



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



Twanoh Falls Creek – December 13, 2010 - monitoring/flooding event

**4th Quarter Report
October 1, 2011 – December 30, 2011
January 11, 2012**

**Prepared for
Washington State Department of Ecology**

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Mason County Hood Canal Marine Recovery Area On-site Septic System Discovery and Pollution Abatement Project
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Quarterly Report, October 1, 2011 – December 30, 2011

Work performed throughout the quarter:

Task 1 – Project Administration and Management

Mason County Public Health (MCPH) prepared and submitted 3rd Quarter 2011:

- Quarterly report
- Payment vouchers
- Fiscal forms

Task 2- O&M Enhancement

- 245 additional parcel records were pulled and verified this quarter. To date, MCPH has verified, scanned and indexed 4089 existing parcels files within the Hood Canal study area.
- Parcel records associated with 48 new septic permits, 294 record requests and ~220 OSS records associated with property reviews for building permits were verified, updated in Carmody and scanned this quarter. To date, MCPH has verified, scanned and indexed 470 new septic system permits, 1598 septic records associated with records requests and 1530 septic records associated with parcel review for building permits.
- Under this grant, MCPH has validated 7,687 on-site septic system records and had them scanned into Land Records.
- MCPH has now made all records that have been scanned available on the Mason County's website (see Appendix A, news release on Land Records).

Task 3- O&M Education

- MCPH sent out bulk mail reminders to 2,512 postal customers around Hood Canal. MCPH switched from individual reminders to bulk mail reminders because of the significant cost savings.

Task 4- Water Quality Monitoring

- MCPH continued performing monthly monitoring at the three 303(d) listed streams that did not meet the water quality standard, Big Bend, Deveraux and Trails End. Those streams were monitored in October, November and December.
- MCPH segmented Trails End and Deveraux Creeks this quarter. Staff will utilize this information along with the data collected from Big Bend and Trails End Creeks to prioritize sanitary surveys along those streams.
- MCPH took a total of 11 ambient samples this quarter from the main monitoring locations and 19 samples were taken during stream segmenting of Deveraux and Trails End Creeks.
- MCPH reloaded all monitoring results to date, in December 2012. MCPH is waiting for the EIM data coordinator to determine if any additional information is needed to fully load the data.
- MCPH composed a letter, with supporting documentation, to request the removal of 9 of the 12 streams that are on the 303(d) list for fecal coliform (see Appendix B).
- MCPH e-mailed DOE staff, Ken Koch, to ask if DOE needs additional data to be collected to support the removal of 9 streams from the 303(d) list for fecal coliform. MCPH is waiting for a response.

The following is a summary of the monitoring results to date for those streams that did not meet the extraordinary water quality standard (not included in this table are the data pertaining to field parameters, flow/loading rates, nutrients and stream segmenting).

303(d) Stream Monitoring Summary

303(d) Stream	Site ID	GEO-MEAN	90th Percentile	# of Samples	# of samples >100 FC	% of Samples >100FC	Meets WQ Standard*	MIN	MAX
Big Bend	BG-01	34	146	17	3	18%	Exceedance	8	1600
Deveraux	DE-01	25	190	17	5	29%	Exceedance	2	900
Trails End	TE-01	21	222	17	3	18%	Exceedance	2	300

* 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 not more than 10% of all samples exceeding 100 colonies/100mL.

- Monitoring results from all 3 streams have been low this quarter (no samples >200 FC/100mL).
- Below are tables that include all of the FC results that were collected as part of segmenting.

Big Bend Segmenting Results

Site ID	GEO-MEAN	90th Percentile	# of Samples	# of samples >100 FC	% of Samples >100FC	Meets WQ Standard
BG-02	150	150	1	1	100%	Exceedance
BG-03	80	80	1	0	0%	Exceedance
BG-04	240	240	1	1	100%	Exceedance
BG-05	130	130	1	1	100%	Exceedance
BG-06	30	30	1	0	0%	NAP
BG-07	50	50	1	0	0%	NAP
BG-08	70	70	1	0	0%	Exceedance
BG-09	30	30	1	0	0%	NAP
BG-10	50	50	1	0	0%	NAP
BG-11	50	50	1	0	0%	NAP

Deveraux Segmenting Results

Site ID	GEO-MEAN	90th Percentile	# of Samples	# of samples >100 FC	% of Samples >100FC	Meets WQ Standard
DE-02	13	13	1	0	0%	NAP
DE-03	27	27	1	0	0%	NAP
DE-04	110	110	1	1	100%	Exceedance
DE-05	34	34	1	0	0%	NAP
DE-06	80	80	1	0	0%	Exceedance
DE-07	50	50	1	0	0%	NAP
DE-08	140	140	1	1	100%	Exceedance
DE-09	70	70	1	0	0%	Exceedance
DE-10	8	8	1	0	0%	NAP
DE-11	11	11	1	0	0%	NAP

Trails End Segmenting Results

Site ID	GEO-MEAN	90th Percentile	# of Samples	# of samples >100 FC	% of Samples >100FC	Meets WQ Standard
TE-02	11	11	1	0	0%	NAP
TE-03	2	2	1	0	0%	NAP
TE-04	70	70	1	0	0%	Exceedance
TE-05	130	130	1	1	100%	Exceedance
TE-06	8	8	1	0	0%	NAP
TE-07	4	4	1	0	0%	NAP
TE-08	11	11	1	0	0%	NAP
TE-08a	900	900	1	1	100%	Exceedance
TE-09	11	11	1	0	0%	NAP

- MCPH will continue to perform monthly monitoring at the three 303(d) listed streams this quarter.

Task 5- Septic System Sanitary Surveys

- MCPH has completed the 1 dye test that was initiated last quarter. The dye test was positive. MCPH is working with the owner to abate the violation.
- MCPH has had 5 OSS repairs this quarter within the study area.
- MCPH's main objective for this quarter is to start performing sanitary surveys at those sites that have full time occupancy in the Deveraux, Trails End and Big Bend Watersheds to identify and correct sources of fecal coliform pollution.