

Modeling Study Plan Description: SEI Scope Tasks

The FAHCE Modeling Study Plan was developed to describe the process to update the analysis carried out as part of the CEQA process related to the implementation of the agreed to FAHCE rule curves for reservoirs located in the three FAHCE watersheds, largely in response to comments and feedback received from the members of the Technical Workgroup representing the signatory parties and the State and Federal agencies.

The final negotiated FAHCE Study Plan includes several categories of activity. These include evaluating methods for refining the temporal resolution of the water temperature modeling, refining the spatial and temporal resolution of the temperature and WEAP model as appropriate, developing specific points of interest where evaluation and analysis of flow and temperature as it relates to effects on salmonids, model validation, and using the validated model to analyze a range of alternatives to satisfy CEQA.

The refined and validated WEAP and temperature models are key to assess the ecological implications of the FAHCE reservoir reoperation rule curves. Model validation will include an assessment of uncertainty inherent in the model. Validation and understanding the uncertainty are important factors that will support the assessment of ecological implications that form the basis of the project's Programmatic Environmental Impact Report.

Specific tasks in the scope of work for SEI contract are:

- 1: Evaluate methods to refine the temporal resolution of the water temperature modeling
- 2: Evaluate the justification for and feasibility of refining the temporal and spatial resolution of the flow modeling
- 3: Decide on the temporal and spatial resolution of the flow and temperature modeling to be completed as part of the implementation of the FAHCE study plan
4. Refine the temperature modeling tools as appropriate
5. Refine the flow modeling tools as appropriate
6. Define Points of Interest and develop flow and temperature criteria
7. Conduct a validation exercise of the refined flow and temperature modeling tools
8. CEQA analysis
9. Additional analysis of interest
10. Preparation for and participation in Technical Workgroup meetings
11. Optional services