



United States Department of the Interior

Fish and Wildlife Service
Sacramento Fish and Wildlife Office
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IN REPLY REFER TO:
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December 5, 2001

Memorandum

To: Alisha Sterud, U.S. Bureau of Reclamation, Sacramento, California

From: *Acting* Assistant Field Supervisor, Endangered Species, Sacramento Fish and Wildlife Office, Sacramento, California *Chifon Noyes for CG*

Subject: Comments on the Draft Central Valley Project Municipal & Industrial (M&I) Water Shortage Policy dated September 11, 2001

The U.S. Fish and Wildlife Service (Service) has reviewed your Draft Central Valley Project (CVP) Municipal and Industrial (M&I) Water Shortage Policy (Shortage Policy), dated September 11, 2001, and developed by the U.S. Bureau of Reclamation (Reclamation) in consultation with the CVP M&I water service contractors. The purposes of the Shortage Policy are to: (1) define water allocations applicable to all CVP M&I contractors during times of reduced water supplies, (2) establish a minimum water supply level that with the M&I contractor's drought water conservation measures and other water supplies should sustain urban areas during drought situations, (3) during severe or continuing droughts would, as much as possible, protect public health and safety, and (4) provide information to help M&I contractors develop drought contingency plans. This policy is in furtherance of the June 9, 1997 Central Valley Project Improvement Act (CVPIA) Administrative Proposal on Urban Water Supply Reliability. The Draft Shortage Policy includes eight terms and conditions for M&I and Irrigation reliability and CVP water supply allocation. These comments have been prepared under the authority and in accordance with the provisions of the Endangered Species Act of 1973, as amended (ESA).

To our knowledge, no environmental documentation or analysis of the environmental effects of the Shortage Policy has been prepared. Implementation of the Shortage Policy may impact availability of environmental water during periods of water shortage (e.g., if the Governor of California declares an emergency due to water shortage or Reclamation, in consultation with the contractor, determines that an emergency exists due to water shortage) and may alter execution of Reclamation's Operations Criteria and Plan (OCAP). As a result, the Service believes that review and analysis of the environmental effects associated with the implementation of this Shortage Policy is warranted. Several federally listed or candidate species are known to occur within the CVP service area and the promulgation or implementation of this Shortage Policy has the potential to result in adverse effects to federally listed species.

Many of the CVP water service contracts have changed the purpose of use from Agriculture to Agriculture and M&I since 1995. The Service has not been consulted on these changes, and these changes in purpose of use of contract water were not covered by the 1991 Friant biological

opinion, the 1994 and 2000 Interim biological opinions or their 1998 and 2001 amendments. Reclamation should identify and analyze the impacts of the Shortage Policy and the changes in purpose of use executed since 1995 for CVP water-service contracts and provide this information and analysis to the Service prior to execution of any Shortage Policy changes. Specifically, Reclamation should provide a Biological Assessment which includes an analysis on how these changes in purpose of use and implementation of the Shortage Policy will affect shortages to districts, and how these changes in allocations will affect CVP-wide water supplies, including availability of environmental water (such as Environmental Water Account water, Refuge Water Supplies, and flow in rivers and in the Delta), under drought conditions. We also recommend you consult with the National Marine Fisheries Service regarding effects of the Shortage Policy on listed salmonid fish.

The proper scope of analysis would include direct, indirect, interrelated, interdependent and cumulative effects under the ESA as required in regulation [50 CFR 402.14(a), and 402.02, "Effects of the action"]. We request a copy of any Biological Assessment Reclamation has prepared or directed to be prepared pursuant to 50 CFR 402.14(b). If such a Biological Assessment has not yet been prepared, we recommend that the Biological Assessment be prepared that evaluates the effect of implementation of this draft Shortage Policy on listed species by an independent source in cooperation with the Service [50 CFR 402.12(b)].

Previous related consultations with the Service include the Friant Opinion dated January 19, 2001 (Service File No., 1-1-01-F-0027), the Renewal of 54 Interim and 14 Friant Contractors (Interim Opinion), dated February 29, 2000 (Service File No. 1-1-00-F-0056) and the CVPIA Programmatic Opinion (PEIS Opinion), dated November 21, 2000 (Service File No. 1-1-98-F-0124), the OCAP Opinion (Service File No. 1-1-94-F-70 and 1-1-95-I-804), and the CalFed Opinion dated August 28, 2000 (Service File No., 1-1-F-00-183). These consultations evaluated CVP water supplies, availability of environmental water, and the effects to listed species including application of water shortage provisions based on the earlier draft CVPIA Administrative Proposal on Urban Water Supply Reliability of June 9, 1997. Several requirements, under the aforementioned consultations, that must be met prior to promulgation or implementation of the Shortage Policy include the following measures: amend criteria for water conservation plans; identify land and water use activities critically impacting listed and proposed species; develop and implement critical need plan; and develop a long term program to address overall effects of the CVP and Implementation of the CVPIA.

RELEVANT EXCERPTS from the PEIS Opinion

Excerpt #1 - Shortage Provisions- *Under the Description of the Proposed Action, municipal and industrial usage of CVP water is increasing due to expansion of urban areas, changes in water contracts allowing conversion from agricultural to M&I uses, and the facilitation of increased water transfers by the CVPIA. In the future, the Service anticipates that a greater percentage of CVP contract allotment will be allocated to M&I uses. During drought periods agricultural deliveries may be reduced by up to 100 percent if necessary; M&I deliveries may be reduced by up to 25 percent. However, conversions from agricultural purpose of use to M&I purpose of use are subject to the interim agricultural shortage provisions found in the June 9, 1997 CVPIA Administrative Proposal on Urban Water Supply Reliability. This conversion from agricultural purpose of use to M&I purpose of use of CVP water could place increasing demand on available water south of the Delta and could serve to limit the amount of water available for*

fish and wildlife purposes south of the Delta; thus impacting threatened and endangered species in the San Joaquin Valley.

Under the Shortage Policy, Reclamation could authorize an urban contractor to permanently convert from an "agricultural shortage provision" to an "M&I water reliability shortage provision" if Reclamation determines that such a conversion would not result in adverse impacts to agricultural or other urban water supplies. The Service needs a definition of what an urban contractor is, and how these contract conversions would affect listed species. An analysis should also include discussion of the interrelated effects of water transfers to the shortage policy and those effects to listed species.

Excerpt #2 - There are no separate shortage provisions applicable to agricultural and M&I contracts in either the Friant or Cross Valley Canal contracts. In the case of Friant Division contractors, shortage allocations are determined by the class of water under contract (discussed below). For example, Class 2 contract water deliveries are reduced to zero before any reductions are imposed upon Class 1 contract supplies. This is true regardless of whether such contract water is delivered for use as agricultural or M&I water. With respect to Cross Valley Canal contract deliveries, all allocations are made based upon agriculture notwithstanding that some contract and subcontract deliveries are for M&I uses.

The analysis of the Shortage Policy should include discussion of the current Friant and Cross Valley shortage allocations in relation to the proposed Shortage Policy and evaluate potential effects to listed species. Under the Shortage Policy, calculations used for implementation of the 3406(b)(2) and refuge water supply provisions would be different than analyzed under the CVPIA PEIS Record of Decision. Refuge and other environmental water would be reduced to allow M&I public health and safety allocations to continue. Refuge and environmental water supplies are needed for survival and recovery of listed species such as the giant garter snake (*Thamnophis gigas*) and Delta smelt (*Hypomesus transpacificus*) and thus we are concerned implementation of the Shortage Policy would impair the survival and recovery of these species.

Excerpt #3 - If the interpretation and implementation of the shortage provisions described in this Project Description (CVPIA PEIS Opinion) change, Reclamation will coordinate with the Service to ensure that such changes in shortage provisions do not adversely affect listed species.

The proposed Shortage Policy is different from the shortage provisions evaluated in the PEIS Opinion. Due to the potential adverse affects to listed species occurring from implementation of this policy, and lack of analysis related to these actions, Reclamation should initiate consultation on the Shortage Policy.

POTENTIAL IMPACTS OF THE PROPOSED SHORTAGE POLICY

The direct and indirect effects of the Shortage Policy would occur throughout the CVP Place of Use, including the Central Valley, Santa Clara Valley and part of San Benito County, Sierra and coastal foothills, and Delta. Effects would occur from actions such as changes in place of use and type of use (i.e., Ag to M&I), changes in application and intensity, and changes in impoundment and diversion. Effects may occur under both normal and drought water years, all of which could have adverse effects to listed species through habitat alteration and habitat loss. Listed species and critical habitat occur throughout the study area in waterways and on native habitats, agricultural lands, and marginal habitats surrounding reservoirs, conveyance facilities, pumping

plants, urban centers, and agricultural lands. Activities associated with the Water Shortage Policy can thus directly or indirectly affect listed species or their critical habitat.

Under a normal water year, water is diverted each year to fulfill various water rights and water contracts. Most agricultural fields are irrigated every year, although the intensity of irrigation may vary from year to year depending on available water. Some fields are fallowed each year. With implementation of the Shortage Policy, and under normal conditions, water users (M&I and Ag) may increase or intensify water use in order to provide a higher baseline for historical use calculations and enhance water shortage provisions. Intensified water use in normal years could change baseline conditions through changes in the type and/or amount of agriculture, increased or more reliable surface and groundwater supplies promoting urban expansion, and changes in tailwater drainage availability. During a dry year, it appears from the information available the increased number of M&I contracts and the proposed Shortage Policy would result in increased diversions from storage, relative to historic average baseline water use. Consequently, the Shortage Policy could result in reduced in-stream flows and reduced availability of CVP water for environmental purposes.

Groundwater pumping is used in many areas of the Central Valley to substitute for or supplement surface diversion irrigation water during dry years (Williamson et al. 1989). Surface water deliveries of the CVP augment groundwater supplies within and adjacent to CVP districts. Thus the entire service areas of the water districts and their associated groundwater basins, not merely those parcels that purchase water directly from Reclamation, should be included for all consideration of adverse effects associated with land use changes likely to occur due to the proposed Shortage Policy.

The permanent conversion from agricultural purpose of use to M&I purpose of use for many CVP water service contracts could place increasing demand on available water south of the Delta and could serve to limit the amount of water available for fish and wildlife purposes south of the Delta, thus impacting threatened and endangered species in the San Joaquin Valley and Delta. An effect of implementation of the Shortage Policy could include decreased availability of Level 2 and Level 4 Refuge Water Supplies to San Joaquin Valley Refuges and private wetlands of the Grasslands, which could impair recovery of the giant garter snake in these areas.

Under a drought year, and with implementation of the Shortage Policy, refuge and environmental water users may lose adequate flows to sustain listed and proposed aquatic species habitat and it can reasonably be expected to reduce the likelihood of survival and recovery of those species. In the event of a prolonged drought or low-flow period, the effect of continued diversions on listed species would be greater. Habitat alteration/destruction may occur from changes in flow, and effects may include changes in vegetation structure by preventing regeneration of riparian corridors, as in the example of changing salt marsh vegetation by altering salinity, and degrading coastal lagoons. The vegetation in marshes around Suisun Bay has been increasingly converted from brackish to saltmarsh species due to the diversion of freshwater from the Delta.

SUMMARY and RECOMMENDATIONS

The Shortage Policy which is the subject of this memo, differs from the shortage policy in project descriptions and analyzed under the Friant, Interim, PEIS, OCAP and CalFed Opinions and is not consistent with M&I shortage provisions considered under the CVPIA PEIS and Record of Decision. The Service believes that a change in the Shortage Policy as proposed would trigger the

need for a NEPA analysis and initiation of formal consultation with the Service. The Service recommends that Reclamation develop a Biological Assessment for the Water Shortage Policy and initiate section 7 consultation to address the effects of the Shortage Policy on federally listed species and environmental commitments described in the Friant, Interim, PEIS, OCAP and CalFed biological opinions.

We look forward to working with you on the Shortage Policy. If you have questions about this letter, please contact Joy Winckel or Miriam Morrill at (916) 414-6650.