

# Hood Canal Regional Pollution Identification & Correction Program

## PHASE II HIGHLIGHTS



The Hood Canal Regional Pollution Identification and Correction (PIC) Program is a cooperative effort to identify and correct fecal pollution sources on Hood Canal shorelines to improve water quality, protect clean beaches and increase harvestable shellfish beds.

The PIC program has fostered and strengthened working relationships between its partners: Jefferson, Kitsap and Mason counties, the Port Gamble S'Klallam and the Skokomish Tribes, WSU Extension and local conservation districts, as well as the Washington State Department of Health (DOH) Shellfish Program. **This valuable working partnership has resulted in joint field work, new ways of sharing information and collaborative problem solving.**

Implementation of the regional PIC program was launched in 2014 with four components:

- ▶ Prioritized shoreline monitoring and hotspot investigations across Hood Canal
- ▶ Residential parcel surveys to assess on-site septic systems' (OSS) status in prioritized areas
- ▶ A study of potential nutrient sources from on-site septic systems and seepage pits
- ▶ Audience research to understand attitudes about water quality, followed by outreach to landowners

## HOOD CANAL REGIONAL PIC PROGRAM ACCOMPLISHMENTS

### SHORELINE FIELD WORK

The regional team partnered with DOH staff to identify and prioritize areas where field work had the most likelihood of improving water quality. Through field surveys the PIC team identified, investigated and documented pollution "hotspots," then worked with landowners to address the problems. The Port Gamble S'Klallam and Skokomish Tribes' natural resource departments conducted research and tested investigative tools that may be more effective in some areas than traditional PIC techniques.



PIC TEAM MEMBER INSPECTING DRAINPIPE

### RESULTS HIGHLIGHTS:

- ▶ **More than 66 miles** of Hood Canal shoreline were surveyed by the regional PIC team in both wet and dry seasons
- ▶ **778 landowners were consulted**, and their septic systems and drainfields inspected for sewage leaks
- ▶ **76 failing on-site septic systems were identified**, many of which were discharging pollution into Hood Canal
- ▶ **67 on-site septic systems have been voluntarily repaired** or replaced and are no longer polluting Hood Canal
- ▶ **25 on-site septic systems have repairs in progress**

AGENCY	SHORELINE SURVEYS	PARCEL SURVEYS	OSS FAILURES	OSS REPAIRS
Jefferson County Public Health <sup>^</sup>	25.5 miles	353	46	42
Kitsap Public Health District <sup>*</sup>	25.9 miles	282	14	14
Mason County Public Health	13.1 miles	143	16	11
Port Gamble S'Klallam Tribe	1.6 miles	0	0	0
<b>TOTAL</b>	<b>66.1 miles</b>	<b>778</b>	<b>76</b>	<b>67</b>

<sup>^</sup>Jefferson County Public Health conducted field work under multiple funding sources

<sup>\*</sup>Kitsap Public Health District conducted field work under separate funding

## PROGRAM ACCOMPLISHMENTS (CONTINUED)

### AUDIENCE RESEARCH & OUTREACH EFFORTS

In preparation for outreach efforts, WSU Extension conducted audience research in the Hood Canal region to learn how best to communicate with landowners about water quality issues, as well as what has worked in past efforts that resulted in landowners implementing recommended actions. Survey results showed that most participants implemented at least some of the recommendations. Primary barriers included physical limitations, cost and need for more information. The research results were taken into consideration when planning and implementing 2016 outreach efforts.

In 2016, WSU staff went door-to-door to 464 residences in the Hoodsport, Union and North Shore areas to offer a water quality site assessment of their property. **Of the 119 people who were at home, nearly a third agreed to an assessment.** The assessments provided residents with septic system, stormwater runoff, shoreline vegetation, and pet waste management recommendations specific to their property.

Additionally, OSS maintenance vouchers were offered to targeted neighborhoods in Mason County as an incentive to offset costs of OSS pumping or riser installation. **Forty-four properties utilized the vouchers, of which 18 had no current OSS maintenance records.**

### PILOT NUTRIENT STUDY FINDINGS

The PIC team worked with the University of Washington's Puget Sound Institute to develop and conduct pilot studies to further knowledge about bacterial and nutrient pollution sources from seepage-pits. Six seepage-pit sites in Mason County were evaluated. The study found that the **seepage pits were not significantly greater sources of bacteria or nutrients to the shoreline compared to on-site septic systems.** More research is needed to make conclusive recommendations regarding the continued use of seepage pits in Hood Canal.



GREEN DYE IS USED TO REVEAL A FAILING SEPTIC SYSTEM

### THE NEXT PHASE

Phase III of the PIC program is funded for April 2017-March 2019, and will utilize lessons learned to address newly prioritized Hood Canal shoreline areas. Phase III will also incorporate ambient fresh water monitoring. The PIC Program hopes to transition over time to a sustainable local and regional funding model for this important work.



Visit [hccc.wa.gov](http://hccc.wa.gov)  
and learn more at [OurHoodCanal.org](http://OurHoodCanal.org)



This project has been funded wholly or in part by the United States Environmental Protection Agency under Assistance Agreements PC-00J32601 to Washington Department of Health. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

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