Objectives and timeline for continued analysis of JSSH habitat data

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### Overview and objectives

The Juvenile Salmonid and Stream Habitat (JSSH) database includes monitoring data of salmonid density and stream habitat characteristics in four watersheds in Santa Cruz County, California. Analyses of the database conducted during the summer of 2018 provided 1) a preliminary assessment of salmonid status and trends in the county of Santa Cruz, and 2) recommendations to guide future monitoring efforts based on conclusions from the existing database. These analyses and recommendations were presented online at <https://sccwrp.shinyapps.io/jss_web>.

Additional habitat datasets for the four watersheds in the existing database are available but were not included in the previous analysis. These datasesets include:

1. Continous flow estimates covering the period of record, modelled for all sampling stations with salmonid density
2. Reach scale habitat measurements covering 1/2 mile segments for all locations in the study area. This dataset includes observations of woody structure.

This follow-up analysis will build on work completed earlier this year to develop a more comprehensive assessment of habitat trends and associations with salmonid densities. The analysis will be driven by the following questions:

1. How has flow changed over time at the monitoring stations?
2. Are flow changes linked to changes in salmonid density?
3. What are the spatial and temporal patterns in habitat variables at the reach scale?
4. Is woody habitat associated with salmonid density, and if so, is there variation by location and/or age classes?

Overall, this work will inform future monitoring programs by building on the knowledge gained from the first analysis. This work will also inform conservation activities by identifying habitat conditions that are likely to sustain healthy salmonid populations in the region.

### Budget and timeline

A sum of $5000 will be available to support the continued analysis of habitat data. These funds will be applied directly to data analysis by M. Beck and will also support time between collaborators to discuss progress towards meeting objectives.

* Task 1: Analysis of habitat data and relation to salmonid density
  + Deliverable: Website page to append to existing resources
  + Completion: Nov. 2018
  + Budget: $4000
* Task 2: Delivery of final presentation to technical advisory committee
  + Deliverable: Webinar presentation
  + Complettion: Dec. 2018
  + Budget: $1000

### Point of contact

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