

# Skagit County On-Site Programs

## Financial Assistance Leads to Pollution Reduction

### Introduction

Septic systems tend to be out-of-sight and out-of-mind, but they can actually be the source of serious water quality and public health problems if not managed correctly. Skagit County has two successful on-site septic system programs. With money from the Water Quality State Revolving Fund, Skagit County Planning & Development Services provides low interest loans to property owners to repair and replace failing septic systems. With support from an Ecology Centennial Clean Water Fund grant, Skagit County Public Health Department is educating and providing incentives for homeowners to have their septic systems inspected and maintained regularly so that water quality is protected.



*50 year old septic tank*

### Problem

There are approximately 19,500 on-site septic systems in Skagit County, and in 2004, Skagit County Public Health Department records showed only 10 percent had any type of monitoring or maintenance. An unknown number of the other 90 percent could be failing, contributing to violations of bacterial water quality standards in several tributary streams in the Skagit watershed. Padilla Bay has been closed to recreational shellfish harvesting by Washington State Department of Health due to high levels of fecal bacteria. More seriously, there have been emergency closures of commercial shellfish beds in Samish Bay in response to an illness outbreak among people eating norovirus contaminated oysters. Norovirus can only come from humans, so it is clear that these outbreaks were not caused by other sources of fecal contamination such as cows or birds. Failing septic systems are important sources of both bacteria and viruses – but they can be fixed.

### Project goals

Skagit County Public Health Department has been educating septic system professionals and homeowners on the importance of septic system inspection and maintenance since 2000. The educational program included development of a publication on septic system care and holding Septics 101 clinics around the county. To increase the impact of this program, Skagit County Health Department devised a pilot project that combines targeted mailings to neighborhoods along creeks and marine shorelines with incentives to attend Septics 101 classes and have septic systems inspected. The incentives are that homeowners who attend classes can receive \$100 rebates toward the cost of septic system inspection and \$100 rebates toward the cost of installing water and vapor-tight risers and lids to septic tanks. These risers and lids eliminate leakage into the septic tank, help prevent over-saturation of the drainfield, and they allow easier access to the system for future inspections and maintenance.

This pilot project complements Skagit County's on-going low interest loan program for repair and replacement of failing septic systems. Skagit County loaned out over three million dollars to replace 569 failing septic systems over the past 6 years (April 2001 through March 2007). Skagit County's current two million dollar Puget Sound Initiative loan is supplemented by a grant, providing additional incentive money to get repairs done promptly. In the past, failing septic systems were mostly identified when surfacing sewage became a nuisance or a serious water quality problem. Now these loans and some grants are available to homeowners who identify repair or replacements needs through Skagit Health's inspection program.

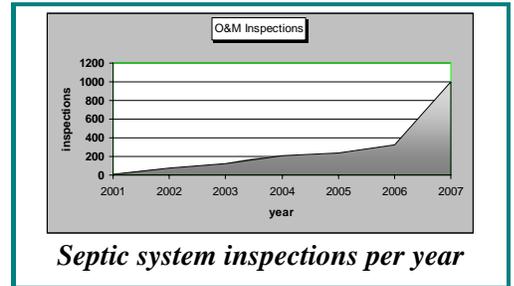
### Milestones and outcomes

Attendance at Septics 101 classes has steadily risen over the course of this project. Class attendance has been as follows:



2004 – 10 classes with 171 attendees, average 17/class  
2005 – 15 classes with 263 attendees, average 17.5/class  
2006 – 17 classes with 537 attendees, average 32/class

As shown in the graph, septic system operation and maintenance inspections also increased during this time. Before the project, in 2001 and 2002, there were well under 200 inspections per year. In 2006 there were about 1000 inspections in the county. Just in the first quarter of 2007, there were 290 inspections. The increase in the number of inspections can be attributed to three factors: the relatively new legal requirements to have sites inspected at the time of property transfer; the requirement to inspect advanced treatment systems inspected annually; and the rebate program incentive.



During this time, Skagit County continued to loan out money to cover the cost of replacing failing septic systems. In 2004, 93 systems were replaced; in 2005, there were 107; and in 2006, there were 89. While these numbers do not show a clear trend, increased inspections are catching and fixing problems and reducing the number of failed septic systems over the long term. Water quality and public health in Skagit County certainly benefit from these two exemplary programs.



*New septic system at  
Similk Beach*

## Project highlights

Homeowners might have attended Septics 101 classes because of the rebates, but they found that the classes were both engaging and fun while offering many useful money-saving tips. Increasing numbers of on-site inspections in Skagit County are evidence that the Septics 101 classes and rebate program are resulting in behavior change toward improved operation and maintenance of on-site septic systems.

The low interest loan program resulted in an average of about 100 on-site system repairs or replacements per year, some of which may not have occurred without the loan program. These two initiatives contribute to cleaner water in Skagit County streams and shellfish harvest areas.

## Partners

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## **Funding**

Skagit Septic System Improvement Project, Total Cost \$203,968.

\$152,976 Centennial Clean Water Fund Grant, \$50,992 local match.

Skagit County Local Loan Fund, Ecology State Revolving Fund Loans:

2000 through 2003, \$1,500,000; February 2004 through June 2007, \$1,500,000;

2007 ongoing, \$2,000,000 Puget Sound Initiative loan, \$409,723 grant

## **For more information**

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