

## Appendix C-2: Planning Project Proposal

<b>Project Number</b>	17-1032
<b>Project Name</b>	PNP Restoration Reconnection Feasibility Study
<b>Sponsor</b>	Mid Sound Fisheries Enhancement Group
<b>Planning Type</b>	Conceptual Design/Feasibility Study

List all related projects previously funded or reviewed by RCO:

Project # or Name	Status	Status of Prior Phase Deliverables and Relationship to Current Proposal?
13-1192	Not funded	In 2013 WDFW proposed a similar project but withdrew it after there were concerns expressed about the proposal from Kitsap County. This project proposes to start with more of an emphasis on outreach, finding common ground, and developing support before moving too fast on actual conceptual design work.

If previous project did not receive funding, describe how the current proposal differs from the original.

*Submit this proposal as a PRISM attachment titled "Project Proposal."*

**1. Project brief.** *In one or two sentences, what do you propose to do?*

The Mid Sound Fisheries Enhancement Group will work with Kitsap County, the Washington Department of Fish and Wildlife and surrounding private landowners to begin feasibility analysis and discussions about the potential to reconnect and restore tidal influence and fish access to former salt marsh wetlands at Point No Point. This project was the highest priority nearshore restoration project in Kitsap County's recently completed West Sound nearshore project prioritization study.

**2. Project location.** *Describe the geographic location, water bodies, and the location of the project in the watershed (i.e. nearshore, tributary, main stem, off-channel, etc.)*

This project is located at the northeastern tip of Kitsap County, in Hansville, where the waters of central Puget Sound meet the waters of Admiralty Inlet. It would affect the nearshore areas on the project site.

- 3. Problem statement.** *What are the problems the project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.*

Nearshore importance to Chinook:

The protection and restoration of nearshore habitat is a high priority Chinook salmon recovery strategy in the West Sound Watershed. Juvenile Chinook from Puget Sound rivers migrate along the shoreline as they head out towards Admiralty Inlet and the Straits. As they migrate, smaller juvenile Chinook stay closer to the shoreline and gradually move into deeper waters as they grow bigger (Fresh, 2006). Having habitats where they can feed and hide from predators on their journey is important for their success and survival. Research has demonstrated higher densities of juvenile Chinook are found in pocket estuaries along the nearshore (Beamer et. al., 2006). As shorelines have been developed these types of habitats and the natural processes that maintain them have been altered leading to reduced availability of these habitats for migrating juvenile fish.

The West Sound Watersheds Council recently commissioned a study to help prioritize all the possible nearshore protection and restoration projects that would benefit juvenile Chinook along the eastern shoreline of Kitsap County and into Pierce County, ending just north of Gig Harbor. The study considered the impact of potential projects on four habitat forming processes (sediment supply, sediment transport, cross-shore connectivity, and tidal flow) and on physical barriers to fish passage (Confluence et. al, 2016).

Importance of Point No Point:

In the nearshore project prioritization study, a project to reconnect the former salt marsh at Point No Point with saltwater again was the highest ranked project for restoration of cross-shore connectivity and tidal flow and also was by far the highest ranked project overall in the 420 project list. It was noted in the study that the project, in addition to improving cross-shore connectivity and tidal flow, could also improve sediment transport processes as well as remove physical barriers to fish passage by reopening access to the former salt marsh.

This is not the first time that this site was identified in a report as a priority area for restoration of nearshore salmon habitat. An earlier analysis of historical nearshore changes in the Hood Canal and Strait of Juan de Fuca regions also included this site since it sits on the boundary between the waters flowing out of Hood Canal and the waters flowing out of central Puget Sound. The report identified that this area was a good candidate for restoration (Todd et. al. 2006)

Historic Factors and modifications:

The historical Point No Point salt marsh was fed by a small stream to the south. Situated at the northeastern corner of the Kitsap Peninsula the salt marsh was bounded by saltwater shoreline both to the north and the east of the marsh. This historical outlet and connection to the salt water was through the north shoreline. The marsh had a series of sinuous channels flowing through the salt marsh where the freshwater from the small stream would mix with the salt water.

Based on reports in a historical journal it is believed that the marsh was one of the earliest ones in the region to be diked, starting in the 1880's (Todd et.al. 2006). Later construction of the road along the north side of the marsh in the 20<sup>th</sup> century is conjectured to be when the northern connection with salt water was cut off. At some point a pipe was installed that allows a limited tidal connection to the eastern shoreline of the marsh with a poorly functioning tide gate. The main channels in the marsh have been ditched, although secondary channels in the wetland remain a more natural sinuous pattern. Because the connection to the salt water has now been basically cut off the wetland that remains is now a freshwater wetland with no fish access from the saltwater.

Current physical factors and constraints:

Much of the former salt marsh site is now owned and managed by Kitsap County, which maintains the site for public recreation. The Kitsap County road runs along the north side of the marsh to a parking lot that is next to the historic lighthouse right on the point. The road fill and parking lot cut off the marsh's historic connection to the saltwater through the northern shoreline. A trail runs along the eastern edge of the marsh separating that side of the marsh from the saltwater shoreline. The pipe with the poorly functioning tide gate runs from west to east under the trail and out into the beach.

A portion of the western most part of the historic marsh is bisected by a private road running north south and one privately owned parcel. North of the Kitsap County road running east-west there are also a number of privately owned parcels with residences built on fill. The Washington Department of Fish and Wildlife also owns one major parcel north of the road which they manage for boater access to the salt water. The parcel was recently developed by WDFW to include a large paved parking lot.

Restoration of this former pocket estuary, which is located at the northern tip of the Kitsap Peninsula, has the potential to benefit migrating natural origin juvenile salmon traveling north from both Puget Sound and Hood Canal as it is situated at the place where the two bodies of water come together and flow into Admiralty Inlet. The site could be an important place for juvenile Chinook traveling from both sides to rest, feed and grow before heading out into deeper waters.

Current political factors:

The physical factors are not the only considerations. This site is an important local recreation site, and previous development has generated significant controversy in the surrounding community. Balancing recreation and restoration interests, and incorporating public comment into that conversation, has been a continuing challenge for the state and county governments.

Fresh, K. 2006. Juvenile Pacific Salmon and the Nearshore Ecosystems of Puget Sound. Puget Sound Nearshore Partnership. Technical Report 2006-06. Published by Army Corps of Engineers, Seattle, Washington. Available at <http://pugetsoundnearshore.org>

Beamer, E.M., A. McBride, R. Henderson, J. Griffith, K. Fresh, T. Zackey, R. Barsh, T. Wyllie-Echeverria, and K. Wolf. 2006. Habitat and Fish Use of Pocket Estuaries in the Whidbey Basin and North Skagit County Bays, 2004 and 2005. Skagit River System Cooperative. January 16, 2006 Available at: [http://www.skagitcoop.org/documents/EB2207\\_Beamer\\_et\\_al\\_2006.pdf](http://www.skagitcoop.org/documents/EB2207_Beamer_et_al_2006.pdf)

Confluence et. al. 2016. West Sound Nearshore Integration and Synthesis of Chinook Salmon Recovery Priorities. Prepared for the West Sound Watersheds Council.

Todd, Fitzpatrick, Carter-Mortimer, and Weller. 2006. Historical Changes to Estuaries, Spits and Associated Tidal Wetland Habitats in the Hood Canal and Strait of Juan de Fuca Regions of Washington State. Point No Point Treaty Council Tech Report 06-01

**4. List the fish resources present at the site and targeted by the project.**

Species	Life History Present (egg, juvenile, adult)	Current Population Trend (decline, stable, rising)	Endangered Species Act Coverage (Y/N)
Puget Sound Chinook	Juvenile	Decline	Y

**5. Describe the limiting factors, and limiting life stages (by fish species) that the project expects to address.**

This project would be the first step in developing a project that, when constructed, would create access to up to 32 acres of pocket estuary salt marsh for outmigrating juvenile Chinook salmon at a critical point in their outward journey. Survival of outmigrating juvenile salmon in Puget Sound is a significant limiting factor to success in recovering listed Puget Sound Chinook salmon. While there are a number of factors that affect the juvenile Chinook’s chances of survival, it is believed that this species of salmon are more dependent on estuary and nearshore rearing habitats for their survival success. Having healthy shallow nearshore and pocket estuary habitats where they can be less susceptible to predation while they feed and grow can be important.

**6. Project goals and objectives.** *When answering the questions below please refer to Chapter 4 of the Washington Department of Fish and Wildlife’s [Stream Habitat Restoration Guidelines](#) for more information on goals and objectives.*

**A. What are the project’s goals?** *The goal of the project should be to remedy observed problems, ideally by addressing the problems’ root causes. The sponsors goal statements should articulate desired biological outcomes (vision for desired future condition). The statement should also include which species and life stages will benefit from those outcomes and the time of year (if pertinent) those benefits will be realized (e.g., will high flow refuge be available when juveniles are outmigrating or rearing in the project area?).*

Assess the feasibility of restoring tidal inundation and fish access to the former Point No Point salt marsh to increase available pocket estuary habitat for migrating juvenile Chinook salmon.

**B. What are the project’s objectives?** *Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be “SMART:” Specific, Measurable, Achievable, Relevant, and Time-bound.*

The objective of this feasibility project is to create a feasibility study that includes several specific elements:

- Identify key conditions for success required by stakeholders and partners, including Kitsap County, WDFW, Suquamish Tribe, local landowners, and community users of the recreation opportunities at the site for any future restoration design to restore tidal inundation to the historic salt marsh.
- Collect property boundary, coastal process and geomorphic data that can inform future design choices
- Develop up to four high level conceptual design alternatives which would balance stakeholders' needs and restoration potential.

**7. What are the assumptions and constraints that could impact whether the sponsor achieves the objectives?** *Assumptions and constraints are external conditions that are not under the direct control of the project, but directly influence the outcome of the project. These may include subsequent availability of funding, public acceptance of the project, land use constraints, geomorphic factors, additional expenses, delays, etc. How will the sponsor address these issues if they arise?*

The major constraint for this project will be whether we can be successful in identifying a potential path forward that is mutually supported by the County, WDFW, the private landowners in the surrounding area and other important partners such as the Suquamish Tribe. That is why this first phase proposal intends to focus most of the work on outreach to the various parties to listen to their needs and concerns and to take the time necessary to talk through possible solutions. The successful future implementation of the project will of course also be dependent on whether additional funding can be secured for future phases.

The purpose of the initial data collection proposed in this phase will be to evaluate and understand how significant other potential constraints such as land use, utilities, and geomorphic factors might be in influencing our design choices.

**8. Project details.** *Please answer the questions below and all pertinent supplemental questions at the end of the application form.*

- A. Provide a narrative description of the proposed project.** *Describe the specific project elements and explain how they will lead to the project's objectives. For assessment projects, describe the design and methodology.*

The project will consist of three main elements: preliminary data collection and analysis; a series of outreach conversations with key stakeholders and partners to identify and develop support for a restoration concept; and an alternatives analysis. The preliminary data collection will be conducted for Mid Sound by Confluence Environmental Company (Confluence), who also completed the nearshore project prioritization analysis that identified this project as the highest priority restoration opportunity on the Kitsap Puget Sound shoreline. The outreach work with stakeholders and partners will be led by Mid Sound staff with some technical assistance from Confluence. Mid Sound will then work with Confluence to use the results of the previous two

tasks to develop an alternatives analysis with an identified preferred alternative that can be further developed in future phases of the project.

For the preliminary data collection and analysis Confluence will conduct a coastal processes and a geomorphic site assessment to document existing conditions and provide baseline design criteria. It is recognized that this is a highly dynamic site and the analysis will look at the factors that would impact where it might be feasible to restore a connection to the salt water that could sustain itself over time. This analysis will also include inundation mapping of the site for a range of sea level rise projections in anticipation of possible future conditions at the site and surrounding area. A review of property ownership, public right-of-ways, and easements will also be conducted to verify that the appropriate people and agencies are being engaged in the project discussions.

While the preliminary data collection will be helpful to shape what options might be possible or desirable from a technical perspective, the major portion of this initial phase will be spent talking to and listening to all potentially affected parties. Mid Sound staff will meet with Kitsap County Commissioners, Kitsap county staff from the multiple departments that would have some interest and influence over how the project is designed (Parks, Public Works, Community Development), Washington Dept. of Fish and Wildlife staff, Suquamish Tribe Fisheries staff, and local property owners and community members in the area surrounding the Point No Point wetland. Others may be added to this list if they become evident as the project proceeds.

Mid Sound will use a combination of targeted one on one meetings, group meetings, and community forums to engage the stakeholders and partners in the conversation. The intent of these conversations will be to identify key concerns that must be addressed in a successful restoration design and to develop a common understanding of and support for a potential future restoration project.

- B. Provide a scope of work and detailed list of project deliverables.** *Provide a detailed description of the proposed project tasks, who will be responsible for each, what the project deliverables will be, and a schedule for accomplishing them. If the project will produce a design, please specify the level of design that will be developed (conceptual, preliminary, or final); design deliverables must comply with those described in RCO "Manual 18, Salmon Recovery Grants," Appendix D-1 (conceptual design), D-2 (preliminary design), and D-3 (final design). Complete planning projects within 2 years of funding.*

**Task 1: March 2018-August 2018**

Confluence will clarify property ownership in the project vicinity;

- i. Compilation of tax assessor parcel data in GIS
- ii. Review public right-of-ways and easements via publicly available sources with particular emphasis on review of deeds for properties which abut public right-of-ways to identify easements
- iii. As needed, field verification of corners of public right-of-ways and easements to identify potential land use conflicts
- iv. As needed, survey of areas where conflicts have been identified to clarify parcel boundaries relative to land use by a professional land surveyor to be identified.

The deliverable will be a map showing parcel lines, right-of-ways, and easements. The map will clearly show which parts of parcels are bound by right-of-ways and easements. The parcel boundaries identified through survey will resolve disputes on the boundaries of ownership in the project area.

Task 2: March 2018-March 2019

Confluence will conduct a preliminary analysis of the coastal processes/geomorphic assessment of the site including:

- i. Geomorphic mapping on site of key sediment transport indicators
- ii. Analysis of long term water level data to calculate tidal datums and extremal water levels
- iii. Wind-wave calculations based on existing wind data from long-term stations. Our team has extensive expertise in evaluating sediment transport resulting from vessel wake wash and believe the vessels transiting this area will be too far from shore to have a significant effect on sediment transport. In addition, wind-wave energy will far exceed vessel wake wash and so will be a primary driver of sediment transport for the project site.
- iv. Cross-shore beach profiles including delineation of some key elevations (ordinary high water, excursion of wave run-up and extremal water level). The cross-shore beach profiles are primarily to determine the location of the key elevations mentioned ((ordinary high water, excursion of wave run-up and extremal water level) relative to the marsh. These surveys are also intended to fill any gaps in the LIDAR data in order to develop a DEM that can be used to determine relative elevations of key locations on the site where restoring a tidal connection will be sustainable, such as low elevations in the shoreline. The cross-shore beach profiles will also be used to determine an average beach slope required to calculate wave run-up. However, since all restoration projects take several years to construct, we will ensure the beach profile locations are repeatable and could be used to determine seasonal profile change over time.
- v. Development of a preliminary digital elevation model using existing LIDAR and supplemented with limited survey data collected to ground-truth selected locations
- vi. Evaluate the site conditions with a range of sea level rise projections. The deliverable will be a Coastal Processes section of the design report (task 4) that presents the information listed in the task description. The report section will provide the coastal processes and geomorphic assessment information that will be used to determine the location(s) where a sustainable outlet to the marsh can be restored.

Task 3: March 2018-August 2019

Mid Sound will have a series of conversations with partners and local community members to identify key concerns and to develop support for a potential restoration. Outreach will include many one on one meetings, some group meetings, and a few community meetings.

- i. Meet with the Kitsap County Commissioner for District 1 to discuss project, identify concerns, and potential paths to success.
- ii. Meet with Kitsap County Public Works – both Roads and Surface Water folks to understand their current plans for management of the road and the surface water, and to discuss what their needs are that might put potential constraints or side boards on the design process.
- iii. Meet with Kitsap County Parks to understand their current plans for management of

- the Point No Point Lighthouse park and what needs and constraints they might have from a recreation perspective.
- iv. Consult regularly with Kitsap County staff in the Department of Community Development to ensure planning work is coordinated with them, their programs and their policies.
  - v. Meet with WDFW staff to discuss their property, future plans for management and identify any potential for the property to be included in the restoration designs. Also coordinate with WDFW habitat biologists to ensure they have early input into restoration design discussions.
  - vi. Meet with staff from Suquamish Tribe Fisheries to get their technical perspective and to be aware of any tribal needs/concerns about how the restoration design is developed.
  - vii. Check with the Point No Point Treaty Council to see if they have any interest in being engaged in project discussions.
  - viii. Conduct outreach to private property owners in the potential project footprint and in the neighboring areas. This would include one on one outreach and community meetings as needed.
- The deliverables will be notes from the group and community meetings. The notes will document the topics discussed, questions/comments received, and action items. One purpose of these notes will be to record the points of issues that are constraints that need to be worked through in discussions, additional information gathering or analysis, and/or addressed through design.

**Task 4: April 2019- October 2019**

Confluence and Mid Sound will work together to write a feasibility study and conceptual design report which will include the development of up to 4 high level conceptual designs for the project. This report will cohesively present the data collected on the site which will be used as a basis for design, a summary of the findings from the outreach program and how these findings will be incorporated into the project design, and planview sketches of the initial design concepts for restoration of the site. A rough estimate of construction costs will be included. Our expectation is not to start with a laundry list of projects because we expect the coastal processes analysis will indicate a marsh outlet can be most sustainable in a limited number of locations.

**C. Explain how the sponsor determined cost estimates.**

Cost estimates for the first two data collection tasks were based on cost estimates from Confluence using their previous similar project work as a guide. The primary cost for Task 3 is staff time in meeting and discussing the project. The staff time was estimated roughly at around 600 hours for the outreach meetings and compiling the report on outcomes of those conversations. Mileage for travel to meetings and the site was also included in the cost estimate as well as some funds for outreach materials to be used in meetings. The cost for Task 4 with the alternatives analysis is based on a very low estimate trying to minimize the total cost of the project to stay within a reasonable budget for the available amount of grant funds. Consequently the conceptual alternatives and analysis will be very high level with the need for additional work to be completed in a future phase of the project. The additional work could be conducted as part of preliminary design and a second alternative analysis where more details on each alternative are provided.

- D. How have lessons learned from completed projects or monitoring studies informed the project?** *Sources of results may be from Project Scale Effectiveness Monitoring from TetraTech, individual sponsors, lessons learned from previously implemented projects, Intensively Monitored Watershed results, or other sources.*

The greatest lesson learned from past projects situated in places like this with multiple ownerships and multiple expectations and uses of the site is that for eventual success it is very important to go slow at the beginning and ensure that all the right people are engaged and consulted before moving forward with a specific proposal. Without that base of support the project will not be able to move forward, no matter how technically sound the proposed restoration might be. Of course as the project moves forward we will consider the technical lessons learned from other nearshore restoration projects across the Sound and incorporate those into our discussions for preliminary designs.

- 9. If the project includes an assessment or inventory** (*NOTE: project may extend across a wide area and cover multiple properties*).

- A. Describe any previous or ongoing assessment or inventory work in your project's geographic area and how this project will build upon, rather than duplicate, the completed work.**
- B. If a design is NOT a deliverable of this grant, please describe how this project meets all of the required criteria for filling a data gap that are list in Section 2 of Manual 18.**

The project will have as a final product four high level conceptual design alternatives that can be used in future phases to choose one preferred alternative and to develop into a preliminary project design alternative. We are proposing to develop high level conceptual designs in this first phase for two primary reasons: First - because it is important in the early stages of project discussion for a project with complex issues and interests to not push people too fast. If people feel they are being rushed or not listened to it can make it difficult to find a path forward that people are comfortable with. Secondly – this grant round for the West Sound watershed is limited in the amount of funds that are available for projects so we are trying to limit the scope to keep costs down.

- 10. If the project includes developing a design or a feasibility study:**

- A. Will a licensed professional engineer design the project?**  
Yes

Confluence Environmental Company has a Coastal Engineer on staff who is a licensed professional engineer (PE) in Washington State that will assist with the conceptual design alternatives and analysis.

- B. If the project includes a fish passage or screening design, has the project received a Priority Index (PI) or Screening Priority Index (SPI) number?**

**C. Will you apply for permits as part of this project's scope?****No**

- i. *If not, please explain why and when the sponsor will submit permits.*

Not needed because this is just a feasibility analysis.

**D. For fish passage design projects:**

- i. **If you are proposing a culvert or arch, will you use stream simulation, no slope, hydrologic, or other design method? Please describe.**
- ii. **Describe the amount and quality of habitat made accessible if the barrier is corrected.**
- iii. **List additional upstream or downstream fish passage barriers, if any.**

**11. Explain why it is important to do this project now instead of later.** *(Consider its sequence relative to other needs in the watershed and the current level and imminence of risk to habitat).*

ESA threatened Puget Sound Chinook populations continue to decline. This project was identified as the highest priority opportunity for nearshore restoration for juvenile Chinook along the entire eastern shoreline of Central Puget Sound. It will take some time just to get the agreements necessary to move forward with a restoration project that will make a difference for the fish. So it is important to start those critical conversations as soon as possible.

**12. If the project is a part of a larger overall project or strategy, describe the goal of the overall strategy, explain individual sequencing steps, and which of these steps is included in this application for funding.** *Attach a map in PRISM that illustrates how this project fits into the overall strategy, if relevant.*

This project is the first step in what will be a multi-step strategy to get to a completed nearshore restoration project at Point No Point. Future sequencing steps if this first effort is successful would be the completion of restoration designs and the construction of the project.

**13. Describe the sponsors experience managing this type of project.** *Please describe other projects where the sponsor successfully used a similar approach.*

The Mid Sound group recently underwent a major staffing change when the long-time Executive Director of the group left in the summer of 2016. The group hired a new Executive Director, Jeanette Dorner, who began in January. Consequently, it seems more relevant for this question to speak to Jeanette's experience in managing this type of project since that is the expertise the group currently has. Jeanette has been working with salmon recovery restoration projects since the Salmon Recovery Funding Board process began in 1999. One major project that she played a key role in leading with partners that has relevance to this application was the Ohop Creek restoration project. In the early 2000's the Nisqually watershed salmon recovery plan identified the restoration of the lower reach of Ohop creek as a high priority. However at that

time there was no landowner agreement or design of what to do. Jeanette worked with partners on a Salmon Recovery Funding Board planning/assessment grant to conduct outreach to all the landowners in the affected reach. The goal of the outreach was to develop support for the project and identify a potential conceptual design for the restoration. This project was ultimately successful in bringing together all the parties and developing agreement to move forward on a restoration project to reconnect the creek with its original floodplain and to restore the adjacent valley floor. The Ohop restoration project recently completed its second phase of construction and has restored over 2 miles of the creek and engaged many partners in the work. Jeanette also played a major role in the projects to restore the Nisqually estuary and so is familiar with the restoration challenges unique to estuary restoration.

As the project manager, Mid Sound has chosen to partner with Confluence Environmental Company, a consultant with expertise in both this watershed, and this type of project. Besides having existing experience in the nearshore restoration prioritization process, Confluence has significant experience designing nearshore restoration projects. They therefore are particularly qualified to be able to identify the technical information needed for future phases, to collect that data in this phase, and to complete an alternatives analysis.

**List all landowner names.** *If the project will occur on land not owned by the organization, attach a Landowner Acknowledgement Form (Manual 18, [Appendix F](#)) in PRISM from each landowner acknowledging that his/her property is proposed for SRFB funding consideration. Refer to Manual 18, Section 3 for possible exceptions to this requirement.*

No actual on the ground restoration work will take place as part of this project. However, landowners that will be engaged directly in the discussions include Kitsap County, Washington Department of Fish and Wildlife, and a large number of private property owners that neighbor the proposed site. One property owner – Cecilia Runkle and Mel Mordaunt – who jointly own the parcel that has the private road and that bisects the county ownership of the wetland will be more directly engaged in the discussions because their property has the potential to be more directly affected by any future project.

**14. List project partners and their roles and contributions to the project.** *Attach a Partner Contribution Form (Manual 18, [Appendix G](#)) from each partner in PRISM. Refer to Manual 18, Section 3 for when this is required.*

Mid Sound will partner with Kitsap County and the Washington Department of Fish and Wildlife to work on this project.

**15. Stakeholder outreach.** *Discuss whether this project has any opposition or barriers to completion besides funding. Describe the sponsors public outreach and feedback received. Are there any public safety concerns with the project? How will the sponsor address those concerns?*

This entire project is focused on stakeholder outreach as a necessary first step to a successful project.

## Supplemental Questions

*For acquisition and planning combination projects, applicants will need to answer the acquisition supplemental questions found in the “Restoration, Acquisition, and Combination Proposal.”*

## Comments

Use this section to respond to the comments received after the initial site visits and after submitting the final application.

## Response to Site Visit Comments

Please describe how the sponsor responded to the review panel’s initial site visit comments. *RCO recommends that the sponsor list each of the review panel’s comments and questions and identify the response. The sponsor may use this space to respond directly to the comments.*

## Draft Application / Site Visit REVIEW PANEL comments

**Date:** 4/12/17

**Project Site Visit?**

Yes  No

**Review Panel Member(s):** Cramer and Tyler

**1. Recommended improvements to make this a technically sound project according to the SRFB’s criteria:**

If you are able to refine your expected deliverables (particularly for Task 4) please clearly articulate them in the final proposal. For example, do you have an idea of how many conceptual designs you hope to compare in the alternatives analysis? Or do you expect to start with a longer laundry list of projects and then prepare conceptual sketches for only a few of them? Will you take the preferred alternative to a more refined conceptual drawing?

Following is additional information on the project deliverables associated with each task.

Task 1 – The deliverable will be a map showing parcel lines, right-of-ways, and easements. The map will clearly show which parts of parcels are bound by right-of-ways and easements. The parcel boundaries identified through survey will resolve disputes on the boundaries of ownership in the project area.

Task 2 – The deliverable will be a Coastal Processes section of the design report (task 4) that presents the information listed in the task description. The report section will provide the coastal processes and geomorphic assessment information that will be used to determine the location(s) where a sustainable outlet to the marsh can be restored.

Task 3 – The deliverables will be notes from the group and community meetings. The notes will document the topics discussed, questions/comments received, and action items. One purpose of these notes will be to record the points of issues that are

constraints that need to be worked through in discussions, additional information gathering or analysis, and/or addressed through design.

Task 4 – The deliverable will be a feasibility study and conceptual design report which will include the development of up to 4 high level conceptual designs for the project. This report will cohesively present the data collected on the site which will be used as a basis for design, a summary of the findings from the outreach program and how these findings will be incorporated into the project design, and planview sketches of the initial design concepts for restoration of the site. A rough estimate of construction costs will be included. Our expectation is not to start with a laundry list of projects because we expect the coastal processes analysis will indicate a marsh outlet can be most sustainable in a limited number of locations.

In addition to evaluating wind-wave potential in Task 2, wave action from passing ships would also merit evaluation, given the large ships regularly traversing this area. Also under Task 2, in item iv, extensive beach surveys may not be particularly useful unless repeated measures are planned and the profiles included in this phase will serve as a single snapshot for later comparison. The tremendous fluctuation in beach materials and surface elevations at this site due to storm and wave action will limit the profiles' utility. Identifying key elevations would hold more value, such as the parameters included in the proposal: ordinary high water, excursion of wave runup and water level extremes.

Our team has extensive expertise in evaluating sediment transport resulting from vessel wake wash and the vessels transiting this area will be too far from shore to have a significant effect on sediment transport. In addition, wind-wave energy will far exceed vessel wake wash and be a primary driver of sediment transport for the project site.

The cross-shore beach profiles are primarily to determine the location of the key elevations mentioned ((ordinary high water, excursion of wave run-up and extremal water level) relative to the marsh. These surveys are also intended to fill any gaps in the LIDAR data in order to develop a DEM that can be used to determine relative elevations of key locations on the site where restoring a tidal connection will be sustainable, such as low elevations in the shoreline. The cross-shore beach profiles will also be used to determine an average beach slope required to calculate wave run-up. However, since all restoration projects take several years to construct, we will ensure the beach profile locations are repeatable and could be used to determine seasonal profile change over time.

**2. Missing Pre-application information.**

Application is complete.

**3. General Comments:**

The outreach plan looks thorough and solid and is a great approach given the project history. One-on-one discussions with private property owners is a good approach to identifying concerns within that constituency and may also result in the identification of possible acquisition opportunities.

Reconnection and restoration of the salt marsh is an exciting prospect which could offer terrific habitat to benefit juvenile Chinook. If the initial phase succeeds and designs

advance, it will be important to thoroughly characterize the spatial extent of habitat expected to be achieved and the duration of time that fish will have access to this habitat.

Thanks for these comments. We will be sure to keep these in mind as we move forward with the project.

**4. Staff Comments:**

This is a really exciting project and I'm looking forward to seeing how the feasibility progresses and the preferred alternative. What a great opportunity.

Thanks! We are excited about this opportunity as well. This could turn out to be a great project for the fish and the surrounding community and a place to educate folks about the importance of salt marshes as habitat.

## Response to Post-Application Comments

Please describe how the sponsor responded to the review panel's post-application comments. *RCO recommends that the sponsor list each of the review panel's comments and questions and identify the response. The sponsor may use this space to respond directly to the comments.*