

Mason County Public Health
Hood Canal Marine Recovery Area On-site Septic System
Discovery and Pollution Abatement Project
Centennial Clean Water Fund
Grant # G1000278



Holyoake Creek

1st Quarter Report
January 1, 2011 – March 31, 2011
April 12, 2011

Prepared for
Washington State Department of Ecology

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Quarterly Report, January 1, 2011 – March 31, 2011

Work performed throughout the quarter:

Task 1 – Project Administration and Management

Mason County Public Health (MCPH) prepared and submitted 4th Quarter 2010:

- Quarterly report
- Payment vouchers
- Fiscal forms

Task 2- O&M Enhancement

- Parcel records of 1023 Hood Canal Shoreline parcels have been reviewed this quarter. Those with on-site septic system information have been updated in MCPH's O&M Database, Carmody. To date MCPH has reviewed 3844 parcels within the Hood Canal study area for OSS records.
- Edits for the O&M database have been tracked in an Excel file that updates the data in Carmody.
 - ✓ The data that has been edited include installation date, type of system, if records (as-built) are available, and if the drainfield is less than 100 feet from surface water.
- 651 reviewed records have been scanned and indexed into Land Records. Also, records associated with 52 new septic permits, 247 record requests and ~233 OSS records associated with property reviews for building permits were updated in Carmody and scanned this quarter.
- Coordination within Mason County on how to make the scanned parcel information available on the web began this quarter.

Task 3- O&M Education

- MCPH prepared and presented an update to Lower Hood Canal Watershed Coalition on March 7th, 2011.
- Washington State University-extension and MCPH presented on OSS and current projects in the Hood Canal area at the North Mason Timberland Library in Belfair on February 3rd, 2011.
- Washington State University-extension and MCPH presented on OSS O&M on March 15th, 2011.

Task 4- Water Quality Monitoring

- MCPH performed monthly monitoring on the 303(d) fecal coliform listed streams during the months of January, February and March. Monitoring is going well; staff has improved monitoring efficiency.

- MCPH still needs to contact DOE’s EAP about potential data exclusion criteria for 303(d) listed streams. If no additional sample results are above the WQ Standard, all of the streams will meet the WQ standard with the exception of Deveraux Creek.
- MCPH has started some preliminary investigations of the Deveraux creek drainage to identify potential fecal coliform sources.

The following is a summary of the monitoring results to date (not included in this table are the data pertaining to field parameters, flow/loading rates and nutrients).

303(d) Stream Monitoring Summary

303(d) listed Stream	GEO-MEAN	90th Percentile	MIN	MAX	# of samples >100 FC	# of Samples	% of Samples >100FC	Meets WQ Standard	
Big Bend	BG-01	23	107	8	170	1	8	13%	Exceedance
Deveraux	DE-01	33	316	2	900	4	9	44%	Exceedance
Happy Hollow	HA-01	4	18	2	30	0	8	0%	NAP
Holyoake	HO-01	16	86	4	170	1	8	13%	Exceedance
Lilliwaup	LI-01	9	39	4	80	0	8	0%	NAP
Little Mission	LM-01	10	56	2	70	0	8	0%	NAP
Mulberg	MU-01	13	124	2	500	1	9	11%	Exceedance
Shoofly	SH-01	3	4	2	4	0	8	0%	NAP
Stimpson	ST-01	4	13	2	17	0	8	0%	NAP
Trails End	TE-01	21	111	2	300	1	8	13%	Exceedance
Twanoh Falls	TF-01	5	36	2	110	1	9	11%	Exceedance
Twanoh	TW-01	9	62	2	110	1	9	11%	Exceedance

* Based on the Extraordinary Primary Contact Water Quality Standard which requires that fecal coliform levels cannot exceed a geometric mean value of 50 colonies/100mL, with no more than 10% of all samples exceeding 100 colonies/100mL.
NAP – No Apparent Problem

- Staff plans to work with DOE EAP staff to determine which data to include. If all data is included MCPH will complete the first 10 consecutive months of monitoring in May, 2011. MCPH anticipates that if the November data or December data (due to no flow data or extreme rain event) is not included, then MCPH could complete the first year of monitoring as late as August, 2011.
- Since the entire timeline for this grant was pushed back about six months by the contract negotiation and QAPP development and acceptance, MCPH is going to propose to begin the last year of monitoring no later than November, 2011. The last year of monitoring will include monitoring all streams for a minimum of 10 events over the course of twelve months. By beginning this monitoring in November, MCPH will be able to acquire at least 10 samples prior to the final report, which is due in November, 2012. In 2011, The creeks that do not meet the WQ Standard at the end of the first year of monitoring (currently only Deveraux), will only be monitored 4 or 5 times monthly, instead of 6 times.

Task 5- Septic System Sanitary Surveys

- MCPH prioritized 222 sites for sanitary surveys. MCPH has performed sanitary surveys at 4 sites, 1 site has denied access and 1 resident has chosen not to participate. Sites that deny access are those sites where the owner/occupant actually instructs us to leave the property. Whereas those that are categorized as 'did not participate' are those that seem willing to have a sanitary survey performed and they do not outright ask us to leave the property, but for one reason or another did not have one completed.
- MCPH has had serious issues finding sites where the owners are actually home so that sanitary surveys can be performed. In order to gain greater participation MCPH has tried the following:
 - ◆ MCPH has made 95 initial site visits, but no one was home. Of the 95 sites, at least 14 have had a 2nd site visit and at least 12 have had a 3rd site visit, all with no one home.
 - ◆ MCPH compared all of the mailing addresses to the site addresses, assuming that those sites would have residents living at them. MCPH prioritized these sites for field inspection, however homeowners were still not home. MCPH hypothesizes that perhaps these sites are also part-time occupancy, but they have their mail forwarded or they work the same normal business hours (8-5) that MCPH works.
 - ◆ MCPH sent out letters to 40 homeowners in January to schedule an appointment for a sanitary survey. To date, MCPH has not received one response to those letters. MCPH included the option for sanitary surveys both during the evening and on weekends.
 - ◆ Determined to gain additional participation, staff decided to work a few Saturdays to see if there were more residents home during the weekend. MCPH was able to perform a few sanitary surveys, but not enough to continue to warrant work on Saturdays.
- MCPH hopes that summer time will bring many seasonal/recreational use property owners to Hood Canal. MCPH is planning on performing additional Saturday surveys during between Memorial Day and Labor Day. Currently MCPH is not focusing on sanitary surveys around Hood Canal, assuming that many homeowners are not full time residents. Once the weather gets nicer, MCPH intends to ramp up sanitary survey work on Hood Canal to attempt to gain greater participation. If the nicer weather does not help MCPH find additional participants, MCPH will have to come up with new ideas to get residents to participate.
- MCPH will probably start performing sanitary surveys in the Deveraux Watershed this quarter and any other creeks that do not meet the WQ Standard.