Salmon Recovery Funding Board
Individual Comment Form

Lead Entity:	WRIA 1
Project Number:	14-1651
Project Name:	MFPorter Creek Reach Phase 1 Restoration
Project Sponsor:	Lummi Nation
Grant Manager:	Marc Duboiski

	Date	Status
Draft Application Review/Site Visit	6/5/14	**Reviewed**
Post Application	9/22/14	**NMI**
Final	10/22/14	**Conditioned**

Early Application Status Option	
REVIEWED	SRFB Review Panel has reviewed and provided comments.
Post-Application & Final Status Options	
NMI	Need More Information
POC	Project of Concern
CONDITIONED	SRFB Review Panel has applied conditions
CLEAR	Project has been reviewed by SRFB Review Panel and is okay to continue in funding process

PROJECT SUMMARY

To restore salmon habitat in WRIA 1, this project will construct 11 engineered log jams (ELJs) in the mainstem Middle Fork Nooksack River, consisting of three Type I ELJs (42x80x6'), 2 Type II ELJs (30x60x6'), and six Type III ELJs (34x75x4') (Figure 4). Endangered early spring Chinook salmon and bull trout will benefit from 11 primary pools; more pools may develop indirectly as increased roughness causes dynamic equilibrium. Scour pools provide thermal refugia (holding pools) from elevated Middle Fork water temperatures during summer spawning months in addition to pools for juvenile overwintering (rearing pools). In addition, juveniles will benefit from 1.23 miles of off channel rearing habitat by increasing connectivity with the floodplain and side channels. All features are focused on enhancement of endangered Spring Chinook (Oncorhynchus tshawytscha) habitat by maximizing natural habitat-forming processes inherent in this reach of river.

DRAFT APPLICATION REVIEW AND SITE VISIT – REVIEW PANEL COMMENTS

Date: 6/5/14

Panel Member(s) Name: O'Neal and Slocum

Early Project Status: ☒ Reviewed

Project Site Visit? ☒ Yes ☐ No

1. **Recommended improvements to make this a technically sound project according to the SRFB's criteria.**
   Match source and amount should be clarified in the application.

If the target life stage for this project is juvenile Chinook (p. 3) clarification of the current level of juvenile use in the reach should be included. Significant investment (70 LWD accumulations stabilized) has been made in this reach already. Some of those structures have been lost, but some still remain. Please discuss the effectiveness of these existing structures and justify the need for additional investment in this reach, especially given the lack of knowledge on how juveniles are using the current structures.

Replanting native riparian forests is a key element of restoration plans. At the field visit the sponsor described its program of working with its tribal conservation corps and NSEA to do revegetation. Including this information in the proposal would strengthen it.

2. Missing Pre-application information.

RCO requires preliminary design documentation to be submitted prior to the final application deadline for construction projects with budgets over $250,000. Please include the basis for design report from project 12-1524 with the final application for this project.

3. Comments/Questions:

The map of spawning locations from 2011 shows high densities of spawners in areas where structures are planned in the design drawnings. If these areas are currently being selected by fish for spawning, please justify the need to change these areas with construction for additional enhancement. The application states that the specific location has been avoided, but the plans call for reach level changes and show extensive jams in the vicinity of past spawning locations.

The Porter Reach is identified as having the highest level of spawning in the Middle Fork (p. 3), yet further increases in spawning habitat are proposed in the application. How much more spawning can be expected in this reach given the current high level of use?

The use of marginal habitat along forested islands by juvenile Chinook is of interest to the Review Panel. What information is available on the use of these areas by chinook, as opposed to significant research identifying use of side channels by juvenile and adult chinook. More direct benefit may be achieved by focusing on enhancement of side channels and other low velocity areas with structures and cover.

The design process should refine the specific project objectives that are listed in the proposal, and then follow them consistently. Trapping gravel, improving connectivity with side channels and forming pools are distinct objectives that typically deserve distinct design approaches, and simply loading up the project reach with ELJs may not be appropriate to meet the various objectives.

4. Staff Comments: Landowner acknowledgement forms and design documents are due by August 15th.

EARLY APPLICATION REVIEW AND SITE VISIT – LEAD ENTITY AND PROJECT SPONSOR RESPONSES

Directions: **By the final application due date**, applicants must revise their project proposals using "track changes" and update their PRISM applications and attachments, as needed, to respond to the review panel comments. In addition, please fill out the section at the end of the project proposal which asks how you responded to the review panel's comments.

Special Note: To help speed the local and SRFB Review Panel evaluation process, if for any reason throughout the application review process you update your project proposal based on SRFB Review Panel comments please update your

project proposal using WORD "track changes" and re-attach your proposal in PRISM. This step will save time and focus the reviewer on the changes.

POST APPLICATION – REVIEW PANEL COMMENTS

Date: 9/22/14

Review Panel Member(s) Name: Full Panel Review

Application Project Status: **NMI**

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, what changes would make this a technically sound project according to the SRFB's criteria?**

3. **If the project is Conditioned, the following language will be added to the project agreement:**

4. **How could this project be further improved?**

Identification of measurable objectives is important for providing targets by which the level of achievement of the project outcomes can be evaluated, and for providing a basis for which to evaluate the anticipated project benefits in relation to their costs. The proposal could be strengthened by going one step further and linking these specific objectives more directly to Chinook salmon habitat outcomes. For example, Objective No. 3 from project 14-1655 makes a clear, direct link to a habitat outcome (i.e. "increase thermal refugia by creating at least 48 primary pool habitat units with cover within five years".) The linkage of the other objectives to measurable habitat outcomes is tends to be less clear, focusing to varying degrees more on general hydraulic and geomorphic response outcomes and less to habitat outcomes or fish response. For example, Objective No. 1 will dissipate high stream flow and partition flow between the two channels, but it could be improved by identifying specific flow characteristics (e.g.

velocity and depth) are desirable to support targeted life stages (egg survival? rearing? migration? spawning?). This exercise is useful because it can determine the engineering design parameters for sizing and locating (and ultimately, determining the cost-effectiveness of) the LWD and ELJ structure,s as well as increasing the probability of those structures providing direct benefits to fish.

We realize that exact predictions of habitat outcomes are difficult, but without some quantified targets for habitat expectations from the project, the cost benefit evaluation that is part of project evaluation becomes much more difficult. Because of the large scale and relatively high cost of this project, we request that the final proposal include a more rigorous attempt to refine the project objectives in line with the comments above.

5. Other comments:

Please attach proof of lessons learned from other projects as provided by your selected design firm, or from your own experience evaluating past projects and wood accumulations (review of 20 years of aerial photos).

Please provide the spawning location data from 2012 and 2013, specifically with reference to proposed project locations. The BOD report states that these spawning locations are available in graphic form.

The BOD Report would be enhanced by providing graphics with comparisons (the difference) between the current and proposed conditions for the 1 and 10 year flows in terms of changes in velocities and depths.

Please attach VSP evaluation from 14-1655 to this application if it should be considered as supporting documentation.

POST APPLICATION – LEAD ENTITY AND PROJECT SPONSOR RESPONSES

Directions: All projects will be reviewed at the September 22-25 review panel meeting. A status will be assigned to each project by October 4, 2014. **By October 15**, applicants of projects assigned a status of Project of Concern, Conditioned, or Need More Information, must update their project proposals. Please "accept" all current track changes in the project proposal so you are starting with a clean proposal. Then please turn track changes back on when you make new changes. This step will save time and focus the reviewers on the changes.

In addition, please fill out the section at the end of the project proposal which asks how you responded to the review panel's comments.

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FINAL REVIEW PANEL COMMENTS

Date: 10/22/14

Panel Member(s) Name: Full Review Panel

Final Project Status: **Conditioned**

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:**

Before submitting the project designs to the permitting agencies, the sponsor will provide the SRFB review panel to review the designs and the basis of design report for consistency with SRFB's project evaluation criteria. In particular, the review panel will check to ensure that 1) the design report identifies specific, measurable objectives for restoring Chinook habitat and habitat forming processes, including but not necessarily limited to those stated in the project proposal, and 2) that the project design will accomplish these objectives.

3. **Other comments:**