

Snohomish County Marine Resources Advisory Committee Meeting Meeting Summary

October 17, 2018 6:30-8:30PM

3000 Rockefeller Ave, Snohomish County Campus, Everett WA 98201

Admin East Building, 6th Floor

MRC Members Present Sarah Brown Bob Hillmann Mike Ehlebracht Tom Doerge Laura Gurley Paul Clampitt Deborah Hopkins Traci Sanderson Cathy Stanley Franchesca Perez Absent Susan Tarpley Craig Wollam	Staff, Presenters, and Others Kathleen Pozarycki, MRC Lead Staff Elisa Dawson, MRC Staff Kari Quaas, Snohomish Conservation District Kyle Koch, Adopt-a-Stream Foundation
Summary of Decisions The MRC approved the September MRC Meeting Summary.	
Upcoming Events <ul style="list-style-type: none">● Vegetation Management for Shoreline Landowners. October 17th at the Four Spring Lake Preserve● Forage Fish sampling event November 5th● MRC Annual Retreat November 7th at Snohomish County Offices● MRC Conference November 16-17th in Port Townsend	

Welcome and Introductions

Co-Chair Mike Ehlebracht opened the Marine Resources Committee (MRC) meeting with a quorum at 6:30pm.

Mike introduced himself and called for self-introduction of meeting participants.

Approval of MRC Meeting Summary

Laura Gurley made a motion to approve the September 19, 2018 MRC Meeting Summary. Tom Doerge seconded the motion. All were in favor and the motion passed.

IGNITE Presentation for November MRC Conference

Kathleen announced that MRC Conference is quickly approaching. Registration has been sent out, and MRC members were asked to fill out the registration as soon as possible. MRCs are being asked to do an IGNITE presentation at the conference. After the discussion at the last meeting, Kathleen followed up with Northwest Straits Commission (NWSC) staff to see if MyCoast would be featured anywhere else in the conference. NWSC staff has confirmed that the MyCoast app will not have any other presentation in the conference, so the MRC decided to focus their Snohomish County MRC Ignite presentation on the MyCoast app.

Franchesca Perez offered to give the presentation if no other MRC members were interested. Kathleen will follow up with MRC members not present to ensure there are no other interested presenters. Kathleen and Elisa will create a draft of the Ignite presentation, and send the draft to the presenter in early November.

MRC Budget Update and End of Year Projects

Kathleen reminded the MRC that at the last meeting Surface Water Management (SWM) Director Gregg Farris announced that Snohomish County Executive, Dave Somers, directed SWM to restore the funding cuts for the MRC in full for 2018 and restore \$30,000 of the \$46,000 cut for 2019. Since this announcement, she has been working with MRC members and partner organizations to find projects which can be completed before the end of 2018. All \$30,000 of restored 2018 funds must be used by the end of the calendar year. Kathleen reported that there have been many good ideas. One idea she worked on initially was to see about funding part of the Warm Beach Martha Creek Restoration Project which Tulalip Tribes Ecologist Brett Shattuck presented to the MRC back in June 2017. Kathleen said that after speaking with SWM management, SWM has decided to fund this project with other funds, and the MRC funds are not needed to move this project forward.

Another idea was the removal of additional boats under the same derelict boat removal contract that the MRC currently has. Kathleen reported that one boat has recently sunk in Deadman's Slough, and two other boats have washed up on the Everett Shoreline just north of Mukilteo. All of these boats have been reported in the MyCoast app. Kathleen is working with the Snohomish County purchasing department to add the removal of additional boats to the contract, funding dependent. She believes 2 boats will be able to be removed with the additional money reinstated to the MRC. The MRC agreed to support the additional derelict boat removal with the 2018 funds reinstated to the MRC.

Forage Fish Presentation by Jamey Selleck

Elisa introduced Jamey Selleck, a consultant with Natural Resource Consultants (NRC) who has been working on part of the forage fish analysis project. Jamey began his presentation explaining that the County has contracted him to complete an analysis and report of forage fish egg and sediment grain size for the Snohomish County Nearshore Restoration Project (Project) which was completed in July of 2016. The Project placed beach nourishment sediment along a 4.5 mile stretch of shoreline between Mukilteo and Everett and removed a bulkhead at Howarth Park. The purpose of the Project was to increase ecological function in the drift cell and improve forage fish spawning habitat and juvenile Chinook habitat.

Jamey reported that purpose of the analysis and report is to examine the interrelationships between beach sediment grain size and forage fish egg presence both before and after the Project

was completed. The County had been collecting grain size and egg presence/absence data at 13 different sample locations. Surveys were taken once per month from approximately August-February at each site since 2011. Jamey is still in the process of completing this work, which will be complete by the end of November 2018. Through this presentation he is hoping to hear the MRC feedback on comments on the analysis so far. The final report will provide an analysis of this data for each individual site and give a summary of the general findings of the analysis as a whole. Development of the final report will be informed by previous reports and guidance from the MRC and SWM partners.

Jamey also noted that this report is part of a larger analysis of the Project. The larger report includes an analysis of photo monitoring and GIS sediment tracking that has been completed for this project. SWM staff is working on this analysis, and the information he is working on completing will help inform this larger analysis. The analysis the Jamey is completing includes descriptive statistics and general trends as well as statistical review and general linear mixed model. Jamey showed the MRC figures of the descriptive statistics and general trends. In this analysis he looked at the percent of optimal grain size within the samples; this variable is important as forage fish prefer specific grain sizes in order to spawn. Additionally, Jamey looked at the distribution of eggs across sites, and found that surf smelt prefer more down drift sites, while sand lance spawning preference is more variable. The purpose of the general linear mixed model is to create a ranking for each species across samples. The GLM was analyzed against percent grain (representative for each species), site location, and years. Jamey reported that for surf smelt he found no significance for percent grain (p-value = 0.442) or year (p-value = 0.231), but did find significant differences between sites (p-value < 0.001, $R^2 = 0.387$). There is a clear surf smelt preference for the northeastern sites 12 and 13, regardless of available substrate. For sand lance, he found significance for percent grain (p-value = 0.013), year (p-value = 0.009), and site (p-value < 0.001). Overall there was greater variability between sites and year in spawning activity, and a considerably greater range of suitable substrate for spawning.

While the number of eggs found does not directly correlate to actual population abundance, the continued presence of eggs in samples demonstrates that the long-term surveys along the shoreline is effective at monitoring the spawning activity for both surf smelt and Pacific sand lance. Many of the sites chosen for this project exhibited spawning events prior to restoration or beach nourishment, but the area of suitable habitat was restricted to a small band in the intertidal zone. Jamey reported that his results are beginning to show that the addition of fine sand material broadened the slope of the beach and extended the total area along the shoreline, increased the potential habitat available for fish to deposit eggs, and improved habitat favorable for egg survival. The addition in 2016 of fine sediments preferred by sand lance between sites 2 through 12 may explain the pattern of ranked spawning seen in Figure 5, where eggs were most common at sites directly adjacent to beach nourishment. Site 6S in particular had little to no spawning activity prior to beach nourishment, but became among one of the more preferred sites for spawning after restoration in 2016 and 2017.

Jamey ended his presentation and opened up the discussion for questions and comments from the MRC. Bob asked Jamey if he knows if surf smelt sand lance leave their spawning grounds and move far off the beach? Jamey responded that surf smelt are quite mobile and move all over. Female surf smelt seem to move around a lot while males seem to hang around the same area waiting for females. Jamey said that sand lance mobility isn't as well known, but the information that is available tend to show that they do not go far from their spawning grounds, and instead stay nearby.

Franny noted that Jamey discussed that the forage fish move up at high tide and spawn. She reported that the MRC protocol had volunteers set 10 and 7 foot elevations at the beginning of each year, and we use that mark throughout the season to take our samples, instead of adjusting to each high tide using the most recent wrack line. She asked Jamey if he believes that this protocol missed eggs by not using the most recent wrack line. Jamey responded that he doesn't think that the protocol made a significant difference. Results of the sampling shows that eggs were captured with this protocol, and for analysis the presence of eggs is more important than the abundance of eggs.

Kathleen said that the overall goal of this analysis and the other analyses that SWM staff are doing is to address the question of future beach nourishment. of where should we put material, and what type of material is best? She is interested in finding out if all the project was successful, which sites provided increased habitat, what type of material is best, where could additional material be placed. Jamey reported that he is still working on conclusions for his report, and the egg presence and grain size data are only one part of being able to answer that question. Jamey indicated that preliminary results of the grain size analysis shows that the dredge material seems to be good for sand lance. Therefore, one of the general conclusions will be that it appears like it may be helpful to continue beach nourishment for sand lance habitat. Although, Jamey mentioned he is only analyzing through February 2017 at this time. It would be helpful to analyze the rest of the 2017-2018 season and 2018-2019 season. Elisa mentioned that we have samples for that time, but still need to do the grain size analysis. Elisa is hoping that the grain size analysis for those samples will be done in early 2019, and we could update this report in 2019 if the MRC wished.

Announcements

- **NWSC Update (Paul):** Paul reported that the NWSC continues to work on budget planning for the future. The NWS Foundation received a \$50,000 grant from Boeing to focus on low-impact development and stormwater projects to improve marine waters. Paul reported that the NWSC is interested in hearing how MRCs may want to work on preventing ocean plastics in future projects. Paul said this will be discussed at the retreat and asked MRC members to start thinking about project ideas. Laura mentioned that the Ocean Research College Academy located in Everett has done some work on plastics in our area, and suggested thinking about collaborating with them on a project.
- **LIO (Elisa):** Elisa reported that the next LIO meeting will be November 1, 2018.
- **MRC Conference 2018 (Kathleen):** Kathleen reminded the MRC that the 2018 conference will be in Port Townsend this year, and will be held at Fort Worden on November 16-17. MRC members should make sure they are registered for the conference. Elisa has organized lodging for our MRC members at Fort Worden.
- **Port Susan Shoreline Outreach (Kathleen):** Kathleen reported that she gave a talk on "Highlights of the Port Susan Marine Stewardship Area" on October 1st at Cama Beach to the Sound Water Stewards. The presentation focused on efforts to date in Port Susan and the MyCoast app. The Northwest Straits Foundation hosted a realtor workshop on October 11th for realtors in Port Susan to learn about shoreline properties. Elisa attended the event and said that about 10 realtors from the Port Susan area participated. Kathleen

reported that the Northwest Straits Foundation is hosting a vegetation workshop for shoreline landowners tonight, October 17th. Kathleen said that she plans to follow up with Lisa Kaufman later this week to hear about the results from this workshop.

- **RainScaping Expo (Mike):** Mike reported that the MRC hosted a table at the Snohomish County RainScaping Expo at McCollum Park on September 29th. The event was from 12-4PM. Mike, Laura, and Tom attended. Over 150 people attended. The MRC members reported that they got to speak to many people who were interested and engaged in low impact development practices.
- **MRC Retreat (Kathleen):** Kathleen announced that the MRC retreat will be November 7th. This meeting is in-place of the normal MRC meeting in November.
- **MRC Conference (Kathleen):** Kathleen announced that the MRC Conference will be November 16th and 17th in Port Townsend.
- **Derelict Vessels Project (Kathleen):** Kathleen reported that the derelict vessels have been posted and removal will start with the contractor in late October.
- **Forage Fish (Elisa):** Elisa reported that forage fish monitoring started in August for the 2018-2019 monitoring season. Elisa asked for volunteer for the Monday, November 5 sampling. Howarth Park volunteers will meet at Howarth at 9AM.

The meeting adjourned at 8:31PM.