

February 11, 2016

Ms. Mindy Vogel  
Coronado National Forest  
U. S. Forest Service  
300 West Congress  
Tucson, AZ 85701

**Re: Proposed Conservation Measures**

Dear Ms. Vogel:

As part of our on-going Section 7 consultation process, Rosemont Copper Company (Rosemont) is providing the attached conservation measures for consideration by the Fish and Wildlife Service (FWS). Based on the information provided in the meeting and the conservative nature of the FWS evaluation of impact on species, the proposed conservation measures were selected as appropriate to meet the goals identified during the discussions.

Note that these conservation measures have been addressed in some fashion during the environmental impact statement (EIS) process. The funding was specifically evaluated in Chapter 3 of the Final EIS. The projects, while fleshed out here with more detail, have been part of our discussions with the Corps of Engineers (Corps) and generally have been disclosed throughout the process. The detailed plans were shared with the Forest Service and FWS for consideration.

Rosemont has included several conservation elements that are part of the mitigation plan submitted to the Corps of Engineers. It is important to keep in mind, however, that these conservation elements have always been part of the proposed action. They will be implemented regardless of whether they are accepted by the Corps. We believe that the acquisition and protection of these lands will provide significant conservation benefits for Arizona fish and wildlife, including species protected under the Endangered Species Act.

We hope you agree that the attached conservation measures represent an opportunity to consider the projects identified by the FWS as important, while providing a mechanism to ensure their completion.

Regards,



Katherine Ann Arnold, PE  
Director, Environment

## **Proposed Conservation Measures**

cc: Mr. Kerwin Dewberry, Forest Service  
Mr. Steve Spangle, USFWS  
Ms. Jean Calhoun, USFWS  
Mr. Chris Garrett, SWCA

*Doc. No. 014/16-15.3.1*

## **Draft – February 11, 2016 Conservation Measures**

### **Proposed Conservation Measure #1 – Staff Funding**

Rosemont Copper Company (Rosemont) will provide funding to the U.S. Forest Service (USFS) for one-half of a full-time agency employee (FTE) position that would support the Rosemont's commitment to fund a Biological Monitor position to oversee the implementation of the proffered Conservation Measures (Conservation Measure A.1). This is intended to provide funding for a full FTE until such time as the Project is completed or until all conservation funds covered by voluntary measures are fully expended, whichever happens sooner.

Because this position will be responsible for managing the funds used to implement Conservation Measures and for coordinating the meetings, plans, and projects specified by the relevant conservation entities, it is expected that the USFS will assign personnel of appropriate skills to this position. Given this degree of responsibility, it is anticipated that the USFS will act as the Conservation Partner (as described in Conservation Measure E.1, Cienega Creek Watershed) to manage all of the conservation funds described in the suite of Conservation Measures. The conservation entities to be engaged in the distribution and use of the funds tied to the Conservation Measures consist of those land and resource management agencies with special expertise or knowledge regarding the action area and adjoining areas in southeastern Arizona, as well as the wildlife and other resources associated with these Conservation Measures.

## **Proposed Conservation Measure #2 – Harmful Nonnative Species Management and Removal**

Species benefitted: Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, and Huachuca water umbel

Proposed Text:

To benefit threatened and endangered aquatic species, as well as other native Arizona aquatic species, potentially impacted by the Rosemont Copper Project, a harmful nonnative aquatic species management and removal program will be developed and implemented. This program will specifically address the threat of harmful nonnative aquatic vertebrate, invertebrate, and plant species invading the aquatic habitat within the action area on USFS lands preferentially in and around Cienega Creek and in the San Rafael-Santa Cruz River Watersheds in the Nogales and Sierra Vista Ranger Districts (but excluding the recreational sport fishery at Parker Canyon Lake). Acreage within these watersheds but outside USFS lands will be considered for inclusion within this program, subject to obtaining consent of the appropriate land owner/management agency and the agreement of U.S. Fish and Wildlife Service (FWS) and USFS.

The Conservation Measures specified here will augment a program that the Coronado National Forest is currently undertaking that will assemble existing data on efforts to control targeted harmful nonnative species, collect additional data, purchase equipment for the removal of harmful nonnative species, mitigate effects to threatened and endangered species as well as other native aquatic species, and develop a plan for continued control efforts within the Sierra Vista Ranger District.

The purpose of this Conservation Measure is to provide funding for a program with the following goal:

That subbasins within the Cienega Creek and neighboring San Rafael-Santa Cruz River Watersheds in the Nogales and Sierra Vista Ranger Districts, that are of value to the survival and continued recovery of the Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, Huachuca water umbel, and other native aquatic species, are secured and maintained as a whole or nearly whole native community.

Specific components of the harmful nonnative species management and removal program include:

1. Baseline surveys and the preparation of plans and priorities of the program.
2. Harmful nonnatives to be addressed in the program will include, but not be limited to, nonnative fish in the families *Centrarchidae* and *Ictaluridae*, American bullfrogs (*Lithobates catesbeiana*), any species of crayfish, other nonnative aquatic invertebrates, and nonnative plants invading aquatic habitat and adjoining riparian areas.
3. Baseline surveys will include all known suitable habitat that has legal access or for which legal access is given for Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frogs, and northern Mexican gartersnakes (and their native prey species [i.e., fish and amphibians]).
4. The plans shall include removal activities of harmful nonnative species using mechanical methods or any other methods, with associated revegetation or restoration where appropriate, which accomplish the repeated removal and control of harmful nonnative species as authorized by the USFS.

5. Data, plans and priorities that arise from this funding will be managed through the Conservation Partners program with USFS ultimately being responsible for program direction and administration.
6. Funding for this measure will be apportioned as follows:
  - a. 10% of the total funding will be provided to the USFS within 90 days of approval of the Mine Plan of Operations for use in planning and survey implementation.
  - b. The remainder of the fund will be provided within 30 days of project commissioning.
  - c. The total amount of funding for these activities will be \$3,000,000.
7. The USFS and Conservation Partners will be responsible for appropriate reporting and financial management of the \$3,000,000 to ensure that the funds are spent in a way that meet the goals specified above.

**Proposed Conservation Measure #3 – Western Yellow-Billed Cuckoo and Southwestern Willow Flycatcher Habitat Enhancement and Monitoring, Surveying, and Conservation Property Management**

Species affected: Western Yellow-Billed Cuckoo (cuckoo) Southwestern Willow Flycatcher (SWFL)

Proposed Text:

Western yellow-billed cuckoos (cuckoo) has been detected along Cienega Creek and Empire Gulch, in areas proposed as critical habitat, and in small numbers in xeroriparian habitat in drainages at the Rosemont Project site. Additionally, small numbers of southwestern willow flycatchers (SWFL) have been detected along upper Cienega Creek and Empire Gulch, in areas that have been designated as critical habitat for the species.

Analysis of the Cienega Creek basin has shown a possibility that, under the range of groundwater impacts, habitat for the cuckoo and SWFL may be affected by the Project. Because of this, Rosemont is interested in providing funding for a habitat improvement, preservation, and replacement program to benefit these species. This program also will provide substantial benefits to other native Arizona species that utilize riparian habitat.

*Habitat replacement, improvement and survey program*

In addition to the elements of the program specified above, habitat replacement, improvement and surveys funded by this Conservation Measure will include these specific components:

1. Baseline surveys, preparation of plans, priorities, and implementation of the plans for a SWFL and cuckoo habitat replacement, improvement and survey program.
2. Specific projects will be identified in areas proximal to the Rosemont Project, preferably on USFS lands. Rosemont will also work with conservation entities as necessary in other appropriate areas.
3. Baseline surveys for SWFL and cuckoo will include all known suitable habitat that has legal access or for which legal access is given. Proposed habitat monitoring methods will be measurable, repeatable, and capable of detecting changes in extent, density, species composition, canopy height, canopy closure, vertical foliar density, soil moisture, temperature, and humidity of habitat.
4. The program shall include enhancement activities that may include, but not be limited to, the following: planting and maintaining trees native to the local environment, elevating groundwater levels, reducing stressors that affect vegetation establishment and growth, installing rock erosion control structures that slow stream flow, excluding or removing livestock from certain riparian areas, and providing riparian area fencing to prevent damage from humans and livestock.
5. Data, plans and priorities that arise from this funding will be managed through the Conservation Partners program with the USFS ultimately being responsible for direction and administration.
6. Funding for this measure will be apportioned as follows:
  - a. 10% of the total funding will be provided to the USFS within 90 days of approval of the Mine Plan of Operations for use in planning and survey

implementation.

- b. The remainder of the fund will be provided within 30 days of project commissioning.
  - c. The total amount of funding for these activities will be \$1,250,000.
7. The USFS and Conservation Partners will be responsible for appropriate reporting and financial management of the \$1,250,000 to ensure that funds are spent in a way that meet the goals specified above.

**Clarifications to Conservation Measures Incorporated into the 2013  
Biological Opinion**

The sections below provide clarifications to conservation measures proposed by Rosemont as part of the proposed action to be analyzed in the 2013 Biological Opinion and the Final Environmental Impact Statement for the Rosemont Copper Project.

While we believe there are many benefits from the conservation measures described below, in particular, the mitigation parcels at a minimum provide the following benefits to federally listed species:

1. For western yellow-billed cuckoo, the Sonoita Creek Ranch and Davidson Canyon mitigation parcels provide over 11 miles (over 800 acres) of restored, enhanced or preserved riparian habitat.
2. For the aquatic species (Chiricahua leopard frog, Northern Mexican gartersnake, Gila chub, Gila topminnow, desert pupfish, and Huachuca water umbel), approximately 6 acres of pond and wetland habitat will be renovated to support conservation efforts. In addition, Fullerton Ranch is included in Recovery Unit 1 for the Chiricahua leopard frog.
3. Finally, Sonoita Creek Ranch and the other mitigation parcels are part of critical wildlife linkages between important protected habitat blocks.

**A. Sonoita Creek Ranch:**

Please note that Sonoita Creek Ranch Conservation Measures appearing below have been revised based on the input of the U.S. Army Corps of Engineers (Corps), with additional clarifying text subsequently added by the FWS.

1. Rosemont has acquired the right to purchase Sonoita Creek Ranch, which contains approximately 1,580 acres of land along Sonoita Creek with an estimated 590 acre-feet of certificated surface water rights from Monkey Spring along Sonoita Creek. The Sonoita Creek Ranch parcel is part of the Conservation Measures for the Chiricahua leopard frog, Gila chub, Gila topminnow, Huachuca water umbel, lesser long-nosed bat, jaguar, ocelot, and yellow-billed cuckoo. The Sonoita Creek Ranch lands will be restored by Rosemont to a more natural condition from the current agricultural state and then made available to a suitable agency, land trust or conservation organization (Land Manager) for long-term conservation and maintenance. These restoration activities have been designed to meet, in part, the requirement to mitigate for impacts to potential waters of the U.S., in conformance with the Corps' 2008 mitigation rule (73 FR 19594). Regardless of whether the Sonoita Creek Ranch restoration activities ultimately provide mitigation for impacts to potential waters of the U.S., Sonoita Creek Ranch will be managed for conservation purposes, as stated below.
2. In the event that the property is used for potential waters of the U.S. mitigation, it is not anticipated that the wildlife conservation benefits described below will be affected. If modification of any conservation measures is ultimately determined to be required, the Corps will work with USFS, FWS, and Rosemont to modify the conservation measures in a manner that would not change the evaluation for each species and which would result in the same benefits for each species but would not conflict with Section 404 mitigation requirements.

3. Rosemont will record a restrictive covenant or conservation easement on the Sonoita Creek Ranch property that precludes real estate development and similar land use activities and livestock grazing and other agricultural uses subject to the limitations described below. This restrictive covenant shall not restrict access to these lands for recreational or traditional cultural purposes provided that these uses are not incompatible with the conservation uses of the property as determined by the Land Manager and the FWS.
4. Rosemont anticipates transferring ownership of Sonoita Creek Ranch, including the appurtenant water rights, to a suitable owner for conservation purposes consistent with the conservation and public benefits contemplated by these conservation measures. The transfer of ownership will follow Rosemont's demonstration to the Corps that the success criteria for mitigation of impacts to potential waters of the U.S. have been met.
5. Funding for long-term management will be accomplished through the establishment of a dedicated account or similar financial instrument subject to approval by the Corps (referred to as the Dedicated Account) and Rosemont will pay into that account adequate funds to cover the normal management and maintenance activities. It is currently anticipated that the Dedicated Account will be funded by a series of annual payments made by Rosemont over a 10-year period commencing with the production of copper concentrates. The payment schedule may be modified, but only with prior approval of the Corps. Until the Dedicated Account is fully funded, Rosemont shall provide all funds necessary to conduct required annual management, maintenance, and monitoring activities. Prior to the time that the Dedicated Account is fully funded, the monies from the Dedicated Account will not be used for any management, maintenance, or monitoring activities. Fence replacement actions completed during the Dedicated Account establishment period will be funded by Rosemont with funds other than the funds used to establish the Dedicated Account. An alternative financial assurance mechanism to that described above may be utilized if approved in advance by Rosemont and the Corps.
6. Restoration activities to be implemented at Sonoita Creek Ranch are as described below. Rosemont will fund the construction of the restoration project. Additional detailed information is located in the Rosemont Copper Project: Revised Habitat Mitigation and Monitoring Plan (September 26, 2014).
  - a. *Re-establish Sonoita Creek floodplain.* Sonoita Creek has been altered over much of its length along State Route 82 between Sonoita and Patagonia to accommodate the highway, smaller access and private roads, and agricultural and ranching developments in the valley. Alterations include realigning, straightening and deepening the channel (or berming its banks) to prevent flows from impinging upon roads and fields. The altered reaches confine flows to a high-capacity channel that maximizes flow velocity and exacerbates both incision and bank instability through scour and degradation. In some places Sonoita Creek's realignment has left tributary inflows without a clear path to a confluence with Sonoita Creek.

As part of the site restoration efforts, Rosemont will construct a minimum of 3.8 miles of new ephemeral channel through historic agricultural fields in order to direct a portion of Sonoita Creek flows back into the Sonoita Creek historic floodplain. The construction of these channels will also allow for the rehabilitation of approximately 5.7 miles of the existing Sonoita Creek channel by directing high flows into the parallel, meandering constructed channels, reducing the

volume and velocity of degrading high flows through the primary channel. Channel improvements will result in a more stable channel, which will enhance multiple ephemeral channel functions, including energy dissipation, sediment transport, and habitat connectivity.

The agricultural fields will be retired, recontoured, and reseeded with a mix of native forbs, grasses, shrubs, and trees. In addition, approximately 8,400 xeroriparian trees (anticipated to be mostly *Prosopis velutina*) will be planted along the slopes and adjacent floodplain of the constructed channels to facilitate the development of a xeroriparian corridor within the entirety of the Sonoita Creek floodplain. The anticipated success of this restoration effort can be seen in previously abandoned agricultural fields in portions of the ranch property, where mature stands of native mesquite have developed over the last 40 years.

Downstream of the agricultural fields, Sonoita Creek flows will be restored to a portion of the relatively rare mesquite-sacaton grasslands already established at, and south of, the mouth of Corral Canyon. In addition, the Sonoita Creek Ranch restoration project will preserve a cottonwood gallery near the south end of the property.

The total area of restored floodplain within Sonoita Creek Ranch is approximately 730 acres, and is anticipated to provide substantial, landscape-scale habitat benefits to a number of wildlife species. In particular, planting, reseeding, and reestablishment of flood flows throughout the floodplain are anticipated to provide habitat for the western yellow-billed cuckoo.

- b. *Enhancement of two ponds.* Two ponds at the north end of the Sonoita Creek Ranch property function as part of an agricultural irrigation system, supplied with water from Monkey Springs. The northernmost pond, which is higher in elevation, fills first and overflows into the lower pond. Overflow water from the lower pond is controlled by an existing structure that diverts water into the irrigation canal serving the agriculture fields. Both ponds are also plumbed at their downstream ends to facilitate draining for pond maintenance. Flow data collected over the last eight months shows an average monthly flow volume of 16.2 million gallons of spring water reporting to the pond system.

Rosemont will renovate the ponds to support recovery efforts for sensitive species, including, as appropriate, Chiricahua leopard frog, Gila chub, Gila topminnow, northern Mexican gartersnake, and Huachuca water umbel. The current configuration of the ponds, with relatively deep pools and open water, supports sport fish and invasive bullfrogs. The final configuration of the ponds is still being developed, but it is anticipated that the ponds will be modified to allow for a passive flow-through system to keep the surface water from stagnating, and that infiltration of the pond water will be reduced through application of a wildlife-friendly chemical sealant. In addition, harmful non-native fish and wildlife species will be eradicated from the pond system and portions of the ponds will be made shallower and planted with native aquatic species, including willow trees (*Salix* spp.).

- c. *Establishment of pond overflow system.* Surface water discharges from the downstream pond will report to a constructed channel that will ultimately discharge to the constructed channels in the Sonoita Creek floodplain, as previously described. Vegetation development along this channel will be more mesic or hydriparian in nature, given the anticipated flow through system described above. Where feasible, this vegetation development will be

- supplemented with plantings.
- d. *Boundary fencing.* Wildlife-friendly fencing will be installed to discourage use by cattle and encourage use by threatened and endangered species, including jaguars and ocelots. Rosemont will construct wildlife fence along the west boundary of the property to enhance the utilization of the SR 82 crossing of Big Casa Blanca Canyon and Smith Canyon. The balance of fence repaired or replaced at Sonoita Creek Ranch will be wildlife-friendly four-strand wire fence built in accordance with Arizona Game and Fish Department standards.
  7. Sonoita Creek Ranch will be managed for conservation purposes to provide habitat and connectivity for the Jaguar and Ocelot between USFS administered lands in the Canelo Hills/Patagonia Mountains and the Santa Rita Mountains, in perpetuity. The southern portion of the ranch has been identified by the Arizona Wildlife Linkages Workgroup and the Arizona Missing Linkages Corridor design as a likely corridor between these two Coronado National Forest land blocks.
  8. Management actions in Sonoita Creek Ranch will not compromise the ability to manage for threatened and endangered species. This includes species that are not currently present, but could recolonize the area if habitat were improved.

#### **B. Davidson Canyon Watershed Parcels**

1. Rosemont owns six parcels of land on the eastern side of the Santa Rita Mountains, containing approximately 545 acres of land with semidesert grassland and riparian habitat. Four of these parcels are within 2.5 miles of the Rosemont Project, and the other two sites are approximately five miles away. All share habitat similar to those within the Rosemont Project area. Prior to acquisition by Rosemont, four of these parcels were owned by a real estate developer and have value for development. They also and have been identified by Pima County as having significant conservation potential.
2. These parcels will be utilized for mitigation of impacts to potential waters of the U.S. as considered under the CWA Section 404 permit for the Rosemont Project. Conservation of these parcels will result in the preservation of an estimated 16 acres of potential waters of the U.S. and an additional 83 acres of associated xeroriparian buffer habitat. In addition, these parcels include three springs (Barrel Spring, Questa Spring, and an unnamed spring) and more developed riparian habitat downstream of Mulberry Spring, all of which will be preserved.
3. Wildlife-friendly fencing will be installed to discourage use by cattle and encourage use by threatened and endangered species. Fence that is repaired or replaced will be wildlife-friendly, four-strand wire fence built in accordance with AGFD standards.
4. Rosemont will record a restrictive covenant or conservation easement on the Davidson Canyon Watershed Parcels that precludes grazing, real estate development and similar land use activities.
5. The Davidson Canyon Watershed Parcels will be included as available land for the establishment of water features beneficial to listed species and to provide general wildlife benefits.
6. Portions of the Davidson Canyon Watershed Parcels have been identified as culturally important by Native Americans. None of the conservation actions outlined for the Davidson Canyon Watershed Parcels will preclude reasonable access to these parcels by interested Native American groups.

### C. Helvetia Ranch Annex North Parcels

1. The Helvetia Ranch Annex North Parcels are comprised of approximately 939 acres located in the western foothills of the Santa Rita Mountains, immediately north of the proposed utility line and approximately 2.5 miles northwest of the proposed mine area. These parcels were secured from a real estate developer that was marketing them as an opportunity for a housing development, similar to other residential developments in the area (e.g. the Sycamore Canyon development). The Helvetia Parcels provide landscape-scale connectivity between the Santa Rita Experimental Range to the west and federal lands (BLM and the Coronado National Forest) to the east, and will provide conservation benefits for several federally listed species.
2. Rosemont will record a restrictive covenant or conservation easement on the Helvetia Ranch Annex North Parcels that precludes grazing, real estate development and similar land use activities.
3. These parcels will be utilized for mitigation of impacts to potential waters of the U.S. as considered under the CWA Section 404 permit for the Rosemont Project. Conservation of these parcels will result in the rehabilitation of an estimated 39 acres of potential waters of the U.S. and enhancement of an additional 270 acres of associated xeroriparian buffer habitat.
4. Conservation activities to be implemented at the Helvetia Ranch Annex North Parcels are as described below. Rosemont will fund the completion of these conservation activities; funding for long-term management will be as described for the Sonoita Creek Ranch mitigation parcel (see Conservation Measure B.5). Additional detailed information is located in the Rosemont Copper Project: Revised Habitat Mitigation and Monitoring Plan (September 26, 2014).
  - a. *Boundary fencing. Wildlife-friendly fencing will be installed to discourage use by cattle and encourage use by threatened and endangered species. The fence repaired or replaced will be wildlife-friendly four-strand wire fence built in accordance with AGFD standards.*
  - b. *Access road improvements. The wash crossings along the primary access road through the Helvetia Ranch Annex North Parcels are all at-grade crossings. Crushed limestone has been used to stabilize the roadways and this material has in some cases migrated downstream into the ephemeral channels. This material has the potential to create a natural crust, affecting the infiltration of stormwater and sediment transport. Rosemont will import aggregate base material that will be combined with the existing limestone material to create a more stable road bed as the limestone reacts with the fines in the AB to form larger cementitious particles. Lime-treated AB is common in construction for its stabilizing and strengthening properties. For maintenance, the road surface will be bladed and watered once or twice a year in order to mix the AB and lime material and continually stabilize the road.*
  - c. *Unnecessary road removal and revegetation. Rosemont will rip and reseed approximately 2.4 miles of infrequently used unpaved roadways within the Helvetia Ranch Annex North parcels. This effort will improve stormwater runoff by reducing the degree of runoff concentration, thereby reducing onsite erosion and downstream sedimentation.*
5. The Helvetia Ranch Annex North Parcels will be included as available land for the establishment of water features beneficial to listed species such as the Chiricahua Leopard Frog, jaguar, and ocelot and to provide general wildlife benefits. See

elements of Conservation Measures G, H, and I.

6. Preservation of the Helvetia Ranch Annex North Parcels will serve as mitigation for impacts to Pima pineapple cactus. See elements of Conservation Measure L.

#### **D. Fullerton Ranch Parcels**

1. The 1,763-acre Fullerton Ranch is located approximately 28 miles west of the Project site, within the Altar Valley, which is ultimately tributary to the Brawley Wash and the Santa Cruz River. The parcel is adjacent to the Marley Ranch Conservation Area, a 114,400-acre ranch that is under contract for purchase by Pima County in phases as a conservation area. The site sits at the western terminus of an identified wildlife corridor between the Santa Rita Mountains (the location of the Rosemont Project) and the Sierrita Mountains.
2. The Altar/Brawley Wash has experienced significant degradation due to historic overgrazing in the valley and adjoining uplands coupled with significant flood events, which have resulted in intensive erosion within the Altar/Brawley Wash and its tributaries. Fullerton Ranch, in the headwaters of Altar Valley, has been intensively overgrazed, and restoration activities at the site offer an opportunity to improve the overall watershed function within the Altar Valley.
3. Rosemont will record a restrictive covenant or conservation easement on the Fullerton Ranch Parcels that precludes grazing, real estate development and similar land use activities.
4. These parcels will be utilized for mitigation of impacts to potential waters of the U.S. as considered under the CWA Section 404 permit for the Rosemont Project. Restoration activities at these parcels will result in the rehabilitation of an estimated 50 acres of potential waters of the U.S. and an additional 263 acres of associated xeroriparian buffer habitat.
5. Restoration activities to be implemented at Fullerton Ranch are as described below. Rosemont will fund the completion of these conservation activities, which includes funding for long-term management will be as described for the Sonoita Creek Ranch mitigation parcel (see Conservation Measure B.5). Additional detailed information is located in the Rosemont Copper Project: Revised Habitat Mitigation and Monitoring Plan (September 26, 2014).
  - a. *Boundary fencing. Wildlife-friendly fencing will be installed to discourage use by cattle and encourage use by threatened and endangered species. The fence repaired or replaced will be wildlife-friendly four-strand wire fence built in accordance with AGFD standards. Substantial restoration benefits can be realized by excluding domestic livestock grazing from intensively overgrazed landscapes like the one at Fullerton Ranch, with identifiable improvements to stormwater infiltration, peak flow discharges, and sediment yield.*
  - b. *Physical improvements. Proposed physical manipulations of the landscape include: maintenance of a concrete dam; removal and revegetation of unnecessary roads; maintenance and modification of existing roads; gully repair; and removal of corrals and other infrastructure.*