

KERN WATER BANK AUTHORITY



January 22, 2013

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

RE: Kern Water Bank Authority (KWBA)
2012 Conservation Credit Certificates and
2012 Endowment Fund for Credits Sold

Dear Dr. Single:

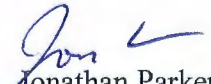
Enclosed are two sets of Conservation Credit certificates for the conservation credits sold in 2012. I have enclosed a check for FOUR THOUSAND ONE HUNDRED TWENTY-FIVE DOLLARS, (\$4,125) representing the endowment funds for conservation credits sold in 2012. Per the Conservation Bank Agreement (Agreement), this payment is based on the sale of 11 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


Jonathan Parker,
General Manager

Enclosures (3)

cc: Annee Ferranti, CDFG
Thomas Leeman, USFWS

KERN WATER BANK AUTHORITY



January 22, 2013

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

RE: Kern Water Bank Authority (KWBA)
2012 Conservation Credit Certificates and
2012 Endowment Fund for Credits Sold

Dear Mr. Leeman:

Enclosed are two sets of Conservation Credit certificates for the conservation credits sold in 2012. I am also forwarding a check for FOUR THOUSAND ONE HUNDRED TWENTY-FIVE DOLLARS, (\$4,125), representing the endowment funds for conservation credits sold in 2012 to California Department of Fish and Game.

If you need anything further, please call.

Very truly yours,

KERN WATER BANK AUTHORITY



Jonathan Parker,
General Manager

Enclosure (3)

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

KERN WATER BANK AUTHORITY
GENERAL ACCOUNT
1620 MILL ROCK WAY, SUITE 500
BAKERSFIELD, CA 93311



Wells Fargo Bank, N.A.

017391
11-24/1210

1/14/2013

PA. THE
ORDER OF

California Department of Fish & Game

\$**4,125.00

Four 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 2012 Conservation Credits

⑈017391⑈ ⑆121000248⑆ 4040017758⑈

KERN WATER BANK AUTHORITY

017391

California Department of Fish & Game

Date	Type	Reference	Original Amt.	Balance Due	1/14/2013 Discount	Payment
1/1/2013	Bill	2012 Endmnt Fund	4,125.00	4,125.00		4,125.00
					Check Amount	4,125.00

Wells Fargo General Endowment Fund for 2012 Conservation Credits 4,125.00

KERN WATER BANK AUTHORITY

017391

California Department of Fish & Game

Date	Type	Reference	Original Amt.	Balance Due	1/14/2013 Discount	Payment
1/1/2013	Bill	2012 Endmnt Fund	4,125.00	4,125.00		4,125.00
					Check Amount	4,125.00

Wells Fargo General Endowment Fund for 2012 Conservation Credits 4,125.00

KERN WATER BANK AUTHORITY

January 22, 2013

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

RE: Kern Water Bank Authority (KWBA)
2012 Conservation Credit Certificates and
2012 Endowment Fund for Credits Sold

Dear Dr. Single:

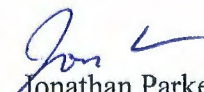
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FASB, California Department of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
Attention: Cash Receipts Group
Fund: KWB Conservation Bank Endowment

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


Jonathan Parker,
General Manager

Enclosures (3)

cc: Annee Ferranti, CDFG
Thomas Leeman, USFWS

KERN WATER BANK AUTHORITY

January 22, 2013

Mr. A.M. O'Hare
Maralex Resources, Inc.
775 Goddard Avenue
Ignacio, Colorado 81137

RE: Conservation Credit Certificate #2012-01

Dear Mr. O'Hare:

Enclosed, please find the above captioned Conservation Credit Certificate confirming your prior purchase of 4 credits from the Kern Water Bank Authority Conservation Bank.

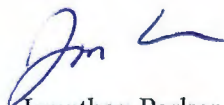
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

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



Jonathan Parker,
General Manager

Enclosures (1)

KERN WATER BANK AUTHORITY

CONSERVATION CREDIT CERTIFICATE NO. 2012-01

4 CREDITS

**MARALEX RESOURCES, INC.
NW McKittrick Oil and Gas Exploration Project, Kern County
(FWS 81420-2010-TA-0404)**

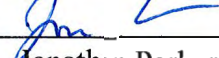
This Conservation Credit Certificate certifies that Maralex Resources, Inc. (the “Developer”) has acquired four (4) Conservation Credits in the Kern Water Bank Conservation Bank (the “Conservation Bank”), established pursuant to the Conservation Bank Agreement (the “Conservation Bank Agreement”) dated 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 22, 2013

By: 
Jonathan Parker
Authorized Representative of Bank Owner



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.dfg.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



August 3, 2012

AUG 6 2012

A.M. O'Hare
Maralex Resources, Inc.
775 Goddard Avenue
Ignacio, Colorado 81137

**Subject: NW McKittrick Oil and Gas Exploration Project
Incidental Take Permit No. 2081-2010-024-04
Maralex Resources, Inc.
Authorization to Obtain Conservation Credits from
The Kern Water Bank Authority**

Dear Mr. O'Hare:


The California Department of Fish and Game (Department) is in receipt of your request to provide authorization for mitigation credit purchase from the Kern Water Bank Authority (KWBA). In addition, the Department has correspondence dated May 18, 2012, from the United States Fish and Wildlife Service (USFWS), authorizing Maralex Resources, Inc., to purchase four conservation credits from the KWBA as compensation for ground-disturbing activities associated with the above referenced Project and to minimize the effects of incidental "take" upon the federally listed endangered San Joaquin kit fox (*Vulpes macrotis mutica*). 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 Department authorizes Maralex Resources Inc., to purchase the credits from the KWBA in compliance with Condition 8 of Incidental Take Permit No. 2081-2010-024-04 (ITP).

The Department would like to remind you there are additional conditions in the ITP which still need to be met before initiation of ground- or vegetation-disturbing Project activities. Maralex Resources, Inc., must 1) acquire, permanently protect, and fund the long-term management of three acres of Habitat Management land as set forth in Condition 8 or provide the Department with an irrevocable Letter of Credit in the amount of \$73,200.00 to meet the 18-month Performance Security required in Condition 9; and 2) provide the Department with a copy of the conservation credit certificate issued by KWBA. The purchase of one credit and the three acres of Habitat Management land are necessary to fully mitigate for the incidental "taking" on the State-listed threatened San Joaquin kit fox and the State-listed threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) and to remain in compliance with the ITP.

A.M. O'Hare
August 3, 2012
Page 2

If you have any questions regarding these comments, please contact Annee Ferranti, Senior Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 227, or by electronic mail at aferranti@dfg.ca.gov.

Sincerely,



Jeffrey R. Single, Ph.D.
Regional Manager

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

Diane Westerberg
Gasco Energy, Inc.
7979 East Tufts Avenue, Suite 1150
Denver, Colorado 80237

✓Jon Parker
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, California 93311

Bob Booher
Robert A. Booher Consulting
3221 Quail Hollow Drive
Fairfield, California 94534



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-TA-0404

MAY 18 2012

Mr. A.M. O'Hare
Maralex Resources, Inc.
P. O. Box 338
Ignacio, Colorado 81137

Subject: Request for Authorization to Obtain Conservation Credits from the Kern Water Bank Authority for Maralex Resources, Incorporated's Northwest McKittrick Oil and Gas Exploration Project, near McKittrick, Kern County, California

Dear Mr. O'Hare:

This letter responds to your October 5, 2011, request by telephone for U.S. Fish and Wildlife Service (Service) authorization for the purchase of conservation credits from the Kern Water Bank Authority (KWBA) by Maralex Resources, Incorporated (Maralex), as compensation for ground disturbing activities associated with the proposed Northwest McKittrick Oil and Gas Exploration Project (Project), near McKittrick, Kern County, California. The purchase of these credits by Maralex 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 approximately five miles northwest of the community of McKittrick in Kern County, California, in the northwest $\frac{1}{4}$ of the southwest $\frac{1}{4}$ of Section 2, Township 30 South, Range 21 East, Mount Diablo Baseline & Meridian – USGS 7.5 minute Reward quadrangle map. The Project consists of two new exploratory oil and gas wells.

In the October 2009 biological resources evaluation (BE), prepared by Booher Consulting, the Project area is described as valley saltbush scrub and ruderal and non-native grassland which functions as a habitat corridor of moderate conservation value. The BE also documented two potential dens of San Joaquin kit foxes (American badger (*Taxidea taxus*) digs/dens) approximately 300 feet east of the existing access road corridor. Adult kit fox scat at several locations along the access road was also observed. The site is within the Western Kern County essential recovery core area for the San Joaquin kit fox, as described in the Service's five-year

TAKE PRIDE
IN AMERICA

Mr. A. M. O'Hare

2

review for the species (2010). The 2011 California Natural Diversity Database records identify several occurrences of kit fox within two miles of the project area. Constructing the two well pads will cause the loss of 1.0 acres of San Joaquin kit fox habitat, as reported in the California Division of Oil, Gas and Geothermal Resources' Mitigated Negative Declaration for the project, received by the Service on March 30, 2011.

The Service concludes that it is likely this project will result in incidental take of San Joaquin 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 that the kit fox will be affected by Project activities, Maralex 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).

The Service authorizes this Project to proceed under the HCP/NCCP. To compensate for the effects of constructing the two wells pads, Maralex will purchase two credits per well pad, for a total of up to four credits from the KWBA. The purchase of the credits must be completed in full and a copy of the fully executed credit sales agreement received by the Service prior to any surface disturbance associated with either well pad.

Please contact Bill Pelle, Fish and Wildlife Biologist, or Thomas Leeman, San Joaquin Valley Branch Chief 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
Anne Ferranti, California Department of Fish and Game, Fresno, California
Adele Lagomarsino, California Department of Conservation, Division of Oil, Gas and Geothermal Resources, Sacramento, California

KERN WATER BANK AUTHORITY

January 22, 2013

Mr. Harry Starkey
West Kern Water District
800 Kern Street
Taft, CA 93268

RE: Conservation Credit Certificate #2012-02

Dear Mr. Starkey:

Enclosed, please find the above captioned Conservation Credit Certificate confirming your prior purchase of 7 credits from the Kern Water Bank Authority Conservation Bank.

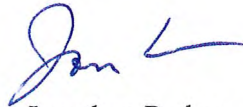
Original copies of this credit certificate are being forwarded to the United States Fish and Wildlife and the California Department of Fish and Game.

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



Jonathan Parker,
General Manager

Enclosures (1)

KERN WATER BANK AUTHORITY

CONSERVATION CREDIT CERTIFICATE NO. 2012-02

7.0 CREDITS

WEST KERN WATER DISTRICT SOUTH SOLAR PROJECT, KERN COUNTY (FWS 81420-2012-TA-0482)

This Conservation Credit Certificate certifies that West Kern Water District (the "Developer") has acquired seven (7) 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 22, 2013

By: _____


Jonathan Parker
Authorized Representative of Bank Owner



December 10, 2012

Harry Starkey
West Kern Water District
800 Kern Street
Post Office Box 1105
Taft, California 93268-1105

Subject: Request for Approval to Obtain Habitat Compensation Credits from the Kern Water Bank Authority and Coles Levee Ecosystem Preserve for West Kern Water District's South Solar Project-Site III

Dear Mr. Starkey:

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) and Coles Levee Ecosystem Preserve.

The proposed Project includes the construction of four 500-kilo-watt photovoltaic solar array systems. Each solar array system has a footprint of approximately 485 feet by 460 feet, plus an 8-foot by 20-foot inverter pad for a total of 21 acres. This request is to cover activities conducted on Site III only, consisting of 7 acres. Activities will include site clearing, vegetation removal, site preparation, perimeter fencing installation, lizard exclusion fencing installation, solar array installation, and solar panel washing and maintenance activities. The United States Fish and Wildlife Service (USFWS) has notified West Kern Water District 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 3:1 ratio for Site III, seven conservation credits shall be purchased. The remaining fourteen conservation credits shall be subtracted from previously purchased credits at the Coles Levee Ecosystem Preserve.

The Project site is located approximately 3 miles east of the unincorporated community of Tupman, in Sections 21 and 28, Township 30 South, Range 25 East, Mount Diablo Baseline and Meridian – USGS 7.5-minute Tupman quadrangle map, Kern County, California.

The Project site consists of non-native grassland and mixed saltbush scrub habitat in the more upland portions of the site and seasonal and perennial wetlands in the lower

elevations of the site. 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* - SJKF), the State threatened San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) and Swainson's hawk (*Buteo swainsoni* - SWHA), and the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides* - TKR) and giant kangaroo rat (*Dipodomys ingens* - GKR). In addition, American badger (*Taxidea taxus*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), San Joaquin pocket mouse (*Perognathus inornatus*), and burrowing owl (*Athene cunicularia*), State Species of Special Concern, could also occur on or adjacent to the Project site.

Biological surveys of the Project site were conducted in 2011 by Live Oak Associates, Inc., and resulted in no detection of BNLL or TKR. Additionally, no active SJKF burrows were observed. However, there are still burrows within the Project site suitable for BNLL, TKR, and SJKF use. Because the biological surveys were conducted over a year ago (survey results are generally good for one year only), all suitable BNLL, TKR, GKR, San Joaquin antelope squirrel, and SJKF burrows and dens should be avoided. Based on the information provided to date, the Department believes that with the implementation of standard avoidance measures, including those specified below, Project implementation is unlikely to result in take of species listed under the California Endangered Species Act (CESA), and therefore that acquisition of a State Incidental Take (2081) Permit is not necessary. The Project will implement the following protective measures:

1. A pre-construction survey will be conducted between 14 and 30 days before the start of ground-disturbing activities to identify and flag all potential SJKF, BNLL, TKR, GKR, and San Joaquin antelope squirrel burrows.
2. The USFWS "Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance" (2011) will be implemented, including no-disturbance buffers around all potential or known SJKF dens. No-disturbance buffers include the installation of perimeter and exclusion fencing and will be clearly delineated on the ground with flagging, stakes, tape, etc., before starting ground-disturbing activities.
3. All potential BNLL, TKR, GKR, and San Joaquin antelope squirrel burrows will be protected with a 50-foot no-disturbance (including perimeter and exclusion fencing installation) buffer that is clearly

delineated on the ground with flagging, stakes, tape, etc., before starting ground-disturbing activities.

4. If Project-related activities will occur during the SWHA breeding season (March 1 through August 31), a qualified biologist will conduct surveys following the Swainson's Hawk Technical Advisory Committee's "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (SHTAC 2000).

If an active SWHA nest is found, a 2,640 foot no-disturbance buffer shall be established around the nest structure until after the breeding season has ended or the young have fledged and are no longer dependent on the nest structure or the parents for survival.

5. BNLL exclusion fencing will be installed around the perimeter of the solar clusters and will be maintained during construction activities. This is only appropriate where there are no potential BNLL burrows within the area surrounded by the exclusion fencing.
6. A biological monitor will be on-site during fence installation and other initial ground-disturbing activities to ensure appropriate buffers are maintained and to stop work should a State-listed species be detected on the Project site. If detected, State-listed species will be allowed to leave the disturbance area in its own time and under its own power.
7. An employee training program will be developed and deployed to educate all workers on the Project site about the sensitive species with potential to occur there and how to avoid them.

Should pre-construction surveys or construction monitoring indicate the presence of State listed species in or immediately adjacent to the Project site, 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 (ITP) from the Department, though Project activities may not proceed until an ITP is executed.

No take can be authorized for the State fully protected BNLL. Because suitable habitat and burrows were identified on the Project site, all suitable burrows will need to be protected with a 50-foot no-disturbance buffer. In addition, as indicated in the list of

Harry Starkey
December 10, 2012
Page 4

measures above, a qualified biological monitor will be present during initial ground disturbance of the site, and exclusion fencing will be installed in areas where no potential BNLL burrows exist within. With the implementation of these measures, the Department concurs that take of this species in association with Project implementation is not likely.

The Department concurs that KWB is an appropriate location to compensate for the loss of habitat for SJKF, TKR, and BNLL that will result from Project implementation and that the KWBA may issue a Conservation Credit Certificate for this Project for seven acres as specified by the USFWS in their letter (81420-2012-TA-0482). The Department concurs that the Coles Levee Ecosystem Preserve is an appropriate location to compensate for the loss of habitat for SJKF, TKR, and BNLL that will result from Project implementation and that the Coles Levee Ecosystem Preserve may subtract 14 credits from West Kern Water District's surplus credits. 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 West Kern Water District prior to conducting any work that would result in take of a State-listed species.

If you have any additional questions, please contact Lisa Gymer, Staff Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4014, extension 238, or by electronic mail at lgymer@dfg.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Dean Maister for". The signature is written in a cursive, flowing style.

Jeffrey R. Single, Ph.D.
Regional Manager

cc: See Page Five

Harry Starkey
December 10, 2012
Page 5

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

Mark Poe
Environmental, Health and Safety Advisor
DOT Pipelines, Coles Levee Ecopreserve
Aera Energy LLC
10000 Ming Avenue
Bakersfield, California 93311

Jon Parker
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, California 93311



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:
81420-2012-TA-0482

Mr. Harry Starkey
West Kern Water District
800 Kern Street
P. O. Box 1105
Taft, California 93268-1105

Subject: Request for Authorization to Obtain Conservation Credits from the Kern Water Bank Authority and Coles Levee Ecosystem Preserve for West Kern Water District's South Solar Project, near Tupman, Kern County, California

Dear Mr. Starkey:

This letter responds to your November 5, 2012, request by telephone for U.S. Fish and Wildlife Service (Service) authorization for the purchase of conservation credits from the Kern Water Bank Authority (KWBA) by Western Kern Water District (WKWD), as compensation for ground disturbing activities associated with the proposed South Solar (Project), near Tupman, Kern County, California. The purchase of these credits by WKWD 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 nitratooides nitratooides*) 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 approximately three miles east of the community of Tupman, in Sections 21 and 28, Township 30 South, Range 25 East, Mount Diablo Baseline & Meridian – USGS 7.5 minute Tupman quadrangle map. The Project consists of construction and use of three 500 kilowatt solar arrays, with a 485 ft. by 460 ft. footprint for each and totaling approximately 21 acres. The electricity produced would be used primarily as an energy source to operate existing pumps within the WKWD well field.

The Project is adjacent to the Tule Elk State Reserve, Coles Levee Ecosystem Preserve (CLEP) and KWBA lands, within an area consisting of non-native grassland and mixed saltbush scrub in the more upland portions, and seasonal and perennial wetland in the lower areas. While neither leopard lizards nor Tipton kangaroo rats were encountered during 2011 protocol surveys

conducted by Live Oak Associates (LOA), Site III, located in an upland non-native grassland area, is still considered potential habitat for the two species. Likewise, no active kit fox burrows were observed in the Project area, however, as stated in LOA's September 2011 report, the Project is within the known range for kit fox and the site provides foraging opportunities for the species. In addition, the site is within the western Kern County core recovery area for the kit fox, as described in the Service's five-year review for the species (2010). The 2012 California Natural Diversity Database records identify multiple occurrences of kit fox within the project area and at least one occurrence of Tipton kangaroo rat within a mile. Constructing the solar array at site III will cause the permanent loss of 7.0 acres of habitat for the San Joaquin kit fox, Tipton kangaroo rat and blunt-nosed leopard lizard.


The Service concludes that it is likely this project will result in incidental take of San Joaquin kit fox by a variety of factors, including harm resulting from destruction of their habitat as well as harassment and mortality from vehicle strikes related to Project construction. To minimize the amount and extent that the kit fox will be affected by Project activities, WKWD 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), as well as the fencing plan described in WKWD's October 1, 2012 letter. The cyclone fencing surrounding sites I and II will have a six-inch space between the ground and the fencing. For kit fox passage the fencing surrounding site III will have flashing attached to the bottom, to exclude passage of Tipton kangaroo rats and blunt-nosed leopard lizards.

The Service authorizes this Project to proceed under the HCP/NCCP. To compensate for the effects of constructing the solar array on site III, WKWD will purchase seven conservation credits from the KWBA and will commit 14 credits that WKWD has on reserve at the Coles Levee Ecological Preserve. WKWD will be authorized to purchase the seven credits from the KWBA upon demonstrating to the Service proof of transfer of 14 conservation credits at the CLEP. The purchase of the KWBA credits must be completed in full and a copy of the fully executed credit sales agreement received by the Service prior to any surface disturbance associated with site III.

Please contact Bill Pelle, Fish and Wildlife Biologist, or Thomas Leeman, San Joaquin Valley Branch Chief at (916) 414-6600 with questions regarding this letter.

Sincerely,



 Daniel Russell
Deputy Assistant Field Supervisor

cc:

Jon Parker, Kern Water Bank Authority, Bakersfield, California
Craig Bailey, California Department of Fish and Game, Fresno, California