

**Hood Canal Regional Pollution Identification and Correction
NEP Phase 2 Grant
Guidance Group Meeting Minutes
September 29, 2015**

Anna Backman, Jefferson Public Health (Jefferson Health)
Leslie Banigan, Kitsap Public Health (Kitsap Health)
Seth Book, Skokomish Tribe
Matt Brincka, Washington State University Extension, Kitsap
Mike Dawson, Jefferson Health
Glenn Gately, Jefferson Conservation District (Jefferson CD)
Amy Georgeson, Washington State Department of Health (WSDOH)
Haley Harguth, Hood Canal Coordinating Council (HCCC)
Andy James, Puget Sound Institute, University of Washington Tacoma
Paul McCollum, Port Gamble S'Klallam Tribe (PGST)
Debbie Riley, Mason County Public Health (Mason Health)
Julian Sammons, Hood Canal Salmon Enhancement Group (HCSEG)
Bob Simmons, Washington State University Extension, Olympic Region
Jen Thurman-Williams, Mason Conservation District
Cindy Waite, Mason Health
Ashley Watkins, Jefferson Health

Leslie welcomed the group and noted that we have a very full agenda today. The group introduced themselves.

Near Term Actions

Haley presented the suggested Near Term Actions that were submitted to the Hood Canal Coordinating Council as Local Integrating Organization for the Hood Canal region. These are short-term recovery projects that support the implementation of the Puget Sound Action Agenda.

The group reviewed the proposed Near Term Actions. The group supported the two near term actions involving oyster restoration, and the one reducing stormwater contaminants.

The group determined that several of the proposed Near Term Actions were already in progress: Beach program (WSDOH), TMDL implementation (HCRPIC implementation), Seepage and Cesspool elimination (local onsite regulations and HCRPIC implementation), mandatory OSS operation and maintenance (local health jurisdictions), prohibit wastewater outfalls (National Pollutant Discharge and Elimination System), and inspect outfalls (HCRPIC implementation).

The group determined that a few of the proposed Near Term Actions are not within the local authority: prohibit wastewater outfalls (NPDES), permit large OSS (WSDOH).

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Jefferson, Kitsap, and Mason Health all have robust OSS operation and maintenance programs approved by WSDOH.

Julian Sammons of the Hood Canal Salmon Enhancement Group presented their proposal of a Near Term Action to provide volunteer water quality monitoring to support HCRPIC planning and implementation goals. The HCRPIC guidance group supports this Near Term Action and was very excited about the possibility of working with Julian's volunteers.

Federal Reporting requirements

Leslie reported about a memo received from WSDOH on August 6th noting that NEP sub-awardees must conform with federal sub-recipient reporting requirements. Many thanks to Amy and Haley for their help developing a standardized reporting form. Leslie sent it to WSDOH for review.

Leslie presented the form to the group. She will provide a draft of this form to Jefferson and Mason Health at the end of each weather season for reporting (October 2015, November 2015, May 2016, November 2016, & March 2016). This information will be provided with semi-annual FEATS report (October 15, 2015, April 15 2016, October 15, 2016, April 15, 2017, Final Report) to support grant reimbursements.

HCRPIC Implementation spending

Leslie presented that our implementation grant was broken into two budget cycles (April 2014 through November 2016 and December 2016 through April 2017.) WSDOH has concerns about our rate of spending and wants us to estimate how much each jurisdictions will spend by November 30, 2016. We need to submit this information by mid-October 2015.

Implementation field work began in March 2015, after the HCRPIC QAPP was approved in February 2015. The project was designed to have all field work conducted by the end of 2016.

We have one wet weather season and one dry weather season left for shoreline surveys. Map updates will be conducted between November and December 2016.

Health and Natural Resource sub-group quarterly reports

Kitsap Health

Leslie reported for Kitsap Health:

Wet season work conducted October 1, 2014 through April 30, 2015:

12 miles of shoreline surveyed in Hood Canal 4 and Hood Canal 5.

No confirmed hotspots

No hotspots needing confirmation

Dry season work May 1, 2015 through September 28, 2015:

12 miles shoreline surveyed in Hood Canal 4 and Hood Canal 5

1 Confirmed hotspot located in front of Holly Community Club – flow dried up, pending investigation

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Wet season work to be conducted November 1, 2015 through April 30, 2016

Scheduled to conduct 14.5 miles of shoreline survey in Hood Canal 2

Mason Health

Cindy reported for Mason Health. They conducted .85 of marine shoreline and .1 miles of fresh water shoreline surveys in Hoodspout in March and April 2015. They sampled 26 drainages and confirmed one hotspot DOH45 near Finch Creek. Stephanie is dye testing houses in the Finch creek drainage. Cindy will transmit the final February through April 30, 2015 activity for the October 15, 2015 grant report.

Jefferson Health

Mike introduced new employees Anna Backman and Ashley Watkins. He reported that Jefferson Health has been working in Irondale, Oak Bay, and Duckabush. They have identified hotspots with associated OSS failures: one in Port Ludlow, one in Port Hadlock, and four in Brinnon. They are investigating confirmed shoreline hotspots in Irondale and Little Goose Creeks (Oak Bay shoreline). Mike will transmit the final February through April 30, 2015 activity for the October 15, 2015 grant report.

Port Gamble S'Klallam Tribe

Paul reported that the Port Gamble S'Klallam Tribe (PGST) continues to work on field work gaps.

They ran a second field test with their Hach autosampler – this time on Irondale Creek. They plan to do this work at one more site in Jefferson County. They plan to work in Kitsap soon. Kitsap is having trouble contacting property owners of the specific parcels in Lofall that could accommodate the autosampler requirements.

The tribe is also working with Mason Health, although scheduling has been tough. Mason is waiting on new shellfish protection district funding.

The Tribe conducted a first round of optical brighter and tryptophan sampling in Irondale in coordination with the autosampler event. Paul thinks it will take several sample events to show any correlations. This first event showed optical brighteners almost backwards from E.coli. Tryptopham was tight with E.coli. The E.coli was never low and showed a lot of variation over time.

Paul is looking for sites to conduct DNA sampling. The price is high for one sample, but at 10 sample, the prices drops significantly. He proposes taking three samples at each site.

Paul reported that divers at Sund Rock in August could see the thermocline and saw Rock Fish in super schools up high in the water and lethargic. This was observed by Skokomish divers and can be seen on Seth's youtube page at <https://www.youtube.com/channel/UC67gQon-5dewrpL8g69e7Gg>. Paul would like to see more data collection in Hood Canal than the two

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ORCA buoys. There is huge potential for chronic impacts for biota in Hood Canal. Data collection will also help tune-up modeling. Paul shared that chronic hypoxia is a big deal to salmon because they have a high respiration and energy budget.

Skokomish Tribe

Seth reported on the fish kills in the lower Hood Canal area in late August and a large Ulva mat at the Skokomish delta. The high temperatures, nutrient inputs and high solar radiation resulted in large algal blooms at the surface which caused eutrophication at deeper waters. Large white microbial mats were observed in Lynch Cove bottom waters similar to those studied by Joel Elliot, University of Puget Sound in 2006-2008. These microbial mats smother benthic aquatic life and are an indicator of anoxia (no dissolved oxygen). Very Low dissolved oxygen levels persisted throughout 2015. Seth reminded us that the Hood Canal region got federal funding more than eight years ago after the big fish kills. He wonders what it will take to get us to wake up a little more.

The recently expanded Skokomish Water Quality Laboratory is currently accredited for total phosphorus and is working towards nitrite and ammonia analysis accreditation. They have a new gas chromatograph/ Mass Spectrophotometer which can analyze for organic constituents and would like to expand into TSS, and sediment concentrations.

Washington State Department of Health

Amy reported that she has finished a first draft of the Hood Canal 6 shoreline survey and sent it out to Mason County for review. There are two closure areas near the downgraded areas in Big Bend: Mason Avenue Extension, and Orre Noble Road.

HCRPIC Status Update

Septic System Pump/Riser Vouchers

Leslie updated the group on the septic pump/riser vouchers. The Skokomish Tribe asked that their \$10,000 grant budget be used to provide up to \$250 rebates for priority properties in the southern Hood Canal watershed. HCCC has dedicated \$1,000 to administer the vouchers. Mason Public Health has offered to administer the rebate voucher program first in Hoodsport and later in Big Bend Creek. The vouchers can be used for septic tank inspection, operation and maintenance, riser installation, and required pumping. Leslie will finalize the rebate voucher description and send to the team.

Nutrient Study Status

Leslie updated the group on the pilot nutrient study status. HCRPIC is working with Andy James of University of Washington to design nutrient studies that further knowledge about bacterial and nutrient sources to Hood Canal. A nutrient sub-group was formed at the June 11, 2015 guidance meeting and the group met with Andy July 20, 2015. Leslie distributed a summary of Andy's suggestions (below).

POTENTIAL JEFFERSON COUNTY NUTRIENT STUDIES

Potential Sampling Objectives:

- Characterize concentrations in two creeks which have not yet been evaluated: monthly sampling Irondale Creek and Little Goose Creek
- Characterize temporal variation of failed OSS in terms of N loading.
 - Deploy field probe/data logger system for both NO₃ and NH₄ or
 - Collect multiple samples over course of a day (could include citizen science network)
- Characterize change in concentration patterns after fecal source corrections
- Characterize the N loading of those septic systems known to be located closest to priority shorelines
- Further demonstrate the utility of the field probe application with regular sampling.
- Utilize field probe to characterize short term variations to allow a more defensible demonstration of changes in concentration following correction. This will better capture large temporal variations observed in Jefferson CD data and develop the foundation for BMP BACI studies.

Potential work areas:

- Irondale Creek and Little Goose Creek
- OSS correction sites
- other high priority sites along Brinnon shoreline area

Mike noted that Jefferson Health is looking at purchasing a nutrient probe. Glenn reminded the group that probes have a lot of limits. Detectable limits are important to consider when looking at probes. Some of the probes work really well only above 2 ppm and his data shows the majority of readings are below 1 ppm. An interference suppressor solution needs to be added to the sample and the samples are typically run on a lab bench. The probes are only as good as the field calibration.

Amy also saw very low nutrient readings in Mason County studies except in drainages with failing septic systems.

Andy noted that we saw a lot of short-term variation in Glenn's data. If that variation is a thing of interest, we may be able to capture daily variation with a probe.

Amy noted we could use probes for more detailed sampling campaigns at locations where we want to know how corrections impact loading.

Leslie asked Jefferson Public Health, Jefferson Conservation District, the nutrient sub-group, and any other interested parties to comment on the potential work and work areas by next week.

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Education and Outreach - Social Marketing

Bob Simmons has been working on a draft scope of work for WSU Extension to work with HCRPIC and Hood Canal Education Network (HCWEN) to develop and implement an education and outreach strategy for Hood Canal residents. The project will implement recommendations from the "Targeted Shellfish Program: Hood Canal Area 6: Outreach project, develop a plan for future outreach, and provide outreach to decision makers and the public.

Debbie reminded us that social marketing showed them that Oakland Bay is very different from Hood Canal in terms of demographics, barriers, motivators, preferred messenger, and where people get their news.

The group discussed how the Hood Canal is ahead of the other Local Implementing Organizations because Hood Canal Education Network has been organized and conducting effective work since 1994.

The group liked the digital photo frames that were used in the early 2000's.

Amy noted that the 2007 HCDOP day-long education event was well attended and got important messages out about Hood Canal.

We might need to use social media like twitter.

Next Steps

NEXT MEETING: December 1, 2015 12:30 until 3:00

Mike and Cindy:

- By October 15, 2015 - report wet season shoreline work (February 2015 through April 30, 2015): shoreline miles, # hotspots confirmed, # hotspots referred by WSDOH, # surveys conducted, # sewage sources identified, # sewage sources corrected.
- By October 15, 2015 - review your budget and billing and confirm that you can spend 113,880 each by the end of November 2016.