



## Memorandum

Date: June 25, 1998

To: BDAC Ecosystem Restoration Work Group

From: Marti Kie *Marti Kie*  
CALFED Bay-Delta Program

Subject: Conservation Strategy Data Base and Review of Example Species Table

The CALFED Bay-Delta Program's Conservation Strategy Team, consisting of CALFED and agency staff, is responsible for preparation of the CALFED Conservation Strategy. The Conservation Strategy, when completed, will provide the framework for compliance with the Federal Endangered Species Act, the California Endangered Species Act, and the Natural Community Conservation Planning Act, and ensure that the overall CALFED Program conserves, recovers, or assists in recovery of species and habitats covered under the Conservation Strategy.

The Conservation Strategy Team is currently working with a contractor and U.S. Fish and Wildlife Service and California Department of Fish and Game staff to complete draft Covered Species lists for review by the BDAC Ecosystem Restoration Work Group. The team is also beginning to develop a database which will be used to compile species and habitat information, CALFED Program actions, the effects of those actions on species, and mitigation and monitoring needs. We are seeking any comments or suggestions which will facilitate development of an effective database for the Conservation Strategy.

Below are our preliminary proposed contents of the Conservation Strategy database, provided for your review and comment.

- A list of species that will either be covered in the Conservation Strategy or will be considered for coverage.
- CALFED regions and ecological zones, with a list of the species that occur in each region and zone.

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### CALFED Agencies

**California**

- The Resources Agency
- Department of Fish and Game
- Department of Water Resources
- California Environmental Protection Agency
- State Water Resources Control Board

**Federal**

- Environmental Protection Agency
- Department of the Interior
- Fish and Wildlife Service
- Bureau of Reclamation
- U.S. Army Corps of Engineers

- Department of Agriculture
- Natural Resources Conservation Service
- Department of Commerce
- National Marine Fisheries Service

- Species information, such as legal status, historical and current distribution, population status, habitat requirements, designated critical habitat, life history, reasons for decline, current conservation efforts (planned or completed) that are not part of the CALFED Program, recovery goals or requirements (to the extent known), research or monitoring data gaps.
- CALFED's goal for the species. The CALFED Program objectives include supporting sustainable populations of plant and animal species in the Bay-Delta. Thus, for some listed species, the goal is to *ensure recovery*. For others, particularly those species which are not wholly dependent on the Delta, the goal will be to *contribute to their recovery*. For other special status species, CALFED's goal will be to *ensure their conservation*.
- Habitat types used by the species.
- Program actions, as identified in the Common Programs and the preferred alternative (once selected).
- Summary Outcomes, which are defined as the general CALFED Program Objectives and Targets which may affect the species. Examples of Summary Outcomes, taken from the ERPP, are "restore 30,000 to 45,000 acres of tidal freshwater marsh" or "implement programs to eradicate invasive non-native plants."
- The effects of each of the actions (beneficial, neutral, and adverse) on each of the species and/or habitats.
- A list of potential mitigation strategies ("3M Strategies") which would: (1) *minimize* adverse effects to species; (2) *maximize* beneficial effects; and (3) *mitigate* (compensate), when necessary, for unavoidable adverse effects. Information developed in this category may be used to refine the ERPP, as well as to identify strategies to be used with other Program components.

Using the database outlined above, the Conservation Strategy Team will assess the effects of the CALFED Program actions for each covered species and/or habitat. The Team will also assess the appropriate "3M" strategies and the overall effect, including mitigation, of the Program on each species and/or habitat. Finally, an analysis of the overall effect for all Program actions will provide the cumulative effect of the CALFED Program on each species.

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The Conservation Strategy Team will also assess the level of certainty that the overall effects on species are accurate, and identify research and monitoring needs. In some instances, overall effects may be based on precise empirical information, but in most cases it is expected that applied research, monitoring, and adaptive management will be necessary to ensure that the Conservation Strategy is fully and successfully implemented. Research, monitoring, and adaptive management needs identified through the Conservation Strategy may be implemented through CMARP or by action agencies.

Using the database, it will be possible to develop a wide variety of informational tables which will likely serve as the backbone of the Conservation Strategy document(s). To date, the Conservation Strategy Team has developed several "pilot" tables to experiment with format and content. We have attached one of the pilot tables, for the Delta plant, Mason's lilaeopsis, for your review and comment. Please note that the table is only partially complete; not all Program actions or outcomes affecting the species are included. However, this example is representative of the type of information we anticipate presenting in the Conservation Strategy for each species.

Also enclosed to assist in your review of the pilot table for Mason's lilaeopsis are: (1) a conceptual diagram which illustrates the overall approach of the Conservation Strategy tables; (2) a generic "Table X" which indicates the type of information to be presented in each column; and; (3) a partial "code key" illustrating how CALFED Program actions will be coded for use in the Conservation Strategy tables.

In reviewing these sample tables, we would like your input on their presentation, readability, and organization. Does the format and information make sense? Is it useful to have lists of the Applicable Programmatic Actions for each Summary Outcome on the table? Should other information from the database (as listed above) be included in the table?

We would appreciate receipt of comments on the proposed database and example species table by July 21, 1998. Comments may be provided to:

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Enclosures