



Hood Canal Coordinating Council (HCCC)

Jefferson, Kitsap & Mason Counties; Port Gamble S'Klallam & Skokomish Tribes

Hood Canal Shellfish Initiative (HCSI) Workgroup Meeting #3

Date: March 19, 2020; 9:00 AM to 12:00 PM

Location: Zoom

Link to [agenda](#)

Attendees:

- Camille Speck, WA Dept. of Fish and Wildlife
- Sarah Fisken, Jefferson County Marine Resources Committee
- Blair Paul, Skokomish Indian Tribe
- Jen Doughty, Hood Canal Salmon Enhancement Group
- Sandy Zeiner, NW Indian Fisheries Commission
- Aaron Dufault, WA Dept. of Fish and Wildlife
- Andrea Thorpe, WA State Parks
- Daniel Hanson, Hood Canal Snail
- Dawn Hanson Smart, Hood Canal Snail
- Bill Dewey, Taylor Shellfish Farms
- Jon Wolf, Skokomish Indian Tribe
- Larry Phillips, WA Dept. of Fish and Wildlife
- Teri King, WA Sea Grant
- Phil Best, Hood Canal Environmental Council
- Dan Tonnes, National Oceanic and Atmospheric Administration
- Laura Butler, WA State Dept. of Agriculture
- David Trimbach, OSU
- Haley Harguth, HCCC
- Nate White, HCCC

Welcome and Introductions

HCCC staff provided an overview of the meeting

- Review Objectives
 - Since the last meeting, HCCC staff reviewed the HCSI action plan content relating to Objectives and Performance Measure that was generated by the Workgroup and organized it to make it compatible with the Environmental Protection Agency's (EPA) DASEES Structured Decision Making (SDM) tool. The Workgroup will now review and provide feedback on this work.
- Rank Objectives
 - We will also be discussing the survey results that Workgroup participants took. The survey asked participants to rank the HCSI action plan's Objectives in the order of desired priorities. Participants were encouraged to be honest in their responses in order to generate robust discussion amongst the Workgroup. Today's meeting will attempt to reach consensus on the order of importance for the Objectives.
- Brainstorm Actions
 - Pending time, the Workgroup will also brainstorm potential actions that can achieve the objectives.

Review Objectives

HCCC staff reviewed the “Objectives Hierarchy” table that was created to organize the HCSI action plan content into a format compatible with the DASEES SDM tool. The following descriptions of the Objectives Hierarchy elements are listed in order of high to low in the hierarchy.

- The Fundamental Objective is the HCSI Goal that the Workgroup created during previous meetings. It is the most important reason for creating an action plan.
- The seven Objectives that the Workgroup came up with are how we will achieve the Fundamental Objective/Goal
- The Performance Measures are how we will measure the success of achieving the Objectives. There can only be one Performance Measure per Objective. Appropriate measurement units are also needed to accurately measure progress in achieving the Objectives.
- The Means Objectives are the means we will use to achieve the Objectives. It's still pretty high level, but a little more drilled down than the Objective level
- Actions are specific actions to take that will achieve the Objectives

The following discussion focused on the Objectives and Performance Measures. Some Objectives had multiple Performance Measures that HCCC staff thought could be applicable. The Workgroup's feedback was sought in these cases to choose which Performance Measure would be best to use. General Workgroup feedback was sought on the rest of the Performance Measures to ensure that the best measure was chosen. Potential units of measurement are included in parentheses.

Objective 1: Restore native Hood Canal shellfish populations

Performance Measure: Sustainable breeding populations reestablished in the Washington Department of Fish and Wildlife (WDFW) priority areas in Hood Canal (#? Index?)

Comments

- If we were to select this performance measure, does HCCC have the funding to do this work for all species in the region?
 - HCCC Staff: The funding and capacity to monitor these measures is definitely a criteria to think about when selecting them. We currently have some funding to implement some of the actions that we decide to prioritize in the action plan. Whether monitoring is one of those actions is for the Workgroup to decide. When considering and selecting performance measures, consider: does that data exist already? Is it readily available? What kind of investment is needed or not? The short answer is that currently no, we're not planning to put a bunch of resources to monitoring at the moment, but if that's something the group prioritizes to do, then we should consider it.
- There is a 20 year WDFW survey for spot prawn, Dungeness crab, Manila clams, Little Neck clams (native), Butter clams (native), Cockle (native), Varnish clams, Pacific oysters, and presence/absence data for Olympia oysters (native).
- Tribal datasets also exist on crab and spot prawn test fisheries, geoduck annual surveys. There are also tribal private tideland surveys (4 year intervals).
- WDFW does not have sustainable breeding population data for native Hood Canal shellfish
- Currently, long term population trends can be used as a similar measure to estimate a sustainable breeding population
- There is a research technique to determine a sustainable breeding population, but lots of data and expertise are needed.
- A Management Strategy Evaluation (MSE) tool could be used to estimate a sustainable breeding population. California has led the use of this tool. These models can go 40-50 years into the future with their simulations. MSE is being piloted with butter clams and cockles in various basins in WA.
- Potential measurements or methodologies used by the Puget Sound Restoration Fund?

- Is restoration needed for some of these species?
- Test fishery data (i.e. number of crab per pot) is not really a population estimate. It's just a metric showing how well it's being fished; it's different than an intertidal population estimate that is given for one single beach, when an adjacent beach might be nothing and then a beach next to it has a lot. It should be averaged over the whole area.

To answer some of these unanswered questions, a subgroup will form between now and the next meeting to decide the most appropriate Performance Measure to use. The subgroup will then report out their conclusions to the full Workgroup for discussion.

Objective 2: Enhance and protect shellfish habitat

Performance Measure: Area enhanced (acres)

Comments

- Enhancement is limited by seed supply. Currently the only native seed supply is for Olympia oysters.
- Co-managers engage in enhancement of Manila clams and Pacific Oysters to support those fisheries. WDFW is interested in continuing this, as long as they have the budget for it.
- Enhancement does not need to be limited by seed supply.
- Densities (i.e. organisms per sq. ft) are better than acres as a unit of measurement. This is for the intertidal zone only; densities are not a good unit of measurement for water column species).
- Acres are a good unit of measurement for Olympia oysters because they are not targeted by fisheries.
- Biomass calculations are challenging for water column creatures.
- Using density could be challenging because it turns into a combination of enhancement effort and harvest pressure. Ex. there could be an area that's been quite effective in restoring the populations, but was just harvested. When you compare that to an area that wasn't harvested, it's difficult.
- Not all acres are equal: enhancement not valid in all sites (i.e. absence of appropriate substrate for oysters, freshwater inputs, etc.).

To answer some of these unanswered questions, a subgroup will form between now and the next meeting to decide the most appropriate Performance Measure to use. The subgroup will then report out their conclusions to the full Workgroup for discussion.

Objective 3: Enhance Hood Canal's water quality

Performance Measure option 1: Marine Water Quality Index (#)

Performance Measure option 2: Shellfish growing areas open (%)

Comments

- HCCC staff: the two Performance Measures under consideration came from the Puget Sound Partnership's Vital Sign Indicators.
- Department of Health (DOH) is already collecting data on shellfish areas open as part of Results WA, which is part of the EPA's National Estuary Program. Align data collection with the time/date DOH does this report.
- There are two types of DOH closures with different timelines--growing area downgrades (happen more slowly, based on shoreline assessments and marine testing stations) and biotoxins (fluctuate more frequently due to responses to rapid water quality changes, i.e. harmful algal blooms).
- There is another class of closure: pollution emergencies.

- Understanding all three of these categories is the best way to define the health of the canal in terms of the ability to raise or to harvest shellfish.
- DOH does annual assessments and releases a status report in the spring.
- Align with schedule of open/closure decisions, as described in HCCC's Integrated Watershed Plan.
- Factor in emergency closures from pollution. These are different from biotoxins. They are caused by failing onsite septic systems (OSS), sewage treatment plant overflows, etc. These are unpredictable in their occurrence.
- Emergency closures don't trigger shellfish protection district regulations
- How do you define each closure and how it gets done?
- Growing area classifications = most important? More stable and repeatable metric, other measures change.
- DOH has the full breadth of growing area closures, emergency closures and biotoxins in a database.
- Considered unclassified areas (still open for recreational harvest unless closed by WDFW).
- FDA audits DOH's program annually. They get called out if they manage areas with emergency closures for prolonged periods of time and are pushed to reclassify.
- Growing area metrics are part of the Puget Sound Partnership Vital Signs dashboard work. This metric is already compiled for that platform.
- Potential Performance Measure: # or frequency of emergency closures?

The Workgroup is leaning toward "Shellfish growing areas open (%)" as the Performance Measure to use. However, to answer some of these unanswered questions, a subgroup will form between now and the next meeting to decide the most appropriate Performance Measure to use. The subgroup will then report out their conclusions to the full Workgroup for discussion.

Objective 4: Improve the resilience of Hood Canal shellfish to future pressures

Performance Measure option 1: Preparedness (% of Hood Canal covered by adaptation plans)

Performance Measure option 2: Other?

Comments

- To measure, this Objective needs genetic research and development: this might be a longer term effort.
- Potential measurement unit: Inclusion of sea level rise impacts on OSS management plans.
- Consider sea level rise impacts on all infrastructure plans (parking lots, parks, campgrounds, lawns, etc.).
- Consider a measurement unit of Yes/No: easier to measure this way.
- Specifically call out inclusion of climate/SLR issues separately.
- How to measure percent of Hood Canal covered by adaptation plans?
- Use county level, jurisdictional level plans.
- WA State Parks, and Skokomish have adaptation plans, too.
- Should more broadly include development impacts etc. Measure could include adequacy of county regulations, implementation and enforcement of county codes to ensure those protections are in place and effective.
- Develop model ordinances to be used by jurisdictions? Opportunity to build a workable model for measurement.

HCCC staff will consider the Workgroup's feedback and research potential Performance Measures more. Staff will bring any updated ideas to the Workgroup for further discussion.

Objective 5: Support a sustainable Hood Canal shellfish industry

Performance Measure option 1: Economic output; contribution to local economy (\$)

Performance Measure option 2: Amount of jobs produced (# jobs)

Comments

- Economic output data available?
- Jobs go up and down: not helpful as measure?
- WDFW reporting requirement for aquatic farm permits: production metrics (annual); rolled up to the WA Dept. of Agriculture, US Dept. of Commerce, and UN Food and Agriculture Organization.
- DOH: tracks production data (for oysters produced for the half shell market; wouldn't include shucked oysters, clams, geoduck) through the Vibrio months (May, June, July, August are vibrio months).
- Co-Management system: total harvest commercial data for geoduck, and recreational/commercial harvest for crab/shrimp.
- Include recreational harvest data (lbs)? This might fit better under Objective 6. Perhaps the word "commercial" should be added to this Objective to specify that it is only considering the commercial shellfish industry.
- Potential Performance Measure: # of sustained commercial shellfish businesses in HC? Length of time they're open.
- Potential Performance Measure: # boats on the water? (i.e. commercial shrimp)
- Potential Performance Measure: # of commercial licenses for crab and shrimp harvest?
- Potential Performance Measure: # of aquatic farm permits?
- Potential Performance Measure: Commercial geoduck diver harvest, landing value (\$, lbs)?
- Potential Performance Measure: Commercial mop up shrimp, landing value (\$, lbs)?

HCCC staff will consider the Workgroup's feedback and research potential Performance Measures more. If needed, staff will consult with shellfish growers and tribes to get more feedback/ideas for appropriate measures. Staff will bring any updated ideas to the Workgroup for further discussion.

Objective 6: Expand harvest opportunities for the local community, visitors, and treaty tribes

Performance Measure option 1: Locally harvestable foods (%)

Performance Measure option 2: Bivalve-harvester days (#? Index?)

Comments

- No consistent data for private land harvesting (people harvesting on their own beach is considered recreational harvest).
- Potential Action: self-monitored survey of private land?
- Potential Performance Measure: # of recreational crab licenses issued? Crab licenses allow Puget Sound-wide harvest, so would have to report where crabs are landed, i.e. Hood Canal.
- Potential Performance Measure: Open recreational harvest areas (related to water quality)? This reflects the opportunity to harvest.
- Potential Performance Measure: area of tidelands available to public use? Wouldn't capture private land harvest.
- Improving upland access to publicly owned land is very important to expand harvest opportunity.
- Potential Performance Measure: # of access points/quality of access points (parking, sanitation, etc.).
- WDFW working with Department of Natural Resources (DNR) to use GIS to study connectivity to public owned land.
- Include tribal commercial harvest in this objective? Initially not intended to be included in this objective. Keep tribal commercial harvest separate (include in Objective 5).
- Potential Performance Measure: #s of ceremonial and subsistence (C&S) harvesting tracked in Co-management system? Data available? Data would be needed from individual tribes.

- Perhaps clarify the Objective language to specify the types of harvest opportunities covered by this objective (i.e. recreational, limited to public lands, and ceremonial and subsistence).

The Workgroup is leaning toward a combination of “Bivalve-harvester days” and ceremonial and subsistence harvesting as the Performance Measure to use. HCCC staff will consider the Workgroup’s feedback and research potential Performance Measures more. Staff will bring any updated ideas to the Workgroup for further discussion.

Objective 7: Promote cultural appreciation of Hood Canal shellfish

Performance Measure option 1: Sense of Place index (%)

Performance Measure option 2: Participation in cultural practices (%)

Comments

- Potential Performance Measure: # of shellfish events? How to determine the geographic scope of events to choose from? There are some events like Olympia Slurp Fest that are not in Hood Canal, but feature Hood Canal oysters.
- Potential Performance Measure: Stories of events? i.e. Shrimp Fest, Girl Scout events, potlatches, etc.?
- Potential Performance Measure: # of recreational licenses for shellfish harvest? This might belong better in Objective 6. Combine this with the Sense of Place index.
- WDFW has started recording residential zip codes during harvester interviews. This started in 2019, but it gives the department an idea of how far people have traveled to access shellfish in Hood Canal.
- Potential Performance Measure: # of articles or other media discussion of Hood Canal and shellfish - Fjord magazine, Sunset, Seattle etc.

HCCC staff will consider the Workgroup’s feedback and research potential Performance Measures more. Staff will bring any updated ideas to the Workgroup for further discussion.

Rank Objectives

HCCC staff reviewed preliminary results from a survey that was sent out to Workgroup participants prior to the meeting. The survey asked participants to rank how important each of the proposed Objectives is to them relative to the others on a scale of low, medium, high. The goal is to reach consensus on the rankings so that the DASEES tool can identify the best decisions and actions to take to achieve the highest priority Objectives.

HCCC staff also discussed the preliminary weighting of these results based on survey respondents choices. However, some errors were noticed in the data, so the weighting discussion will be moved to the next meeting’s agenda.

The table below shows how many votes each objective got in each importance category (high, medium, low). The top three Objectives from the survey are highlighted green, and are ranked in the order of importance. The bottom four ended with the same score. These results should be considered preliminary until more respondents complete the survey.

	Most Important	Medium Importance	Least Important
Enhance Hood Canal's water quality	11	2	0
Improve the resilience of Hood Canal shellfish to future pressures	10	3	0
Enhance and protect shellfish habitat	10	2	1
Support a sustainable Hood Canal shellfish industry	9	4	0
Expand harvest opportunities for the local community, visitors, and treaty tribes	3	8	2
Promote cultural appreciation of Hood Canal shellfish	3	7	3
Restore native Hood Canal shellfish populations	2	8	2

Comments

- Ranking seems sensible. If progress is made on the first three Objectives, then all the lower rankings would improve as well.
- Although the resilience Objective is something we should be working on, it is a longer term effort. What's the timeframe for this? It's going to require research, manipulating the genetics of various species.
 - Answer: We have not put a specific time frame on the implementation of these objectives or actions related to these objectives. We're hoping to produce an action plan that would put us on a trajectory to be working on these things for the long term.
- Clarifying question: when we're talking about the resilience of Hood Canal shellfish, are we defining Hood Canal shellfish as the native species within Hood Canal? What's the difference between the restore native Hood Canal shellfish populations Objective versus the improving the resilience of Hood Canal shellfish Objective, if they're defined as native species?
 - Answer: For the "Improve the resilience of Hood Canal shellfish..." Objective, we did not define shellfish to exclusively mean native species.
- How many people responded to the survey? Do these results represent the collective opinion and wisdom of the whole group?
 - Answer: 13 responses were received out of 37 possible.
- Seeing this data for the first time, it would be nice to have more time to really think about it, rather than to agree to this order on the fly

Due to the low response rate (likely due to the COVID-19 virus impacting partner operations), it was decided to send out the survey again to get a broader response rate, and then revisit the updated results at the next meeting.

Brainstorm Actions

The Workgroup did not have time to brainstorm and discuss actions. This item will be moved to the next meeting's agenda.

Next Meeting

The next meeting will likely be in April or May. HCCC staff will send a Doodle Poll with potential dates soon.