WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Cherry Point Aquatic Reserve
Implementation Committee Meeting Summary

Monday, October 12th, 2015, 1:00 p.m. – 3:30 p.m.
Department of Ecology Bellingham Field Office | 1440 10th St. Suite 102, Bellingham

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Participants: Elizabeth Kilanowski, Brent Rubash (*Whatcom County MRC*); Austin Rose (*Whatcom County Public Works & Staff Marine Resources Committee*); Lyle Anderson, Marie Hitchman, Kim Clarkin (*Cherry Point Citizen Stewardship Committee*); Dan Eisses (*Birch Bay Water & Sewer District*); Michael Kyte (*Independent Biologist*); Kathryn Mitchell, Raina Clark, Chase Carter (*ALCOA*); Fred Felleman (*WAVE/Friends of the Earth*); Ted Morris (*Birch Bay State Park*); Evelyn Brown, Alan Chapman (*Lummi Natural Resources*); Chad Yunge (*Dept. of Ecology*); Brendan Brokes (*Washington Department of Fish & Wildlife*); Pete Sim (*BP Cherry Point Refinery);* Steve Irving (*North Cascades Audubon*); Skip Sahlin (*SSA Marine*); Birdie Davenport, Dennis Clark, Erin Lietzan, Betty Bookheim & Jamie Kilgo (*Department of Natural Resources*)

1:00 p.m.
Introductions & Agenda – *Birdie Davenport, Aquatic Reserves Program Manager*

1:10 p.m.
Reviewed Committee Ground Rules – *Birdie Davenport & Dennis Clark*

- Review of Committee Ground Rules and agreement from the committee to follow the rules
- Question about speaking to the media – Can identify yourself as a member of the committee, but refrain from speaking for the committee.

1:20 p.m.
2013 Prioritization Recap and Progress Summary- *Jamie Kilgo*

The Implementation Committee prioritized the following three areas in 2013:

- Cherry Point herring recovery
- Stormwater & outfalls
- Education & outreach

Sub-committees recommended a near term focus & actions steps. Completed a brief overview of past and current projects.

1:30 p.m.
Sub-Committee Implementation Workshop

Members divided into five sub-committees to prioritize actions and discuss recommendations, including: *Desired outcome*, *Partnerships* (for example, lead entity, partners, regulatory authorities), *Coordination* (for example, existing projects, committees, opportunities), *Resources required* (for example, approximate cost, funding sources, equipment, staff, volunteers, feasibility), *Recommendations* (for example, priority, near-term, long-term actions.) The reserve program will use this information to build our work plan for the next two years; we'll share this information with the committee when ready.

Research & Monitoring Sub-Committee

- *Action*: Continue and expand existing monitoring:
  - *Recommendations:*
    - Continue submerged vegetation monitoring and SeagrassNet
    - Continue forage fish beach spawning surveys
    - Continue Citizen Stewardship Committee intertidal biota surveys
    - Continue WDFW herring surveys
  - *Partnerships*: Maintain and expand partnerships. State parks and industries.
- *Action*: Increased data sharing and coordination
  - *Recommendation*: Need more communication on resources available. Recommend quarterly newsletter with updated links to reports and databases.

Water Quality Sub-Committee

- *Issue*: Lots of data, but limited public knowledge and need for synthesis
  - *Outcome:* Concise picture of historical and current water quality in CP reach
  - *Recommendation:* Compile & summarize water quality and stormwater information from all partners. Create map with what is known for each sub-area & level of management. Include information from the industries, current status, remediation, individual drainages, gutter flows.
  - *Partners & coordination*: collaborative effort - DNR, industries (NPDES permits & factsheets have a lot of information), BBWARM, Whatcom County, Dept. of Ecology, BB water/sewer, Whatcom Conservation District
  - *Resources required*: GIS specialist, public relations person, water quality expert, data miner (students)

Cherry Point Herring Sub-Committee

- *Action:* Cherry Point herring stock recovery
  - *Outcome:* (analogous to Salmon Recovery Plan)
    1. Abundance level goal (3500 tons/5 years)
    2. Maintain unique stock (run timing, genetic uniqueness, site fidelity)
    3. Healthy & diverse age structure
    4. Recolonization of historic range
  - *Partners:*
    - Lead co-managers-WDFW, Tribes (Swinomish, Lummi, Nooksack, Tulalip, Suquamish)
    - Partners: DNR, Dept. of Ecology, Coast Guard (vessel traffic), Puget Sound Partnership
  - *Coordination*:
    - Cherry Point technical committee oversight
    - DNR forage fish beach spawning surveys and herring overlap
    - New 2-year mid-water trawl
    - Marine Spatial Planning – newly formed forage fish technical group
    - Seine program
    - Habitat & water quality: NPDES and Mussel Watch
    - Distribution: Eyes Over Puget Sound
    - Habitat: SeagrassNet & CP CSC
  - *Resources required*: $1.5 million/year (sources: WDFW, PSP, SK, BIA CC, TWG, NSP, DNR-NOPP, EPA)
  - *Recommendation*: Use a recovery-driven approach. What is preventing CP herring from recovering?
    - *Objective:* Identify life-stage specific factors

- *Goal*: Determine if and what the best mitigating action would be
- *Factors:*
    - Toxicity and disease – for example, genetic damage, adult productive impairment, juvenile mortality from disease
        - *Gap*: Where is toxin load/disease occurring most influential?
    - Predation: i.e. predation at each life stage
        - *Gap*: Where, what level- inter annual variability?
    - Change in distribution & migration route due to disturbance – for example, vessel traffic, high predator concentration, anchoring and lights
        - *Gap*: Where are adults and juveniles? Identify migration route.
    - Climate change – for example, prey field, community change, competition, SST, pH , growth and survival

Education & Outreach Sub-Committee

- *Action:* Public Outreach & Education
    - *Outcome:* Better educated public
    - *Recommendations*: Brochure reprint, continue visitor use surveys, school visits
    - *Partners & coordination*: Citizen Stewardship Committee (CSC), Whatcom Marine Resources Committee (MRC), industries, schools, Western Washington University (WWU) Huxley School, expert talks by Huxley profs
    - *Resources required*: Committee member time
- *Action:* Education on ecosystem sensitivity
    - *Outcome:* Less disturbance, more intact ecosystem
    - *Recommendations*: Coordinate with WDFW to create brochure to accompany crab licenses
    - *Partners& coordination* : Audubon, state & county parks, local gov't, non-profits, Nooksack Salmon Enhancement Group, WDFW
    - *Resources required*: Brochure development
- *Action*: Continue & expand citizen science projects
    - *Outcome:* More data & citizen engagement
    - *Recommendations*: Complete beach profiles 3 times/year [currently completed at 3 intertidal biota sites]
    - *Partners & coordination*: WDFW, DNR, Land Trusts, Port of Bellingham, businesses, other gov't agencies, neighborhood association (Blaine and Birch Bay), MRC, WWU, CSC
    - *Resources required*: Gear, volunteers, expertise

Protection & Restoration Sub-Committee

- *Action:* Enhance native vegetation along shoreline, minimize shoreline armoring, retrofit tightlines
    - *Outcome:*
        - Inventory existing studies of shoreline armoring
        - Provide technical/financial assistance for armoring removal,
        - Develop new inventory of armoring
    - *Recommendations*:
        - Update language in management actions to Marine Shoreline Design Guidance March 2014
        - Requires voluntary action, so need education and outreach
        - Remove aquatic invasive species
        - Host education workshop/presentations at Cherry Point IC meetings (for example, Scott McCreery on oil spill preparedness and cleanup)

- *Partners:* Whatcom county, Dept. of Ecology, WDFW, Army Corps, Cherry Point Implementation Committee, Birch Bay State Park
- *Coordination*: Coastal Geological Services study, Birch Bay Beach Enhancement Project, MRC, Northwest Straits, Coastal Geologic workshops
- *Resources required*: Funding and willing landowners

3:05 p.m.

DNR & Partner Updates

DNR aquatic land management – *Erin Lietzan, Aquatic Land Manager*

Use Authorizations

DNR has issued one use authorization in the Reserve since the last meeting in March. DNR issued Intalco a Right of Entry for sediment sampling that fell outside their leasehold. Intalco conducted the sediment sampling to fulfill their National Pollution Discharge Elimination Permit and Ecology Agreed Order for fugitive alumina emission. Sampling was done in a manner that did not increase turbidity or disturb eelgrass or other native submerged aquatic vegetation.

Resource Protection at Birch Bay

DNR was notified buoys and boats grounding on tidelands in Birch Bay were causing damage to eelgrass and crushing the benthos. During spring 2015, DNR began monthly monitoring at Birch Bay and observed damage to the beach and eelgrass from boats and buoys grounding and prop scour.

Using registration records, educational letters were sent to boat owners. Owners that called DNR were receptive and some did move their boats before the end of crabbing season (July – September), which is when the vast majority of the seasonal use occurs. Thirty-three buoys and anchors are still present on SOAL in Birch Bay and a 2016 restoration project is planned to remove buoys and anchors next spring.

WDFW update – *Brendan Brokes*

Kurt Stick retired and the position has been refilled. Contact information will be sent out to the committee.

Cherry Point Citizen Stewardship Committee update – *Kim Clarkin, Lyle Anderson & Marie Hitchman*

- The CSC now has three years of citizen science data for bird and intertidal biota surveys. A report should be completed soon.
- The 3rd Annual Cherry Point Forum took place on Saturday October 24th, 9:30am – 2:30pm at Bellingham Technical College. The event was well attended and highly informative.
- The CSC commented on the Whatcom Comprehensive Plan and others on the committee may want to comment as well.

Aquatic Reserves Program – *Birdie Davenport*

The reserves program applied for an EPA grant ($250,000) to support the Citizen Stewardship Committees and hire a technician to work directly with the committees and support citizen science projects.

Lummi Natural Resources - *Evelyn Brown*

There is a gap in forage fish beach spawning surveys around the Lummi reservation. Looking for volunteers to sample this area and Bellingham Bay starting this winter.

3:25 p.m.

Next Steps

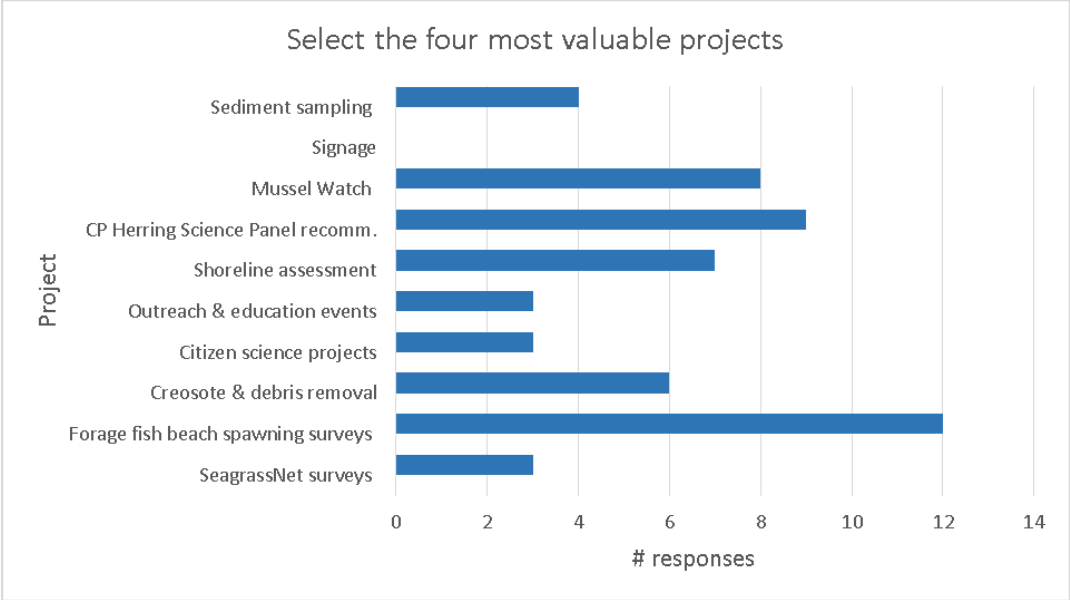
- Will send out a meeting summary that includes sub-committee recommendations and Survey Monkey results. The reserve program will use this information to build our work plan for the next two years
- The next Implementation Committee meeting will be in early 2016. We will send out a doodle poll to determine the best date.

3:30 p.m. Adjourn

APPENDIX I
Survey Monkey Results

Current Projects

1. Please select the four Cherry Point Aquatic Reserve projects that you believe have been the most valuable?



2. Why do you believe these projects are the most valuable?

Responses fell roughly into the following 5 categories. Examples of supporting comments are listed below.

- Supports *Cherry Point Herring recovery*: i.e. "They are related to, though not directly, to the number one priority of the Management Plan, to recover the Cherry Point Herring Stock."
- Provides *data and baseline monitoring*, both long-term & short-term: i.e. "Best data and indicators of ecosystem health" & "They are valuable baseline and monitoring efforts, something normally neglected."
- Supports *outreach and education*: i.e. "…the Citizen Science projects … give us larger and longer look at other subjects in the Aquatic Reserve. The outreach and education events are very important since they bring with them understanding and ownership of the Aquatic Reserve by the community."
- Provides information on *water quality & shoreline health*: i.e. "Seems like water quality is a perpetually unresolved issue at CPAR…" & "Because they provide directly applicable information for shoreline health."
- Provides information on *potential spill impacts*: i.e. "All of the above are valuable; I thought the four I selected were particularly important for tracking and monitoring changes and potential oil-industry impacts" & "We need to collect the ecosystem information to monitor changes that may be associated with the industries. The surveys should be thorough enough to fully document the current status in the event of an oil spill for NRDA purposed and the identification of cleanup and treatment priorities…"

Implementation Planning

3. Given progress to date, please select the top four subject areas/issues you would like to see addressed in the next biennium.

Note that three items (**) were identified as the top priorities in 2013. Other priority items identified in 2013 are preceded by a *star. They are roughly sorted from top to bottom.

Management Action	Priority 1	2	3	4	Response Count
** Cherry Point herring recovery	8	0	0	0	8
* Extent of forage fish beach spawning habitat	0	5	0	2	7
Vessel traffic risk mitigation	0	2	2	1	5
* Mapping & removal debris, creosote, and derelict fishing gear	1	0	1	2	4
** Public outreach and education	0	2	0	1	3
* Manage activities with emphasis on protection of aquatic habitat	1	1	1	0	3
* Protection of adjacent aquatic areas and uplands	0	0	1	2	3
** Outfalls & stormwater management	0	1	1	0	2
Adjacent landowner stewardship	1	0	0	1	2
Characterize groundwater sources and sediment chemistry	0	0	1	1	2
* Strategies for ballast water management	0	0	1	0	1
Wastewater management	0	0	1	0	1
Comprehensive climate change monitoring strategy	0	0	1	0	1
Oil spill preparedness	0	0	1	0	1
Review and comment on relevant plans and proposed regulations	0	0	0	0	0
Site specific habitat protection plans	0	0	0	0	0
* Restoration opportunities with emphasis on aquatic vegetation	0	0	0	0	0
	# respondents:				*11*

4 – 7. For your highest priority subject area/issue, what implementation steps do you recommend? Partners? [summary of comments & recommendations by action]

Cherry Point herring recovery

- *Partners*: WDFW,NFWS,NOAA,CORPS
- *Monitoring*: Encourage budgeting for intensive and extensive surveying. Find smoking gun.
- *Overall recommendations*: Don't allow any fishing for herring; Proceed with recommendations of the Technical Group; Co-manager leadership; Plan that includes experimental recovery projects and key research that will allow a better understanding of limits on recovery (i.e. acoustic tagging)

Forage fish beach spawning

- *Partners:* WDFW,NFWS,NOAA,CORPS
- *Monitoring*: Continue & expand monitoring; Find limiting factors
- *Overall recommendations*: Enhance and prioritize spawning habitat protection; forage fish species represent the key indicators of the health of Puget Sound

Vessel traffic risk mitigation

- *Partners*: Harbor Safety Committee
- *Overall recommendations*: Understand impacts of potential vessel accidents/ vessel traffic risks

Derelict fishing gear, creosote & debris removal

- *Partners*: Northwest Straits, volunteers, DOE, WDFW, NFWS, commercial fisherman & crabbers
- *Overall recommendations*: Map and remove

Education and outreach

- *Overall recommendations*: Continue as before

Manage activities with emphasis on protection of aquatic habitat

- *Overall recommendations*: Maintain Aquatic Reserve standards and policies; strict enforcement of HPA and Shoreline development policies and regulations; focus more on this may beneficially affect decisions taken by industries and other land managers

Protection adjacent lands

- *Partners*: Concerned citizens & non-profits
- *Monitoring*: Maintain and expand current monitoring including shoreline-wide condition surveys
- *Overall recommendations*: Protection action will result in more involvement of concerned citizens/non-profits which can help reveal the true impacts of the oil and coal processing and shipping industry

Outfalls and stormwater

- *Partners*: DOE, BBWARM, WDFW,RCO
- *Monitoring*: Continue monitoring.
- *Overall recommendations*: seek grants for storm water improvement; DOE to continue evaluation of point and non-point introduction of contaminants

Landowner stewardship

- *Partners*: Outreach to landowners
- *Overall recommendations*: Enforce HPA and Shoreline development regulations

Wastewater management

- *Overall recommendations*: Water pollution seems to be one of the worst long-term problems in the Sound with little known consequences for all aquatic life

Groundwater management

- *Partners*: Western Washington University may have some potential for partnership for groundwater measurements and sediment chemistry. Perhaps graduate studies in hydrology for classwork or a thesis.
- *Monitoring*: Detailed sediment and mussel sampling that will detect toxins at low levels.
- *Overall recommendations:* Confirm that all emissions and discharges are legal and comply with environmental regulations.

Ballast water management

- *Monitoring*: Assess and monitor the content of ballast water brought into Puget Sound, with an emphasis on the water discharged at Cherry Point

Climate change planning

- *Partners*: Partner with others doing climate change research nearby; Research projects are underway for the Skagit River delta and work is being proposed for the Nooksack delta and Bellingham Bay.
- *Monitoring*: Encourage BP to dedicate more resources to maintenance of the instrumentation on their piers to avoid data gaps.

Oil spill preparedness

- *Partners*: Ecology

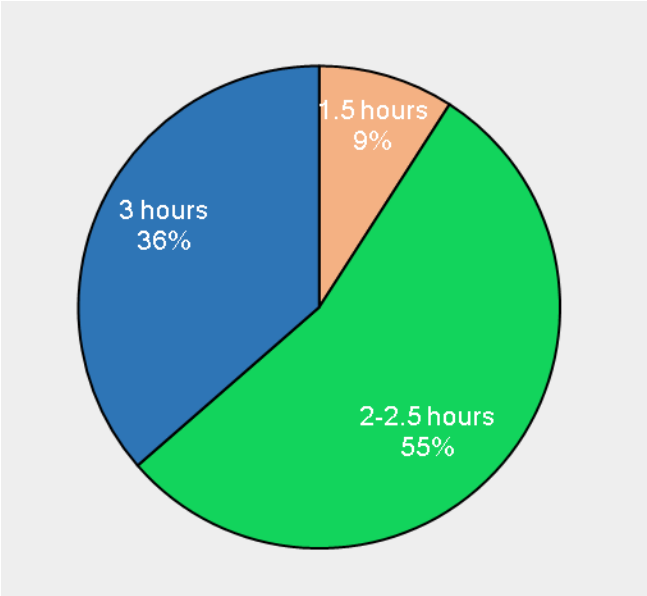
Partnerships

8. For any of the four top priorities you identified, are you currently engaged in projects that could be enhance by, contribute to, or make timely work on those priorities?
   - Audubon bird surveys
   - Lummi Nation Natural Resources (LNR) have an active water quality monitoring program that could be expanded; there is a cultural history and interest in protecting CP and recovering herring. The Lummi Tribe submitted a 256 page response document on the SST/GPT that has a large section on herring and forage fish impacts among others. Lummi should and could be a major contributor/participant in CP protection efforts.
   - Annual shoreline condition surveys that include invasive species, feeder bluff activity, forage fish habitat, etc.
   - PSEMP forage fish workgroup

Meeting Feedback

9. How long is your ideal Implementation Committee meeting?

   Percent response (n=11)



10. What topics would you most like to learn about or discuss at future meetings? [responses grouped & summarized]
    - Herring recovery strategies & efforts; forage fish
    - Seagrass monitoring in CPAR and compare results to other Puget Sound sites
    - Intertidal groundwater flows; sediment condition & sampling data (physical, chemical, biological).
    - Coordination with new and ongoing programs that overlap (Marine Survival Project, emerging forage fish program with new funding, Canadian programs that are similar funded by the PSF); better understanding of member organizations' research
    - Data on human uses of the reserve as discussed in the MP Committee & details on industry operations that might affect the reserve (e.g. vessel calls, traffic frequency, discharges,

precautionary measures, incidents, pre-booming frequency, NPDES compliance, voluntary collaborations).

- Habitat protection actions.

11. How can we improve Implementation Committee meetings? [responses summarized & paraphrased]

- Improve facilitation with a professional facilitator to manage conflict and grandstanding
- Keep meetings respectful & civil
- Keep strictly to the published agenda with some flexibility to include last minute topics of interest. Adhere to and enforce Implementation Committee Responsibilities and Ground Rules
- Focus more on the management of the industrial impacts and evaluation of the condition of the herring stock.
- Address the top priorities of the MP with more specificity. Seek greater engagement of Cherry Point industries in potential research/conservation efforts.