



ACTION ITEM (NEW)

Approval of a Contract Amendment with the United States Geological Survey

Summary: Council staff recommends that the Council approve a contract amendment with the United States Geological Survey (USGS). The amendment is required to adjust the budget to reduce indirect costs and increase personnel costs, and to extend the project performance period by five months in response to continued impacts caused by the COVID-19 pandemic and an unexpected need to expand the modeling work. This project, which addresses critical knowledge gaps in juvenile Chinook salmon survival, was selected for an award from the 2018-2019 multi-agency Delta Science proposal solicitation.

REQUESTED ACTION

The ongoing COVID-19 pandemic affected all USGS field and analysis-based research projects as employees and cooperators shifted to teleworking schedules and adjusted to a new mode of working. The modeling work for this project has been delayed to include a feedback loop between tidal metrics and the survival models. In addition, the Western Fisheries Research Center's indirect cost rate decreased considerably during the project period, requiring an amendment to this agreement. For these reasons, the USGS has requested that the Council extend the end date of the project performance period from February 1, 2022, to June 30, 2022.

Council staff recommends that the Council approve a contract amendment with USGS. The contract amendment would add five months to the term of the contract, extending the agreement until June 30, 2022. The budget would also be amended to account for delays due to the COVID-19 pandemic, additional modeling work, and a lower indirect cost rate, shifting \$11,825.19 from indirect costs, reduced as a result of decreased overhead costs, to personnel to account for the extra time needed to complete the project. Initially, the modeling process was more of a "one-way-street," where the tidal metrics are completed first and then those metrics are used in the survival model. However, it is now more of a feedback loop where the initial tidal metrics are included in survival models, and then insights from the survival modeling generates new ideas about the tidal metrics. The total contract amount of \$510,974 would not change. The Executive Officer has delegated authority up to \$500,000 to enter into contracts on the Council's behalf. This contract amendment requires Council approval because it exceeds that amount.

INFORMATION ABOUT THE TOPIC

This project entitled “Quantifying the contribution of tidal flow variation to the survival of juvenile Chinook salmon,” is in collaboration with USGS and Resource Management Associates (RMA).

This project is an outgrowth of work funded and completed as a result of the 2010 Delta Science Program proposal solicitation. The 2010 project developed new statistical models for quantifying the effect of tidally averaged river flows on survival, travel time, and migration routing through the Delta (Perry et al. 2018; <https://doi.org/10.1139/cjfas-2017-0310>). These models are now being used by natural resource managers to predict real-time survival through the Delta; the online tool shows how water management actions can potentially influence salmon survival (<https://oceanview.pfeg.noaa.gov/shiny/FED/CalFishTrack/>). Furthermore, the 2010 research project identified considerable variation in juvenile Chinook salmon survival that was unexplained by net tidally averaged river flows. This finding led to a 2018 proposal that is based on a hypothesis that this unexplained variation in survival could be caused by tidal forcing (e.g., the spring-neap cycle), in which the total distance that juvenile salmon travel changes. To find out the answer, biologists from the USGS Western Fisheries Research Center partnered with hydrodynamic modelers from the USGS California Water Science Center and Resource Management Associates (RMA) to develop metrics of tidal river flow that could help explain variation in survival. Findings from this study will help resource managers better understand how factors that influence tidal forcing in the Delta (e.g., wetland restoration, sea-level rise, etc.) affect the survival of juvenile Chinook salmon.

FISCAL INFORMATION

Not applicable.

LIST OF ATTACHMENTS

No attachments.

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