

East Jefferson County Water Quality News

Water Quality Project Updates

WA State Beach Environmental Assessment, Communication and Health (BEACH)

Program: We'll start sampling beaches for bacteria levels at Oak Bay County Park, Camp Parsons (in Brinnon) and Fort Worden State Park (sampled by the Port Townsend Marine Science Center) starting in May thru September of 2017.

Hood Canal Priority Basins: Monthly monitoring of 20 stations on Ludlow Creek to analyze bacteria and basic water quality parameters started in October of 2016 and will continue until September 2017 (See page 4).

Hood Canal Regional PIC Phase 2: We are wrapping up a short nutrient study at several sampling stations in Chimacum, Irondale and Little Goose Creeks. Preliminary results show high nitrates at both Irondale and Little Goose Creeks. Full data will be available later this spring.

Lake Monitoring: We plan to start lake monitoring for harmful algal blooms again in April this year and we also hope to receive funding to allow an in-depth study of the factors that cause toxic algal blooms on Anderson Lake.

Quilcene-Dabob PIC: This project funded by the Department of Ecology includes regular monitoring in Quilcene & Dabob Bay to identify areas of concern and evaluate the levels of fecal and nutrient pollution (See page 3 for more information).

Shellfish Biotoxin: Monitoring for Paralytic, Amnesic, and Diarrhetic Shellfish Poisoning (PSP, ASP & DSP) is an on-going project with the Department of Health. Look for our advisory signs posted at shellfish beaches before you harvest or check the State hotline at (800) 562-5632. See also: www.doh.wa.gov/ShellfishSafety.htm

Conservation Futures: It's time to submit your 2017 Conservation Futures grant application to help preserve open space, working farms, forests, and habitat that provides public benefits. The application deadline is Thursday, March 30, 2017 (See Page 2 or the following website for details: www.co.jefferson.wa.us/commissioners/Conservation/conservation.asp).

North Pacific Coast Marine Resource Council (MRC): This MRC has a number of priority actions for 2017; check the webpage for details at: http://wdfw.wa.gov/about/volunteer/mrc/county_northpacific.html

Central Hood Canal Pollution Identification & Control (PIC) Project & Strait Priority Areas Project: New projects (see update on this page).

New Projects Starting in 2017

Jefferson County Public Health is currently working on grant agreements with the Department of Ecology for two projects. The first project is called the **Central Hood Canal Pollution Identification & Control (PIC) project**. This project will bring JCPH staff to the Brinnon area for both marine and stream monitoring; staff will also be visiting with south county residents to do onsite septic system outreach.

The second project is called the **Strait Priority Areas project**. JCPH staff alongside Jefferson County Conservation District staff will be working in the Discovery Bay area & Port Townsend throughout this project on water quality and agricultural best management practices. We will be conducting water quality monitoring, agricultural surveys, and onsite septic system outreach.

“Oh, Eeyore, you are wet!”
said Piglet, feeling him.

Eeyore shook himself, and asked somebody to explain to Piglet what happened when you had been inside a river for quite a long time.”

— A.A. Milne

Conservation Futures Grants Available for Open Space Projects in Jefferson County

The Jefferson County Board of County Commissioners invites applications for projects to enhance the county's open spaces.

The Conservation Futures Program and Fund help protect important wildlife habitat, agricultural and timber lands, visual buffers, scenic areas, and open space lands linked to parks, cultural and historic sites – all for the health, benefit, and welfare of citizens.

Projects must provide permanent protection of open space lands through the acquisition of real

property or development rights or involve operations and maintenance costs for properties previously acquired with Conservation Futures Funds. To request a program manual and application, and for more information, contact tpokorny@co.jefferson.wa.us or call (360) 379-4498.

The application deadline is **Thursday, March 30, 2017 at 4:30 PM** to the Jefferson County Environmental Health Dept., 615 Sheridan St., Port Townsend, WA 98368. Or email to: tpokorny@co.jefferson.wa.us.



Workshops to explain the details of the Conservation Futures Program to agencies, groups and interested citizens are available by request throughout the year.

The Hood Canal Clean Streams Initiative

This two-year project just completed. It involved monthly monitoring for fecal coliform bacteria at 19 locations on the Big and Little Quilcene Rivers, as well as Tarboo, Donovan, Ripley, Howe, and Leland creeks. The results for fecal coliform monitoring are shown in the table below.

In addition, the project also looked at water temperatures to determine if conditions in these rivers and creeks were healthy for returning salmon. Overall, 2015 temperature data was inconclusive due to the record high temperatures and drought that occurred throughout that year. The 2016 temperature data in the second year of the project was closer to normal conditions but unfortunately still showed temperatures above the state standard at all the stations tested. As part of the project, in an effort to improve temperature conditions, a number of restoration plantings were done along Tarboo and Leland Creeks in the riparian areas. As these plantings mature, they will provide better shading along these creeks and lower stream temperatures over time.

While the Clean Streams Initiative ended in 2016, many of the stream sites will receive continued monitoring under the Quilcene-Dabob Pollution Identification and Control (PIC) Project (See the next page for more details).

Fecal Coliform Bacteria Results			
Sample Location	Meets Standard?	Sample Location	Meets Standard?
Big Quilcene river mile 2.5	👍	Little Quilcene river mile 0.1	👎
Big Quilcene river mile 0.64	👍	Little Quilcene river mile 0.8	👎
Big Quilcene river mile 2.9	👍	Tarboo Creek river mile 0.9	👎
Little Quilcene river mile 1.7	👍	Tarboo Creek river mile 3.5	👎
Tarboo Creek river mile 2.0	👍	Tarboo Creek river mile 4.2	👎
Leland Creek river mile 0.7	👎	Leland Creek river mile 2.9	👎
Howe Creek river mile 1.9	👍	Leland Creek river mile 4.0	👎
Howe Creek river mile 0.5	👍	Donovan Creek river mile 0.2	👎
Cemetery Drain river mile 0.6*	👎	Donovan Creek river mile 1.8*	👎
Ripley Creek river mile 0.1	👍	*Also does not meet Part 1 of Water Quality Standard (Geomean over 100 mg/L)	

Quilcene-Dabob Pollution Identification and Correction (PIC) Project

The focus on this project is to identify nonpoint sources of pollution in Quilcene and Dabob Bays, which are important shellfish growing areas of Hood Canal. JCPH staff will analyze fecal coliform bacteria and nutrient inputs and then assess shoreline septic systems through sanitary surveys. Correction activities will work to repair failing septic systems near waterbodies.

In addition, there will be two years of bi-monthly marine sampling at 16 stations and one year of stream monitoring at 17 stations for fecal coliform bacteria and nutrient composition (some of the stream stations were previously sampled in the Hood Canal Clean Streams Initiatives, see page 2).

The project started with shoreline sampling in June 2016 and so far the data collected has shown that fecal coliform bacteria is high in some areas (see map showing the location of sample sites and areas where we have high hits for fecal coliform bacteria over 200 cfu/100ml). These areas include:

- **The east side of the Bolton Peninsula**
- **At a tributary to Donovan Creek**
- **Spencer Creek**
- **On the west side of Jackson Cove**
- **At head of Quilcene Bay near Indian George Creek**
- **On the east side of Tarboo Bay**

This indicates that there are potential threats in these areas to human health, salmon habitat, and shellfish beds.

To improve water quality, JCPH staff has started knocking on doors in these neighborhoods to ask about how septic



Alisa Hasbrouck, Quilcene-Dabob PIC Project Manager



systems are being maintained. We share tips on how to keep septic systems working well, and provide important information about septic inspections, and low-interest loan programs for septic system repair or replacement.

For more details on the water quality work of Jefferson County Environmental Health, visit www.jeffersoncountypublichealth.org or call us at (360) 385-9444.

Hood Canal Priority Basins

Jefferson County
Environmental Health
and the Jefferson
County Conservation
District are now

collecting monthly water quality samples to test for fecal coliform bacteria in the Ludlow Creek Basin. So far we are finding much lower bacteria levels in Ludlow Creek as compared to Chimacum Creek. In the Chimacum valley we identified some areas with higher levels of bacteria and are targeting those areas for more sanitary surveys and outreach efforts. We recently created some fact sheets that were mailed to residents in these neighborhoods. These **Chimacum Water Quality Factsheets** (see a sample above) are now available on the www.JeffersonCountyPublicHealth.org home page under the *News and Events* section.



Pollution Prevention Assistance program aka Local Source Control

JCPH's Pollution Prevention Assistance program, also known as Local Source Control, has been working with local businesses to keep our waterways clean. In 2016, our pollution prevention specialists visited over 60 businesses that are small-quantity generators (of hazardous waste). This included visits to county schools, ensuring that waste streams from places such as science classroom laboratories are being safely handled.

Our Pollution Prevention Specialists can help county residents to:

- **Safely handle and store materials**
- **Manage drainage systems**
- **Create a plan to prevent spills**
- **Replace toxics with safer alternatives**

Contact JCPH at (360) 385-9444 to schedule a pollution prevention visit today.



FREE Homeowner Septic System Care and Maintenance & Homeowner Inspection Certification Trainings—Spring 2017 Schedule

Tri-Area Community Center, Wednesday, April 12th, 9:30 AM

Quilcene Community Center, Tuesday, April 18th, 9:30 AM

Tri-Area Community Center, Thursday, April 27, 4:00 PM

*For more information about the classes—Pre-Registration Required
please call (360) 385-9407*



EAST JEFFERSON COUNTY WATER QUALITY NEWS

Jefferson County Public Health
615 Sheridan Street
Port Townsend, WA 98368

This newsletter is made possible by a grant from the Washington State Department of Ecology.

Send questions, comments and ideas to:
info@jeffersoncountypublichealth.org
or call (360) 385-9444 M-Th, 9:00- 4:30



Water quality monitoring along river, stream, shorelines and marine environments of East Jefferson County has been conducted by the Water Quality Team at JCPH since 2006.