



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



Staff measures flow at Big Bend Creek – June 26, 2012 - monitoring event

**2nd Quarter Report
April 1, 2012 – June 30, 2012
July 9, 2012**

**Prepared for
Washington State Department of Ecology**

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Work performed throughout the quarter:

Task 1 – Project Administration and Management

Mason County Public Health (MCPH) prepared and submitted 1st Quarter 2012:

- Quarterly report
- Payment vouchers
- Fiscal forms

Task 2- O&M Enhancement-

- This quarter, 473 additional parcel records were pulled and verified this quarter. In addition, MCPH has scanned 594 records this quarter. To date, MCPH has verified, scanned and indexed 6981 existing parcels files within the Hood Canal study area.
- Parcel records associated with 62 new septic permits, 300 record requests and 191 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 572 new septic system permits, 1896 septic records associated with records requests and 2011 septic records associated with parcel review for building permits.
- Under this grant, MCPH has validated 11,460 on-site septic system records, had their information updated into Carmody and then scanned into Land Records.
- MCPH has completed all of the verification, scanning and indexing of the parcels located within 1000' of Hood Canal and those parcels that are adjacent to the 303(d) listed streams.
- As funding still exists in this task, MCPH will be proposing to add additional areas in the Hood Canal Watershed for verification, scanning and indexing prioritized by population density and closeness to surface water.

Task 3- O&M Education

- MCPH sent out 3544 O&M reminders within the Hood Canal Watershed. These were sent out to all homeowners on certain postal routes, using 'every door direct mailing' (EDDM). The reminders were sent to postal routes in Hoodsport, Union and Tahuya.
- Within the timeframe of this grant, MCPH has sent out 11,453 reminders within the Hood Canal Watershed.
- MPCH will also be sending out a EDDM to Belfair during the 3rd quarter.

Task 4- Water Quality Monitoring

- MCPH requested ECY to allow for additional monitoring due to potential changes to the delisting policy. MCPH was instructed by ECY during the contract negotiation of this grant, that if 10 samples from within a 12 consecutive month period met the extraordinary water quality standard (FC levels must not exceed a geometric mean of 50 colonies/100mL with no more than 10% of all samples exceeding 100 colonies/100mL), then those streams segments would be eligible for delisting.

In 2011, MCPH recommended delisting of 9 streams on the 303(d) list, based on monitoring results from the first year of monitoring. MCPH had collected at least 10 samples from each site within a 12 consecutive month period. The monitoring results from these streams met the extraordinary water

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quality standard for fecal coliform. However, four of the nine streams had a single monitoring event with a result >100 FC/100mL (which meets the ECY provided criteria for removal). The four streams are Holyoake, Mulberg, Twanoh and Twanoh Falls. Once MCPH requested that the streams be removed, ECY informed MCPH that there was a potential policy change. The policy change may require that the samples' results met a higher standard than the existing water quality standard.

According to ECY, in the new potential policy, there may be a change in the requirement for removing a stream from the 303(d) list. The policy change may require that fecal coliform levels not exceed a geometric mean value of 50 colonies/100mL without any individual result exceeding 100 colonies/100mL. MCPH has been in contact with ECY staff, Ken Koch, to determine if additional monitoring should be performed at those streams that MCPH has requested be de-listed, but had a single monitoring event with a result >100 colonies/100mL. ECY has not been able to provide a definitive answer.

In light of this potential, MCPH proposed to continue monitoring at those four streams, 10 additional times, before the end of the grant, to determine if they can meet that standard. Due to budget and timing constraints, MCPH is proposing to only collect fecal coliform samples from these sites. MCPH met with grant officer Tammy Riddell to provide additional details about this proposal. MCPH is drafting a more-formal monitoring proposal for these streams.

- 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. In addition, MCPH monitored 4 streams that MCPH recommended for delisting (see bullet below for additional information), Holyoake, Mulberg, Twanoh Falls, Twanoh. These streams were monitored in April, May and June.
- MCPH took a total of 16 ambient samples this quarter from 7 monitoring locations.
- The following is a summary of the monitoring results to date for the three streams that did not meet the extraordinary water quality standard in the first year of monitoring and the four streams that met the water quality standard, but may not be eligible for delisting pending a policy decision from ECY. Not included in this table is 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
Deveraux	DE-01	21	215	22	7	32%	Exceedance	2	900
Trails End	TE-01	18	170	22	5	23%	Exceedance	2	300
Big Bend	I-73	33	128	22	4	18%	Exceedance	8	1600
Mulberg	MU-01	17	416	13	2	15%	Exceedance	2	500
Holyoake	HO-01	16	48	12	1	8%	NAP	4	170
Twanoh Falls	TF-01	5	15	13	1	8%	NAP	2	110
Twanoh	TW-01	7	46	13	1	8%	NAP	2	110

* 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 7 streams have continued to be low this quarter. Deveraux and Mulberg each had a single fecal coliform sample results greater than 100 FC/100mL).
- MCPH will continue to perform monthly monitoring at the seven 303(d) listed streams this quarter.

Task 5- Septic System Sanitary Surveys

- MCPH is still working with one owner to abate a failing OSS.
- MCPH has had 2 non-shoreline OSS repairs this quarter and 1 shoreline OSS repair within the study area.
- MCPH completed 2 sanitary surveys this quarter and attempted surveys at 10 site located adjacent to a 303(d) listed stream.
- MCPH has hired an additional Environmental Health Specialist, who will be assisting with performing sanitary surveys for this grant. MCPH will focus sanitary surveys both in areas adjacent to 303(d) listed streams and at shoreline sites where elevated fecal coliform levels were identified under G1000122.