

4 May 1999

Memorandum

To: Larry Smith

From: Peter Stine

Subject: Comments on Draft CALFED EIS/EIR

The instruction memo attached to the Draft EIS/EIR from Lester Snow directs our attention to comment upon:

“issues” or “red flags” that may preclude our agency from agreeing to release of the document
technical errors or omissions

unclear ideas

I presume that USGS has relatively few “issues” that would preclude agreement to release of the document. Our comments focus upon some unclear issues and general thoughts about how the explanations in this document might relate to our ability to realize the goal of executing CMARP. We have focused comments on Chapter 6.2 (Vegetation and Wildlife) and the Conservation Strategy. Hopefully they are suitable and appropriate comments. They may be comments that extend beyond these general needs but we think they are generally relevant to making this document mesh with how CMARP will develop over time.

Before providing comments I want to draw your attention to Section 8 of the Conservation Strategy, “Monitoring.” Some of the language in here comes directly from the summary I wrote that I recommended for inclusion in our final CMARP report. Since I wrote it, naturally I think it is accurate. Most of this verbiage did not show up in the final CMARP report but here it is (unbeknownst to me) in the Conservation Strategy. I still believe the body of this section (there is one problem in the summary of this section) is an accurate assessment of the expected connection between CMARP and the Conservation Strategy. Read this section and let me know what you think.

Comments on Chapter 6.2 Vegetation and Wildlife

General Comments:

While the opening paragraph states that, “The CALFED Program seeks to restore value by improving ecological functions to support sustainable plant and wildlife populations,” the last

sentence on p. 6.2-1 acknowledges that, "the Program would increase quantity and quality of terrestrial habitat compared to the No Action Alternative." While quantity of habitat can be more readily assessed, quality is another matter. The "Success of Habitat Restoration Efforts" is one of the "Areas of Controversy" (Section 6.2.2) under CEQA for which CALFED will look to ERP, CMARP, and the MSCS (see p. 6.2-4). It is not clear what the boundaries or responsibilities among these will be (e.g., see Section 8.1.2) but these will need to be coordinated (sooner rather than later). Monitoring and research for the assessment of terrestrial habitat quality for wildlife species, while addressed in the CMARP report, will require additional effort to implement.

The Assessment Methods (p. 6.2-15) reiterate that "changes in quality and quantity are the measures used to determine impacts of the alternatives being considered." Assuming that species dependent on a plant community generally would be affected in the same direction by a particular CALFED action holds true, a quantitative change in acreage of a plant community alone may not be sufficient to quantitatively measure impacts to wildlife (The converse would also apply; increases in created habitat acreage may not necessarily result in wildlife population increases.). For some populations, the quality of the habitat relative to the specific life-history requirements, will determine the magnitude of the impacts. Loss of a small amount of habitat may result in population declines if the habitat lost is a "source" habitat for the population. Determination of source or sink habitats for species will be more complicated than simply surveying for wildlife habitat use, because density can be a misleading indicator of habitat quality. It is not clear whether assessment of habitat quality relative to "irreversible and irretrievable commitments" (p. 6.2-43) falls under an adaptive management scenario and thus, may be within CMARP's purview. It also bears mentioning that it is important that determination of habitat quality occur at the appropriate temporal scale and with consideration of disturbance regimes. Until appropriate indicators for wildlife species relative to measures of habitat quality are identified/verified, this component will require considerably field research.

The assumption was also made (p. 6.2-17) that distribution and abundance of special-status species is proportional to the amount and quality of habitat available. Assessment of habitat quality, even if just for a select group of the 205 MSCS, will be a considerable effort. The list of potentially significant adverse impacts (p. 6.2-3) contains many "temporary or permanent loss or disturbance" of specific habitats, implicitly assuming that impacts on associated species are included in the assessment. However, it appears (p. 6.2-16-17) that only effects on special-status species were conducted. Is this accurate? Presumably this is a reflection of the current availability of data on most wildlife species-habitat relationships. CMARP should include monitoring and/or research to test these impact assumptions.

Section 6.2.7 (beginning on p. 6.2-21) evaluates the environmental consequences common to all the alternatives on the resources. Each program lists potential effects on vegetation and wildlife which *could* result from program actions (e.g., increased quantity or quality of wetland and riparian habitats if water saved or transferred is allocated to restoration of habitat). These should be cross-checked against the CMARP monitoring recommendations.

The mitigation measures and strategies identified (Section 6.2.10-6.2.15) will obviously require

monitoring although, again, it is not yet clear whether this will be accomplished under CMARP or some other entity (see Chapter 9). In any case, some of the mitigation strategies (p. 6.2-44 through 46) will require research (e.g., relocation or artificial propagation of special-status species, restoration of rare natural communities, maintenance of native plant species to restore wildlife habitat temporarily disturbed, etc.). It is not clear whether this will be CMARP function or fall under the programs or somewhere else in CALFED. At the very least, mitigation monitoring should be coordinated with the CMARP recommendations. While there is some overlap, there is much new monitoring that would be necessary if CMARP is responsible for the mitigation monitoring.

Specific Comments:

p. 6.2-1, Paragraph 2: What are the specific *measures* under ERP that would protect natural habitats from future activities?

Vigor of target populations has a genetic connotation which I don't think is what the authors intend (also mentioned on p. 6.2-29, para. 3).

p. 6.2-3: Reduction in quantity or quality of forage for species of concern is an identified impact for which I don't believe CMARP has yet addressed.

The Mitigation Strategies to begin restoration prior to project impacts is a noble goal. However, "restoring" the habitat to its full quality or value to wildlife to offset impacts may take much more time and hence monitoring. Thus, does one need to address the impacts due to the time-lag? Species relocation or artificial propagation for wildlife species (probably less so for plants?) is usually an effort that requires a big commitment of time and resources to be successful.

p. 6.2-15: Indirect impacts such as noise or human disturbance could also affect habitat quality..." I'm not sure if this is addressed in the CMARP recommendations.

p. 6.2-17: Did not have access to the Vegetation and Wildlife Technical Report. Also, clarify whether the MSCS was used for the assessment.

p. 6.2-22: Identified ERP (and WUE) potential consequence on Swainson's hawks, greater sandhill cranes, and wintering waterfowl due to reductions in available forage. I'm not sure if this is addressed in the CMARP recommendations.

p. 6.2-25, Paragraph 3: "...15,000 acres of open-water habitat of varying depth would be created, increasing the quantity of open-water habitat area in the Delta for associated wildlife." Given that this action falls under the Storage Program, I'm assuming that most of the acreage will not be shallow water and hence, of less value to most wildlife species. Perhaps it would be more accurate to state the acreage of shallow water habitat out of the ~15,000 acres.

p. 6.2-29, Paragraph 4: "...restoration projects would be implemented only if the created habitat was of higher value than the habitat being replaced." Who determines the criteria for "value?" and will CMARP be involved in assessment?

p. 6.2-30, Paragraph 2: Should mention specifically which wildlife that use lake habitats.

p. 6.2-32, Paragraph 1: "Because dredged material would be disposed of on agricultural lands, natural communities would not be affected." While "natural communities" could potentially be affected either through temporary loss of habitat, forage, or from contaminants in dredged material, I think the intent was that "native habitats" would not be affected. Of course, this assumes that run-off from these lands doesn't adversely impact streams and riparian areas, etc.

p. 6.2-42, Paragraph 4: "The overall benefits ...that are selected for implementation generally would outweigh any short-term adverse impacts. If the reverse were true, the proposed action would be eliminated from consideration during screening." It is unclear what the adaptive management mechanism to accomplish this will be. Will CMARP be involved?

p. 6.2-43, Paragraph 3: The following statement was unclear to me. "However, restoration activities would not proceed until the designers are confident of the desirability of the results."

Comments on Multi-Species Conservation Strategy

General Comments

In several parts of the Multi-Species Conservation Strategy (MSCS) there is reference to the relationship with the ERP. Some sections of this document describe the "ERP as the basis for the MSCS goals" (Section 3) and in other places it describes the MSCS as something substantially different (Section 1.3). Perhaps both are true, depending on what perspective one has. However, it seems it would be very useful to blend the two programs (ERP and MSCS) into one. This would help in terms of making the overlap between the two programs seamless and to clearly indicate what additional requirements there are with the MSCS. The final development of the monitoring and research activities would benefit from this clarification. Efficiencies could be identified and potential duplication of effort could be avoided.

The MSCS should consider the application of adaptive management in the context of rare species that are protected by law. If an adaptive management program is to be executed it will undoubtedly involve some protected species. This document should explore what latitude will there be to develop experimental research that may involve protected species and explain how this will be accommodated within the framework of the MSCS and the regulatory requirements of the FWS, NMFS, and CDFG.

There are some 201 taxa currently under consideration within the "m" category. Before CMARP begins to develop specific monitoring and research prescriptions this list needs to be reduced to its final level so we do not waste resources trying to address taxa that will not be included in the MSCS.

It appears that the full impact of the MSCS on the other CALFED common programs has not yet been evaluated. Obviously the MSCS is an important and necessary feature of CALFED but it appears that it has been developed in parallel with other common programs and thus potential effects on other programs have not been fully realized yet.

The MSCS makes reference in several places to the role of CMARP and the importance of monitoring and research to achieving the eventual objectives of the MSCS. However, the scope of this effort has not been fully addressed yet by CMARP or CALFED. In order to meet the array of goals that CMARP has, including the significant requirements of the MSCS, this will likely translate into a fairly substantial increase of financial and human resources. The MSCS should acknowledge this requirement somewhere within the document.

Specific Comments

Page 1-5 The figures are difficult to read (too dark, colors do not copy well in black and white.

Page 2-2 The use of habitat or vegetation maps now and in the future is clearly an important tool for the MSCS. There are two important questions that the MSCS (and ultimately CMARP) will have to answer; a) are we satisfied with the classification of habitats/vegetation that we are using and b) do we have adequate GIS data for use as the baseline data. Careful attention needs to be paid to these questions and resolution established as soon as possible.

Page 2-11 Much of the MSCS, particularly with the "m" taxa, will rely upon a means of associating species with habitats; i.e. some sort of habitat relationship model. We understand that this will be necessary for a variety of reasons. However, we also know that this is problematic for at least two reasons; a) we do not have adequate empirical data on habitat requirements for many species, and b) many species do not respond solely to recognizable habitat or vegetation features that are mapable. Perhaps more work is needed to establish these relationships and perhaps other kinds of GIS data can help refine our ability to predict presence, absence, and abundance. The MSCS should address these issues in more depth. This comment also applies to section 5.1.3.

Page 3-7 The prescriptions for species are needed to help create goals/targets from which monitoring programs can be developed. However, some of the prescriptions as they are stated in Table 3-1 have somewhat vague terms, e.g. "re-establish and maintain viable species populations" or "reduce the risk of current and imminent threats." In order to design specific monitoring programs that will inform managers on the progress of attaining goals, more quantitative targets are needed. This is admittedly a difficult thing to do but the MSCS should anticipate this with respect to monitoring programs that will accompany their efforts.

Page 5-1 This section is difficult to follow. The approach discussion (on page 5-2) includes several different ways of analyzing potential CALFED program impacts on NCCP communities and evaluated species. Is there a way of weaving all these methods together, explaining how the

different components inter-relate? Each of the methods includes tables and explanations and there seems to be overlap between many of them. Perhaps some introductory text in this section could lay down a map for interpreting this all the approaches discussed in this section.

Page 7-4 Is it possible for the MSCS document to anticipate into which category the monitoring and research activities associated with CMARP will fall? Presumably CMARP monitoring and research activities will fall either into Type I or Type II actions and be able to proceed without any substantial waiting period. It would be helpful if the document could discuss this specifically.

Page 8-1 Ongoing monitoring for the "R" and "r" species is adequate in some cases but there are a number of these species for which existing activities are inadequate to meet the overall goals of the ERP and the MSCS. More focused efforts will be required for the majority of the bird, mammal, reptile, amphibian, invertebrate, and plant species within those two categories.

Page 8-2 Tracking changes in the distribution and abundance of habitats can be accomplished using GIS and remote sensing. However, tracking the distribution and abundance of species within those habitats requires much different field protocols and is significantly more labor-intensive. Focused monitoring of population dynamics of selected taxa to detect species' response to management actions requires still different methods. The MSCS document should acknowledge these differences and the relative difficulty of accomplishing monitoring at these different levels of need.

Page 8-3 Text on this page addresses the concerns raised above for page 8-1, that "... relatively little monitoring is underway" for most of the "r" taxa. Thus it does appear to contradict the claim made on page 8-1, that "... ongoing monitoring should adequately address MSCS needs for fish and most other "R" and "r" species."