

Appendix H

2011 Conservation Bank Transactions



Flame Skimmer (*Libellula saturata*)

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KERN WATER BANK AUTHORITY

February 13, 2012

Mr. Thomas Leeman
U.S. Fish & Wildlife Service
2800 Cottage Way W2605
Sacramento, CA 95825

RE: Kern Water Bank Authority (KWBA)
2011 Conservation Credit Certificates and
2011 Endowment Fund for Credits Sold

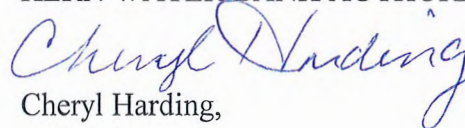
Dear Thomas:

Enclosed are two sets of Conservation Credit certificates for the conservation credits sold in 2011. I am also forwarding a check for NINETEEN THOUSAND ONE HUNDRED TWENTY-FIVE DOLLARS, (\$19,125), representing the endowment funds for conservation credits sold in 2011 to California Department of Fish and Game.

If you need anything further, please call.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosure (3)

cc: Jeffrey Single, CDFG
Annee Ferranti, CDFG
Bill Pelle, USFWS

CH/

KERN WATER BANK AUTHORITY

February 13, 2012

Dr. Jeffrey Single
Regional Manager
California Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93710

RE: Kern Water Bank Authority (KWBA)
2011 Conservation Credit Certificates and
2011 Endowment Fund for Credits Sold

Dear Jeff:

Enclosed are two sets of Conservation Credit certificates for the conservation credits sold in 2011. I have enclosed a check for NINETEEN THOUSAND ONE HUNDRED TWENTY-FIVE DOLLARS, (\$19,125) representing the endowment funds for conservation credits sold in 2011. Per the Conservation Bank Agreement (Agreement), this payment is based on the sale of 51 credits at the rate of \$375.00 per credit. Paragraph 6.2 of the Agreement stipulates that KWBA should forward the endowment funds to:

FASB, California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
Attention: Cash Receipts Group
Fund: KWB Conservation Bank Endowment

Based on previous conversations with CDFG staff, however, I am sending the payment to your attention. If you need anything further, please call.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (3)

cc: Annee Ferranti, CDFG
✓ Thomas Leeman, USFWS

CH/

**KERN WATER BANK AUTHORITY
GENERAL ACCOUNT**

1620 MILL ROCK WAY, SUITE 500
BAKERSFIELD, CA 93311

WELLS FARGO BANK, N.A.
11-24/1210

016881

2/13/2012

PAY TO THE
ORDER OF

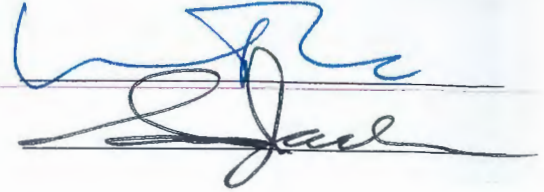
California Department of Fish & Game

\$\$\$19,125.00

Nineteen Thousand One Hundred Twenty-Five and 00/100*****

DOLLARS

California Department of Fish & Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814



MEMO

Endowment Fund for 2011 Conservation Credits

⑈016881⑈ ⑆121000248⑆ 4040017758⑈

KERN WATER BANK AUTHORITY

016881

California Department of Fish & Game

2/13/2012

Date Type Reference
1/1/2012 Bill 2011 Endmt

Original Amt.
19,125.00

Balance Due
19,125.00

Discount

Payment
19,125.00

Check Amount

19,125.00

Wells Fargo General Endowment Fund for 2011 Conservation Credits

19,125.00

KERN WATER BANK AUTHORITY

016881

California Department of Fish & Game

2/13/2012

Date Type Reference
1/1/2012 Bill 2011 Endmt

Original Amt.
19,125.00

Balance Due
19,125.00

Discount

Payment
19,125.00

Check Amount

19,125.00

Wells Fargo General Endowment Fund for 2011 Conservation Credits

19,125.00

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Zachary Parker
California Department of Transportation
2015 East Shields Avenue, Suite 10
Fresno, CA 93728

RE: Conservation Credit Certificate #2011-01

Dear Mr. Parker:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 8 credits from the Kern Water Bank Authority Conservation Bank.

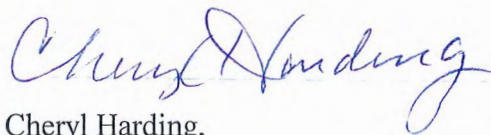
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY



CONSERVATION CREDIT CERTIFICATE NO. 2011-01

8 CREDITS

**State of California Department of Transportation
Kettleman City Rehabilitation Project, Kings County
(FWS 1-1-06-F-0064)**

This Conservation Credit Certificate certifies that the State of California Department of Transportation (the "Developer") has acquired eight (8) Conservation Credits in the Kern Water Bank Conservation Bank (the "Conservation Bank"), established pursuant to the Conservation Bank Agreement (the "Conservation Bank Agreement") dated October 2, 1997, by and among the United States Fish and Wildlife Service ("USFWS"), the California Department of Fish and Game ("CDFG"), and Kern Water Bank Authority ("Bank Owner").

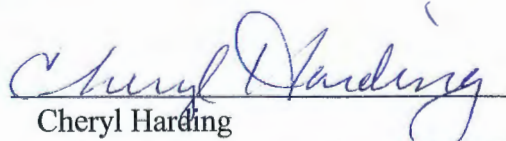
This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By:



Cheryl Harding

Authorized Representative of Bank Owner



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



IN REPLY REFER TO:
81420-2010-F-0643

AUG 09 2010

Mr. Zachary Parker
Biology Branch Chief
California Department of Transportation, District 6
2015 East Shields Avenue, Suite A-100
Fresno, California 93726


Subject: Reinitiation of the biological opinion for the *Kettleman City Rehabilitation Project, Kings County, California* (California Department of Transportation EA 06-415900), as appended to the *Programmatic Biological Opinion on the Effects of Minor Transportation Projects on the San Joaquin Kit Fox, Giant Kangaroo Rat, Tipton Kangaroo Rat, Blunt-nosed Leopard Lizard, California Jewelflower, San Joaquin Woolly-threads, Bakersfield Cactus, and Recommendations for the San Joaquin Antelope Squirrel* (1-1-01-F-0003, amended 81420-2009-F-0974-1)

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request to amend the biological opinion for the *Kettleman City Rehabilitation Project in Kings County, California* (Service file number 1-1-06-F-0064), issued on March 7, 2006. Your letter, dated June 22, 2010, was received in this office on June 25, 2010. Under consideration is Caltrans' request to modify the conservation measure pertaining to compensation for the endangered San Joaquin kit fox (*Vulpes macrotis mutica*) and the endangered blunt-nosed leopard lizard (*Gambelia sila*). This response was prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

In reviewing the request, the Service has relied upon: (1) the Service's March 7, 2006, biological opinion for the project, (2) telephone discussions and electronic-mail (e-mail) correspondence between the Service, Caltrans, and Wildlands Inc., dating from April through June 2010; (3) Caltrans' June 22, 2010, amendment request letter to the Service; and (4) other information available to the Service.

Consultation History

April 23, 2010. Jen Schofield (Service) received two original copies from Ryan Lopez (Wildlands, Inc.) of the *Agreement for Sale of Conservation Credits* for Caltrans' purchase of

TAKE PRIDE
IN AMERICA 

75.4 San Joaquin kit fox credits from Kreyenhagen Hills Conservation Bank (KHCB). These agreements requested Service approval and signature prior to being returned to Wildlands.

May 5, 2010. Ms. Schofield e-mailed Zachary Parker (Caltrans) to inquire about the proposed compensation as set forth in the credit sales agreement between Caltrans and KHCB that Wildlands, Inc. had submitted for Service approval. The biological opinion stated that compensation would be fulfilled through land acquisition, not conservation bank usage; the document also addressed the blunt-nosed leopard lizard, which is not a species covered by KHCB. However, Ms. Schofield suggested to Mr. Parker that the Service would prefer the conservation bank approach and that a possible solution for addressing both species was to set aside a percentage of the credits (e.g. 10%) to the Kern Water Bank Authority (KWBA) to cover the blunt-nosed leopard lizard, with the rest remaining at KHCB for the San Joaquin kit fox.

May 6, 2010. Mr. Parker e-mailed Ms. Schofield to provide his thoughts on events concerning the compensation for the project. He said that both Virginia Strohl and Lori Bono (Caltrans) had voiced early concerns regarding the sales agreement and so had requested that Wildlands, Inc. first send it to the Service to see if it could be approved. He recognized that although there was no mention in the biological opinion of utilizing a conservation bank, a bank had been proposed as an option in Caltrans' initial request letter and biological assessment. Mr. Parker also said Caltrans had coordinated previously with KHCB on the blunt-nosed leopard lizard issue, as the bank had indicated that there had been several species occurrences on site; he relayed that KHCB was proposing to add the blunt-nosed leopard lizard in its next report. Mr. Parker also mentioned that the habitat within the project footprint was not very good quality, based on Caltrans' most recent assessment for the blunt-nosed leopard lizard; Caltrans was thus working with the California Department of Fish and Game (CDFG) on how to proceed with surveys to prove absence or to include measures in-lieu of that. He said Caltrans would likely end up re-initiating formal consultation, but first he would talk to Ms. Strohl to inquire about coordination activities of which he might not be aware.

May 10, 2010. Mr. Lopez e-mailed Ms. Schofield to inquire into the status of the sales agreement for the San Joaquin kit fox credits at KHCB.

June 3, 2010. Ms. Schofield responded to Mr. Lopez via e-mail to say that the sales agreement was on hold since several issues had arisen relating to Caltrans' compliance with the biological opinion. She was now waiting for Caltrans to update her on the next steps it planned to take.

June 7, 2010. Mr. Lopez telephoned Ms. Schofield to concur with the Service's action of placing the sales agreement on hold. He provided some further background on the situation and relayed that he had been aware of the blunt-nosed leopard lizard issue. He inquired of Ms. Schofield as to what Caltrans intended; she replied that this would depend on the updates with which Caltrans provided her.

Mr. Parker e-mailed Ms. Schofield to ask for a reminder as to whether they had decided anything at the end of their last correspondence in regards to the compensation issues; she replied that nothing definitive had been addressed. Mr. Parker replied to say that the survey issue with CDFG had been resolved and that Ms. Bono was looking into the circumstances of an older oil project that had been approved by the Service for both San Joaquin kit fox and blunt-nosed leopard lizard compensation at KHCB. He stated that Caltrans would prefer to use Wildlands, Inc. if possible. Following an internal discussion with a Service colleague, Ms. Schofield responded to say that although they did not have the appropriate details at hand regarding this oil project, and although there could have been extenuating circumstances, this approval did not set precedence. She therefore again suggested the idea of Caltrans purchasing a portion of the credits at the KWBA specifically for the blunt-nosed leopard lizard. Ms. Schofield also inquired whether Caltrans would be re-initiating consultation soon.

June 25, 2010. The Service received a letter from Caltrans requesting approval of the purchase of 67.86 San Joaquin kit fox credits at KHCB and of 7.54 blunt-nosed leopard lizard and San Joaquin kit fox credits at the KWBA, for permanent and temporary effects to these species in lieu of land acquisition, as initially proposed in the biological opinion.

The Service approves Caltrans' proposal to help minimize the permanent and temporary effects of the project on the San Joaquin kit fox and blunt-nosed leopard lizard by purchasing a total of 75.4 conservation credits, split between KHCB, located in Fresno County and KWBA, located in Kern County. The purchase of 67.86 credits at KHCB and 7.54 credits at KWBA credits will satisfy, in part, the combined San Joaquin kit fox and blunt-nosed leopard lizard conservation measures. KHCB's service area appropriately covers the project's action area; KWBA's permit area also appropriately covers the project's action area. The Service will consider this portion of compensation requirements for the project completed once the fully executed Sales Agreement, Bill of Sale, and Payment Receipt are received.

The following changes are to be made to the biological opinion. All alterations and additions are in **bold**:

On page 2, the Compensation Component is currently written as:

2. "The California Department of Transportation shall provide compensation in the form of land acquisition for newly-disturbed habitats, whether temporary or permanent, and shall not provide compensation for previously paved areas or non-habitat areas within the roadway, shoulder areas, or right-of-way. Because the project occurs within a satellite population area, the compensation ratios for adverse effects are as follows:"

Modify the first sentence. This is amended to read:

2. "The California Department of Transportation shall provide compensation in the form of **the purchase of conservation bank credits** for newly-disturbed habitats, whether

temporary or permanent, and shall not provide compensation for previously paved areas or non-habitat areas within the roadway, shoulder areas, or right-of-way. Because the project occurs within a satellite population area, the compensation ratios for adverse effects are as follows:"

On page 3, measures 2 and 3 are currently written as:

2. "The California Department of Transportation shall provide compensation in the form of land acquisition for 75.4 acres of habitat for the San Joaquin kit fox and blunt-nosed leopard lizard (see table below for breakdown of ratios). The California Department of Transportation will acquire the compensation in the same county where the project occurs, unless otherwise approved in writing by the Service.
3. At least 30 days prior to ground breaking, the California Department of Transportation shall purchase any required compensation land, place a Service-approved conservation easement on that land, and arrange for Service-approved management and endowment."

Delete the last sentence of measure 2 and the second half of measure 3. Modify the two measures to reflect the approved change in compensation method from land acquisition to conservation bank credit purchases. These are amended to read:

2. "The California Department of Transportation shall provide compensation in the form of **the purchase of 75.4 credits for 62 acres** of habitat for the San Joaquin kit fox and blunt-nosed leopard lizard (see table below for breakdown of ratios). **Credits shall be split between KHCB (whose service area extends to the same County in which the project occurs; Kings), and the KWBA (whose permit area also extends to Kings County). Ninety percent of the total credits (67.86) shall be purchased at KHCB for permanent and temporary effects to the San Joaquin kit fox, while the remaining 10 percent of the total credits (7.54) shall be purchased at KWBA for permanent and temporary effects to the blunt-nosed leopard lizard and San Joaquin kit fox.**
3. At least 30 days prior to ground-breaking, the California Department of Transportation shall purchase the appropriate number of credits."

The remainder of the March 7, 2006, biological opinion is unchanged. This concludes reinitiation of formal consultation on the Kettleman City Rehabilitation Project. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In

Mr. Zachary Parker

5

instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

Please contact Jen Schofield or Michael Welsh, Acting San Joaquin Valley Branch Chief, at the letterhead address or at (916) 414-6630 if you have any questions regarding this letter.

Sincerely,



fd Susan K. Moore
Field Supervisor

cc:

Mr. Walter C. Waidehich, Jr., Federal Highway Administration, Sacramento, California
Ms. Annee Ferranti, California Department of Fish and Game, Fresno, California



DEPARTMENT OF FISH AND GAME

JOHN McCAMMAN, Director



Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
<http://www.dfg.ca.gov>

November 3, 2010

NOV 17 2010

Zachary Parker
California Department of Transportation (Caltrans)
2015 East Shields Avenue, Suite 100
Fresno, California 93728

**Subject: SR 41 Kettleman City Rehabilitation Project, Kings County, California
06-KIN-41 PM 11.5-20.1 EA 06-415900
Request for Approval of Habitat Compensation Purchase at Kern Water Bank**

Dear Mr. Parker:

The California Department of Fish and Game (DFG) has reviewed your request to mitigate for the above Project through the Kern Water Bank Authority's (KWBA) Kern Water Bank (KWB).

The Project, which entails shoulder widening, is located along State Route (SR) 41 Post Mile 11.5-20.1 from Quail Avenue east of Kettleman City to Utica Avenue west of I-5, in Kings County. The Project crosses T 22 S, R 19 E, Sec 7, 18, and 19 in Kettleman City Quad, T 23 S, R 18 E, Sec 2, 10, 11 and 15 in Kettleman Plain Quad, T 22 S, R 19 E, Sec 19, 30 and 31 in Los Viejos Quad, T 22 S, R 18 E, Sec 36 in Los Viejos Quad and T 23 S, R 18 E, Sec 1 and 2 also in Los Viejos Quad. This location contains grassland habitat with some naturally open areas and some areas opened by the previous disking of a fire break. The Project is in an area with the potential to support State-listed species, including the State and Federally endangered and State fully protected blunt-nosed leopard lizard (BNLL) (*Gambelia sila*) and State threatened and Federally endangered San Joaquin kit fox (SJKF) (*Vulpes macrotis mutica*).

A total of 75.4 acres of compensatory mitigation will be acquired for permanent and temporary impacts to potential habitat for SJKF and BNLL, as required by the United States Fish and Wildlife Service (USFWS) through the Biological Opinion (1-1-06-F-0064 amended 81420-2010-F-0643) which is appended to the Programmatic Biological Opinion (1-1-01-f-003 amended 81420-2009-F-0974-1). Caltrans has requested approval to purchase 7.54 credits at the KWB as compensation for habitat suitable for both SJKF and BNLL. In addition, Caltrans plans to purchase 67.86 credits at the Kreyenhagen Hills Conservation Bank (KHCB) for impacts to SJKF habitat. USFWS has given approval for both of these requests.

DFG has issued a Streambed Alteration Agreement (SAA) 2010-0109-R4 for this Project, but a 2081 Incidental Take Permit Application was not submitted for this Project. DFG concurs that KWB is an appropriate location to compensate for the loss of habitat that will result from Project implementation and that the KWBA may issue a Conservation Credit Certificate for this Project for eight (8) credits.


Zachary Parker
November 3, 2010
Page 2

However, Caltrans should be aware that if this Project results in the "take" of SJKF then Caltrans will need to seek additional mitigation at a State-approved bank because the KHCB is not a State-approved California Endangered Species Act Conservation Bank. DFG would then make its own determination as to the required compensation acreage which would be based upon DFG's estimate of the acreage required to provide for adequate biological carrying capacity at a replacement location as a means of fully mitigating the Project's impacts to the habitat.

Any additional potential habitat disturbance associated with road construction or maintenance by Caltrans would need separate review by DFG and a separate approval for use of KWB for mitigation.

If you have any additional questions, please contact Laura Peterson-Diaz, Environmental Scientist, at the address provided on this letterhead, by e-mail at lpdiaz@dfg.ca.gov, or by telephone at (559) 243-4014, extension 225.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

cc: ✓ Cheryl Harding
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield California 93311

Julie Maddox
Wildlands, Inc.
3855 Atherton Road
Rocklin, California 95765

Tim Kuhn
United States Fish and
Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

ec: Julie Means
Laura Peterson-Diaz
Department of Fish and Game

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Russell Grigg
Griffith Company
1128 Carrier Parkway Avenue
Bakersfield, CA 93308

RE: Conservation Credit Certificate #2011-02

Dear Mr. Grigg:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 9 credits from the Kern Water Bank Authority Conservation Bank.

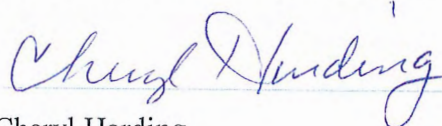
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY



CONSERVATION CREDIT CERTIFICATE NO. 2011-02

9 CREDITS

Griffith Company
Mendiburu Borrow Pit, Kern County
(FWS 81420-2011-TA-0416)

This Conservation Credit Certificate certifies that the Griffith Company (the "Developer") has acquired nine (9) Conservation Credits in the Kern Water Bank Conservation Bank (the "Conservation Bank"), established pursuant to the Conservation Bank Agreement (the "Conservation Bank Agreement") dated October 2, 1997, by and among the United States Fish and Wildlife Service ("USFWS"), the California Department of Fish and Game ("CDFG"), and Kern Water Bank Authority ("Bank Owner").

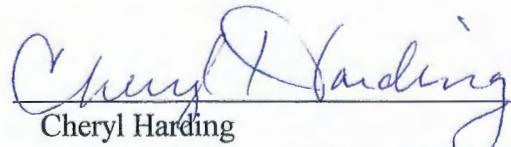
This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By:



Cheryl Harding

Authorized Representative of Bank Owner



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-TA-0416

MAR 25 2011

Mr. Russell Grigg
Griffith Company
1128 Carrier Parkway Avenue
Bakersfield, California 93308

Subject: Request for Authorization to Obtain Conservation Credits from the Kern Water Bank Authority, for the Griffith Company Proposed Mendiburu Livestock Property Borrow Pit Project, Bitterwater Valley Road, Kern County, California

Dear Mr. Grigg:

This letter responds to your March 18, 2010 electronic mail requests for U.S. Fish and Wildlife Service (Service) authorization for the purchase of conservation credits from the Kern Water Bank Authority (KWBA) by Griffith Company (Griffith), as compensation for ground disturbing activities associated with the Proposed Mendiburu Livestock Property Borrow Pit Project, a temporary borrow pit operation in a previously graded area adjacent to Bitterwater Valley Road, Kern County, California. The purchase of these credits by Griffith is intended to minimize the effects of incidental take upon the San Joaquin kit fox (*Vulpes macrotis mutica*) (kit fox) and Tipton's kangaroo rat (*Dipodomys nitratoideus nitratoideus*) resulting from Project-related impacts. The kit fox and kangaroo rat are listed as endangered under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Federal incidental take authorization for the Project would be extended through the *Kern Water Bank Habitat Conservation Plan / Natural Community Conservation Plan* (HCP) (1997).

The proposed Mendiburu Livestock Property Borrow Pit Project includes a total of 8.5 acres located along the southeast side of Bitterwater Valley Road approximately 3.5 miles south of State Route 46, in Section 18 T27S/R19E Mount Diablo Base & Meridian of the United States Geological Survey, Shale Point Quadrangle. The proposed Mendiburu Livestock Property Borrow Pit site is on private lands.

Site conditions were described in two biological investigations which were conducted on the subject property in support of the project by Pruett and Associates (Pruett), as approximately 8.5 acres of disturbed property in an area containing non-native grassland that is dominated by grazing, agriculture, and oil production. During surveys conducted by Pruett, no sensitive species were observed on the project site. In addition, no active, inactive, or potential kit fox dens were observed on the property. A buffer zone out to 1,000 feet was surveyed around the project area. The project buffer was largely devoid of large mammal activity. Some small burrows (less than 1 inch in diameter) were observed throughout the survey area. No precincts typical of kangaroo rats were observed in the buffer area.

TAKE PRIDE
IN AMERICA

To minimize the likelihood that the kit fox and Tipton's kangaroo rat will be adversely impacted from project activities, Griffith will incorporate all Service protective measures from the Service's *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (1995, 1999).

The Service concludes that it is likely this project will result in incidental take of kit foxes and Tipton kangaroo rat by destruction of their habitat, and by possible harassment, harm, and mortality from vehicle strikes related to Project construction. The compensation ratio in the HCP for projects with temporary impacts on listed species habitat area is 1:1. Therefore, to compensate for the effects of constructing and operating the proposed temporary borrow pit, Griffith is required to purchase 8.5 compensation credits from the KWBA for the temporary disturbance of 8.5 acres of habitat for the subject species. Please note that KWBA only sells whole credits and consequently 9 compensation credits will be purchased. The purchase of credits must be completed in full and a copy of the credit sales agreement received by the Service prior to any surface disturbance associated with the proposed Project.

Please note that the authorization for the purchase of compensation credits for incidental take of kit fox and Tipton's kangaroo rat does not exempt the Project from requirements under other State and/or federal laws and regulations. Further consultation with the Service may be necessary if: 1) new information reveals the proposed action may affect listed species or proposed critical habitat in a manner or to an extent not considered; or 2) new species or critical habitat is designated that may be affected by the proposed actions; or 3) the action is subsequently modified in a manner that causes an effect to the listed species that was not considered in this determination. Please contact Bill Pelle at (916) 414-6600 with questions regarding this letter (Service file number 81420-2011-TA-0416).

Sincerely,



Daniel Russell
Deputy Assistant Field Supervisor
Endangered Species Division

cc:

Cheryl Harding, Kern Water Bank Authority, Bakersfield, California
Julie Vance, California Department of Fish and Game, Fresno, California
Mary Jane Wilson, WZI Inc.



DEPARTMENT OF FISH AND GAME

JOHN McCAMMAN, Director



Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
<http://www.dfg.ca.gov>

MAR 17 2011

March 14, 2011

Russell Grigg
Vice President/District Manager
Griffith Company
1128 Carrier Parkway Avenue
Bakersfield, California 93308

**Subject: Griffith Company Mendiburu Livestock Property Borrow Pit, Kern County, California (Kern County CUP#1, Map #50)
Request for Approval of Habitat Compensation Purchase at Kern Water Bank**

Dear Mr. Grigg:

The California Department of Fish and Game (Department) has reviewed your verbal request to mitigate for the above project through the Kern Water Bank Authority's (KWBA) Kern Water Bank (KWB).

The proposed Project is a borrow pit mining operation in support of widening State Route (SR) 46, a California Department of Transportation (Caltrans) project that is currently underway. In April 2010, grading and excavation began under a County grading permit, and following a Notice to Comply issued by the Department of Conservation, Office of Mining Reclamation, Project activities were halted pending the approval of a surface and mining and reclamation plan. Approximately 90,000 cubic yards of soil have already been removed from the project site, and an additional 60,000 additional cubic yards of material are planned for removal. The Project site is located along the southeast side of Bitterwater Valley Road, approximately 3.5 miles south of SR 46, approximately 16 miles west of Lost Hills, on Section 18 of Township 27S, Range 19E, MDB&M (APNs 068-110-03 and 04) in unincorporated Kern County. The Project footprint will be limited to 8.5 acres in size.

The Project area consists of non-native grassland habitat and is in an area with known occurrences of State-listed species, including the State and federally endangered and fully protected blunt-nosed leopard lizard (*Gambelia sila*) and the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*). The State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) could also occur on the Project site, as well as the burrowing owl (*Athene cunicularia*), a State

Russell Grigg
March 14, 2011
Page 2

Species of Special Concern that is protected by the Federal Migratory Bird Treaty Act (MBTA) and sections 3503, 3503.5, and 3513 of the Fish and Game Code.

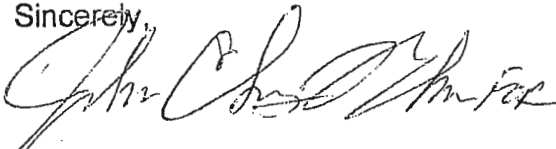
The Department believes that Project implementation is likely to result in "take" under the California Endangered Species Act (CESA) and, therefore, that a State Incidental Take (2081) Permit is necessary for this Project. However, no "take" can be authorized for the fully protected blunt-nosed leopard lizard (BNLL). Should pre-construction surveys or construction monitoring indicate BNLL presence in or adjacent to the work area, the Project proponent must consult with the Department and develop and implement avoidance measures acceptable to the Department.

The Department concurs that KWB is an appropriate location to compensate for the loss of habitat that will result from Project implementation, as the Project is described in this letter. The Department has determined that the impacts from the Project will largely be temporary given the short-term nature (less than one year) of mining and once the required on-site restoration occurs. As a result, mitigation at a 1:1 ratio is appropriate. The KWBA may issue a Conservation Credit Certificate for this Project for nine (9) credits (credits are only sold in whole acre increments).

Please note that this letter does not grant Incidental Take Authority under CESA for this Project under the State Incidental Take Permit held by the KWBA. ***In order to comply with State law, the Project may not resume/proceed until a final Incidental Take Permit is secured.*** Preparation of an Incidental Take Permit for this Project is currently underway.

If you have any additional questions, please contact Julie Vance, Environmental Program Manager, at the address provided on this letterhead or at (559) 243-4005, extension 141.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

cc: See Page Three

Russell Grigg
March 14, 2011
Page 3

cc: Tim Kuhn
United States Fish and
Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

Lorelei Oviatt, AICP, Director
Kern County Planning and Community
Development Department
2700 "M" Street, Suite 100
Bakersfield, California 93301-2323

Mike Luksic
Department of Conservation
Office of Mine Reclamation
Compliance Section
801 K Street, MS 09-06
Sacramento, California 95814-3530

Cheryl Harding
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, California 93311

Mary Jane Wilson
WZI, Inc.
1717 28th Street
Bakersfield, California 93301-2370

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Todd Barosso
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, CA 93728

RE: Conservation Credit Certificate #2011-03

Dear Mr. Barosso:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 1 credit from the Kern Water Bank Authority Conservation Bank.

Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY



CONSERVATION CREDIT CERTIFICATE NO. 2011-03

1 CREDIT

**State of California Department of Transportation
Oily Wash Project, Kern County
(FWS 81420-2011-TA-0249-1)**


This Conservation Credit Certificate certifies that the State of California Department of Transportation (the "Developer") has acquired one (1) Conservation Credit in the Kern Water Bank Conservation Bank (the "Conservation Bank"), established pursuant to the Conservation Bank Agreement (the "Conservation Bank Agreement") dated October 2, 1997, by and among the United States Fish and Wildlife Service ("USFWS"), the California Department of Fish and Game ("CDFG"), and Kern Water Bank Authority ("Bank Owner").

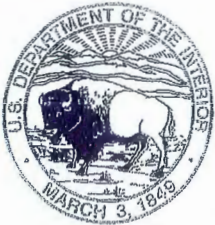
This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By: 
Cheryl Harding
Authorized Representative of Bank Owner



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:
81420-2011-TA-0249-1

JAN 31 2011

Ms. Cheryl Harding
Project Administrator
Kern Water Bank Authority
PO Box 80607
Bakersfield, California 93380-0607

Subject: Approval of Sale of one Conservation Credit for the State Route 33 Oily Wash Project near McKittrick, Kern County, California

Dear Ms. Harding:

The U.S. Fish and Wildlife Service (Service) was first informed via electronic-mail of the State Route 33 Oily Wash Project (project) near the town of McKittrick in Kern County, California on January 24, 2011. It is our understanding that the project initially involved only rehabilitation work on guardrails and headwalls and that no work occurred within the California Department of Fish and Game's (CDFG) 1600 jurisdiction; neither was there any disturbance to habitat or species. To date, there has been no Service involvement with this project as Caltrans determined there to be no effect to any federally-listed species. The CDFG issued a Stream Alteration Agreement (file number 2008-0126-R4) on July 3, 2008, following an observation by CDFG staff on June 17, 2008 of work activities causing disturbance to habitat within the channel of Oily Wash. It was thus agreed between CDFG and Caltrans that Caltrans would compensate for this disturbance to high quality valley saltbush scrub habitat. A letter from CDFG to Caltrans on August 5, 2010 identified how the compensation request was to be met; CDFG concurred that the Kern Water Bank Authority's Conservation Bank (KWBCB) was an appropriate location at which to compensate for 0.034 ac of permanent effects (at 3:1 compensation ratio) and 0.416 ac of temporary effects (at 1.1:1 compensation ratio), resulting in a total of 0.560 ac of compensation acreage (equating to the purchase of one conservation credit by Caltrans).

Although there has been no prior Service activity regarding this project and we do not recommend separate compensation measures, we acknowledge the project issues leading to the present circumstances. The Conservation Bank Agreement established amongst the Kern Water Bank Authority, CDFG, and the Service requires concurrence from both resource agencies, CDFG and the Service, regarding conservation credit purchases. The Service therefore approves the sale of one credit from the KWBCB to Caltrans.

If you have questions regarding this letter, please contact Jen Schofield at (916) 414-6600.

Sincerely,

Michael Welsh
Acting Chief, San Joaquin Valley Branch

TAKE PRIDE
IN AMERICA 



DEPARTMENT OF FISH AND GAME

JOHN McCAMMAN, Director



Central Region

1234 East Shaw Avenue

Fresno, California 93710

(559) 243-4005

<http://www.dfg.ca.gov>

AUG 10 2010

August 5, 2010

Todd Barosso
California Department of Transportation
2015 East Shields Avenue, Suite 100
Fresno, California 93728

Subject: Oily Wash - Kern County
KER 33 PM 36.65 EA 06-0F820
Stream Alteration Agreement No. 2008-0126-R4
Request for Approval of Habitat Compensation Purchase at Kern Water Bank

Dear Mr. Barosso:

The California Department of Fish and Game (DFG) has reviewed your request to mitigate for the above Project through the Kern Water Bank Authority's (KWBA) Kern Water Bank (KWB).

The Project is located on State Route (SR) 33 at Post Mile 36.65 where it goes over Oily Wash, in Kern County. This is 3.7 kilometers north of the intersection with SR 58, near the City of McKittrick in Township 30 South, Range 22 East, Section 8, Reward Quad. This location is high quality valley saltbush scrub habitat. The Project occurred in an area with the potential to support State-listed species, including the State and Federally endangered and fully protected blunt-nosed leopard lizard (*Gambelia sila*), State threatened and Federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) and Federal endangered and State endangered, giant kangaroo rat (*Dipodomys ingens*).

Project History: The Project initially involved work only on the guard rails with no work within 1600 jurisdiction or disturbance of habitat and was initially cleared by the Caltrans biology branch in July 2006. When the Project changed in scope, it was not appropriately reevaluated and went to construction without the required permitting. On June 17, 2008, work causing disturbance to habitat within the channel of Oily Wash was observed by DFG staff. Caltrans was told to stop work until a 1600 agreement could be issued. On June 24, 2008, Caltrans biology performed surveys of the site. No threatened or endangered plant or animal species were observed. No burrows or track or tail drag marks were found during the field reconnaissance. Caltrans determined that there were no threatened or endangered species currently within the Project impact area. The Department agreed that Project implementation was unlikely to result in "take" under the California Endangered Species Act (CESA) and therefore that a State Incidental Take (2081) Permit was not required, because Caltrans proposed to implement measures that would likely avoid direct injury or mortality to threatened and endangered species. Stream Alteration Agreement 2008-0126-R4 was issued on July 3, 2008, and Caltrans was allowed to resume work. It was agreed upon at that time that Caltrans would mitigate for the disturbance to the high quality valley saltbush scrub habitat. This letter is to identify how this mitigation obligation can be met.

Todd Barosso
August 5, 2010
Page 2

Implementation of the Project, which has already been completed, resulted in widening the bridge over Oily Wash to meet current highway design standards, including shoulders. Non-yielding concrete barrier railing was placed on both sides. Widening the bridge required widening the concrete box culvert. This entailed removal of portions of the existing parapet walls located on both the southbound and northbound bridge points. Reinforced concrete box culvert extension footings were dug out, and new concrete was poured into frames at all four corners of the bridge. The existing culvert apron was removed and a new concrete apron was extended past the cutoff wall that was removed. Post-construction measures to prevent sediment from entering the watercourse included Rock Slope Protection (RSP) and erosion control blankets. The Project resulted in the disturbance of 0.450 acres of habitat, including permanent impacts to 0.034 acres and temporary impacts to 0.416 acres. At this time, the mitigation for this Project is still outstanding.


The Department concurs that KWB is an appropriate location to compensate for the loss of habitat that will result from Project implementation and that the KWBA may issue a Conservation Credit Certificate for this Project. The required compensation acreage is based upon DFG's estimate of the acreage required to provide for adequate biological carrying capacity at a replacement location as a means of fully mitigating the Project's impacts to the habitat. The mitigation ratio of 3:1 was used for permanent impacts and 1.1:1 for temporary impacts. Compensatory mitigation for permanent impacts is 0.034×3 which = 0.102 acres. Compensatory mitigation for temporary impacts is 0.416×1.1 which = .458. Total compensatory mitigation required for your Project is based on the sum of these two amounts: $0.102 + 0.458 = 0.560$ acres required for compensation.

Caltrans can meet this mitigation requirement by purchasing one credit from KWB, which has been approved by DFG, at the first address listed below. Implementation of the mitigation measures identified will result in mitigating potential impacts to San Joaquin kit fox to a level of less-than-significant, based on the evaluation of impacts from your Project.

Any additional potential habitat disturbance associated with road construction or maintenance by Caltrans would need separate review by DFG and a separate approval for use of KWB for mitigation.

If you have any additional questions, please contact Laura Peterson-Diaz, Environmental Scientist, at the address provided on this letterhead, by e-mail at lpdiaz@dfg.ca.gov or by telephone at (559) 243-4014, extension 225.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

cc: See Page Three

Todd Barosso
August 5, 2010
Page 3

cc: ✓Cheryl Harding
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield California 93311

Tim Kuhn
United States Fish and
Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

Amy Kuritsubo
Bureau of Land Management
Bakersfield Field Office
3801 Pegasus Drive
Bakersfield, California 93308

ec: Julie Means
Laura Peterson-Diaz
Department of Fish and Game

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Bill Lloyd
Cirque Resources L.P.
475 - 17th Street, Suite 1600
Denver, CO 80202

RE: Conservation Credit Certificate #2011-04

Dear Mr. Lloyd:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 1 credit from the Kern Water Bank Authority Conservation Bank.

Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY

CONSERVATION CREDIT CERTIFICATE NO. 2011-04

1 CREDIT

**Cirque Resources L.P.
Tupman 16X-13 Well Project, Section 13, T30S, R24E, MDBM, Kern County
(FWS 81420-2011-TA-0468)**

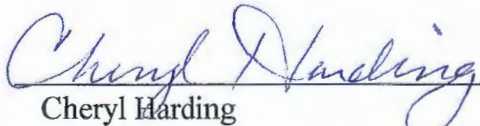
This Conservation Credit Certificate certifies that Cirque Resources L.P. (the "Developer") has acquired one (1) Conservation Credit in the Kern Water Bank Conservation Bank (the "Conservation Bank"), established pursuant to the Conservation Bank Agreement (the "Conservation Bank Agreement") dated October 2, 1997, by and among the United States Fish and Wildlife Service ("USFWS"), the California Department of Fish and Game ("CDFG"), and Kern Water Bank Authority ("Bank Owner").

This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By: 
Cheryl Harding
Authorized Representative of Bank Owner



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-TA-0468

13 May 2011

Mr. Bill Lloyd
Sr. Vice President Operations
Cirque Resources LP
475 17th St, Ste 1600
Denver, CO 80202

Subject: Request for Authorization to Obtain Conservation Credits from the Kern Water Bank Authority, for the Cirque Resources LP Proposed Tupman 16X-13 Project, near Tupman, Kern County, California

Dear Mr. Lloyd:

This letter responds to your April 13, 2011 electronic mail request for U.S. Fish and Wildlife Service (Service) authorization for the purchase of conservation credits from the Kern Water Bank Authority (KWBA) by Cirque Resources LP (Cirque), as compensation for ground disturbing activities associated with the Proposed Tupman 16X-13 Project (Project), consisting of two exploratory oil-gas wells near Tupman, Kern County, California. The purchase of these credits by Cirque is intended to minimize the effects of incidental take upon the federally-listed as endangered San Joaquin kit fox (*Vulpes macrotis mutica*) (kit fox), Tipton kangaroo rat (*Dipodomys nitratoide nitratoide*) and blunt-nosed leopard lizard (*Gambelia sila*) (leopard lizard), resulting from Project-related impacts. Federal incidental take authorization for the Project would be extended through the *Kern Water Bank Habitat Conservation Plan / Natural Community Conservation Plan* (HCP/NCCP) (1997).

The project is located about 1 mile north of Tupman in Section 13 Township 30 South, Range 24 East, Mount Diablo Base & Meridian of the United States Geological Survey, Tupman Quadrangle. The site consists of installing two oil and gas wells on KWBA operational lands with underlying, private mineral rights at about Universal Trans Mercator (UTM) zone 11 south, 285,600 meters (m) east, 3,910,600 m north.

Site conditions were described in the California Division of Oil, Gas and Geothermal Resources November 23, 2009 *Initial Study / Negative Declaration*, and in the June 2009 biological evaluation (BE), prepared by Robert A. Booher Consulting (Booher), as non-native and disturbed/ruderal grassland habitat, a portion of which is being currently used for ranching operations. While no presence or sign of kit fox, Tipton kangaroo rat or leopard lizard were detected during the surveys conducted by Booher in 2009, the area is potential habitat for these species. The BE mentions three inactive, but potential, kit fox burrows. Also mentioned are California Natural Diversity Database records documenting the nearest Tipton kangaroo rat occurrence at about 0.4 miles from the Project site and closest leopard lizard sighting at 0.6 miles.

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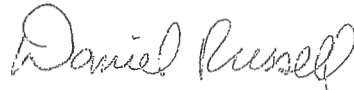
The Service concludes that it is likely this project will result in incidental take of kit foxes, Tipton kangaroo rat and leopard lizard by destruction of their habitat, and by harassment, harm, and mortality from vehicle strikes related to Project construction. Habitat impacts include 0.85 acres of permanent loss. We agree that authorization for this project can proceed under the HCP/NCCP.

To minimize the likelihood that the kit fox, Tipton kangaroo rat and the leopard lizard will be adversely impacted from project activities, Cirque will incorporate all Service protective measures from the Service's *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011) and the measures included in the BE.

To compensate for the effects of constructing and operating the well pad, Cirque will purchase 1 credit from the KWBA for the disturbance of habitat to the San Joaquin kit fox, Tipton kangaroo rat and the leopard lizard. The purchase of the credits must be completed in full and a copy of the credit sales agreement shall be received by the Service prior to any surface disturbance associated with the proposed Project

Thank you for your efforts to conserve the San Joaquin kit fox, Tipton kangaroo rat and the blunt-nosed leopard lizard. Please contact Fish and Wildlife Biologists Bill Pelle or San Joaquin Branch Chief Thomas Leeman at (916) 414-6600 with questions regarding this letter.

Sincerely,



Daniel Russell
Deputy Assistant Field Supervisor

cc:

Cheryl Harding, Kern Water Bank Authority, Bakersfield, California

Adele Lagomarsino, California Department of Conservation, Division of Oil, Gas and Geothermal Resources, Sacramento, California

Annee Ferranti, California Department of Fish and Game, Fresno, California

Robert A. Booher, Robert A. Booher Consulting



Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
<http://www.dfg.ca.gov>

May 24, 2011

William Nicas
Senior Vice President Land and Marketing
Cirque Resources LP
475 17th Street, Suite 1600
Denver, Colorado 80202

Subject: Cirque Resources LP, Wells KWBA #1 and KWBA #2, Kern County, California
Request for Approval of Habitat Compensation Purchase at Kern Water Bank

Dear Mr. Nicas:

The California Department of Fish and Game (Department) has reviewed your request to mitigate for the above Project through the Kern Water Bank Authority's (KWBA) Kern Water Bank (KWB).

The proposed Project includes the drilling of two exploratory oil and gas wells from a single well pad. The well site will be 120 feet by 300 feet in area, and construction activities will cover a total of approximately 0.83 acres. Activities will include levee relocation followed by clearing, grading, watering, and compaction of the site to establish a level and solid foundation for the drilling rig. Completing the site preparation process will require approximately one week. Following site preparation, the drilling rig will be mobilized and rigged up. This process is typically completed in two to five days. Temporary facilities, equipment, and materials necessary for the drilling operation will be set up and stored on-site (i.e., drilling mud supplies, water, drilling materials and casing, crew support trailers, pumps and piping, portable generators, fuels and lubricants, etc.). Drilling will continue until target depth is reached and each well is fully evaluated. If a well is eventually determined to be economically viable, it would be completed as a producing well.

The Project site is located approximately 0.8 miles north of Tupman in Kern County, California, in Section 13, Township 30S, Range 24E, MD B&M, on land owned by the KWBA and in an area used for groundwater recharge. The United States Fish and Wildlife Service (USFWS) has notified Cirque Resources LP that the Project is suitable for inclusion under the KWBA section 10 Master Permit to cover Project-related incidental "take" under the Federal Endangered Species Act (ESA), and that using a 1:1:1 ratio, one conservation credit shall be purchased.

The Project site consists of disturbed/ruderal and non-native grassland habitat. A portion of the proposed Project site is currently used for ranching operations, and an existing levee will need to be relocated for the drill site to be constructed outside of a levee system that is used to contain a recharge basin. The proposed Project is in an area where the following State-listed species could occur: the State and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila* - BNLL), the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), and the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*). In addition, burrowing owl (*Athene cunicularia*), a State Species of Special Concern that is protected by the Federal Migratory Bird Treaty Act (MBTA) and sections 3503, 3503.5, and 3513 of the Fish and Game Code, could also occur on or adjacent to the Project site.

Biological surveys of the Project site and adjacent area in 2009 and 2011 indicated that no special status species were observed on the Project site, and that no burrows suitable for State-listed species were present. The Department believes that with the implementation of measures that would likely avoid direct injury or mortality to threatened and endangered species, Project implementation is unlikely to result in "take" under the California Endangered Species Act (CESA), and therefore that a State Incidental Take (2081) Permit is not necessary. The Project will follow the protective measures in the USFWS Standard Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance, in addition to operational procedures listed in the Negative Declaration adopted by the Department of Conservation, Division of Oil, Gas and Geothermal Resources. Measures include but are not limited to: a pre-construction survey will be completed to demonstrate whether site conditions have changed such that State-listed species may be present; a qualified biologist will be present during ground-disturbing activities (site preparation); an Environmental Awareness Program will be held to educate all workers on the site about the sensitive species with potential to occur; all excavated steep-walled holes or trenches in excess of two feet in depth shall be provided with one or more earthen escape ramps; and if fencing is to be used around the site, it will be installed while avoiding any ground disturbance within 50 feet of burrow entrances that could be used by any State-listed species.

Should pre-construction surveys or construction monitoring indicate the presence of listed species or a change in conditions such that the Project site could support listed species (e.g., the presence of suitable burrows) in or immediately adjacent to the Project area, the Project proponent must consult with the Department to determine whether additional surveys are warranted, and to develop and implement avoidance measures acceptable to the Department prior to initiating or continuing

William Nicas
May 24, 2011
Page 3

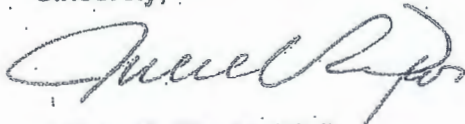
ground-disturbing activities or any other activities that could result in take. Alternatively, the Project proponent may apply for an Incidental Take Permit from the Department, though Project activities may not proceed until permit issuance is completed.

No "take" can be authorized for the fully protected BNLL. Because no suitable burrows were identified on or adjacent to the Project site and a qualified biological monitor will be present during initial ground disturbance of the site, the Department concurs that "take" of this species in association with Project implementation is not likely; however, if pre-construction surveys or construction monitoring indicate BNLL presence in or immediately adjacent to the work area, the Project proponent must consult with the Department and develop and implement avoidance measures acceptable to the Department.

The Department concurs that KWB is an appropriate location to compensate for the loss of habitat that will result from Project implementation and that the KWBA may issue a Conservation Credit Certificate for this Project for one acre as specified by the USFWS in their letter dated May 13, 2011 (81420-2011-TA-0468). Please note that this letter does not grant Incidental Take Authority under CESA for this Project under the State Incidental Take Permit held by the KWBA. Additional incidental "take" authority under CESA, if needed, would need to be secured separately by Cirque Resources LP prior to conducting any work that would result in "take" of a State-listed species.

If you have any additional questions, please contact Linda Connolly, Staff Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4014, extension 242.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

cc: See Page Four

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Michael J. Barbella
Central Team - Region Lead
ExxonMobil Production Company
5959 La Colusa Boulevard
Irving, TX 75039

RE: Conservation Credit Certificate #2011-05

Dear Mr. Barbella:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 1 credit from the Kern Water Bank Authority Conservation Bank.

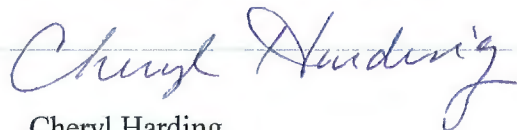
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY

CONSERVATION CREDIT CERTIFICATE NO. 2011-05

1 CREDIT

ExxonMobil Production Company
Hill Lease Diatomite Development Project Near North Belridge, Kern County
(FWS 81420-2011-TA-0550)


This Conservation Credit Certificate certifies that ExxonMobil Production Company (the "Developer") has acquired one (1) Conservation Credit in the Kern Water Bank Conservation Bank (the "Conservation Bank"), established pursuant to the Conservation Bank Agreement (the "Conservation Bank Agreement") dated October 2, 1997, by and among the United States Fish and Wildlife Service ("USFWS"), the California Department of Fish and Game ("CDFG"), and Kern Water Bank Authority ("Bank Owner").

This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By: 
Cheryl Harding
Authorized Representative of Bank Owner

JUN 20 2011



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-TA-0550

JUN 16 2011

Michael J. Barbella
RSO Permitting
Central Team – Region Lead
ExxonMobil Production Company
5959 La Colusa Blvd.
Irving, Texas 75039

Subject: Request for Authorization to Obtain Conservation Credits from the Kern Water Bank Authority, for Exxon Mobil's Proposed Hill Lease Diatomite Development Project, near North Belridge, Kern County, California

Dear Mr. Barbella:

This letter responds to your September 22, 2010, request for U.S. Fish and Wildlife Service (Service) authorization for the purchase of conservation credits from the Kern Water Bank Authority (KWBA) by ExxonMobil as compensation for ground disturbing activities associated with the proposed Hill Lease Diatomite Development Project (project), on the existing lease in the South Belridge Oil Field, Kern County, California. The purchase of these credits by ExxonMobile is intended to minimize the effects of incidental take upon the federally-listed as endangered San Joaquin kit fox (*Vulpes macrotis mutica*) (kit fox), resulting from project-related impacts. Federal incidental take authorization for the project would be extended through the *Kern Water Bank Habitat Conservation Plan/Natural Community Conservation Plan* (HCP/NCCP) (1997).

The project is located one mile west of State Highway 33 and about 2.5 miles north of Seven Standard Road, immediately adjacent to Contractor's Road, in Section 19, Township 28 South, Range 21 East, Mount Diablo Base & Meridian of the United States Geological Survey, Oil Center 7.5 minute Carneros Rocks and Belridge Quadrangles. The project consists of replacing five oil and gas wells around Universal Trans Mercator (UTM) zone 11 south, 250,400 meters (m) east, 3,929,900 m north.

In the Biological Resources Evaluation (BE) prepared by Quad Knopf, the project area is described as an active oil field, void of much of the native habitat, although some remnant patches of valley saltbush scrub remain throughout the Hill Lease. A California Natural

TAKE PRIDE
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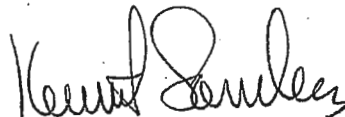
Diversity Database record from 2010 identifies several occurrences of kit fox within five miles of the project area. No dens or other sign of kit fox were indentified at or near any of the five well sites during the site visit described in the BE. It is recognized in the BE, however, that implementation of the project will result in permanent impacts to foraging habitat for the species.

The Service concludes that it is likely this project will result in incidental take of kit fox by a variety of factors, including destruction of their habitat as well as possible harassment, harm, and mortality from vehicle strikes related to project construction. To minimize the amount and extent of the likelihood that the kit fox will be adversely impacted from project activities, and reduce the effect of take resulting from habitat loss or modification, ExxonMobile will incorporate all Service protective measures from the Service's *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (2011).

Habitat impacts include 0.159 acres of permanent disturbance. We agree that authorization for this project can proceed under the HCP/NCCP. To compensate at a 3:1 ratio for the effects of replacing the five wells pad, ExxonMobil will purchase 1 credit from the KWBA for the disturbance of habitat to the San Joaquin kit fox. The purchase of the credits must be completed in full and a copy of the fully executed credit sales agreement shall be received by the Service prior to any surface disturbance associated with the proposed project.

Thank you for your efforts to conserve the San Joaquin kit fox. Please contact biologist Bill Pelle or Thomas Leeman, San Joaquin Valley Branch Chief at (916) 414-6600 with questions regarding this letter.

Sincerely,



FOR

Daniel Russell
Deputy Assistant Field Supervisor

cc:

Cheryl Harding, Kern Water Bank Authority, Bakersfield, California
Adele Lagomarsino, California Department of Conservation, Division of Oil, Gas and Geothermal Resources, Sacramento, California
Annee Ferranti, California Department of Fish and Game, Fresno, California
Paul D. Rosebush, Quad Knof, Bakersfield, California



Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
<http://www.dfg.ca.gov>

August 4, 2011

AUG 09 2011

Exxon Mobil Production Company
Michael Barbella
CORP-MI-219
Post Office Box 4358
Houston, Texas 77210-4358

Subject: Request for Authorization to Obtain Conservation Credits from Kern Water Bank Authority, for ExxonMobil's Proposed Hill Lease Diatomite Development Project, near North Belridge, Kern County, California

Dear Mr. Barbella:

The California Department of Fish and Game (Department) has reviewed your request to mitigate for the above Project through the Kern Water Bank Authority's (KWBA) Kern Water Bank (KWB). This letter supersedes the one sent previously and dated July 20, 2011. The impact acreage on page two has been corrected from 0.59 to 0.159; the requirement of one (1) credit is correct and will now fit mathematically.

The proposed project is located one mile west of State Highway 33 and about 2.5 miles north of Seventh Standard Road, and just south of Contractors Road, in Section 19, Township 28 South, Range 21 East, Mount Diablo Base and Meridian of the United States Geological Survey, Oil Center 7.5 minute Carneros Rocks and Belridge Quadrangles. The Project consists of replacing five oil and gas wells around Universal Trans Mercator (UTM) zone 11 south, 250,400 m east, 3,929,900 m north.

The Project site consists of disturbed/ruderal with small patches of Valley Saltbush Scrub habitat scattered throughout the site. The proposed Project is in an area where the following State-listed species could occur on or adjacent to the Project site: the State and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila* - BNLL), the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), the State and federally endangered giant kangaroo rat (*Dipodomys ingens*) and the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*).

A biological survey conducted of the Project site and adjacent area on August 9, 2010, indicated that four mammal species were found: coyote (*Canis latrans*), kangaroo rat (*Dipodomys* sp.), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail

Michael J. Barbella
August 4, 2011
Page 2

(*Sylvilagus audubonii*). While no special status species were observed on the Project site, there are burrows suitable for State-listed species. Small mammal trapping will need to be done to determine which species of kangaroo rat is present. If and only if it is the non-listed Heermanns kangaroo rat (*D. heermanni*), then the Department believes that with the implementation of measures that would likely avoid direct injury or mortality to threatened and endangered species, Project implementation is unlikely to result in "take" under the California Endangered Species Act (CESA), and therefore that a State Incidental Take (2081) Permit is not necessary.

Should the small mammal trapping, pre-construction surveys, or construction monitoring indicate the presence of listed species or a change in conditions such that the Project site could support listed species (e.g., the presence of suitable burrows) in or immediately adjacent to the Project area, the Project proponent *must* consult with the Department to determine whether additional surveys are warranted, and to develop and implement avoidance measures acceptable to the Department prior to initiating or continuing ground-disturbing activities or any other activities that could result in "take." Alternatively, the Project proponent may apply for an Incidental Take Permit from the Department, though Project activities may not proceed until permit issuance is completed.

The Project will follow the protective measures in the United States Fish and Wildlife Service (USFWS) Standard Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. Measures include but are not limited to: a preconstruction survey will be completed to demonstrate whether site conditions have changed, such that State-listed species may be present; a qualified biologist will be present during ground-disturbing activities (site preparation); an Environmental Awareness Program will be held to educate all workers on the site about the sensitive species with potential to occur; all excavated steep-walled holes or trenches in excess of two feet in depth shall be provided with one or more earthen escape ramps; and if fencing is to be used around the site, it will be installed while avoiding any ground disturbance within 50 feet of burrow entrances that could be used by any State-listed species.

No "take" can be authorized for the fully protected BNLL. Because no suitable burrows were identified on or adjacent to the Project site and a qualified biological monitor will be present during initial ground disturbance of the site, the Department concurs that "take" of this species in association with Project implementation is not likely; however, if pre-construction surveys or construction monitoring indicate BNLL presence in or immediately adjacent to the work area, the Project proponent must consult with the Department and develop and implement avoidance measures acceptable to the Department.

Michael J. Barbella
August 4, 2011
Page 3

The USFWS has notified ExxonMobil that Federal incidental "take" authorization for the Project would be extended through the Kern Water Bank Habitat Conservation Plan/ Natural Community Conservation Plan (HCP/NCCP) (1997). The Project will permanently impact 0.159 acres of habitat. To compensate at a 3:1 ratio for the effects of replacing the five well pads ExxonMobil will purchase one conservation credit from the KWBA for the disturbance of San Joaquin kit fox habitat.

The Department concurs that KWBA is an appropriate location to compensate for the loss of habitat that will result from Project implementation and that the KWBA may issue a Conservation Credit Certificate for this Project for one acre as specified by the USFWS in their letter dated June 16, 2011 (81420-2011-TA-0550). The purchase of the credit must be completed in full and a copy of the fully executed credit sales agreement shall be received by USFWS and the Department prior to any surface disturbance associated with the proposed project.

Please note that this letter does not grant Incidental Take Authority under CESA for this Project under the State Incidental Take Permit held by the KWBA. Additional incidental "take" authority under CESA, if needed, would need to be secured separately by ExxonMobil prior to conducting any work that would result in "take" of a State-listed species.

If you have any additional questions, please contact Laura Peterson-Diaz, Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4017, extension 225.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

cc: Bill Pelle
United States Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

✓ Cheryl Harding
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, California 93311

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. Wilmar Boschman
Semitropic Water Storage District
1101 Central Avenue
Wasco, CA 93280

RE: Conservation Credit Certificate #2011-06

Dear Will:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 26 credits from the Kern Water Bank Authority Conservation Bank.

Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY



CONSERVATION CREDIT CERTIFICATE NO. 2011-06

26 CREDITS

**Semitropic Water Storage District
In-Lieu Service Area Facilities Project, Kern County
(FWS 81420-2011-TA-0056)**

This Conservation Credit Certificate certifies that Semitropic Water Storage District (the “Developer”) has acquired twenty-six (26) Conservation Credits in the Kern Water Bank Conservation Bank (the “Conservation Bank”), established pursuant to the Conservation Bank Agreement (the “Conservation Bank Agreement”) dated October 2, 1997, by and among the United States Fish and Wildlife Service (“USFWS”), the California Department of Fish and Game (“CDFG”), and Kern Water Bank Authority (“Bank Owner”).

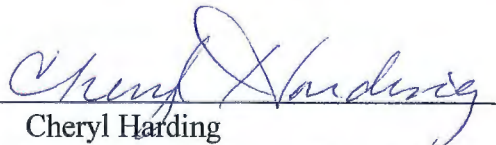
This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By:



Cheryl Harding

Authorized Representative of Bank Owner

DEC 9 2010



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-TA-0056

DEC 02 2011

Mr. Wilmar L. Boschman
General Manager
Semitropic Water Storage District
1101 Central Avenue
Wasco, CA 93280

Subject: Approval of Incidental Take Coverage and Authorization for the Sale of Conservation Credits to the Semitropic Water Storage District for the Construction, Operation, and Maintenance of the In-Lieu Service Area Project in Kern County, California

Dear Mr. Boschman:

This letter responds to the September 10, 2010, electronic mail request for U.S. Fish and Wildlife Service (Service) review of Semitropic Water Storage District's (District; Proponent) proposed In-Lieu Service Area Project (ILSA Project) in Kern County, California. The September 10th request proposed a detailed conservation strategy to be incorporated as part of the Project to minimize, reduce, and off-set potential impacts to federally listed species under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Of concern are potential Project-related effects upon the Federal-endangered Buena Vista Lake shrew (*Sorex ornatus relictus*), Federal-threatened Western snowy plover (*Charadrius alexandrinus nivosus*), State-threatened and Federal-endangered San Joaquin kit fox (*Vulpes macrotis mutica*), State- and Federal-endangered blunt-nosed leopard lizard (*Gambelia sila*), State- and Federal-endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), State- and Federal-endangered California Jewel-flower (*Caulanthus californicus*), Federal-endangered Kern Mallow (*Eremalche kernensis*), and Federal-endangered San Joaquin Woollythreads (*Monolopia congdonii*).

The conservation strategy for this Project has been coordinated through correspondence, meetings, and field site visits among the Proponent, environmental consultants, the California Department of Fish and Game (CDFG), and the Service. This response letter represents the Service's review, assessment, and approval of the proposed conservation strategy as suitable for exemption of incidental take as described in section 9 of the Act.

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The Project is designed to increase the Proponent's ability to conserve, bank, and deliver water to its banking partners within the Semitropic Water Storage District (see Figure 1). The Project utilizes an in-lieu strategy for water use, storage, and extraction. State Water Project entitlements that are surplus to the immediate needs of the Proponent's banking partners are delivered to the ILSA via the California Aqueduct. This water is effectively banked as groundwater through "in-lieu" recharge: Recharge is a method whereby contracting landowners agree to take imported surface water in-lieu of operating their private groundwater extraction wells. By orchestrating that groundwater be stored rather than extracted, the Proponent effectively accumulates a bank of groundwater over time, for subsequent extraction, sale, and use. Member participation in the ILSA Project is limited to private agricultural landowners located within the geographic boundary of the ILSA that have been actively cultivated and irrigated for crop production for a minimum of five years prior to the issuance date of this letter (see Figure 2). Current ILSA Project members and those land parcels currently meeting these criteria are delineated in Figure 3. Prior to approval of additional ILSA Project memberships, the Proponent shall assure that the land conversion from potential habitat for listed species to agriculture has been approved through coordination with the Service under the Act. Such habitat conversion is outside of the scope of this consultation, and is therefore not encompassed within this incidental take analysis; only lands currently assessed (Figure 3), or those lands whose owners provide the Proponent with assurance of coordination, may be approved for ILSA Project membership.

The proposed ILSA Project includes a geographic area of roughly 12,000 acres (see Figure 2), and is located 10 miles northwest of Wasco and 22 miles south of Corcoran, in Kern County, California. The construction footprint for Project facilities (see Figure 1), which includes the North-South Pipeline conveyance system and secondary water distribution systems, is anticipated to include only 5 percent of the full ILSA geographic area, approximately 550 acres.

Impacts considered by the Service in the analysis of this Project are depicted in Table 1 (see also, Figure 2) and described in the following summary. The North-South Conveyance System includes three primary components: canal, pipeline, and pumping Plants. The North-South Canal would be 0.2 mile long and cover approximately 5.1 acres. The North-South below-ground pipeline would be 6.22 miles long and cover approximately 149 acres: 13.35 acres on suitable habitat for listed species, 14.39 acres on public and private roads, and 121.63 acres on cultivated-agricultural lands. Four pumping plants would be constructed on a raised earth pad with gravel surfacing within the North-South Conveyance System right-of-way—one pumping plant for each of the three irrigation distribution systems, and one pumping plant as a booster for the North-South Conveyance System. Distribution pipelines systems will be connected to the North-South Canal Conveyance System to provide surface water deliveries to existing agricultural well sites on developed agriculture lands. Roughly 80 farm turnouts (above-ground risers) are anticipated to provide the interface between the District's system and the landowner's system; these turnouts will be located at or near the landowner's existing well(s). Existing access roads comprising approximately 137 acres on public and private property occur within the proposed ILSA construction footprint. All staging areas, for construction equipment, supplies, or for operation and maintenance activities, will be located within the ILSA construction footprint in areas that do not provide potential habitat for listed species; these include areas under active agriculture,

existing roads, or previously disturbed areas that are devoid of vegetative structure and burrows (such as existing landowner equipment staging areas). If suitable staging areas are not available, the Proponent shall coordinate with the Service for approval of alternative staging areas. The staging areas will include temporary storage of equipment and materials as well as two trailers, which will provide office space for the contractor's staff during construction.

Detailed descriptions of methods for construction for each ILSA facility, as assessed in this determination, and a preliminary construction schedule are described in Enclosure 1.

Construction of the ILSA Facilities is expected to begin in the first quarter of 2011 and will be phased to accommodate the District's needs and funding. Based upon the assumption that the ILSA Facilities will be constructed in a continuous, efficient manner with some overlap between phases, the shortest construction schedule is anticipated to be approximately 36 months including: 22 months for the construction of the North-South Conveyance System Phases 1 and 2; and, 10, 9 and 14 months, respectively, for Distribution Systems X, Y and Z.

It is anticipated that the useful life of the ILSA Facilities will not be less than 35 years. So long as there is continued need for the ILSA Facilities, it is possible for the Proponent to maintain, repair and replace these facilities and extend their useful life for a number of additional years. Thus, also considered in the analysis of Project-related effects are the anticipated operations and maintenance procedures (see also, Enclosure 1) necessary for the continued reliability of the ILSA Project facilities over time. These procedures shall be conducted by District, and/or District-hired contractors. As specified in a November 16, 2010, correspondence from Entrix (on behalf of the Proponent) to the Service, all operations and maintenance procedures shall be conducted to avoid all potential impacts to listed species, and will be limited to occur within areas that have been assessed as permanently impacted within this analysis. For instance, the majority of operations and maintenance procedures shall be conducted within access roads or in other permanently impacted areas, such as those adjacent to the pumping plants.

Beyond the physical impact of such operations and maintenance procedures, a principle concern for listed species, is the release of water into dry upland habitats. To address these concerns, the Proponent has assured that blow-off water from the North-South Conveyance system or other distribution lines shall be contained in such a manner to avoid all potential impacts to listed species. The uncontrolled release of water will only occur in the event of a catastrophic pipeline failure. All other operations and maintenance procedures requiring the drainage of the pipelines will be done in a controlled manner whereby District personnel will dictate how the water will be drained from the pipeline if necessary.

Ultimately, operations and maintenance procedures are not anticipated to induce incidental take. As such, operations and maintenance procedures are not covered by this approval; should such incidental take be determined necessary, subsequent coordination between the Proponent and the Service would be compulsory prior to their implementation.

Table 1, Estimate of Acres of Impact (with project revisions incorporated) for the In-Lieu Service Area Project construction footprint.

Facility	Pipeline or Canal Length	Construction Footprint						Notes
		Total	Temporary	Permanent	"Native" Habitat	Public & Private Roads	Cultivated Land	
	(miles)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	
North-South Conveyance System								
Canal	0.21	5.14	0.00	5.14	0.00	0.51	4.63	
Pipeline	6.22	149.37	149.37	0.00	13.35	14.39	121.63	
N-S Booster P.P. & Pumping Plant "X"		1.74	0.00	1.74	0.00	0.09	1.65	
Pumping Plant "Y"		1.36	0.00	1.36	0.00	0.22	1.14	
Pumping Plant "Z"		1.65	0.00	1.65	1.35	0.30	0.00	
Total	6.43	159.26	149.37	9.89	14.70	15.51	129.05	
Irrigation Distribution Systems (X, Y, Z)								
System X	13.75	108.68	108.68	0.00	0.00	33.62	75.06	(1)
System Y	8.25	84.00	84.00	0.00	0.00	26.00	58.00	(2)
System Z	20.25	199.00	199.00	0.00	0.00	62.00	137.00	(2)
Total	42.25	391.68	391.68	0.00	0.00	121.62	270.06	
Grand Total	48.68	550.94	541.05	9.89	14.70	137.13	399.11	

Notes:

- (1) About 31 percent of the disturbed area is estimated to involve existing public and private roads.
(2) That portion of the disturbed area consisting of public and private roads was estimated by applying the percentage developed for System X (i.e., 31 percent of the total disturbed area).

Project implementation includes the temporary construction and establishment of exclusion fencing; designed to preclude the potential harm of listed species by prohibiting their encroachment onto the construction area. Temporary exclusion fences will be installed in active construction areas of the Project, and will be removed once construction activities have been completed. Temporary exclusion fences shall be inspected on a weekly basis and any damaged fencing will be promptly repaired or replaced. Though necessary as a means to avoid and minimize take of listed species, such fencing acts as an impediment to species movement near the Project area. Such temporary impedance has been assessed in this analysis as a Project-related effect. Specific areas of exclusion fencing within the Project are described in Enclosure 1.

Biological surveys of the right-of-ways for the North-South Conveyance System, pumping plants and distribution pipelines were conducted on September 26, October 3 and 5, 2008, and again, in March 2010, to identify and delineate special-status species and their habitats. Potential for listed species occurrence within the ILSA construction footprint are shown in Table 2. Subsequent to the completion of these surveys, recommendations were made to the District-engineers to re-align or relocate Project linears and/or facilities, such that related impacts upon special-status species or their habitats would be minimized.

These Project-design changes, including re-alignment and relocation, to various portions of the Irrigation Distribution System pipelines and the North-South Conveyance System have resulted in the avoidance of Project-related impacts to special-status species and their habitats across 145 acres from the original Project proposal. A significant Project-design change was replacing the North-South Canal with a below-ground pipeline. This measure and the associated route re-alignment for the North-South Conveyance System have resulted in the avoidance of temporary and permanent disturbance to approximately 4 miles of special-status species habitat. Moreover, species habitat would not be bisected by an open canal; rather, habitat connectivity would remain intact after completion of the disturbance from pipeline installation and the removal of the temporary exclusion fencing.

Table 2, Survey results for federally-listed special status species with potential to occur within the ILSA construction footprint and surrounding areas, as reported by Live Oak and Associates in 2008.

Species	Federal Listing Status	Potential Occurrence in and/or Associated with the ILSA Construction Footprint
Mammals		
Buena Vista Lake shrew (<i>Sorex ornatus relictus</i>)	Endangered	Duck club areas may provide suitable habitat for this species. However, construction-related activities within the duck club areas will be limited to the access road.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	Endangered	Suitable habitat is within Section 30 and the northerly one-eighth portion of Section 19. In addition this species could be found in habitats adjacent of the North-South Conveyance System in T26S, R22E, Sections 6, 12, 13, 24, and 25.
Tipton kangaroo rat (<i>Dipodomys nitratooides nitratooides</i>)	Endangered	Suitable habitat is within Section 30 and the northerly one-eighth portion of Section 19. In addition, this species could be found in habitats adjacent to the North-South Conveyance System in T26S, R22E, Sections 6, 12, 13, 24, and 25.
Reptiles		
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	Endangered	Habitat is present within Section 30 and the northerly one-eighth portion of Section 19. In addition, this species could be found in habitats adjacent to the North-South Conveyance 12 and 24. This species has been located in T26S, R22E, and Section 13 which is adjacent to the proposed location of the North-South Conveyance System.
Birds		
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	Threatened	Some duck club areas, in the vicinity of the ILSA construction area footprint, provide suitable habitat for this species. No suitable habitat is present within the ILSA construction footprint.
Plants		
California Jewel-flower (<i>Caulanthus californicus</i>)	Endangered	Suitable habitat is not present in the ILSA.
Kern Mallow (<i>Eremalche kernensis</i>)	Endangered	Suitable habitat is not present within the ILSA.
San Joaquin Woollythreads (<i>Monolopia congdonii</i>)	Endangered	Suitable habitat is within Section 30 and the northerly one-eighth portion of Section 19. In addition, this species could be found in habitats adjacent to the North-South Conveyance System in T26S, R22E, Sections 6, 12, 13, 24, and 25.

In summary, the following potential effects to listed species are anticipated:

- **Buena Vista Lake shrew.** Low potential for a detrimental effect – potentially susceptible to construction activities on the access road associated with a duck club.

- **San Joaquin kit fox.** Susceptible to construction activities on, and/or adjacent to, special-status species habitat.
- **Tipton kangaroo rat.** Susceptible to construction activities on, and/or adjacent to, special-status species habitat.
- **Blunt-nosed leopard lizard.** Susceptible to construction activities on, and/or adjacent to, special-status species habitat
- **Western snowy plover.** Extremely low potential for overlap between species and construction activities – adverse effects from construction activities are not anticipated.
- **California jewel-flower.** Not found within the ILSA construction footprint – adverse effects from construction activities are not anticipated.
- **Kern Mallow.** Not found within the ILSA construction footprint – adverse effects from construction activities are not anticipated.
- **San Joaquin woollythreads.** Not found within the ILSA construction footprint – adverse effects from construction activities are not anticipated.

Three listed mammals and one reptile have the highest susceptibility to the potential effects associated with construction of the ILSA Facilities. Adverse effects on the two listed bird species are not anticipated from the proposed construction activities. Additionally, no ESA listed plant species were found within the construction footprint; however, potential habitat for San Joaquin woollythreads does occur within the ILSA Project boundary.

Anticipated potential effects to those species from construction of the ILSA facilities are mostly similar in nature, regardless of facility type. These effects could include effects such as direct mortality or injury; direct loss of dens or burrows, as well as loss of habitat structure essential for feeding, breeding or shelter; harassment, entrapment or entombment; displacement; accidental wildfires; and restricted animal movements within and among suitable habitat within or adjacent to the Project area.

Direct mortality or injury have potential to result from vehicle strikes, or from collapsed burrows or dens resulting in animals being crushed or entombed. Excavations left open overnight could entrap wildlife. Equipment, such as pipes, that provide hiding places could attract wildlife and create hazards if left open or uncapped overnight. Burrows or dens located in the construction footprint may be destroyed. Animals that occur within, or adjacent to the construction footprint could be displaced during grading, pipeline installation, and recontouring; such displacement of animals into unfamiliar areas could increase the risk of predation and increase the difficulty of finding essential resources such as food and shelter. Harassment may result from ground vibrations, burrow and den destruction, and from the inherent increase in vehicular traffic and human presence. Harassment may alter the behavior of animals (e.g. activity periods, space use, etc.) resulting in increased predation risk, reduced access to resources, and reduced breeding success. Such harassment and displacement of animals may occur whether or not the animals' dens and burrows are directly impacted.

Species-specific potential anticipated effects from Project implementation on the Buena Vista Lake shrew, San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard, are described below.

Buena Vista Lake shrew individuals have the potential to be harmed or killed during construction activities or by vehicle strikes resulting from increased construction-related traffic. However, the potential susceptibility for this species is limited to construction activities on the access road associated with one duck club within the ILSA construction footprint.

The **San Joaquin kit fox** has the potential to be adversely affected by vehicle strikes and construction-related activities. Because the San Joaquin kit fox is a burrowing animal, activities involving ground disturbance may impact the species. The San Joaquin kit fox may also be adversely affected by construction activities temporarily blocking travel corridors in grassland and agricultural areas. Destruction of dens may result in a net reduction of denning habitat used by these animals for shelter, reproduction, and escape cover. Animals may be displaced into adjacent areas resulting in increased predation, exposure, or stress through disorientation and loss of shelter. The viability of the species is dependent upon the protection of habitat.

San Joaquin kit foxes inhabiting the ILSA construction footprint and surrounding vicinity may be subject to indirect effects including temporary harassment from noise associated with construction activities and human presence, and a reduction in natural food sources as a result of habitat disturbance. Harassment can also result from heavy equipment vibration causing the collapse of dens and subsequent displacement of resident animals, which may become vulnerable to increased predation, exposure, or stress through disorientation and loss of shelter.

Construction effects on the San Joaquin kit fox may be greater during the den selection, pregnancy, and early pup dependency periods of the breeding cycle (December through July), than at other times of the year. The San Joaquin kit fox may exhibit increased sensitivity to disturbance during this period.

The **Tipton kangaroo rat** potentially occurs within Section 30 and the northwest quarter of Section 19 of the ILSA. Adverse effects on the Tipton kangaroo rat within these areas may result from several sources. The major impact of construction activities on the Tipton kangaroo rat would be the conversion of suitable habitat to a canal and associated facilities. Furthermore, because the Tipton kangaroo rat is a burrowing animal, activities involving ground disturbance may impact the species. Individual animals may be directly injured or killed by land clearing and compaction activities; vehicle strikes resulting from increased construction-related traffic; inadvertent entrapment from collapsed burrows; and by wildfires that may be accidentally started during construction activities. Destruction of burrows may result in a net reduction of habitat used by these animals for shelter, reproduction, and escape cover. Animals may be displaced into adjacent areas resulting in increased predation, exposure, or stress through disorientation and loss of shelter. Because this species is active nocturnally throughout the year, its exposure to construction-related impacts are greatest at night.

Construction occurring during blunt-nosed leopard lizard above-ground active seasons (April 15 to September 30), would subject individuals to risks from vehicle strikes. These effects could be especially relevant within the north ½ of Section 30 and the northwest ¼ of Section 19, where lizards have been reported and suitable habitat is adjacent and within the construction right-of-ways. Conversely, there is a greater risk of entombment in burrows when construction activities occur during this species' subterranean period (October 1 to April 14).

Conservation Measures

The following proposed conservation measures were considered in this review and determination. These measures shall be incorporated into Project construction, and operation and maintenance activities, to avoid and minimize adverse impacts to listed species and their habitat.

In addition to the measures described below, the Proponent proposes to compensate through the purchase of 25.41 acres of conservation credits at the Kern Water Bank Authority's Conservation Bank as a means to off-set anticipated impacts to listed species.

Prior to ground disturbing and construction activities, all District employees, contractors, or other persons involved in the construction of the ILSA Facilities will attend a "tailgate" session informing them of the biological resource protection measures that will be implemented for construction activities. The orientation will be conducted by a Service-approved biologist and will include: occurrence and distribution of potential special-status species within the ILSA construction footprint, life history of these species, take avoidance measures being implemented during Project-related activities, reporting requirements if incidental take occurs, and applicable definitions, prohibitions, and consequences of violations under the Act.

The District will provide a Service-approved biologist(s) to conduct pre-activity surveys of all construction right-of-ways, to determine whether there is evidence of special-status species occurring within the proposed construction footprint. The pre-activity surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of any ground disturbing activity, and for any construction activity that has the potential to involve take or adverse affects to listed species or their habitat.

During the pre-activity survey, the biologist(s) will identify and clearly demarcate the location of areas where special-status species were observed and/or the presence of habitat features including potential and suitable dens and burrows. Appropriate No Disturbance Buffer Zones will be established (Table 3) around each delineated location; these Buffer Zones shall be staked or otherwise delineated with highly visible markers (including pinflags, stakes and ribbon or fence posts and wire). If the distance of a given Buffer Zone cannot be maintained, the Proponent shall seek site-specific approval from the Service and CDFG for any activity within the Buffer Zone; after receiving authorization from the Service and CDFG, approved activities may occur under the supervision of a Service-approved biologist. The Service-approved biologist shall be present during all activities inside the Buffer Zones.

Kit fox are known to use multiple den sites in a given year; thus, although potential dens may be appear to be inactive at any specific point in time, they may be subsequently important at times for essential kit fox behaviors. Therefore, the complete avoidance of all known and potential dens and appropriate Buffer Zones is the District's first priority; known or potential dens would be destroyed only as a last-resort. If avoidance of known or potential non-natal kit fox dens is determined to be infeasible, and there is an unavoidable need to destroy or otherwise impact the den or Buffer Zone during construction activities, Den Destruction procedures outlined in the "Standard Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance" Service guidelines (June 28, 1999) will be implemented. As described in these guidelines, the District shall consult with the Service and CDFG for guidance if potential, active or inactive natal kit fox dens are observed on-site, or within vicinity of the Project site.

In summary, all potential kit fox dens will be identified and demarcated during pre-activity surveys. Subsequently, prior to ground or surface disturbing activities, these dens shall be inspected by a Service-approved biologist(s) for evidence of kit fox use or presence. If the subject den is determined to be inactive and empty, the den may be immediately and completely excavated (until it is certain that no kit foxes are inside) by, or under, the direct supervision of a Service-approved biologist, and then backfilled and compacted to preclude later use by kit fox. The Service encourages hand excavation, but realizes that soil conditions may necessitate the use of excavation equipment. However, extreme caution must be exercised. Excavation activities shall cease immediately, if any kit fox is discovered inside the den being excavated for closure, and monitoring, as described below, shall ensue until the kit fox has escaped unharmed and on its own accord. Only after the kit fox has vacated the den and Project-site, shall excavation activities re-commence.

If the subject den is determined to be currently active or occupied by kit fox, the den should be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity. Use of the den can be discouraged during this period by partially plugging its entrances(s) with soil in such a manner that any resident animal can escape easily. It is the intention that this plug would dissuade use of the den, complete plugging of the den entrance is not allowed. The den shall be monitored for use subsequent to its partial plugging. Only when the den is determined to be unoccupied by the Service-approved biologist may the den be excavated under the direction of that biologist. If the animal is still present after five or more consecutive days of partial-plugging and monitoring, the Proponent shall consult for with the Service and CDFG further guidance.

If the consulting biologist has reason to believe an occupied kit fox den occurs within 150 feet of a work area, or if such a den is planned for excavation, the Service and CDFG will be contacted for further guidance before excavation proceeds. Concurrent with the reporting requirements described below, the observation of any kit fox during excavation activities would require notification of the Service and CDFG of the observation and actions taken. In addition, documentation of the results of the destruction of any known kit fox den will be included in the post-construction compliance report.

A Service-approved botanist familiar with the flora of the area will conduct a pre-activity survey of those areas of the North-South Conveyance System and distribution pipelines that are located within land not currently under active agricultural production. A 25-foot Buffer Zone will be established around all identified sensitive plant populations. The ILSA facilities should be constructed and operated in such a way as to avoid impacts to special-status plant species occurring within the ILSA construction footprint.

Table 3, Radial distance for No Disturbance Buffer Zones to be established and maintained around sensitive biological areas.

Type of Sensitive Area	Radius of Buffer Zone (feet)
Occupied kit fox den	150
Potential kit fox den	50
Known kit fox den	100
Natal kit fox den	Notify and receive authorization from Service and CDFG
Tipton kangaroo rat burrow	50
San Joaquin Antelope Squirrel	30
Known blunt-nose leopard lizard burrow	30
Small mammal burrow	50
Flat bottom drainages	30-50
Badger debs	30
Burrowing owl burrows (nesting)	100
Other raptor nests	Varies by Service and CDFG guidelines
Plants	25

The following Avoidance and Minimization measures will be implemented during construction, to protect listed species and/or their habitat, by all Project-related employees, including Semitropic Water Storage District personnel, and/or hired contractors.

- All Project-related equipment and vehicles will operated in such a manner as to prevent harm to wildlife. Except in case of an emergency, no off-road driving or driving on non-developed roads (i.e., trails) shall occur without prior Service approval. Construction vehicles will not be allowed to travel outside of the construction easement. Prior to initiation of construction, the construction rights-of-way and construction easements will be delineated with lath stakes or flagging every 100 feet to alert operators of construction equipment and vehicles from affecting adjacent agricultural lands and sensitive species habitats.
- Firearms and pets will be prohibited within the ILSA construction footprint.
- The District and any District-hired contractors will ensure all trash and food waste such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and regularly removed from the ILSA construction footprint during construction. Feeding of wildlife will be strictly prohibited.
- The District and District-hired contractors will minimize the chance for human-caused fires by carrying water or fire extinguishers and shovels in the field. The use of shields,

protective mats or use of other fire preventative methods shall be used during grinding and welding to minimize the potential for fire.

- Chemical spills will be cleaned up as soon as possible (as required by all appropriate laws, ordinances, rules, or statutes) to protect personnel, wildlife, and habitat. If a spill occurs: the emergency actions to stop the spill or leak as soon as possible and ensure the safety of personnel shall be taken; and, as soon as possible, a survey shall be conducted by a Service-approved biologist to identify potential take of listed species. The results of such surveys will be submitted to the Service and CDFG within 3 days of completion of the emergency action; the Proponent shall coordinate with the Service for any outstanding balance in compensation, associated with take or habitat disturbance during the implementation of emergency activities.
- All steep-walled trenches or excavations used during construction will be inspected twice daily to ensure prevention of wildlife entrapment. If an animal is located in the trench or excavation, a Service-approved biologist will be called immediately to remove the animal if it is unable to escape. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals by Service-approved biologist(s).
- All open trenches or excavations will include escape ramps, at slopes no steeper than a ratio of 2:1, to allow wildlife to escape. Each excavation will contain at least one escape ramp, with longer trenches containing at least one ramp every 1/8 mile. In those areas where sensitive species habitat is located adjacent to a proposed construction area, the Service-approved biologist(s) will inspect all open trenches and excavations; construction will only commence after the trenches have been inspected and the Service-approved biologist has provided approval to commence construction.
- A 20 mile per hour speed limit (except on County and State roads with designated speed limits) will be enforced during construction, and operation and maintenance of the ILSA Project. Speed limit signs will be posted throughout the site and will remain for the duration of construction activities. Construction personnel that exceed the posted speed limit will be given a verbal and written warning (first occurrence). Second time offender may be terminated from working at the site, or otherwise restricted from vehicle operation.
- All non-emergency construction within or adjacent to special-status species habitat will be confined to daylight hours, unless otherwise approved by the Service. Extra caution will be exercised during night driving within the ILSA construction footprint since San Joaquin kit fox and kangaroo rats are primarily nocturnal species and may face a greater potential for vehicle strike during this time.
- All construction-related parking and equipment storage will be confined to the construction site or to previously disturbed, off-site areas. Undisturbed areas will not be used for parking or equipment storage. Construction-related vehicle traffic will be restricted to established roads, construction areas, storage areas, and staging and parking areas.

In addition to the Conservation Measures described above, the Proponent shall implement the itemized protection measures described in Exhibit H of the Kern Water Bank Habitat Conservation Plan / Natural Community Conservation Plan.

A principal mission of the Service, as delegated by the Federal government of the United States, is to provide for the protection and preservation of public fish, wildlife, and plant resources and

their habitats. Section 9 of the Act prohibits the take (e.g. harm, harass, pursue, injure, kill) of federally-listed wildlife species. Harm is further defined to include habitat modification or degradation that kills or injures wildlife by impairing essential behavioral patterns including breeding, feeding, or sheltering. Congress established two provisions (sections 7 and 10) that allow for the incidental take of endangered species of wildlife by Federal agencies, private interests, and non-Federal government agencies. Incidental take is defined as take that is incidental to, and not the primary purpose of, the carrying out of an otherwise lawful activity. Such take requires authorization from the Service or the National Marine Fisheries Services, as appropriate, that anticipates a specific level of take for each listed species.

Although many effects of the human activities that are within prime and potential habitat are small on when considered on an individual basis, the cumulative effect of each project, road, or other human activity adversely impact federally listed species. Based on the submitted information, the Service anticipates that the Project would result in the permanent destruction and temporary disturbance of potential habitat for San Joaquin kit foxes, Titpon kangaroo rats, the blunt-nosed leopard lizards. Moreover, the Service anticipates that individuals are likely to be harmed or harassed during the construction, and/or operation and maintenance activities associated with this Project.

The Service concurs with the proposal that this Project is suitable for inclusion under the section 10 Master Permit for the Kern Water Bank Authority Habitat Conservation Plan. The Service acknowledges the Proponent's conservation strategy and proposed compensation, in combination with the Proponent's efforts to re-design Project implementation to minimize effects to listed species to the extent feasible as sufficient. The Proponent is therefore authorized to complete a credit sale transaction with Kern Water Bank Authority for the purchase of 25.41 acres of conservation credits. Upon completion of this transaction, the anticipated incidental take associated with Project-related affects on the San Joaquin kit fox, Titpon kangaroo rat, and blunt-nosed leopard lizard, in the form of harm and harassment, will be covered under the Kern Water Bank Authority section 10 Master Permit. Incidental take associated with this Project would therefore be exempted from the prohibitions of section 9 of the Act; as such, a separate consultation under section 7 of the Act would not be necessary.

Conservation strategies for any project is assessed on a case-by-case basis, and recommended amounts of compensation are determined relative to the level of project-related effects on the recovery goals for each affected species. As such, the Service notes the level of off-set assessed herein, is relevant to this Project only; future projects, occurring under different circumstances, in terms of their spatial or temporal context, would be assessed relative to those contexts.

Further consultation with the Service for this Project may be necessary, if: 1) new information reveals the proposed action may affect listed species or proposed critical habitat in a manner or to an extent not considered; or 2) new species or critical habitat is designated that may be affected by the proposed actions; or 3) the action is subsequently modified in a manner that causes an effect to the listed species that was not considered in this determination.

The Service appreciates your efforts to monitor and report on the details of this project, and wishes to thank you for your continued efforts and dedication to the conservation of America's diverse resources. Please contact Tim Kuhn or Mike Welsh of my staff at (916) 414-6630 if you have questions regarding this letter (Service file number 81420-2011-TA-0056).

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel Russell". The signature is fluid and cursive, with a large initial "D" and "R".

Daniel Russell
Deputy Assistant Field Supervisor

Enclosure 1—Activities for Semitropic Water Storage District's Construction, Operation, and Maintenance of the In-Lieu Service Area Project

Enclosure 2—Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance

cc:

Linda Connolly
Cheryl Harding
David Lewis
Shauna MacDonald
Leo Lentsh
Lisa Mash
Waring Laurendine

KERN WATER BANK AUTHORITY



February 13, 2012

Mr. David Hampton
Buena Vista Water Storage District
P. O. Box 756
Buttonwillow, CA 93206

RE: Conservation Credit Certificate #2011-07

Dear Dave:

Enclosed please find the above captioned Conservation Credit Certificate confirming your prior purchase of 5 credits from the Kern Water Bank Authority Conservation Bank.

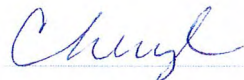
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

We have forwarded the Endowment Fund (\$375.00 per credit) collected at the time of purchase to the California Department of Fish & Game.

Please submit a report on your project, when completed, for inclusion in our Annual Report to California Department of Fish and Game and United States Fish and Wildlife Service. We appreciate your interest in our conservation bank and hope we can be of service to you in the future.

Very truly yours,

KERN WATER BANK AUTHORITY



Cheryl Harding,
Administrator

Enclosures (1)

KERN WATER BANK AUTHORITY



CONSERVATION CREDIT CERTIFICATE NO. 2011-07

5 CREDITS

**Buena Vista Water Storage District
BV8 State Water Project Turnout, Kern County
(FWS 08ESMF00-2011-F-0040)**

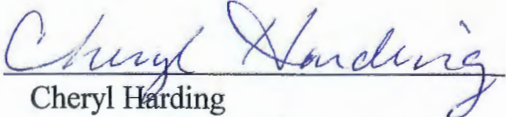
This Conservation Credit Certificate certifies that Buena Vista Water Storage District (the “Developer”) has acquired five (5) Conservation Credits in the Kern Water Bank Conservation Bank (the “Conservation Bank”), established pursuant to the Conservation Bank Agreement (the “Conservation Bank Agreement”) dated October 2, 1997, by and among the United States Fish and Wildlife Service (“USFWS”), the California Department of Fish and Game (“CDFG”), and Kern Water Bank Authority (“Bank Owner”).

This Certificate may be used only in satisfaction of requirements identified by USFWS and/or CDFG relating to that project of the Developer whose project is identified in the letter from CDFG to Developer attached hereto.

This Conservation Credit Certificate is not transferable.

KERN WATER BANK AUTHORITY

Date: January 25, 2012

By: 
Cheryl Harding
Authorized Representative of Bank Owner



United States Department of the Interior



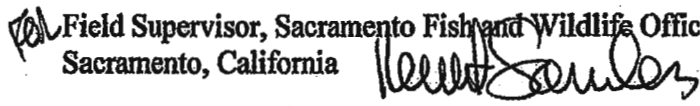
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
08ESMF00-2011-F-0040

DEC 23 2011

Memorandum

To: David Hyatt, Supervisory Wildlife Biologist, Bureau of Reclamation,
South-Central California Area, Fresno, California

From:  Field Supervisor, Sacramento Fish and Wildlife Office,
Sacramento, California

Subject: Formal Consultation on the Buena Vista Water Storage District BV8 State Water
Project Turnout, Kern County, California

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on your August 31, 2010, memorandum requesting formal consultation on the U.S. Bureau of Reclamation's (BOR) proposed action of granting a Water for America Challenge Grant to Buena Vista Water Storage District (District) for their California Aqueduct Turnout #8 (BV8) State Water Canal Project, which includes the construction of a new water turnout on the California Aqueduct (Aqueduct) and construction of about 1,500 feet of underground pipeline connecting the Aqueduct to the West Side Canal in Kern County, California (project). This biological opinion evaluates the proposed project's effects on the endangered San Joaquin kit fox (*Vulpes macrotis mutica*), blunt-nosed leopard lizard (*Gambelia sila*), and Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*) pursuant to the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). After review, it was determined that your memorandum did not contain all the information necessary to initiate formal consultation. We received complete information to initiate consultation for the proposed project with your memorandum dated January 13, 2011.

The Service concurs with BOR's assessment that the proposed project may adversely affect the San Joaquin kit fox, blunt-nosed leopard lizard, and Tipton kangaroo rat.

This biological opinion is based on: (1) *Biological Assessment for the Buena Vista Water Storage District Water Project Turnout, Kern County, California*, prepared by BOR in August 2010 (biological assessment); (2) The BOR January 11, 2011 response memorandum received in our office January 13, 2011; (3) electronic mail (email) and telephone conversations between BOR and the Service; (4) the draft environmental assessment and draft Finding of No Significant Impact for the Buena Vista Water Storage District BV8 State Water Project Turnout dated August 2010; (5) the California Department of Fish and Game (CDFG) Incidental Take Permit No. 2081-2011-56-04 dated October 12, 2011; (6) and other information available to the Service. A complete administrative record of this consultation is on file in the Sacramento Fish and Wildlife

Office. Please refer to file number 08ESMF00-2011-F-0040 when requesting information concerning this consultation.

Consultation History

- October 23, 2009 The Service received an e-mail from BOR regarding the award of a *Water for America Challenge Grant* to Buena Vista Water Storage District for their Canal Reoperation Project and potential for the need to consult pursuant to the Act.
- March 19, 2010 The Service provided a species list for the Buena Vista Water Storage District BV8 State Water Project Turnout, Kern County, California. Service Document No. 100319100618.
- August 20, 2010 The Service provided an updated species list for the Buena Vista Water Storage District BV8 State Water Project Turnout, Kern County, California. Service Document No. 100820034619.
- August 23, 2010 The Service received an e-mail from BOR providing a link to a press release and the draft Environmental Assessment for the Buena Vista Water Storage District BV8 State Water Project Turnout.
- August 31, 2010 The BOR provided to the Service a memorandum with an attached Biological Assessment dated August 2010, requesting concurrence and formal consultation pursuant to the Act.
- October 21, 2010 The Service supplied comments and questions via e-mail to BOR regarding the Buena Vista Water Storage District BV8 State Water Project.
- January 11, 2011 The Service received from BOR a memorandum providing responses to questions and comments identified by Service's October 21, 2010, e-mail.
- March 10, 2011 The Service received a letter from the U.S. Army Corps of Engineers, Sacramento District, that the Corps had designated BOR as the lead Federal agency for purposes of section 7 consultation under the Act for the Buena Vista Water Storage District BV8 State Water Project.
- June 13, 2011 In a telephone conversation with Mark Littlefield, Jennifer Lewis at BOR confirmed their determination for blunt-nosed leopard lizard is "may affect, likely to adversely affect."
- October 12, 2011 The Service received a copy of an Incidental Take Permit (No. 2081-2011-056-04), issued by California Department of Fish and Game.

December 1, 2011 The Service received a copy of a 2011 report titled Blunt-nosed Leopard Lizard Protocol Survey, San Joaquin Antelope Squirrel, and Burrowing Owl Report of Findings for the Buena Vista Water Storage District California Aqueduct Turnout Project

BIOLOGICAL OPINION

Description of the Proposed Action

Project Location

The proposed project is located about 18 miles west of the City of Bakersfield between the California Aqueduct and the West Side Canal near the town of Buttonwillow, Kern County (See Figures 1 and 2). The project is located at about 350 19' 41.40" latitude, 1190 24' 36.05" longitude. The project site is in Section 9, Township 30 South, and Range 24 East, Mount Diablo Meridian.

The proposed project includes the construction and operation of a new water turnout on the east bank of the Department of Water Resources' California Aqueduct to deliver water into the District's West Side Canal via a new underground pipeline and outlet structure. The turnout will be about 20 feet tall, 19 feet wide, and 54 feet long; constructed of reinforced concrete; and will include a 78-inch by 78-inch cast iron sluice gate with automatic actuator, trash racks, and galvanized steel handrails.

Water will be transported from the California Aqueduct to the West Side Canal through the construction of a belowground reinforced concrete pipe (RCP) of about 1,510 feet in length and 78-inches in diameter. Installation of the pipe will run underground across the Kern River flood channel and will require construction of a trench about 30 feet wide by 13 feet deep within a temporary 100-foot wide easement for the length of the pipeline. The RCP will include a pitot tube with a flow meter within a reinforced concrete vault near the California Aqueduct and a 66-inch butterfly valve near the West Side Canal.

An outlet structure will be constructed in the West Side Canal, upstream of the Arizona Canal. The discharge bay of the outlet structure is about 14 feet tall, 17 feet wide, and 25 feet long. To reduce erosion, the discharge area around the outlet structure will be reinforced with about 167 cubic yards of 12-inch thick rock rip-rap above a 6-inch gravel bed. The outlet structure will have galvanized steel handrails. Finally, a 10 foot by 12 foot electrical building will be constructed about 200 feet from the California Aqueduct inlet structure. The building will include a 0.18 acre elevated graded pad for access from the existing Aqueduct road.

RCP excavation would be 10 feet deep on average, 10 feet wide at the bottom and up to 30 feet wide at the top, with a four-foot minimum cover above the pipeline once installed. There would be a 1:1 slope where there is no shoring or bracing in the excavations. In the right-of-way of the Aqueduct, excavation would be about 22 feet deep. Within the right-of way on the West Side Canal, excavation would be about 18 feet deep. Temporary trenching would occur across the Kern River Flood Channel. Once installation of the RCP is complete, the river channel would be

returned as closely as possible to its original condition and grade. Temporary ground disturbance for the whole project would be about 3 acres (9,000 cubic yards), with a permanent footprint of about 0.3 acres.

General Operation Activities

The proposed project's facilities may be operated at any time as deemed necessary by the District and pursuant to the District's contracted State Water Project's water agreements; however, the proposed facilities are expected to operate primarily during the District's water year, which extends from late May through mid-August. During operational days, the District plans to send personnel to the site twice daily to adjust the valves and read the meter. The District would manage resultant conserved water supplies through programs with in-district, out-of-district, or a combination of in-district and out-of-district entities.

Proposed Avoidance, Minimization and Conservation Measures

At least thirty (30) calendar days prior to ground breaking, the District shall (a) purchase five acres of compensation land, place a Service approved conservation easement on that land, and arrange for Service approved management and endowment, or (b) purchase and endow five acres of compensation land with a Service approved conservation bank.

Biological monitor(s) shall be present during all ground disturbing activities. In addition to conducting pre-activity surveys for the project, the biological monitors shall aid crews in satisfying take avoidance criteria and implementing project Avoidance and Minimization measures, documenting all pertinent information concerning project effects on sensitive species, and shall assist in minimizing adverse effects of project activities on sensitive species.

Preconstruction surveys and implementation of avoidance and minimization measures for San Joaquin kit fox: The 1999 U.S. Fish and Wildlife Service *Standard Recommendations for Protection of the San Joaquin Kit Fox to or During Ground Disturbance (USFWS 1999)* will be utilized. Preconstruction protocol level surveys for San Joaquin kit fox shall be completed no fewer than 14 days and no more than 30 days prior to the onset of any ground-disturbing activity. Standard San Joaquin kit fox avoidance measures must be implemented during the proposed work.

Preconstruction surveys will be completed for kangaroo rats (all species) to identify small mammal burrows. In addition, all small mammal burrows within the proposed construction zone will be identified during this pre-activity survey and flagged with pin flags and their location recorded using a Global Positioning System (GPS). The GPS coordinates will be provided to the project engineer to be incorporated as a layer within the pipeline plans. The project engineer will, to the greatest extent practical, design the alignment of the pipeline to avoid small mammal burrows. Pipes and culverts shall be searched for kangaroo rats prior to being moved or sealed to ensure that an animal has not been trapped. Construction activities would be done outside of Tipton kangaroo rat breeding period (February through April). Work areas, including staging areas, will be clearly defined with flagging or other highly visible marking and the smallest possible area will be disturbed. Movement of heavy equipment to and from the project sites,

Figure 1. Site Location Map

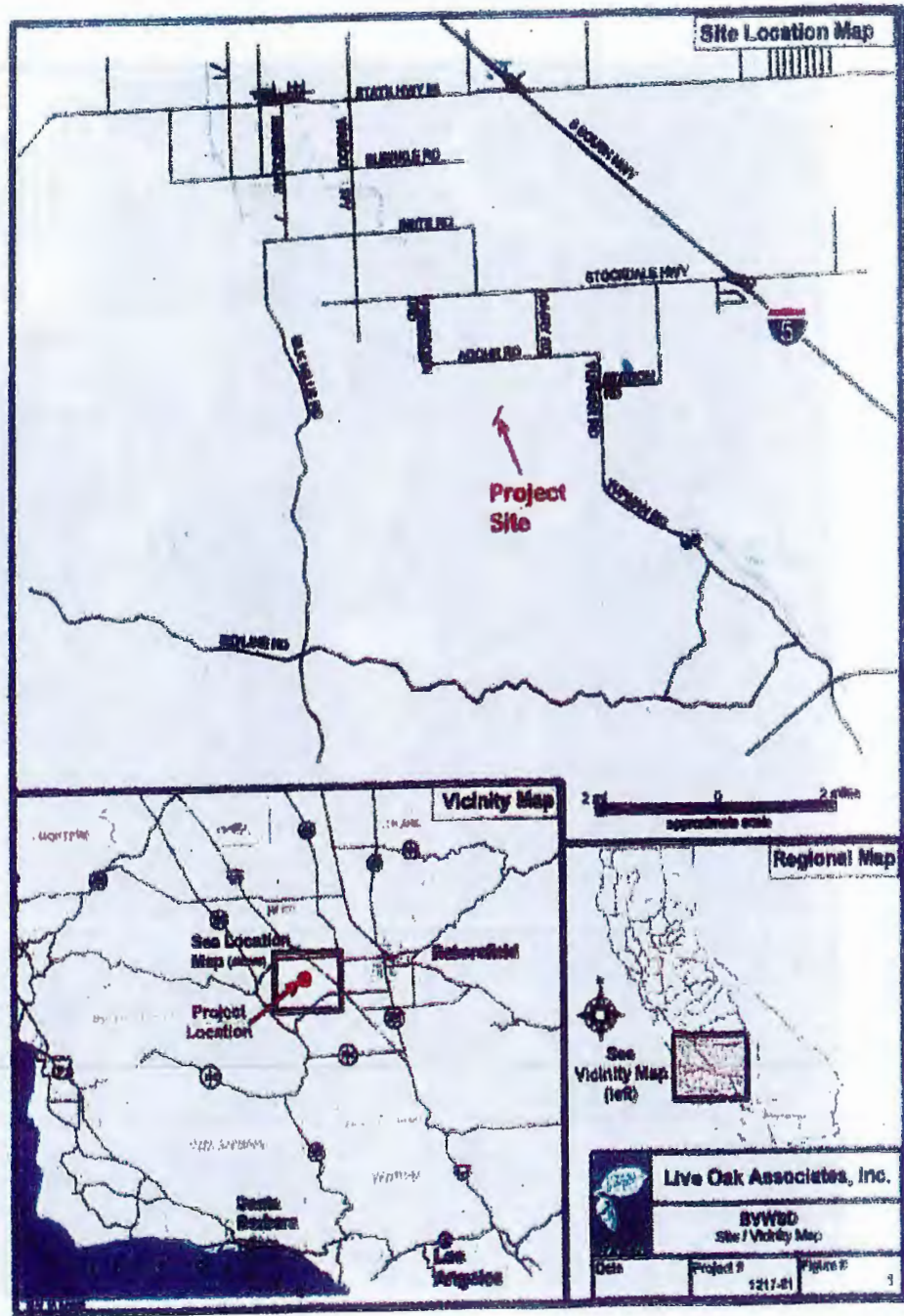




Figure 2. Aerial Photograph of Project Site Area

staging areas, or borrow sites will be confined, to the extent possible, to existing roadways to minimize habitat disturbance.

The project description was modified as a result of the Conditions of Approval for DFG's Incidental Take Permit (ITP) #2081-2011-056-04 issued for the project (Attachment). The Conditions of Approval include General Provisions; Monitoring, Notification and Reporting Requirements; Take Minimization Measures; Take Mitigation Measures; and Habitat Management Land Acquisition which are considered as avoidance, minimization and conservation measures for the proposed project.

Biological monitors are empowered to order cessation of construction activities if take, avoidance and/or environmental protective measures are violated and will notify the District's representative.

To prevent inadvertent entrapment of species, any excavation for pipeline and back fill will be limited to the amount which can be completed in a workday. If this is not possible, all open holes and trenches shall be covered at the close of each working day by plywood or similar material or provided with one or more escape ramps constructed of earth fill or wooden planks (wooden planks will be no less than 10 inches in width and will reach the bottom of the hole/trench). Before any hole or trench is filled, they will be thoroughly inspected for trapped animals.

All construction activities will be restricted to daylight hours only.

Action Area

The action area of this proposed project comprises all areas to be affected directly or indirectly by the Federal action, not merely the immediate area involved in the action. The action area for the proposed project is generally located between the California Aqueduct and the Westside Canal and extends beyond the project's temporary easement for 200 feet in all directions. The proposed project area is about 3 acres of ruderal grassland and desert shrub.

Analytical Framework for the Jeopardy Determination

In accordance with policy and regulation, the jeopardy analysis in this Biological Opinion relies on four components: (1) the Status of the Species, which evaluates the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard's range-wide conditions, the factors responsible for that condition, and their survival and recovery needs; (2) the Environmental Baseline, which evaluates the condition of the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard; (3) the Effects of the Action which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard; and (4) Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard's current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the San Joaquin kit fox, Tipton kangaroo rat, or blunt-nosed leopard lizard in the wild.

The jeopardy analysis in this Biological Opinion places an emphasis on consideration of the range-wide survival and recovery needs of the San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard and the role of the action area in the survival and recovery of the San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

Status of the Species

San Joaquin Kit Fox

Please see San Joaquin Kit Fox 5-Year review, dated February 16, 2010 for a complete discussion of the status of this species.

Tipton Kangaroo Rat

Please see Tipton Kangaroo Rat 5-Year review, dated February 16, 2010 for a complete discussion of the status of this species.

Blunt-Nosed Leopard Lizard

Please see blunt-nosed leopard lizard 5-Year review, dated February 16, 2010 for a complete discussion of the status of this species.

Environmental Baseline

Status of the San Joaquin Kit Fox within the Action Area: The San Joaquin kit fox has declined in the vicinity of the action area as a result of several factors including, but not limited to habitat loss, vehicle strikes, poisoning, and predation. The project site comprises suitable habitat for the San Joaquin kit fox; however, survey results (conducted in 2008 and 2009) did not report evidence (dens, scat or tracks) of individuals at the project site (BOR 2010). The Service concurs with the determination in the Biological Assessment for this project, that this species can be reasonably expected to use the project site for foraging and movement purposes and the action area is suitable to support denning, foraging and movement. These behaviors are reasonably certain because: the site contains suitable habitat to support feeding, breeding, or sheltering behaviors by the San Joaquin kit fox; there are at least four records of San Joaquin kit fox within two miles of the action area; and, the San Joaquin kit fox is a highly mobile species, moving up to 1-12 miles per night.

Status of the Tipton Kangaroo Rat within the Action Area: The Tipton kangaroo rat has declined in the vicinity of the action area primarily as a result of habitat destruction, disturbance, and

fragmentation. The action area supports valley saltbush scrub, a habitat type which is preferred by the Tipton kangaroo rat. Tipton kangaroo rat is known to occur approximately two miles southeast of the action area. Kangaroo rat burrows and tail drags, dust baths, droppings and tracks near a few burrows were located and indicate that the area is occupied by kangaroo rats. For these reasons, and lacking any survey evidence to the contrary, the Service considers the action area occupied by Tipton kangaroo rat.

Status of the Blunt-nosed Leopard Lizard within the Action Area: The blunt-nosed leopard lizard has declined in the vicinity of the action area primarily as a result of habitat destruction, disturbance, and fragmentation. Although the project site comprises suitable habitat for the blunt-nosed leopard lizard, no individuals have been documented at the project site. The most recent protocol level blunt-nosed leopard lizard surveys in the action area, conducted in 2011, did not detect the presence of this species. However the blunt-nosed leopard lizards have been recorded in the Elk Hills Oil Field and along Elk Hills Road and the California Department of Water Resources has reported observations of the species at both Mileposts 230.25 and 227 of the Aqueduct. The proposed project would be constructed at about Milepost 232. For these reasons, the Service considers the action area to be suitable habitat for blunt-nosed leopard lizard, but not currently occupied by the species.

Effects of the Proposed Action

San Joaquin Kit Fox

San Joaquin kit fox may be harassed and disturbed or killed or injured as a result of the proposed action. Impacts to the species in the form of disturbance or harassment is reasonably likely to occur during construction of the turnout facility and the pipeline, as San Joaquin kit fox may avoid or change their use within the project site or the action area due to human presence, noise, or temporary barriers to passage. The use of vehicles and construction equipment on or adjacent to the project site would result in an increased risk of accidental death and injury to the San Joaquin kit fox during the construction period and to a somewhat lesser degree during operation and maintenance of the facility.

Tipton Kangaroo Rat

Tipton kangaroo rats may be harassed, disturbed, injured or killed as a result of the proposed action. The species would be harmed by the loss of 3.0 acres of habitat, including 0.3 acres of permanent loss, which would occur from development of the project site; this loss would impair behavioral patterns including breeding, feeding, or sheltering, and would consequently lead to reduced reproduction and survival through the period required for the area to be restored. Tipton kangaroo rat would be harassed or harmed during implementation of the translocation plan that is proposed under CDFG's ITP Take Minimization Measure 7.9 (Attachment).

Blunt-Nosed Leopard Lizard

Blunt-nosed leopard lizards may be harassed, disturbed injured or killed as a result of the proposed action, if they enter the action area before or during construction. Loss of 3.0 acres of blunt-nosed leopard lizard habitat, including 0.3 acres of permanent loss, would occur from development of the project site. This loss would impair behavioral patterns including breeding, feeding, or sheltering, and would consequently lead to reduced reproduction and survival through the period required for the area to be restored.

Cumulative Effects

Cumulative effects are those effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the Act. The Service is unaware of any other future actions that are reasonably certain to occur in the action area.

Conclusion

After assessing the current status of the San Joaquin fit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard, the environmental baseline for the action area, effects of the proposed action, and cumulative effects, it is the Service's biological opinion that the proposed action is not likely to jeopardize the continued existence of the San Joaquin fit fox, Tipton kangaroo rat, or blunt-nosed leopard lizard.

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulations pursuant to Section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of Section 7(b)(4) and Section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by BOR so that they become binding conditions of any action related to this project, in order for the exemption in section 7(o)(2) to apply. The BOR has a continuing duty to regulate activities covered by this incidental take statement. If BOR: (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms; and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of Section 7(o)(2) may lapse.

Amount or Extent of Take

San Joaquin fit fox. The Service anticipates that incidental take of the San Joaquin kit fox cannot be quantified for the following reasons: when not foraging, mating, or otherwise being active on the surface, the San Joaquin kit fox inhabits dens, making detection problematic; it may range

over a large territory; it is primarily active at night; and it is an intelligent but shy animal likely to avoid human presence. The Service therefore cannot quantify an exact number of San Joaquin kit foxes that will be taken as a result of the proposed action; in instances when specific take calculations cannot be produced, the Service may estimate take in regards to the number of acres of permanently lost or degraded habitat as a result of the project action, since this is a quantifiable number that can be monitored to determine if the level of take has been exceeded. Therefore, the Service anticipates take incidental to this project as all San Joaquin kit foxes inhabiting, using, or moving through 3.0 ac of suitable habitat that will be permanently lost and temporarily disturbed. Upon implementation of the *Reasonable and Prudent Measures, Terms and Conditions*, and the *Proposed Avoidance and Minimization Measures* considered herein, incidental take within this acreage, in the forms of harm and harassment due to project construction activities leading to habitat loss and disturbance, and in the forms of injury and mortality (an indeterminable, but likely small level) will become exempt from the prohibitions described under section 9 of the Act.

Tipton kangaroo rat. The Service anticipates that incidental take of the Tipton kangaroo rat cannot be quantified due to the animal's small size, its tendency to escape underground into burrows, its response to the effects of specific seasonal and weather conditions, and its nocturnal activity patterns; these all serve to preclude the discovery of injured or dead individuals, and to make the observation of live individuals unlikely. The Service therefore cannot quantify an exact number of Tipton kangaroo rats that will be taken as a result of the proposed action; in instances when specific take calculations cannot be produced, the Service may estimate take in regards to the number of acres of permanently lost or degraded habitat as a result of the project action, since this is a quantifiable number that can be monitored to determine if the level of take has been exceeded. Therefore, the Service anticipates take incidental to this project as all Tipton kangaroo rats inhabiting, using, or moving through 3.0 ac of suitable habitat that will be permanently lost and temporarily disturbed. Upon implementation of the *Reasonable and Prudent Measures, Terms and Conditions*, and the *Proposed Avoidance and Minimization Measures* considered herein, incidental take within this acreage in the forms of harm and harassment due to project construction activities leading to habitat loss and disturbance, and in the forms of injury and mortality (an indeterminable, but likely small level), will become exempt from the prohibitions described under section 9 of the Act.

Blunt-nosed leopard lizard. The Service anticipates that incidental take of the blunt-nosed leopard lizard cannot be quantified due to the animal's small size, its tendency to escape underground into burrows, its response to the effects of specific seasonal and weather conditions, and its activity patterns; these all serve to preclude the discovery of injured or dead individuals, and to make the observation of live individuals unlikely. The Service therefore cannot quantify an exact number of blunt-nosed leopard lizards that will be taken as a result of the proposed action, so in instances when specific take calculations cannot be produced, the Service may estimate take in regards to the number of acres of permanently lost or degraded habitat as a result of the project action, since the habitat loss results in a significant adverse biological effect to the species. Therefore, the Service anticipates take incidental to this project as all blunt-nosed leopard lizards inhabiting, using, or moving through 3.0 ac of suitable habitat that will be permanently lost and temporarily disturbed. Upon implementation of the *Reasonable and Prudent Measures, Terms and Conditions*, and the *Proposed Avoidance and Minimization*

Measures considered herein, incidental take within this acreage in the forms of harm and harassment, as well as injury and mortality (an indeterminable but likely very small level), due to project construction activities leading to habitat loss and disturbance will become exempt from the prohibitions described under section 9 of the Act.

Effect of the Take

The Service has determined that the level of anticipated take is not likely to result in jeopardy to the San Joaquin kit fox, Tipton kangaroo rat, or blunt-nosed leopard lizard.

Reasonable and Prudent Measures

The following reasonable and prudent measure is necessary and appropriate to minimize the effects of the proposed action on the San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat:

1. All of the conservation measures proposed in the BA, the Draft SHP Plan, the *Project Description*, and as supplemented and modified below, must be fully implemented.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, BOR shall implement all conservation measures described in the biological assessment and comply with all other conditions of the biological opinion. These terms and conditions are nondiscretionary.

The following Terms and Conditions implement Reasonable and Prudent Measure one:

1. BOR shall be responsible for implementing all measures described in this biological opinion. Term and condition 2b, which applies to contractor activities shall be conditioned in contracts for the work.
2. In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, BOR shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, BOR must immediately reinstate formal consultation as per 50 CFR 402.16.
 - a. For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, BOR will provide weekly updates to the Service with a precise accounting of the total acreage of habitat impacted. Updates shall also include any information about changes in project implementation that result in habitat disturbance not described in the Project Description and not analyzed in this Biological Opinion.
 - b. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby

incidental take in the form of harassment, harm, injury, or death is anticipated, BOR shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6600 to report the encounter. If encounter occurs after normal working hours, BOR shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, BOR shall follow the steps outlined in the Salvage and Disposition of Individuals section below.

- c. Before construction starts on this project, the Service shall be provided with the final documents demonstrating completion of the Habitat Management Land purchase (DFG ITP Condition 9.1, see Attachment).
 - d. A post-construction report detailing compliance with the project design criteria and proposed conservation measures described under the Description of the Proposed Action section of this biological opinion shall be provided to the Service within 30 calendar days of completion of the project. The report shall include: (1) dates of project groundbreaking and completion; (2) pertinent information concerning the success of the project in meeting compensation and other conservation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat, if any; (5) occurrences of incidental take of the San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat; and, (6) any other pertinent information.
 - e. New sightings of the San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat or any other sensitive animal species shall be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location in which the animals were observed also should be provided to the Service.
3. The proposed Tipton kangaroo rat relocation plan (DFG ITP Condition 7.10, see Attachment) must be approved by the Service prior to implementation, and must be implemented by a Service-approved biologist.

Disposition of Individuals Taken

In the case of injured and/or dead San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat, the Service shall be notified of events within one day and the animals shall only be handled by a Service-approved biologist. Injured San Joaquin kit foxes, blunt-nosed leopard lizards and Tipton kangaroo rats shall be cared for by a licensed veterinarian or other qualified person. In the case of a dead animal, the individual animal shall be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or until the Service takes custody of the specimen. BOR must report to the Service within one calendar day any information about take or suspected take of federally-listed species not exempted in this opinion. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal. The Service contacts are Mr. Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento, at (916) 414-6600 and Mr. Daniel Crum, the Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660.

CONSERVATION RECOMMENDATIONS

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid further adverse effects of a proposed action on listed, proposed, or candidate species or on designated critical habitat, or regarding the development of new information. They may also serve as suggestions on how action agencies can assist species conservation in furtherance of their responsibilities under section 7(a)(1) of the Act, or recommend studies improving an understanding of a species' biology or ecology. Wherever possible, conservation recommendations should be tied to tasks identified in recovery plans. The Service is providing you with the following conservation recommendation:

1. It is recommended that BOR continue to assist the Service in the implementation of recovery efforts for the San Joaquin kit fox, blunt-nosed leopard lizard and Tipton kangaroo rat.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the proposed Buena Vista Water Storage District BV8 State Water Project Turnout, Kern County, California. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action.

If you have questions regarding this biological opinion, please contact, Thomas Leeman, San Joaquin Valley Branch Chief at (916) 414-6600.

cc:

Lisa Gymer, CDFG, Fresno, California