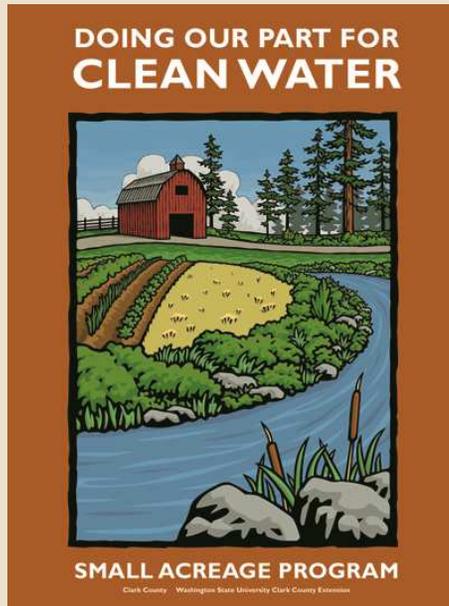


Small Acreage Program



Program Coordinator:
Eric Lambert

A partnership between:



Clark
County

WASHINGTON STATE UNIVERSITY
EXTENSION



Environmental
Services

Mission:

Provide residents with knowledge, resources and skills necessary to manage their land and animals in ways that will help keep water clean and protect natural resources.

WASHINGTON STATE UNIVERSITY
 EXTENSION



CASE STUDY

Washington State University Extension Small Acreage Program

Funded by Clark County's Clean Water Program in partnership with the Washington State University (WSU) Extension—Clark County, the county's Small Acreage Program educates residents on proper land and animal management in order to reduce pollution entering stormwater and surface water from residential and agricultural properties.

Towards this effort, the Small Acreage Program conducts four annual septic system workshops. The workshops—held in partnership with the Clark County Public Health Department, which oversees the county's septic systems—educate homeowners on general septic system maintenance and protection, as well as common systems in the county.

PROGRAM ELEMENTS

With an emphasis on practical education, the workshops allow participants to witness an actual septic system inspection, and they teach residents the necessary information to pass a certification requirement to inspect their own gravity-fed systems. (In Clark County, gravity-fed systems can be inspected by certified homeowners.)



Aaron Henderson of Clark County Public Health showed workshop participants some of the simple tools he made to do a home inspection of a gravity-fed system.

GOALS & OBJECTIVES

The overall goal of the Small Acreage Program's education program is to teach residents best practices regarding rural land management, including management of stormwater, animal waste, wastewater that they can easily implement to save money while increasing sustainability and protecting groundwater and local waterways.

In addition to septic system maintenance issues, the workshops also educate participants on the maintenance and protection of potable water wells.



Workshop participants learn how to protect their drinking water with proper well and septic system maintenance.

PROMOTION

In order to cut advertising costs, the program "piggybacks" on public health department mailings to alert septic system owners about both their systems and upcoming workshops. Paid advertising is limited to budget-friendly local papers covering rural areas.

www.epa.gov/septicmart | page 1



Partners Since 2004

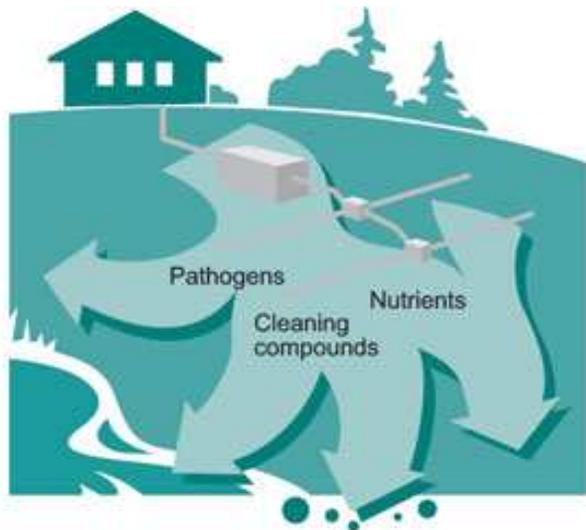
WSU Extension is a trusted local institution for quality educational programs.

WSU Extension provides:

- Workshop organization, administration and facilitation
- Program tracking and evaluation
- Publicity and outreach

WASHINGTON STATE UNIVERSITY
EXTENSION

Survey Question: 'How My Management Practices Impact Clean Water'	
Year	% of Respondents Increasing Knowledge
2010	75%
2011	75%
2012	75%
2013	87%
2014	83%
2015	73%



Source: U of Minnesota Extension

Changing Behavior

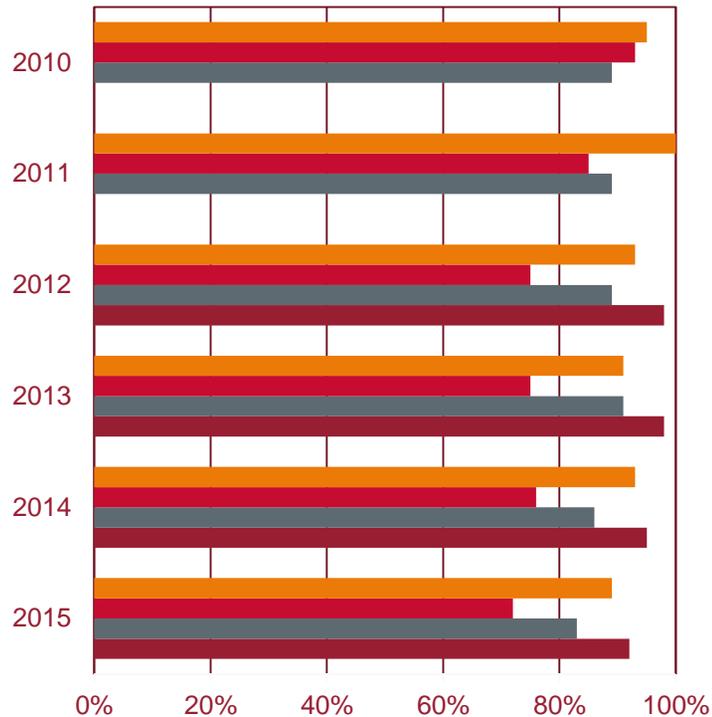
‘How management practices impact clean water’

- Small Acreage Program Coordinator gives a 20 minutes introductory lesson on stewardship and nonpoint source pollution.
- Workshops introduce residents to resources and educational opportunities for learning more about stewardship.

Impact Evaluation

- 72% of respondents inspected their septic system
- 30% reduced chemical usage

Percent of Respondents Increasing Knowledge



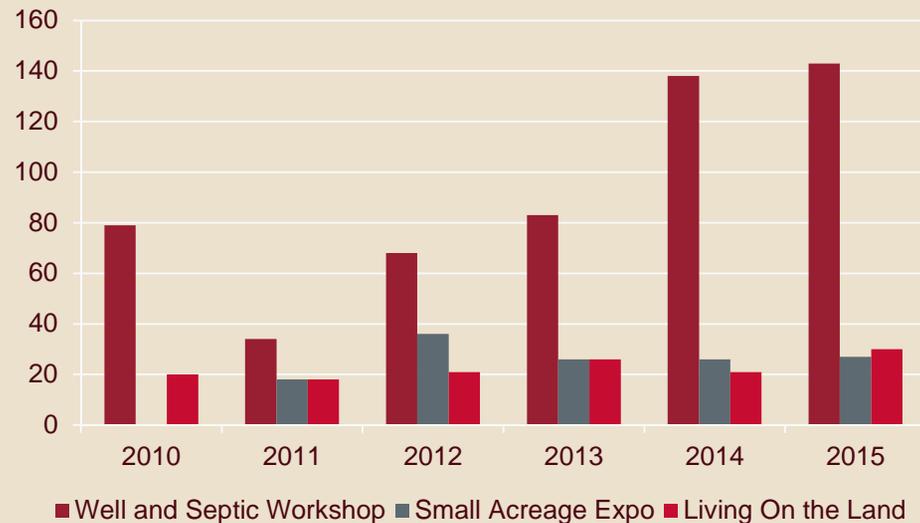
- Q1 – Knowledge of well and septic maintenance
- Q1 – Keeping my drinking water healthy
- Q3 – Protecting my septic system
- Q4 – How to properly inspect my septic system

Program Success

Since 2010:

- > 88% of respondents have increased their knowledge of well and septic maintenance
- 814 total participants

Participants Receiving Septic Maintenance Education





Clark County Public Health Water Resource & Protection

Implementing Positive Change Through Outreach & Education

With Brigette Bashaw & Sean Hawes



Find us on Facebook!
www.facebook.com/clarkcowa.ph

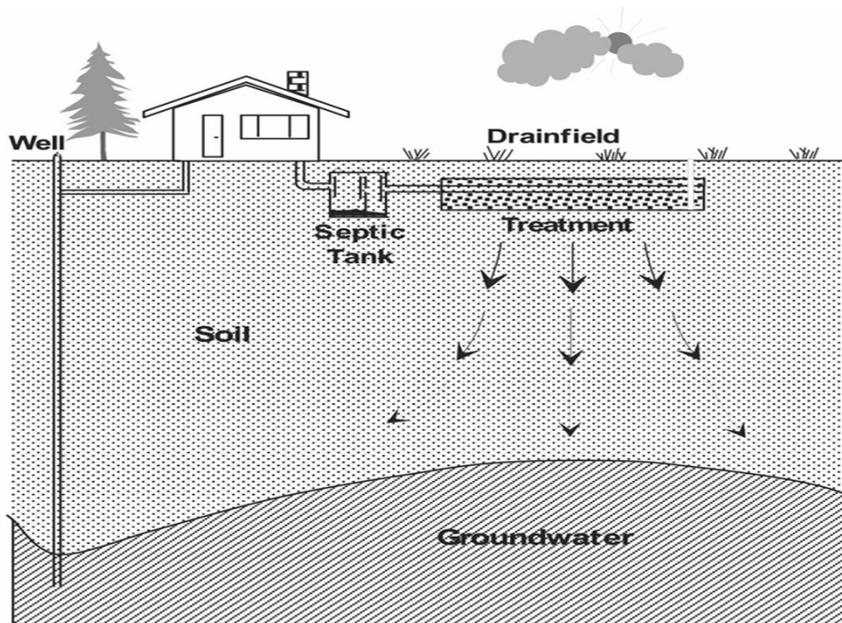


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Septic Workshop Objectives

To provide information on:

- Septic basics
- The importance of regular operation & maintenance (O&M) inspections
- Homeowner inspection requirements
- Inspection components
 - What to look for
- DOs and DON'Ts





Why is Septic Operation & Maintenance (O&M) Important?

- CCPH has three primary goals:
 - *Protect drinking water resources (ground and surface)*
 - *Prevent direct exposure to pathogens*
 - *Protect homeowner investment*
 - *Repairing an on-site sewage (OSS) system is cheaper than replacing an OSS or connecting to city sewer.*
 - We can all think of better ways in spending our money than to replace a failing OSS or connecting to sewer.

Resident Homeowners Inspections

Resident homeowners may provide their own OSS inspections every other required operation and maintenance inspection if:

- The system is conventional gravity system or a pump to gravity system
- Homeowners go through Septic Workshop and pass the exam.
- The inspection is NOT at the time of sale or transfer;
- The OSS was last inspected by a certified professional.

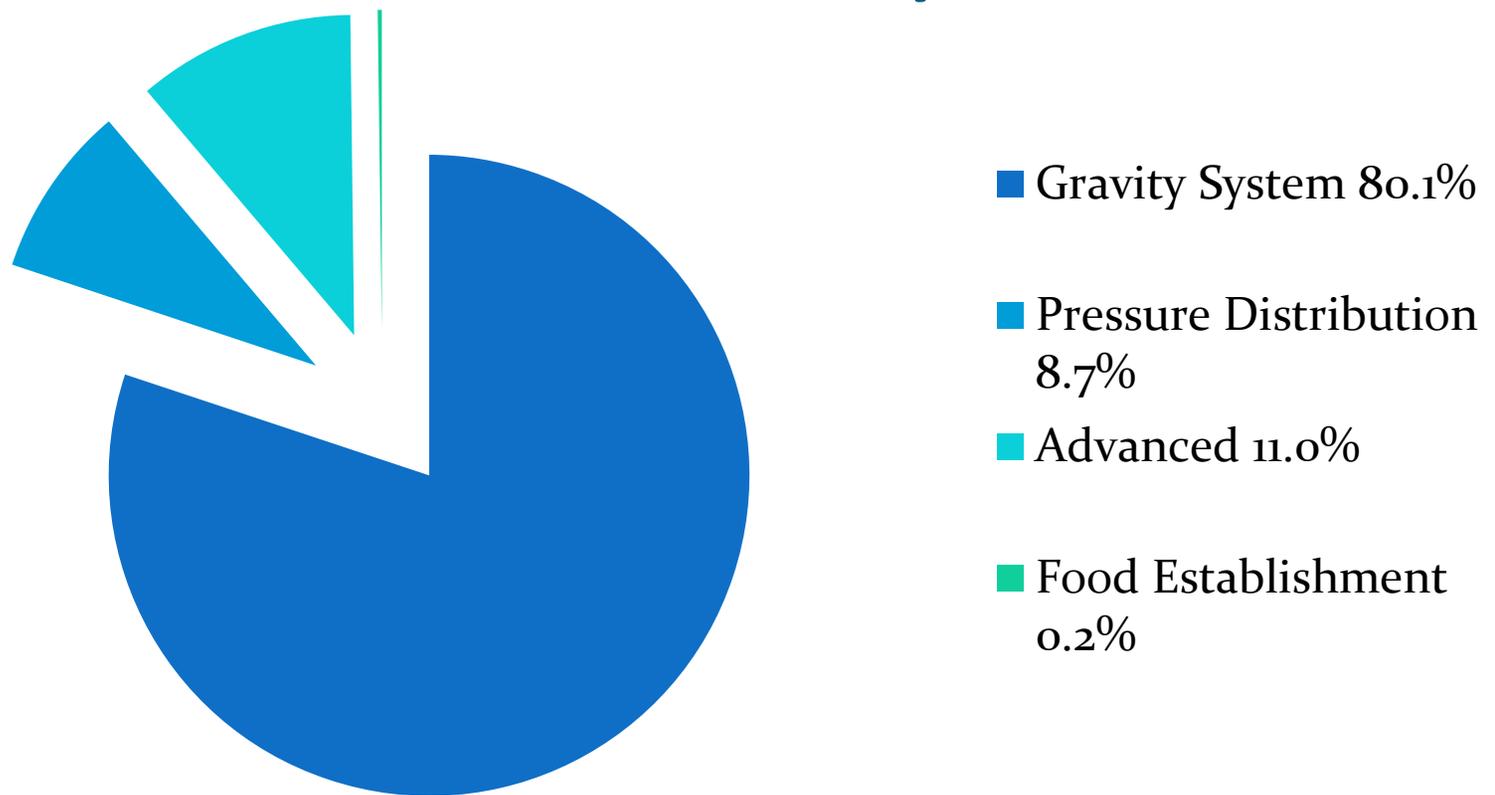


Courtesy of WA Department of Health



Courtesy of WA Department of Health

Active Septic System Distribution in Clark County



Total number of Active Septic Systems = 34,934

Inspecting Your Septic Tank

The Good



Courtesy of: <https://www.youtube.com/watch?v=CC8Vdb2tqcE>



Courtesy of: massiehouse.blogspot.com

Inspecting Your Septic Tank

The Bad



Courtesy of: www.jthis.com

- Flooded Tank / Issues in Drain Field



Courtesy of: www.vdwws.com

- Leaking Tank

Inspecting Your Drain Field



Courtesy of WA Department of Health

- Good



Clark County Public Health



Clark County Public Health

- Surfacing Sewage / Failed System

Professional Support

- Technical Advisory Committee supports educational workshops.
 - Raises the public knowledge and awareness for routine O&M inspections.
 - Increases public awareness of services provided by professionals.



Clark County Public Health



Clark County Public Health



Clark County Public Health

Drinking Water Workshop Objectives

- Who protects my water?
- Is my water safe to drink?
- How can I protect my water supply?



Courtesy of: www.oxfordcounty.ca



Who protects my water?

- Department of Ecology has well construction standards
- Building Official requires demonstration of safe water prior to building permit issuance
- Property owner awareness

Is my water safe to drink?

Water sampling and lab analysis is the only way to know!

Basic Recommendations

- Test for bacteria - annually
- Test for nitrate – every 3 years
- Test for arsenic – at least once



How can I protect my drinking water?

Location -- Construction -- On-going Conditions



Sanitary control area concerns



Below grade well with openings present



Unsanitary conditions & well openings present

How can I protect my drinking water?

Location



A 100' radius around the well should be free of potential sources of contamination.

How can I protect my drinking water?

Construction



The well casing should extend at least 6" above grade (or 2' above flood plain) and contain an intact sanitary surface seal to grade.

How can I protect my drinking water?

On-going Conditions



Openings, in the well head should be adequately sealed or screened to prevent contaminant entry. Fiberglass insulation should not be present as it encourages rodent harborage.

How can I protect my drinking water?

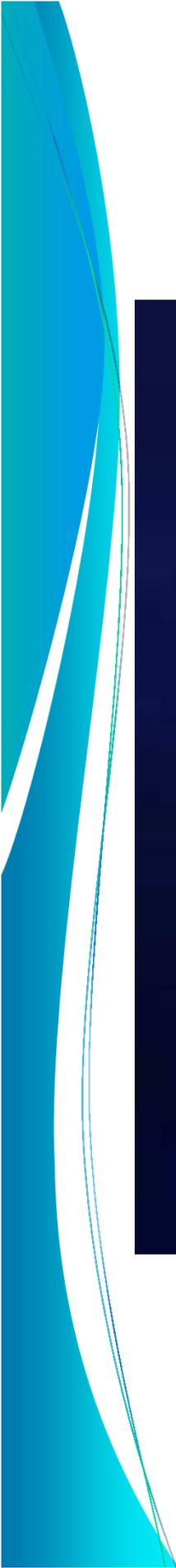
Before & After Examples





Quotes From Public

- “Info seems easy to apply, if not for doing my own inspections, for understanding system.”
 - “I was worried I wouldn’t understand because I had very little knowledge, but the program was very informative and easy to understand.”
- “Those people [O&M professionals] earn every cent.”
 - “Excellent presenters! Clear & interesting presentation; practical info that we can really use; made me so much more aware of the importance of septic maintenance.”
- “[One practice I might implement within a year is to] inspect septic system seasonally [and] check seal on well.”



**THE BEST
PROTECTION FOR
PUBLIC HEALTH IS
PREVENTION, NOT
CLEANUP.**

QUOTEHD.COM

John McNabb