

Salmon Recovery Funding Board

Individual Comment Form



Lead Entity:	Island County
Project Number:	15-1050
Project Name:	Kristoferson Creek Fish Passage Improvements
Project Sponsor:	Snohomish Conservation District
Grant Manager:	Mike Ramsey

	Date	Status ¹
Post-Application		
Final	9/23/15	Clear

PROJECT SUMMARY *(for Review Panel reference only)*

This fish passage restoration project will result in improved fish passage by removing two partial barriers to fish passage along Kristoferson Creek where it crosses Barnum Road and Russell Road. These crossings are located on the first 500 feet of Kristoferson Creek where the creek flows into Triangle Cove. The existing crossing at Barnum Road consists of four undersized round concrete culverts that lay side by side and are installed at uneven elevations. The Russell Road crossing consists of a single 4 foot round steel pipe. This project will build on a feasibility study conducted in 2008 by AdoptaStream Foundation assessing crossings and fish passage improvement opportunities on Kristoferson Creek. By replacing the fish passage barriers, the project will improve fish passage for endangered Chinook salmon and steelhead. The 2013 "Juvenile Chinook Salmon Rearing in Small NonNatal Streams Draining Into The Whidbey Basin" (Beamer et al) documented lower Kristoferson Creek as providing nonnatal rearing habitat for endangered Chinook salmon (fry migrant Chinook); the report also documented other species use for rearing including chum, coho (species of concern), steelhead (threatened), and cutthroat trout. These passage barriers are the first barriers on Kristoferson Creek and are the highest priority barriers within the subbasin for providing access for juvenile fry migrant Chinook salmon. The project will restore full fish passage to 1.6 miles of the creek. The project is located on Camano Island and is publicly owned. Grant funding is needed to design, permit, and construct the two improved crossings.

The project is different than version proposed in 2014 because it addresses two fish passage barriers on the lower creek instead of one.

FINAL REVIEW PANEL COMMENTS

Date: 9/23/15

Final Project Status: Clear

Review Panel Member(s): Full Panel Review

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: Click to choose a status

¹ CLEAR: Cleared to proceed; CONDITIONED: Cleared to proceed with a condition; NMI: Needs More Information; POC: Project of Concern; NOTEWORTHY: Exemplary Project

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Individual Comment Form



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: April 8, 2015

Project Site Visit?

Yes No

Review Panel Member(s): Schlenger and O'Neal

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

Restoration of full fish access to Kristoferson Creek by addressing both partial barriers in the lower creek will provide access to good rearing habitat for juvenile salmon. The sponsor is strongly encouraged to revisit the calculations for the size of structure needed at both crossings. At the Russell Road crossing (upper), the width of the stream appeared larger than reported. In particular, there are two channels of flow joining at the top of the culvert: one running along the road embankment to east and the main creek channel to north. At the Barnum Road crossing (lower), the site is tidally influenced; therefore a wider opening should be considered than estimated using the WDFW design guidelines for freshwater streams. As noted in the 2014 review panel comments, better technical insights for the design width of the culvert and channel would include an evaluation of natural tidal channels draining similarly-sized watersheds/marsh complexes. The attachment in the PRISM file of SRFB Project 09-1468 Skagit Bay Nearshore Restoration Design titled "Reference Site Evaluation 5-11" document several such reference channels in Island County. Design studies such as Williams et al. 2002 "Hydraulic Geometry and Geomorphology Design Tools for Tidal Marsh Channel Evolution in Wetland Restoration Projects" and WDFW 2014 "Marine Shoreline Design Guidance" are also helpful. The sponsor is encouraged to consult with the WDFW Area Habitat Biologist and others at WDFW to clarify the agency's expectations for channel sizing.

In addition to the comment above leading to potential changes in the design, the sponsor described a design-build process that included the evaluation of three alternatives to select a preferred, then community outreach. The proposed budget does not appear sufficient for the A&E portion (alternative development, selection, outreach, and design), nor for constructing what is expected to be larger structures than conceptually shown in diagrams included in application materials.

The sponsor is encouraged to evaluate a range of alternatives beyond just a culvert solution, particularly at Barnum Road. Based on application material and the site visit discussion, there appears to be an opportunity to transition the road crossing to a pedestrian-only crossing, i.e., no vehicular crossing.

Although the proposed construction sites are both on county right-of-ways, the land between them is privately owned. The proposed project would change the inundation patterns on the property, including the delivery of more drift wood. The sponsor is strongly encouraged to maintain the dialogue with the landowner and ensure

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any of their concerns are known and there are no surprises for the landowners in terms of expectations for how a restored site would change over time. Since the proposed project would increase inundation on their property, a conservation easement for the estuary could add certainty to the project's long-term success and financially compensate the landowner. In terms of addressing the concern from the landowner to manage wood transport and flooding of their property, additional cover elements (strategic wood placements) on the upstream site of the Barnum Road culvert may serve the dual purpose of providing cover and preventing addition wood from moving upstream.

There is a small number of treated wood piles just upstream and west of the Barnum Road culverts. It would be beneficial to remove those, if possible, although it may require different equipment than would be on-site for the crossing restoration.

2. Missing Pre-application information.

3. General Comments:

Please correct the culvert diameter information for the four pipes at Barnum Road. The diameter is wider than the 12 inches stated in the application.

Staff Comments:



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.