Project Review Comments

PROJECT: 21-1049 P, Washougal River Habitat Assessment & Design

Sponsor: Underwood Conservation Dist Program: SALMON ST PROJ Status: Application Resubmitted

MEETING: Initial Review

Shared: 4/2/2021

Review Status: Needs more information

Considerations:

Topics	Comments
Review Panel Comments - Initial	
Questions (response required)	
	How are past restoration projects in the Washougal evaluated within the assessment?
	Reply: Field observation of past projects and information shared among the advisory group will contribute toward understanding current reach-specific conditions. Project performance and success will inform current additional habitat needs and future project alternatives.
	As one of the likely outcomes of this assessment is the identification of smaller projects that affect the stability and condition of edge habitats and overall floodplain processes it will be important to know how the implementation of many smaller projects will contribute to restoration of habitat for salmonids. How and with what analysis methods will the sponsor evaluate the pros and cons of cumulative benefit from smaller projects implemented over time?

	Reply: UCD is familiar with linking several small projects or properties to lead to a greater overall lift for habitat, and we are well-versed in many ways to prioritize projects, provided there is also voluntary landowner willingness to implement work, for optimal benefits-to-cost. This assessment will enable us to identify projects, large and small, and prioritize those projects based on their specific benefits and relationship to priority habitat needs. This prioritization method will be developed and modified with the advisory group to ensure consensus, and we anticipate using a methodology consistent with the LCFRB TAC system used to score project proposals, focusing on the Benefits to Fish score. This same methodology was used in the Lower East Fork Lewis River Habitat Restoration Plan and also in the Wind River Habitat Strategy and assessment; however, some modifications will likely apply to the Washougal River assessment. While some projects may be too small to be worth pursuing, given the competitive nature of securing grants and fixed costs of administering funds, a comprehensive approach to landowners in the watershed is the most likely way to develop potential projects that link together and provide the biggest cumulative benefits. Where benefits can be gained, but projects do not rank out as high enough priorities for funding like SRFB, UCD also has a small-scale cost share program. Finally, UCD can provide technical assistance and support to landowners for improving land management practices and habitat conditions. Even if projects do not rank out as the high enough benefit-to-cost to merit cost share or grant funding, there is still benefit to be gained when landowners can demonstrate good stewardship practices to their neighbors, children, and larger communities, setting the norm for future best practices and management.
Improvements to Make Project Technically Sound (response required)	
	The project sponsor should include a geomorphic assessment in the proposed development of conceptual designs to better understand geological considerations, such as changes in channel gradient, the impact of channel confinement from deep-seated landslides, sediment transport and storage within the channel floodplain, the effect of changes in bedrock on substrate conditions, and the influence of tributary streams on river dynamics.
	Reply: UCD will include a description of the geomorphology of each project area in the conceptual design, especially as it relates to the design components. The geomorphic conditions listed above will also be considered when deciding on the feasibility and priority of individual projects.
	Please elaborate on SMART objectives to identify biological goals that are specific and measurable based on the type of projects you hope to develop from the assessment (e.g., develop projects that will increase reach-scale juvenile rearing habitat by 50%, increase riparian shading to a minimum of 80% along a one-mile reach of the river). The current objectives are simply implementation goals.

	Reply: One of the purposes of the assessment is to gather some of the baseline data that will enable setting meaningful, quantitative biological objectives. Without that data, it is difficult to know baseline conditions and therefore measurables changes to target in the projects we hope to develop. The proposed assessment will inform us and the advisory group members of current conditions and various types of projects that are available to us. After review and revisions with the advisory group, we will utilize a similar assessment form for field surveys as what was used in the Wind River watershed habitat assessment. This assessment form includes numerical targets for “good,” “fair,” and “poor” habitat (which alternatively could be termed as “properly functioning,” “at risk,” and “not properly functioning”), and includes targets such as: “at least 100 foot riparian buffer with >80% mature trees, consistent with potential native community, <20% riparian disturbance (human) and >80% canopy closure in the riparian zone.” Another example is “> 80 pieces/mi (>24 in diameter; > 50 ft. long) [from NMFS].” These habitat attributes are likely to transfer to the Washougal River watershed due to relative similarities to the Wind River, but again, this is role that the advisory group will provide at the onset of the assessment. Please see attached table of physical habitat attributes, used in the Wind River, which will be revised appropriately for use in the Washougal River watershed. If/when existing conditions are found to be suboptimal (At Risk, Not Properly Functioning) to target conditions during the assessment, the difference between these scores/ratings will be considered the ‘restoration gap’. The restoration gap will be used to guide the development of restoration actions with objectives to close the restoration gap and bring existing conditions up to target (i.e. Properly Functioning) conditions. Examples of objectives to fill restoration gaps would be, “increase large wood jams from 2.9 to >4 jams/mile,” or “Remove or modify man-made barriers blocking connectivity to floodplains and off-channel habitat.”
General Comments (response not required)	
	The project was reviewed and eventually cleared in 2020; However the assessment outline presented in 2021 doesn't necessarily incorporate all of the comments from 2020 and is still lacking in geomorphic and sediment transport elements that would lead to the identification of appropriate and successful projects.
	Reply: This project did not significantly change from the 2020 application. All project elements are the same and the 2020 project was cleared for funding. The final TAC ratings included “High” scores under Benefits to Fish and Cost, and “Medium” for Certainty of Success, just 4 points below the funded projects on the list. If sufficient funding had been available, we would have been funded.

PROJECT: 21-1049 P, Washougal River Habitat Assessment & Design

Sponsor: Underwood Conservation Dist Program: SALMON ST PROJ Status: Application Resubmitted

MEETING: LE Review

Shared: 4/15/2021

Topics	Comments
Lead Entity Comments	
Questions For Applicant	
	Will the assessment scope encompass areas where habitat restoration has already occurred, such as headwater areas that the Lower Columbia Fisheries Enhancement Group has completed work? If so, will the assessment consider the effectiveness of these past projects in terms of identifying future restoration needs?
	Reply: Field observation of past projects and information shared among the advisory group will contribute toward understanding current reach-specific conditions. Project performance and success will inform current habitat needs and future project alternatives.
	What specific methods are proposed to assess habitat conditions and project opportunities? Uncertain whether one or a few small projects in the area could produce measurable habitat impacts.
	Reply: After review and revisions with the advisory group, we plan to utilize a similar assessment form for field surveys as what was used in the Wind River watershed habitat assessment. This assessment form includes numerical targets for “good,” “fair,” and “poor” habitat (which alternatively could be termed as “properly functioning,” “at risk,” and “not properly functioning”), and includes targets such as: “at least 100-foot riparian buffer with >80% mature trees, consistent with potential native community, <20% riparian disturbance (human) and >80% canopy closure in the riparian zone.” Another example is “> 80 pieces/mi (>24 in diameter; > 50 ft. long) [from NMFS].” These habitat attributes are likely to transfer to the Washougal River watershed due to relative similarities to the Wind River, but again, this is role that the advisory group will provide at the onset of the assessment. Please see attached table of physical habitat attributes, used in the Wind River, which will be revised appropriately for use in the Washougal River watershed. While some projects may be too small to be worth pursuing, given the competitive nature of securing grants and fixed costs of administering funds, a comprehensive approach to landowners in the watershed is the most likely way to develop potential projects that link together and provide the biggest cumulative benefits. Where benefits can be gained, but projects do not rank out as high enough priorities for funding like SRFB, UCD also has a small-scale cost share program. Finally, UCD can provide technical assistance and support to landowners for improving land management practices and habitat conditions. Even if projects do not rank out as the high enough benefit-to-cost to merit cost share or grant funding, there is still benefit to be gained when landowners can demonstrate good stewardship practices to their neighbors, children, and larger communities, setting the norm for future best practices and management.
	How will geomorphology, sediment storage and transport patterns be considered in the assessment? Given the large scale of the assessment, it is recommended that you work with a geomorphologist to identify stream reaches by geomorphic conditions.

	Reply: Geomorphic conditions are an important component to understanding overall function and restoration potential within the watershed. UCD will seek out current local knowledge and any existing data sets to help inform geomorphic considerations at both the reach and watershed scales; this data will be incorporated as appropriate for project identification and development. UCD can also consider a watershed scale stand-alone geomorphic evaluation; that will depend on available budget and the need to fill data gaps.
	Details on proposed methods are lacking in the proposal: clarify how field work and desktop analysis will be integrated in the assessment. It is important to identify the methodology prior to forming a work group. As an example, the Wind River assessment focused on supplementing existing habitat data in the watershed.
	Reply: This assessment method will be similar to the Wind River assessment in that it will first identify and analyze existing data, and then, with input from an advisory group, identify and fill data gaps through strategic and targeted field surveys. The field surveys will also serve to pinpoint potential projects to address suboptimal (At Risk, Not Properly Functioning) habitat conditions. A desktop analysis will begin with compiling existing habitat data in the watershed, surveying advisory group members to ensure all relevant datasets are utilized. Pending review and revisions with the advisory group, we plan to use a similar rapid habitat assessment form for field surveys as what was used in the Wind River watershed habitat assessment (see attached form). These field surveys will take place where landowner permission is granted, and in the strategic areas identified through the desktop analysis.
	Will this assessment identify future salmon habitat projects as well as Best Management Practices that could be implemented by the Conservation District and landowners? Defining the project deliverables will help understand what types of projects could potentially be identified.
	Reply: Many types of projects are possible in the project identification task, and UCD is well-versed in the range of conservation, restoration, enhancement practices available to a variety of settings. The focus of this assessment is to identify habitat improvement projects, and other project types (e.g. livestock management or forest management), while related to overall watershed health and properly functioning watershed processes, can be developed with other funds. Based on current land-uses and known habitat limiting factors, we anticipate identification of the following types of projects: • Side channel and floodplain reconnections • Large woody debris placement • Riparian vegetation enhancement and noxious weed management • Fish passage on smaller tributaries
	How does future build out and land acquisition play into the assessment?

	Reply: Current land use and current habitat conditions will have the strongest influence on the assessment. We will consider development pressures, zoning, and other threats to future habitat health, but a comprehensive study on development suitability and buildout projections would be time consuming and less valuable to the purposes of this proposal. As opportunities arise for potential acquisition projects to be developed, we can include those, and such projects will be considered and prioritized in context with surrounding land uses, threats, habitat conditions, life stage bottlenecks and other factors. Acquisition projects are most likely to be identified where reaches are in good shape and prioritized for protection. We have a letter of support for this project from Columbia Land Trust and plan to discuss project opportunities with them, as they arise.
	Will this assessment build on High Resolution Change Detection data that the Washington Department of Fish and Wildlife is developing?
	Reply: High Resolution Change Detection data is not yet available for the project area. It is anticipated to be released summer of 2022. We will incorporate this data into our watershed geodatabase when it becomes available.
	How do you propose to identify site-scale project opportunities and habitat actions in light of long-term changes in habitat quantity and quality across the watershed?
	Reply: While there are serious long-term changes occurring with regard to habitat quantity and quality, we feel that individual, and cumulative, linked projects at a site-specific scale will still be valuable. Smaller project priority will be considered relative to their anticipated impact to the large-scale watershed condition and habitat needs. Similar to our answer above, we acknowledge that some projects may be too small to be worth pursuing, but a comprehensive approach to landowners in the watershed, as proposed, is the most likely way to develop potential projects that link together and provide the biggest cumulative benefits. Where benefits can be gained, but projects do not rank out as high enough priorities for funding like SRFB, UCD also has a small-scale cost share program. Finally, UCD can provide technical assistance and support to landowners for improving land management practices and habitat conditions. Even if projects do not rank out as the high enough benefit-to-cost to merit cost share or grant funding, there is still benefit to be gained when landowners can demonstrate good stewardship practices to their neighbors, children, and larger communities, setting the norm for future best practices and management.
	Clarify in the proposed budget what is covered by your matching Ecology grant relative to the proposed SRFB grant: more information is needed to understand if tasks and deliverables overlap between these two grants.
	Reply: Ecology funding has allowed this project to begin, with current efforts underway to compile data, begin mapping and desk review of current conditions, and begin outreach to landowners. We are planning to support a comprehensive project with both grant sources, and Ecology funding will serve as a source of match, applied toward a portion of the data collection, landowner outreach, field survey, project identification, and administrative tasks.
	Consider how to best capitalize on existing data in the Washougal. In addition to the suggestions above, a watershed and riparian assessment was completed for the watershed in 2004 and, although dated, it may provide useful information to consider in the assessment. The assessment can be found here:

	https://www.lcfrb.gen.wa.us/lewisriver
	Reply: We will certainly incorporate all existing data as appropriate, including past assessment work. We hope to translate some of this prior assessment work into data layers that can be viewed in the GIS database with other relevant features for a more complete picture of the state of the watershed.