REVISED June 22, 2021

Attachment 1. 2021 Delta Science Proposal Solicitation Projects and Contracts Overview.

Supplemental information for each project is available in Attachment 2. These individual contracts are financially supported by the Council unless otherwise noted (the US Bureau of Reclamation are noted with "Reclamation" after the budget amount). Integrated Socio-Ecological System projects are labeled as "ISES."

Title	Primary Investigator	Recipient Institution	Recommended Budget, Not to Exceed	Primary Science Action Agenda Area	Research or ISES	Approx. End Date
Addressing CyanoHABs as a threat to water and air quality in the San Francisco Bay-Delta, CA	Paerl, H	UNC-Chapel Hill	**$272,485.00**	1. Human dimension of natural resource management	Research	12/31/2023
	Paerl, R	North Carolina State University	**$112,270.50**			
	Popendorf	University of Miami	**$90,000.00**			
	Kudela	UC Santa Cruz	**$90,000.00**			
Integrating social and ecological research to control invasive species: fostering collective action among private and public stakeholders	Kettenring	Utah State University	**$319,652.46**	1. Human dimension of natural resource management	ISES	2/1/2024
	Ma	Purdue University	**$209,881.46**			
	Tanner	Chapman University	**$152,040.06**			
	Matzek	Santa Clara University	**$150,875.63**			
	Takekawa	Suisun Resource Conservation District	**$136,376.63**			

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How Delta food webs have changed: integrating detrital material into the Delta food web puzzle	Bergamaschi	USGS CWSC	**State Water Contractors (SWC)** ***pending SWC Board approval***	4. Interactions between stressors, managed species, and communities	Research	1/31/2024
	Hernes	UC Davis	**$240,902.00**			
The effects of climate change on the life history of spring-run Chinook Salmon through time	Willmes	UC Santa Cruz	**$528,438.00**	4. Interactions between stressors, managed species, and communities	Research	6/30/2023
	Eerkins	UC Davis	**$169,882.00** Reclamation			
Understanding within- and between-basin migration in White Sturgeon: A synthesis of more than 10 years of acoustic tagging data	Johnston	Cramer Fish Sciences	~~**$88,325.63**~~ **$73,325.63** Reclamation	4. Interactions between stressors, managed species, and communities	Research	7/31/2022
	Jackson	**US Fish and Wildlife Service**	**$15,000.00**			
Regulation of controls of cold water through the Temperature Control Device of the Shasta Dam as a means of supporting downstream fish populations	Forrest	UC Davis	**$498,528.00** Reclamation	5. Monitoring, data management and modeling	Research	8/31/2023

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Assessing sea-level rise and flooding changes in the Sacramento/San Joaquin Delta using historical water-level records	Talke	California Polytechnic State University, San Luis Obispo	**$529,812.00**	2. Science synthesis	Research	12/31/2023
Estimating juvenile production and run timing of spring Chinook salmon leaving the Delta	Perry	USGS-WFRC	**$221,966.00**	2. Science synthesis	Research	2/1/2024
	Meek	Michigan State University	**$152,267.00** Reclamation			
	Piper	Fish Metric, Inc.	**$76,800.00** Reclamation			
Comparing the impact of predation on the outmigration mortality of all Central Valley salmon ecotypes relative to other habitat related covariates	Henderson	Humboldt State University	**$259,429.00** Reclamation	2. Science synthesis	Research	12/31/2023

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Reorienting to Recovery: Developing an inclusive, landscape scale process for Central Valley Salmonids, prioritizing actions and investments to achieve recovery and minimize community and economic impact	Silberblatt	Kearns and West	**$450,282.00** Reclamation	2. Science synthesis	ISES	2/30/24
	Tompkins	FlowWest	**$312,478.00** Reclamation			
	Harstone	Compass Resource Management	**$176,694.00** Reclamation			
	Bobker	The Bay Institute	**$166,641.00** Reclamation			
	Danner	NMFS-SWFSC	**$138,431.37**			
	Henery	Trout Unlimited	**$131,981.00** Reclamation			
	Hendrix	QEDA Consulting	**$110,737.00** Reclamation			
Towards Quantifying the Effects of Climate Change and Sea Level Rise on Carbon Accretion by Tidal and Non-Tidal Wetlands Exposed to a Range of Salinity along the San Francisco Bay Estuary and Delta	Baldocchi	UC Berkeley	**$695,821.00**	3. Support and evaluate habitat restoration	Research	2/1/2024
Non-Invasive Environmental DNA Monitoring to Support Tidal Wetland Restoration	Nagarajan	UC Davis	**$496,322.00** Reclamation, partial	3. Support and evaluate habitat restoration	Research	2/1/2024

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From Microbes to Zooplankton, What Defines a Beneficial Wetland?	Jungbluth	SFSU	**$579,386.00**	3. Support and evaluate habitat restoration	Research	2/1/2024
	Hassrick	ICF	**$118,479.00** Reclamation			
Standard Operating Procedure for Diagnosing and Addressing Predator Detections in Salmon Telemetry Data	Buchanan	University of Washington	**$292,859.00** Reclamation	3. Support and evaluate habitat restoration	Research	2/1/2024
	Perry	USGS-WFRC	**$241,599.00**			
Suisun Landscapes: historical ecology, functional metrics, and community priorities for landscape planning	Grenier	SFEI-ASC	**$699,997.00**	3. Support and evaluate habitat restoration	Research	2/1/2024
Harmful Algal Blooms and Cyanotoxins in the Delta: Occurrence, Distribution, Trends, and Environmental Drivers	Kraus	USGS	**$699,374.00**	4. Interactions between stressors, managed species, and communities	Research	2/1/2024
		Total Funds	**$9,611,012.75**			