

To: Carol Howe, CALFED Consultant Team  
From: Mary Dunne, CDFG  
Date: 6-10-97

ANS

Following are CDFG Comments to "Work in Progress Water Quality Impacts Technical Report" - *Impact Analysis*  
Considering what some believed was a short review time (obviously sheltered), a few of our reviewers requested they be re-solicited to review more complete versions, and submitted only brief comments at this time.

### General Comments

•Since this is recognized as a 'work in progress', comments are limited to format and content, excluding minor edits.

•There is a discrepancy in the representation of some of the Delta habitat types between this document and the Ecosystem Restoration Program Plan. For instance, shallow water habitat is a *type* of tidal perennial aquatic habitat, and open water habitat (deep and shallow) is a *type* of nontidal perennial aquatic habitat. Clarification of habitat type is necessary since it effects the magnitude of the programmatic action and subsequent impacts. I have included a summary (S1) of the Delta habitat types as described in the ERPP (May 20;draft) at the end the comment section to help to clarify some of the specific comments.

Habitat types

- The tables outlining Programmatic Actions are effective as quick reference.
- The format is consistent and easy to follow.

### Specific Comments

Page 6, Table ERP-1

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*Action 1 and Action 2:* Tidal emergent wetlands referred to in Action 1, and tidally influenced freshwater marsh referred to in Action 2 are the same habitat type. The ERPP defines the habitat type as Fresh Emergent Wetland Habitat (tidally influenced; see S1). To avoid confusion, consider standardizing terminology.

Habitat types

The ERPP denotes a Delta Channel Hydraulic Programmatic Action to restore "3,000 to 4,000 acres of tidal perennial aquatic habitat and 20,000-25,000 acres of tidally influenced freshwater marsh." is "not additive to acreages presented (30,000 -45,000) in the targets and programmatic actions for habitat. Should part of Action 1 and all of Action 2 be deleted? Should there be only one Action to restore tidal emergent wetlands (fresh emergent wetland habitat-tidal) at an acreage of 30,000 to 45,000 as represented in the ERPP?

### Page 6-7, Action 1: Restore Tidal Perennial Aquatic Habitat and Tidal Wetlands

Further review and clarification of the ERPP Programmatic Actions would help identify inconsistencies in the General Description of Action. For instance: open water habitats are types of nontidal perennial aquatic habitats, and agricultural land conversion will be to tidal emergent wetland (which is not an aquatic habitat).

### Page 9-10, Direct Long-term Impacts Compared to Existing Condition

*Salts:*, Consider deleting the last paragraph on page 9, and the first paragraph on page 10. Paragraph 5 on page 9, with the addition of paragraph 2 (one sentence) from page 10, adequately conveys the concept of no net salt load change with increased concentrations.

*Page 11, Action 2: Restore Tidally Influenced Freshwater Marsh*

*General Description of Action:* In addition to setback levees, flooding islands, and flooding peninsulas, acreages will be increased by development on channels islands and upper ends of dead-end sloughs.

*Page 15, Action 4: Restore Shallow Water Habitat*

The General Description of Action misrepresents the type of habitat being created; shallow water aquatic habitat is a tidal aquatic habitat type, whereas shallow open water aquatic habitat is a non-tidal aquatic habitat type. Inclusion of emergent vegetation denotes some sort of wetland restoration effort which is not the objective of this Action. Consider changing the last sentence of the paragraph to read: 'Aquatic habitat will consist of shallow water and intertidal mudflat habitat.'

Change the term "open water" to shallow water habitat where it exists throughout the impacts sections.

*Page 19, Action 9. Restore Riparian Habitat*

*Direct Short-Term Impacts:* Creating setback levees is an acceptable method for riparian restoration, however the setback distances required to maintain a viable riparian system are much greater than those for other habitat types.

*Page 20, Table ERP-2*

Action 1 Magnitude should be 10,000-14,500 acres.

*Page 23-24, Action 5. Restore Riparian Habitat*

*General Description of Action:* The miles of riparian restoration should actually be 50 to 75. The ERPP denotes "10-15 miles of restoration to take place within *each* of five ecological units that comprise the Suisun Marsh/ SF Bay Ecological Zone." The five ecological units are: Suisun Bay and Marsh, Napa River, Sonoma Creek, Petaluma River, and San Pablo Bay. Consistent with the ERPP, San Pablo Bay needs to be added to the list of restoration areas as the fifth ecological unit in this paragraph

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Comments to "Work in Progress Water Quality Affected Environment Report"

Few of us were able to completely review this document, but again several commented that they are interested to see more complete revisions. Those that did a cursory review offered the following:

**General Comments**

•Generally, there were comments regarding the phrasing of some concerns involving trace metals and organic contaminants. The writing tended to suggest that "serious" adverse effects are occurring in the Delta, when there is only limited evidence to support this statement. Additionally, the bioaccumulative potential of some organics is questionable.

ARM  
strats

Attachment S1.

**ECOSYSTEM RESTORATION PROGRAM PLAN DELTA HABITAT TYPES**

**TIDAL PERENNIAL AQUATIC HABITATS**

- shallow water aquatic habitats
- intertidal mudflat habitats
- shoal habitats

*Characterized by: submergent vegetation; high levels of primary productivity and nutrient cycling; provides spawning and rearing habitat, foraging, and escape cover for fish; provides foraging areas for waterfowl that use submergent vegetation, and diving ducks that consume clams living in the shoals; provides foraging areas for wading birds and shorebirds.*

**NONTIDAL PERENNIAL AQUATIC HABITAT**

- deep open water habitats (>4 ft deep)
- shallow open water habitats (< 4 ft deep)

*Characterized by: open water, embayments, ponds and lakes; may or may not be surrounded by emergent vegetation or riparian habitats; supports invertebrate communities, provides resting areas for waterfowl and semi-aquatic mammals (i.e. river otters); provides foraging opportunities for diving ducks.*

**FRESH EMERGENT WETLAND HABITAT (TIDALLY INFLUENCED)**

**FRESH EMERGENT WETLAND HABITAT (NONTIDAL)**

*Characterized by: freshwater emergent vegetation; provides quality marsh habitats for fish and wildlife; rearing and outmigration habitats for native anadromous fish species; arrests subsidence of peat soils.*

**SEASONAL WETLAND HABITAT**

*Characterized by; vernal pools, wet meadows or pastures, managed duck clubs; provides important seasonal habitat for waterfowl, shorebirds, fish.*

**SLOUGHS**

*Characterized by: tidal slough habitats; provide spawning and rearing areas for native Delta fish species.*

**MIDCHANNEL ISLANDS AND SHOALS**

*Characterized by: remnant channels or berm islands, shallow underwater islands; provide quality edge habitat for fish and wildlife.*

**RIPARIAN AND RIVERINE AQUATIC HABITAT**

*Characterized by: forest and shrub habitat found on the water and land side of levees, berms, berm islands, and island interiors; canopy cover of riparian vegetation, in addition to instream woody debris creates shaded riverine aquatic*

*habitat; provides important habitat for fish and wildlife during some life cycle stage-dependent on abundant leaf and vertebrate biomass.*