



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
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Sacramento, California 95825-1846

In reply refer to:
1-1-04-1-0674

Memorandum

FEB 10 2005

To: Chief, Resource Management Division, U.S. Bureau of Reclamation, South Central California Area Office, Fresno, California (Attn.: Kathy Wood)

From: ^{FOR} Acting Field Supervisor, Sacramento Fish and Wildlife Office, Sacramento, California *Chief Newberry*

Subject: Conclusion of Informal Consultation on Renewal of a Long Term Water Service Contract for the City of Fresno, Fresno County, California

This responds to your request of April 8, 2004, for consultation on renewal of a Central Valley Project (CVP) long term water service contract with the City of Fresno (City) for a 40-year period. Included in this action is the proposed annexation of 12,800 acres in the City's Southeast and North Growth Areas into the CVP contract service area for the City of Fresno. Reclamation proposes this change in the CVP contract service area as part of the federal action subject to environmental review and consultation in accordance with section 7 of the Endangered Species Act (Act). The addition of these lands is subject to approval of Reclamation and other agencies, including the Local Area Formation Committee (LAFCo). This action is in accordance with section 3404(c) of the Central Valley Project Improvement Act (CVPIA) and our November 2000 Programmatic Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP (Service File No. 1-1-98-F-0124).

This document represents our review of the proposed CVP long-term contract renewals on the federally listed as threatened vernal pool fairy shrimp (*Branchinecta lynchi*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), bald eagle (*Haliaeetus leucocephalus*), fleshy owl's clover (*Castilleja campestris* ssp. *succulenta*), California tiger salamander (*Ambystoma californiense*), designated critical habitat for the vernal pool fairy shrimp (unit 24B) and fleshy owl's clover (unit 5); and proposed critical habitat for the California tiger salamander (unit 2). This consultation addresses the renewal of the existing contract amount and the continued delivery of water under the existing operating parameters to the City of Fresno water-service areas. This consultation does not exempt incidental take that may result from the use or application of CVP water by private parties or from the prohibitions under section 9 of the Act.

After review of information available to us and discussions with Area Office and Regional Office staff in January 2005 it is our determination that renewal of the CVP long term water service contract for the City of Fresno is not likely to adversely affect federally listed species or designated or proposed critical habitat.

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contract for the City of Fresno is not likely to adversely affect federally listed species or designated or proposed critical habitat.

Description of the Proposed Action

The City of Fresno is one of 28 contractors within the Friant Division. Formal consultation on long term renewal of the remaining 27 Friant Division contracts, and all Cross Valley Canal contracts, was concluded by issuance of a biological opinion dated January 19, 2001 (Service File Number I-1-01-F-0027) which determined that the proposed contract renewals would not jeopardize the continued existence of federally listed species or destroy or adversely modify designated critical habitat.

Under the renewed contract, the U.S. Bureau of Reclamation (Reclamation) would make available for delivery 60,000 acre-feet/year (afy) of Class 1 water for M&I purposes from March 1, 2005 through March 1, 2046 (Reclamation 2004a). The existing contract for the City is also for 60,000 afy of Class 1 water for M&I purposes. M&I is defined in the contract between Reclamation and the City as "Project Water, other than Irrigation Water, made available to the Contractor. M&I Water shall include water used for human use and purposes such as the watering of landscaping or pasture for animals (e.g., horses) which are kept for personal enjoyment or water delivered to land holdings operated in units of less than five acres" (USBR 2004b).

Table 1 – Summary of the Proposed Long-Term Contract Renewal for the City of Fresno

Contract Amount	Acres in Service Area*	Use	Contract Term
60,000 AF/year	90,400 (approx)	Municipal & Industrial	40 years

* current City sphere of influence based on Fresno 2010 and 2025 General Plans (City of Fresno 2000; 2002) (U.S. Bureau of Reclamation 2004a)

Our January 2001 biological opinion for long term renewal of the 27 Friant Division contractors, 8 Cross Valley Canal contractors and 11 Cross Valley Canal subcontractors included commitments for new and continuing actions by Reclamation, the Service, and the contractors of the Friant Division and Cross Valley Canal Unit. These actions included applicable conservation measures from the 1991 Friant biological opinion (Service file number I-1-91-F-22), each subsequent Interim water contract renewal opinion (1995, 1998, and 2000), and the CVPIA Programmatic biological opinion, in addition to measures negotiated during the 2001 consultation. Reclamation and the City have agreed to implement these measures as well for actions relating to delivery and use of CVP water within the City (David Young, USBR, pers. comm, January 2005). Reclamation provided a summary of implementation status of conservation measures from the 1991 Friant biological opinion and the 2000 CVP Programmatic biological opinion in Appendix B of the biological assessment (U.S. Bureau of Reclamation 2004a). These commitments are offered as continuing commitments for the City of Fresno.

Historic Water Use and Future Water Needs

As part of the contract renewal process, Reclamation has performed water needs assessments for each long term CVP contractor. The water needs assessment for the City of Fresno is a combined document for the City and Fresno Irrigation District (FID), a Cross Valley Canal contractor, because FID operates and maintains the City's water program under a cooperative agreement (City & FID 1976, U.S. Bureau of Reclamation 2004a). The combined City of Fresno/FID water needs assessment included the City of Clovis. At our request, Reclamation provided water needs information for the City of Fresno only so that we could better evaluate their history of water use and projected future water needs (Appendix A). The water needs assessment includes a quantification of groundwater and other surface waters within each district service area. All groundwater wells are owned by landowners or other agencies within the City. Local surface water, Kings River water, and CVP water are used directly and for groundwater recharge in Fresno (U.S. Bureau of Reclamation 2004a).

Reclamation's Class 1 water delivery to and use by the City during the past ten years are summarized in Table 2, revised by Bureau of Reclamation in February 2005. The City received its maximum water delivery of 60,000 af during nine of the past 12 years between 1993 and 2004; the exceptions being wet years, 1992, 1994, and 1995. Water transferred out by the City is replaced by FID with its Kings River Supply under their water sharing agreement (Barbara Hildeburg, U.S. Bureau of Reclamation, pers. comm., January 2005). This information indicates that the City has consistently utilized its full CVP contract entitlement to support existing development, and that the CVP water supply does not appear to be a significant source of water for projected future urban growth within the City.

Water Year (Type) ²	USBR Class 1 Water Delivered to City of Fresno (AF)	Month	Volume Used or Transferred (AF)
2003-2004 (Dry)	60,000	March	4
		April	7
		May	15
		July	25,830
		August	29,634
		September	3,175
		October	762
		November	34
		February	539
		March	14
2002-2003 (Below Normal)	60,000	April	45
		May	1,652
		June	24,021
		July	17,203
		August	15,532
		September	595
		October	101
		February	837
2001-2002	60,000	May	5,697

U.S. Bureau of Reclamation, South-Central Area Office
 Chief, Resource Management Division

Water Year (Type) ¹ (Dry)	USBR Class I Water Delivered to City of Fresno (AF)	Month	Volume Used or Transferred (AF)
(Dry)		June	23,805
		July	27,207
		August	1,291
		September	2,000
2000-2001 (Dry)	60,000	July	21,382
		August	21,291
		September	17,327
1999-2000 (Above Normal)	60,000	April	1,738
		May	7,262
		June	10,000
		July	26,900
		August	14,035
1998-1999 (Above Normal)	59,019	September	65
		September	25,333
		October	33,598
		November	42
1997-1998 (Wet)	60,000	December	46
		June	12,656
		July	35,736
1996-1997 (Wet)	60,868	August	10,000
		September	1,608
		June	16,777
		July	31,706
1995-1996 (Wet)	43,333	August	10,097
		September	2,288
		May	154
1994-1995 (Wet)	48,284	September	21,039
		October	18,152
		November	3,958
		January	50
		March	1
		April	63
		May	131
1993-1994 (Critical)	59,000	June	23,223
		July	13,283
		August	7,999
		September	119
		September	2,594
		October	109
		November	12
		January	869
		March	30
		April	78
1992-1993 (Wet)	47,310	May	96
		June	111
		July	34,772
		August	23,681
		March	8,331
		June	29,378
		August	508
		September	353

Water Year (Type) ¹	USBR Class I Water Delivered to City of Fresno (AF)	Volume Used or Transferred	
		Month	(AF)
		October	964
		November	1,070
		February	6,706

Source: Information provided by USBR, South-Central California Area Office, February 3, 2005.

¹ California Department of Water Resources water year classifications based on May 1 runoff forecasts, San Joaquin Valley Index (CDWR 2003).

Consultation Parameters

Reclamation is requesting consultation on delivery of the City of Fresno's full contract amount of up to 60,000 acre-feet/year for each year in the 40-year contract term. This is in accordance with the "Description of the Proposed Action" from Reclamation's Biological Assessment (U.S. Bureau of Reclamation 2004a) and Reclamation's July 19, 2004 memorandum establishing consultation parameters.

The City has the ability to receive additional CVP water beyond the contract amount through the use of temporary water transfers, and the ability to permanently increase the amount of their contractual amount by obtaining a permanent water assignment. These are separate Federal actions, and are not proposed or addressed in this consultation. Any future action that permanently or temporarily increases City's total CVP contract amount beyond 60,000 acre-feet/year is also not covered in this long-term contract renewal consultation (e.g. permanent water assignment actions, or an unlikely wet-year scenario where water transfers or similar actions could allow City to receive more than their total CVP contract amount), and will require separate environmental review.

Action Area

The action area for this consultation is defined as the 2025 Fresno General Plan sphere of influence, which is illustrated in Figure 1, and the action area defined in the 2004 OCAP consultation. The old CVP contract service area, and the new areas proposed to be annexed, are shown in Figure 1. Listed species occurrences and critical habitat, both proposed and designated, are overlaid in Figure 2. The current service area encompasses approximately 90,400 acres and the Growth Areas proposed to be annexed into the service area encompass 12,800 acres, for a total service area of 103,200 acres (U.S. Bureau of Reclamation 2004). The annexed land currently lies with the boundaries of Fresno Irrigation District, a Cross Valley Canal Contractor.

We have confined the terrestrial portion of the action area to the CVP contract service area, unlike the other Friant Division contracts, as a result of information provided by Reclamation to the Service in December 2003. Geologists in Reclamation's Mid-Pacific Region prepared a report that discussed the practice of conjunctive use of groundwater and surface water and the importance of this practice to agricultural operations in the Central Valley (U.S. Bureau of Reclamation 2003). The report concluded that existing imports of CVP water are not sufficient

to meet present demands, and because of the magnitude of existing groundwater overdraft in the San Joaquin Valley to meet existing water demands for agriculture and urban uses, together with groundwater dynamics in the San Joaquin Valley, there is no excess water availability in the valley that could lead to widespread land conversions (U.S. Bureau of Reclamation 2003). Additionally, information in Figure 4 of the Biological Assessment and in subsequent information provided by the Bureau (U.S. Bureau of Reclamation 2004a; David Young, U.S. Bureau of Reclamation, pers. comm., January 2005), after discussion with a geologist from CDWR (A. Steele, Geologist, California Department of Water Resources, pers. comm. to D. Young, January 2005), indicates that groundwater movement would be westward toward the San Joaquin River and away from areas of native habitat adjacent to the CVP service area to the northeast (Figure 3). The zone of groundwater influence would not, in any case, extend across the San Joaquin River. For this reason we do not consider groundwater recharge with CVP water to measurably facilitate habitat conversion with groundwater outside of the City's CVP service area.

Consultation on Related Actions

The Sacramento Fish and Wildlife Office (SFWO) is currently engaged in, or has recently completed, consultation with Reclamation on related actions. These other consultations include:

1) *CVP Operations Criteria and Plan (OCAP)*. The OCAP describes the coordinated operation of the Central Valley Project (CVP) and State Water Project (SWP) by Reclamation and the California Department of Water Resources (CDWR). The 2004 OCAP consultation addressed the operation of the CVP/SWP in the Sacramento Valley, and included all applicable commitments of the SWP and CVP, such as meeting requirements of the CVPLA BO (Service, 2000), the obligations contained in the Central Valley Water Quality Control Board water right permits, obligations of CVP water service contracts, Sacramento River Settlement contracts, San Joaquin exchange contracts, and other requirements. The 2004 OCAP consultation included the storage of water in reservoirs, releases and river operation, Federal/State diversion facilities, and CVP/SWP export-pumping operations in and through the Delta. Therefore, the OCAP BO addressed all the aquatic effects of operating the CVP/SWP.

On July 30, 2004, the Service issued biological opinion 1-1-04-F-0140, which addressed the effects of delivering CVP water for renewed long term water contracts and other actions on delta smelt and its critical habitat. The long term water contracts, while authorizing a maximum contract amount, recognize that the delivery of the entire contract amount is subject to the availability of water and other obligations (such as biological opinions). Our July 30, 2004, biological opinion on OCAP is hereby incorporated by reference because it analyzed effects of the action addressed in this consultation, and the findings of this consultation cannot be made independently of the analysis and findings of the OCAP biological opinion. The OCAP analysis of effects to delta smelt and its critical habitat also must be made a part of the analysis of the total effects of the long term contract renewals.

2) *Operation and Maintenance of CVP Water Conveyance Facilities in the Jurisdiction of the South Central California Area Office.* The CVPIA programmatic biological opinion (CVPIA PBO) anticipated that it may be desirable to cover some operations and maintenance activities under long term contract renewal biological opinions (page 2-46). Pursuant to pages 2-46 to 2-49 of the CVPIA PBO and requirements of the biological opinions for CVP Interim Water-Service Renewal Contracts (1995, 1998, 2000, 2002), Reclamation has prepared regional operations and maintenance plans (O&M Plans) to describe the general and routine maintenance and operational procedures Reclamation conducts on their CVP facilities throughout northern California. Because Reclamation aggregated information at different geographic scales and levels of specificity for long term contracts and facility operation and maintenance, the Service determined it was necessary to conduct separate, but concurrent, consultation on operation and maintenance to meet Reclamation's target dates for long term contract renewal. This consultation will analyze effects of operation of CVP facilities associated with renewal of the City of Fresno's long term water service contract other than those analyzed in the OCAP biological opinion.

3) *CVP Long-term Water Service Contract renewals.* In addition to the City of Fresno Contract analyzed in this consultation, Reclamation intends to renew about 119 CVP Water Service contracts throughout the Central Valley (27 of which have already been executed in the Friant Division of the CVP). The CVP Water Service contracts include an annual maximum quantity of approximately 5.6 million afy of CVP water and provide water service to approximately 3.2 million irrigable acres of land and an urban population in excess of 4.3 million people. The long term water contracts renewals, while authorizing a maximum contract amount, recognize that the delivery of the entire contract amount is subject to the availability of water and other CVP obligations.

For efficiency, Reclamation has grouped the CVP water-service contract renewal environmental-documents by similar regional issues. Reclamation has requested separate consultations for the following CVP regions: Shasta and Trinity Divisions, Sacramento River Division (Corning Canal, Tehama-Colusa Canal, and Black Butte Units), Feather River Water District, American River Division, Contra Costa Canal Unit, San Felipe Division, Delta-Mendota Canal Unit, and the West San Joaquin Division. The SFWO issued biological opinions for the remaining Friant Division contractors, the Hidden contract, the Buchanan contract, and the Cross Valley Canal contracts in 2001.

All of the renewing CVP contracts have provisions needed to comply with applicable law, including provisions of the CVPIA and requirements applicable to consultation regarding the execution of the contract and which are within the contractor's legal authority to implement. Renew contracts incorporate applicable provisions of the CVPIA requiring payment into the Central Valley Project Restoration Fund.

4) *Sacramento River Settlement Contract Renewals.* In addition to the water service contracts, Reclamation also intends to renew about 141 Sacramento River Settlement contracts. These contracts provide for a total of about 1.8 million af of base supply (based on prior water rights)

and about 400,000 af of CVP contract water to about 141 contractors.

Consultation History

April 8, 2004. Memorandum from Bureau of Reclamation to Fish and Wildlife Service, Request for Initiation of Formal Section 7 Consultation on the Long Term Contract Renewal between Reclamation and City of Fresno.

May 13, 2004. Memorandum from Fish and Wildlife Service to Bureau of Reclamation. Request for Further Information on the Long Term Contract Renewal between Reclamation and City of Fresno.

June 9-11, 2004. Site Visit by Fish and Wildlife Service Biologist, Graciela Hinshaw, City of Fresno Action Area, Fresno, California.

August 3, 2004. Memorandum from Bureau of Reclamation to Fish and Wildlife Service. Response to Request for Information for Formal Section 7 Consultation for the Long-Term Water Service Contract for the City of Fresno (re: 1-1-04-I-1658).

August 19, 2004. Meeting between Fish and Wildlife Service Biologists Graciela Hinshaw and Mike Welsh, and Bureau of Reclamation Biologists Mike Kinsey and Ned Gruenhagen, in Sacramento, California.

September 21, 2004. Memorandum from Bureau of Reclamation to Fish and Wildlife Service. Supplemental and Updated Information for the Biological Assessment for the Long-Term Water Service Contract Renewal for the City of Fresno, Central Valley Project.

October 4, 2004. Memorandum from Fish and Wildlife Service to Bureau of Reclamation. Confirmation of Formal Section 7 Consultation, Commencement Date of Section 7 Established as August 27, 2004.

October 4-8, 2004. Series of Meetings between Fish and Wildlife Service Biologist Mike Welsh and Bureau of Reclamation Biologist Mike Kinsey, in Sacramento, California.

January 5, 2005. Meeting between Fish and Wildlife Service Biologists Jan Knight and Mike Welsh and Bureau of Reclamation Biologists Mike Kinsey and David Young. Discussion of Water Needs Assessment, Sacramento, California.

January 18, 2005. Meeting of Fish and Wildlife Service and Bureau of Reclamation. Discussion of Water Needs Assessment, Sacramento, California and by Phone, South Central California Area Office, Fresno California

Environmental Baseline

Relationship to the CVPIA Programmatic Biological Opinion

This long-term contract renewal consultation tiers from the November 2000 Programmatic *Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP* (CVPIA PBO) to address incremental and cumulative effects of the proposed renewal action. This tiering automatically carries forward all conservation measures and other components of the Proposed Action of the CVPIA PBO into this consultation applicable to long term renewal of the City of Fresno contract. Reclamation's program to implement the CVPIA included the renewal of all existing CVP contracts as a core program (CVPIA PBO page 2-29 to 2-36). Two additional core program actions that affect renewal contract provisions are the implementation of water measurement under CVPIA Section 3405(b) and the implementation of water conservation standards, under CVPIA Section 3405(e).

The CVPIA Proposed Action listed eight significant areas of commitment that provided the basis of the PBO no jeopardy finding (Page 2-50). These eight areas of commitment are listed below:

- Commitments Associated with Implementation of the CVPIA.
 - Anadromous Fisheries Restoration Activities (§3406(b)(1)).
 - Habitat Restoration Program (§3406(b)(1) other).
- Commitments Associated with Long term Renewal of CVP Water Contracts.
- Commitments for Activities Associated with CVP Water and/or Facilities.
- Commitments Associated with CVP Conveyance and Storage.
- Commitments Associated with Operations and Management Planning.
- Commitments Associated with Conservation Programs.
 - Wildlife Habitat Augmentation Program (Wetland Development Program).
 - CVP Conservation Program.
 - Comprehensive Mapping Program.
- Commitments Associated with Drainage.
- Commitments Associated General Consultation Process.

Under "Commitments Associated with Long-term Contract Renewal of CVP Contracts (page 2-54 to 2-56) The CVPIA PBO lists these fourteen contract-renewal commitments:

1. Long-term contracts will be renewed, and Reclamation will complete tiered site specific consultations with the Service. **No CVP water will be delivered or applied outside current contract service areas until either formal or informal consultation, as appropriate, is complete.** Once formal site specific consultation has occurred that is in compliance with this opinion, it is assumed that changes in land-use practices and impacts to listed and proposal species, in the districts have been addressed.
2. During the contract renewal process, a **needs-analysis** to determine beneficial use of CVP water will be completed, and all contract renewals will be subject to Section 7 consultation procedures and the NEPA process. **A site specific biological assessment,**

to determine potential impacts of using CVP water on Federal and State listed and proposed species, will be completed for individual water districts or for groups of districts in close proximity to one another. The Service's SFWO Endangered Species Division will provide recommendations to Reclamation on the appropriate level of ESA consultation and *conservation measures* needed.

3. Reclamation also will continue to consult with the Service on a drainage-basin basis or ecosystem-level strategy for addressing new and amended water contracts outside and/or inside the American River watershed, including execution of diversion agreements associated with American River Water Forum.

4. **Reclamation and the Service will write a joint letter to the water districts, any member agencies, Planning Departments of cities or counties within the districts using CVP water, and other responsible parties regarding requirements under the ESA.** The letter will include: (1) a discussion of Reclamation's need to ensure that CVP water is not used in a manner which could jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated *critical habitat*, and (2) an explanation of the prohibitions described under Section 9 of the ESA in regard to *take*. The letter will discuss the appropriate protection measures as described here and in subsequent contract renewal consultation **and will be completed within 60 days of execution of long-term contracts.**

5. **Conservation strategies will be in place for the districts or areas receiving CVP water.** The types of strategies that could be accepted are: *Habitat Conservation Planning* as described in section 10(a) of the ESA; programmatic land management actions that include protection of listed and proposed species; requirements resulting from site specific Section 7 consultation; or an expansion of the existing CVP Conservation Program that adequately compensates for the direct and indirect effects of increased water delivery to an area.

6. Reclamation will, subsequent to a determination of *may affect* to listed species and/or adverse modification to designated *critical habitat* in consultation with the Service's SFWO Endangered Species Division, **consult on all Federal actions that result in changes in purpose of use for CVP water contracts, including changes from Agriculture to Agriculture/Municipal and Industrial purposes.**

7. The Service and Reclamation will work together to convey information to the water districts, and individual water users (as appropriate), on listed species needs. **Reclamation will establish an outreach and education program, in collaboration with the Service, to help water users integrate implementation of the CVPIA and requirements of the contract renewal process as it relates to the ESA.**

8. **Interior will work closely with the water users, providing them maps of listed**

species habitats within their service-areas and guiding them through the consultation process to address site specific effects. **Reclamation may encourage CVP contractors to complete HCPs encompassing the affected areas.**

9. Reclamation and/or the Service will develop provisions for compensation for the loss of endangered species habitat resulting from the direct or indirect effects of a Reclamation action not covered under prior biological opinions that occur within the CVP service areas from the date of this opinion until completion of either: (a) contract area specific Section 7 consultation, (b) any other required site specific Section 7 consultation on the effects of the conversion in question, or (c) the completion of an HCP that encompasses the area in question.

10. Reclamation and CVP contractors will comply with all applicable opinions related to the CVP (CVPIA PBO pages 1-11 to 1-12). Flow standards that form the environmental baseline of the 1995 OCAP biological opinion will be met, and Reclamation will take no discretionary actions (e.g. new contracts, contract amendments, facility construction) that would incrementally increase diversions and alter hydrologic and environmental conditions in the Delta until any required consultation is reinitiated and completed. (CVPIA PBO Appendix 1., letter to the Service and NMFS from Reclamation, dated October 29, 1999.)

11. **Contractors are required to conform with any applicable provisions of any biological opinions addressing contract renewal** so as to prohibit the use of CVP water that results in unauthorized *take* or conversion of wildland habitat determined to have the potential to be occupied by listed species, or violation of any terms of the contracts pertaining to the conservation of listed species. All contracts (or related biological opinions) will also stipulate Reclamation will not undertake any discretionary action allowing the delivery of CVP water to native habitat for listed species depicted on the maps attached to the 18-month notices unless clearance pursuant to the ESA has been obtained from the Service.

12. Reclamation, relative to all new and renewed contracts will informally consult with the Service's SFWO Endangered Species Division to determine the need for formal consultation prior to contract execution.

13. Reclamation will make certain that applicable measures to ensure ESA compliance for the renewal of CVP water service contracts are provided within the text of new and/or amended long-term water contracts and related actions.

14. **Reclamation will provide information related to proposed new water assignments of Project water to the Service's SFWO Endangered Species Division prior to execution of the assignment**

Since the issue of the CVPIA PBO in 2000, Reclamation has been working with the Service to address each CVPIA PBO commitment associated with long-term contract renewal of CVP water service contracts and/or refine them so that they are clearly understood and meet the original intent of avoiding and/or addressing impacts to listed species related to the renewal of long-term water contracts (Frank Michny pers. com 11/26/2004). Reclamation has stated that all CVPIA PBO commitments associated with long-term contract renewal of CVP water contracts will or have been addressed to ensure that the renewal of the long-term contracts fully comports with the requirements of the CVPIA PBO and Endangered Species Act as it pertains to federal actions (Frank Michny, U.S. Bureau of Reclamation, pers. com 11/26/2004).

Reclamation is committed to implement all conservation measures described in the CVPIA BO consultation (Frank Michny, U.S. Bureau of Reclamation, pers. com 11/26/2004). The following is a list of the more significant measures:

The Central Valley Conservation Program - A program that funds activities and land conservation strategies that address species that have been impacted by the CVP. The program is funded and administered by Reclamation and jointly implemented by Reclamation and the Service. Priority funding actions have included land and easement acquisitions, surveys/studies, habitat restoration, captive breeding/reintroduction, and management planning. All funding actions are determined jointly by Reclamation and the Service consistent with priorities established by both agencies.

CVPIA (b)(1) Other Program - A program established under the CVPIA to address the needs of species and habitats impacted by the CVP but not specifically enumerated within the CVPIA. The program is funded annually with CVPIA restoration funds and works in conjunction with the CVP Conservation Program to fund actions that will benefit species impacted by the CVP. Program funding is "split" annually between Reclamation and the Service. All funding actions are determined jointly and are consistent with priorities established by both agencies.

Wildlife Habitat Augmentation Program - This was part of a program identified in the CVPIA BO as a Wetlands Development Program. That program was terminated but those portions of the Wetland Development program that were related to commitments related to listed species were retained, reorganized and renamed. This program funds activities that have a general benefit to listed species, particularly those related to wetlands.

Comprehensive Mapping Program - This continuing Reclamation program develops spatial data on lands/habitat types and presence of species on lands that are related to CVP actions, specifically the service areas of the CVP contracts. This provides important information of the extent of habitats, trends in land use and known occurrences/ranges of listed species.

Environmental Conditions Within the Action Area

Analysis of digital information on current and future land uses and distribution of listed species, after ground-truthing, indicates few listed species and little habitat remain in the action area (U.S. Bureau of Reclamation 2004a). What little remains is located within the North Growth Area (Figure 2); none is identified in the Southeast Growth Areas, and none remains within the City's existing service area boundary. Recent ground reconnaissance showed that much of the remaining natural habitat in the North Growth Area has been fragmented or degraded within the past ten years or so, although the area is not yet fully developed.

Vernal pool habitat that supported occurrences of vernal pool fairy shrimp and California tiger salamander observed in the early 1990's have been substantially altered and degraded by construction of the Copper River golf course, housing, and Friant View Road (U.S. Bureau of Reclamation 2004a). An historic occurrence of fleshy-owl's clover northeast of the intersection of Friant Road and Blackstone Avenue has been extirpated by commercial and urban park development (U.S. Bureau of Reclamation 2004a). Some elderberry plants exist near the Riverside Golf course and near the Santa Fe Railroad bridge hut, as with vernal pools, have already been subject to the effects of deterioration caused by habitat fragmentation and degradation. The nearest nesting record for bald eagles is 24 miles to the north of the action area, but they have been reported to winter at Millerton Lake State Recreation Area and, on occasion, may visit the San Joaquin River. No designated or critical habitat occurs within the action area (U.S. Bureau of Reclamation 2004a). Designated critical habitat for the vernal pool fairy shrimp, fleshy owl's clover, and proposed critical habitat for California tiger salamander, is present adjacent to, but not within, the North Growth Area. We conclude that designated and proposed critical habitat for the vernal pool fairy shrimp, fleshy owl's clover, and California tiger salamander will not be adversely affected by the proposed action.

Given the City's pattern of fully utilizing their CVP contract during the past nine of the past 12 years as discussed above, we would consider effects of future development in the North Growth Area to be cumulative effects rather than indirect effects of the action, or the effects of interrelated and interdependent activities; therefore, they will not be subject to further review at this time. Future actions within the North Growth Area that may adversely affect, or that may incidentally take listed species, are required to obtain compliance through either section 7 or 10 of the Endangered Species Act as appropriate.

Conclusion

On the basis of the forgoing discussion and other information in our files, we conclude that renewal of the long term water service contract for the City of Fresno is not likely to adversely affect the federally listed as threatened vernal pool fairy shrimp (*Branchinecta lynchi*) and its designated critical habitat (unit 24B), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), bald eagle (*Haliaeetus leucocephalus*), fleshy owl's clover (*Castilleja campestris* ssp. *succulenta*) and its designated critical habitat (unit 5), or California tiger salamander (*Ambystoma californiense*) and its proposed critical habitat (unit 2) because: (1) the City of Fresno is already at or near full utilization of its CVP water supply to support existing development, and (2) for that reason, the CVP water supply is not likely to be play a significant

role in supporting future development as it is in many other urbanizing areas. No new construction is included in the proposed action.

Closing

The Sacramento Fish and Wildlife Office would like to thank you and your staff for their assistance in providing information, ground-truthing, helping us better understand Reclamation's water contracting process, and commitment to working with us to conserve listed species. Please contact Jan Knight or Mike Welsh at (916) 414-6600 with questions about the City of Fresno long term contract renewal.

Enclosures: Figures 1-4, Appendix A

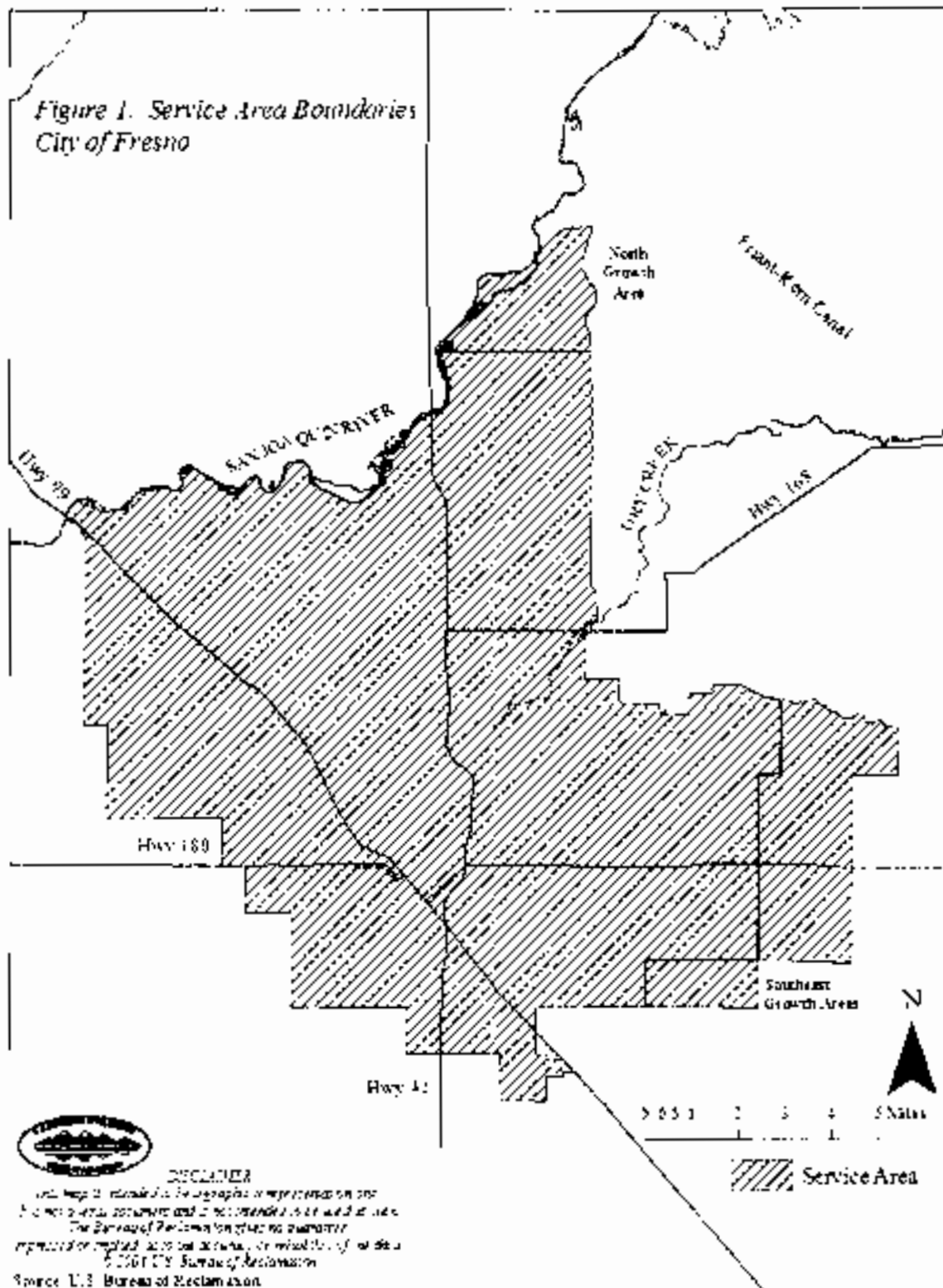
cc: Frank Michny, MP-150
U.S. Bureau of Reclamation
Sacramento, CA

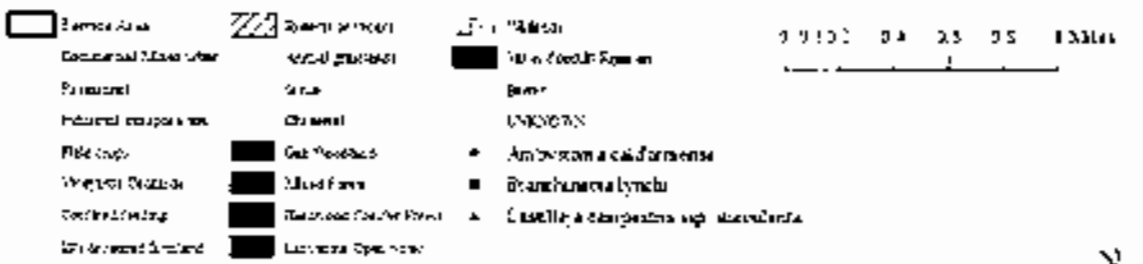
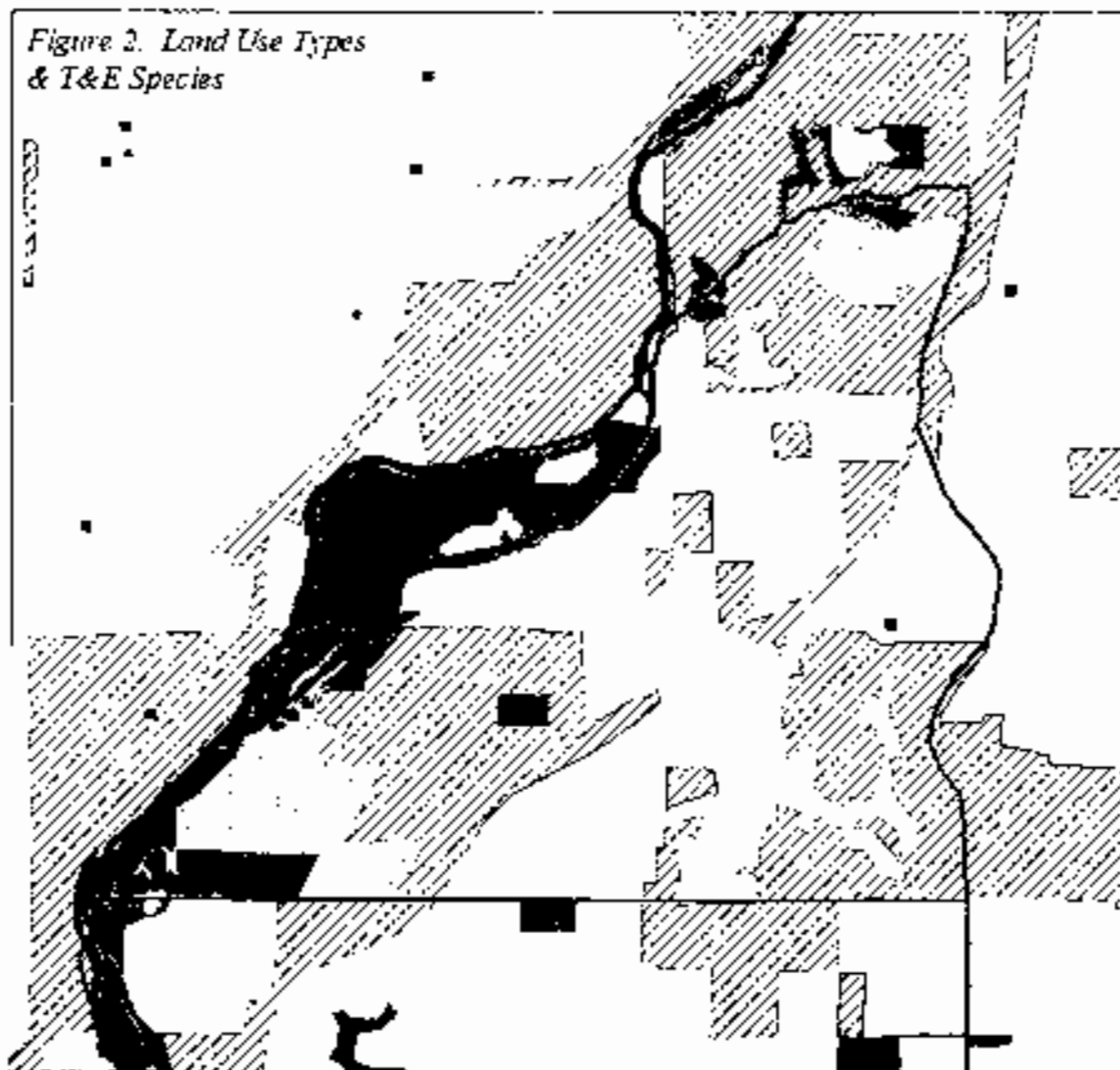
Richard Stevenson, MP-400
U.S. Bureau of Reclamation
Sacramento, CA

Barbara Hidleburg, SCC-415
U.S. Bureau of Reclamation
Fresno, CA

Michael Kinsey, SCC-427
U.S. Bureau of Reclamation
Fresno, CA

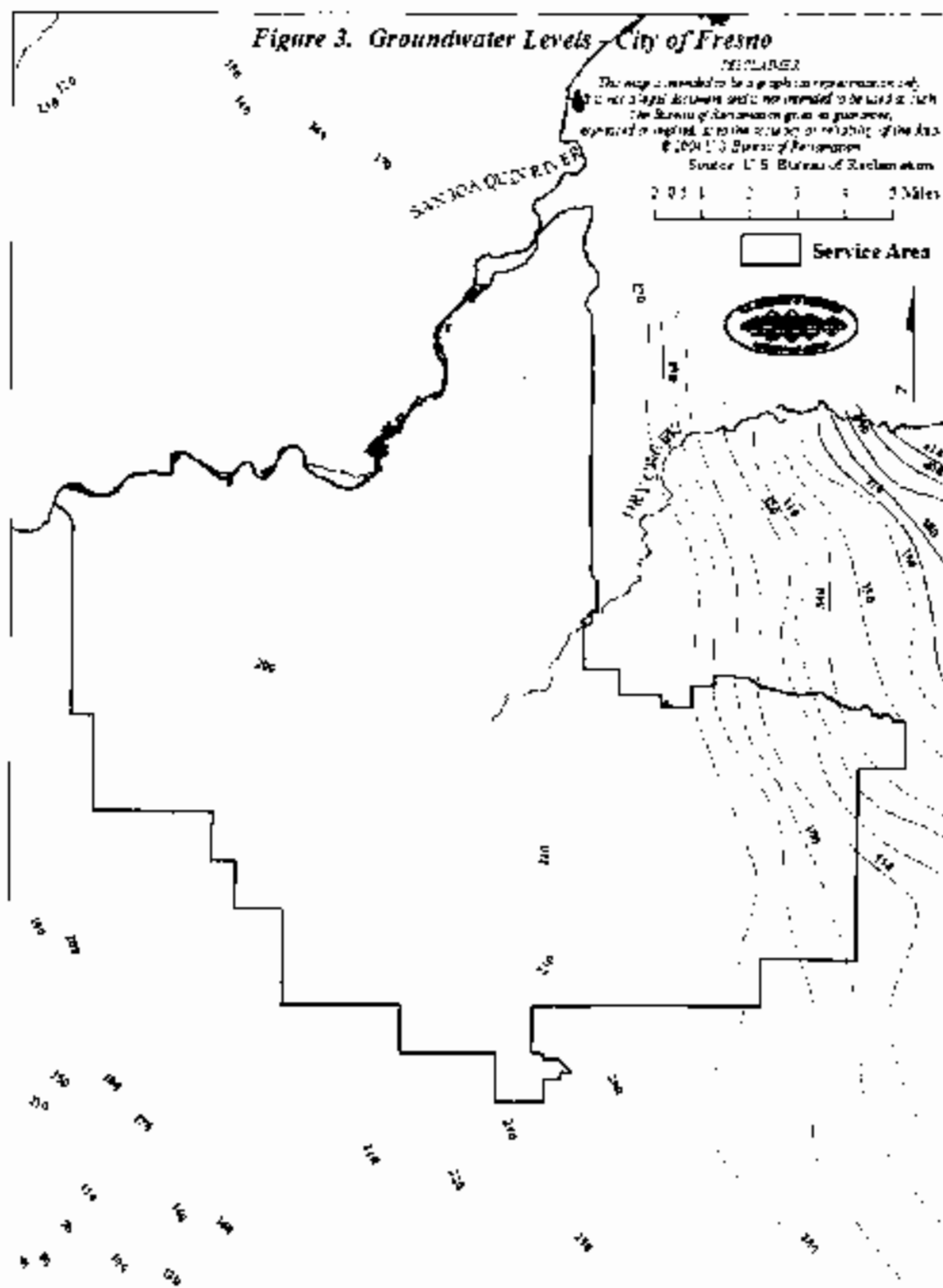
Judi Tapia, SCC-440
U.S. Bureau of Reclamation
Fresno, CA

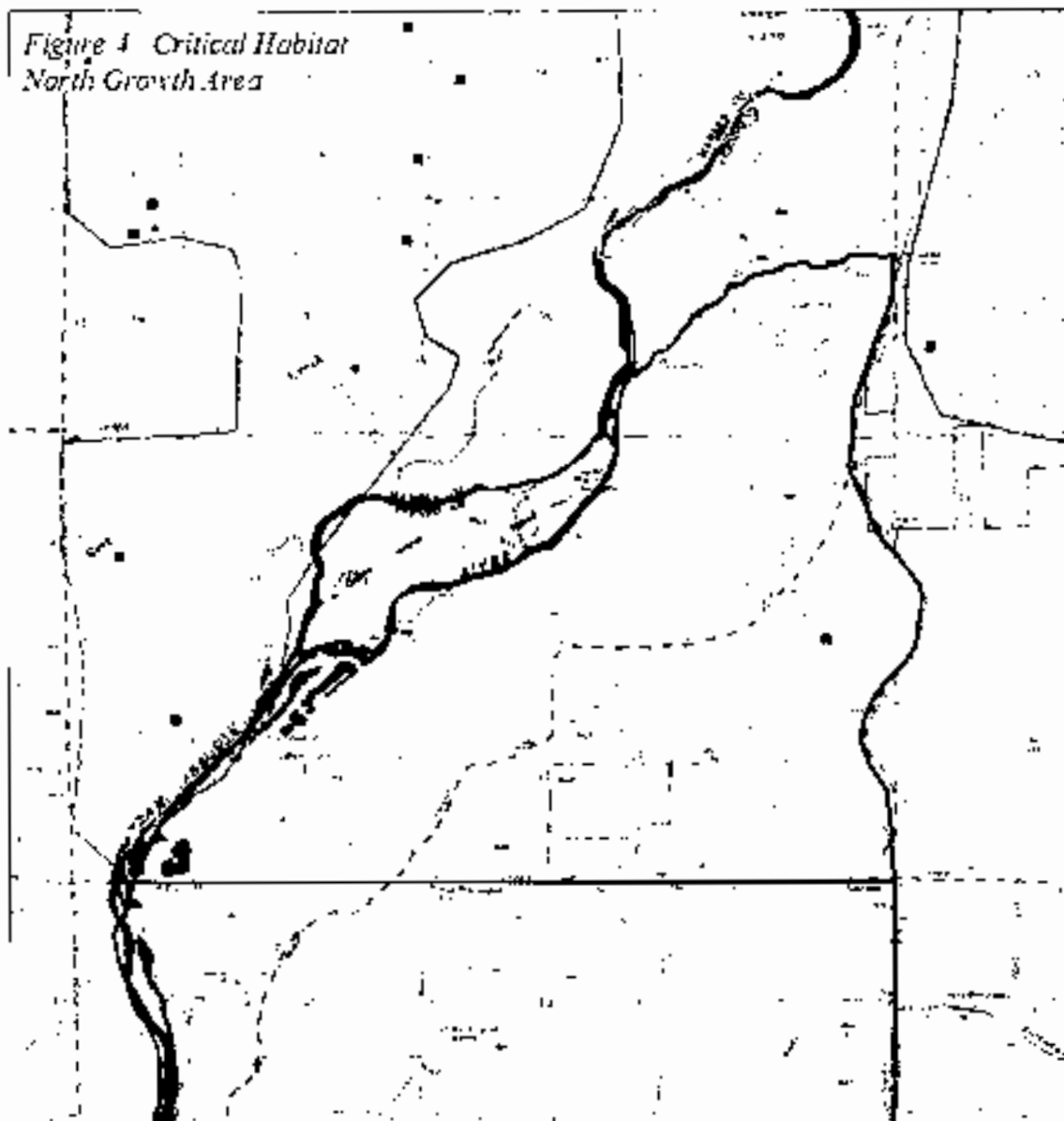




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- ▭ Service Area
- Critical Habitat Proposed - California Tiger Salamander
- Critical Habitat - Jena/Foot
- *Ambystoma californicum*
- *Bolitoglossa macrinii*
- ▲ *Certhya dispersa* sp. *haroldina*

0 0.5 1.0 1.5 2.0 2.5 3.0 Miles



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Scale: 1 inch = 1 mile
 10000:1 (not to scale)

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Appendix A
Water Needs Assessment

Water Needs Assessment

Contractor ID: 202330

Friant

Contractor's Water Supply Sources and Quantities (acre-feet)

Date: 1/18/2005 9:20:47 A

Timeframe 1	Surface Water Supply							Groundwater Supply				Total Supply 13
	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsf / Rtn / Recycle In 7	Trsf / Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1988/89 Submittal	0	59,312	0	357,104	Kings Rvr	12,327	0	0	293,000		154,000	567,743
1990	0	37,330	0	90,000		0	0	0	0		0	127,330
1996 WC Plan	15,107	90,081	0	508,895	Kings River	7,882	0	0	295,585		156,585	745,838
2025	30,000	90,000	0	391,840	Kings Rvr	16,250	0	0	263,291		180,000	581,381
2026	30,000	80,000	0	90,000		0	0	0	0		0	150,000

Contractor's Agricultural Water Demands

Maximum Production Acres: 149,347

Timeframe 1	Crop Water Requirement (acre-feet) 15	Distric Irrig Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres 21	Reference Irrigated Acres 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1989	430,580	75	47,033	64,993	511,398	487,449	163,120	162,483	3.14	3.00	8,000	519,398
1990	405,338	75	61,183	61,183	458,874	458,874	152,958	152,959	3.00	3.00		
1996	434,096	75	85,287	63,219	491,745	458,339	163,218	158,048	3.01	2.50	8,000	499,745
2025	424,298	85	67,216	67,216	420,098	420,098	168,039	168,039	2.50	2.50	8,000	428,098
2026												

Contractor's M&I Water Demands

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Rel Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet) 37	Total Ag - M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm / Instl. (acre-feet) 32	Total Demand (acre-feet) 33	Unacc. / Dist. (acre-feet) 34					
1989	481,522	252.6	136,265	5,241	21,288	26,529	4,884	301.0	310.9	167,678	687,074	118,331
1990	364,202	253.4	100,530	5,241	21,288	26,529	4,884	0.0	332.6	131,943	131,943	4,613
1996	571,009	252.8	161,549	5,527	26,296	31,823	5,801	301.0	311.4	199,173	698,918	46,920
2025	877,850	225.7	247,186	8,611	30,074	38,685	10,000	269.0	270.1	285,871	723,969	142,588
2026	833,034	226.4	180,535	8,611	30,074	38,685	8,400	269.0	250.0	205,620	205,620	56,620

* Represents Maximum Contract Amount

Notes: COMBINED ANALYSIS: CITY OF FRESNO/FRESNO ID: 2025 - 90,000 AF represents 100% Class I + 40% Class II. Transfer In = reclaimed water. 124,291 AF of gw recharge assumed to be available for pumping in a normal year in addition to 139,000 AF safe yield. 1990 is for 1989 data for City of Fresno M&I population only. 2026 is for 2025 data for City of Fresno M&I population projections only.