Draft Outline of Five Year Ecosystem Restoration Workplan

In order for the Ecosystem Roundtable members to better understand the proposed mission, this is an outline of a Five Year Ecosystem Restoration Workplan that identifies the types of information to be included and the types of recommendations that will be presented to the Ecosystem Roundtable for their input.

I. Introduction

The purpose of this workplan is to develop coordinated, integrated restoration actions in the Bay-Delta ecosystem over the next three to five years. This workplan builds on the goals of several existing planning efforts including the Central Valley Project Improvement Act and the CALFED Ecosystem Restoration Program Plan and includes a summary of the goals of those various efforts.

The workplan also includes:

- a set of near term strategic priorities and guidance on how resources should be allocated among those priorities,
- a summary of the limiting factors or problems that need to be addressed to to achieve these priorities,
- actions that need to be undertaken to address the limiting factors, and
- recommendations on implementation of those actions including schedule and funding.

II. Goals

This section will include the summary statements about the goals of the major restoration programs.

III. Near term Strategic Priorities

This section will identify the priority species, habitat types, and ecosystem processes. It will provide guidance on how resources should be allocated among those priorities. It will describe how and why these priorities were identified and how they achieve the goals of the major restoration programs.

A. Priority 1

For each priority, the document will include the following sections:

1. Discussion of limiting factors or problems that need to be addressed to to achieve this priority. This discussion will include the relative importance of the limiting factor or problem, the degree of consensus in the technical community on its importance, and any important areas of uncertainty. It is expected that there will be some technical disagreement on the relative importance of some problems or limiting factors.

2. Actions that need to be undertaken to address the limiting factors.
This section will identify the actions that technical experts believe can best address each limiting factor or problem. Once again, there may not always be complete consensus on the actions or on the relative importance of actions. If there is no consensus, then additional applied research may be needed. If there is some agreement but not complete consensus, then actions can be implemented as pilot efforts that are closely monitored as part of adaptive management. If there is consensus, then we can just do it.

Each action will include a discussion of the potential for multiple benefits to other species, habitats, or ecosystem processes. The benefits of these synergistic effects can be recognized by assigning a higher priority to those actions that provide them.

3. Recommendations on implementation of those actions including schedule and funding.
In this section, the action can be divided into appropriate phases including:

- conceptual development
- feasibility and options analysis,
- design and permitting,
- construction or implementation, and
- monitoring.

The costs for each of these phases can be estimated and the cost-share partners identified.

An Example of a Table Summarizing Rationale for Actions

Species	Life Stage	Problem or Limiting Factor	Geographic Location	Priority	Actions	Type of Action	Synergistic Benefits
Spring run chinook salmon	Returning Adults	Delayed Passage	Mill Creek	High	Improve Passage at Clough Dam	Stressor	None
			Butte Creek	High	Improve Passage at Adams Dam	Stressor	Reduce conflict with diversions for managed wetlands
				High	Improve Passage at Gomill Dam	Stressor	None
				High	Improve Passage at Durham Mutual Dam	Stressor	None
				High	Improve Passage through Sutter Bypass	Stressor	Reduce conflict with diversions for managec wetlands
				Med	Improve Passage at Wards Landing	Stressor	None

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An Example of a Table Showing Scheduling, Costs, and Cost Share Partners

Actions	Schedule					Costs				
	1996	1997	1998	1999	2000	1996	Cost Sharing	1997	Cost Sharing	1998
Improve Passage at Clough Dam		Feasibility and Options Analysis	Design and Permitting	Construction				$20,000	Cat III or CVPIA	Unknown
Improve Passage at Adams Dam	Design and Permitting	Construction	Monitoring and O&M	O&M	O&M	$200,000	50% CVPIA, 50% Cat III	$1,000,000	33% CVPIA, 33% Cat III, 33% local	
Improve Passage at Gorrill Dam	Design and Permitting	Construction	Monitoring and O&M	O&M	O&M	$200,000	50% CVPIA, 50% Cat III	$1,000,000	33% CVPIA, 33% Cat III, 33% local	
Improve Passage at Durham Mutual Dam	Design and Permitting	Construction	Monitoring and O&M	O&M	O&M	$200,000	50% CVPIA, 50% Cat III	$1,000,000	33% CVPIA, 33% Cat III, 33% local	
Improve Passage through Sutter Bypass	Concept Development - may break into several actions	Feasibility and Options Analysis				$130,000	Prop 70, NFWF	Unknown		
Improve Passage at Wards Landing		Feasibility and Options Analysis								

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Development of an Implementation Strategy

The first step towards developing recommendations on ecosystem restoration actions is to develop near term priorities. There are literally hundreds of ecosystem restoration actions that have been identified in the various planning document and it will take millions of dollars and quite a few years to implement them all. Although you could begin by implementing those projects that are ready to go or who have strong advocates, the actions will be more effective if they are focused by a set of priorities. Therefore, it is necessary to develop near term priorities and decide how funds will be allocated among those priorities.

There are numerous ways you could develop priorities;

- by geographic area.
- by ecosystem process,
- by habitat type,
- by limiting factor, or
- by species.

Each of these approaches is valid and they each have their strong and weak points. But we must start somewhere. Therefore, the proposed approach is to identify as priorities those aquatic resources that are at greatest risk, species that are either listed or proposed for listing under the state or federal endangered species acts or recognized as being "species of special concern", or a population that has shown dramatic declines.

Limiting factors or problem areas would be identified for these priority species and actions developed to address these limiting factors. As the actions are developed to address these priority species, there would be specific criteria established that require a balance among actions that eliminate sources of mortality, that restore ecosystem processes, and that restore key habitat types. There would also need to be a balance between geographic areas. Criteria could also be established that gave higher priority to actions which provide multiple benefits to ensure that species which are recreationally or commercially important such as fall run chinook salmon are also provided benefits.

Using this approach, the species which have tentatively been identified as priorities would include:

- San Joaquin River fall run chinook salmon,
- winter-run chinook salmon,
- spring-run chinook salmon,
- delta smelt,
- splittail,
- steelhead trout, and
- green sturgeon.

These priorities and the approach used to develop them still needs additional technical review. However, we would like the Ecosystem Roundtable to provide feedback on this approach with the following questions in mind:

- ***Would a focus on these species meet the interests of your constituents?***
- ***In allocating resources among the priority areas, do we want to reserve 5 to 10% of the available funding for actions which are not in the priority area?***
- ***Is a criteria that actions have a broad geographic distribution appropriate?***
- ***In developing criteria that increases the priority of an action based on multiple benefits to other species, should this cover all species or should it cover a more limited number of species?***

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