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| Lead Entity:  | WRIA 8 |  |  | Date | Status**[[1]](#footnote-1)** |
| Project Number: | 16-1214 |  | Post-Application |  |  |
| **Project Name:** | Willow Creek Daylighting Final Design & Permitting |  | Final |  |  |
| **Project Sponsor:** | City of Edmonds |  |
| Grant Manager:  | Josh Lambert |  |

# Project Summary (*for Review Panel reference only*)

This project as proposed will complete a final design and secure permits for the day-lighted channel component and beach channel to restore tidal processes and Chinook rearing habitat in the 28-acre Edmonds Marsh. Access to the Unocal/Chevron site is currently not allowed so no additional groundwater/soil monitoring or testing can be done until ownership transfers to WSDOT Ferries. Ecology has approved a cleanup plan which may take 6 to 8 years; land ownership will not transfer until the cleanup is complete. Some of the project information shows a new ferry dock/infrastructure in this area but lead entity TAC members suggest that this is not likely. But, future use of the land is uncertain. Worst case scenario may be a lined somewhat narrow channel through this reach for fish to access the marsh. This phase will prepare final design plans for the daylighted channel connection of Edmonds Marsh to Puget Sound by reconfiguring Willow Creek connection under BNSF railroad and across Marina Beach. The estimated cost is $368,000.

# FINAL REVIEW PANEL Comments

**Date:** **Final Project Status:** Choose an item.

**Review Panel Member(s):**

1. **If the project is a POC, please identify the SRFB criteria used to determine the status of the project:**
2. **If the project is Conditioned, the following language will be added to the project agreement:**
3. **Other comments:**

# Post-Application REVIEW PANEL comments

**Date: Project Status:** Choose an item.

**Review Panel Member(s):**

1. **If the project is a POC, identify the SRFB criteria used to determine the status of the project:**
2. **If the project is a POC, identify the changes that would make this a technically sound project:**
3. **If the project is Conditioned, the following language will be added to the project agreement:**
4. **General comments:**

## Sponsor Response instructions:

If your project is not cleared (i.e. has a status of NMI, Conditioned, or POC) you must update your proposal, PRISM questions, or attachments as necessary to address the review panel’s comments. Use track changes when updating your proposal. Fill out the section at the end of your project proposal to document how you responded to comments.

# Draft Application / Site Visit REVIEW PANEL comments

**Date:** 4/12/16 **Project Site Visit?** **[x]  Yes** **[ ]  No Review Panel Member(s):** Powers/Tyler

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

The sponsor has done a thorough job in the application describing the current site condition and has invested substantial effort over several years to advance this project. The previous phases of this work have provided substantial detail and analysis. The review panel has provided three rounds of extensive technical comments for the feasibility and preliminary design phases of this project (SRFB project numbers 11-1553, 13-1107, and 14-1299) and many previous comments are still relevant. The panel agrees that daylighting of Willow Creek and providing consistent access to the marsh from Puget Sound would benefit those juvenile Chinook locating the system. Riparian restoration of the existing daylighted channel and the proposed channel would further benefit this. However, a number of factors continue to make it difficult to evaluate the potential benefits to salmon and the certainty of successful project implementation; many of these points were also raised in past reviews:

1. The final alignment of the daylighted channel would preferably be wider with more channel complexity. A wider setback from the railroad tracks would allow for a meandering channel design with reduced velocities and enhanced habitat value. This possibility should be explored before a final design is prepared. The panel suggests that this discussion should be a priority in the next phase of work, even if the property has not yet transferred. A final design along the straight alignment should only occur if a meandering design has been completely ruled out by WSDOT Ferries.
2. Toxic contamination of soil and water: The contaminants of concern for the site are the total petroleum hydrocarbons (TPH) and their underlying constituents such as benzene and polyaromatic hydrocarbons (PAHs). The feasibility study indicates an expectation that toxic contaminants will be identified within the channel and marsh during restoration, even after the cleanup activities have been completed. The presence of contaminants (and concentration levels if found) will affect the utility of the habitat and influence the design (chiefly, whether or not to include a high density liner in the bed of the channel). Chevron will not allow access for testing at this time, so this cannot be evaluated until the property has transferred.
3. Based on an assumption that 50% of the soils excavated during channel construction (i.e. after cleanup is complete) will contain contaminants which require off-site disposal, the feasibility analysis includes a “conservative estimate” that $1.1M will be required for handling and disposal of contaminated soils. Have funding sources been identified that could appropriately be used for these expenses during project implementation?
4. Stormwater inputs to the marsh and channel may continue to add deleterious substances to the system which would be contrary to the restoration objectives. The feasibility analysis has identified that the two freshwater inputs to the marsh are largely stormwater derived. Willow Creek is “predominantly a stormwater conveyance system in the upstream urbanized areas of the drainage”. Shellabarger Creek is also described as primarily stormwater. There are two stormwater inputs to the 700-foot open channel that runs along the BNSF railway embankment extending between the northwestern portion of the marsh and two outfall pipes that run beneath the railway. The first is the Point Edwards condominiums stormwater and the second is the runoff from SR 104.
5. Future land use at the project site is uncertain. Some of the project information shows a new ferry dock and associated infrastructure in the project area, however members of the project team and the lead entity TAC suggest that odds of this happening are remote, or at a minimum the possibility is decades away given funding and logistical constraints. While the Edmonds Crossing ferry terminal is not in WSDOT’s 2009 long-term plan, WSDOT Ferries expressed concern to the City as recently as June 2015 that the conceptual drawing of park alternatives did not include Edmonds Crossing. The panel understands that the project could proceed with a straight, narrow alignment channel even with the Edmonds Crossing ferry terminal constructed, however the benefit to fish would certainly be reduced by the ferry terminal operation. The degree of uncertainty to the future land use in the project site contributes to the challenges in evaluating benefits to fish and certainty of successful implementation.

Based on these uncertainties, the panel finds it premature to finalize designs for the daylighted channel. It would be inefficient to finalize designs and construct a narrow, linear channel only to complete construction and discover that a channel with sinuosity is indeed feasible. The panel suggests that the next phase of work continue to assess remaining project uncertainties, rather than advancing the preliminary design to final status and securing permits for a design that may never be constructed.

The next phase of the project could provide an excellent opportunity for the City of Edmonds to initiate dialogue with WSDOT Ferries on the possibility of a wider setback after the property transfers to WSDOT ownership; this would allow for a meandering channel design. If WSDOT were receptive to the wider setback, the panel would hope to see more consideration of alternative channel patterns which would support the natural formation of tidal channels. The alternative channel analysis should consider bank and bed complexity, and evaluation of roughness versus velocity. This analysis would also support the dialogue with WSDOT after the property has transferred and designs move forward.

If WSDOT will not even consider a wider setback, sponsor could proceed with the straight alignment, however the panel would still like to see alternative channel analysis conducted to consider bank and bed complexity, and evaluation of roughness versus velocity within the narrow channel.

Once the question of permissible channel width has been resolved, designs could be finalized and permits secured in anticipation of construction as soon as the property has transferred and other uncertainties have been resolved. After ownership has transferred, should further soil testing on the Chevron property reveal toxic contamination in the vicinity of the proposed channel and marsh, the panel would like to see further analysis of alternatives to the proposed high density liner, such as additional material excavation and capping.

1. **Missing Pre-application information.**

The scope of work should include a schedule for each of the items described, not just the design report, plans and permit applications. Please clarify in the proposal the timing and sequencing of work. The proposal indicates that geotech work and topo boundary survey within the Chevron property might proceed in this phase of work, yet our understanding is that these tasks cannot occur until the property has transferred, which may be 6-8 years from now.

1. **General Comments:**

In the current proposal, the intent described at the site visit is to have the tidegate open at all but the highest tides, closing only at tides greater than 9.5 feet (NAVD88) in order to protect SR 104 and Dayton Street. Based on the tidegate functionality identified in the feasibility study, fish access could occur at the following durations:



For example, fish passage for 26% of the time is equivalent to 3 hours during each tidal cycle, or roughly 6 hours per day.

1. **Staff Comments:**

Please be sure to address all comments I provided when I reviewed the application in May (if you haven’t already done so), along with completing all other final application requirements listed in Section 3 of RCO Manual 18 [http://www.rco.wa.gov/documents/manuals&forms/Manual\_18.pdf](http://www.rco.wa.gov/documents/manuals%26forms/Manual_18.pdf). All changes to your proposal should be made using “Track Changes” in Word.

## Sponsor Response instructions:

Revise your project proposals using “track changes” and update any relevant PRISM questions and attachments. Fill out the section at the end of your project proposal to document how you responded to comments.

1. CLEAR: Cleared to proceed; CONDITIONED: Cleared to proceed with a condition; NMI*:* Needs More Information; POC: Project of Concern; NOTEWORTHY: Exemplary Project [↑](#footnote-ref-1)