

# Salmon Recovery Funding Board

## Individual Comment Form



<b>Lead Entity:</b>	WRIA 8
<b>Project Number:</b>	15-1071
<b>Project Name:</b>	Evans Creek Relocation
<b>Project Sponsor:</b>	City of Redmond
<b>Grant Manager:</b>	Elizabeth Butler

	<b>Date</b>	<b>Status<sup>1</sup></b>
Post-Application	9/23/15	<b>Condition</b>
Final	10/28/15	<b>Condition</b>

### PROJECT SUMMARY *(for Review Panel reference only)*

This proposed restoration project would relocate a ditched section of Evans Creek to adjacent open space, enhancing in-stream and riparian habitat for Chinook and Coho salmon. Evans Creek is currently constricted by industrial development and isolated from its floodplain, with simplified in-stream habitat and very narrow buffers. The project will create a longer channel, enhance in-stream structure and habitat, connect the channel with floodplain wetlands, and restore buffers with native plants. Project enhancements will primarily benefit rearing habitat for Sammamish Chinook (threatened) and Coho (candidate) salmon from Evans and Bear Creeks. This project will build upon construction of the lower 1,100 feet of channel (currently a backwater) completed by WSDOT in 2013. The PSAR-funded portion of Redmond’s project will construct 3,500 feet of creek, restore over 10 acres of riparian buffer, and enhance 12 acres of existing wooded wetland near the channel. The project will also benefit passive recreation and stewardship on the Bear-Evans trail, which is planned as a raised walkway.

### FINAL REVIEW PANEL COMMENTS

**Date:** 10/28/15

**Final Project Status:** Conditioned

**Review Panel Member(s):** Full Panel Review

- If the project is a POC, please identify the SRFB criteria used to determine the status of the project:**
- If the project is Conditioned, the following language will be added to the project agreement:**

**CONDITION:** The Review Panel will review and approve a draft final design of the Evans Creek Relocation project to evaluate wood placement and floodplain connectivity for juvenile salmonid habitat.

- Other comments:**

The project sponsor has done a good job of responding to previous Review Panel comments, but several design elements of the proposed project appear to be uncertain at this time and may be modified for the final design.

### POST-APPLICATION REVIEW PANEL COMMENTS

**Date:** 9/30/15

**Project Status:** Conditioned

**Review Panel Member(s):** Review Panel

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<sup>1</sup> 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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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:

**CONDITION:** The Review Panel will review and approve a draft final design of the Evans Creek Relocation project to evaluate wood placement and floodplain connectivity for juvenile salmonid habitat.

#### 4. General comments:

The project sponsor has done a good job of responding to previous Review Panel comments, but several design elements of the proposed project appear to be uncertain at this time and may be modified for the final design.



#### 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:** May 5, 2015

**Project Site Visit?**

Yes  No

**Review Panel Member(s):** Pat Powers and Steve Toth

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

The project goals and objectives should be refined to increase the emphasis on the rearing habitat provided to threatened chinook salmon - the focus of the regional salmon recovery plan. What are the project design elements that increase the quantity or improve the quality of rearing habitat for this reach of Evans Creek? Can you quantify the increase in rearing habitat at various flows when juvenile Chinook salmon are utilizing this reach?

The current project design relies on fairly standard stream restoration techniques for gravel-bedded alluvial channels. The low-gradient wetland environment of the proposed relocated channel, however, should be conducive to creation of a more dynamic and natural environmental setting that allows the channel and floodplain to adjust over time. The vertical drop is only 4 feet over the 3,500 feet of constructed channel. The proposed wood structures at the outer edge of meander bends are essentially functioning as revetments to lock the channel in place. The in-stream channel design would benefit from fewer revetment-like structures, in favor of wood structures that promote opportunities for channel movement and greater floodplain connectivity. The project designer is encouraged to reduce the use of cables and anchoring systems given the low gradient, low energy geomorphic setting.

If beavers move into the project area, what would be the expected response by the City? What type of impact might be expected on the proposed restoration project?

The currently proposed planting plan does not have a sufficient number of large trees to provide a long term source of wood to the stream. Large wood from conifers and cottonwood are critical habitat-forming elements in streams, and these species need to be a significant component of riparian buffer plantings. The current planting plan calls for only 10 to 20 percent of the total plantings to be conifers or cottonwood. The density of conifers and cottonwoods in the planting plan needs to be significantly increased to allow for the project to be successful over the long term. If

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herbivory is a problem, consider planting spruce seedlings together with cedar or other conifer seedlings to help reduce browsing.

The currently proposed cost estimate for the riparian and wetland plantings is very high. Based on a total of 22 acres of planting, the current overall costs are nearly \$16,000 per acre for invasive plant removal and control and an additional \$55,000 per acre to prepare the soil, plant, and maintain the vegetation. Planting costs for riparian buffers on SRFB projects typically range from one-quarter to half of the currently proposed cost estimate. Please clarify and justify the expenses in the planting plan.

Please provide more detail on the strategy for controlling reed-canary grass over the long term after project completion. What are the stewardship plans for invasive plant control? What level of reed-canary grass control will be deemed successful?

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

Please provide any hydrologic modeling information for the project. For example, what are the anticipated water surface levels in the project area during the 2-year, 10-year, and 100-year flood events?

### **3. General Comments:**

The proposed project was reviewed in the 2014 SRFB grant round. No significant changes appear to have been made in the design since the proposal was presented last year. The Review Panel had particular concerns with the volume of introduced washed rock given the low energy of the system and the lack of spawning habitat. Additional comments included developing specific engineering design parameters to create the desired Chinook rearing habitat conditions, such as water depth, velocity, and cover conditions and to address the control of reed canary-grass. One key parcel essential to the project is still under private ownership and may require governmental action to allow the project to move forward.

### **4. 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.