

Monitoring Panel

Individual Comment Form



Lead Entity:	Island County --WRIA 6
Project Number:	#15-1485
Project Name:	Whidbey Basin Pocket Estuary Census
Project Sponsor:	Skagit River System Cooperative
Grant Manager:	Keith Dublanica

	Date	Status¹
Post-Application	10-12-15	NMI
Final		

PROJECT SUMMARY *(for Monitoring Panel reference only)*

This proposal requests \$22,734 (not including match) to fund a census of pocket estuary habitat using remote sensing in the nearshore/marine waters of the Whidbey Basin in Island County. Pocket estuaries are used as rearing habitat by juvenile Chinook from adjacent river systems (Skagit, Stillaguamish, and Snohomish), and, along with the rest of the marine nearshore in Island County, make up the majority of ESA listed salmonid habitat in WRIA 6. A census of pocket estuary habitat is one of the three highest priority data gaps for salmon habitat status and trends monitoring for WRIA 6 (Island County Lead Entity RFP, July 13, 2015). If funded, this project would fill the requested data gap. Indicators measured in the census will include a count of sites accessible to juvenile salmon, the extent of habitat by type, and site connectivity. This data collection complements work being conducted in the Skagit Pilot Project, a monitoring project funded by the Puget Sound Partnership. The Skagit Pilot Project will use the same census technique to establish conditions in 2005, the data collected in this request would be from 2013/14, and will be used to establish a trend for this habitat type over the period of time since the adoption of the Salmon Recovery Plan (2005-2013/14). All project funding will go to support technical staff at the SRSC, with about half going to GIS and the other half supporting a geomorphologist.

In conjunction with the Skagit Pilot Project, this project would establish status and trends for the most important rearing habitats for ESA listed salmonids in Island County. The WRIA 6 Salmon Plan prioritizes protection over restoration, and developing an understanding of habitat trends since the inception of the Plan is important for evaluating the success of the Plan in meeting recovery goals. The application clearly articulates the project goals and how they are related to regional monitoring objectives.

FINAL MONITORING PANEL COMMENTS

Date:

Final Project Status: Choose an item.

Monitoring Panel Member(s)

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

¹CLEAR: 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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POST-APPLICATION REVIEW PANEL COMMENTS

Date: 10/12/15

Project Status: NMI

Review Panel Member(s): Full Panel

1. If the project is a POC, identify the SRFB monitoring eligibility criteria used to identify 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:

The following information must be provided or the project will be assigned a POC. The enumerated points below and your responses to them should be appended to your proposal under the section heading Responses to Post-Application Comments. **Your updated proposal must be posted on SharePoint by October 26.** Please also alert your grant manager (Keith Dublanica) when the proposal has been updated with this information.

- 1) The Salmon Project Proposal cites an Island County RFP (July 2015) as identifying this work as a high priority data gap, however the RFP was not included in the references section. Please provide this RFP.

Response: The Island County July 2015 RFP was uploaded to PRISM 10/20/2015 (file name: Island County 2015 SRFB 10% monitoring-RFP v2).

- 2) Also the Panel would like to know if this data gap is identified anywhere else, either within the basin Salmon Recovery Plan or in updates to the Plan. If the RFP is the first time this data gap was identified, what was the process for identifying and prioritizing data gaps?

Response: The Island County Lead Entity July 2015 Request for Proposals included three focus areas for potential monitoring project proposals. The three data gaps were:

- Historic and current condition of marine riparian vegetation
- Census survey of shoreline armoring – historic and current
- Census survey of area of pocket estuaries – historic and currently accessible

These three indicators were identified as being of high importance during WRIA 6/Island Co's Phase 1 Monitoring & Adaptive Management project. Because there is no data currently available to populate those indicators, they were identified as a "gap" in the final report of Phase 1 M & AM submitted to the Puget Sound Partnership. These indicators have since been selected by the Puget Sound Ecosystem Monitoring Program (PSEMP) team, led by Bruce Crawford and Leska Fore, as part of the suite of nearshore "common indicators" that Puget Sound watersheds will be required to track within the Open Standards process and utilizing Miradi Software. The WRIA 6 Salmon Recovery Plan has not been updated since 2005 so does not include recent information or recommendations. The WRIA 6 Lead Entity is preparing to update the chapter and will also be developing a monitoring and adaptive management plan under the guidance of the Puget Sound Partnership and the PSEMP common indicators work. The results of this study will be used by the Lead Entity to assess recovery strategies that have been employed in WRIA 6 and to develop new strategies as appropriate.

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- 3) The proposal seeks to obtain the best available remote sensing data, including orthophotos and LiDAR. Do the principal investigators know if time series orthophotos and/or LiDAR image files are available (and from whom), and if so, what the cost of obtaining them would be?

Response: Suitable images are available at no cost to the PIs. Island County flew orthophotos in 2014 in both true color and color infrared at a resolution of 0.25ft. In addition, the PIs have a subscription to Pictometry Online which enables them to look at areas at an oblique angle if Pictometry images are available in that area. Pictometry images are 0.3 meter pixel resolution (or better, i.e., smaller). Scanning Island County shorelines through Pictometry Online shows that much of the shoreline has pictometry images available. Image dates range from 2006 to 2015 depending on the area. Island County also has LiDAR data acquired in 2014 at 3ft resolution. Another source of imagery is the National Agriculture Imagery Program (NAIP) which acquires and distributes orthophoto images for free. NAIP images are available through USDA's Geospatial Data Gateway (<https://gdg.sc.egov.usda.gov/>) where images are downloaded through a search (<https://gdg.sc.egov.usda.gov/GDGOrder.aspx>) specifying the state and county you are interested in. At the time of writing this response, the most contemporary NAIP images available for Island County are 2013 (1 meter pixel size). 2015 NAIPs have been flown, but are not yet available for download.

- 4) When seeking remote imagery for the contemporary period, securing data flown at a similar tidal stage as the 2005 census effort will be critical in detecting change. Please specify if this will be a criterion of adequacy when evaluating the best available imagery.

Response: Having consistency in tidal stage between photo series used to census pocket estuary habitat is important. For pocket estuary mapping having photos taken at a tidal stage approaching mean low water (MLW) allows the surveyor to clearly see channel/impoundment, tidal wetlands, and unvegetated tidal flats. Having photos taken at mean lower low water (MLLW) or extreme low water (ELW) is not necessary for our purposes. A review of tidal height differences between images used in the Skagit Monitoring Pilot Project and the 2013 NAIP show the images are suitable for our analysis. Moreover, the PIs will use images consistent with, or better than, the images used to census pocket estuary habitat within the Whidbey Basin for the Skagit Monitoring Pilot Project (PSP Interagency Agreement #2015-64). In the Skagit Monitoring Pilot Project, 4 different image datasets were used to digitize pocket estuary habitat depending on the areal coverage of each. The images are: 2004 NAIP (2 m pixel size); 2004 Triathlon Color Infrared (0.15 m pixel size); 2006 NAIP (1 m pixel size); and 2006 WDFW Color Infrared (0.3 m pixel size).

- 5) If possible, the panel recommends that the census be expanded to include all of the Pocket Estuaries in Island County, not just those in the Whidbey Basin. However, an inability to do so will not affect the status assignment given by the monitoring panel. We understand that this would likely require an increase in project budget.

Response: There is not enough monitoring funding available to complete a census of all Island County pocket estuaries. Thus, the monitoring proposal was developed for pocket estuaries within the WRIA's highest priority geographic area in the 2005 WRIA 6 Salmon Recovery Plan (i.e., the Whidbey Basin). In addition, the Whidbey Basin scope and methods from this proposal matches the Skagit Monitoring Pilot Project's geographic scope and methodology and thus will enable status and trends results when comparing between studies. The intention is that the Lead Entity will find a way to complete the census for WRIA 6 pocket estuaries that aren't included in this survey some time in the near future.

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- 6) It was unclear in the proposal if the project would include a census of stream mouths accessible to non-natal rearing fish. If not, this should be included in the project scope of work.

Response: This project does not include the small coastal stream mouths accessible to anadromy as it has already been completed for this area. Island County recently completed a barrier assessment for the WRIA 6 Priority Geographic Area 1, which includes the Whidbey Basin (IC PWSWMD, 2015). The assessment used the streams identified in the Whidbey Basin Small Streams Study (Beamer et al. 2013) and conducted barrier assessments on publically maintained structures between the nearshore and natural fish barrier upstream. An inventory of private crossings and potential barriers was also collected for future investigation once a project sponsor has been identified (ICPW 2015).

Beamer, E.M., W.T. Zackey, D. Marks, D. Teel, D. Kuligowski, and R. Henderson. 2013. Juvenile Chinook salmon rearing in small non-natal streams draining into the Whidbey Basin. Skagit River System Cooperative, LaConner, WA.

Island County Public Works Surface Water Management Division. 2015. Island County Fish Passage Barrier Inventory. Island County Public Works, Coupeville, WA.



SPONSOR RESPONSE INSTRUCTIONS

THIS PROJECT PROPOSAL 15-1485 HAS BEEN IDENTIFIED AS NEEDING MORE INFORMATION (NMI)

PLEASE PROVIDE WRITTEN RESPONSES TO THE ABOVE NO LATER THAN CLOSE OF BUSINESS OCTOBER 28.

PLEASE SUBMIT THESE COMMENTS AS AN ATTACHMENT LISTED AS 'CORRESPONDENCE' INTO PRISM.

PLEASE INFORM ME BY E-MAIL OR PHONE IF ANY ISSUES PREVENT YOU WITH A TIMELY SUBMISSION.

THANK YOU

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