

United States Department of the Interior BUREAU OF RECLAMATION Interior Region 10 Bay-Delta Office 801 I Street Sacramento, California 95814



IN REPLY REFER TO: BDO-100 2.2.4.23

Dr. Lisamarie Windham-Myers Delta Lead Scientist, Delta Science Program Delta Stewardship Council 715 P Street, 15-300 Sacramento, CA 95814

Request for Independent Peer Review of HEC-ResSim Water Temperature Simulation Model

Dear Dr. Windham-Myers:

The Bureau of Reclamation requests the Delta Science Program's (DSP) assistance in conducting an external independent peer review on the subject topic.

Reclamation has undertaken an effort for a Water Temperature Model Platform (WTMP) Project which entails the collection of data, development of a data management system, development of a set of physically based tools, and development of a modeling framework. A successful application of this platform would be capable of providing short and long-term water temperature predictions to assist resource managers of major Central Valley Project reservoirs with balancing water resources and downstream temperature needs. The development and deployment of the WTMP includes a change in the referenced model from HEC-5Q to HEC-ResSim (ResSim) for Central Valley Project (CVP) water temperature management.

Reclamation would like to use the DSP's established independent scientific peer review and advice processes to evaluate HEC-ResSim (ResSim) as a reservoir temperature simulation model. Though use of ResSim for reservoir modeling is well established in the literature, the temperature modeling component was only recently introduced to ResSim. The use of ResSim for reservoir temperature modeling is not as well established as the hydrodynamic components. A robust peer review of HEC-ResSim for reservoir temperature modeling is requested to further the model's acceptance by USBR and associated interested parties.

If you have any questions regarding this request, please contact Dr. Derya Sumer at dsumer@usbr or 916-208-7909.

Sincerely,

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David M. Mooney Manager, Bay Delta Office

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