

Shellfish Protection District 2016 Annual Reporting

Reporting Period: July 1, 2015 – June 30, 2016

Date: July 21, 2016

Name of Shellfish Protection District: Clean Water District

Name of County: Jefferson County

Primary Point of Contact: Michael Dawson, Water Quality Manager

Number of SPD 2015/2016 Meetings: 3

1. Summary

Please provide a summary of the following:

- *SPD Program funding source*
- *Substantial program changes (i.e. staff, revised closure response plan, new PIC projects or programs, created MRA, regulation changes),*
- *SPD successes (i.e. collaboration, upgrades to shellfish growing areas, improved marine or fresh water quality, political support, sustainable funding source, met any outreach, inspection, or compliance goals, experimental methods identifying sources) and,*
- *SPD Challenges/Barrier (i.e. staffing levels, funding gaps; lack of political support, property access issues, database, enforcement/compliance).*

The Jefferson County Clean Water District is funded by a \$20 per-parcel fee assessed by the Jefferson County Assessor. In calendar year 2015, Jefferson County collected \$389,716 from the Clean Water District fee, which was used as matching funds for Clean Water Project grants obtained by the Water Quality division of Jefferson County Public Health. The Water Quality division of Jefferson County Public Health has continued to pursue the pollution identification and correction strategies outlined in the 2012 Clean Water District Advisory Council recommendations. These include pursuing grant funding for Clean Water Projects. This strategy allows district funds to be leveraged with state funds for projects.

The following Clean Water Projects were active for at least part of this reporting period:

1. Northeast Jefferson Clean Water Project
2. Hood Canal Clean Streams Initiative
3. Hood Canal Priority Basins
4. Quilcene-Dabob Pollution Identification and Correction

The Northeast Jefferson project was completed at the end of 2015 and the final report is available at: jeffersoncountypublichealth.org/index.php?clean-water-projects Northeast Jefferson monitoring included the first occurrence of Port Townsend stormwater monitoring using Illicit Discharge Detection and Elimination techniques. Data from this and other projects was shared with the Jefferson County Marine Resources Committee

to help guide decisions about stormwater retrofit projects. Sanitary surveys helped better distinguish the Port Townsend properties served by sewer versus onsite septic systems. Shoreline surveys found interesting differences between freshwater flows and bacteria counts between developed and non-developed areas.

The Quilcene-Dabob project was initiated at the beginning of 2016. Monitoring in the Chimacum Creek basin began under the Hood Canal Priority Basins project in October 2015 and has continued, as does Hood Canal Clean Streams monitoring, through this reporting period. In addition, the Water Quality division was engaged in other projects such as the Hood Canal Regional PIC project, Lakes Cyanobacteria Monitoring, Shellfish Biotxin Monitoring, BEACH program and National Estuary Program-funded projects in cooperation with Jefferson County Environmental Health/Onsite Septic division. The Water Quality division also partners with the Jefferson County Conservation District in the Hood Canal Priority Basins project.

Water Quality's participation in the Hood Canal Regional PIC project has led to some interesting experiments in source tracking. Water Quality collaborated with the Port Gamble S'Klallam Tribe to deploy an E. coli autosampler in Irondale Creek, a confirmed bacterial hot spot, and also perform continuous monitoring for optical brighteners and tryptophan (a possible E. coli surrogate). Results are still being analyzed, but E. coli levels peaked at night and in early morning hours at the time of testing, indicating the potential for undercounts using traditional daytime sampling schedules. Water Quality plans to coordinate with the tribe in microbial source tracking and real-time nutrient monitoring in 2017. In spring 2016, Water Quality deployed iPads running ESRI Collector to improve field data collection and plans to explore their use in sanitary surveys.

The Water Quality division began to increase staffing and plan new projects in 2015 after sustainable funding was obtained in 2014. More time is needed to develop programs and get new projects established through available grant funding cycles. Additional upgrades to databases and GIS are needed to meet the increased workflow. Water Quality continues to integrate operations closely with the Jefferson County Environmental Health/Onsite Septic division. Onsite enforcement activity is anticipated to increase over the next year due to the Operations and Monitoring inspection program entering into an expansion phase throughout the county that began July 2016. The Water Quality staff have been handling most septic enforcement cases to date but plans are underway to increase staffing in the department to help with this new workload in 2017. Water Quality assisted the Onsite division in developing a notice-to-title process for long-term enforcement actions to help compliance continuity in the event of property transfers. Water Quality and Onsite sought funding for critical database upgrades to help interdepartmental and interagency permit coordination, but has not been successful so far in obtaining financial assistance. Water Quality has also been seeking financial assistance in establishing a water quality abatement fund that could help resolve problems that are not responsive to other enforcement methods.

2. Pollution Control Implementation Table

Please fill in the relevant fields below. The orange text is example language. If the SPD information in the fields below is not a part of your pollution identification and correction plan or program please put a N/A. In addition, if you are unable to obtain the SPD information, please describe why in the comment field. There are a few blanks at the bottom of the table to allow you to add any additional tasks that are not represented on this table.

SPD Information	Number	Outcomes	Comments
Miles of shoreline evaluated	12	276 E. coli samples analyzed	Hood Canal Regional PIC: wet and dry seasons
Discharges/streams monitored	50	Chimacum Creek watershed-31 Quilcene area -19	Monthly at all stations Weekly at Big Quilcene during fishing season Additional Discovery Bay temp stations by JCCD
Sites with elevated bacteria or "hot spots"	32	Hood Canal Regional PIC – 2 Quilcene area – 10 failed FC standard Chimacum – 20 failed FC standard	Conducted follow-up bracketed sampling to identify potential sources. Also targeted sanitary surveys in these areas.
Parcel/property evaluations	443	846 sites contacted	Northeast Jefferson, Hood Canal Regional PIC, Hood Canal Priority Basins
OSS in the Shellfish Protection District	~13,500; 10,312 permits	67 previously unknown OSS identified from sanitary surveys and/or pump reports	Distributed copies of as-builts during sanitary surveys;
OSS with current inspection report	941	O&M required at time of sale of the property or when applying for a building permit	O&M required at time of sale or when applying for a building permit
O&M warning letters		Case by case basis when discovered through permit review or sanitary survey	Mailing to all known OSS begins July 2016: Phase 1 alternative systems; Phase 2 conventional <100' to shore in MRA; Phase 3 all others
OSS dye tests	2	both negative	
Failed OSS	100	56 urgent and 3 minor repairs finalized 27 repair permits issued & pending	
Low interest OSS repair loans (Craft3 or other)	4	2015 Craft3 data; unknown number of USDA repairs	
Farms with animals in the Shellfish Protection District		3 surveyed in Chimacum basin 16 surveyed in 2014 by Conservation District	
Surveillance flights	none		Acquired 2015 NAIP aerial imagery; Received water quality data and aerial photos from Ecology/Eyes Over Puget Sound
Farms evaluated		unknown number of JCCD farm plans completed	

SPD Information	Number	Outcomes	Comments
Agriculture BMPs installed	3	Chimacum basin; also 2 CREP projects	4 additional in process
Agriculture warning letters	none		
Utilized new source tracking technology	Yes	24-hr E. coli autosampler; continuous optical brightener & tryptophan – Irondale Creek	With Port Gamble S'Klallam Tribe
Incentives/Rebates	Yes	1 st O&M inspection Risers Distributed low flow shower heads, leak detectors, etc during sanitary surveys	
Penalties	78	75 OSS failure/violation NOCVs 1 OSS failure/violation Tickets 1 Abatement Order 1 Notice to Title	
Public Meetings	3	Northeast Jefferson final meeting Hood Canal Priority Basins initial meeting Quilcene-Dabob initial meeting	
Workshops	13	3 Homeowner Septic Classes 2 WSU Beach Naturalists/Watershed Stewards 8 Conservation District workshops	Homeowner O&M inspection training online July 2016 at jeffersoncountypublichealth.org/septic
Community Events	3	Information booths and interactive watershed model	Diggin' for Dinner shellfish event (x2) Wooden Boat Festival WSU Beach Naturalists/Watershed Stewards classes
Mailers/flyers/brochures	~900	Distributed during sanitary surveys and meetings	
Did you conduct a social marketing survey?	No		Currently reviewing social marketing campaign in Mason County (Hood Canal Regional PIC) with plans to incorporate ideas into local projects
Newsletters sent	2	Mailed to project area residents	Additional Conservation District newsletters sent

SPD Information	Number	Outcomes	Comments
Letters of support/ recommendations to council/commission/grants received	2	Received Ecology FY17 grant funding	Strait Priority Areas Central Hood Canal PIC
Are there stormwater activities occurring?	Yes	Shared bacteria data with Jefferson County Marine Resources Committee to help guide decisions about where to locate stormwater retrofit projects	www.nwstraits.org/media/2092/jef-2016-bioretenion_assessment.pdf
Riparian restoration	Yes	Tarboo Creek – 3,000 trees Leland Creek – 2 acres	Hood Canal Clean Streams
Septic and water quality complaints	162	154 septic, 8 water quality; 77 cases closed	Includes tracking cases for septic enforcement; Responded to 2 sewage spills in Pt Ludlow
Reports	2	Northeast Jefferson final report Chimacum Comprehensive WQ Report	jeffersoncountypublichealth.org/index.php?clean-water-projects www.jeffersoncd.org/resources/chimacum-report-with-appendices
Data/Mapping		Obtained grant support to upgrade county GIS 5 iPads deployed w/Collector app for WQ data	Plan to create public mapping apps/portal for water quality data in 2017