

# Jefferson County Clean Water District

## ANNUAL REPORT

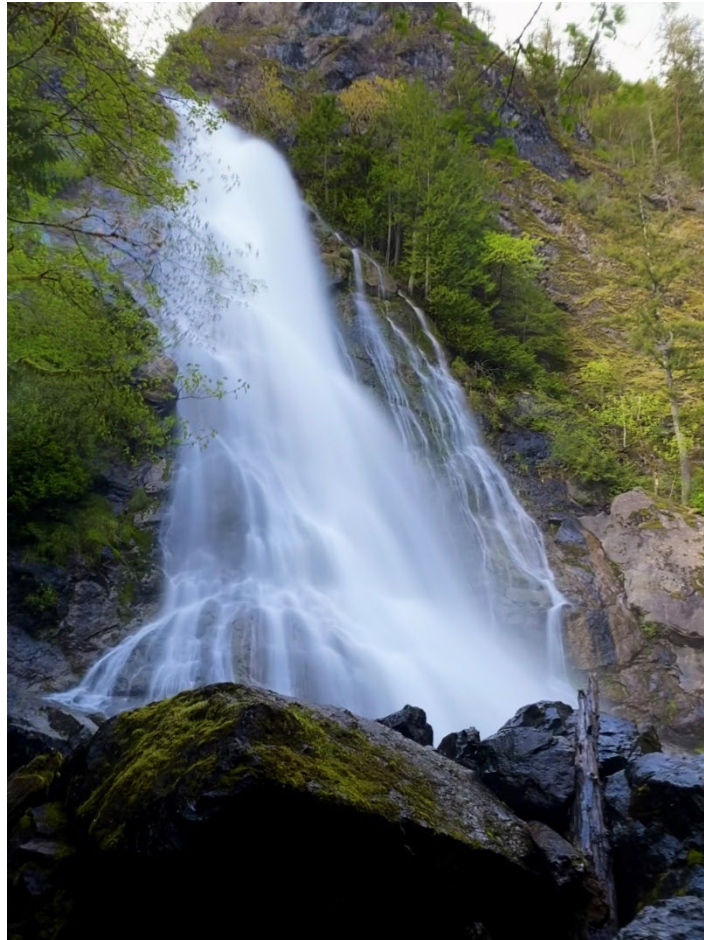


Figure 1. Rocky Brook Falls. Photo by Michael Dawson.

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**Reporting Period:** January 1 - December 31, 2021

**Name of Shellfish Protection District:** Jefferson County Clean Water District

**Name of County:** Jefferson

**Primary Point of Contact:** Michael Dawson, Water Quality Manager

**Number of Meetings in 2021:** 4 Clean Water District Advisory Council meetings

## 1 FUNDING

The Jefferson County Clean Water District (CWD) is funded by a \$20 per-parcel fee assessed by the Jefferson County Assessor. In 2021, the Water Quality division of Jefferson County Public Health (JCPH) received a net of \$423,000 from the CWD assessment, which was used as matching funds for Clean Water Projects. The Water Quality division has continued to pursue the Pollution Identification and Correction (PIC) strategies outlined in the 2012 Clean Water District Advisory Council recommendations. These include applying for grant funding for Clean Water Projects. This strategy allows JCPH to leverage district funds with state funds for projects.

The following Clean Water Projects were active during this reporting period (Figure 2):

1. Northern Hood Canal PIC Project
2. Oak Bay – Mats Mats PIC Project
3. Jefferson County Foundational Monitoring and PIC Project

JCPH utilized the CWD fee to provide 25% matching funds in conjunction with 75% from Ecology's Centennial Clean Water program to fund these Clean Water Projects. During 2021, the Northern Hood Canal PIC project received \$132,341 in state funds matched with \$45,114 in CWD funds. The Oak Bay – Mats Mats PIC project received \$75,139 in state funds matched with \$25,046 in CWD funds. The Foundational Monitoring project received \$135,467 in state funds matched with \$45,156 in CWD funds.

CWD funds also supported administrative expenses related to operating the Water Quality department. JCPH provided temporary sanitation at the Big Quilcene River during the fishing season in 2021 to avoid emergency closures of shellfish beds. CWD funds were not used for additional programs of the Water Quality department, including the BEACH program, Recreational Shellfish Biotoxin program, Lakes program, Hood Canal Regional PIC project, and the Natural Resources programs.

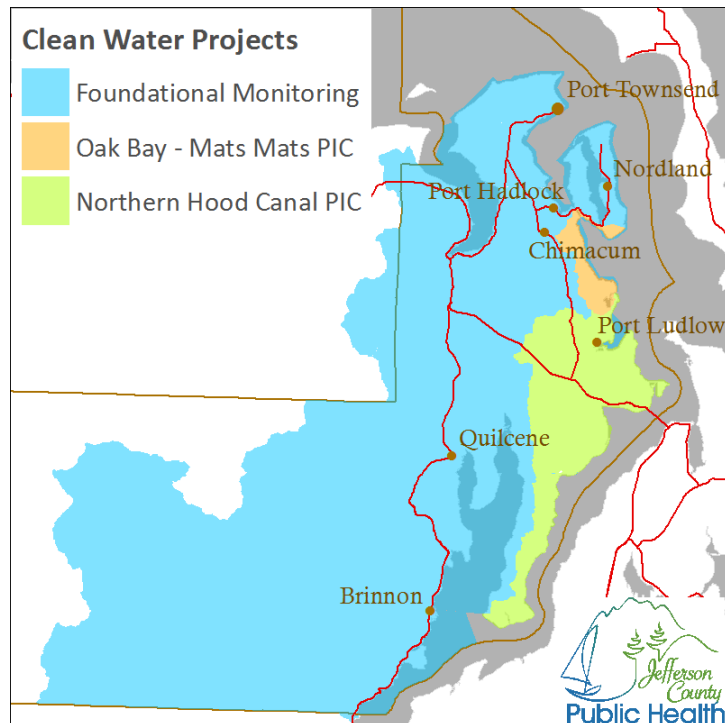


Figure 2. Water Quality Project Area Map, 2021.

## 2 PROGRAM STATUS/CHANGES

There were no changes in Water Quality staffing in 2021. In January 2021, the Water Quality department moved staff offices to 1200 Sims Way, Port Townsend, as JCPH expanded and needed more office space at 615 Sheridan Street.

The Foundational Monitoring plan continued in 2021 with the following staff assignments:

Monitoring Group	Receiving Waters	Description	Staff
1	Strait of Juan de Fuca	Discovery Bay	Brad Stone
2	Puget Sound	Port Townsend to Port Ludlow	Lara Gaasland-Tatro
3	Hood Canal	Duckabush and Dosewallips Rivers	Amanda Christofferson
4	Hood Canal	Quilcene and Dabob Bays	Tim Weissman
5	Hood Canal	Coyle to Paradise Bay	Jacquelyn Stenman

As the Foundational Monitoring project covers the entire Clean Water District, including existing projects with overlapping geographies (the Northern Hood Canal and Oak Bay-Mats Mats projects), staff coordinated so there wouldn't be duplicative efforts. In the work areas of these two projects, the plan was for staff to use those previous project funds until the projects conclude in 2022.

Figure 3 shows the shellfish growing areas and their relation to the Monitoring Groups listed above, and the prioritized shoreline (in purple). JCPH prioritized shoreline reaches by the presence of commercial and recreational shellfish beds, recreational beaches, and based on past monitoring history. Staff monitored high priority shorelines each wet season and dry season, as well as medium priority reaches if time and budget allow. JCPH intends for the prioritization scheme to be adaptable as conditions change over time. More details are available in the Annual Water Quality Report at

<https://jeffersoncountypublichealth.org/DocumentCenter/View/13122/Water-Quality-Annual-Report-2021>.

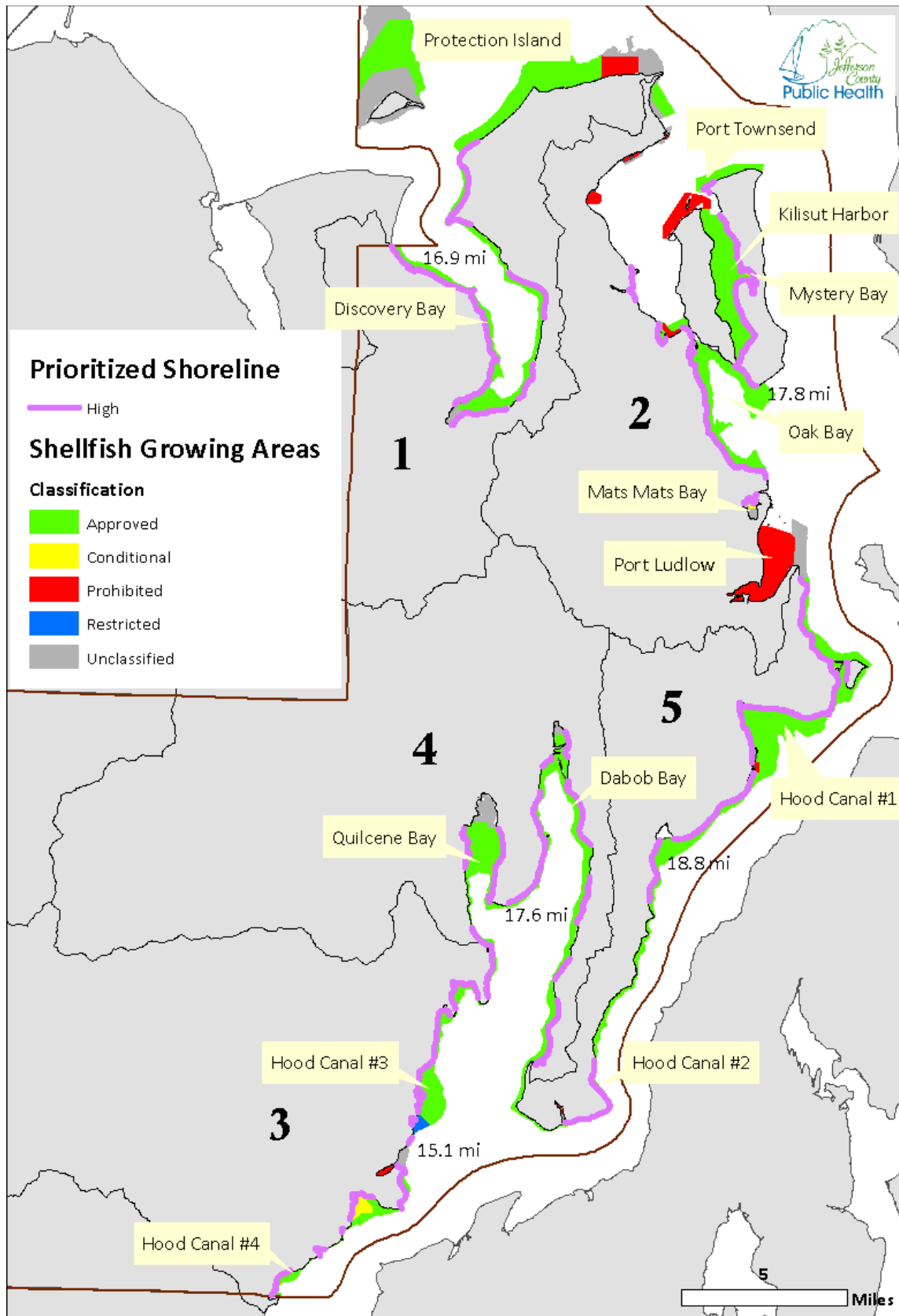


Figure 3. Foundational Monitoring areas map.

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### 3 PROGRAM SUCCESSES

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With the implementation of the Foundational Monitoring project in 2020, JCPH created a baseline water quality monitoring program that will serve the entire Clean Water District and allow for monitoring that can continue independently of grant funding availability. Annual Water Quality Reports are published to the JCPH webpage to summarize findings, available under Plans & Reports at [jeffersoncountypublichealth.org/713/Clean-Water-District](http://jeffersoncountypublichealth.org/713/Clean-Water-District). After completing a full year of monitoring in 2021, JCPH will review shoreline prioritization in 2022 to determine if any changes need to be made. At the completion of the project, the Water Quality department will have an estimate of the annual cost of monitoring the entire CWD.

DOH did not release Early Warning reports for shellfish growing areas in 2021 due to the COVID-19 pandemic. Marine water quality, as monitored by DOH, showed some improvements in 2021. Hood Canal #3 data exhibited an improving trend, though DOH needs greater improvements over a longer time period to consider any changes to the Conditionally Approved area at the Duckabush River. DOH documented high bacteria levels in Quilcene Bay during a late June heatwave with record high temperatures.

In 2021, Jefferson County completed a major revision of the enforcement code in Title 19 Code Compliance, available at [www.codepublishing.com/WA/JeffersonCounty/#!/JeffersonCounty19/JeffersonCounty19.html](http://www.codepublishing.com/WA/JeffersonCounty/#!/JeffersonCounty19/JeffersonCounty19.html). Water Quality staff were trained on the revised code and contributed to the creation of septic violation letter templates to standardize responses to septic failures and code violations.

### 4 CHALLENGES/BARRIERS

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The COVID-19 pandemic continued to impact all JCPH programs in 2021. Staff primarily teleworked, and all meetings were held virtually, including the Clean Water District Advisory Council quarterly meetings. Fieldwork continued, but staff primarily worked solo in the field during water quality monitoring, which sometimes resulted in additional vehicle trips and less efficiency. In spite of this, staff met water quality monitoring goals and there was very little disruption in data collection.

The rate of completion for septic system sanitary surveys continued to be slow during the pandemic. Staff revised mailer cards sent to schedule site visits, which helped somewhat to boost responses. Staff completed 65 surveys in 2021, with 1 attempted/denied. Staff found 3 septic system failures during surveys.

Progress was also delayed on investigations, and on pollution correction activities. Complaint investigation and enforcement continued, but at a reduced pace. The septic team pursued septic repairs and permitting, but were sometimes slowed down by lack of availability of professionals for design and installation due to impacts of the pandemic.

## 5 POLLUTION CONTROL IMPLEMENTATION TABLE

SPD Information	Number	Outcomes	Comments
Miles of shoreline evaluated (WY2021)	99	Wet and dry season monitoring E. coli and Enterococcus	Northern Hood Canal: 18.4 miles Oak Bay – Mats Mats: 6.5 miles Foundational Monitoring: 73.9
Discharges/streams monitored for E. coli or Enterococcus and assessed for State standards (WY2021)	20	Wet season: 3 streams failed part 2. Dry season: Cooper Creek failed parts 1 & 2 of the standard, and 9 other streams failed part 2.	Northern Hood Canal: 5 stations Oak Bay – Mats Mats: 5 stations Foundational Monitoring: 10 stations
Marine stations monitored	none		See DOH marine monitoring results at <a href="https://fortress.wa.gov/doh/oswpviewer/index.html">fortress.wa.gov/doh/oswpviewer/index.html</a> See BEACH program results at <a href="https://ecology.wa.gov/Water-Shorelines/Water-quality/Saltwater/BEACH-program">ecology.wa.gov/Water-Shorelines/Water-quality/Saltwater/BEACH-program</a>
Sites with elevated bacteria or “hot spots” (WY2021)	17	Confirmed hot spots > 320 E. coli geomean or > 110 entero investigated	Northern Hood Canal: 9 Oak Bay – Mats Mats: 7 Foundational Monitoring: 1
Parcel/property evaluations	65	Distributed copies of as-builts if available, homeowner class info, rebate info, Craft3, USDA and JCPH Septic Cost Share financial assistance	65 Completed, 1 Attempted/Denied Northern Hood Canal, Oak Bay – Mats Mats & Foundational Monitoring
OSS in the Shellfish Protection District	~13,500	16 previously unknown OSS identified	On-site Septic program
OSS with current inspection report	unknown	1,930 O&M inspections completed (100 from homeowners)	On-site Septic program
O&M warning letters	32	O&M deficiencies	On-site Septic program
OSS dye tests	none		
Failed OSS	3		From surveys, additional unknown # from O&M

<b>SPD Information</b>	<b>Number</b>	<b>Outcomes</b>	<b>Comments</b>
OSS Repairs	42	42 urgent repairs finalized 5 urgent repair permits issued 1 urgent repair permits pending	
Low interest OSS repair loans (Craft3 or other)	unknown	At least one urgent repair completed/funded in Pt Whitney	Craft3 low-interest loans & Jefferson County Septic Repair Cost Share program
Farms with animals in the Shellfish Protection District	unknown		
Surveillance flights	None		
Farms evaluated	None		A comprehensive farm inventory was planned but not implemented
Agriculture BMPs installed	2	Cattle exclusion fencing, Chimacum Consultation on property with pigs and runoff problems	4 farm conservation plans completed
Agriculture warning letters	None		
Utilized new source tracking technology	No		
Incentives/Rebates	2 HCRPIC, OSS unknown	O&M inspection, riser installation, pumping rebates to homeowners	On-site Septic program & Hood Canal Regional PIC project
Penalties	unknown		
Public Complaints	39 OSS 7 WQ	34 OSS finalized/closed 8 WQ finalized/closed	All complaints investigated
Public Meetings	4		Clean Water District Advisory Council 4
Workshops	Online classes on demand	60 participants, 6 homeowners completed and became registered for homeowner inspections	Online Homeowner Septic Classes (On-site program)
Community Events	none		Events cancelled due to COVID-19
Mailers/flyers/brochures	unknown	Hot spot factsheets sent to project area residents	Northern Hood Canal Oak Bay – Mats Mats Foundational Monitoring



SPD Information	Number	Outcomes	Comments
Did you conduct a social marketing survey?	No		Staff attended social marketing training
Newsletters sent	2	Mailed to project area residents	Additional JCCD newsletters sent
Letters of support/ recommendations to council/commission/grants received	2		Chimacum – Hadlock PIC grant application
Are there stormwater activities occurring?	Yes	No new hot spots	Port Townsend waterfront stormwater sites monitored wet season/dry season through Foundational Monitoring
Riparian restoration	Yes	Duckabush & Big Quilcene Floodplain Acquisitions, riparian planting	Conservation Futures & Natural Resources program
Reports	2	Posted on JCPH website	<a href="http://jeffersoncountypublichealth.org/713/Clean-Water-District">jeffersoncountypublichealth.org/713/Clean-Water-District</a>
Data/Mapping	Yes	WQDB/GIS connection Mobile GIS data collection	

## 6 ACRONYMS AND SPECIAL TERMS USED

CWD	(Jefferson County) Clean Water District
DOH	Washington State Department of Health
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
GIS	Geographic Information System
JCCD	Jefferson County Conservation District
JCPH	Jefferson County Public Health
O&M	(Septic) Operations & Maintenance
OSS	On-Site Septic Systems
PIC	Pollution Identification and Correction
SPD	Shellfish Protection District
WQ	Water Quality