

DEPARTMENT OF FOOD AND AGRICULTURE

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October 20, 1997

Mr. Lester Snow, Director
CALFED Bay-Delta Program
1416 Ninth Street, Room 1155
Sacramento, California 95814

Dear Mr. Snow:

Thank you for the opportunity to provide comments on the Review Drafts and Draft Working Paper (Volumes I, II, III) of the Ecosystem Restoration Program Plan (ERPP).

CALFED should be commended for the overall interagency coordination as the process moves forward. An especially important step was the recent convening of the Scientific Review Panel (SRP) to provide the first critical analysis of the ERPP.

However, currently the ERPP is a product limited to the efforts of CALFED staff with at best modest input and peer review from the independent scientific community during the process. The next iteration of the ERPP should be developed using consistent and comprehensive input from the scientific community at large. It is unreasonable to expect that an effort of this magnitude and complexity can be developed by the limited staff resources available to CALFED. Mr. Daniels is to be congratulated on his effort and recognized for his dedication, but it is time for the ERPP to move beyond staff and become a product of the CALFED community.

It is apparent that the ERPP has been drafted prior to any attempt to examine the existing environment (including agricultural land and water resources and other human uses of land). Defining the existing environment should occur prior to developing an appropriate ERPP approach. Under CEQA there must be alternatives presented that would reduce or avoid impacts to the existing environment, even if achieving program goals are impaired. Therefore, it is our opinion that the alternatives implied by the classification of ERPP targets (the three diamonds) is not legally sufficient to comply with CEQA.

The foundation of the ERPP is a staff developed vision that "If we build it, they will come." There is a lack of scientific justification to support this conceptual approach. The approach of the ERPP is based on the relationship of ecological processes, habitats, and species as presented in Figure 2 on page 6 of Volume I. It is indicative of the fundamental flaw of the conceptual approach to the ERPP. Nowhere in this conceptual approach is there recognition of the other ecological stressors that ultimately will play a significant role in determining the success or failure of the program to restore the First

Level Species (winter-run Chinook salmon, Delta Smelt, Striped Bass). These stressors include the wholesale change in the aquatic biota of the Estuary, the continuing commercial and sport taking of listed species and the presence of identified and unidentified toxicity in the aquatic environment. These stressors are certainly acknowledged in the ERPP, but never addressed in the same level of detail afforded habitat and flows. Most often these stressors are addressed in the context of habitat and flows, rather than as independent factors that deserve priority attention.

There is limited treatment of significant stressors including predation, introduced/exotic species, harvest (commercial and sport) of threatened and endangered species, and toxicity. On page 252 of Volume I of the ERPP it states that, "The only practical way to minimize the spread of non-native species and promote the growth of native species is to restore the habitats to more natural conditions. Under these more natural conditions, native species should be able to hold their own against a non-native competitor or predator." The scientific basis for this presumption is not presented, and in fact is frequently disputed.

The stated primary goal of the ERPP is to restore ecological processes and functions to a status that will support target species sustainability. This is often stated as restoration to conditions that existed during the period of the 1960's and 1970's. There is no scientific foundation presented that this is in fact possible given irreversible changes to the environment including increased human activity, increased presence of non-indigenous species, and significant unidentified toxicity.

Volume II of the ERPP provides a classification system for ERPP targets based upon their reliability to contribute to ERPP implementation objectives (the three diamonds). It is a three tiered ranking: sufficient certainty for full implementation; staged implementation with monitoring; research needed prior to implementation. CALFED seems to presume that this classification system is a sufficient treatment of a range of alternatives as required for the environmental review process to preclude the need for any further discussion of alternatives to the ERPP. However, this classification scheme is only used in the confines of the fundamental ERPP approach of "if we build it they will come." An appropriate range of alternatives under NEPA/CEQA should include analyses of different conceptual models that would prioritize different targets and actions (based on a solid scientific foundation). One alternative approach might focus on intensive monitoring and research during the first five years, with an implementation focus on entrainment, predation and harvest reduction, intensive control and prevention of introduced species, and foodweb restoration.

In fact, it is a matter of some controversy whether striped bass should be considered a First Level Species. According to the Final Rule listing of the Coho Salmon for Southern Oregon and Northern California, "scientists have documented that at least in some circumstances, the presence of striped bass and other non-indigenous species has reduced or eliminated Coho salmon populations. The ongoing management applied to these exotic fish species, in certain locales, may not be consistent with the goals of the ESA." These same observations may very well apply to Chinook salmon as well.

The basic premise of the Ranking of Ecosystem Elements on pages 27 and 28 of Volume III is pure speculation, but is stated as scientific fact and as such is intended to support the process/habitat/species relationship put forward in Volume I. The three-step species restoration process (page 28) should start with (rather than end with) identification of stressors that then leads to appropriate actions to reduce those stressors in order to enhance process and function; and then provide for habitat enhancement also in conjunction with appropriate measures to reduce other stressors as identified.

Focused research as described in Vol. III should be the cornerstone of the ERPP. Uncertainties and data gaps should be identified up front. A comprehensive and well integrated research and monitoring program should be developed and implemented during the first five years of the program.

There is no action plan developed for the first five years of the program, as referenced in the ERPP (Volume III, page 16), yet CALFED is moving forward with early implementation of ERPP actions under Category III funding. CALFED must be careful not to succumb to political pressure to allocate Category III funds prior to having a scientifically defensible plan for the first 5 years of implementation. This plan must be built on a conceptual model that should be developed as recommended by the Scientific Review Panel. Expenditure of Category III funds prematurely could result in not only throwing away public funds, but also significant unintended consequences to the environment and water users. Additionally, funding of certain projects (eg. those that involve conversion of agricultural land) prior to completion of a cumulative impact analysis and consideration of the whole of the action under CEQA, may expose the program to legal challenge.

It is unclear how the ERPP addresses keystone species of the Bay-Delta. Is striped bass considered a keystone species? Are other exotic species keystone species of the Bay-Delta? If so, what are the impacts to anadromous fish and other fish species of concern?

The ERPP promotes adaptive management as the appropriate implementation strategy (and we agree), yet early high priority for water acquisition for the ecosystem is

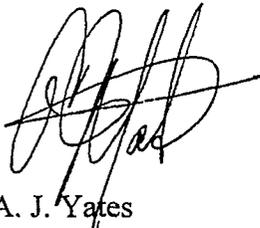
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proposed, without pausing to monitoring the benefit of the dedication of 800,000 ac-ft of CVP water away from agriculture for environmental needs. It is also given a higher priority than improving the foodweb, improving upper watershed processes, controlling invasive species, and improving harvest management.

For example, foodweb impacts and research to improve it are a low priority, but should be of the highest priority. It is precisely this type of scientific information that is needed to provide a solid foundation to determine if more costly and controversial actions to restore the Bay-Delta ecosystem are needed. If flows and habitat are provided, but food is not available to sustain targeted populations, there is no ultimate benefit to the species of concern. For example, in reference to the Asian clam, an introduced species discovered in 1986, the State of the Estuary reports found that the large Asian clam population, "by consuming so much phytoplankton, may have an adverse effect on zooplankton populations and organisms that depend on them - the young of salmon, striped bass and other fish." The report further states that, "Probably the most dramatic negative impact on recent phytoplankton abundance in Suisun Bay and the western Delta has been the unintentional introduction of the Asian marine filter-feeding clam..." "Within two years of the clam's detection in 1986, phytoplankton levels were down by a factor of nearly ten. This clam also appears to be affecting certain important zooplankton and other benthic species."

These comments are offered in an effort to develop a successful CALFED program that adheres to its solution principles and provides benefits to to the water users and the environment of California. My staff is continuing to review the ERPP and will make every effort to provide timely and constructive comments with the appropriate documentation.

Sincerely,



A. J. Yates
Undersecretary