



## Cherry Point Aquatic Reserve

### Implementation Committee Meeting Summary

Prepared by Birdie Davenport

**November 8th, 2018, 1:00 p.m. – 3:30 p.m.**

Civic Center Building, 322 N Commercial Street, Bellingham

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**Participants:** Elizabeth Kilanowski, (*Whatcom County MRC*); Bert Rubash (*Citizen*); Michael Kyte, (*Cherry Point Lead naturalist*) Marie Hitchman, Kim Clarkin, Lyle Anderson, Rick Hann (*Cherry Point Citizen Stewardship Committee*); Evelyn Brown, (*Lummi Nation Natural Resources*); Eleanor Hines, Eddy Ury, Lilya Jaeren (*ReSources*); Andrew Gamble, (*Petrogas*); Lovel Pratt (*Friends of the San Juans*); Austin Rose, (*Whatcom County PW*); Adam Lindquist, (*WA Department of Fish and Wildlife*); Birdie Davenport, Betty Bookheim, Dennis Clark, Joelene Boyd, Erica Bleke (*Department of Natural Resources*)

**1:00 p.m.**

#### Welcome & Introductions, Meeting Agenda & Outcomes

- Focus of the meeting is information about Cherry Point Pacific Herring monitoring and research updates, and new work that has begun to study zooplankton, especially larval crab presence and recruitment timing.

**1:15 p.m.**

#### Larval Crab Monitoring using Light Traps

Dr. Evelyn Brown, *Lummi Nation Natural Resources*

- Evelyn gave ample evidence for why we need a regional crab working group, including new data indicating the ecological importance of larval crab in salmonid diets
- Monitoring larval crab was priority for group meeting at PCSGA forum
- Lummi Nation and Swinomish Tribe initiated monitoring
- Three focus areas: crab recruitment, crabs as salmon food, and to monitor forage fish
- Light traps are an efficient and economical monitoring tool with low by-catch
- By using a standard lumens and funnel hole size the data can be comparable to similar light trap studies
- One initial finding: timing of larval recruitment varies between sites, even those nearby
- Density of food matters to salmon, and while they prefer to eat forage fish, they will switch to larval crabs when forage fish are not available in large enough numbers.
- Elders ask “where are the larger crab we used to catch?” historic carapace sizes were much bigger; Evelyn showed graphic demonstration theorizing that restoring large crab could bring great economic benefit to fishery

**1:45 p.m.**

## Regional and Cherry Point Pacific Herring 2018 update

Adam Lindquist, *WA Department of Fish and Wildlife*

- Overall herring biomass in southern Salish Sea = 9744 metric tons in 2018, up from 8187 metric tons in 2017
- Cherry Point stock declined from 337 to 249 metric tons in 2018
- Only a few spawning locations around Birch Point
- WDFW did an acoustic vegetation survey at Cherry Point this year, findings:
  - Most of Cherry Point has veg bands wider than 60 meters
  - Short or flat veg types hard to detect
  - Seasonality can effect biomass estimates
  - Drop camera or ROV video needed to verify
- DNR funded genetics work – results from fish caught at Cherry Point will be analyzed soon (expected winter 2019), with results on where else Cherry Point herring are caught to be available later.
- Investigate use of light traps to look for forage fish and herring
- Gave examples of new climate change effects on herring research at Western WA University
- WDFW forage fish team has added a few staff to help work with forage fish and herring

**2:15 PM**

## Land Management report

Joelene Boyd, *Aquatic Land Manager, DNR Orca-Straits District*

- Proposal from Northwest Indian College (NWIC) and Lummi Nation to install reef nets for educational purposes at Cherry Point AR north of Gulf Road. Since the CPAR IC meeting, DNR staff met with Lummi and NWIC staff to discuss steps for the project to move forward.
- Phillips 66 is doing geotechnical drilling at two locations to investigate engineering for repair/replacement of the causeway.

## Aquatic Reserves Program report

Birdie Davenport, *Aquatic Reserves Manager, DNR*

- Wrapping up final scientific monitoring reports by citizen scientists for the National Estuary Program grant, which ends this year. (These will be online when complete.)
- Work has started to update the Fidalgo Bay AR management plan, this includes stakeholder process and input from October 1 meeting; Cherry Point plan update next.
- At the citizen steward's All Hands meeting in October, Commissioner of Public Land Hilary Franz spoke to the group; we also discussed strategies and priorities going forward with less funding.
- Puget Sound Corps team shifting emphasis to include more monitoring projects and reduce forage fish work – except at certain sites like Cherry Point where surf smelt spawning timing and location may be shifting.

- Focus on research support and connection to higher ed programs: working on list of priority research and monitoring projects for faculty and grad students, for all reserves.

### **3:00 PM**

Round table discussion and comments:

Discussion about research proposals: Todd Sandell and Evelyn are considering placing predator exclusion frames over herring spawn to test if preventing complete predation can help juvenile survival. Adam noted that CP herring spawn in tight aggregation where a 3X3 meter enclosure (a structure that excludes predators) could cover a significant number of eggs. Sea ducks have been observed taking all eggs in some locations and up at Cherry Point herring tend to spawn in very concentrated areas.

### **3:10 p.m.**

#### Partner Updates

- Petrogas update: Working to take care of infrastructure by encapsulating creosote pilings: this involves encasing with carbon fiber wrap, which is pumped full of epoxy grout. They expect to spend about \$1 million per year and have completed 74 pilings to date. They are doing underwater engineering inspections to evaluate structural integrity of pier structure.
- Friends of San Juans: San Juan National Monument holding open houses and public comment on draft management plan. In Whatcom County this include mostly small rocks and marine mammal haulouts.
- Eleanor Hines: Whatcom MRC is working to understand where kelp survey data gaps exist and create a better contact group for this project.

#### Next steps

- Next meeting in May 2019

### **3:30 p.m.** Adjourn