

## **7.3 FISHERIES RESOURCES (NEW)**

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### 7.3.1 INTRODUCTION

#### 7.3.1.1 Content

*The proposed project analyzed in the Monterey Plus EIR was the Monterey Amendment and the Settlement Agreement. The Monterey Plus EIR considered five “elements” of the Monterey Amendment as follows:*

- *Changes in the procedures for allocation of Table A water and surplus water among the SWP contractors;*
- *Approval to permanent transfers of 130,000 acre feet and retirement of 45,000 acre-feet of SWP long-term water supply contracts’ Table A amounts;*
- *Transfer of property known as the “Kern Fan Element property” in Kern County;*
- *Water supply management practices; and*
- *Restructured water rates.*

*This REIR has changed the description of the Kern Fan Element property transfer to be:*

- *Transfer of property known as the “Kern Fan Element property” in Kern County and its development and continued use and operation as a locally owned and operated groundwater banking and recovery project.*

*There are no revisions to the other elements of the Monterey Amendment or of the Settlement Agreement, and no changes have been made relating to them in this REIR. (See discussion in Introduction/Executive Summary.)*

*This REIR does not supersede the analysis of the Monterey Plus EIR but supplements the Monterey Plus EIR. The Monterey Plus EIR focused on the transfer of the KFE property, which was fully analyzed in the Monterey Plus EIR. This REIR did not identify any new impacts or changes to impacts caused by the transfer of the KFE property; therefore, the Monterey Plus EIR fully disclosed all impacts caused by the transfer of the KFE property. Consequently, this REIR focuses on the development and continued use and operation of the KWB as a locally owned and operated groundwater banking and recovery project (“KWB activities”).*

*The Monterey Plus DEIR Section 7.3 identified potential impacts to fisheries resources as a result of the transfer of the Kern Fan Element. The Monterey Plus DEIR Section 7.3 identified potential impacts to fisheries resources as a result of the transfer of the Kern Fan Element. Substantial new information is presented in this section, however, that replaces text from DEIR Section 7.3 that discusses KWB activities. All other text in DEIR Section 7.3 remains unchanged. Impacts on surface water hydrology and surface water quality are described in Sections 7.1, Surface Water and Groundwater Hydrology, and 7.2, Surface Water and Groundwater Quality, respectively.*

Table 7.3-1A identifies the potentially affected environmental resources from impacts of KWB activities on fisheries resources.

TABLE 7.3-1A

**IMPACTS OF THE KERN WATER BANK ACTIVITIES ON FISHERIES RESOURCES**

Proposed Project Element	Potentially Affected Environmental Resources	Impact Number
Transfer of Kern Fan Element Lands and KWB Activities	Local flows, water quality, and fish habitat on or near KWB Lands	7.3-1, 7.3-5*
<p>* Monterey Plus EIR Impact 7.3-5 considered whether implementation of the proposed project's Water Supply Management Practices, including State Water Project deliveries to the KWB, could potentially affect special-status fish species in the Sacramento-San Joaquin Delta due to Delta export changes. The decision in <i>Rosedale et al. v DWR</i> and <i>CDWA et al. v DWR</i> found the mitigation for potential impacts to resources in the Delta to be adequate. The REIR did not find any new information that would change the discussion relative to KWB activities. Therefore, no changes have been made to Impact 7.3-5.</p>		

Comments received in response to the Notice of Preparation for the Monterey Plus DEIR pertinent to fisheries resources are available in Appendix B of the Monterey Plus DEIR. No comments dealt with KWB activities.

### 7.3.1.2 Analytical Method

This analysis included a review of the environmental setting, impacts, and mitigation measures related to fisheries resources, to the extent they apply, presented in the 1997 Monterey Initial Study and Addendum (see Appendix 7-6a).

The following additional documents were reviewed to describe the environmental setting as it existed in 1995 for the fisheries resources on KWB Lands:

- *Final Environmental Impact Report: Artificial Recharge, Storage, and Overdraft Correction Program, Kern County, California* (December 1986)<sup>1</sup>;
- *Kern Water Bank (KWB) First Stage Kern Fan Element Draft Supplemental Environmental Impact Report* (December 1990)<sup>2</sup>;
- Biological information collected for the 1995 Draft and Final Program EIR for the Implementation of the Monterey Agreement<sup>3</sup>; and
- *Kern Water Bank Habitat Conservation Plan/Natural Community Conservation Plan Implementation Agreement*, prepared by KWBA (October 1997)(KWB HCP/NCCP, Appendix 7-7a).

The following documents were reviewed to describe the environmental setting as it existed in 2014:

- A California Natural Diversity Database (CNDDB) query<sup>4</sup> and U.S. Fish and Wildlife Service (USFWS) official species list<sup>5</sup> for the following 7.5-minute topographic quadrangle maps: Buttonwillow, Rio Bravo, Rosedale, Oildale, Gosford, Stevens, Tupman, East Elk Hills, Taft, Milllux, and Conner.
- The KWB HCP/NCCP Annual Compliance Reports and corresponding Management Plans from 1996 through 2013.<sup>6</sup>

### 7.3.1.3 Standards of Significance

The following standards of significance are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. For the purposes of this REIR, impacts to fisheries resources would be considered significant if KWB activities would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Substantially reduce the habitat of a fish or wildlife species;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Substantially reduce the number or restrict the range of an endangered, rare, or threatened species;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources; or
- Substantially reduce populations of fish species having economic or social value.

The following potential impacts were removed from further analysis because KWB activities would have little to no impacts: substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; conflict with any local policies or ordinances protecting biological resources; and substantially reduce populations of fish species having economic or social value.

KWB water sources include the Kern River, and the Friant-Kern Canal and other canals. The Kern River at the KWB is dry except for flood flows, offering limited and temporary fish habitat. The Friant-Kern Canal is concrete-lined and offers no natural fish habitat. As KWB Lands consist of canals, diversions, turnouts, and recharge ponds, the occurrence of suitable habitat for fish species is extremely limited. Fish populations are limited to mostly non-native species. The recharge ponds themselves also provide only temporary habitat. Therefore, the aforementioned impact mechanisms are not discussed further because KWB activities would have less-than-significant impacts on fish populations, their habitats, and their migrations. None of the species present have more than marginal economic or social value. KWB activities also do not conflict with any local policies or ordinances protecting biological resources, and must comply with the KWB HCP/NCCP, which serves to protect habitats and species. Fish species and populations are limited in waterways on KWB Lands and in the Kern River near KWB facilities.

### 7.3.1.4 Life Histories of Fish Species of Concern through 2014

The following paragraphs highlight the species of concern that live in waterways that may be affected by KWB activities.

### **Kern Brook Lamprey (*Lampetra hubbsi*)**

This species is endemic to the east side of the San Joaquin Valley and is listed as a California species of high concern.<sup>7</sup> Kern brook lamprey were first collected from the Friant-Kern Canal but have since been found in the lower Merced, Kaweah, Kings, and San Joaquin Rivers.<sup>8</sup> The species is not known to occur in the Kern River and would be unable to maintain a self-sustaining population or survive long-term in the Kern River in the KWB area. They occur at a mean elevation of about 500 feet, with a range of 100-1,100 feet. Ammocoetes prefer shallow pools with low-flow velocities, a mixture of sand and mud substrates, and water temperatures below 77 degrees Fahrenheit (°F). Adults prefer riffles with gravel and rubble for spawning and cover.

Kern brook lamprey ammocoetes have been detected in siphons of the Friant-Kern Canal, a source of water for the KWB. Individuals that become entrained in agricultural canals apparently do not contribute to the survival of the species. Once entrained in these sink habitats, adults are unable to spawn because of a lack of spawning habitat and thus do not contribute at the population level.

### **Kern River Rainbow Trout (*Oncorhynchus mykiss gilberti*)**

The Kern River rainbow trout is a subspecies of golden trout and is part of the redband-rainbow trout complex found in isolated areas of California and Oregon. This species is listed as a California species of critical concern<sup>9</sup> and is native to the upper Kern River basin. Historically, it was found as far downstream as Keyesville, which is more than 50 river miles upstream of the KWB. The Kern River rainbow trout was believed to have disappeared through genetic introgression with other forms of rainbow trout. Genetic studies in the 1980s suggested that the subspecies still exists in isolated areas of its native range. Populations are currently restricted to reaches of the Kern River above Lake Isabella.<sup>10</sup>

#### **7.3.1.5 Physical Setting in 1995**

Permanent fish habitat is limited to canals on KWB Lands; recharge ponds and the Kern River near KWB facilities only provide temporary habitat during recharge and high flows, respectively.

#### **7.3.1.6 Changes in Physical Setting between 1996 and 2014**

Water is delivered to the KWB through a number of water conveyance canals and the Kern River. A small portion of the Kern River flows through the southwest corner of KWB Lands in a northeast to southwest direction. Fish species that occur within these systems could conceivably be entrained in the KWB. The primary systems delivering water to the KWB area include:

- Friant-Kern Canal
- Kern River
- River Canal
- Cross Valley Canal
- KWB Canal
- Alejandro Canal
- California Aqueduct

These systems deliver water to the KWB through a system of pumps, diversions, and turnouts. The KWB can be broadly divided into two sections. The northern section is located north of the Kern River

and the southern section is located south of the river. Recharge ponds in the northern section receive water from the Cross Valley Canal and KWB Canal. Approximately 8 miles east of the eastern boundary of the KWB, the Friant-Kern Canal delivers water to the Cross Valley Canal. The Cross Valley Canal and KWB Canal are directly connected to the California Aqueduct on the western boundary of the KWB; both of these canals receive water directly from the California Aqueduct. Recharge ponds in the southern section receive water from the River Canal and Alejandro Canal. The River Canal also receives water from the Friant-Kern Canal. Kern River flows are diverted to the KWB during high-flow events and all KWB recharge ponds receive water through surface water flows. The physical characteristics of the recharge ponds and the annual water cycles within the recharge ponds are not suitable for fish occupation. Fish entrained in the recharge ponds likely would expire quickly.

### **7.3.1.7 Regulatory Setting in 1995**

#### **State**

##### State of California Species of Special Concern

CDFW maintains a list of species of special concern (SSC). SSC is an administrative designation and carries no formal legal status. The intent of designating SSC is to focus attention on animals at conservation risk, stimulate research on poorly known species, and achieve conservation and recovery of these animals before they meet California Endangered Species Act criteria for listing as threatened or endangered. CEQA Guidelines Section 15380 suggests that SSC should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

### **7.3.1.8 Changes in Regulatory Setting between 1996 and 2014**

#### **Local**

##### Kern Water Bank Habitat Conservation Plan/Natural Communities Conservation Plan

USFWS and CDFG approved the KWB HCP/NCCP in 1997. The federal and State HCP and NCCP programs seek to make the permit application process more efficient, while still complying with current federal, State, and county laws that protect threatened or endangered species. The goal is to conserve plant and wildlife species by preserving their natural communities. The KWB HCP/NCCP serves as an HCP pursuant to Section 10(a)(1)(B) of the 1973 federal Endangered Species Act (FESA), as well as an NCCP under the California NCCP Act of 2001. It allows the incidental “take” of selected species in areas outside of preserve boundaries, while guaranteeing that natural communities capable of sustaining the covered species’ population needs are preserved in perpetuity.

The KWB HCP/NCCP planning area comprises the entire approximately 19,900-acre KWB Lands. The KWB HCP/NCCP allows for the incidental take of up to 161 rare, threatened, or endangered species with documented occurrences or potential habitat on KWB Lands that may be affected by KWB activities, or species that do not currently occur and for which habitat does not currently exist on KWB Lands, but for which habitat may be created in the future.

Under the HCP, KWBA has authorization to incidentally take (including harm or harass) 161 covered species that are listed or may be listed in the future under FESA. Fish species covered under the HCP incidental take permit include Kern brook lamprey and Kern River rainbow trout. Both species are currently listed as species of special concern under the California Endangered Species Act and are listed as Group 2 species under the HCP incidental take permit. Neither species has ever been detected in, adjacent to, or within 50 miles of KWB Lands. CDFW designates certain vertebrate

species as species of special concern because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as species of special concern is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability. Group 2 species are defined by the incidental take permit as those that do not currently occur and for which habitat does not currently exist in the project area, and are unlikely to be affected by the action during the life of the permit but for which potential habitat may be created. Since the development of the KWB, special-status fish species have not been detected on KWB Lands.

### 7.3.2 IMPACTS AND MITIGATION MEASURES

#### 7.3-1 KWB operations could potentially entrain or harm fish species of special concern.

##### 1996 – 2014

Since 1996, KWBA has been responsible for managing KWB Lands in accordance with an KWB HCP/NCCP approved by USFWS and CDFG in 1997 (see Appendix 7-7a). The KWB HCP/NCCP documents a plan to accomplish water conservation and environmental objectives, mitigating KWB-specific impacts to less than significant at a regional level. The primary water conservation objective is to store water in aquifers during times of surplus for later recovery during times of shortage. The primary environmental objective is to set aside large areas of KWB Lands for endangered, threatened, and other sensitive species and to implement a program to protect and enhance the habitat. Under the HCP incidental take permit, KWBA has authorization to incidentally take (including harm or harass) 161 covered species, two of which are fish species: Kern brook lamprey and Kern River rainbow trout (Appendix 7-7e, CDFG Take Authorization). Neither of these species were detected on or adjacent to the KWB area before or during 1996-2014. The KWB HCP/NCCP states that impacts from the KWB would be “negligible” and that the KWB activities would not remove or provide suitable habitat for these species.

KWB water sources include the Kern River and the Friant-Kern Canal. Kern brook lamprey have been detected in the Friant-Kern Canal and it is possible, although highly unlikely, for individuals of the species to be present in the canals directly delivering water to the KWB. However, the canals are considered sink habitat for the species. Breeding habitat does not exist in the canals; any entrained lampreys would not spawn and would die. Canal populations of lampreys are not viable contributors to the population as a whole or to the conservation of the species. The only known Kern River rainbow trout population and suitable habitat occurs far to the east at a much higher elevation than the KWB. The likelihood of this species being transported down the Kern River during flood flows down the Kern River and being entrained into the KWB was extremely poor. Trout would not have been able to survive in the Kern River or in water bodies on the KWB because of high summer water temperatures and lack of water.

For these reasons, it is unlikely that there were any impacts on Kern brook lamprey and Kern River rainbow trout from KWB activities.

Therefore, the impact of KWB activities from 1996 to 2014 on Kern brook lamprey and Kern River rainbow trout was ***less than significant***.

#### Mitigation Measures

*None required.*

**2015 – 2030**

KWB sources of water from the Friant-Kern Canal and Kern River would generally be similar to 1996-2014. Potential impacts would be similar to those described above for 1996-2014. KWB activities would continue to have the rare potential to cause entrainment of Kern brook lamprey and Kern River rainbow trout that reach the KWB by highly unlikely events, and they are covered by the HCP incidental take permit.

For these reasons, it is highly unlikely that there would be any impacts on Kern brook lamprey and Kern River rainbow trout from KWB activities.

Therefore, the impact of KWB activities from 2015 to 2030 on Kern brook lamprey and Kern River rainbow trout would be ***less than significant***.

**Mitigation Measures**

*None required.*

## ENDNOTES

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