

# **Snohomish Estuary Piling Prioritization Project: Stakeholder Meeting**

## **Meeting Summary and Notes**

**May 26<sup>th</sup>, 2021**

### Meeting Participants

Jessica Balbiani, City of Marysville  
Scott Brown, U.S. Army Corps of Engineers  
Laura Gurley, Port of Everett, Snohomish County Marine Resources Committee (MRC)  
Dean Shaughnessy, City of Everett Parks and Recreation  
Heather Griffin, City of Everett Public Works  
Bob Hillman, City of Everett Parks and Recreation, Snohomish County MRC  
Pat Mitchell, City of Everett Public Works  
Paul Crane, City of Everett Public Works  
Chris Robertson, Washington Department of Natural Resources  
Natasha Coumou, Tulalip Tribes  
Brett Shattuck, Tulalip Tribes  
Gretchen Glaub, Snohomish Basin Lead Entity Coordinator  
Brett Gaddis, Snohomish County Surface Water Management  
Tholen Blasko, Snohomish County Surface Water Management  
Alex Pittman, Snohomish County Surface Water Management, MRC  
Elisa Dawson, Snohomish County Surface Water Management, MRC  
Paul Schlenger, ESA  
Jimmy Kralj, ESA

### Meeting Purpose

The purpose of the meeting was to gather stakeholders and partners from the Snohomish River Estuary to review the inventory of pilings and prioritization process, as well as to discuss opportunities for piling removal.

### Project Introduction

- Elisa provided participants with an overview of the piling inventory completed for the estuary including the locations of pilings and ownership map. She explained that the project area is the Snohomish estuary downstream (north) of Highway 2. This work has been funded by the MRC's Northwest Straits Initiative grant.

### Washington Department of Natural Resources Work

- Chris discussed work completed by the Washington Department of Natural Resources (WDNR) to remove pilings in the Estuary.
- Creosote wood removal is a priority for WDNR. The end of the current biennium is approaching but WDNR expects to focus future creosote-treated debris (i.e., drift logs) removal efforts in Ebey Slough and the Quilceda Estuary near Priest Point.
- WDNR's program focuses primarily on creosote removal, however there is possibilities DNR could be involved in removal of pilings that are habitat barriers.
- WDNR has a Washington Conservation Corps crew that works on riparian restoration projects in the watershed.
- WDNR time could be available to support piling removals done through existing projects in the estuary.

### Piling Prioritization

- Paul provided an overview of the prioritization process used to sort pilings in the estuary for removal.
- Paul summarized the results of the prioritization framework used to assess the ecological benefits of removal and removal feasibility as well as the locations of creosote treated pilings.
- Additionally, Paul summarized techniques used to remove pilings.

### Roundtable Discussion #1

- Chris asked how many of the creosote treated pilings are located on state aquatic lands.
  - 969 creosote treated pilings are located on state aquatic lands in the study area.
- Heather asked for a cost estimate for removing pilings:
  - Chris replied with the following information.
  - Prices vary depending on the number of pilings that need to be removed, how closely they are to one another, and the presence of sensitive habitats like eelgrass.
  - Generally, the removal cost falls between \$500 and \$1,000 per piling.
  - The structural integrity of the pilings determines the available removal techniques.
- Paul C. discussed removal techniques including “stumping” the piling by cutting the piling off at the mudline.
  - Chris clarified this is a potential removal technique but only for non-creosote treated pilings as this would release creosote when done on creosote treated pilings.
- Bob asked about possible mitigation credit
  - Paul S. reviewed the NOAA Conservation Calculator and the potential for pilings removals to count towards mitigation credits.
  - Pilings have value as a mitigation credit, and creosote treated piles are rated more highly.
- Laura shared that piling removals can be paired with other projects to maximize the use of resources. For example, if a barge with a crane will be working in the area for an ongoing project, that can be a great opportunity to reduce costs by removing pilings during the same mobilization (at the same time).
- Chris mentioned that WDNR can work on areas other than state-owned aquatic lands (SOAL) if the project benefits SOAL. Given the location of pilings along the river channels, it would be relatively simple to demonstrate benefits to SOAL for most, if not all, of the pilings inventoried.
- Chris indicated that WDNR will not complete removals conducted as mitigation because it takes them away from their program’s core mission – ecological lift. Mitigation is not enough of a net lift.

### High Priority Areas for Piling Removal

- Alex reviewed the process behind identifying focus areas for piling removal. These areas are those with a high concentration of creosote-treated pilings, those with a concentration of high priority pilings, and areas with a variety of public owners to work with.
- The five priority areas included:
  - Quilceda Estuary
  - City of Marysville Waterfront
  - Mouth of Steamboat Slough
  - Jetty Island North
  - City of Everett Public Works Yard
- For each priority area, Alex reviewed the number of pilings, ownership, and priority classifications.

## Roundtable Discussion #2

- After the presentation, participants engaged in a roundtable discussion about pilings in the estuary and potential removal opportunities.
- Pilings and Existing Uses
  - Scott (USACE) shared that some of the pilings along the City of Everett Public Works Yard are used by the USACE to moor barges for dredging.
  - The pilings in the Jetty Island North priority area are not owned by the USACE.
  - The spur dike pile structure due east of the north end of Jetty Island is in use by the USACE and would need to be replaced with another structure if it were to be removed.
  - The piling identification process included steps to assess current uses. However, not every piling will need to be removed. Those that are ranked as “high priority” do not have conflicting uses and are able to be removed.
  - Chris would like to engage with those groups using pilings for log rafting to learn more about which pilings are in use for that.
- Removal Process
  - Chris said that WDNR has programmatic permits for piling removals so the permitting process is fairly straightforward if WDNR is completing the work.
  - Cutting or snapping non-creosote pilings at the mudline can be cost effective, particularly if pilings are not stable and able to be removed easily.
  - There are a large number of non-creosote treated pilings, when investments are made into creosote-treated pilings, it can often be politically challenging because so many other pilings still remain visible in an area.
  - Brett G. shared that the County completed a piling removal project using vibratory equipment. Project went well and he has the bid specifications, if anyone is interested.
  - Paul C. noted that bubble curtains are a common best management practice during piling removal/installation to avoid impacts to fish.
  - Chris noted that in 2016 WDNR did a study to evaluate sediment disturbance associated with different removal techniques. They found that vibratory extraction caused extremely low sediment disturbance.
- Piling Ownership
  - Laura shared that from the perspective of the Port of Everett, it was very helpful to see the ownership map of pilings. There may be opportunities for removal with other partners if there are not enough Port of Everett pilings to remove.
  - The Tulalip Tribes are very willing to continue discussions about piling removal and to advance projects on their land. Brett will have conversations with leadership to determine next steps.
  - The City of Marysville knew of their pilings in the central area. The pilings upstream near the wastewater plant are not the City’s but are waterward on SOAL.
  - Paul C. indicated that upstream of the project area there was site assessment and a creosote piling inventory as part of the Everett Riverfront, 3-acre park development. He said Environmental Science Associates completed that assessment. Paul S. will follow up to find any report related to a piling survey in that area.
  - Scott indicated that the sunken ship breakwater structure on mudflat north of Jetty Island is considered an abandoned structure by the USACE.
    - The USACE would support removal of this structure.
    - There is currently little information on this structure but it is potentially creosote treated.

- This has the potential to be a large project opportunity.
  - To the east of the ship hulls, there is a cluster of pilings that heads up to Steamboat Slough.
- Existing Removal Plans
    - In 2018, Snohomish County Surface Water Management pursued the removal of some pilings. Brett offered to share information about that effort including bid pricing with participants.
    - The City of Marysville has upcoming projects along their waterfront where piling removals and/or replacements may occur.
      - Ebey waterfront park boat launch will be expanded and any creosote pilings in the project footprint would be removed.
      - Geddes Marina will be included in the park expansion and pilings in that area would also be removed.
      - All pilings in the stretch along Marysville will be removed at some point for mitigation credits.
      - Marysville will work with WDNR to review removal procedures.
    - Chris mentioned that WSDOT is looking for mitigation opportunities in the area and piling removals may be a source. Mitigation will be for 0.75 acres of benthic habitat.
    - Laura asked about what happens for pilings removals that WDNR may be unable to support and if there are grant programs to support this work.
      - WDNR is in the process of identifying this information.
      - There are no grants strictly for piling removal but programs like ESRP, NOAA Marine Debris Grants, PSNERP, and SRF Board grants may be used.
    - The two piling rafts just north of the USACE rock spur may be an opportunity for piling removal.
      - These are likely creosote treated.
      - WDNR will review these for removal consideration.
  - Mitigation Uses
    - The NOAA Conservation Calculator has quantified the value of piling removal.
    - When coupling piling removals with other projects, creosote pilings offer a high mitigation credit.
    - It can be helpful to have a consultant familiar with the calculator support mitigation work to navigate use of the calculator.
    - There is no way to remove pilings and capture the credit to save it for future mitigation use.

**Washington Department of Natural Resources Meeting Summary**  
**Snohomish Estuary Piling Prioritization Project**  
**March 18, 2021**

Meeting Participants

Chris Robertson, Washington Department of Natural Resources (DNR) Aquatic Restoration Manager – Orca Straits District, Creosote Piling Removal Program  
Elisa Dawson, Snohomish County Surface Water Management, MRC  
Alex Pittman, Snohomish County Surface Water Management, MRC  
Paul Schlenger, ESA

Meeting Purpose

The purpose of the meeting was to discuss DNR's plans for creosote-treated piling removal in the Snohomish River estuary.

Meeting Summary

- Chris advised that understanding the correct ownership in priority areas is important. Some pilings on State-Owned Aquatic Lands (SOAL) may be associated with an Aquatic Land Lease. Therefore, some pilings on SOAL may be the responsibility of a lessee.
- Chris recommended checking with Ben Cooksey at DNR about lease holdings in the project area.
- Chris has been talking to the Tulalip Tribes about removal of creosote-treated large wood that has drifted onto tribal properties in the Quilceda estuary.
- Chris mentioned that WSDOT has an upcoming project which may require mitigation for which piling removal may be a fit. Elisa has been in contact with WSDOT about that opportunity. It is 1 to 2 years out and entails mitigation for up to 1 acre of benthic disturbance.
- Chris said that it is a site-by-site decision whether DNR will remove untreated pilings that may be distributed among creosote-treated pilings. It depends on multiple factors including proximity to treated pilings and number of untreated pilings.
- Chris mentioned proposed state legislation which may bring targeted funding to Snohomish County as part of DNR's Salmon Enhancement Plan. If passed, DNR will be able to do a lot more. There will be more staff and a Washington Conservation Corps crew to do restoration in the watershed.
- DNR is an ideal partner for creosote-piling removal, in part because they have all the permits and extensive experience.
- The Puget Sound Nearshore Conservation Calculator presents an emerging situation for DNR. DNR is in discussions with NOAA and the Puget Sound Partnership (PSP) regarding plans for piling removal as mitigation for miscellaneous projects. DNR will identify sites to the Puget Sound Partnership that DNR cannot work on (e.g., Haines wharf). DNR anticipates some issues on staff availability.
- Chris said that to-date the program has been fully focused on actions that produce a net gain. If they got involved in pulling pilings for mitigation, then it would reduce the time and resources they have available to focus on net gain projects.

**City of Everett Meeting Summary**  
**Snohomish Estuary Piling Prioritization Project**  
**June 22, 2021**

Meeting Participants

Dean Shaughnessy, City of Everett Parks and Recreation  
Heather Griffin, City of Everett Public Works  
Pat Mitchell, City of Everett Public Works  
Paul Crane, City of Everett Public Works  
Tom Hood, City of Everett Public Works  
Elisa Dawson, Snohomish County Surface Water Management, MRC  
Alex Pittman, Snohomish County Surface Water Management, MRC  
Paul Schlenger, ESA

Meeting Purpose

The purpose of the meeting was to follow up with the City of Everett on city-owned pilings and opportunities for piling removal. Several City staff participated in an earlier group stakeholder meeting which included more introductory information about the piling prioritization.

Public Works Yard Priority Area

- Dean and Heather indicated the City plans to remove many pilings in the priority area as mitigation for an upcoming project.
- Pat indicated that the City owned the pilings at Parcel O. These pilings are occasionally used, but do not have any uses that prevent their removal.
- Paul C. indicated that the small derelict dock near northwest margin of priority area should remain because it allows City to retain a water access point for future use.

Everett Riverfront EIS

- Following last conversation, Paul tried to find the piling inventory for the Everett Riverfront site that Paul Crane mentioned. He was unable to locate the files. This is upstream of the piling prioritization project area, but still of interest as it is City-owned pilings.
- Tom also recalled that all pilings at the site were inventoried. All were creosote, some were removed.
- Paul will look again (again no luck).

Port of Everett Pilings

- Dean commented that when he was at the Port, Pentec conducted a properties inventory which included a pilings inventory.
- Based on his recollection of that work, he expects there is more creosote than what the recent inventory documented.

Miscellaneous

- Tom indicated that piling pulling is happening as part of projects
- Heather commented that it would be helpful to receive the prioritization GIS files. The City received them previously, but receiving again would help. Paul will provide the updated GIS to the City's GIS contact which Heather provided.
- Paul C. thinking the Diking Improvement District 5 will be a good stakeholder to speak with. He will send Vic's contact information.

- Elisa mentioned that she recently spoke with someone who indicated that with infrared photography creosote-treated wood is distinguishable from untreated wood. Thus, infrared technology may be helpful in identifying creosote-treated wood.

**Port of Everett and U.S. Army Corps of Engineers Meeting Summary**  
**Snohomish Estuary Piling Prioritization Project**  
**June 23, 2021**

Meeting Participants

Laura Gurley, Port of Everett, Snohomish County Marine Resources Committee (MRC)  
Scott Brown, U.S. Army Corps of Engineers  
Elisa Dawson, Snohomish County Surface Water Management, MRC  
Alex Pittman, Snohomish County Surface Water Management, MRC  
Paul Schlenger, ESA

Meeting Purpose

The purpose of the meeting was to follow up with the Port of Everett and the Corps of Engineers on port-owned or Corps-used pilings and opportunities for piling removal. Several City staff participated in an earlier group stakeholder meeting which included more introductory information about the piling prioritization.

North Jetty Island Priority Area

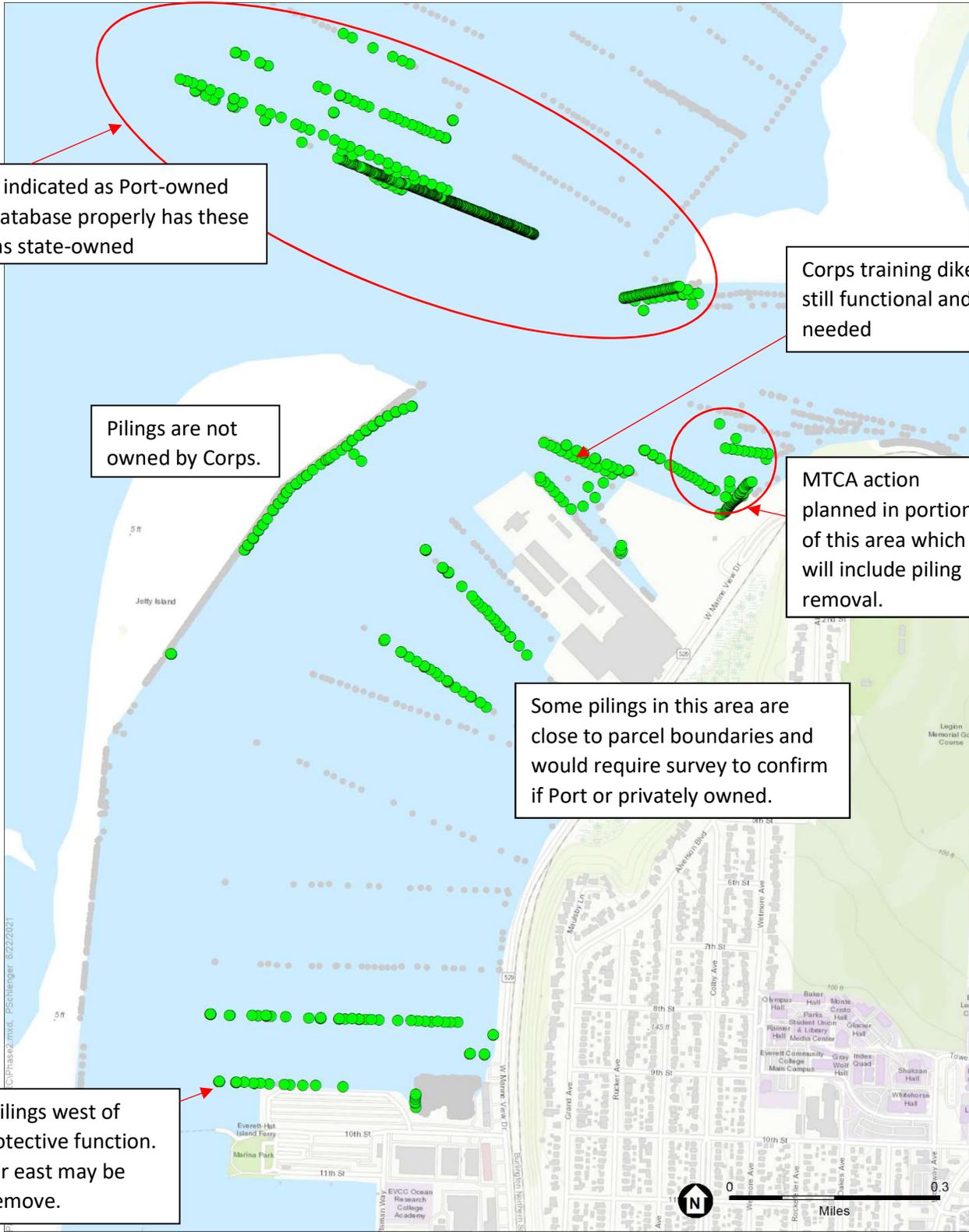
- Scott confirmed the takeaways from the group stakeholder meeting that the pilings at the north end of Jetty Island are not owned by the Corps. Scott confirmed this with his Real Estate group.
- The property is owned by the Port of Everett.
- This is different than Laura's past understanding. She will do research on her end to learn more about their ownership, if not the Port.
- Laura asked if they serve a function to protect jetty island. Scott indicated that he will need to look into that.
- Scott noted that there is an updated version of the Salish Sea model which will be useful in informing whether pilings are needed for navigation or if they can be removed. The model outputs will be publically accessible through the University of Washington. Expected out within one year.

Port-owned Pilings

- Laura provided information on Port-owned pilings along jetty island channel. See annotated map on next page.
- Laura asked WSDOT about their use of pilings near Highway 529. WSDOT does not rely on any of those pilings.
- Port is open to participating, but needs to keep pilings that have mitigation value for them until they can receive credit for them.
- Laura said the Port has some projects upcoming which will remove pilings as mitigation.
- Upcoming projects involving dredging are unlikely to be able to readily include piling removal because different equipment is needed. Laura will follow up with Port to confirm.

Corps' Use of Pilings

- Scott confirmed the takeaway from the group stakeholder meeting that a dredging contractor for the Corps uses a small number of pilings along the City of Everett's Public Works Yard (a priority area for the piling removal project). However, their use of pilings is not critical and any pilings can be removed. The Corps has no pilings uses in the estuary other than the training dike near the north end of Jetty Island (see map below) that prevent any pilings from being removed.



Incorrectly indicated as Port-owned in figure. Database properly has these identified as state-owned

Corps training dike still functional and needed

Pilings are not owned by Corps.

MTCA action planned in portion of this area which will include piling removal.

Some pilings in this area are close to parcel boundaries and would require survey to confirm if Port or privately owned.

In this row, pilings west of land have protective function. Pilings further east may be possible to remove.

Map of Port of Everett Pilings near the north end of Jetty Island

**Snohomish County Meeting Summary**  
**Snohomish Estuary Piling Prioritization Project**  
**July 1, 2021**

Meeting Participants

Dave Lucas, Snohomish County Public Works Supervisor

Brett Gaddis, Snohomish County Senior Habitat Specialist

Gretchen Glaub, Snohomish County, Snohomish Basin Salmon Recovery Lead Entity Coordinator

Elisa Dawson, Snohomish County Surface Water Management, MRC

Alex Pittman, Snohomish County Surface Water Management, MRC

Paul Schlenger, ESA

Meeting Purpose

The purpose of the meeting was to follow up with Snohomish County on county-owned pilings and opportunities for piling removal. Brett Gaddis and Gretchen Glaub participated in an earlier group stakeholder meeting which included more introductory information about the piling prioritization.

Piling Ownership Update

- In preparation for the meeting, piling ownership in the project database was corrected for parcels along Steamboat Slough that the County purchased from Dunlap Towing in recent years.
- Brett confirmed that the County was aware of the presence of pilings on those parcels at the time of the purchase.

Creosote Treatment of Pilings

- Elisa described the field observations used to determine whether pilings have been creosote treated. These field observations are the best data we have. No lab testing was conducted.
- Elisa explained that in the estuary, sometimes the creosote was painted on after piling installation. Paint is not expected to stay on as long as creosote-infused treatments which penetrate into the pilings. Thus, some creosote-painted pilings may no longer appear to be treated.
- Brett noted that for the piling removal completed at Spencer Island the pilings were not tested for creosote. The person contracted to remove them was the same person who put them in years ago. The pilings were not creosote-treated by his recollection. Nevertheless, the removal and disposal methods assumed the pilings were creosote-treated in order to be protective of the environment. When they were pulled out, there was no sheen or signs of creosote.

Removal of County-owned Pilings

- Elisa asked whether the County would take on piling removal and include it in a work plan. If so, how could the MRC support such efforts?
- Dave said that to get on a work plan, he would need to know how piling removal ranks compared to other projects being considered. The County has limited staff resources and they need to be used for the highest priority projects.
- Dave said that some Surface Water Management funds can be available if piling removal is a high enough priority. If there was a grant available, they could hire a consultant to handle the bulk of the work.
- Dave said that at earliest piling removal could be put in work plan for 2023. Planning for that begins in fall/winter of 2021-2022.
- Gretchen noted that SRFB is unlikely to be a viable funding source for stand-alone piling removal projects. Piling removal as part of larger salmon restoration projects could be funded using salmon funding.

- Gretchen said that multiple watersheds are discussing a 10-year project list which pilings could be added to. The list is combined among Snohomish, Skagit, and Island counties.
- Gretchen mentioned that it may be beneficial to get a detailed map to Stephanie Celt, DNR. Stephanie plans to pull together a project list for the estuary and shop it to private investors.
- Brett mentioned that future work at North Spencer is for minimal riparian restoration. Piling removal could potentially be included in that work as edge enhancements.
- Brett said that piling removal could potentially also be included in future work at Smith Island. People have identified some ideas for small adaptive changes at the site. Those ideas could be combined with piling removal to make a big enough project to move ahead with.
- Brett offered that piling removal is also something to keep in mind towards the end of the year when extra funding sometimes becomes available in the county. Perhaps there's an opportunity to use such funding to pull 25 or so pilings. This may require setting up the permit and bid process in a programmatic method.
- Paul mentioned that untreated pilings could potentially be re-used in log jams in the estuary. Brett mentioned that the Spencer Island restoration included vertical arrays of logs, similar to pilings, to collect wood entering the marshes.

#### Removal of Pilings at Blue Heron Slough

- Brett indicated that he has previously tried to get Blue Heron Slough mitigation bank developers to consider piling removal. They have not been responsive.
  - Action: Paul will work with his co-worker, Sky Miller, who was previously involved at Blue Heron Slough to see if piling removal can be included in their project.

**Tulalip Tribes Meeting Summary**  
**Snohomish Estuary Piling Prioritization Project**  
**July 2, 2021**

Meeting Participants

Brett Shattuck, Tulalip Tribes Restoration Ecologist

Kurt Nelson, Tulalip Tribes Environmental Department Manager

Jason Gobin, Tulalip Tribes Fish and Wildlife Director

Natasha Coumou, Tulalip Tribes Assistant Restoration Ecologist, Snohomish County Marine Resources Committee (MRC)

Elisa Dawson, Snohomish County Surface Water Management, MRC

Alex Pittman, Snohomish County Surface Water Management, MRC

Paul Schlenger, ESA

Meeting Purpose

The purpose of the meeting was to follow up with Tulalip Tribes on tribe-owned pilings and opportunities for piling removal. Some tribal staff participated in an earlier group stakeholder meeting which included more introductory information about the piling prioritization.

Meeting Summary

- Elisa provided an overview of the project, including that the first piling database used at the outset of the project was provided by the tribe.
- Brett mentioned that the tribe has been in discussions with DNR on creosote-removal, especially in the Quilceda estuary. Those discussions have been about creosote-treated drift wood deposited in the area, not pilings. This piling removal project is separate from the DNR work.
- Jason said that all pilings within the Tulalip Reservation are under the Tulalip Tribes' regulatory authority regardless of parcel ownership in the parcel database.
- Brett noted that removal of the high density of creosote-treated pilings near the Quilceda estuary is of interest for the tribes.
- Jason indicated that before approving piling removal, the tribes will want to consider whether they will have future uses of the pilings. He shared that they did some piling removal some years ago, then subsequently planned to build a marina in the same location and they had to re-install pilings.
- When asked about current piling use, Jason responded that no specific pilings are used by tribal fishermen or for gravel barge operations.
- Jason asked what the benefits of removal are if the pilings are not creosote-treated. Paul replied that any pilings can have detrimental impacts on sediment transport – especially if clustered in high densities or rows – and also impact marsh vegetation due to scour around pilings.
- Kurt noted that untreated pilings can snag other wood and provide habitat benefits. Elisa agreed and noted that untreated pilings that are removed could be beneficially re-used to form habitat structure.
- Kurt indicated that the tribe owns the parcel west of the truck yard near I-5. Quilceda is one of the top wetland areas in the Snohomish.
- Kurt said that if any piling removal were to occur near the Superfund site between Ebey Slough and Steamboat Slough, then the USEPA should be contacted. Contact: Anthony Reese, Big Flats Manager, 360-716-5056.
- Elisa mentioned that at Mission Beach, the map only shows independent pilings, but there is a wall of other pilings in the area.
- Brett mentioned that DNR approached the tribe to discuss the Mission Beach area. They were interested in doing an alternatives analysis to remove creosote and restore the area.

- Brett recommended reaching out to the tribe's GIS manager for a map of the reservation area. Christopher Wright, [christopherwright@tulaliptribes-nsn.gov](mailto:christopherwright@tulaliptribes-nsn.gov), cell 350-913-3694, office 360-716-5164.