

Regional Water Quality Control Board  
North Coast Region

Executive Officer's Summary Report  
Thursday, August 14, 2014  
Regional Water Board Office  
Santa Rosa, California

- ITEM: 7
- SUBJECT: Update on the Elk River Recovery Assessment (*Alydda Mangelsdorf and Darren Mierau, CalTrout*)
- BOARD ACTION: This is an Informational Item.
- BACKGROUND: The Elk River Recovery Assessment and Pilot Sediment Removal Implementation Project (Recovery Assessment) is funded by the State Water Resources Control Board's Cleanup and Abatement Account with cost shares from the California Coastal Conservancy, Humboldt Redwood Company, and Redwood Community Action Agency.
- The goal of the Recovery Assessment is to conduct a system-wide analysis of river hydraulics and sediment transport, assess a suite of potential sediment removal and restoration activities, implement a pilot mechanical sediment removal project, and develop an implementation framework that promotes recovery of ecosystem functions and beneficial uses in Elk River. The Recovery Assessment will test the response of the system to a suite of direct recovery actions, such as dredging, new channel construction, on-channel or off-channel sediment detention basins, levee construction or modification, vegetation management, infrastructure improvements, creation of inset floodplains, high flow channels, and placement of in-stream large woody debris. The Recovery Assessment includes the construction, calibration, and validation of hydrodynamic and sediment transport models (HST model) suitable to determine the effects of a range of actions individually, collectively and under a range of flows, sediment loads, and time frames.
- The Recovery Assessment will result in a peer-reviewed Elk River sediment reduction implementation framework that is scientifically defensible and has the best prospect of leading to recovery of beneficial uses and reduction in flooding potential. It will satisfy the Regional Water Board's previous requirement for a feasibility study, inform TMDL implementation actions and provide key support information to the Elk River watershed stewardship group regarding remediation solutions, and provide needed bases for permitting.
- The pilot project associated with the Recovery Assessment will serve as a demonstration project to provide key information on the efficacy

of mechanical sediment removal and maintenance, explore available permitting pathways, and inform the cost of sediment disposal.

**DISCUSSION:** The contract with California Trout (CalTrout) for the Recovery Assessment was executed in May 2014, with the Regional Water Board as the grant manager. Subcontracts have been executed with Stillwater Sciences and Northern Hydrology and Engineering. Efforts are underway to conduct field surveys, data preparation, and develop pilot project designs. The presentation to the Board will provide updates on the status of these efforts.

**SUPPORTING DOCUMENTS:** None

140728\_ACW\_dp\_Update\_ElkRiver\_EOSR