

Integration of the Multi-Species Conservation Strategy and the Ecosystem Restoration Program Plan.

Description of the Mechanics

Attached are examples of the mechanical effort that incorporates elements of the MSCS into a revision of Volume I and Volume II of the ERP. The materials for the integration include the June 1999 versions of the MSCS and the ERP (CALFED Bay-Delta Program Draft Programmatic EIS/EIR Technical Appendices, June 1999).

Following is a page by page description of where the MSCS is discussed in the ERP or page number where additional MSCS information has been added. Generally, elements from the MSCS are included verbatim from the original.

Changes to Volume I: Ecological Attributes of the San Francisco Bay-Delta Watershed:

Pages 39 and 40: The introductory ERP section discusses the MSCS, species designations, and conservation measures. [Note: the term "covered species" will be replaced by the term "evaluated species" throughout the ERP.] This section is generally a verbatim restatement of information in the MSCS.

The primary elements of the MSCS which are transferred to the Volume I in these examples include the "Conservation Measures that Add Detail to CALFED Program Actions" taken verbatim from MSCS Attachment 5 -- Prescriptions and Conservation Measures for Species.

ERP Volume I is organized by 1) ecological processes, 2) habitats, 3) species, and 4) stressors. The MSCS conservation measures that add detail were developed primarily on a species by species basis and are directly and easily transferrable to the appropriate species section. There is a strong link between species and habitat and many habitat related MSCS conservation measures are transferrable to the appropriate habitat section. Some stressor reduction measures are included in the MSCS and these are transferrable to the appropriate ERP stressor section. Measures that are directed at ecological processes are not directly transferrable and judgment is required to select or distribute measures that apply to the appropriate ecological process section.

Ecological Processes

Pages 47-56 are the complete text of the proposed revision for Central Valley Streamflow ecological process section. The ERP ecological processes would include a section on Linkage to Multi-Species Conservation Strategy (page 52) to provide a narrative clarification or description of the role or value of the process to habitat improvement and species recovery. Relevant MSCS conservation measures (taken verbatim from MSCS Attachment 5) are found on pages 55 and 56. Selection of the set of conservation measures for ecological processes is subjective and would benefit from additional technical review and advice.

The remaining ERP ecological processes could be treated in a similar manner, e.g., provide a narrative linking the process to restoration of habitats and species recovery and list conservation measures that are intertwined with the process.

Habitats

Habitats are important elements in both the ERP and MSCS. Page 108 is a variation of a table from the MSCS which attempts to relate the ERP habitat designations to the MSCS classification system.

Pages 129-136 are the complete text of the proposed revision for the Saline Emergent Wetland section. Page 129 includes a restatement of the MSCS habitat description.

Page 131-132 provides a listing of joint MSCS and ERP species and other MSCS species that would potentially benefit from improvement of saline emergent wetlands. The species list is derived from tables presented in MSCS Attachment 4 Summary of Potential Beneficial and Adverse Program Effects and Conservation Measures. The description of the list in the ERP section is a variation of the associated evaluated species potentially affected by the program. It is portrayed in the ERP revision as "species potentially benefiting from restoration."

Pages 134-136 list verbatim the conservation measures directed toward saline emergent wetlands. There is a lengthy list of conservation measures regarding the geographic areas emphasizing individual species. The last conservation measure addressing geographic area (page 135, left column, third bullet) is a suggested compression of the 7 previous bulleted items into one item.

Species

Pages 255-259 include the complete text of the proposed revision for the Suisun song sparrow.

Pages 258-259 include the verbatim inclusion of all Suisun song sparrow conservation measures that add detail to CALFED program actions (MSCS Attachment 5). Other species listed in the MSCS Attachment 5 tables would be treated the same.

Stressors

Pages 427-432 include the complete text of the proposed revision for the ERP section on water diversions, a stressor.

Pages 431-432 include the verbatim conservation measures that mention water diversion and entrainment.

Changes to Volume II: Ecological Management Zone Visions

The proposed revisions to the ERP Volume II include incorporation of MSCS "Prescriptions for Species Goals" derived from Table 3-1 of the MSCS and inclusion of the MSCS conservation measures that add detail to program actions for each species.

The only section of ERP Volume II that would change to accommodate integration of MSCS prescriptions and measures is the ERP Population Targets and Programmatic Actions for Species and Species Groups. This section is a species-by-species listing of ERP population targets, general programmatic action and rationale. It is proposed to include the MSCS species prescriptions and species conservation measures in this section.

Page 14 (from Volume II) is the ERP section on delta smelt. Page 14 includes the MSCS species prescription and page 15 lists the conservation measures taken verbatim from MSCS Attachment 5.

General Comments

- Mechanical integration of MSCS information into Volume I is generally straightforward. Additional technical review and collaboration is needed to craft narrative linkages of ecological processes to MSCS conservation measures.
- Restating MSCS conservation measures in Volume II of the ERP section on species population targets is redundant. However this is consistent with the ERP treatment of species.
- One variation could be to incorporate MSCS conservation measures into the Volume II Restoration Targets and Programmatic Actions section at the end of each ecological management zone write up (14 total). Placement of conservation measures there is **not recommended** as listing the ERP target, MSCS conservation measure and ERP programmatic action will confuse the reader into believing there is an additional set of actions to be implemented.
- Nomenclature for prescriptions, strategic objectives, long-term objectives, short-term objectives, Stage 1 expectations, population targets, and rationale need to be reviewed and revised for clarity and to avoid redundancy.

The following information displays some of the terminology found in the MSCS and the ERP. Delta smelt is used as the example.

Prescriptions and Targets

MSCS

- Prescriptions for Species Goals (Table 3-1)

ERP - Volume I

- Strategic Plan Objectives (Table 12)
- Long-term Objectives (Each vision)
- Short-term Objectives (Each vision)
- Stage 1 Expectations (Each vision)

ERP - Volume II

- Species Population Targets and Programmatic Actions
- Rationale (occasionally has numbers)

Example - delta smelt

MSCS prescription: The fall mid-water trawl survey in September and October must capture delta smelt in all zones in 2 out of 5 consecutive years and in at least 2 zones in 3 out of the 5 consecutive years, and in at least 1 zone in all 5 years; and the 5 consecutive years must include 2 sequential extreme outflow years (i.e., at least one critical or dry year followed by a critical, dry, or wet year) and the fall mid-water trawl catch for September and October must exceed 239 for 2 out of 5 years and not fall below 84 for more than 2 consecutive years. (USFWS 1995)

Strategic Plan Objective: Restore delta smelt to the Delta and Suisun Bay.

Long-term Objective: To restore delta smelt abundance to levels that existed in the 1960s and 1970s, as measured over a period of at least 10 years.

Short-term Objective: Achieve the recovery goals for delta smelt identified in the Delta Native Fishes Recovery Plan.

Stage 1 Expectations: In 7-10 years, the delta smelt population indices should be within the same range as during 1990-1998. The basic factors limiting delta smelt distribution and abundance should be determined (e.g., reduced food supply, interactions with non-native species, negative effects of diversions) and, where feasible, overcome through habitat and ecosystem process restoration.

ERP - Volume II

Species Population Targets and Programmatic Actions: Meet Delta Native Fishes Recovery Plan goals which include recovery goals tied to the fall midwater trawl survey and distribution of catch in various trawl survey zones.

Rationale: Restoration of delta smelt should be assessed when the species satisfies distributional and abundance criteria. Distributional criteria include: (1) catches of delta smelt in all zones 2 of 5 consecutive years, (2) in at least two zones in 1 of the remaining 3 years, and (3) in at least one zone for the remaining 2 years. Abundance criteria are: delta smelt numbers of total catch must equal or exceed 239 for 2 out of 5 years and not fall below 84 for more than two years in a row. Distributional and abundance criteria can be met in different years. If distributional and abundance criteria are met for a five-year period the species will be considered restored. Delta smelt will meet the remaining recovery criteria and be considered for delisting when abundance and distributional criteria are met for a five-year period that includes two successive extreme outflow years, with one year dry or critical. Both criteria depend on data collected by the California Department of Fish and Game during the fall midwater trawl, during September and October (U.S. Fish and Wildlife Service 1996).