

Selenium Proposal #1: Selenium Strategy Coordination and Technical Support

Summary: The funds would support SFEI coordination and technical support for Workgroup activities and continuing development of the Selenium Strategy.

Oversight group: Selenium Workgroup
Proposed by: Jay Davis, SFEI

Funding requested for 2019: \$10,000

Introduction and Background

In April 2014 the RMP formed a Selenium Strategy Team to evaluate information needs that can be addressed by the Program. The initial charge given to the Team by the RMP Steering Committee was to focus on low-cost, near-term monitoring elements that could provide information that provides high value in support of policy development and decision-making. A TMDL for the North Bay was developed by the Water Board and was approved by USEPA in 2016. In July 2016, a Selenium Monitoring Workshop was held to begin developing a long-term selenium monitoring plan for North Bay, including sturgeon, clam, and water monitoring. The primary objective of this monitoring is early detection of changes in selenium exposure. A multi-year plan, completed in 2018, includes selenium monitoring in all of these matrices. Development of a TMDL for the South Bay will be considered in the next few years.

Study Objective and Applicable RMP Management Questions

The objective of this task is to provide coordination and technical support for Workgroup activities and continuing development of the Selenium Strategy. This task would therefore address all of the questions currently articulated in the Strategy (an update of these questions is in progress).

1. What are appropriate thresholds?
2. Are the beneficial uses of San Francisco Bay impaired by selenium?
3. What is the spatial pattern of selenium impairment?
4. How do selenium concentrations and loadings change over time?
5. What is the relative contribution of each loading pathway as a source of selenium impairment in the Bay?

This task would specifically address the management questions articulated for the North Bay.

1. Are the beneficial uses of north San Francisco Bay impaired by selenium?
2. Are changes occurring in selenium concentrations that warrant changes in management actions?
3. Will proposed changes in water flows and/or selenium loads in the Bay or upstream cause impairment in the North Bay?

The task would also address many of the overarching RMP management questions.

Tasks for 2019

Funds for this task would enable SFEI to continue to convene the Selenium Workgroup to allow discussions of plans for studies in support of implementation of the North Bay TMDL and the consideration of a TMDL for South Bay, to develop RMP workplans to support these efforts, and for any small-scale synthesis of information that is needed to support these discussions. The plan will include a multi-year schedule of budgets and deliverables aimed at providing a technical foundation for the TMDLs.

Timing and Deliverables

An updated selenium multi-year plan will be prepared for June 2019. The plan will include a multi-year schedule of budgets and deliverables.