

Charge to the Delta Science Program Independent Science Advisors Recommendation of Method to Develop Flow Criteria for Priority Tributaries to the Sacramento-San Joaquin Delta

Orientation and Focus

The intent of this review is to develop regional flow criteria for the Sacramento Delta. Site-specific habitat based studies have historically been used to provide a comprehensive assessment of flow needs for specific stream reaches. The application of traditional site specific studies however is constrained by resource needs. The State Water Board (Board) would like to develop flow criteria that can be applied to the bulk of each priority tributary's watershed, and address multiple species or life stages and fluvial processes. The Board will evaluate and augment additional studies and modeling, to establish flow criteria on a regional scale.

Materials to be reviewed

Each independent science advisor will review the following documents (to be provided in electronic format):

- 1) Letter from the State Water Resources Control Board to the Delta Science Program dated July 31, 2013.
- 2) State Water Resources Control Board Report "Potential Methods to Develop Flow Criteria for Priority Tributaries to the Sacramento-San Joaquin Delta" July 2013

Scope of the Review and Analysis

This review and analysis shall address the following questions:

- If an Instream Flow Incremental Methodology (IFIM) is recommended, how can the information generated be used, or augmented with other methods, to inform the development of flow criteria for portions of the watershed outside of the study plan area?
- If Ecological Limits of Hydrologic Alteration (ELOHA) is used, it is possible that local stakeholders or agencies may desire to perform site-specific studies to refine the regional flow criteria. For example, fish passage and spawning habitat are often localized issues that may benefit from site specific refinements or calibrations of regional criteria. For such cases, and others (i.e., temperature, flushing flows, fluvial processes, etc.),

- Which methods or tools could be used consistently in these watersheds to calibrate or refine regional flow criteria?
- If not, what limitations need to be considered to improve the feasibility of given solutions?

Deliverables

The independent science advisors will prepare the following deliverables:

Written report recommending a method or methods to determine in-stream flow criteria that are:

- scientifically defensible,
- cost-effective,
- applicable to the bulk of each tributary's watershed, and
- able to be implemented in a timely fashion.

Advisory Team Membership

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