

Onsite Wastewater Treatment Education Resources for Educating Clientele

Developed by

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12 August 2005



This project was funded in part by USDA/CSREES Agreement number 2002-51130-01976, *Region 9 Water Quality Coordination*, through Arizona Cooperative Extension Service.

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Videos & DVDs

1. *Alternative Septic Systems*. Video and fact sheets highlighting three Twin Cities metro area installations using re-circulating sand filters and drip irrigation on difficult sites including shallow bedrock, high groundwater, and a steep slope. EP-07572-GO; \$14.00. University of Minnesota Extension Service Distribution Center, 612-624-4900, 1-800-876-8636, or <http://www.extension.umn.edu/units/dc/>
2. *The Care and Feeding of Your Septic Tank*. Department of Environmental Resources, 16 minutes, 1995, V9112. To borrow a video, call the WREN Resource Center at 1-800-692-7281, or e-mail at lwvpa@epix.net.
3. *Choosing an Alternative Septic System*. Video highlighting three Twin Cities metro area installations using re-circulating sand filters and drip irrigation on difficult sites including shallow bedrock, high groundwater, and a steep slope. VH-07024; \$13.00. University of Minnesota Extension Service Distribution Center, 612-624-4900, 1-800-876-8636, or <http://www.extension.umn.edu/units/dc/>
4. *Inspecting Existing Septic Systems During Home Sales*. Demonstrates the equipment, procedures and knowledge necessary to conduct proper inspection of septic systems. Penn State College of Agricultural Sciences, 39 minutes, 1991, V9410. To borrow a video, call the WREN Resource Center at 1-800-692-7281, or at e-mail lwvpa@epix.net.
5. *Landscaping Your Drainfield*. This modest 16-minute video talks about why a homeowner with a septic system needs to be careful about landscaping over the drainfield...and exactly what kind of plants are recommended for this use. The plants shown are best suited to the Puget Sound lowland area. Washington State University Cooperative Extension, Clallam County, WA, 360-417-2414.
6. *On-Site Wastewater Treatment Systems: Constructed Wetlands*. This video covers the use of constructed wetland technology for home wastewater treatment systems. SP-70; \$15.00. Texas Cooperative Extension, (888) 900-2577, or <http://tcebookstore.org/index.cfm> >> Home >> Waste.
7. *Overview of Septic Systems*. This 28-minute video available in both VHS and DVD format describes the technologies available for managing residential wastewater. It can help homeowners choose the type of system they need. SP-132; \$15.00. Texas Cooperative Extension, (888) 900-2577, or <http://tcebookstore.org/index.cfm> >> Home>>Waste.

8. *Professional On-site Sewage System Maintenance*. This video is for gravity drainfields. Eastgate Public Health Center, WA, <http://www.metrokc.gov/health/wastewater/operating.htm>
9. *Septic Evaluation*. Online video. US Inspect, <http://www.usinspect.com/SepticVideo/SepticMain.asp>
10. *Septic System Maintenance*. 1538. High school to adults, 15 minutes. Dakota County Environmental Education Program, MN, 651-480-7734, <http://www3.extension.umn.edu/county/dakota/eeprog.html>
11. *Septic Systems Revealed: Guide to Operation, Care, and Maintenance*. A 23-minute video showing how an actual septic system works and demonstrates proper pumping methods. Includes tips on household water conservation and product use. VH-06768-GO; \$15.00 (or as EP-06769-GO in combination with the Owner's Guide \$ 18.00); Revised 1999. University of Minnesota Extension Service Distribution Center, 612-624-4900, 1-800-876-8636, or <http://www.extension.umn.edu/units/dc/>
12. *Understanding and Maintaining Alternative On-Site Sewage Disposal Systems*. A video for Pressure Distribution, Sand Filter and Mound systems. Eastgate Public Health Center, WA, <http://www.metrokc.gov/health/wastewater/operating.htm>
13. *Water Conservation – Managing Our Precious Liquid Asset*. A 21-minute video offering many ways to reduce water use to the benefit of the septic system without impacting family comfort and quality of life. VH-06948-GO; \$15.00. University of Minnesota Extension Service Distribution Center, 612-624-4900, 1-800-876-8636, or <http://www.extension.umn.edu/units/dc/>
14. *What to expect from your Home Inspection*. Online video. U.S. Inspect. <http://www.usinspect.com/ghivideo/whattoexpectmain.asp>
15. *The Why, When, & How of Septic System Care and Maintenance*. 1543, Adults. Dakota County Environmental Education Program, MN, 651-480-7734, <http://www3.extension.umn.edu/county/dakota/eeprog.html>
16. *Your Septic System: A Guide for Homeowners*. Uses husband-wife story as method of explaining how to operate and maintain a septic system; good do's and don't section. 11 minutes. National Small Flows Clearinghouse, West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064, 800-624-8301, http://www.nesc.wvu.edu/nsfc/nsfc_index.htm

Fact Sheets (selected)

- New Mexico State University
 - Septic Tank Maintenance (<http://cahe.nmsu.edu/pubs/m/m-113.pdf>)
- North Carolina State University
 - <http://www5.bae.ncsu.edu/programs/extension/publicat/wqwm/septic.html>
 - About Septic Systems: What You Need to Know
 - Investigate Before You Invest
 - Management of Single Family and Small Community Wastewater Treatment and Disposal Systems
 - Septic Systems and Their Maintenance

- Oklahoma State University
 - Household Wastewater: Septic Systems and Other Treatment Methods, Oklahom*A*Syst Worksheets (<http://pearl.agcomm.okstate.edu/wqs/homsyst3.pdf>)
- Purdue University Cooperative Extension
 - <http://www.ces.purdue.edu/onsite/>
- Texas Cooperative Extension (Spanish versions available)
 - <http://tcebookstore.org/browse.cfm?catid=115>
 - Not in My Septic System! (English, Spanish)
 - Aerobic Treatment Units (English, Spanish)
 - Alternative Collection Systems (English, Spanish)
 - Constructed Wetlands (English, Spanish)
 - Constructed Wetlands (video) (English)
 - Conventional Septic Tank/Drain Field (English, Spanish)
 - Evapotranspiration Bed (English, Spanish)
 - Gravel-less Pipe (English, Spanish)
 - Homeowner Training Kit (Bilingual)
 - Leaching Chambers (English, Spanish)
 - Low-Pressure Dosing System (English, Spanish)
 - Mound System (English, Spanish)
 - Operation and Maintenance (English, Spanish)
 - Overview of Septic Systems (VHS, DVD) (English)
 - Owner's Record (English, Spanish)
 - Pump Tank (English, Spanish)
 - Sand Filters (English, Spanish)
 - Selecting and Permitting (English, Spanish)
 - Septic Tank/Soil Absorption Field (English, Spanish)
 - Spray Distribution (English, Spanish)
 - Subsurface Drip Distribution (English, Spanish)
 - Tablet Chlorination (English, Spanish)
 - Trickling Filter (English, Spanish)
 - TEX-A-SYST: Reducing the Risk of Ground Water Contamination by Improving Household Wastewater Treatment (English)
- University of Arizona Cooperative Extension
 - <http://ag.arizona.edu/pubs/quarterly.html>
 - Antibacterial Products in Septic Systems
 - Inspecting Your Household Septic System
 - Maintaining Your Septic Tank
 - Managing Your Household Septic System
 - Mound Systems: Alternative Onsite Wastewater Treatment
 - Operation and Maintenance Tips for Your Septic System
 - RV Holding-Tank Treatments & Deodorizers in Septic Systems
 - Understanding Your Household Septic System
 - Septic System Owner's Guide
- University of Kentucky Cooperative Extension
 - Septic Systems for Homeowners, 1998, AGR-167, (<http://www.ca.uky.edu/agc/pubs/agr/agr167/agr167.htm>)
 - Maintaining Conventional Septic Systems, 1998, AGR-166,

- (<http://www.ca.uky.edu/agc/pubs/agr/agr166/agr166.htm>)
 - Household Wastewater: Septic Systems and Other Treatment Methods, 2000, IP-69, (<http://www.ca.uky.edu/agc/pubs/ip/ip69/ip69.htm>)
- University of Minnesota
 - <http://septic.coafes.umn.edu/>
 - homeowner (30 fact sheets)
 - professionals (22 fact sheets plus design worksheets)
 - small communities (2 brochures)
 - commercial entities (8 fact sheets)
- University of Rhode Island
 - http://www.uri.edu/ce/wq/has/html/has_septicfacts.html
 - Maintaining Your Septic System
 - Frequently Asked Questions about Septic System Operation and Maintenance
 - Septic System Additives
 - What You Should Know About Septic System Inspections
 - How to Order and Buy a Septic Tank
 - Access Risers and Effluent Filters
 - How to Order and Buy a Distribution Box
 - How to Hire a Contractor for Septic System Installation or Repair
 - Frequently Asked Questions About Enhanced Individual Sewage Disposal Systems (ISDS) in Rhode Island
 - What's In Your Backyard
- University of Wisconsin
 - <http://www.wisc.edu/sswmp/publist.html>
 - #1. Characterization of Water Use and Wastewater Production - In-House Alteration Methods
 - #2. Wastewater Treatment and Nutrient Removal
 - # 3. Disinfection
 - # 4. Movement of Liquid and Gas Into and Through Soil Materials and Groundwater
 - # 5. Using Soil Surveys for Determining Soil Potential for Disposal
 - # 6. Microbial and Viral Reduction in Soils
 - # 7. Nutrient and Other Substance Transformations and Movement in Soil
 - # 8. Soil Clogging and Crusting
 - # 9. Liquid Distribution Systems
 - # 10. Performance of Soil Disposal Systems
 - # 11. Institutional and Economic Aspects of Onsite Waste Disposal
 - # 12. Implications for Land Use Patterns
 - # 13. General Information About the Project
 - # 14. Community Waste Treatment Systems
 - # 15. Alternate Design

Tabletop Booth Displays

1. *Household Septic System*. University of Arizona Cooperative Extension. 3-panel tabletop booth display concerning the operation and maintenance of household septic systems. Approximate size: 32" tall x 60" wide. Developed using WordPerfect, will share graphics. Contact Dr. Kitt Farrell-Poe, kittfp@ag.arizona.edu, 928-782-3836.
2. *Caring for Your Septic System*. University of Kentucky Cooperative Extension. Access to sewers varies greatly across the state, and my Kentuckians rely upon septic systems for household wastewater disposal. This exhibit share how a septic system works, and offers both "Do's and Don'ts" for septic system use and care. The exhibit is a companion to low reading level fact sheets, but could be used independently. Designed to fit a small exhibit board – approximate size 26" tall x 80" wide.

Physical Models

1. *Conventional System: Septic Tank with Soil Absorption Field*. Plexiglas working model with two trenches that can demonstrate the infiltration and percolation abilities of two different soil types. University of Arizona Cooperative Extension. Contact Kitt Farrell-Poe, kittfp@ag.arizona.edu, 928-782-3836.

Curriculum

1. *Practitioners Training Curriculum Development Project*. The Consortium of Institutes for Decentralized Wastewater Treatment.
 - a. This project developed a consistent technical educational base to launch nationwide training efforts. The materials produced are easily modifiable electronically to address specific local rule requirements. The practitioner curriculum is presented as a series of short courses (or modules) with educational objectives (needs-to-know), resource needs and detailed agendas for each. Currently, there are five modules: Model National Curriculum Development, Septic Tanks, Soil and Site Evaluation, Technology Overview, and Water Movement and Treatment in Soils.
 - b. <http://www.onsiteconsortium.org/training/activities.cfm>
2. *Academic Curriculum Development Project*. The Consortium of Institutes for Decentralized Wastewater Treatment.
 - a. This project developed course curriculum with appropriate modules for teaching classroom, laboratory, and field courses in onsite and decentralized water and wastewater treatment and natural systems for water reclamation. The modules developed include: Fundamental Concepts for Environmental Processes, Site Evaluation, Wastewater Characteristics, Treatment processes (Onsite Nitrogen Removal, Septic Tanks, Packed Bed Filters for Wastewater Treatment, Constructed Wetlands, Constructed Wetlands: Alternative Design Approaches, Aerobic Treatment Units, Soil Treatment Systems, Disinfection), Distribution and Dispersal Systems (Effluent Conveyance, Drip

- Distribution, Spray Distribution, Water Reuse Systems), Hydraulics and Controls (Hydraulics, Instrumentation and Controls), and Biosolids.
- b. <http://www.onsiteconsortium.org/curriculum/activities.cfm>
3. *Septic Education Kit*. Padilla Bay National Estuarine Research Reserve.
 - a. This kit serves as a toolbox that contains everything an educator needs to set up and publicize a septic education program. Included are a series of customizable fact sheets, a slide presentation, comprehensive workshop outlines, publicity photos, marketing ideas, tips on how to partner with other agencies, and article templates for quick submission to local newspapers, a poster, radio announcement scripts, and sample newspaper ads and flyer. Cost \$99.
 - b. Contact National Small Flows Clearinghouse, 800-553-6847, orders@ntis.fedworld.gov

Web Sites (selected)

- California Onsite Wastewater Association
 - <http://www.cowa.org/>
- Consortium of Institutes for Decentralized Wastewater Treatment
 - <http://www.onsiteconsortium.org/index.cfm>
- EPA, Septic Systems
 - <http://cfpub.epa.gov/owm/septic/home.cfm>
 - Fact sheets: <http://www.epa.gov/owm/mtb/decent/technology.htm>
 - Design manual: <http://www.epa.gov/owm/mtb/decent/toolbox.htm#1980man>
 - Management guidelines: <http://www.epa.gov/owm/mtb/decent/download/guidelines.pdf>
- National Association of Wastewater Transporters (NAWT)
 - <http://www.nawt.org/>
- National Decentralized Water Resources Capacity Development Project
 - <http://www.ndwrcdp.org/>
- National Onsite Wastewater Recycling Association (NOWRA)
 - <http://www.nowra.org/>
- National Small Flows Clearinghouse
 - http://www.nesc.wvu.edu/nsfc/nsfc_index.htm
- National Society of Consulting Soil Scientists
 - <http://nscss.org/>
- Pumper: Liquid waste industry organization
 - <http://pumper.com/>
- Showcase (This is a tool for Northwest environmental educators to find outstanding products related to nonpoint water pollution.)
 - <http://www.ecy.wa.gov/forms/showcase/>
- University of Minnesota Onsite Program
 - <http://septic.umn.edu>
- Washington On-site Sewage Association (WOSSA)
 - <http://wossa.org/>

Training Centers

- Alabama
 - Alabama Onsite Wastewater Association Training Center (Livingston)
 - <http://aowatc.uwa.edu/>
- Arizona
 - Northern Arizona University - Onsite Wastewater Demonstration Project (Flagstaff)
 - <http://www.cet.nau.edu/Projects/WDP/>
 - University of Arizona - Onsite Wastewater Education Program (Maricopa)
 - <http://ag.arizona.edu/waterquality/OWTFPage.htm>
- California
 - California Wastewater Training and Research Center (Chico)
 - <http://www.csuchico.edu/cwtrc/>
- Florida
 - Florida Department of Health Onsite Sewage Training Courses (Polk City)
 - <http://www.doh.state.fl.us/environment/ostds/training/maintra.htm>
- Kentucky
 - Kentucky Onsite Wastewater Training Center (Lawrenceburg)
 - <http://www.kentuckyonsite.org/>
- Missouri
 - Missouri Small Wastewater Flows Education and Research Center (Columbia)
 - <http://aes.missouri.edu/bradford/news/mso-ftc.stm>
- New York
 - SUNY Morrisville Environmental Training Center (Claverack)
 - <http://www.nyruralwater.org/aquafacts/winter2000/9.shtml>
- North Carolina
 - Lake Wheeler Training Facility (Raleigh)
 - <http://www.soil.ncsu.edu/swetc/latdc/index.html>
 - Mountain On-Site Wastewater Center (Fletcher)
 - <http://www.ces.ncsu.edu/plymouth/septic2/fletcher.html>
 - Southeast Regional Onsite Wastewater Training Center (Bolivia)
 - <http://www.ces.ncsu.edu/onslow/staff/drashash/enved/sepdem.html>
 - Vernon James Research & Extension Center (Plymouth)
 - <http://www.ces.ncsu.edu/plymouth/>
- Rhode Island
 - University of Rhode Island On-Site Wastewater Training Center (Kingston)
 - <http://www.uri.edu/ce/wq/owtc/html/owtc.html>
- Tennessee
 - Tennessee Onsite Wastewater Training Center (Springhill)
 - http://onsite.tennessee.edu/Training_Center.htm
- Texas
 - International On-Site Wastewater Treatment Training Center (El Paso)
 - <http://elpaso.tamu.edu/Research/Index.htm>
 - Riverside (Bryan) Training Center (Bryan)
 - http://ossf.tamu.edu/riverside_bryan_training_center.htm
 - On-Site Wastewater Treatment Training Center (Weslaco)
 - <http://primera.tamu.edu/IRRGSYS/waste.htm>

- Utah
 - Utah On-Site Wastewater Treatment Training Center (Logan)
 - <http://www.engineering.usu.edu/uwrl/training/>
- Washington
 - The Northwest On-site Wastewater Training Center - NOWTC (Puyallup)
 - <http://wossa.org/>

Miscellaneous

1. Magnets
 - a. Refrigerator magnets in both English and Spanish indicating what materials when flushed down the toilet are either cloggers or killers of septic tanks. \$1.00 (SP-133). Available through Texas Cooperative Extension, Extension Distribution and Supply, 979-845-6573.
2. Training Center Signs.
 - a. Signs include aerobic treatment, constructed wetlands, conventional land application, conventional septic tank system, evapotranspiration bed system, gravelless pipe system, leaching chamber system, low-pressure dosing system, mound system, recirculating media filter system, single-pass sand filter system, spray dispersal system, step/steg system, and subsurface drip dispersal system.
 - b. All signs are 24" X 24" and made of 1/8" aluminum. The signs have a polished white background with screen printed graphics and text.
 - c. For more information about signs or to place an order please contact Bruce Lesikar, b-lesikar@tamu.edu, http://ossf.tamu.edu/training_center_signs.htm
3. Comic Books
 - a. Special Project Funding. Southern Regional Water Quality Program. Please contact Craig Runyan (505-646-1131, crunyan@nmsu.edu); Adrian Hansen (athanson@nmsu.edu); Bruce Lesikar (b-lesikar@tamu.edu); or Kitt Farrell-Poe (928-782-3836, kittfp@ag.arizona.edu).