ACTION ITEM (NEW)

Approval of a Contract Amendment with Michigan State University

Summary: Council staff requests an amendment to a contract with Michigan State University (MSU) to enable budget adjustments in response to an unexpected change in methods. The COVID-19 emergency drastically slowed MSU's access to samples from CDFW's Tissue Archive used in this study. Due to this unexpected delay in sample acquisition and rapidly changing sequencing technologies, it became necessary to shift the genotyping method (shift from the method of a capture array to Restriction-site associated DNA sequencing (RAD-seq). As this contract is addressing Science Action 3 and 4, developing management relevant tools, it is imperative that the most appropriate sequencing technologies are used for that method development. The original contract amount and time frame will remain the same. The study performed under this contract was selected for an award from the 2018-2019 multi-agency Delta Science Proposal Solicitation.

REQUESTED ACTION Authorize the Executive Officer to approve a contract amendment with MSU to move existing funds from 'Research Assistant' to 'Research Associate' and 'Materials and Supplies' to 'Other Operating Expenses.' Research Assistant' originally totaled $40,560 and if approved would change to $20,560 with the 'Research Associate' changing from $104,403 to $133,790. 'Materials and Supplies' was previously $112,500 and would now total $42,500, while 'Other Operating Expenses' was $36,000 and would now total $116,000. The original contract amount and time frame will remain the same.

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.

BACKGROUND

The purpose of the study funded by this contract is to improve the scientific and resource management community's ability to protect life-history trait diversity in Chinook salmon. Life history trait diversity (migration timing) is decreasing in the Central Valley, leading to reduced genetic diversity and the ability to adapt to environmental change. A key roadblock to protecting the present diversity is the inability to identify large numbers of individuals rapidly and inexpensively from different populations and life history types during their outmigration. The investigators will address this information gap by leveraging pre-existing genomic

data to develop a new high-throughput genotyping panel that will allow us to identify individuals by run type and tributary, including identifying Fall-run from the Sacramento versus the San Joaquin River basins. This contract was awarded as part of the 2018-2019 multi-agency Delta Science proposal solicitation. This work is most responsive to Action Areas 3 and 4 of the Science Action Agenda: "Develop Tools and Methods to Support and Evaluate Habitat Restoration," and "Improve Understanding of Interactions between Stressors and Managed Species and their Communities," respectively.

INFORMATION ABOUT THE TOPIC

In mid-March 2020, the COVID-19 emergency required that California Department of Fish and Wildlife (CDFW) and MSU pivot to a work-from-home model. This sudden shift resulted in a delay that drastically slowed the contracting process between CDFW and MSU, which was required for accessing samples from CDFW's Tissue Archive used in this study. Due to this unexpected delay in sample acquisition and rapidly changing sequencing technologies, it became necessary to shift the genotyping method. The originally proposed method required more 'Research Assistant' time and 'Supplies and Materials', while the current method requires more bioinformatics core services (Other operating expenses) than originally anticipated (and advantageously also imparts much higher quality data). Consequently, more time is also required from the 'Research Associate' because someone with more technical skills is needed for the data analysis, with the current method. Therefore, a subset of the funds that had been allocated for 'Research Assistant' time (roughly lowering by half) and 'Supplies and Materials' (roughly reducing to one third of the original amount), now need to be shifted to the 'Research Associate' (adding roughly 28%) and 'Other Operating Expenses' (roughly tripling the original amount) categories within the existing budget and timeframe.

FISCAL INFORMATION

No additional funds are being requested. The total budget of $632,909.02 remains the same.

LIST OF ATTACHMENTS

None.

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