

Memorandum

U.S. Fish and Wildlife Service
California Department of Fish and Wildlife
U.S. Bureau of Reclamation
California Department of Water Resources

Date: July 14, 2022

To: Requestors of cultured Delta Smelt originating from the University of California Davis Fish Conservation & Culture Laboratory from the 2023 year-class

From: Culture and Supplementation of Smelt Steering Committee

Subject: Annual process to request Delta Smelt from the University of California Davis Fish Conservation & Culture Laboratory from the 2023 year-class

This memorandum provides information on how to request cultured Delta Smelt from the 2023 year-class, including an updated request form (see attached) and information on criteria that will be used to evaluate proposals received.

Please note, **there will only be one solicitation for proposals for 2023 brood year fish**. Requests must be submitted to the director of the FCCL, Dr. Tien-Chieh Hung at thung@ucdavis.edu on or before **September 30, 2022**.

The primary intent of this solicitation is **to solicit research proposals that address priority management needs**, as outlined below. Requests for other uses of cultured Delta Smelt, such as education, will be considered but are a secondary priority and will only be approved if fish are available after all research requests are accommodated.

What is the CASS?

In October 2019, the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the U.S. Bureau of Reclamation, and the California Department of Water Resources established the Culture and Supplementation of Smelt (CASS) Steering Committee (SC); a charter is available upon request. The purpose of the CASS SC is to implement science-based activities to secure and stabilize the wild Delta Smelt population through a coordinated propagation and supplementation program. To facilitate cooperative and consensus-driven recommendations to agencies, the CASS SC will receive guidance from working groups (WG) charged with providing technical guidance concerning: (1) Captive Propagation (CPWG), (2) Research (RWG), and (3) Regulation Coordination (RCWG).

The CASS SC identified an early need for improved documentation and prioritization of the usage of cultured Delta Smelt propagated at the University of California Davis Fish Conservation & Culture Laboratory (FCCL) for optimal information gain and high management relevance. To this end, the CASS SC has established a process for soliciting, evaluating, and approving requests of cultured Delta Smelt from the 2023 year-class. Before undertaking a study that incorporates cultured Delta Smelt, requestors must submit a Cultured Delta Smelt 2023 year-class Fish Request Proposal (see page 4) and any additional documentation.

Please note the CASS is not a regulatory entity and does not issue state and federal permits. Investigators are responsible for pursuing regulatory permits separately and those will need to be in place before fish can be provided. Permits required may include CDFW scientific collection permits for CESA species and associated memorandums of understanding (MOU), and USFWS 10(a)1(A) recovery permits. For more information regarding state regulatory requirements, please contact Jeff Holt at Jeffrey.Holt@Wildlife.ca.gov. For more information regarding federal regulatory requirements, please contact Stephen Curry at stephen_curry@fws.gov.

Proposal evaluation by the CASS

To ensure that cultured Delta Smelt can be used to maximal information and conservation management gain, the CASS has developed a list of priority study categories based upon the USFWS Delta Smelt Supplementation Strategy as are being applied by the Experimental Release Technical Team (ERTT) (please contact Katherine Sun (katherine_sun@fws.gov) with specific questions) as well as the Delta Smelt Hatchery and Genetic Management Plan (HGMP; please contact Dr. Tien-Chieh Hung (thung@ucdavis.edu) with specific questions). These categories, in priority order are:

1. Experimental Release and Supplementation Implementation Practices
2. Hatchery Practice Improvements
3. Studies to Inform Management Decisions
4. Mechanistic Understanding and Monitoring of Survival and Growth
 - a. Genetic
 - b. Habitat
 - c. Pathogen
 - d. Entrainment
5. Fundamental Biology and Physiology
6. Other

Proposals requesting the use of cultured Delta Smelt will be evaluated based upon whether they address one or more of the above management priorities. Proposals will also be evaluated based on:

- Management need

- Urgency of the information need
- Quality of the Fish Request Proposal
- Study objectives and methods
- Communication plan (required)

If the proposal involves co-project investigators or collaborators, please ensure that these investigators have reviewed the proposal and are familiar with the proposal requirements and evaluation criteria.

Proposals will be reviewed and prioritized by the CPWG, RWG, and RCWG and each working group will provide a recommendation as to whether to approve or deny the request to the SC. Requestors may be contacted by the working groups if there are minor questions or concerns about the request. Requesters will receive notification of fish allocation decisions by December 15, 2022.

Courtesy review

If a letter of support from the CASS is required for investigators to apply for funding, a Fish Request Proposal (see pages 4-6) should be submitted three months in advance of the funding solicitation due date for a courtesy review. The CASS will return written documentation (an email) of the recommendation after the proposal has been reviewed for hatchery feasibility, scientific merit, and permissibility by the CPWG, RWG, and RCWG chairs, respectively, and the SC has been updated. The courtesy review is a red flag review only and does not preclude the submission of the Fish Request Proposal for fish allocation; a Fish Request Proposal must still be submitted before the annual CASS deadline.

Multi-year proposals

The CASS solicits Fish Request Proposals on an annual basis to enable efficient hatchery management at the FCCL and to allow for adequate time for communication among agencies about experimental release and supplementation priorities. However, to prevent investigators from having to submit proposals for the same study across years, there is an option to submit a Fish Request Proposal for a multi-year study during the annual solicitation cycle. If a multi-year study is desired, investigators should provide a justification as part of the Fish Request Proposal (see section h) that details why it is necessary for the study to span multiple years. This option shall not be used as a means to subvert the annual solicitation cycle and even when desired, the multi-year aspect of the study may not be approved or only partially approved. Please note, as with any fish request, provision of cultured Delta Smelt in future years cannot be guaranteed and is subject to the prioritization of refugial population, supplementation, experimental release, and other priorities of the agencies.

If a multi-year study is approved, the investigators should submit a short description of the fish needed (sections f.1 and f.2) in years after the first year to Dr. Tien-Chieh Hung on or before the annual proposal deadline (**September 30, annually**).

Out-of-cycle proposals

The submission of out-of-cycle (OOC) proposals should be avoided as the CASS cannot guarantee timely evaluation and the return of a decision and fish are unlikely to be available. If an OOC proposal is required, the requestor should submit (1) a Fish Request Proposal (see page 4), and (2) a <1 page justification letter detailing why the requestor could not meet the annual deadline and why the study cannot be postponed to the next year. Additional information regarding out-of-cycle requests can be obtained by contacting Nora De Cuir (cass@kearnswest.com).

CULTURED DELTA SMELT 2023 YEAR-CLASS FISH REQUEST PROPOSAL INSTRUCTIONS

Describe the proposed study by filling in the following sections (expected length is approximately 3-5 pages). All elements are required or a proposal may be returned and if resubmitted, considered as an OOC proposal. However, if the proposal is for non-research activities such as education, it is not necessary to reply to items f3, f4, h, i, or j.

- a. Title of the Fish Request Proposal
- b. Names, email addresses, and phone numbers of the Project Investigator and all Co-Investigators
- c. Introduction and relevant background, including cited literature
- d. Project need
- e. Objectives
- f. Methods
 1. Describe the fish needed (minimum and maximum) for the proposed study;
 - i. Life stage (approximate range)
 - ii. Number
 - iii. Sex (if applicable)
 - iv. Other (e.g., desired number of families)
 - v. Date needed
 2. Describe the study location (if applicable)
 3. Describe the study design
 4. Describe the experimental techniques and equipment
 5. Describe the planned disposition of fish specimens upon completion of the study
- g. Study timeline
- h. Justification for a new multi-year study, if desired (suggested length is one paragraph)
 1. Describe why the study must span multiple years.
- i. Anticipated results
- j. Redundancy
 1. Describe how the project will answer questions not answered by

earlier research

2. Explain how the proposed project will be coordinated with past and ongoing research studies

k. Management implications

1. Describe how the study will inform Delta Smelt population supplementation; **identify biological opinion, Supplementation Strategy, or HGMP tasks by number and name, if applicable**
2. Describe the relevance of the study to management; identify management document tasks by number and name, if applicable

l. Funding

1. Identify contracts and agreements held for the proposed study (attach copy or give title, funding organization name and address, date of signature, and duration of contract)
2. State whether full funding will be available for the completion of the proposed activity

m. Student support

1. State whether the study will be done for a student project, the name and school affiliation of the student, and the nature of the work (i.e., senior thesis, master's thesis, Ph.D. dissertation, or postdoctoral project)

n. Permitting

1. Have this study been authorized under (1) a USFWS 10(a)1(A) recovery permit, and (2) a CDFW MOU. YES _____ NO _____
2. If yes, provide permit numbers.
3. If no, have you submitted a permit application to USFWS and CDFW? YES ___ NO ___ Date submitted: FWS _____ CDFW _____
4. Would a change/addition in the List of Authorized individuals under (1) a USFWS 10(a)1(A) recovery permit be needed? YES _____ NO _____

o. Communication plan (required)

1. To assist with adaptive management decision making, the communication plan should include regular and timely contact with

management agencies, describe how study results will be communicated to management agencies (e.g., emails, meetings, phone calls, presentations, reports, publications) and approximate time frame.

2. A one paragraph abstract on study progress (or final reports or publications) should be submitted to the CASS twice yearly on March 31 and September 30, provided fish have been received. Reports should be emailed to Nora DeCuir (cass@kearnswest.com).
3. Describe how study results will be disseminated to the public and stakeholders (e.g., presentations, reports, publications) and approximate time frame for when dissemination will happen.
4. Describe whether and how study data will be made publicly accessible.

p. Literature cited