



ACTION ITEM

Amendment of an Agreement with Aquatic Science Center for Integrated Modeling Support

Summary: The Executive Officer requests authority to amend a contract with the San Francisco Estuary Institute – Aquatic Science Center (SFEI-ASC) for an addition of time and scope, and to increase the contract budget by up to \$15,724 for a total of \$972,724. These additional resources will be used to support calculations to estimate the benefit of the preliminary draft Delta Plan Ecosystem chapter on the food supply for fish, birds, and other wildlife.

Requested Action

Authorize the Executive Officer to amend an existing contract with SFEI-ASC (#5186), by increasing the contract budget by up to \$15,724, and providing a time extension and scope change. These changes would allow SFEI-ASC to calculate the estimated increase in primary production, a measure of food supply for wildlife, associated with the targets in the preliminary draft Delta Plan Ecosystem chapter, and prepare a manuscript that links the past, present, and potential future of primary productivity in the Delta.

The Executive Officer has delegated authority, up to \$500,000, to enter into contract agreements on the Council's behalf. This proposed contract requires Council authorization because the total contract exceeds that amount.

Background: Primary Productivity Phase II task

The amount of plants and algae produced, also known as *primary production*, across the Delta landscape defines the amount of food that is available to fish, birds, and other wildlife. The relative importance of different plants or algal species to that food supply is a major uncertainty in understanding the ecosystems of the Delta. Understanding how the extensive historical changes in the Delta landscape have altered primary production informs restoration planning and ecosystem management across the region. The Delta Landscapes Project (SFEI-ASC 2014) lays the foundation for making estimates of historical and modern primary production, by providing detailed maps of different habitat types in the Delta. The focus of the Delta Primary Productivity project is on estimating plant and algal biomass, because that defines the capacity for the ecosystem to supply food for animals.

The goal of the project is to quantify changes in the plants and algae of the Sacramento-San Joaquin Delta using newly available data describing landscape change and the movement of water across the landscape. A set of calculations for five producer groups (submerged aquatic vegetation, phytoplankton, non-phytoplankton microalgae, marsh vascular plants, and woody trees and shrubs) has been completed for historical and modern time periods, and with this amendment will also be completed for a restoration scenario based on restoration targets identified in the preliminary draft Delta Plan Ecosystem chapter. Additionally, food quality of the different plants and

algae will be estimated. This task is a collaboration among scientists and a group of resource managers.

Amendment for inclusion of Delta Plan Ecosystem targets

The proposed amendment of \$15,724 for addition of time and scope, would allow SFEI-ASC to calculate the estimated increase in primary production associated with the targets in the preliminary draft Delta Plan Ecosystem chapter. By quantifying the degree to which future restoration goals would change the base of the food web, and the potential contributions of each habitat type, this calculation provides valuable context for managers making decisions about how to approach ecosystem restoration. The project team will submit a manuscript to a high-impact scientific journal, so that this unique work and the potential positive impacts of the Delta Plan Ecosystem targets can be shared widely.

Fiscal Information

The proposed amendment will add \$15,724 to the existing budget to allow SFEI-ASC to complete the calculations and submit a manuscript for publication. Current contract amount is \$957,000, and total amended contract would be \$972,724.

List of Attachments

None

Contact

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