



ACTION ITEM

Approval of a Contract Amendment with the United States Geological Survey (Sediment Study)

Summary: Council staff requests an amendment to a contract with the United States Geological Survey (USGS) to make no-cost budget adjustments between the contract's fiscal years. The contract amendment would allow for a funding shift between budget years but would not add any funds. The original contract dollar amount of \$744,390.77 will remain the same. This amendment allows for the project's adjustment to account for changes resulting from the COVID-19 emergency and will enable researchers to finish the project as initially funded by the Council. The study performed under this contract was selected for an award from the 2018-2019 multi-agency Delta science proposal solicitation.

REQUESTED ACTION

Council staff recommends that the Council approve a contract amendment with USGS to allow for a budget shift between the contract's fiscal years.

The Executive Officer has delegated authority up to \$500,000 to enter into contracts on the Council's behalf. This contract amount is in excess of the Executive Officer's delegated authority and requires Council approval. The Council approved the original contract on April 25, 2019. Consequently, this amendment also requires Council approval.

BACKGROUND

The study includes two overlapping components to address critical knowledge gaps in nutrients and sediment. The first part is a broad survey of nutrients in Delta sediments across the region. The "paired site" approach compares wetland and shallow water sites to nearby open water sites. The results will help clarify the nutrient implications of wetland restoration efforts by improving existing linked 3-dimensional models of the estuary. The second part of the study involves a collaboration with Dr. Tomo Kurobe at the University of California, Davis, to collect information about microbes at a subset of sites. Specifically, USGS and Dr. Kurobe will measure the amount of nutrients stored or released in sediments and identify the microbial community. Recent advancements in metagenomic approaches can shed light on how microorganisms influence how the ecosystem functions. Together, the two parts of the study will produce rates of nutrient processes that are applicable across broad areas of the Delta. These rates are needed to improve

process-based models that can compare the outcomes of different management scenarios.

This study, entitled "Assessing sediment nutrient storage and release in the Delta: linking benthic nutrient cycling to restoration, aquatic vegetation, phytoplankton productivity, and harmful algal blooms," represents the first comprehensive assessment of the amount of nutrients found in Delta sediments, how those nutrients change over time, and how they move through the Delta system.

JUSTIFICATION

The purpose of this amendment is to shift the budget between the contract's fiscal years in response to significant delays in the research due to the ongoing COVID-19 pandemic, which affected all USGS field and analysis-based research projects. Employees and cooperators shifted to teleworking schedules and adjusted to a new mode of working.

FISCAL INFORMATION

No additional funds are being requested. The total budget of \$744,390.77 remains the same.

LIST OF ATTACHMENTS

None.

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