



## Cherry Point Aquatic Reserve Implementation Committee Meeting Summary

**Wednesday, April 27<sup>th</sup>, 2016, 1:30 p.m. – 4:00 p.m.**

Department of Ecology Bellingham Field Office | 1440 10th St. Suite 102, Bellingham

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**Participants:** Elizabeth Kilanowski, Bert Rubash (*Whatcom County MRC*); Marie Hitchman, Kim Clarkin (*Cherry Point Citizen Stewardship Committee*); Dan Eisses (*Birch Bay Water & Sewer District*); Michael Kyte (*Citizen Scientist*); Kathryn Mitchell (*ALCOA-Intalco*); Mark Larson (*Anchor QEA LLC*); Evelyn Brown (*Lummi Natural Resources*); Brendan Brokes (*Washington Department of Fish & Wildlife*); Pete Sim (*BP Cherry Point Refinery*); Kyle Loring (*Friends of the San Juans*); Birdie Davenport, Dennis Clark, Erin Lietzan, Betty Bookheim & Jamie Kilgo (*Department of Natural Resources*)

**1:30 p.m.**

Welcome & Introductions, Meeting Agenda & Outcomes

**1:45 p.m.**

Work Session- *Birdie Davenport*

DNR took the work that was done by the committee at the last meeting and created a draft work plan. Because DNR can't do all these priority actions, the agency will need to coordinate closely with partners. The workplan identifies the priority actions. [Refer to the appendix for the draft work plan with comments and additions from the committee.]

**2:30 p.m.**

DNR District and Leasing Updates - *Erin Lietzan and Dennis Clark*

Birch Bay Mooring Buoy Removals

- Thirty-five moorings with homemade anchors are present on state-owned tidelands in Birch Bay. Damage to the benthos and eelgrass from the anchors, chains, grounded boats and from prop scour has been noted.
- DNR sent out letters and posted notices on the Birch Bay boat ramp to notify owners that these moorings would be removed this spring.
- Removal will take place before the beginning of crabbing season in July when the moorings are primarily used. Target date for removals is May 9<sup>th</sup>- 12<sup>th</sup> 2016. Most removals will be done by hand, larger anchors will be removed by boat.

Requested Assignment of Intalco Lease

- Intalco has requested to assign their pier lease (20-A08488) to Petrogas Pacific LLC
- Petrogas Pacific's parent company has been using the Intalco pier since 2014 to ship liquefied petroleum gas (LPG) products
- If DNR consents to assignment of the lease, there will be no changes to the lease, no change in shipping volume (currently 1-2 ships of LPG per month and this will stay the same), limited to 48 ships per year in the lease, lease runs through 2033.

- This lease is outside the reserve in a “cutout”
- Q: How is the safety record for LPG products from the pier? A: No record of safety or environmental violations to DNR’s knowledge.
- Q: Was there a public hearing? A: Not required to do a public hearing because the lease is not changing.

#### Williams Pipeline

- Williams Pipeline Company is a major conveyor of natural gas and is proposing a new gas pipeline from Sumas to Birch Point or Cherry Point. From “landfall,” the proposed pipeline would cross state-owned aquatic land for 14 miles before crossing the international boundary to Vancouver Island. Upon reaching a new terminal on Vancouver Island, gas shipped by the pipeline would be chilled to liquefy it (liquid natural gas or LNG), loaded onto specialized tankers, and exported.
- Last fall, Williams requested a meeting with DNR for information sharing meeting. They did not make a specific request for approval of the concept at that time. DNR briefed them on the Cherry Point Aquatic Reserve Management Plan and emphasized that the plan does not allow new pipelines. They have not submitted any applications since that meeting.

**3:00 p.m.**

#### Fugitive Alumina Study at Intalco - *Mark Larsen, Principal Scientist Anchor QEA, LLC*

- Intalco completed a fugitive alumina emissions study, which was required by Department of Ecology to determine any impacts to the benthos.
- Intalco receives alumina from Australia, where it is refined from bauxite, and uses a large clam shell to scoop the fine, white sand-like material into three silos.
  - Alumina is 50% oxygen and 50% aluminum. Despite best management practices you can see visible dust emissions when vessels are unloaded.
  - This study was designed to determine the impacts of that dust on the marine environment.
- Alumina is not toxic. Any possible impacts would be from excessive accumulations burying sediment-dwelling organisms.
  - There is natural sedimentation and tolerance to sedimentation varies by organism. Most organisms have a tolerance of 10-30 cm/yr.
  - Sensitive organisms and or organisms at sensitive life stages would be impacted at sedimentation rates >5 cm/yr. Impacts of sedimentations have been studied extensively around sediment disposal sites.
  - Natural range of accretion at this site is 0.6 cm/yr.
- The study distinguished between natural aluminum found in the earth’s crust versus fugitive alumina to estimate net deposition. Methods used can detect alumina deposition rates down to 0.0025 cm/yr. Alumina accumulation based on data collected on site was below this detection level.
- Initial results:
  - No visible alumina accumulations
  - Aluminum concentrations were below background levels at 34 of 35 sampling stations
    - Natural background 2.4%
    - Concentration in test samples averaged 1.7%

- Enrichment (with a concentration of 3.5%) at only one location near the outfall (wastewater diffuser) is hypothesized to be most likely residual from historic waste water disposal practices
- The bottom line of the study is that there is no evidence of significant deposition or concentrations of alumina on the benthos

**3:30 p.m.**

Aquatic Reserve Program Updates

Cherry Point Pacific Herring Project – *Betty Bookheim*

- DNR has contracted with WDFW to complete age class and genetics study on Cherry Point Pacific herring
- WDFW has been out 3 times to date this spring to complete the herring spawn rake surveys and to collect adult fish using variable-mesh gillnets
  - On April 18<sup>th</sup>, 140 adult herring were caught (average size 280 mm, estimated 5 years old) and small patches of recent spawn were observed at Birch Point, generally spawning on invasive *Sargassum*, also a great deal of bird activity
  - Older herring spawn first and then younger herring. WDFW will be going out until June 15<sup>th</sup> to capture age structure.

Events – *Birdie Davenport*

- “What’s the Point?” at Point Whitehorn County Marine Park on Saturday June 4<sup>th</sup>, 10-2 pm
- Gulf Road Community Clean-up on Saturday July 9<sup>th</sup>, 10 am to 2 pm. Bring gloves, lunch and plenty of water.

**4:00 p.m. – Adjourn**

## Appendix – Draft Cherry Point Aquatic Reserve Work Plan

The Implementation Committee prioritized the following three areas in 2013:

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

### Research & Monitoring

- *Action:* Continue and expand existing monitoring:
  - 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 – Stormwater and outfalls

- *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.
  - DNR will continue doing stormwater monitoring on a biennial basis.
  - *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

- *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*:
    - o Toxicity and disease – for example, genetic damage, adult productive impairment, juvenile mortality from disease
      - *Gap*: Where is toxin load/disease occurring most influential?
    - o Predation: i.e. predation at each life stage
      - *Gap*: Where, what level- inter annual variability?
    - o 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.
    - o Climate change – for example, prey field, community change, competition, SST, pH , growth and survival

## Education & Outreach

- *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

- *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 education and outreach is needed
    - 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
- *Action:* Remove creosote on Cherry Point beach
  - Annual inventory with PSC, volunteer
  - Clean up with Ecology creosote team and DNR restoration program