

**Hood Canal Regional Pollution Identification and Correction
NEP Phase 2 Grant
Guidance Group Meeting Minutes
March 7th, 2016**

Hood Canal Coordinating Council meeting room
17791 Fjord DR NE, Suite 124, Poulsbo, WA 98370

The next guidance group meeting will be June 30th from 10:00 am until 1:00 pm at the Hood Canal Coordinating Council office in Poulsbo.

Grant billing and reporting is now required monthly.

Pilot nutrient studies are pending QAPP addendum approval.

PGST asked for input on DNA identification methods: polymerase chain reaction (PCR), QPCR, and molecular.

Attendees

Leslie Banigan, Kitsap Public Health
Erika Bates, Washington State University Extension, Mason (Call In)
Seth Book, Skokomish Tribe
Hans Daubenberger, Port Gamble S'Klallam Tribe
Mike Dawson, Jefferson Public Health (Call in)
Glenn Gately, Jefferson Conservation District
Haley Harguth, Hood Canal Coordinating Council
Paul McCollum, Port Gamble S'Klallam Tribe
Debbie Riley, Mason County Public Health
Ian Rork, Kitsap Public Health
Jean Snyder, Washington State Department of Health (Call in)
Devon Hayes, Port Gamble S'Klallam Tribe
Cindy Waite, Mason County Public Health

Introductions

Leslie welcomed the group and introduced Ian Rork, who will be helping staff the guidance group meetings. The group introduced themselves.

Quarterly Reports

Kitsap Public Health

Leslie summarized Kitsap Health's upcoming shoreline survey work in Hood Canal. The Hood Canal 2 growing area will be surveyed in early April (wet season) and during the dry season in 2016. Leslie will provide confirmed wet season hotspot results at the June 30th meeting.

Jefferson Public Health

Mike reports that the E.coli concentrations have decreased in Irondale Creek (166 GMV) and Little Goose Creek (13 GMV) over the winter months. Little Goose Creek is generally clean upstream, and elevated at the mouth station. There is some development near the mouth of the creek that could be contributing.

Mike reports that they have completed many sanitary surveys throughout the county. Jefferson has surveyed all of the permanent residences of Paradise Bay. A few recreational vehicles were occupied in the area. Any connections from the RV's have been **disconnected**. Jefferson has begun to survey priority properties in the Brinnon area.

The large list of properties in the Duckabush area have been prioritized. Jefferson has begun surveying high priority properties. Jefferson has found many problematic properties so far.

Leslie summarized Jefferson's cumulative implementation work on this project:

- 6 hotspots
- 68 surveys
- 21 failures
- 5 repairs
- 4 violations (2 resolved)

Jefferson can report priority area shoreline survey miles conducted if they don't find the 40 hotspots estimated in the project scope of work.

Mason Health Report

Cindy reports that no additional miles of shoreline have been walked. Mason is currently working on four confirmed hotspots in the Hoodspport area.

A designer has been hired for the 11 Hill Rd property in Hoodspport. They are currently waiting for dry weather to conduct the planned work which includes adding a curtain drain to divert water away from the septic system.

Mason staff has met with 22710 North US 101 HWY, which has unsatisfactory maintenance with an OSS roughly 15 feet from the shoreline.

Banigan, Leslie 3/18/2016 3:11 PM

Comment [1]: Mike – how many did you have and are these captured in the cumulative grant deliverable activity?

The QAPP for Mason Health District's seepage pit study has been written and is currently in the approval process. See Pilot Nutrient Study section below.

Cindy proposed transferring funds from their rebate program to a maintenance and investigation program for 10 specific sites in Hoodspout that have no maintenance, no records and are within 100 feet of the shoreline. These sites are the highest priority and that money would be used effectively to camera/locate and inspect/pump each OSS. Seth will propose this idea to the Skokomish Tribe for approval. Leslie can then send a request to our grant officer.

Leslie summarized Mason's work:

- 20 confirmed hot spots
- 12 surveys
- 6 failures
- 1 repair

Leslie explained that any parcels that Washington State Department of Health (State Health) identifies as potential pollution sources are considered confirmed hot spots and investigation can begin. Confirmed hotspots where fecal sources have been identified and corrected, are presented to the guidance group for closure.

[Port Gamble S'Klallam Tribe Report](#)

The Lofall Creek autosampler event has been rescheduled multiple times because the prior 24 hour rainfall exceeded the precipitation threshold of 0.25 inches in the prior 24 hours. The next attempt will be March 16th and 17th.

Hans discussed microbial source tracking techniques for contaminated Pacific Northwest streams. The goal is for the regional PIC partners to work together to fill gaps in conventional PIC methods and to expand temporal and geographic sampling scopes.

Waterborne pathogens can enter aquatic systems from wastewater discharges and failing septic systems, and unmanaged livestock and pet waste. Conventional methods that use fecal indicator bacteria are not directly linked to pathogen presence and do not indicate potential contamination sources. Fecal indicator bacteria have been shown to be poor indicators of fecal pollution sources in water due to their broad distribution in the gastrointestinal tracts of most warm-blooded animals, and their ability to survive outside the host environment.

A better understanding and implementation of microbial source tracking can facilitate targeted remediation, enhance public health protection, and minimize costs associated with fecal pollution.

Some molecular methods are:

- Polymerase chain reaction technique with culture-independent Genetic markers for pollution source identification and specific pathogens. This method identifies source

markers including: human bacteria, human virus, dog, cat, gull, wild waterfowl, deer raccoon, ruminant livestock, and poultry.

- Fluorescent In Situ Hybridization – detects DNA sequences
- Oligotyping – a computational method that helps distinguish subtle variations among Ribosomal RNA gene sequences. It can detect pathogens that have adapted to stream environments and may not be related to human health risks.

Hans and Paul offered to host a guidance group technical meeting to discuss the details of the new methodologies and their potential benefits to the HCCPIC project. This meeting will be held at the PGST tribal center in Little Boston and the date will be determined in the next few weeks.

Jean Snyder of State Health explained that they are currently doing testing for Norovirus and MST in Drayton Harbor (Blaine). These analyses are being conducted by the University of Washington laboratory. The study is being led by Mark Toy.

Skokomish Tribe Report

Seth reported that sampling by the Skokomish Tribe has slowed due to flooding conditions.

WSU Extension, Mason

Erica reports that their contract started March 1st, 2016. They will conducting follow ups with 24 owners that were advised to implement BMPs during a site visit last year. They will be checking to see if the suggested BMPs were implemented or if help is still needed on the properties.

Erica also noted that an emphasis will be put on conducting site visits to seasonal residence on the canal this summer. Seasonal residence are very abundant throughout the area and are often difficult to get ahold of.

Erica will be working on a “Hoodsport Report Card” to share success and improvements with residents.

Grant Updates

Haley presented an overview of multiple changes in grant requirements.

State Health has expressed concerns about the current spending rates for the grant. This first occurred in October 2015 and the HCRPIC partners assured State Health that grant funds would be expended and grant deliverables would be met.

State Health expressed concerns again in February 2016 because the current spending rate is lower than originally projected and without changes, there will be a surplus of money left over. State Health emphasized that if the money is not spent, it will hinder future funding opportunity efforts. State Health assured us that there will be NO grant extensions and

requested a detailed spending plan by March 11th to describe monthly spending for the remaining grant term.

The following small budget adjustments have been made to enable the most productivity through the remainder of the grant in the following tasks:

- Task 1- funding adjusted based on spending rate through the first half of the grant period
- Task 2- funding adjusted based on spending rate through the first half of the grant period
- Task 4- funding adjusted based on spending rate through the first half of the grant period
- Task 5- funds have been added to this task and the timeline adjusted from January-March to March-April
- Task 6- funds have been added to this task to allow for reporting grant successes to the public and decision makers
- Task 7- funds have been added to ensure the group is able to continue attending PIC workshops in the coming year.

Haley presented a change in billing procedure from the original quarterly billing to a new monthly billing schedule. Along with monthly invoices, a monthly progress report will be required. Haley will provide a memo containing more detailed information about the changes.

If task funding is not being utilized appropriately and adequately, funds will be transferred to other grants. We need to focus on working towards our grant deliverables and spending sufficiently.

Leslie explained that along with the billing changes, the monthly reporting is effective immediately. Leslie offered to help with the monthly reporting IF she receives appropriate and timely updates. For example, we need Tax ID numbers for completed properties so that Leslie can submit them for the GIS mapping update. Otherwise, you will need to develop and submit a GIS map update with survey and failure information.

[Pilot Nutrient Study](#)

The goal of the nutrient studies is to further knowledge about bacterial and nutrient pollution sources. Leslie has developed a nutrient study QAPP addendum and sent it to UW Marine Chemistry Lab and our QAPP officer for review.

Jefferson County

The Jefferson County nutrient study, Evaluation of nutrient loading from three watersheds, will characterize the short and long-term in-stream nitrogen concentrations at three streams (Irontdale Creek, Little Goose Creek, and Chimacum Creek.)” These streams discharge into the Chimacum Creek Tidelands, closed to shellfish harvest due to elevated fecal coliform concentrations in Irontdale Creek.

Project goal: evaluate nutrient loading from three watersheds: Chimacum Creek, Irondale Creek, and Little Goose Creek.

Project Objectives:

Characterize the concentrations in two creeks which have not yet been evaluated.

Compare and contrast bacterial and nutrient results in the three watersheds

Develop methodologies for field probe deployment and use

Characterize accuracy and uncertainty utilizing existing testing regimen.

Characterize the short term temporal patterns.

Tasks:

Monthly sampling at one or two locations in Chimacum Creek, Irondale Creek, and Little Goose Cree watersheds. Samples will be sent to the University of Washington Seattle Marine Chemistry Laboratory and analyzed for PO₄, Si(OH)₄, NO₃, NO₂, and NH₃.

Each sample station will be monitored, with a field probe and data logger during one or two storm events, to characterize spatial variation. Grab samples will be collected during each probe deployment to verify accuracy and precision of the field instrument.

Mason County

The Mason County nutrient study, Evaluation of Nutrient Loading from Seepage Pits, will utilize focused field sampling and water quality analysis to evaluate whether seepage pits located on near-shore parcels are a significant source of nitrogen or bacteria loading to Hood Canal.

Project goal: evaluate bacteria and nutrient loading from seepage pits located within 100 feet of the Hood Canal shoreline. Confirm, investigate, identify, and correct fecal pollution sources.

Project Objective: Utilize focused field sampling and water quality analysis to evaluate whether seepage pits located on near-shore parcels are a significant source of nitrogen or bacteria loading to Hood Canal.

Tasks:

Mason Health staff will work with a UW student intern to collect samples. Mason staff will deliver bacteria samples to Thurston Water Lab and the UW staff will deliver nutrient samples to UW, manage the data, and produce a final report.

Select sample locations and collection dates associated with full-time occupancy.

Collect three sample sets between January and March, and three sample sets between July and September to account for seasonal differences.

Select multiple sampling locations at each site to increase probability of detecting a seepage pit signal.

Next Meeting

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