

Delta Research Awards

2025 Proposal Solicitation Notice

Solicitation #23000

For technical assistance, contact SGProposal@ucsd.edu.

Version 3 (updated 5/13/24)



**Delta
Science
Program**

DELTA STEWARDSHIP COUNCIL

Table of Contents

1	BACKGROUND	1
2	WHAT'S NEW ABOUT THIS SOLICITATION?	2
3	SCHEDULE	3
4	WHERE TO FIND HELP	3
5	AWARD INFORMATION AND PROJECT CATEGORIES	4
5.1	Budget Contingency Clause for State-Funded Contract Agreements	5
5.2	Recognition of Funding Source	5
6	SUBMITTAL REQUIREMENTS	5
6.1	Letter of Intent (LOI)	5
6.2	Project Proposal	7
7	ELIGIBILITY REQUIREMENTS	8
7.1	Eligible Entities	8
7.2	Ineligible Activities	9
8	SOLICITATION FOCUS	10
8.1	Management Need 1: Improve coordination and integration of large-scale experiments, data collection, and evaluation across regions and institutions.	10
8.2	Management Need 2: Enhance monitoring and model interoperability, integration, and forecasting.	11
8.3	Management Need 3: Expand multi-benefit approaches to managing the Delta as a social-ecological system.	11
8.4	Management Need 4: Build and integrate knowledge on social process and	

behavior of Delta communities and residents to support effective and equitable management.	12
8.5 Management Need 5: Acquire new knowledge and synthesize existing knowledge of interacting stressors to support species recovery and ecosystem health.	12
8.6 Management Need 6: Assess and anticipate impacts of climate change and extreme events to support successful adaptation strategies.	13
9 PROPOSAL REQUIREMENTS	14
9.1 Signed Institutional Cover Page	14
9.2 Project Summary/Abstract	15
9.3 Project Narrative	15
9.3.1 Introduction and Background	15
9.3.2 Objectives, Hypotheses and/or Research Questions	15
9.3.3 Work Plan	16
9.4 Works Cited	17
9.5 Science Action Agenda Relevance	17
9.6 Letter of Support from Resource Management Entity or Community Group	17
9.7 Broader Impacts and Equitable Engagement	18
9.7.1 Engagement and Communication Plan	20
9.7.2 Vulnerable or Historically Marginalized Communities	20
9.8 Data Management Plan	21
9.9 Compliance with Applicable Laws, Questionnaire, and IRB Certification	23
	2

9.10	Budget and Budget Justification	24
9.10.1	Ineligible Costs	24
9.11	Project Team Experience and Qualifications	25
9.12	Curriculum Vitae (CV)	25
9.13	Current and Pending Support	26
10	PROPOSAL REVIEW PROCEDURE	26
10.1	Administrative Review	26
10.2	Individual Expert Technical Reviews	27
10.3	Technical Evaluation Panel(s)	30
10.4	Funding Decisions	30
11	RESOURCES FOR APPLICANTS	32
11.1	Science Action Agenda	32
11.2	Delta Residents Survey Data	32
11.3	Environmental Justice	32
11.4	Community Engagement	33
11.5	Data Management	33
11.6	More About the Delta Stewardship Council	35
11.7	State and Regional Resources	35
12	ACRONYMS	35
13	DEFINITIONS	36
	APPENDIX A: AWARD REPORTING TEMPLATE	39

List of Tables

Table 1. Schedule	3
Table 2. Technical Review Criteria	27

1 Background

The Delta Stewardship Council (Council) is pleased to announce the 2025 Delta Research Awards Proposal Solicitation Notice. This proposal solicitation for Delta research projects (Solicitation) is funded by the Council, led by the Council's Delta Science Program (DSP), and administered in partnership with the University of California San Diego, California Sea Grant (Sea Grant). The Solicitation will further the DSP's legislatively mandated mission to:

... provide the best possible unbiased scientific information to inform water and environmental decision-making in the Delta ... through funding research, synthesizing and communicating scientific information to policy-makers and decision-makers...
-Delta Reform Act 2009, Water Code Section 85280(b)(4).

Through this Solicitation, the DSP seeks to identify and fund research that will promote an integrated understanding of the Sacramento-San Joaquin Delta and Suisun Marsh, particularly to support the science and natural resource management community's ability to measure, anticipate, and plan for a rapidly changing climate. Proposals must advance one or more of the Science Actions in the **2022-2026 Science Action Agenda (SAA)**¹. The SAA prioritizes science actions to fill gaps in knowledge and aligns them with management needs. For more information about the Solicitation focus and the SAA, see Section 8.

Eligible entities that wish to submit a proposal must first submit a Letter of Intent by the deadline set forth in the Solicitation as a prerequisite to be considered for an invitation to submit a full proposal. Letters of Intent will be evaluated based on the requirements in Section 6.1 of the Solicitation and successful applicants will receive a notification to submit a proposal. All proposals will be evaluated by independent experts with the appropriate specialized knowledge, based on requirements and criteria in Sections 9 and 10 of the Solicitation. The Council will select proposals for final awards. Selected applicants will receive an "intent to award" letter and will be required to enter into a contract agreement (agreement) to be negotiated with Sea Grant. If additional funding is available from external partners, successful proposals may receive an "intent to award" letter from the Council and/or external funding

¹ <https://scienceactionagenda.deltacouncil.ca.gov/>

partners such as the Bureau of Reclamation and State Water Contractors, as applicable. There is a total of approximately \$6 million available for awards. Sea Grant will collaborate closely with the Council in administering the Solicitation as well as for external and expert review of submitted proposals, award agreements, and communication of funded work with key interested parties.

2 What's new about this Solicitation?

- There are separate award categories for large projects (\$200,001 to \$1,500,000) and small projects (\$90,000 to \$200,000). The category for small projects was added following public input on the 2021 Solicitation.
- Projects must directly advance at least one science action from the 2022-2026 SAA.
- In recognition of the importance of SAA actions related to the human dimensions of the Delta, projects with a substantial social science component will be eligible for additional points during the review process (Section 10). Data from the 2023 Delta Residents Survey may be relevant to researchers (Section 11.2).
- Letters of Intent will be assessed based on whether the proposed project aligns with science actions identified in the 2022-2026 Science Action Agenda, meets eligibility criteria, and falls within the geographic scope of the Delta (Section 6.1).
- Large projects are required to have one or more Letter(s) of Support from a Delta community partner, resource manager, or decision-maker (Section 9.6).
- All awards will be administered as formal agreements with Sea Grant. All collaborating entities will also be required to enter into sub-agreements with the primary applicant or may be required to enter into a separate agreement with Sea Grant.
- For optional assistance identifying tribal and/or community partners, please submit a survey response here by May 1, 2024:
<https://www.surveymonkey.com/r/N7X8S9F>.

3 Schedule

Table 1. Schedule in Pacific Daylight Time (PDT)

Event	Date(s) and Deadlines
Proposal Webinar #1 (Optional)	April 19, 2024 10:00 am (1 hour)
Partnership Survey Deadline (Optional)	May 1, 2024 by 5:00 pm submitted via online form
Letter of Intent (LOI) Deadline	May 28, 2024 by 5:00 pm submitted online using eSeaGrant
Invitations to Submit Full Proposals	Issued approximately early June
Proposal Webinar #2 (Optional)	June 14, 2024 10:00 am (1 hour)
Recommended Deadline for Questions	August 19, 2024
Full Proposal Deadline	August 26, 2023 by 5:00 pm submitted online using eSeaGrant
Notice of Intent to Award	Issued approximately mid-December
Project Start Dates	April 1, 2025

Schedule is subject to change. Updates will be sent to applicants who have submitted a Letter of Intent via the eSeaGrant online portal.²

4 Where to Find Help

Please see the website

[<https://caseagrant.ucsd.edu/funding/2025-delta-research-awards-proposal-solicitation>] for the most updated copy of the Solicitation, answers to questions, and other information about the Solicitation and proposal process. For important resources and links, reference Section 11, Resources for Applicants.

For technical assistance and questions about the Solicitation, please contact SGProposal@ucsd.edu.

Communications with Council or Sea Grant staff related to the Solicitation, other than as specified and allowed in the Solicitation, may disqualify a potential proposal from being considered.

Two optional virtual webinars will be held to provide technical assistance and other guidance for proposals (see Section 3, Schedule). Additional virtual webinars and/or workshops may be held on topics relevant to this Solicitation. Applicants registered on eSeaGrant will be notified of workshop details. The information will also be

² <https://eseagrant2.ucsd.edu>

posted on the Council’s events calendar web page.³ Workshops will be recorded, and the recordings will be made available on the Solicitation website.

5 Award Information and Project Categories

There is a total of approximately \$6 million available for awards. Projects must directly advance at least one science action from the 2022-2026 SAA. Availability of funding is dependent upon State and Federal budget appropriations for the specified fiscal year and is subject to change. All awards selected by the Council will be administered as formal agreements with California Sea Grant. In some cases, additional awards may be selected by, and administered as formal agreements with, external partners.

Project categories (dollar amount limits include all eligible costs including indirect costs):

- **Small Projects:** Awards between \$90,000 and \$200,000
- **Large Projects:** Awards between \$200,001 and \$1,500,000

The project duration may be up to a maximum of three years (36 months).

Applicants may submit more than one Letter of Intent and proposal (subject to receiving an invitation to submit a proposal), but a maximum of one proposal per individual lead Principal Investigator (PI) can be selected for an award. However, lead PIs may be listed as co-PIs on other awarded projects if the total combined effort of awarded projects is less than or equal to 100% of their time.

5.1 Budget Contingency Clause for State-Funded Contract Agreements

If the Budget Act of the current year and/or any subsequent years covered under the ensuing agreement does not appropriate sufficient funds for the program, the agreement shall be of no further force and effect. In this event, the Council will have no liability to pay any funds whatsoever or to furnish any other considerations under the agreement and the contractor shall not be obligated to perform any provisions of the agreement.

³ <https://deltacouncil.ca.gov/events>

If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the Council will have the option to either: cancel the agreement with no liability occurring to the Council or offer an agreement amendment to the contractor to reflect the reduced amount. The contractor shall be reimbursed for any completed work or work in progress at the time of termination of an executed agreement if approved by the Council.

5.2 Recognition of Funding Source

Successful applicants must acknowledge funding from the Delta Stewardship Council and its Delta Science Program, and any partner organizations providing project funds, as specified in the agreement language, for any publication (including online webpages) of any material based on or developed under a project funded through this Solicitation. Support must also be orally acknowledged during all news media interviews, including radio, television, and news magazines.

6 Submittal Requirements

6.1 Letter of Intent (LOI)

Letters of Intent (LOI) are required and must be submitted by the deadline in Section 3 (Schedule) using eSeaGrant.⁴ If you have never used California Sea Grant's eSeaGrant portal before, you will need to register for an account. You can change the randomly-generated password once you log in successfully into the website. Contact sgproposal@ucsd.edu with any access issues related to eSeaGrant. **NOTE:** We advise not to wait until the last minute to submit your LOI; when eSeaGrant experiences high user traffic, you may experience page loading delays. It is the applicant's responsibility to get all required materials submitted before the deadline, and the submission deadline will not be extended.

All interested applicants must submit a Letter of Intent (LOI), which contains a brief description of their project, using eSeaGrant by the deadline specified in the Solicitation (see Section 3, Schedule). For projects with multiple collaborating entities requesting funds, one lead PI should submit a single LOI on behalf of all collaborating entities. LOIs will be used to screen for eligibility and relevance to the Science Action Agenda, to enable the timely selection of reviewers, and to help

⁴ <http://eseagrant2.ucsd.edu/>

avoid potential conflicts of interest in the review process. Interested applicants may submit more than one LOI, but an individual may only be the Primary Investigator for a single submitted project.

LOIs will be screened based on the requirements below. An invitation to submit a proposal will be issued to each applicant whose LOI passes the screening process. LOIs received after the deadline will not be considered.

If there are any proposed changes to the scope of the successful LOIs, applicants must notify California Sea Grant via sgproposal@ucsd.edu as soon as possible and no later than July 15th, 2024. The name of lead PI must not change from LOI to proposal submission. Applicants will be notified by email no later than July 23rd, 2024 regarding whether the changes to their LOI are accepted, including an invitation to submit a proposal (if applicable) with the accepted revision(s).

LOIs will be assigned a pass/fail score based on their relevance to the science actions identified in the 2022-2026 Science Action Agenda (Section 8, Solicitation Focus), eligibility (Section 7, Eligibility Requirements), and whether they fall within the geographic scope of the Delta.⁵

Applicants will be notified electronically in writing if their LOIs were or were not successful. Applicants with successful LOIs will receive an electronic invitation to submit a full proposal. Applicants that did not receive an invitation to submit will not be considered.

The page limit for the LOI is two (2) pages, Arial font size 12, single spacing, and standard margins, including header, footer, labeling, and address information. If the LOI exceeds two pages, only information in the first two pages will be considered.

LOIs must include the following information:

- Name of lead PI, affiliation, and contact information (name of lead PI must not change from LOI to proposal submission).
- Name of Co-PI(s) with affiliation(s), if applicable.

⁵ Projects are not required to be physically located within the Delta; however, project activities must provide a demonstrable link(s) to the Delta. A link to the Delta could include hydrologic connection, tribal ancestral/spiritual connection, social/cultural connection, etc. The 'Delta' means the Sacramento-San Joaquin Delta as defined in Water Code Section 12220 and the Suisun Marsh as defined in Public Resources Code Section 29101 (Water Code Section 85058).

- Title of project.
- Indication of award type sought (Large Project or Small Project, see Section 5, Award Information and Project Categories) and which SAA Science Action(s) will be addressed.
- Geographic scope of the project.
- Brief discussion of the topic and approach, including how the specified science action(s) will be addressed.
- Approximate total budget and a list of all the collaborating entities who will receive funds as part of the award.

6.2 Project Proposal

Proposals will only be accepted from applicants whose Letters of Intent have been approved and who have received an invitation to submit a full proposal.

Applicants who do not receive an invitation to submit a proposal will not be considered.

All proposals must present clear hypotheses or cogent research questions that can be addressed using a scientifically-sound research design. Research may invoke disciplines within, for example, the biophysical sciences, social sciences, integrated social-ecological disciplines, traditional knowledge, and/or local place-based knowledge.

Proposals are encouraged to:

- Include substantial roles for undergraduate, graduate, and/or postdoctoral students, particularly those from underrepresented groups and a diversity of lived experiences;
- Have a plan for meaningful, early, and sustained engagement with community members or community organizations;
- Be based on or thoughtfully and respectfully incorporate tribal, traditional, and/or local knowledges, as applicable.

Proposals must meet all the requirements in Section 9 (Proposal Requirements) and must be submitted by the deadline in Section 3 (Schedule) using eSeaGrant: <http://eseagrant2.ucsd.edu/>. If you have never used California Sea Grant's eSeaGrant portal before, you will need to register for an account. You can change

the randomly-generated password once you log in successfully into the website. Contact sgproposal@ucsd.edu with any access issues related to eSeaGrant. **NOTE:** We advise not to wait until the last minute to submit your proposal; when eSeaGrant experiences high user traffic, you may experience page loading delays. It is the applicant's responsibility to get all required materials submitted before the deadline, and the submission deadline will not be extended.

7 Eligibility Requirements

7.1 Eligible Entities

All entities will be required to fulfill the award conditions of the [University Terms & Conditions \(UTC-220\)](#) and all pass-through terms and conditions from the Council unless otherwise agreed upon by the parties.

Eligible entities for agreements are entities that are in good standing and eligible to do business in California, including but not limited to:

- A California Native American Tribe;
- A California State agency, State college, or State university, including an auxiliary organization of the California State University (CSU);
- A State agency, State college, or State university from another state;
- A local governmental entity, including those created as a Joint Powers Authority and local government entities from other states;
- California community colleges including an auxiliary organization or foundation organized to support the Board of Governors of the California Community Colleges;
- The Federal government including National Laboratories;
- An auxiliary organization of the Student Aid Commission established under Education Code;
- A corporation (both domestic and foreign), partnership, limited partnership, or limited liability company, or other such similar organization that meets the requirements for doing business in California, including tax-exempt organizations such as 501(c)(3) non-profit organizations;
- A private independent business, including sole proprietors;
- A domestic or foreign private college, university, or educational or research entity.

For proposals involving multiple entities, a single entity must be identified as the primary lead entity, and a single proposal describing the entire project must be submitted by that entity. The budgets of those participating entities must be clearly identified in the comprehensive project budget submitted by the lead entity and not exceed the total project budget.

Eligible activities include, but are not limited to:

- Research and data collection, analysis, synthesis, management, and delivery;
- Development of resource management tools and technologies;
- Development of conceptual or quantitative models;
- Production of peer-reviewed journal articles, conference presentations, and communications for the scientific/management community;
- Science communication for broader audiences and/or community engagement;
- Project management and coordination of a multidisciplinary team;
- Institutional Review Board (IRB) review;
- Document/report preparation.

7.2 Ineligible Activities

Funds shall not be expended to pay:

- the design, construction, operation, mitigation, or maintenance of restoration projects or any Delta Plan covered actions,⁶ or
- implementation activities (e.g., construction or improvement of a capital asset), or
- land acquisition or easement purchase, or
- information technology (IT) services (e.g., hardware, software, web services).⁷

See Section 9.10.1 for Ineligible Costs.

8 Solicitation Focus

Proposals must directly address one or more of the 25 priority science actions

⁶ <https://coveredactions.deltacouncil.ca.gov>

⁷ Information technology as defined: <https://www.dgs.ca.gov/PD/Resources/SCM/TOC/10/10-2>

described in the 2022-2026 SAA⁸ and must either be physically located in the Delta⁹ or provide a demonstrable link to the Delta.¹⁰

This section, “Solicitation Focus,” provides a high-level summary of the SAA, listing actions under thematic management needs. **The management needs and the science actions are of equal priority and not listed in order of importance** and are cross-cutting and integrative and unlikely to be addressed by only one project. More points will be awarded to projects that address multiple components of a science action or multiple science actions, where appropriate. For more information about the 25 priority science actions that are the focus of this Solicitation, please review the full SAA document.

8.1 Management Need 1: Improve coordination and integration of large-scale experiments, data collection, and evaluation across regions and institutions.

Science Actions:

- A. Establish publicly accessible repositories, interactive platforms, and protocols for sharing information, products, and tools associated with monitoring and modeling efforts, in support of forecast and scenario development, timely decision-making, and collaborative efforts.
- B. Evaluate the individual and institutional factors that enable or present barriers to coordination, learning, trusting, and using scientific information to inform decision-making and resource sharing within and among organizations.
- C. Identify and implement large-scale experiments that can address uncertainties in the outcomes of management actions for water supply, ecosystem function, and socioeconomic conditions in the Delta.

⁸ The complete Science Action Agenda is available at <https://scienceactionagenda.deltacouncil.ca.gov>

⁹The ‘Delta’ means the Sacramento-San Joaquin Delta as defined in Water Code Section 12220 and the Suisun Marsh as defined in Public Resources Code Section 29101 (Water Code Section 85058).

¹⁰A link to the Delta could include hydrologic connection, tribal ancestral/spiritual connection, social/cultural connection, etc.

8.2 Management Need 2: Enhance monitoring and model interoperability, integration, and forecasting.

Science Actions:

- A. Evaluate and update monitoring programs to ensure their ability to track and inform the management of climate change impacts, emerging stressors, and changes in species distributions.
- B. Develop a framework for monitoring, modeling, and information dissemination in support of operational forecasting and near real-time visualization of the extent, toxicity, and health impacts of Harmful Algal Blooms (HABs).
- C. Enhance flood risk models through a co-production process with Delta communities to quantify and consider tradeoffs among flood risk management, water supply and water quality management, habitat restoration, and climate adaptation.
- D. Iteratively develop, update, and make widely available forecasts of climatological, hydrological, social-ecological, and water quality conditions at various spatial and temporal scales that consider climate change scenarios.

8.3 Management Need 3: Expand multi-benefit approaches to managing the Delta as a social-ecological system.

Science Actions:

- A. Conduct studies to inform restoration and approaches to protecting human communities that are resilient to interannual hydrologic variation and climate change impacts.
- B. Develop integrated frameworks, data visualization tools, and models of the Delta social-ecological system that evaluate the distribution of environmental benefits and burdens of management actions alongside anticipated climate change impacts.
- C. Identify how ecosystem restoration projects, in comparison to existing water management strategies, benefit and burden human communities, with an emphasis on environmental justice.

- D. Test and monitor the ability of tidal, nontidal, and managed wetlands and inundated floodplains to achieve multiple benefits over a range of spatial scales, including potential management costs, tradeoffs, and unintended consequences.
- E. Synthesize existing knowledge and conduct applied, interdisciplinary research to evaluate the costs and benefits of different strategies for minimizing the introduction and spread of invasive species, and to inform early detection and rapid response strategies.

8.4 Management Need 4: Build and integrate knowledge on social process and behavior of Delta communities and residents to support effective and equitable management.

Science Actions:

- A. Use multi-method approaches (e.g., surveys, interviews, oral histories, and/or observations) to develop an understanding of how human communities' values, and uses of cultural, recreational, agricultural, and natural resources vary across geography, demographics, and time.
- B. Synthesize existing data and collaboratively develop additional long-term data collection and monitoring strategies to address knowledge gaps on human communities within the Delta and those reliant on the Delta, with the goal of tracking and modeling metrics of resilience, equity, and well-being over time.
- C. Measure and evaluate the effects of using co-production or community science approaches (in management and planning processes) on communities' perceptions of governance and on institutional outcomes, such as implementation or innovation.

8.5 Management Need 5: Acquire new knowledge and synthesize existing knowledge of interacting stressors to support species recovery and ecosystem health.

Science Actions:

- A. Identify and test innovative methods for effective control or management of invasive aquatic vegetation in tidal portions of the Delta under current and projected climate conditions.
- B. Identify thresholds in the survival and health of managed fish and wildlife species with respect to environmental variables (e.g., flow, temperature, dissolved oxygen) and location-specific survival probabilities to develop strategies that will support species recovery.
- C. Determine how environmental drivers (e.g., nutrients, temperatures, water residence time) interact to cause HABs in the Delta, identify impacts on human and ecosystem health and well-being, and test possible mitigation strategies.
- D. Integrate and expand on existing models of hydrodynamics, nutrients, and other food web drivers to allow for the forecasting of the effects of interacting stressors on primary production and listed species.
- E. Quantify spatial and temporal patterns and trends of chemical contaminants and evaluate ecosystem effects through monitoring, modeling, and laboratory studies.

8.6 Management Need 6: Assess and anticipate impacts of climate change and extreme events to support successful adaptation strategies.

Science Actions:

- A. Evaluate how climate change, sea level rise, and more frequent extremes will impact habitats, water supply, water quality, sediment supply, long-term species persistence, primary productivity, and food webs.

- B. Evaluate individual and cumulative impacts and tradeoffs of drought management actions on ecological and human communities over multiple timescales.
- C. Evaluate the possible multi-benefits of management actions that promote groundwater recharge for ecological functions and water resilience under climate change (e.g., multiple dry year scenarios).
- D. Identify how human communities connected to the Delta watershed are adapting to climate change, what opportunities and tradeoffs exist for climate adaptation approaches (i.e., agricultural practices, carbon sequestration, nature-based solutions/green infrastructure), and how behaviors vary with adaptive capacity.
- E. Predict and test how water allocation and supply decisions, and ecological flow scenarios should change under projected climate change to maintain habitat conditions, access of target species to critical habitat, and interactions among native and invasive species.

9 Proposal Requirements

Eligible entities that wish to submit a proposal must first submit a LOI by the deadline set forth in the Solicitation as a prerequisite to be considered for an invitation to submit a full proposal (See Section 3, Schedule).

Applicants with successful Letters of Intent will receive an electronic invitation to submit a full proposal. The invitation to submit must be included with the proposal submittal.

Listed below are the requirements for a complete proposal package. For lead PIs affiliated with academic institutions, final proposals must be submitted by the institution's sponsored research office. For deadlines, see Section 3 (Schedule). For instructions on how to submit a proposal via eSeaGrant, see Section 6.2 (Project Proposal). For award information, see Section 5 (Award Information and Project Categories).

9.1 Signed Institutional Cover Page

The cover page provides basic summary information regarding the project and demonstrates support of the proposal from the applicants' institution. Applicants should download and use the fillable Cover Page Template (found in the fillable

template Excel Workbook and linked on eSeaGrant), enter this information, and upload this document as a PDF back into eSeaGrant. Please provide all requested information and obtain the required institutional signatures (e.g., from your sponsored projects office or equivalent). Summary budget information must match that requested in eSeaGrant budget forms. Each lead and subaward institution must submit a signed institutional cover page.

9.2 Project Summary/Abstract

The project summary **must not exceed 300 words** and should present a concise description of the proposed research in a way that is useful to a variety of readers without specialized expertise. **Project Objectives, Methodology, and Rationale** must be covered separately in the Project Narrative.

The project summary must be submitted through eSeaGrant. Please carefully follow the instructions in eSeaGrant; the project summary is the most widely consulted description of the project.

9.3 Project Narrative

The project narrative **must not exceed 12 pages**, Arial font size 12, single spacing, and 1" margins (including introduction, objectives, approach, illustrations, charts, tables, and figures, but excluding the cited references list). Any content beyond this length limit will not be reviewed.

The narrative must include the following:

9.3.1 *Introduction and Background*

Provide the rationale for the project (i.e., a well-defined problem or important opportunity) and a brief overview of the foundational literature. The introduction must include a clear, concise statement of the "real world" need for the research (rationale), how the project would address one or more SAA science actions, and a description of who might use the results and/or products and how they might use them.

9.3.2 *Objectives, Hypotheses and/or Research Questions*

Describe the project goals or objectives. List the hypotheses and/or research questions, which must clearly relate to the goals or objectives. Include anticipated outcomes for each hypothesis and/or research question.

9.3.3 *Work Plan*

Present the scientific/technical approach, experiments, procedures, and methods. Identify and discuss any new approaches (innovation) to solving problems and seizing opportunities in resource management. Describe necessary resources, parties responsible for each task, and an approximate schedule. Include information on roles for undergraduate, graduate, and postdoctoral students if relevant. Where appropriate, discuss how uncertainties in the work plan will be quantified and/or addressed. Discuss any potential pitfalls and contingencies.

For projects with community engagement, describe who will be involved and the approach to be used. Project teams are also encouraged to engage with collaborative workgroups or science initiatives (e.g., Interagency Ecological Program, Central Valley Project Improvement Act Science Integration Team, Collaborative Adaptive Management Team, Delta Regional Monitoring Program, Bay-Delta Social Science Community of Practice, Sacramento River Science Partnership) if there are potentially overlapping efforts. Large projects are required to include relevant letter(s) of support from a community group or management partner (see Section 9.6, Letter of Support from Resource Management Entity or Community Group).

Applicants that receive an award pursuant to this Solicitation will be expected to provide specific deliverables that include but are not limited to:

- Annual meetings with DSC and Sea Grant staff, including a kick-off meeting;
- Quarterly progress reports (see Appendix A: Award Reporting Template);
- Annual progress reports (see Appendix A: Award Reporting Template);
- Final progress report, including a lay-person or visual summary (see Appendix A: Award Reporting Template);
- Links to media coverage and any other communication products;
- Presentation(s) at relevant science conferences (e.g., Bay Delta Science Conference);
- Draft (and final) manuscripts resulting from the project;
- Links to where data, models, and any other final work products have been made publicly available;
- Institutional Review Board approval or exemption, if applicable;
- Revised Data Management Plan (see Section 9.8, Data Management Plan);

- Revised Engagement and Communication Plan (see Section 9.7.1, Engagement and Communication Plan);
- Addition of project information to the Delta Science Tracker;¹¹
- As requested, participation in a theme-based engagement workshop focused on the science-policy interface, to be hosted by DSP and/or Sea Grant; and
- Participation in the development of communication products developed by DSP and/or Sea Grant to communicate outcomes of the project.

9.4 Works Cited

List all cited references alphabetically in a consistent format including a DOI or hyperlink. The list of references **does not count toward the 12-page limit** of the narrative but must be included in the narrative PDF file.

9.5 Science Action Agenda Relevance

Describe, in a maximum of one page, how the proposed work will address one or more of the science actions in the 2022-2026 SAA and discuss the project's specific management relevance. This section **does not count toward the 12-page limit** of the narrative and must be provided in separate PDF file.

9.6 Letter of Support from Resource Management Entity or Community Group

Letters of support are required for proposals in the Large Projects category and optional, but encouraged, for proposals in the Small Projects category. Letters must demonstrate that an end user outside of the project team supports the idea of the project and is interested in the results or outcomes of the proposed research. If applicable, letters should also be submitted from end users who will provide monetary or in-kind support. Letters of support **do not count toward the 12-page limit** of the narrative and must be provided in separate PDF file.

End users can be natural resource management or community organizations with expressed interest in using project findings to support decision-making, advocacy, public welfare, and/or resource stewardship. They may include, but are not limited to, representatives of state, local, or federal agencies or water districts, tribal

¹¹ <https://sciencetracker.deltacouncil.ca.gov/>

governments or coalitions, local governments, community-based organizations, and non-governmental organizations. Participatory research models, in which end users are an active and engaged part of the research process, are encouraged but not required (for more information on participatory research, see Section 9.7, Broader Impacts and Equitable Engagement).

Letters of support **must not exceed two pages** each and must include a statement indicating the end user's level of interest in, and understanding of, the project. If multiple letters are to be included in the proposal, please consolidate all letters into a single PDF for uploading to eSeaGrant. Each letter must also describe:

- the history of collaboration, or whether this project represents a new collaboration;
- the group's role and specific contributions, including anticipated frequency of engagement;
- how the project will affect (benefit and/or burden) the group;
- whether and how the group will be compensated for its contributions; and
- *optional*: in-kind support and/or cost share, such as volunteer time or equipment.

Letters of support and identity of supporters and/or contributors shall be public information and will be made public. All proposals and letters of support shall be subject to conflicts of interest and bias review. Proposals may be rejected as a result of conflicts of interest and/or bias issues.

9.7 Broader Impacts and Equitable Engagement

This section must not exceed 4 pages and must describe how the information produced from the project will lead to broader impacts that could contribute to more effective and equitable management of the Delta. Broader impacts may be accomplished through the research itself, through activities that are directly related to the research, or through activities that are complementary to the research.

This section **does not count toward the 12-page limit** of the narrative and must be provided in a separate PDF file. This section must describe the process by which the researchers are engaging with Tribes and/or local communities (e.g., through trusted liaisons or community-based organizations) and/or employing participatory

research methods, if applicable. Participatory research is an umbrella term for an approach to research in which the community that is intended to be the beneficiary of the research is engaged in the research process itself. Early and ongoing engagement is an important tenet of participatory research. For example, researchers could develop questions and methods in partnership with the communities affected by the proposed research. For participatory research projects, explain how relationships will be developed and maintained during the course of the project.

Broader impacts could include outreach; education and mentorship; curriculum development and educator training at any level; public engagement with science via participatory research; equitable public access to information and resources; partnerships among academia, industry, and others; infrastructure for research and education; policy engagement such as testimony in a public hearing; and science communication.

Projects are encouraged to include substantial roles for undergraduate, graduate, and/or postdoctoral students, particularly those from underrepresented groups and a diversity of lived experiences.

Evaluation of broader impacts will include the applicant's Vulnerable Communities assessment (below, Section 9.7.2) and the depth of consideration given to community engagement plans. See Sections 11.2, Environmental Justice and 11.3, Community Engagement for guidance and resources.

9.7.1 Engagement and Communication Plan

Proposals must include plans for communicating project goals, messages, and results with relevant communities and interested parties. Instead of one-way science communication that is reactive or done after products are completed, making engagement an intentional, long-term process creates a context for mutually beneficial interactions between researchers and the people using their research, such as natural resource managers or communities. The DSP is asking researchers to think holistically, well before time of message delivery, to 1) identify the audiences for their work, 2) purposefully craft project messages and vehicles for delivery that effectively engage with these specific audiences, and 3) define metrics to evaluate the effectiveness of the engagement effort. At a minimum, plans must contain details about the communication goals, audience(s), frequency and method

of community engagement, the vehicle/media used, and how effectiveness of engagement will be measured. An optional template for Engagement and Communication is available online on the Delta Research Awards webpage [<https://caseagrant.ucsd.edu/funding/2025-delta-research-awards-proposal-solicitation>]. This section **does not count toward the 12-page limit** of the narrative and must be provided in a separate PDF file.

9.7.2 Vulnerable or Historically Marginalized Communities

Applicants are required to evaluate and describe any potential connections between the project and a community that is socially vulnerable or historically marginalized in the context of environmental change. For example, research may investigate or evaluate potential management actions to address one or more of the factors that contribute to higher social vulnerability to climate change impacts in a specific community. To identify vulnerable communities and estimate how a project may affect specific communities, applicants may use a tool such as the Delta Adapts Map Tool¹² or refer to results of the Council's interviews with Environmental Justice (EJ) community representatives (see Section 11.2, Environmental Justice). This section **does not count toward the 12-page limit** of the narrative and must be provided in a separate PDF file.

Governor Brown's 2015 Executive Order B-30-15 requires that, "State agencies' planning and investments shall...protect the state's most vulnerable populations." Vulnerable communities in the context of climate change are here defined as those that "experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality" (California's Office of Planning and Research: Integrated Climate Adaptation and Resiliency Program).

9.8 Data Management Plan

Proposals must include a data management plan (DMP), which is a written

¹² Mapping Tool of Social Vulnerability: https://deltascience.shinyapps.io/Delta_vulnerability_map/

document that describes the data that will be acquired or generated during the course of a research project, how those data will be managed and stored, and what mechanisms will be used to share and archive the data. If funding is required for data management and archiving, please make sure that the proposed budget includes funds for data management. This section **does not count toward the 12-page limit** of the narrative and must be provided in a separate PDF file.

Applicants are strongly encouraged to use reproducible workflows (e.g., script-based analyses in R; documentation of coding or QA procedures), follow FAIR (findable, accessible, interoperable, reusable) data principles, publish model code, and publish journal articles using open-access services.

Data management should be consistent with the following principles:

- Datasets are clearly labeled in a way that is understandable to general users.
- Data are interoperable (machine readable).
- Standard data and metadata formats are used for similar data types.
- Quality assurance/quality control (QA/QC) procedures are documented and followed.
- Appropriate steps have been taken to protect human subjects data (e.g., IRB review).
- Open and transparent data and metadata are accessible to the public in a reasonable time frame. All data generated and all models produced from awarded projects are **required to be made publicly accessible** no later than two years after the end date of the project, except where prohibited by law, regulation, or policy or security requirements, for example with human subjects data.

The DSP respects the sovereignty of Tribes and will not require disclosure of sensitive or confidential information, to the extent allowed by law. For projects based on traditional and tribal knowledges, the project team will be expected to work with the Council and/or Sea Grant to prepare and enter into a data sharing agreement that defines how project results and deliverables will be used, in alignment with the CARE (collective benefit, authority to control,

responsibility, and ethics) data principles (see Section 11, Resources for Applicants).

DMPs must be a maximum of 3 pages and include, at a minimum, the following information:

- How the DMP is aligned with the applicant's established data management approach (if applicable);
- Date the plan was created or updated;
- Point of contact for access to, or questions about, the data or model(s);
- Brief description of the data to be acquired or generated during the project, including approximate size (in MB) of the dataset;
- Brief description of metadata;
- Must meet California Department of Fish and Wildlife's Minimum Data Standards (<https://www.wildlife.ca.gov/Data/BIOS/Metadata>)
- Description of short-term storage and backup procedures, including physical and electronic resources;
- Procedures for long-term archiving and preservation of data and model(s)
- How data and model(s) will be accessed and shared; applicants are strongly encouraged to have a plan for sharing data directly with impacted communities;
- Format(s) in which data will be generated, maintained, and made available;
- Quality control/quality assurance procedures;
- Rights and requirements for data use and model(s), and how models will be licensed, description of types of likely confidential data/data protected by law anticipated and reasons why it would be confidential/protected by law; and
- Proposed data publishing organizations. See Section 11.4, Data Management, for a list of relevant open data portals.

DMPs are living documents. Therefore, successful applicants will be required to revise the DMP at least once and as needed if methods and/or data management

needs change.

For more guidance on DMPs, see Section 11 Resources for Applicants.

9.9 Compliance with Applicable Laws, Questionnaire, and IRB Certification

An Abbreviated Environmental Questionnaire¹³ is required with each proposal. Only one questionnaire is to be submitted per proposal, even if there are multiple institutions involved. For questions not applicable to the proposed research, please note N/A on the form. Leave blank the question about Grant/Project Number.

Projects must comply with all applicable laws and regulations, including the Delta Reform Act (Water Code Section 85000 et seq.) and labor and employment laws. Applicants are responsible for obtaining all permits necessary, and compliance with all applicable laws, rules, and regulations, in the performance of and to complete project work. Scientific studies that involve the collection of fish, wildlife, or endangered or rare plants must have a valid Scientific Collecting Permit or Plant Voucher Collection Permit.

For any research involving human research subjects, the applicant must ensure that subjects are protected from research risks in conformance with the relevant federal policy known as the Common Rule (Federal Policy for the Protection of Human Subjects, 45 CFR 690). Before data collection begins, all projects involving human subjects must provide documentation that they: (1) have approval from an Institutional Review Board (IRB) before issuance of an agreement; or (2) affirm that the IRB has declared the research exempt from IRB review. IRB approval or exemption will be a required deliverable of all projects involving human subjects. Applicants are responsible for ensuring that collection, storage, use, and dissemination of data concerning human subjects complies with all applicable laws concerning such data, including privacy laws.

9.10 Budget and Budget Justification

All budget sections require justification. Review the budget instructions to see what is expected as justification for each section. Please make clear what other sources

¹³ The Abbreviated Environmental Questionnaire is available at <https://seagrant.noaa.gov/funding/implementation/> under "NEPA Compliance."

of support (fiscal, personnel, equipment, or logistical), if any, will be used to support the work proposed. This section **does not count toward the 12-page limit** of the narrative and must be provided in a separate Excel file.

Applicants must budget for all costs associated with project delivery, for example coordination, permit fees, co-production costs associated with community engagement, travel, presentations to the Council, publishing, project reporting, science communication and broader outreach, data management, indirect costs, and document accessibility.¹⁴ Only costs identified in the resulting agreement will be eligible for reimbursement.

All entities must use an indirect rate not to exceed 35% unless an official third-party indirect cost rate has been negotiated. Applicants will be required to include documentation of negotiated indirect cost rates. Entities with an official negotiated rate may use it for their budgets. For proposals from multiple entities, the sum of the separate budgets for each entity may not exceed the total budget specified in the entire proposal.

9.10.1 Ineligible Costs

The following are examples of ineligible costs for reimbursement. This is not an exhaustive list:

- Costs incurred outside of the agreement term
- Costs related to the preparation of the proposal
- Land acquisition
- Out-of-state travel without prior written authorization
- Costs of the design, construction, operation, mitigation, or maintenance of Delta Plan covered actions
- Information technology (IT) services (e.g., hardware, software, web services)
- Routine printing production expenses (technical printing, such as for surveys, is an allowable expense)
- Equipment and materials that are part of the entity's regular course of business

Ineligible costs for reimbursement may be identified as cost share if funds will be

¹⁴ <https://webstandards.ca.gov/accessibility/>

spent during the agreement term. Ineligible costs may be removed from the budget of a project selected for funding.

9.11 Project Team Experience and Qualifications

Applicants must demonstrate that the project team has the experience, facilities, materials, equipment, and the capacity to successfully perform the proposed tasks within the term of the agreement. The project team includes all key personnel and other entities who will be performing the work described in the proposal. This section **does not count toward the 12-page limit** of the narrative.

Discuss any relevant prior projects, prior publications or examples of productivity, or previous collaborations that the work leverages. Where relevant, include the project team's experience with interdisciplinary and collaborative efforts, natural resource management, Delta communities, local and traditional knowledges, and outreach. Applicants may use the form in eSeaGrant or upload a PDF of the provided template.

9.12 Curriculum Vitae (CV)

An abbreviated curriculum vita (CV), **maximum of 2 pages for each person** of all key personnel (PI, Co-PI, other named personnel) must be included in the submission. CVs must include the key personnel's educational and employment history, a list of relevant publications and other outcomes (e.g., online or media resources, data releases, software), and participation in collaborative activities. This section **does not count toward the 12-page limit** of the narrative. Please combine all CVs into a single PDF.

9.13 Current and Pending Support

Please list other current and pending projects associated with all key personnel. Applicants may use the online form in eSeaGrant or upload a PDF. This section **does not count toward the page limit** of the narrative.

10 Proposal Review Procedure

Each proposal submitted by the deadline specified in Section 3 will undergo several steps in the review and selection process:

- 1) Proposals will be screened in an **administrative review** by CA Sea Grant;
- 2) Proposals that pass the administrative review will be advanced to a technical review by subject matter experts (**individual expert technical reviews**);
- 3) Individual expert technical reviews will be considered during one or more **technical evaluation panel(s)** during which the proposals will be reviewed, discussed and ranked;
- 4) The Council, in consultation with the Delta Lead Scientist, will make **funding decisions** based on consideration of the technical reviews, rankings, and factors described in Section 10.4, Funding Decisions.

Further details on each of these steps are below.

10.1 Administrative Review

Administrative review determines if the proposal meets the following criteria:

- 1) **The applicant and project are eligible.** See Section 7, Eligibility Requirements, for eligibility requirements.
- 2) **The proposal is complete.** The proposal has all required sections: see Section 9, Proposal Requirements.

Proposals that do not meet both criteria may not be considered eligible under this Solicitation.

10.2 Individual Expert Technical Reviews

All proposals that advance past administrative review will go through independent technical review by at least two external experts. Technical reviewers will be professionals in fields relevant to the proposed project and screened to avoid any potential conflicts of interest. Technical reviewers will evaluate each proposal in accordance with the Technical Review Criteria (Table 2) and may submit narrative comments that support their scores.

Table 2. Technical Review Criteria

Large Projects		Small Projects	
CATEGORY	MAXIMUM SCORE	CATEGORY	MAXIMUM SCORE
Scientific merit	25	Scientific merit	35
Relevance to SAA	25	Relevance to SAA	25
Broader Impacts and Equitable Engagement	18	Broader Impacts and Equitable Engagement	10
Project has a substantial social science component	7	Project has a substantial social science component	5
Feasibility	10	Feasibility	10
Reasonableness of budget	5	Reasonableness of budget	5
Team qualifications	5	Team qualifications	5
Data management plan	5	Data management plan	5
TOTAL POSSIBLE POINTS	100	TOTAL POSSIBLE POINTS	100

The following is a list of questions that will be provided as guidance for proposal reviewers:

- **Scientific Merit**
 - Will the work address key scientific uncertainties and fill important information gaps? The proposed research does not have to be hypothesis-driven but must, at a minimum, include a clear statement of research questions.
 - Is the underlying scientific basis or underlying knowledge base for the proposed work clearly explained, the need for the project justified, and is it based on the best possible information, such as current scientific literature, Tribal expertise, traditional knowledge, and local knowledge?
 - Are the methods, including data analysis and reporting, clearly linked to and appropriate for the objectives and research questions?
- **Relevance to the SAA**
 - How is the project responsive to the 2022-2026 SAA? Which science action(s) will be addressed? Does the project address more than one science action? How comprehensively does the project address the science action(s)?

- o *Large Projects Only*: Does the letter of support demonstrate an effective connection with management needs and meaningful engagement with practitioners, Delta communities, and/or resource managers?
- o Is the proposed work significant on the landscape and regional scale?
- o Will the information produced contribute to effective adaptive management or co-production (i.e., participatory knowledge development) of science for the Delta?
- o *If applicable*: Will the project leverage existing datasets or tools?
- **Broader Impacts and Equitable Engagement**. Small projects will be scored on addressing at least one component of community engagement, positive impact on vulnerable (i.e., environmental justice (EJ)) communities, or outreach and training, as described below. Large projects will be scored on the extent to which all three components are addressed.
 - o **Community and/or Tribal engagement**
 - Is there evidence that the project team has made good faith efforts to engage with community groups or Tribes?
 - How well does the proposed project incorporate realistic and ample opportunities for community partnership, participation, and/or input?
 - How will feedback from engagement be incorporated into or influence the proposed work?
 - Will there be any co-production of knowledge or participatory research with tribal experts or community groups?
 - o **Positive impact on vulnerable communities**
 - Will the research process and/or products have the potential for a meaningful positive impact on underrepresented groups or to promote EJ?
 - Will the process and /or products promote principles of justice, equity, diversity, and inclusion?
 - o **Outreach and Training**
 - Does the Engagement and Communication Plan explain how the information will be made directly available to the entities that will most benefit from it, including scientists, managers, and the public?
 - Does the proposed work include training and mentoring for students (K-12, undergraduate, graduate), post-doctoral scholars,

and/or educators (e.g., curriculum development), particularly those from underrepresented groups and with a diversity of lived experiences?

- Is there a plan for policy engagement, such as presentations to decision-makers?
- Will the proposed work include partnerships among academic, industry, and/or non-governmental organizations?
- **Project has a substantial social science component.** This criterion includes interdisciplinary projects with a substantial social science component.
 - Does the proposed project employ methods, theories, or data from any of the social science disciplines, including but not limited to political science, sociology, economics, anthropology, geography, or psychology?
 - Does the project meaningfully integrate information on social and natural dimensions of the Delta?
- **Feasibility**
 - Is there an adequate description of how each element of the project will be implemented (e.g., methods, materials, equipment, responsible parties)?
 - Does the schedule demonstrate a logical sequence and timing of project tasks? Is it feasible to complete the proposed work within the proposed time frame? Are potential pitfalls and contingencies described in sufficient detail?
 - Are the necessary facilities, equipment, and administrative capacity available to successfully perform and manage the proposed tasks?
- **Reasonableness of budget**
 - Is there justification for all costs in the budget?
 - Are all costs well justified and realistic for the work being proposed?
- **Team qualifications.** The DSP is committed to funding researchers from a broad range of institutions and career stages, including those who have not received prior funding from the DSP.
 - Does the project team have adequate expertise to complete the proposed work?
 - What is the project team's record of publication, productivity, management, engagement, training, and outreach?
- **Data management plan (DMP)**

- o Does the DMP address all sections described in the Solicitation, including best practices for open science?

10.3 Technical Evaluation Panel(s)

The Review Panel(s) will consider the individual reviews by technical experts and rank projects according to the review criteria listed in Section 10.2, Individual Expert Technical Reviews. Members of the review panel(s) will be professionals in fields relevant to the proposed projects and screened to avoid any potential conflicts of interest.

10.4 Funding Decisions

The Council will select proposals for awards in consultation with the Delta Lead Scientist (or if the Delta Lead Scientist Position is vacant, the Deputy Executive Officer for Science or the Deputy Executive Officer for Science's designee). Funding decisions will be made with consideration of the following:

- Review Panel feedback and rankings
- Distribution of projects across SAA science actions
- Budget requests relative to available funds
- Management relevance to the Delta
- Distribution of applicants' institutions and career stages

Any funding partners will select proposals in coordination with the Council and issue intent to award letters separately.

The intent to award does not guarantee an ensuing agreement. For proposals recommended for funding, intent to award letters will be distributed to the primary applicant and will include any requested changes to the proposal and/or budget in response to proposal review feedback. The Council reserves the right to revise funding decisions. To proceed to an executed agreement, successful applicants must provide any revisions and additional documentation as requested by Sea Grant in a timely manner.

11 Resources for Applicants

11.1 Science Action Agenda

- [The complete 2022-2026 Science Action Agenda](#)
- [Researcher's Guide to Funding and Tracking Priority Science](#)
- [Delta Science Tracker](#)
- Sommer, T., Conrad, J. L, & Culberson, S. (2023) Data to Decisions: How to Make Science More Relevant for Management of the San Francisco Estuary. *San Francisco Estuary and Watershed Science* 21(1).
<http://dx.doi.org/10.15447/sfew.s.2023v21iss1art1>

11.2 Delta Residents Survey Data

The 2023 Delta Residents Survey reached over 2,300 Delta and Delta-adjacent residents to:

- Characterize residents' sense of place;
- Assess well-being of a diverse and evolving population living in the region;
- Understand residents' experiences and perceptions of environmental and climate changes across the estuary;
- Evaluate residents' civic engagement and perceptions of governance in the region.

[Data from the 2023 survey](#) are now available.

11.3 Environmental Justice

- [Summary of the Council's interviews](#) with EJ community groups to understand their research needs
- The Council's [summary of EJ in the Delta](#)
- [Delta Adapts Mapping Tool of Social Vulnerability](#) shows the location of socially-vulnerable communities in the Delta. For more information, see the [Equity Technical Memo](#).
- [Delta Adapts: Creating a Climate Resilient Future](#)
- [California Healthy Places Index](#) is a mapping tool to explore the community conditions that impact life expectancy, including air and water quality, access to healthcare, housing, education, and income.
- [CalEnviroScreen](#) - Pollution Vulnerability Interactive Map

- [California EPA Environmental Justice Page](#)
- California Office of Planning and Research: [Integrated Climate Adaptation and Resiliency Program](#) (ICARP)
- [California Department of Justice Environmental Justice Page](#)
- [Federal EPA Environmental Justice Page](#)

11.4 Community Engagement

Proposals may, but are not required to, use the Council’s template for an engagement and communication plan, available on the Delta Research Awards webpage

[<https://caseagrant.ucsd.edu/funding/2025-delta-research-awards-proposal-solicitation>].

- Optional [survey](#) for researchers interested in making connections with Tribes and/or community-based organizations.
- [Community Engagement Guide for Sustainable Communities](#) from PolicyLink
- [Tips for Meaningful Community Engagement Draft Guidance Document and webinar on two case studies of meaningful engagement](#) from the CA Coastal Conservancy
- [Guide to Equitable, Community-Driven Climate Preparedness Planning](#) from the Urban Sustainability Directors Network
- [Environmental Justice Primer for Ports: The Good Neighbor Guide to Building Partnerships and Social Equity with Communities](#) from the federal EPA
- [Best Practices for Meaningful Community Engagement](#) from Groundwork USA
- [Centering Community in the Public Engagement Process](#) from Vision Zero

11.5 Data Management

Applicants may, but are not required to, use the [Data Management Plan Template](#) from the Interagency Ecological Program.

- Recommendations from [Environmental Data Summit white paper](#)
- Read more about the DSP’s approach to open data in the [November 2023 Delta Breeze](#).
- Carroll, S.R., Herczog, E., Hudson, M. et al. [Operationalizing the CARE and FAIR Principles for Indigenous data futures](#). Sci Data 8, 108 (2021).

- [AB 1755](#) The Open and Transparent Water Data Act of 2016.
- [CARE data principles](#) for Indigenous data
- California Water Quality Monitoring Council
 - [Open Data Fact Sheet](#)
 - [Data Management Plan Fact Sheet](#)
- [Open and Transparent Water Data Act \(AB1755\)](#)
- [Guidance from the Interagency Ecological Program](#)
- [CDFW Minimum Metadata Standards](#)
- Central Valley Project Improvement Act (CVPIA)-related resources
 - Data guidance for CVPIA Funded Work: [CVPIA-Data-Guidance Dec-2020.docx \(live.com\)](#)
 - SIT monitoring guidelines: [SIT-Monitoring-Guidelines Dec-2020.docx \(live.com\)](#)
 - Data Assets: [Data Assets - CVPIA Science Integration Team](#)

Data delivery can include publishing data to relevant open data portals, including but not limited to:

- Surface water data reported to [California Environmental Data Exchange Network](#) (CEDEN) (<http://www.ceden.org/>),
- [Environmental Data Initiative](#)),
- California Natural Resources Agency [Open Data Platform](#), <https://data.ca.gov/>,
- Groundwater data reported to [GeoTracker GAMA](#),
- Species observation data of tracked species (<https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>) reported to the <http://wildlife.ca.gov/Data/CNDDDB>) using the online [field survey form](#) or other digital method,
- Fish passage assessment data reported to the California [Fish Passage Assessment Database](#) (PAD),
- The [Knowledge Network for Biocomplexity](#) (KNB) <https://knb.ecoinformatics.org/> (supported by NCEAS), and
- [Data Observation Network for Earth](#) (DataONE): <https://www.dataone.org/>

(supported by NCEAS)

11.6 More About the Delta Stewardship Council

- Enabling legislation: Sacramento-San Joaquin [Delta Reform Act of 2009](#)
- [Delta Stewardship Council](#)
 - [Delta Plan](#)
 - [Delta Science Program](#)
 - [Delta Science Plan](#)
 - [Science Action Agenda](#)
- [Boundaries of the Sacramento-San Joaquin Delta](#)
 - [Map of Legal Delta](#), GIS
 - [Map of Legal Delta](#), PDF
 - [Statutory Definition of Legal Delta \(Water Code Section 12220\) and Water Code Section 85058](#)

11.7 State and Regional Resources

- [State Water Resources Control Board](#)
- [Sacramento River Science Partnership Charter](#)
- [California Water Action Plan](#)
- [California Wetland Monitoring Workgroup](#)
- [Surface Water Ambient Monitoring Program \(SWAMP\)](#)

12 Acronyms

CBO	Community Based Organization
Council	Delta Stewardship Council
CV	Curriculum Vita
DMP	Data Management Plan
DSP	Delta Science Program
EJ	Environmental Justice
IRB	Institutional Review Board

PST	Pacific Standard Time
PI	Principal Investigator
SAA	Science Action Agenda

13 Definitions

Co-production

Co-production is one type of participatory research in which information is produced by both the researchers and the community being researched. Participatory research is an umbrella term for an approach to research in which the community that is intended to be the beneficiary of the research is engaged in the research process itself. Both co-production and participatory research have core philosophies of inclusivity and of shifting the traditional paradigm in which researchers have power over people from whom information is extracted.

Collaboration

Sharing information and resources and modifying activities based on a common interest or objective that multiple parties involved jointly define. Collaboration is distinguished from coordination or cooperation, in which the interests or objectives are independently defined or pursued. Parties include scientists (including federal, state, and local agencies), academics, consultants, non-governmental organizations, community-based organizations, and interested public who are actively participating in scientific and management activities in the Delta.

Community Based Organizations (CBOs)

Organizations that bring community insights and perspectives from the following communities: socially vulnerable, underrepresented, indigenous and Environmental Justice populations. CBOs most relevant to this Solicitation live in the communities they work with, which are in or relevant to the Delta.

Delta

The Sacramento-San Joaquin Delta as defined in Water Code Section 12220 and the Suisun Marsh as defined in Public Resources Code Section 29101 (Water Code Section 85058).

Native American Tribe

References in the Solicitation to Tribes, tribal knowledge, and tribal experts/expertise include all federally recognized Native American Tribes recognized by the United States Department of the Interior, Bureau of Indian Affairs and listed annually in the Federal Register and all non-federally recognized California Native American Tribes listed on the California Tribal Contact List maintained by the Native American Heritage Commission as described in Section 65352.4 of the Government Code.

Nonprofit Organization

An organization qualified to do business in California and qualified under Section 501(c)(3) of Title 26 of the United States Code.

Public Agency

A California agency or department (including public universities), special district, joint powers authority, county, city, city and county, or other political subdivision of the state.

Subcontractor

Any third-party entity other than the project proponent/applicant that performs a portion of the Scope of Work and includes subrecipients, subawardees, independent subcontractors, and consultants.

Vulnerable Communities

Vulnerable communities, in the context of climate change ... are defined here as those that “experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality ([OPR ICARP Office of Planning and Research: Integrated Climate Adaptation and Resiliency Program](#)).

Appendix A: Award Reporting Template

To be completed by all contractors and sub-contractors

QUARTERLY PROGRESS REPORT #

Progress Report Completion Date: *MM/DD/YYYY*

Project Title:

Contract #:

Contract Term: (Agreement Start Date *MM/DD/YYYY* – End Date *MM/DD/YYYY*)

Report-Specific Performance Period: (Start Date *MM/DD/YYYY* – End Date *MM/DD/YYYY*)

Contractor Contact	Delta Stewardship Council Contact
Principal Investigator Name: Institution: Address: Phone: Email:	Name: Institution: Address: Phone: Email:

WORK PERFORMED FOR INVOICE PERIOD

List all project goals or objectives. Project goal and objectives are derived from the contract. Provide a brief description of progress or delays (current or anticipated) toward achieving each goal/objective.

Goal/Objective #1:

Narrative Progress Summary, Achievements, and Unanticipated Delays:

Goal/Objective #2:

Narrative Progress Summary, Achievements, and Unanticipated Delays:

...[list all]

DELIVERABLES CURRENT STATUS

In the deliverable column, list all contractual deliverables. For each deliverable provide the status. Include all deliverables with completed status from previous progress reports. For applicable statuses, specify and describe any current or anticipated delays. For each delay, explain how they will be resolved.

Project Information should be added to the [Delta Science Tracker](#) on an ongoing basis as soon as content is available throughout the course of the contract term.

Deliverable	Due Date	Status
1. Kickoff meeting with researchers and CA Sea Grant	Annually	<i>Examples</i> 1. Completed 1. Scheduled - anticipated annual meeting date dd/mm/yyyy 1. (if delayed) Delayed – personnel on not available due to unanticipated reasons. We plan to reschedule annual meeting to dd/mm/yyyy.

<p>1. Annual meeting #1 with DSC and CASG staff</p> <p>2. Annual meeting #2 with DSC and CASG staff</p> <p>...[list all]</p>	<p>Annually</p>	<p>1. <i>Scheduled - anticipated annual meeting date dd/mm/yyyy</i></p> <p>1. <i>(if delayed) Delayed – personnel on not available due to unanticipated reasons. We plan to reschedule annual meeting to dd/mm/yyyy.</i></p> <p>2. <i>Status – explanation (if applicable)</i></p> <p>...[list all]</p>
<p>Quarterly progress report and quarterly invoices</p> <p>1. Quarterly Progress Report & Invoice #1</p> <p>2. Quarterly Progress Report & Invoice #2</p> <p>...[list all]</p>	<p>Quarterly</p>	<p>1. <i>Quarterly Progress Report & Invoice #1</i></p> <p>2. <i>Quarterly Progress Reports & Invoice #2</i></p> <p>...[list all]</p>
<p>Annual Progress Report</p> <p>3. Year 1 Progress report</p> <p>4. Year 2 Progress report</p> <p>...[list all]</p>	<p>April 30th</p>	

<p>Project Information should be added to the Delta Science Tracker on an ongoing basis as soon as content is available throughout the course of the contract term.</p> <ul style="list-style-type: none"> · Add project · Output Type (e.g. Data spatial and non spatial, journal/news article, photo, videos, preprint, presentation, project fact sheet, report, website, other) · Final progress report, including lay-person or visual abstracts · Draft or final manuscripts 	<p>Add project within 1 year of start date</p> <p>Addition of project information to tracker: Ongoing -Throughout contract term</p>	
<p>Institutional Review Board approval or exemption, if applicable</p>	<p>within 1 year of start date</p>	
<p>Revised Data Management Plan</p>	<p>within 1 year of start date</p>	
<p>Revised Engagement and Communication Plan</p>	<p>within 1 year of start date</p>	
<p>Mandatory participation in a theme-based engagement workshop focused on the science-policy interface hosted by the DSP and/or Sea Grant</p>	<p>Within contract term</p>	

Participation in the development of communication products developed by DSP and/or Sea Grant to communicate outcomes of the project	Within contract term	
Final Progress Report	30 days before end of contract	

BUDGET SUMMARY - Quarterly Expenditure Calculation

Budget Category <i>(Use contract budget to accurately fill out summary)</i>	Total Contract Budget	Amount Invoiced this Reporting Period (A)	Amount Invoiced to Date Prior to this Reporting Period (B)	Total Expenditures (A+B)
Personnel: Salaries and Fringe Benefits	\$	\$	\$	\$
Travel	\$	\$	\$	\$
Materials & Supplies	\$	\$	\$	\$
Equipment	\$	\$	\$	\$
Subcontractor	\$	\$	\$	\$
Other Direct Costs	\$	\$	\$	\$
Indirect Costs %__	\$	\$	\$	\$
Total Cost	\$	\$	\$	\$

ANNUAL PROGRESS REPORT

Progress Report Completion Date:

Project Title:

Contract #:

Contract Term: (Agreement Start Date *MM/DD/YYYY* – End Date *MM/DD/YYYY*)

Report Specific Performance Period: (Start Date *MM/DD/YYYY* – End Date *MM/DD/YYYY*)

Contractor Contact	Delta Stewardship Council Contact
Principal Investigator Name: Institution: Address: Phone: Email:	Name: Institution: Address: Phone: Email:

WORK PERFORMED FOR INVOICE PERIOD

List all project goals or objectives. Project goals and objectives are derived from the (contracts/proposals). Provide a brief description of progress or delays (current or anticipated) toward achieving each goal/objective.

Goal/Objective #1:

Narrative Progress Summary, Achievements, and Unanticipated Delays:

Goal/Objective #2:

Narrative Progress Summary, Achievements, and Unanticipated Delays:

...[list all]

DELIVERABLES CURRENT STATUS

List the status of each deliverable for the past year. For applicable statuses, specify and describe any current or anticipated delays. For each delay, explain how they will be resolved.

Project Information should be added to the [Delta Science Tracker](#) on an ongoing basis as soon as content is available throughout the course of the contract term.

[Contractor to fill in deliverable description]

<i>Deliverable</i>	<i>Due Date</i>	<i>Status</i>
.		.
.		.
.		.
.		.
.		.
.		.
.		.
.		.
.		.
.		.
.		.

BUDGET SUMMARY – Annual Expenditure Calculation

Add annual expenditure calculations to [Delta Science Tracker](#).

Budget Category (edit these to exactly match contract budget)	Total Contract Budget	Amount Invoiced this Year (A)	Amount Invoiced to Date Prior to this Year (B)	Total Expenditures (A+B)
Personnel: Salaries and Fringe Benefits	\$	\$	\$	\$
Travel	\$	\$	\$	\$
Materials & Supplies	\$	\$	\$	\$
Equipment	\$	\$	\$	\$
Subcontractor	\$	\$	\$	\$
Other Direct Costs	\$	\$	\$	\$
Indirect Costs %__	\$	\$	\$	\$
Total Cost	\$	\$	\$	\$
AMOUNT ROUNDED FOR BUDGET PURPOSES ONLY:				

ANNUAL REPORT ADDITIONAL REQUIREMENTS:

Changes or Challenges

Have there been any changes in your approach? Have there been actual or anticipated challenges or delays? Have there been changes that significantly impact expenditures? How did you overcome these challenges? Describe.

Research Relevancy

How does your work contribute to addressing gaps in the SAA (based on SA, MQ, and MN)?

Research Highlight feature (include photo(s) for social media/web)

In 1-2 paragraphs, summarize any key findings, results, outcomes, and other important project updates to date for a non-science audience.

FINAL PROGRESS REPORT

Progress Report Completion Date: *MM/DD/YYYY*

Project title:

Contract #:

Contract term: (Agreement Start Date *MM/DD/YYYY* – End Date *MM/DD/YYYY*)

Contractor Contact	Delta Stewardship Council Contact
Principal Investigator Name: Institution: Address: Phone: Email:	Name: Institution: Address: Phone: Email:

FINAL DELIVERABLES SUMMARY

List the final status of each deliverable. Include all deliverables and statuses from previous reports.

[Contractor to fill in deliverable description]

<i>Deliverable</i>	<i>Due Date</i>	<i>Status</i>
.		.
.		.
.		.
.		.
.		.
.		.
.		.

BUDGET SUMMARY - Final Expenditure Calculation

Budget Category <i>(Use contract budget to accurately fill out summary)</i>	Total Contract Budget	Total Expenditures
Personnel: Salaries and Fringe Benefits	\$	\$
Travel	\$	\$
Materials & Supplies	\$	\$
Equipment	\$	\$
Subcontractor	\$	\$
Other Direct Costs	\$	\$
Indirect Costs %__	\$	\$
Total Cost	\$	\$

FINAL REPORT ADDITIONAL REQUIREMENTS:

- § Two paragraph summary or abstract for a non-scientist audience**
- § Provide a thorough discussion of research findings**
- § Provide a thorough discussion of major contributions to the field(s)**
- § Provide a thorough discussion of management implications of project findings and link to SAA. List all science actions that are relevant and how your work contributes to addressing SAA.**
- § Provide photos and/or videos to highlight the project social media/web**
 - For each photo and video provide photo credit and alt text (one sentence description of photo or video)**