STATE OF CALIFORNIA-THE RESOURCES AGENCY

DEPARTMENT OF FISH AND GAME 1416 NINTH STREET P.O. BOX 944209 SACRAMENTO, CA 94244-2090

(916) 654-3821

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June 23, 1995

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Contra Costa County c/o Manager of Airports Buchanan Field Airport 510 Sally Ride Drive Concord, CA 94520

To Whom it May Concern:

Enclosed for your records is a fully executed duplicate original of the Mitigation Agreement between the County and the Department of Fish and Game for the Byron Airport. Thank you for your cooperation.

If you have have any questions or comments, please feel free to call me at (916) 654-5295.

Sincerely,

STEPHEN ADAMS, Attorney

SEA/rkh Enclosures

cc: Ken Aasen, Acting Manager California Department of Fish and Game Region 3

> David Showers California Department of Fish and Game Environmental Services Division

John Donnelly California Department of Fish and Game Natural Heritage Division LEGAL/CHRON/6SEA/LETTER/CCOSTA

CALIFORNIA ENDANGERED SPECIES ACT MANAGEMENT AUTHORIZATION

FOR CONSTRUCTION OF

CONTRA COSTA COUNTY AIRPORT AND ANCILLARY FACILITIES AT BYRON, CONTRA COSTA COUNTY

CONTRA COSTA COUNTY AIRPORTS

SUMMARY

CONTRA COSTA COUNTY AIRPORTS (hereinafter "Applicant") has requested an Authorization for Management of Endangered Species pursuant to California Fish and Game Code section 2081 for construction and operation of a general aviation airport (hereinafter "Project") which will result in temporary and permanent disturbance of 214 acres of which 199 acres is considered habitat for the San Joaquin kit fox located in the southeast corner of the County approximately 3.0 miles south of the Town of Byron on Byron Hot Springs Road.

The construction will temporarily modify 111 acres and permanently modify 103 acres of potential habitat for one State-listed threatened species; the San Joaquin kit fox.

It is the determination of the California Department of Fish and Game (hereinafter "Department") that the preservation, enhancement, and long-term management of 814 acres of habitat for the species listed above at the project site will offset the project impacts and will result in preserving core areas for the species in order to achieve sustainable populations. It is also the Department's determination that the project, as mitigated, will not result in jeopardy to the continued existence of the listed species and may, through the acquisition of habitat lands, protect the species from further degradation.

PROJECT DESCRIPTION

The proposed airport would be a general aviation airport developed, owned, and operated by Contra Costa County. The airport's primary service area would be eastern Contra Costa County. The County currently owns the approximately 1,321 acres required to develop

> Mgmt. Auth./[Applicant] Draft [Date]/[Project], [county]

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the new airport facilities and maintain required surrounding buffer zones for operational safety (i.e., clear zones). The proposed facilities include the following:

- 1. ultimate capacity of 400 based aircraft, including tiedowns, T-hangars, and fixed base operations spaces;
- 2. apron area for about 35 transient aircraft; and
- 3. at least 50 acres for the required building area.

Given the elevation and temperatures in the East County area and the proposed service, the required runway length is about 4,500 feet. The potential for ultimate extension to 6,000 feet to accommodate larger business jets and establishment of a precision instrument approach were also considered important.

Given the runway layout and existing parcel lines, the area required for the airport, including the runway-taxiway system to accommodate larger general-aviation aircraft, crosswind runway requirements, clear zones, and building area was considered to exceed 1,000 acres. Also, easements over critical surrounding lands could eventually be required to ensure land use compatibility.

Project implementation would also require:

- an access road connecting the proposed airport with Armstrong Road,
- 2. construction of two storm water detention basins,
- 3. realignment and widening of Byron Hot Springs Road, and
- 4. relocation of 45 Canal, which carries water from the California Aqueduct and is operated by the Byron-Bethany Irrigation District.

The project site is a 1,321-acre area located in the southeastern corner of Contra Costa County approximately three miles south of the Town of Byron and 2.5 miles north of the Contra Costa County-Alameda County line. The existing airport facilities are located between Armstrong Road, which skirts the west and north sides of the facilities, and Byron Hot Springs Road, which is to the east. Private lands surround the existing facilities.

The project site is a generally level, low-lying alluvial area with interspersed bedrock knolls and ridges which lend the site a minor amount of gently rolling terrain. The site generally slopes from west to east and is drained by Brushy Creek and its tributaries. The natural drainage patterns have been altered substantially around the existing airport facilities to control runoff. Most of the work was done after 1950. In the 1960's, the northern tributary of Brushy Creek was rerouted around the northern end of Runway 14-32. Other work was done previously on the west side of the airfield, including some excavation to obtain the material necessary to raise the runway elevation.

The site supports a mosaic of annual and alkali grassland (both upland habitats) and an unestimated area of wetlands and waters subject to regulation by the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (Stromberg 1990). A handful of tamarisk and pepper trees are present, but the site has been grazed heavily for decades, and virtually no woody vegetation is present. Of the 199.46 acres of vegetated habitat affected by the project, approximately 157.48 acres are grassland and 34.31 acres are irrigated pasture. Approximately 4.52 acres are a stock pond and 3.15 acres are alkali wetlands, vernal pools and other seasonal wetlands, and drainage features which carry water intermittently.

The impacts of development of the proposed airport facilities, issuance of this Management Permit, and execution of the approved activities on the San Joaquin kit fox could include short-term impacts associated with site preparation and would include longterm impacts resulting from the loss of habitat and dens.

Earthmoving during construction could trap kit fox in their dens and result in mortality. This potential impact and the danger are exacerbated by an apparent tendency for kit fox to remain in their burrows at the approach of heavy equipment (Knapp 1978). Increased traffic during construction activities could result in "road kills".

Kit fox could also be attracted to the cover supplied by equipment or by food-related trash and, therefore, become exposed to construction-related hazards. Noise and ground vibrations associated with construction could displace kit fox from nearby dens. Although it is difficult to predict the number of kit fox that could be killed, harmed, or harassed, any impacts of this type would be potentially significant, especially if animals are destroyed.

The primary post-construction or long-term impact of the project would be the unavoidable loss of kit fox habitat. Construction would result in the permanent loss of 214.52 acres of foraging habitat (irrigated pasture is not considered foraging habitat). Temporary loss of habitat would result from the lowering of the hill on the north side of Armstrong Road to remove an obstruction from in the runway clear zone. Construction will also result in the destruction of potential kit fox dens.

Based on surveys conducted to date, approximately 23 of 81 potential dens would be destroyed. These dens represent 28 percent of the dens known to exist on the site.

The kit fox is not particularly shy or wary of human contact (Murphy personal communication, Olislagers personal communication, Standley personal communication) and, although contact with humans is not desirable in kit fox habitat, the presence of humans and human activities would not adversely affect or reduce the habitat value of adjacent undisturbed habitat.

As part of the project and an Endangered Species Management Agreement with the Department, approximately 814 acres of land owned by the County on the west, southwest, and southeast side of proposed facilities will be set aside as a San Joaquin kit fox preserve, which will be left undeveloped and retained in existing and/or enhanced condition. This area contains 58 potential dens, approximately 72 percent of the total number on the entire project site. The County will grant a Conservation Easement to the Department over this area.

The County will fund the long-term maintenance of the 814 acres. Additionally, the County will develop, in conjunction with the Department, a plan for the initial enhancement of the habitat subject to the Management Agreement.

LISTED SPECIES

Based on biological studies of the project site and adjacent areas, the state-listed threatened San Joaquin kit fox, <u>Vulpes</u> <u>macrotis</u> <u>mutica</u>, may use the project area. A summary of its life history information follows:

The San Joaquin kit fox is one of eight recognized subspecies of kit fox. It resembles a small lanky dog in appearance, with proportionately large ears that have an abundance of large white inner guard hairs. Total length is about 32 inches, including a 12-inch black-tipped tail. Coloration ranges from light buff to grayish along the back and tail; gray, rust, or yellowish along the sides; and white along the belly (O'Farrell 1983).

San Joaquin kit foxes hunt for rodents, rabbits, and other prey by night from dens that are typically excavated in loose soil (O'Farrell 1983). Individual animals may utilize from three to 24 separate dens (Morrell 1972). Individual den entrances may range from one to 36 (O'Farrell 1983), and may extend into several tunnels and chambers reaching depths of up to ten feet (O'Farrell 1987). Man-made structures such as culverts and pipes may also be utilized as dens (O'Farrell 1983). Den entrances are characteristically higher than wide, and are sufficiently small to

prevent access by larger carnivores such as coyotes. Den entrance hole dimensions are generally about eight to ten inches in height and less than eight inches in width (O'Farrell 1987), but may be as small as four inches in width (Dr. Ted Murphy, California State University Bakersfield, pers. comm.) Burrows of other animals, particularly California ground squirrels (Spermophilus beecheyi), may also be opportunistically enlarged and utilized as den sites by San Joaquin kit foxes (Balestreri 1981). Although occupied dens may show freshly excavated soil, scats, and prey remains (O'Farrell 1987), such obvious sign may also be inconspicuous or absent (Hall 1983).

San Joaquin kit foxes forage and live in an area of one to two square miles (Knapp 1978; Morrell 1972). Mating occurs in December-January. Pups are born in February-March, and begin to disperse at around five months of age (Morrell 1972; O'Farrell 1983). Survival rates of kit fox pups are low; about 75 percent of the pups die before the age of eight months-(O'Farrell 1984). Mortality for this species has been documented from attacks by coyotes, road kills, conversion of habitat, shooting, drowning, entombment, pneumonia, and starvation (Morrell 1975; Knapp 1978; O'Farrell and Gilbertson 1979; O'Farrell et al. 1986; Berry et al. 1987). Additionally, widespread use of rodenticides may result in mortality, since kit fox are extremely vulnerable to secondary poisoning through consumption of poisoned ground squirrels or other scavenged rodents (EPA 1983; USFWS 1985b).

The San Joaquin kit fox historically was distributed over a large portion of central California, extending roughly from southeastern Contra Costa County south along the eastern edge of the Interior Coast Range to the southern San Joaquin Valley, including major portions of western Kern County and Tulare County. San Joaquin kit fox were also distributed through adjacent valleys, foothills, and plains, including portions of San Luis Obispo County, Monterey County, and the Santa Clara Valley on the western side of the Interior Coast Range (Morrell 1975).

Habitat conversion has been the principal reason for both State listing and Federal listing of the San Joaquin kit fox. Agricultural development is the principal contributing factor to this decline of available kit fox habitat. Approximately 42 percent of "suitable" kit fox habitat has been lost as a result of such developments (O'Farrell 1983).

EFFECTS ON LISTED SPECIES

The impacts of development of the proposed airport facilities on the San Joaquin kit fox could include short-term impacts associated with site preparation and would include long-term impacts resulting from the loss of habitat and dens.

Earthmoving during construction could trap kit fox in their dens and result in mortality. This potential impact and the danger are exacerbated by an apparent tendency for kit fox to remain in their burrows at the approach of heavy equipment (Knapp 1978). Increased traffic during construction activities could result in "road kills".

Kit fox could also be attracted to the cover supplied by equipment or by food-related trash and, therefore, become exposed to construction-related hazards. Noise and ground vibrations associated with construction could displace kit fox from nearby dens. Although it is difficult to predict the number of kit fox that could be killed, harmed, or harassed, any impacts of this type would be potentially significant, especially if animals are destroyed.

The primary post-construction or long-term impact of the project would be the unavoidable loss of kit fox habitat. Construction would result in the permanent loss of 214.52 acres of foraging habitat. Temporary loss of habitat would result from the lowering of the hill on the north side of Armstrong Road to remove an obstruction from in the runway clear zone. Construction will also result in the destruction of potential kit fox dens.

Based on surveys conducted to date, approximately 23 of 81 potential dens would be destroyed. These dens represent 28 percent of the dens known to exist on the site.

The project may result in enhancement of habitat for the alien red fox <u>Vulpes</u>, which is a competitor with the kit fox and may exclude it where they occur together.

HABITAT MANAGEMENT LANDS

ACQUISITION OF LANDS

In association with this project, Applicant shall preserve through conservation easement to the Department, 814 acres of habitat management lands for the above species.

INITIAL HABITAT PROTECTION

Applicant shall provide for initial habitat protection of the habitat management lands, including but not limited to fencing, trash removal, or other measures as required by the Department. The applicant will also implement the measures identified in the Endangered Species Management Agreement By and Between County of Contra Costa and California Department of Fish and Game.

The acquisition, improvement, and maintenance of the mitigation land will allow for its management for threatened, endangered, and/or candidate species in perpetuity. The acquired parcel in combination with past and future acquisitions in the area will provide sufficiently large core areas for the management of the affected species.

SPECIFIC CONDITIONS REQUIRED BY THE MANAGEMENT AUTHORIZATION

- 1. The County shall dedicate the Conservation Easement to the Department over 814 acres. The lands over which the Easement is dedicated shall be accepted by the Department as occupied kit fox habitat.
- 2. During construction of the facilities, the County shall implement the following measures to minimize the effect of any incidental kit fox take:
 - a. Within 30 to 60 days before the start of construction or before any pre-construction activity that could have an impact on the kit fox or its habitat, a pre-construction survey shall be conducted over the entire project impact area by a team of qualified biologists. The survey shall determine the presence or absence of the kit fox and shall be used to identify specific areas used by the species and what those uses are. Survey methods acceptable to the Department shall be used.
 - b. The results of the survey shall be submitted to the Department within two weeks of completion. This report shall state the number of kit fox dens located in the project impact area and their status and accompanying maps shall specifically show the den locations. If kit fox activity is observed, the type and location of the activity shall be recorded, described in the letter, and shown on the map.
 - c. The County's biologist shall work with the project construction supervisor to plan site-specific techniques for kit fox burrow avoidance and protection during all phases of construction.
 - d. protective exclusion zones shall be established around any known or potential dens found within 100 feet of the project impact area (which includes all construction staging areas). The design of exclusion zones shall be based upon consultation with Department personnel. Exclusion fencing shall be

constructed of materials acceptable to the Department and signs shall be posted on the fencing, in accordance with Department standards, identifying the exclusion areas as environmentally sensitive areas in which disturbances is prohibited unless approved by an on-site biological supervisor or Department personnel. Construction-related activity, vehicle operation, material storage, and other project activities shall be prohibited within these exclusion areas. Upon completion, all fences and signs shall be removed.

- e. Dens within the project impact area shall be excavated by experienced biologists upon authorization of the Department and issuance of the Section 2081 permit. The Department shall first be notified if den excavation is unavoidable and shall be informed of reasons why alternative courses of action are not possible. Recommendations of alternative methods to avoid den excavation shall be solicited from the Department.
- f. Known dens or pupping dens known to be occupied shall be avoided during the breeding season and den excavation shall not begin until the den or dens have been vacated.
- Known dens shall be monitored for three consecutive g. days prior to excavation to ensure that they are not being currently used by kit fox. Monitoring shall be accomplished by placing tracking material outside each den (to be checked daily), and by spotlighting at night. If it can be established that the dens are not occupied by kit fox, the dens shall be destroyed immediately, under the supervision of the County's qualified biologist, by hand excavation (dens shall be excavated to a point where they are no longer suitable for use, and then they shall be refilled and compacted to prevent future use by resident animals). If kit for activity is observed at a den, the den shall be monitored for five consecutive days from the time of initial observation to allow the occupying animals to move to other dens.
- h. Vehicle travel shall be restricted to the project impact area and specified and marked access roads. Vehicle speeds on the project site and on Armstrong, Byron Hot Springs, and Holey Road where they are adjacent to the project site, shall be re-

stricted to 20 mph to reduce the chances of vehicle-caused mortality.

- i. To the extent possible, construction during the evening hours shall be minimized.
- j. All pipe, culvert, or similar structures with a diameter of five inches or more that are stored onsite overnight shall be inspected for kit fox before being buried, capped, or otherwise used or moved in any way. All steep-walled trenches and holes over two feet deep that are to be left in place overnight shall be covered with plywood or similar materials or they shall be provided with ramps to allow escape and to avoid inadvertent mortality to kit fox. Before ramps are constructed or any holes or trenches are filled, they shall be inspected for kit fox.
- k. All open ends of pipes greater than four inches in diameter shall be capped if left in a trench overnight. If during construction, a kit fox is discovered inside a section of pipe, that section of pipe shall be left unmoved if possible. If the pipe must be moved it shall be moved only far enough to remove it from the path of construction activity, until the kit fox has escaped.
- 1. All food-related trash shall be disposed of properly in closed containers removed from the site regularly.
- m. An employee education program shall be conducted before the start of work (and periodically thereafter as necessary if construction crews change or new personnel are added to the existing crews) to inform all personnel working on the project site of the nature and purpose of the above protection measures and the risks and penalties of failures to maintain all protective practices and measures. The program cover all topics recommended by the Department and shall submitted to the Department for its review at least 30 days prior to the start of construction.
- n. Any construction worker that inadvertently kills or injures a kit fox or who finds any kit fox, either dead, injured, or entrapped, shall report the incident to the County's biologist or other on-site representative and shall immediately notify the

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Department by telephone or other expedient means. In addition, formal notification shall be provided in writing within three working days of the finding of such animal(s). Notification shall include the date, time, location, and circumstance of the incident. The Department contact for this information shall be Carl Wilcox (707) 944-5525.

- o. No pets shall be allowed on the project site during construction.
- 3. Any known den destroyed during construction shall be replaced with an artificial den constructed elsewhere on the project site. Den design shall be based upon consultation with DFG biologists. Mitigation for the loss is ensured because 58 potential dens are present on the project site outside the project impact area and an uncountable number of other enlargeable ground squirrel holes are present.
- 4. Use of an existing house and accompanying buildings in the southeast corner of the property in the Dedicated Buffer shall continue but no additional residences shall be constructed.
- 5. Implement an Endangered Species Management Plan for the kit fox, to include grazing management and red fox monitoring and control. The Plan is included as Exhibit 1 of the Endangered Species Management Agreement By and Between County of Contra Costa and California Department of Fish and Game.
- 6. Compliance inspections shall be conducted once per week by the County's Biologist and a monthly compliance report shall be provided by to the USFWS Sacramento Field Office of USFWS and the Regional Office of the Department. Inspections shall check for compliance with all of the mitigation measures outlined above and the exclusion zones shall be checked to ensure that the signs, stakes, and fencing are still intact and that human activities have been restricted in these protective zones.
- 7. Within 45 days of completion of the project, Applicant shall forward to the USFWS Sacramento Field Office and the Department Regional Office a post-construction compliance report prepared by a qualified biologist. This report shall detail the following: 1) dates that construction occurred; 2) pertinent information concerning the applicant's success in meeting project

mitigation measures; 3) an explanation of failure to meet such measures, if any; 4) known project effects on all of the affected listed species enumerated in this MA, including the number of dens and burrows destroyed, if any, in a timely manner, as provided herein; and 5) other pertinent information.

DISCLAIMER

- Upon timely satisfaction of the conditions of this 1. California Endangered Species Management Authorization, Applicant will have satisfied the State's endangered species requirements, and understands and recognizes that this agreement does not constitute or imply compliance or entitlement to proceed with the project, with regard to and and regulations beyond the authority laws jurisdiction of the Department. Applicant has independent responsibility for compliance with any and all applicable laws and regulations.
- 2. Following execution of the CESA MOU and issuance by the Department of this California Endangered Species Management Authorization, Applicant's decision whether or not to proceed with said project shall be voluntary, and subject to all other pertinent law and regulations. As such, Applicant will hold the State of California and the Department of Fish and Game harmless, in any violation of the law, lien, suit, or claim of injury or damage which may result from any aspect of the project, including fulfillment of the obligations under this MA and the CESA MOU.

DEPARTMENT FINDINGS

If the above-written conditions of this MA and the Memorandum of Understanding are implemented in a timely manner, as provided herein, the Department finds that the construction of the project will not result in jeopardy to the continued existence of the listed and candidate species and may, through the acquisition of habitat lands, protect the species from further degradation.

CALIFORNIA DEPARTMENT OF FISH AND GAME TITLE DATED

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RECORDING REQUESTED BY: MAIL TO:

____` _`

COPY

Above Space for Recorder's Use

CONSERVATION EASEMENT GRANT

THIS CONSERVATION EASEMENT GRANT is made this _____ day of ______, 1993, by the County of Contra Costa, a political subdivision of the State of California, ("Grantor"), in favor of State of California, Department of Fish and Game ("Grantee").

WITNESSETH:

WHEREAS, Grantor is the sole owner in fee simple of certain real property in the County of Contra Costa, State of California, more particularly described in Exhibit "A" and shown on Exhibit B attached hereto and incorporated by this reference (the "Property"); and

WHEREAS, the Property possesses wildlife and native habitat values (collectively, "conservation values") of importance to Grantor, the people of the County of Contra Costa, and the people of the State of California; and

WHEREAS, the property is a suitable habitat for the San Joaquin Kit Fox, which occurs in the area.

WHEREAS, the Department of Fish and Game, pursuant to the Fish and Game Code Section 1802, has jurisdiction over the conservation,

WAP:dp 1:consesmc.077 (5/4/93) protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable population of those species; and

WHEREAS, Grantor intends to convey to Grantee the right to preserve and protect the conservation values of the Property; and

WHEREAS, Grantee agrees by accepting this grant to honor the intentions of Grantor stated herein and to preserve and protect the conservation values of the Property in accordance with the terms of this conservation easement.

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of California and Civil Code Section 815, et seq., Grantor hereby grants and conveys to Grantee a conservation easement over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

This Conservation Easement Grant is made subject and subordinate to the following:

- A. Utility, pipeline, irrigation, roadway, drainage, and other easements of record or as described and shown on Exhibits A and B.
- B. The right of flight for the passage of aircraft in the airspace above the surface of the easement herein conveyed, together with the right to cause in said airspace such noise as may be inherent in the operation of aircraft, now or hereafter used for navigation of or flight in the air, using said airspace or landing at, taking off from, or operating on Byron Airport.

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C. The right to install air navigational aids, including lighting in, on, over, under, and across the real property described herein. Installation of such air navigational aids shall occur only following consultation with the Department to ensure that the San Joaquin Kit Fox is not adversely affected.

1. <u>Purpose</u>. It is the purpose of this Easement to assure that the Property will be retained in a natural condition and to prevent any use of the Property that will significantly impair or interfere with the conservation values of the Property. Grantor intends that this Easement will confine the use of the Property to such activities involving the preservation and enhancement of the San Joaquin Kit Fox and their habitat in a manner consistent with the habitat conservation purposes of this Easement.

2. <u>Rights of Grantee</u>. To accomplish the purpose of this Easement, the following rights are conveyed to Grantee by this Easement:

(a) To preserve and protect the conservation values of the Property;

(b) To enter upon the Property at reasonable times in order to monitor Grantor's compliance with and otherwise enforce the terms of this Easement; provided that such entry shall be upon prior notice to Grantor, and Grantee shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property; and

(c) To prevent any activity on or use of the Property that is inconsistent with the habitat conservation purposes of this Easement and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

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3. <u>Prohibited Uses</u>. Any activity on or use of the Property inconsistent with the habitat conservation purposes of this Easement is prohibited. Without limiting the generality of the foregoing, use of herbicides or weed abatement activities, incompatible fire protection activities, and any and all other uses which may adversely affect the preserve are prohibited. Grantor shall undertake all reasonable actions to prevent the unlawful entry and trespass by persons whose activities may degrade or harm the biological values of the land.

4. <u>Reserved Rights</u>. Grantor reserves to itself, and to its personal representatives, heirs, successors, and assigns, all rights accruing from its ownership of the Property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Easement.

Grantee's Remedies. If Grantee determines that Grantor is 5. in violation of the terms of this Easement or that a violation is threatened, Grantee shall give written notice to Grantor of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity by Grantor inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantor fails to cure the violation within forty-five (45) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a forty-five (45) day period, fail to begin curing such violation with the forty-five (45) days period, or fail to continue diligently to cure such violation until finally cured, Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement, to enjoin the violation, ex

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parte as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any conservation values protected by this Easement, including damages for the loss of scenic, aesthetic or environmental values, and to require the restoration of the Property to the condition that existed prior to any such injury. Without limiting Grantor's liability therefor, Grantee, in its sole discretion, may apply any damages recovered to the cost of undertaking any corrective action on the Property. If Grantee, in its sole discretion, determines that circumstances required immediate action to prevent or mitigate significant damage to the conservation values of the Property, Grantee may pursue its remedies under this paragraph without prior notice to Grantor or without waiting for the period provided for cure to expire. Grantee's rights under this paragraph apply equally in the event of either actual or threatened violations of the terms of this Easement, and Grantor agrees that if Grantee's remedies at law for any violation of the terms of this Easement are inadequate, Grantee shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise Grantee's remedies described in this available legal remedies. paragraph shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. Furthermore, the provisions of Civil Code Section 815, et seq., are incorporated herein by this reference and this grant is made subject to all of the rights and remedies set forth therein. If at any time in the future Grantor or any subsequent transferee uses or

WAP:dp a:consesmt.077 (5/4/93) threatens to use such lands for purposes not in conformance with the stated conservation purposes contained herein, notwithstanding Civil Code 815, et seq., California Attorney General or third-party entities organized for conservation purposes have standing as interested parties in any proceeding affecting this Easement.

5.1 <u>Costs of Enforcement</u>. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantor, including costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Easement shall be borne by Grantor. If Grantor prevails in any action to enforce the terms of this Easement, Grantor's costs of suit, including attorneys' fees, shall be shall be borne by Grantee.

5.2 <u>Grantee's Discretion</u>. Enforcement of the terms of this Easement shall be at the discretion of Grantee, and any forbearance by Grantee to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantor shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver.

5.3 <u>Acts Beyond Grantor's Control</u>. Nothing contained in this Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the property resulting from causes beyond Grantor's control, including, without limitation, aircraft emergency, accident, trespass, fire, flood, storm, and earth movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate or mitigate significant injury to the Property resulting from such causes.

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- 6. <u>Fence Installation and Maintenance</u>. Grantor shall install and maintain a permanent barbed-wire fence around the entire property.
- 7. <u>Access</u>. This agreement does not convey a right of access to the public, however, reasonable access for scientific research and interpretive purposes shall be reserved to the Grantee or his designee.
- 8. <u>Costs of Liabilities</u>. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the property.

8.1 <u>Taxes</u>. Grantor shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "taxes"), including any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request.

8.2 <u>Hold Harmless</u>. Grantor shall hold harmless, indemnify, and defend Grantee and its members, directors, officers, employees, agents, and contractors and the heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from Grantor's share and against all liabilities, penalties, costs, losses, damages, expense, causes of action, claims, demands or judgments, including reasonable attorneys' fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damages to any property, resulting from any act, omission, condition or other matter related to or occurring on or about the Property, regardless of cause, unless due to the negligence of any of the Indemnified Parties; and (2) the existence or administration of this Easement. Grantee agrees to indemnify and hold harmless the COUNTY, its officers, agents, and employees from the Grantee's share of any and all claims, costs, and liability for any damages, injury or death of any person or the property of any person, in the exercise of the rights granted in paragraph 7, <u>Access</u>, including attorneys' fees, arising out of negligent acts, errors or omissions of Grantee, its agents, employees, contractors or designees.

8.3. <u>Condemnation</u>. If the Easement is taken, in whole or in part, by exercise of the power of eminent domain, Grantee shall be entitled to compensation in accordance with applicable law.

9. <u>Assignment</u>. This Easement is transferable, but Grantee may assign its rights and obligations under this Easement only to an organization that is a qualified organization at the time of transfer under Section 170(h) of the Internal Revenue Code of 1954, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder, and authorized to acquire and hold conservation easements under Civil Code Section 815, et seq. (or any successor provision then applicable). As a condition of such transfer, Grantee shall require that the conservation purposes that this easement is intended to advance, continue to be carried out.

10. <u>Subsequent Transfers</u>. Grantor agrees to incorporate the terms of this Easement in any deed or other legal instrument by which they divest themselves of any interest in all or a portion of the Property, including, without limitation, a leasehold interest. Grantor further agrees to give written notice to Grantee of the transfer of any interest at least sixty (60) days prior to the date of such transfer. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.

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11. <u>Management Agreement</u>. The Endangered Species Management Agreement dated _______, 1993, by and between the County of Contra Costa and the California Department of Fish and Game, is incorporated herein and made a part hereof as Attachment 1. It is the intent of the parties that the Management Agreement and the Management Plan attached thereto as Exhibit "1" shall be the working agreements that implement and accomplish the purposes of this Conservation Agreement. It is understood and agreed the Management Agreement and Management Plan may be modified and amended from time to time as necessary by mutual consent of the parties hereto in writing, as an administrative action, without amending and re-recording this Conservation Easement.

12. <u>Estoppel Certificates</u>. Upon request by Grantor, Grantee shall within fifteen (15) days execute and deliver to Grantor any document, including estoppel certificate, which certifies Grantor's compliance with any obligation of Grantor contained in this Easement and otherwise evidences the status of this Easement as may be requested by Grantor.

13. <u>Notices</u>. Any notice, demand, request, consent, approval or communication that either party desires or is required to give to the other shall be in writing and either served personally or shall be sent by first class mail, postage prepaid, addressed as follows:

To Grantor:	Contra Costa County c/o Manager of Airports Buchanan Field Airport 510 Sally Ride Drive Concord, CA 94520
To Grantee:	Director Department of Fish and Game 1416 Ninth Street P.O. Box 944209 Sacramento, CA 95814-2090

Regional Manager Department of Fish and Game, Region 3 7329 Silverado Trail P.O. Box 47 Napa, CA 94558

or to such other address as either party from time to time shall designate by written notice to the other.

14. <u>Recordation</u>. Grantee may record this instrument in the official records of Contra Costa County, California, and may rerecord it at any time as may be required to preserve its rights in this Easement.

15. <u>General Provisions</u>.

(a) <u>Controlling Law</u>. The interpretation and performance of this Easement shall be governed by the laws of the State of California.

(b) <u>Liberal Construction</u>. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of this Easement and the policy and purpose Civil Code Section 815, et seq. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purposes of this Easement that would render the provision valid, shall be favored over any interpretation that would render it invalid.

(c) <u>Severability</u>. If any provision of this Easement, or the application thereof to any person or circumstances, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other

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than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(d) <u>Entire Agreement</u>. This instrument sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Easement, all of which are merged herein.

(e) <u>No Forfeiture</u>. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

(f) <u>Successors</u>. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running with the Property.

(g) <u>Captions</u>. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

(h) <u>Counterparts</u>. The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

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IN WITNESS WHEREOF Grantor and Grantee have entered into this Easement the day and year first above written.

GRANTOR

GRANTEE

By

CONTRA COSTA COUNTY, a political STATE OF CALIFORNIA, subdivision of the State of California

By

Chair, Board of Supervisors

Dated

STATE OF CALIFORNIA COUNTY OF CONTRA COSTA)

On JUN 8 1993 before me, Phil Batchelor, Clerk of the Board of JUN 8 1993 Supervisors and County Administrator, Contra Costa County, personally appeared TOM TORLARSON, who is personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

By:_	Barbara Sidayi
	Deputy Clerk

Attachments:

Exhibit A - Legal Description Exhibit B - Parcel Map Titled Habitat Management Lands Attachment 1 - Endangered Species Management Agreement Exhibit 1 - Endangered Species Management Plan

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DEPARTMENT OF FISH AND GAME

East Contra Costa County Airport Habitat Management Lands DWG No. BA-HM-93

EXHIBIT "A"

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A portion of Sections 22, 23, 26 and 27 of Township 1 South, Range 3 East, Mount Diablo Meridian, County of Contra Costa, State of California described as follows:

Beginning at the intersection of the south line and east line of Armstrong Road as shown on the map filed November 3, 1969 in Book 10 of parcel maps at page 50 Records of said County; thence along said east line, south 0°06'43" east 2065.42 feet to the north line of the parcel of land described in the deed to Roy Wickline, et. al., recorded October 15, 1962, in book 4222 of Official Records at page 457 records of said County; thence along the north line of said parcel south 89°47'50" east 858.60 feet; thence south along the easterly line of said parcel (4222 OR 457) south 0°06'16" east 550.00 feet; thence along the southerly line of said parcel north 89°47'50" west 858.60 feet to east line of Armstrong Road; thence along said east line south 0°11'10" east 3964.49 feet to the intersection of the south line of parcels 1 & 2 as said parcels are described in the instrument to Contra Costa County recorded April 7, 1993 in Book 18425 of Official Records at page 447 records of said County; thence along said south line north 89°55'05" east 2636.65 feet to the west line of the parcel of land described in the instrument to Contra Costa County recorded June 16, 1992 in book 17502 of Official Records at page 12 Records of said County; thence along said west line south 00°05'30" east 1320.00 feet more or less to the southwest corner of said parcel; thence along the south line of said parcel and those parcels described in the instruments to Contra Costa County recorded November 6, 1990 in book 16234 at page 718, and February 21, 1989 in book 14893 at page 384 both Official Records of Contra Costa County, a bearing of north 89°52'34" east, a distance of 7232.56 feet to the most westerly corner of the parcel of land described in the instrument to the State of California recorded April 14, 1964 in book 4595 of Official Records at page 305; thence along the southeast line of said parcel granted to Contra Costa County (14393 OR 384) north 36°20'43" east 1173.66 feet to the west line of North Bruns Way; thence along said west line north 00°00'09" east 1722.61 feet to the north line of said parcel (14893 OR 384); thence along said north line north 89°50'18" west 2662.99 feet; thence south 89°40'48" west 445.77 feet; thence south 45°39'50" west 433.44 feet; thence south 89°39'49" west 183.32 feet; thence north 44°20'10" west 417.05 feet; thence south 89°39'49" west 351.11 feet; thence north 44°20'12" west 106.53 feet; thence north 0°24'40" east 142.05 feet; thence north 44°20'10" west 425.00 feet; thence south 63°25'10"-west 3540.07 feet; thence north 26°34'50" west 500.00 feet; thence north 63°25'10" east 300.00 feet; thence north 26°34'51" west 500.00 feet; thence north 63°25'10" east, 1050.00 feet to a point hereinafter referred to as point "A"; thence leaving said point "A" continuing along said line, north 63°25'10" east 300.00 feet; thence south 26°34'51" east 400.00 feet; thence north 63°25'10" east 1349.20 feet; thence north 0°03'12" west 374.97 feet; thence south 89°56'48" west 195.10 feet; thence north 44°20'10" west 200.00 feet; thence south 45°39'50" west 175.00 feet; thence north 89°20'10" west 800.00 feet; thence north 44°20'10" west 75.00 feet to a point hereinafter referred to as point "B"; thence leaving said point "B" continuing along said line, north 44°20'10" west, 425.00 feet; thence north 30°42'32" west 70.11 feet; thence north 44°20'11" west 752.38 feet; thence north 17°48'57" west 400.00 feet; thence south 56°16'29" west 600.00 feet; thence north 33°43'30" west

3646.49 feet to the south line of Armstrong Road; thence along said line south 89°41'54" west, 400.28 feet to the point of beginning.

EXCEPTING THEREFROM: All of the 60.00 feet in width relocated Byron Hot Springs Road lying within the above described boundary.

ALSO EXCEPTING THEREFROM: A strip of land 100.00 feet in width (measured at right angles) the centerline of which is described as follows:

Beginning at point "A" as described in the description above; thence leaving said point "A" north 26°35'50" west, 71.36 feet; thence north 25°42'32" east, 860.00 feet to point "B" as said point is described above, the terminus of the herein described line.

Containing an area of 814 acres more or less.

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ATTACHMENT 1 TO CONSERVATION EASEMENT GRANT

ENDANGERED SPECIES MANAGEMENT AGREEMENT BY AND BETWEEN COUNTY OF CONTRA COSTA AND CALIFORNIA DEPARTMENT OF FISH AND GAME

This Management Agreement ("Agreement") is made and entered into by and between the County of Contra Costa, a political subdivision of the State of California, hereafter referred to as the "County", and the California Department of Fish and Game, hereinafter referred to as the "Department" or Department.

The purpose of this Agreement governing the management of the San Joaquin Kit Fox is to provide a permit to "take" the identified State-listed endangered species under authority of Section 2081 of the Fish and Game Code. The permitted activities include the project as described in the Endangered Species Management Plan (Exhibit 1). The described actions are to be undertaken as management activities for the benefit of the listed threatened and endangered species in order that the proposed project does not result individually or cumulatively in the destruction or adverse modification of habitat essential to the continued existence of the San Joaquin Kit Fox.

WHEREAS, the County proposes to manage a habitat for the San Joaquin Kit Fox which are known to occur near the Byron Airport, and desires to minimize impacts to the Kit Fox in the vicinity of the project site.

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WHEREAS, pursuant to the Fish and Game Code Section 1802, the Department has jurisdiction over the conservation and protection of fish, wildlife, and native plants and holds those resources in trust for the people of California.

WHEREAS, the Department desires that consistent with the policies of the California Endangered Species Act, that there is permanent protection for the above-named State-listed species and their habitat to assure the conservation, restoration, and longterm survival of such listed species.

WHEREAS, the County agrees to undertake the management activities contained in this mitigation agreement.

NOW THEREFORE, the parties agree as follows:

I. <u>DEFINITIONS</u>

The following definitions shall govern this Agreement:

<u>Wildlife</u> - Wildlife shall be defined consistent with the definition found at Fish and Game Code Section 711.2 to mean "all wild animals, birds, plants, fish, amphibians, and related ecological communities, including the habitat upon which the wildlife depends for its continued viability.

<u>Take</u> - Take shall be defined to include any act without regard to intent which results in the destruction of individuals, populations of individuals or habitat upon which these individual or populations rely for the continued viability of the species.

<u>Operation, Maintenance and Protection</u> - These terms shall mean those actions required in the discretion of the Department, to permit the species to function within a natural ecological system. Such actions may include management actions of a legal, biological or administrative nature. II. DUTIES

1. The County, acting in its own capacity or through a designated agent approved by the Department, shall preserve and enhance approximately 814 acres of Habitat Management Lands ("HM") as provided below. Such designated agent may include The Nature Conservancy, The Trust for Public Lands, or any other non-profit entity organized for conservation purposes, which is acceptable to the Department.

a. The required acreage is based upon a biological assessment which considers the quality of the existing habitat, the potential for enhanced biological carrying capacity, and the project's impact on listed species. Management of the species has been determined on the facts of this application to require approximately 814 acres of Habitat Management Lands as shown on Exhibit 2 to replace the biological carrying capacity of the impact site. Such replacement habitat will offset the permanent loss and temporary disturbance resulting from construction and installation of the airport facility.

b. County covenants and agrees to grant to the Department a Conservation Easement on the Habitat Management Lands to preserve the San Joaquin Kit Fox.

2. The County has acquired the habitat lands prior to execution of this Agreement. If the County or its approved agent has failed to enhance and implement the Endangered Species Management Plan and the Habitat Management Lands within 12 months of execution of this Agreement, the Department may, at its option,

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demand that the County cure its breach forthwith. If after 12 months from the date of execution of this Agreement any of the protection or enhancement duties detailed in Exhibit 1 and this Agreement remain incomplete, the Department may seek all legal remedies available at law or in equity.

3. The County agrees to conduct the enhancement activities described in the Management Plan as detailed in Exhibit 1 of this Agreement and paragraph 3(a) below.

3(a). The County agrees to pay all costs of fencing and other improvements to enhance the quality of the HM Lands so as to help increase the size of the Regional Kit Fox population from the pre-project condition. All fencing and posting shall be completed to the satisfaction of the Department's authorized representative. 4. The County shall fund the maintenance, management, monitoring, consulting services, and other operating expenses of the HM Lands each year as a line item in the budget of the Airports Division of the Contra Costa County Public Works Department. The County shall fund the operation and maintenance of the HM Lands at a level adequate to maintain the lands in a suitable condition for the protection of the San Joaquin Kit Fox.

5. The County shall fund the fencing and other improvements as part of the funding for the construction of the Byron Airport Project. The Byron Airport Project is funded through Federal Aviation Administration grants (90%) and County (10%) and these grants are approved and in hand.

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III. ESTIMATED COSTS

The parties to this Agreement estimate that the direct cost of enhancing the HM Lands, including protective fencing, will be \$450,000.

IV. SECURITY GUARANTEE OF PERFORMANCE

 The County hereby agrees and guarantees no part of the new Byron Airport Project will be put into operation until all mitigation is in place.

V. DEFAULT

Upon information and belief that a default by the County has occurred, the Department shall notify the County that a default has occurred and give the reasons therefore. The County shall have 20 days to cure such a default before the Department acts to cure the default. In the event of a default, the Department shall have all rights with respect to all remedies available at law or equity, including specific performance, injunction, and without limitation all rights of a secured party pursuant to the California Uniform Commercial Code.

The following non-exclusive list of actions shall constitute an event of default under this Agreement:

1. The County or its agent has not conveyed the real property interests to the Department as provided in this Agreement.

2. The County has not fenced and improved habitat management lands according to the terms of this Agreement.

3. The County has not complied with the terms and conditions of the Endangered Species Management Plan.

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4. The County has not adequately funded the Operation, Maintenance, and Protection expenses of the HM Lands each year to meet the requirements of the Endangered Species Management Plan. <u>DEPARTMENT COVENANTS, REPRESENTATIONS, AND WARRANTIES</u>

The Department hereby covenants, warrants, and represents as follows:

1. The Department, its designee or successor shall protect all lands conveyed under this Agreement solely for the purposes of conservation, restoration, and enhancement of the species adversely impacted by the Project. This covenant shall run with the land and no use of such land shall be permitted by the Department or any subsequent titleholder or assignee which is in conflict with the stated conservation purposes of this Agreement. If at any time in the future the Department or any subsequent transferee uses or threatens to use such lands for purposes not in conformance with the stated conservation purposes contained herein, the California Attorney General, or California residents shall have standing as interested beneficiaries to challenge such nonconforming uses of the land rights transferred herein; AND

2. The Department, its designee or successor shall record on each deed a statement that the rights described in the Conservation Easement have been conveyed to the Department or its successor for purposes of conservation, preservation, restoration, and maintenance of those species adversely impacted by the Project.

VI. MISCELLANEOUS PROVISIONS

A. NOTICES

All notices and other communications required or permitted to be given or delivered pursuant to this Agreement shall be in writing. Such writing shall be delivered personally, by courier, by telecopy or sent by first-class or certified mail, return receipt requested. All such notices or transmittals shall be deemed delivered upon the earlier of actual receipt or three days after posting by certified mail addressed to the recipient as follows:

> APPLICANT Contra Costa County c/o Manager of Airports Buchanan Field Airport 510 Sally Ride Drive Concord, CA 94520

DEPARTMENT Director California Department of Fish and Game 1416 Ninth Street P.O. Box 944209 Sacramento, CA 95814-2090

and

Regional Manager Department of Fish and Game Region 3 7329 Silverado Trail P.O. Box 47 Napa, CA 94558

B. ASSIGNMENT

No sale or assignment of this Agreement or any of the rights or obligations thereunder shall be made by any party hereto unless there first shall have been obtained the written consent thereto of the parties.

C. ENTIRE AGREEMENT

This Agreement, along with the exhibits attached hereto, constitutes the entire Agreement and understanding between the

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Department and the County for the Project. This Agreement supersedes all prior and contemporaneous agreements, representations or understandings or the parties, if any, whether oral or written.

D. GOVERNING LAW

5 . 23

This Agreement shall be governed by the laws of the State of California. Actual or threatened breach of this Agreement may be prohibited or restrained by a court of competent jurisdiction.

E. BENEFIT OF AGREEMENT

This Agreement is solely for the benefit of the People of the State of California by and through the Department or its designated representative.

F. FURTHER ACTIONS

From time to time hereafter, the County and the Department shall execute such instruments and other documents and take such other actions, upon the request of the other, as may be necessary to carry out the intent of this Agreement. This Agreement cannot be amended or modified in any way except by a written instrument duly executed by County and the Department. Any proposal for amendment or modification must be duly delivered for review and approval by the Director and the Legal Advisor of the Department of Fish and Game, 1416 9th Street, 12th Floor, Sacramento, California 95814.

G. EFFECTIVE DATE

This Agreement shall be immediately effective upon execution by both the County and the Department.

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This Agreement includes and incorporates the following:

EXHIBIT 1, ENDANGERED SPECIES MANAGEMENT PLAN, which includes:

- A. HABITAT MANAGEMENT LANDS, Section 5.0
- B. RED FOX MONITORING AND CONTROL PLAN, Section 6.0
- C. GRAZING MANAGEMENT PLAN, Section 7.0
- D. MANAGEMENT AND FUNDING, Section 7.3

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Management Agreement to be in effect as of the date last signed below.

GRANTOR

Public

GRANTEE

COUNTY OF CONTRA COSTA, a CALIFORNIA DEPARTMENT political subdivision of the OF FISH AND GAME State of California

OF FISH AND GAME By

Date 6 19-97 Boyd Gibbons, Director California Department of Fish and Game Sacramento, California

RECOMMENDED FOR APPROVAL: Ву County Administrator Deputy

Works

Direc

By Manager of Airport By Príncipa Rea Proper By Lease Manager

APPROVED AS TO FORM:

VICTOR J. WESTMAN, County Counsel

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EXHIBIT 1

4. • • •

> California Endangered Species Act Endangered Species Management Plan for the County of Contra Costa's Proposed Airport and Ancillary Facilities at Byron, Contra Costa County, California

> > بالمشير المستر الع

8.0.	RED FOX MONITORING AND CONTROL PLAN	26
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2.2. PROJECT SITE DESCRIPTION

The project site is a generally level, low-lying alluvial area with interspersed bedrock knolls and ridges which lend the site a minor amount of gently rolling terrain. The site generally slopes from west to east and is drained by Brushy Creek and its tributaries.

The natural drainage patterns have been altered substantially around the existing airport facilities to control runoff. Most of the work was done after 1950. In the 1960s, the northern tributary of Brushy Creek was rerouted around the northern end of Runway 14-32. Other work was done previously on the west side of the airfield, including some excavation to obtain the material necessary to raise the runway elevation.

2.3. PROJECT DESCRIPTION

The proposed airport would be a general aviation airport developed, owned, and operated by Contra Costa County. The airport's primary service area would be eastern Contra Costa County. The County currently owns the approximately 1321 acres required to develop the new airport facilities and maintain required surrounding buffer zones for operational safety (ie. clear zones). The proposed facilities include the following:

- 1. ultimate capacity of 400 based aircraft, including tiedowns, T-hangars, and fixed base operations spaces;
- 2. apron area for about 35 transient aircraft; and
- 3. at least 50 acres for the required building area.

Given the elevation and temperatures in the East County area and the proposed service, the required runway length is about 4500 feet. The potential for ultimate extension to 6000 feet to accommodate larger business jets and establishment of a precision instrument approach were also considered important.

Given the runway layout and existing parcel lines, the area required for the airport, including the runway-taxiway system to accommodate larger general-aviation aircraft, crosswind runway requirements, clear zones, and building area was considered to exceed 1000 acres. Also, easements over critical surrounding lands could eventually be required to ensure land use compatibility.

Project implementation would also require:

The range of the San Joaquin kit fox has been reassessed several times in recent years (Laughrin 1970, Jensen 1972, Swick 1973, Morrell 1975). The first documentation of kit fox in Contra Costa County was published in the early 1970s (Jensen 1972) when investigators observed the kit fox in the valleys of the Inner Coast Range as far north as Byron. Whether kit fox were present historically in these areas but had gone previously unnoticed or the species had, in fact, actually extended its range is not known. As native habitats on the San Joaquin valley floor were converted, displaced foxes may have begun to colonize these foothill areas (Laughrin 1970, Jensen 1972, Orloff et al. 1986). The range mapped by Morrell (1975) was later adopted for the San Joaquin kit fox Recovery Plan (O'Farrell 1983).

Kit fox in the vicinity of the project site represent the extreme northern extent of the subspecies. As a result, local populations are subject to reduced gene flow resulting from habitat fragmentation, and are particularly vulnerable to local extirpation (Hall 1983). The introduced red fox (<u>Vulpes</u> <u>vulpes</u>) has expanded its range into the region in recent history. Because it competes with the kit fox for prey and denning sites, the red fox is considered to be a threat to the kit fox in the northern part of it's range (Orloff et al. 1986).

San Joaquin kit fox have been observed in the vicinity of the project site. Swick (1973) compiled observations of the species in the area in an attempt to delineate the northern boundary of their range. Hall's 1982 study near Bethany Reservoir identified eight individuals, including a breeding pair. In 1987, a radiocollared female was observed with two to three pups approximately 1.1 miles south of the project site (Palmisano personal communication). Presumably the female had been collared as a pup during Hall's study. In 1988 and 1989, as part of field work associated with the Los Vaqueros Reservoir project and the associated Vasco Road and utility realignment, several observations were made in the Kellogg Creek area west of the project site (Jones & Stokes Associates, Inc. 1989, Jones & Stokes Associates, Inc. 1980). Included was a natal den with three pups located in 1988. Although sightings have been made very near the Byron Airport site, none have yet been made on the site itself.

3.2. HABITAT REQUIREMENTS

San Joaquin kit fox were originally associated with San Joaquin saltbush scrub, alkali sink, and annual grassland habitats (O'Farrell 1983). Soils in these habitats are generally welldrained and loose-textured. The terrain is typically flat to

with the species assume that this expansion has been detrimental to northern kit fox populations. Given that the two species are of similar size and use similar food and cover resources, competition would be possible, particularly if dens sites and ground squirrels, known to be a den excavator and primary food species for the kit fox in the surrounding region, were limited.

The effects of cattle grazing on kit fox habitat are complex. Cattle compete with granivorous small mammals, such as California ground squirrels, the primary food source for the species in this part of its range, and kangaroo rats and pocket mice. Undergrazing can result in declines in the ground squirrel and these other small mammals and reduce the prey base for the kit fox. Studies conducted for the Los Vaqueros Reservoir project just a few miles to the west of the proposed Airport indicate that ground squirrel colonies were absent in areas that had not been grazed (Airola, personal communication), and that moderate levels of livestock grazing reduces vegetation cover enough to maintain ground squirrel colonies (Getz, personal communication).

Cattle grazing is also necessary to ensure that grass height does not block views of approaching predators such as coyote. Elimination of cattle grazing could also adversely affect ground-nesting burrowing owls that also prefer open grassland areas for the same approach-visibility reasons.

Ground squirrels are also important to the burrowing owl because of its den excavation activities.

3.3. LAND USE IMPACTS ON THE KIT FOX

Conversion of native habitat, primarily in agricultural development, is the primary reason for the decline of the San Joaquin kit fox throughout the San Joaquin Valley (O'Farrell 1983). Intensive agricultural practices such as cotton farming, which destroy burrows, are incompatible with use by the species (Knapp 1978). Kit fox are more successful in areas adjacent to dry-land farming (Jensen 1972). Success of the species in orchards is unclear (Morrell 1975). Secondary poisoning from rodenticide may partially explain the decline of the species (Jensen 1972, Morrell 1972), but the significance of this source of mortality has not been determined.

Urbanization and associated increases in traffic have more recently affected the species. Road kills have been a significant factor in the decline of the species throughout the San Joaquin valley (Jensen 1972, Swick 1973, Orloff 1990). Shooting and night hunting

obstruction from in the runway clear zone. Construction will also result in the destruction of potential kit fox dens.

Based on surveys conducted to date, approximately 23 of 81 potential dens would be destroyed. These dens represent 28 percent of the dens known to exist on the site.

The kit is not particularly shy or wary of human contact (Murphy personal communication, Olislagers personal communication, Standley personal communication) and, although contact with humans is not desirable in kit fox habitat, the presence of humans and human activities would not adversely affect or reduce the habitat value of adjacent undisturbed habitat.

As part of the project and this Agreement, approximately 814.5 acres of land owned by the County on the west, southwest and southeast side of proposed facilities will be set aside as a San Joaquin kit fox preserve, which will be left undeveloped and retained in existing and/or enhanced condition. This area contains 58 potential dens, approximately 72 percent of the total number on the entire project site. The County will grant a Conservation Easement to the Department over this area.

The County will fund the long-term maintenance of the approximately 814.5 acres. Additionally, the County will develop, in conjunction with the Department, a plan for the initial enhancement of the habitat subject to the Management Agreement (Exhibit 1-B, Proposed Mitigation).

5.0. CONDITIONS REQUIRED BY THE MANAGEMENT AGREEMENT

5.1. MANAGEMENT AGREEMENT CONDITIONS:

- 1. the County shall dedicate the Conservation Easement to the Department approximately 814.5 acres. The lands over which the Easement is dedicated shall be accepted by the Department as occupied kit fox habitat.
- 2. during construction of the facilities, the County shall implement the following measures to minimize the effect of any incidental kit fox take:
 - a. within 30 to 60 days before the start of construction or before any pre-construction activity that could have an impact on the kit fox or its habitat, a pre-construction survey shall be conducted over the entire project impact area by a team of quali-

- f. known dens or pupping dens known to be occupied shall be avoided during the breeding season and den excavation shall not begin until the den or dens have been vacated.
- known dens shall be monitored for three consecutive g. days prior to excavation to ensure that they are not being currently used by kit fox. Monitoring shall be accomplished by placing tracking material outside each den (to be checked daily), and by If it can be established spotlighting at night. that the dens are not occupied by kit fox, the dens shall be destroyed immediately, under the supervision of the County's qualified biologist, by hand excavation (dens shall be excavated to a point where they are no longer suitable for use, and then they shall be refilled and compacted to prevent future use by resident animals). If kit fox activity is observed at a den, the den shall be monitored for five consecutive days from the time of initial observation to allow the occupying animals to move to other dens.
- h. vehicle travel shall be restricted to the project impact area and specified and marked access roads. Vehicle speeds on the project site and on Armstrong, Byron Hot Springs, and Holey Road where they are adjacent to the project site, shall be restricted to 20 mph to reduce the chances of vehicle-caused mortality.
- i. to the extent possible, construction during the evening hours shall be minimized.
- j. all pipe, culvert, or similar structures with a diameter of five inches or more that are stored onsite overnight shall be inspected for kit fox before being buried, capped, or otherwise used or moved in any way. All steep-walled trenches and holes over two feet deep that are to be left in place overnight shall be covered with plywood or similar materials or they shall be provided with ramps to allow escape and to avoid inadvertent mortality to kit fox. Before ramps are constructed or any holes or trenches are filled they shall be inspected for kit fox.

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consultation with DFG biologists. Mitigation for the loss is ensured because 58 potential dens are present on the project site outside the project impact area and an uncountable number of other enlargeable ground squirrel holes are present.

- 2. use of an existing house and accompanying buildings in the southeast corner of the property in the Dedicated Buffer shall continue but no additional residences shall be constructed.
 - 3. an Endangered Species Management Plan for the kit fox, to include grazing management and red fox monitoring and control. The Plan is included in the following sections.

6.0. ENDANGERED SPECIES MANAGEMENT PLAN FOR THE SAN JOAQUIN KIT FOX

6.1. INTRODUCTION

This document presents the plan proposed by the Airports Division, Public Works Department, County of Contra Costa (the "County"), to manage approximately 814.5 acres of land at the East Contra Costa County Airport site (the "Airport") as habitat for the San Joaquin kit fox (<u>Vulpes macrotis mutica</u>). This plan constitutes the Endangered Species Management Plan required under section 2081 the California Fish and Game Code. The managed lands, hereinafter as "Habitat Management Lands" (HM Lands), are shown on the accompanying Exhibit 2.

The County will grant a Conservation Easement over the HM Lands to the Department. The primary objective of the plans is to manage the HM Lands to offset the impacts of temporary disturbance during the construction of facilities and the subsequent loss of San Joaquin kit fox habitat during the long-term operation of the Airport. A secondary objectives is to maintain habitat conditions for other sensitive species, particularly the burrowing owl (Athene cunicularia) and the American badger (Taxidea taxus).

6.2. EXISTING HABITAT

The HM Lands are a mosaic of upland grasslands and several wetland vegetation types. These types include annual and alkali grasslands, and seasonal wetlands. Irrigated pastures, ponds, and drainages are also present. did not succeed at eradication, it reduced the ground squirrel population substantially.

Annual control efforts continued until 1979, at which point ground squirrel population levels in the county were at their lowest. Following the passage of Proposition 13 and the loss of funds, fewer inspectors were available and the "county-wide" control program was limited to supplying chemicals at reduced cost to landowners who requested it. Although 1080 is no longer registered by the Environmental Protection Agency, it was used until the mid-1980s along with chlorophacinone and diphacinone, anticoagulants which cause hemorraging when consumed. Currently, only anticoagulants are used.

The Airport lands were treated as part of the county-wide program in the 1950s and were treated thereafter as part of the continuing control program. Gradually, however, population levels rose and by the mid-1980s landowners began reporting "significant problems" and requesting chemicals (Souza, personal communication).

The Airport lands, including the HM lands, were probably treated annually until 1979. Thereafter, requests for manpower and materials continued, and in 1986 a request was made for control with compound 1080; because of potential problems with kit fox as non-target species, the request was denied.

7.0. GRAZING MANAGEMENT PLAN

Although grazing will provide income to the County, grazing income is secondary to the County's primary objective of using cattle grazing as a means of ensuring that the HM Lands remain suitable kit fox habitat.

Currently, four lessees conduct continuing livestock operations on the Airport, including the HM Lands. Barbed-wire fences divide the HM Lands into several pastures. Because of changes in the availability of pasture lands and water and the relocation of Byron Hot Springs Road, major changes will be made in the configuration of pastures on the west side of Byron Hot Springs Road in its current alignment. Minor changes in pasture configuration will be made east of Byron Hot Springs Road.

7.1. GRAZING MANAGEMENT

Grazing will be managed to ensure that utilization is within acceptable limits, that the HM Lands are not overgrazed with consequent erosional problems or are underutilized with the result

others during the grazing season rather than being allowed to graze the entire rangeland throughout the grazing season.

The ideal situation is to have only one herd and to rotate it through several pastures during the grazing season. However, it will be extremely difficult to concentrate livestock into a single herd on the HM Lands because there are multiple lessees. Animal health concerns and type of operation (cow/calf or stocker) tend deter different livestock managers from combining herds. Since more than one lessee will continue to operate on the HM Lands, the "rotational" aspect of livestock movement may simply mean movement of livestock off the currently grazed pasture to an alternate pasture off the HM Lands when the desired level of 50 to 60 percent utilization has been reached.

The grazing rotation schedule will be set on the basis of vegetation growth, which is variable throughout the season and between years. The herd will be moved out of a pasture when vegetation removal approaches 50 percent. However, flexibility to depart from the desired (average) utilization level to allow the cattle to "keep up with" rapid vegetation growth in warm winter and wet spring seasons. In some years and in some pastures, it may be acceptable and desirable to allow 70 percent or greater utilization to ensure that grass height can be kept below the 12-inch level.

If the lessee has more than one pasture on the HM Lands, the herd can be moved into an adjacent pasture when utilization is at the desired level. If the lessee has leased only one pasture, the herd must be moved off the HM Lands.

7.1.2. Grazing Season

The grazing season will be directly dependent upon when precipitation begins and ends, and how that precipitation is distributed. Typically, precipitation begins around mid October and ends around late April. Vegetation growth can be relatively rapid in the fall if the temperatures are warm and the precipitation is evenly distributed after the season begins. Vegetation growth slows in the late fall and winter when the temperature drops in spite of typically higher seasonal precipitation. The most rapid period of vegetation growth occurs in the spring when soil moisture is high and daily temperatures increase. In the spring, vegetation growth is so rapid it is often difficult for livestock grazing to keep up with vegetation growth even under heavy stocking.

To avoid adverse competitive impacts on wildlife, livestock grazing will cease on all pastures at the end of the growing season unless

The proposed pastures (Exhibit 1-A, Grazing Management Plan) have been configured to minimize grazing-related fence construction and to maximize use of available water sources (either existing or proposed). Pasture boundaries are preliminary and may be set differently than shown or be changed over time to improve resource management. Fences that are not used in the proposed pasture configuration will be removed; relict fences, even if down in some places, could impede livestock access.

It will be necessary to develop water sources either in the form of pump installation or pond formation. There are currently two windmills in separate pastures that could possibly provide water. All wells on the property cannot pump at this time of the year due to the low level of the water table. Apparently the water table is below the maximum well depth of 30 feet (Borges, personal communication; Costa, personal communication). The recent six-year drought has caused the local water table to drop about 18 feet. As a result, the pumping capacity of the two windmills is unknown and the dependability of water supply is uncertain.

Approximately 5.5 miles of fence will be constructed to exclude trespass (human and livestock) onto the airport runways, to exclude livestock from wetland compensation areas (Exhibit 1-B, Proposed Mitigation), and to create the new pasture configuration. About 3.2 miles of new fence will be installed to prevent trespass into the Airport facilities, about 1.3 miles will be installed around constructed wetlands to exclude cattle, and about 1 mile will be installed around new pastures.

The fence surrounding Airport facilities will most likely be of the chain link type; the bottom will be raised off the ground approximately four inches to facilitate kit fox entry and exit and/or six-inch pipe will be placed beneath the fences at regular intervals (fences in contact with the ground could trap kit foxes inside facility areas and provide barriers to escape routes; six-inch pipes can be used by kit fox for escape and movement but are too small for red fox and coyote).

Newly constructed perimeter fence will be five-strand barbed wire or equivalent to permit free wildlife movement and to prevent livestock escape.

Most existing fences to be retained are in fair condition and should last 10 to 15 more years. Some interior fencing is in poor condition and will be replace or removed. Unless fence replacement or removal is necessary to accommodate the new pasture configuration, the boundary fencing has been retained.

Rotation of the herd between rangeland and irrigated pastures may not provide sufficient forage resources throughout the year. Due to current overgrazing practices on this unit, livestock utilization will be closely monitored. The lessee may have to move livestock off of all these pastures if the current levels of grazing continue.

7.1.4.2. Holding Pond Pasture. This pasture is located directly west of the Southeast Quarter Unit, east of the existing Byron Hot Springs Road. This pasture and the adjacent Windmill 1 pasture, west of Byron Hot Springs Road, are currently under lease to Vaquero Farms and the lease is expected to continue.

The realignment of Byron Hot Springs Road and the irrigation canal will have some impact on this pasture. A few acres from the Southeast Quarter Unit lease will be added to the upper northeast corner of the lease where the road realignment will enter the pasture. Although this pasture will be shaped differently, it will still be about 160 acres in size.

The canal will no longer be available as a watering source for this pasture. Therefore, the holding pond will have to be maintained as a stock watering source; a small, deep section will be created at one end (the entire pond cannot be deepened nor can more water be piped into it because it will be near the end of a runway and bird use could create a hazard to planes). When the existing canal is abandoned it will be either filled, leveled, or one levee will be lowered to prevent livestock injury due to bank slumping.

Vehicular traffic on the realigned Byron Hot Springs Road will be very light. Therefore, roadside fencing will not be used and cattle guards will be installed at the northeast entrance to and the southwest exit from the pasture. The cattle guards should provide sufficient livestock control.

New fencing will need to be constructed only on the east side of the road realignment, along the northern pasture boundary as changed by airport requirements, and around the wetland mitigation sites to be constructed in the southwest area. A short length of existing pasture perimeter fence in the northeast corner along the existing boundary this pasture and the Southeast Quarter Unit will need to be removed due to road realignment.

7.1.4.3. Windmill 1 Pasture. Windmill 1 pasture is located on the southern end of the HM Lands west of the current Byron Hot Springs Road alignment. As mentioned previously, Vaquero Farms is expected to continue its lease on this pasture. Airport operations and a

improved depending on the depth of the water table during grazing season. The current well depth is not sufficient to allow water pumping year around (Borges, personal communication).

Two wetland compensation areas will be fenced to exclude livestock. The fencing around these areas were incorporated into pasture fence location. The fence on the western edge of the 160-acre pasture as it exists now is in poor condition and will be removed. New fence will be constructed diagonally from the working facility northeast to the lower wetland mitigation area and north to tie into the Airport facilities fence.

7.2. IMPLEMENTATION

7.2.1. Procedure

The following steps will be taken by the County to implement the grazing management plan:

1. in the first year, the Range Manager will review the grazing management plan; provide final implementation details for the plan; develop the grazing lease, including a warning and penalty system, lease fees, liability and insurance requirements; and place the current lessees under the new lease (the terms of the lease are discussed below in section 2.2.2).

In the first year, the Range Manager will also establish line transects in each pasture and mark the ends with steel posts or other permanent markers.

Each year, grass height will be measured along each transect.

In three of the first six years (year one, year three, and year five) after the Conservation Easement has been accepted by the Department, the County will engage the services of a wildlife biologist to conduct kit fox and ground squirrel surveys of the HM Lands.

2. in the first year, the Range Manager will coordinate with the County's Wildlife Biologist conducting the kit fox and ground squirrel surveys. The County's Wildlife Biologist will submit reports of

prior to the end of the grazing season, the lessees will inform the Range Manager of the anticipated date of removal of cattle from the range.

- 8. At the end of the third and fifth years, the Wildlife Biologist will produce a report of findings of the effects of grazing on ground squirrel population size and trends and, to the extent that observations permit (no kit fox may be observed), assess the effects of the grazing management plan and red fox control on the kit fox habitat in the HM Lands. This report will be submitted the Department and the Service. As necessary, the Wildlife Biologist will discuss recommendations for changes in the grazing management plan with the Range Manager.
- exclosures will be necessary in assessing grazing impacts. Utilization may be assessed using a portable exclosure method.

7.2.2. Terms of the Grazing Lease

Lessees must fully commit to grazing in accordance with this grazing plan. Lease agreements will include the following terms:

- lessees will inform the Range Manager before each grazing season of the date at which grazing is to begin, the number of cattle to be placed on the range, and toward the end of the grazing season, will inform the Range Manager of the date(s) at which cattle are to be removed.
- 2. as necessary, and at the direction of the Range Manager, lessees will move livestock on and off the pasture(s) as necessary to achieve the desired vegetation removal.
- 3. lessees will be permitted flexibility in setting herd size and the grazing duration to adjust grazing levels to variations in precipitation within and between years.
- 4. all adjustments in grazing levels will be directed to accommodate optimum wildlife habitat rather than to satisfy lessee interests or increase County income.

administering the grazing management plan through an interagency agreement.

7.3.2. Funding

Implementation of the grazing management plan will be funded as a line item in the operations and management budget of the Airports Division of the Contra Costa County Public Works Department. The budget will be based on first-year labor requirements of 80 hours and an annual labor requirement of 40 man-hours thereafter and associated expenses plus the cost of any improvements planned for the fiscal year.

Either a private professional range manager will be placed under contract or funds will be transferred from the County to the Contra Costa Water District on an annual basis.

8.0. RED FOX MONITORING AND CONTROL PLAN

The red fox is an adaptive, prolific species (Palmisano, personal communication) whose population densities generally tend to vary greatly (Golightly, personal communication). Therefore, the red fox could not easily be eradicated from the region including the Byron Airport even if a regional effort were undertaken. However, developed areas attract red fox and development can cause local red fox numbers to increase (Wilcox, personal communication). Red fox control on the Byron Airport site is, therefore, intended to prevent on-site red fox breeding and to prevent Airport operation from increasing what is perceived to be a potential adverse impact of red fox presence on the local kit fox population and the quality of the HM Lands on the Airport.

8.1. IMPLEMENTATION

Red fox monitoring and control will include the following:

8.1.1. Signs, Notices, and Airport Observations

1. signs and notices will be posted at prominent places in all buildings and all hangars indicating that the surrounding area supports the San Joaquin kit fox, that the kit fox is an endangered species, and that it will enter the airport area and approach humans. Signs will contain a warning that any contact with the kit fox is prohibited, and

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dens are spotted, the County may approach the landowner(s) with a request to enter the property to check the den and to conduct trapping to remove the red fox.

8.1.2. Surveys, Trapping, and Red Fox Control

Red fox control efforts must incorporate several methods known or determined through on-site experience to be practically effective. Survey and control methods will be adjusted over time to improve overall control efficiency. Currently, three methods are available for controlling red fox. These are trapping using either live "box" traps" or soft-catch leg traps, and shooting. In terms of the cost-effectiveness and risk to kit fox, use of soft-catch traps is most cost-effective but would pose the greatest threat, shooting is intermediate in effectiveness but offers the least risk, and use of live "box" traps is least cost-effective and offers an intermediate risk (Golightly, personal communication). However, shooting near the airport is not considered an appropriate means of control for safety reasons.

- 1. trapping will be conducted on an as-needed basis by experienced biologists or trappers. Red fox may be trapped and in some years and not in others, based on on-site observations. In all cases, the method(s) used will be selected on the basis of observed conditions on the Airport and the recommendations of the Department and the Service, and will be coordinated with efforts of others conducting trapping in the region. The expertise of the U. S. Department of Agriculture, Animal Damage Control, and experts on red fox control will be sought as necessary throughout the control effort.
- 2. red fox will be removed from den sites on the HM Lands. Den sites will be identified during the spotlight surveys and biologists will confirm that the den occupants are red fox and not kit fox. Attempts will be made to trap adult red fox before they breed. After breeding, attempts will be made to remove both the adults and pups.
- 3. red fox control personnel will remove trapped animals and dispose of them as specified by the Department of Fish and Game.

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- 4. prior to any routine or planned non-emergency operations, submittal to the Department of a brief report describing the proposed operations and the measures taken to first avoid, and then to minimize, and thereafter rectify and compensate for impacts of the proposed operations on kit fox habitat.
- 5. to the extent possible, minimization of impacts on kit fox habitat that result from emergency operations (ie. responses to aircraft accidents).
- 6. use of an existing house and accompanying buildings in the southeast corner of the Airport property will continue but no additional residences will be constructed.
- 7. surveys for kit fox and monitoring of ground squirrel numbers and in the first, third, and fifth year after the Conservation Easement has been granted to the Department of Fish and Game. Kit fox surveys will be conducted according to USFWS and DFG standards and will include ground surveys to identify and map known and potential dens, scent stations, five remote camera stations per square mile, and spotlighting in one season (for six nights within a 14-day period during the optimum survey period extending from May 1 to September 30). Before each survey, the wildlife biologist will contact the USFWS and DFG to obtain approval of the survey methods.
- 8. Ground squirrel monitoring will be conducted to permit qualitative assessments of ground squirrel population trends and the affects on the population of the grazing management practices. Ground squirrel monitoring will be conducted using the following approach, modified in the future if conditions so warrant:
 - a. in the first year, all HM lands will be surveyed to assess the general distribution of ground squirrel holes. A map will be produced based on a pre-survey field reconnaissance showing areas (density areas) characterized by high-, moderate-, and low-density holes. The

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The County will contract the services of private wildlife biologists to conduct the kit fox and ground squirrel surveys in years one, three, and five, and will contract the services of either the Department, the United States Department of Agriculture Animal Damage Control, or private biologists and trappers for red fox surveys and control.

The three years of kit fox and ground squirrel surveys will require 320 person-hours annually.

At present it is not possible to establish who will actually perform the red fox surveys and control. United States Department of Agriculture Animal Damage Control is currently underfunded and has terminated its contract with Contra Costa County; red fox control on the Airport by trappers working in other counties would require currently non-existent contractual and budget arrangements (Coolahan, personal communication). The Department of Fish and Game has indicated that County funding of a position with time allocated to Airport red fox control would also be possible (Wilcox, personal communication).

The annual budget will be based on estimates of the required work and will vary year to year with the level of effort required for control.

8.4.2. Funding

The County will be responsible for funding all kit fox and ground squirrel monitoring, and subsequent red fox monitoring and control. Funding will be partially supplied (90 percent) by the Federal Aviation Administration.

Red fox monitoring and control will be funded as a line item in the operations and management budget of the Airports Division of the Contra Costa County Public Works Department. The County will fund red fox monitoring and control through either an annual contract with a private trapper or an interagency transfer of funds_to the Department of Fish and Game, the United States Department of Agriculture Animal Damage Control.

9.0. PERSONS CONTACTED AND REFERENCES CITED

9.1. PERSONS CONTACTED

Mr. Mark Allaback, Wildlife Biologist, Biosearch Wildlife Surveys, Santa Cruz, California.

mortality of the San Joaquin kit fox, Naval Petroleum Reserve #1, Kern County, California, 1980-1986. EG&G Energy Measurements, Santa Barbara, CA.

- California Department of Fish & Game. 1990. Region 4 approved survey methodologies for sensitive species. Fresno, CA.
- Egoscue, H. J. Preliminary studies of the kit fox in Utah. J. Mamm. 37: 351-357.
- Hall, F. A. 1983. Status of the San Joaquin kit fox (<u>Vulpes</u> <u>macrotis</u> <u>mutica</u>), at the Bethany Wind Turbine Generating (WTG) project site, Alameda County, California. Department of Fish and Game. Sacramento, California.
- Jensen, C. C. 1972. San Joaquin kit fox distribution. U. S. Fish and Wildlife Service Report, Sacramento, CA.
- Jones & Stokes Associates, Inc. 1989. Results of biological resource inventories and habitat evaluations in the Kellogg Creek watershed. Prepared for James M. Montgomery, Consulting Engineers, Inc. February 1989.
- Jones & Stokes Associates, Inc. 1990. Draft environmental impact report, Vasco Road and utility relocation project. Prepared for Contra Costa Water District, Concord, California. February 1990.
- Knapp, D. K. 1978. Effects of agricultural development in Kern County, California, on the San Joaquin kit fox in 1977. Nongame Wildlife Investigations Final Report, Project E-1-1, Job V-1.21. Department of Fish & Game, Sacramento, CA.
- Laughrin, L. 1970. San Joaquin kit fox. It's distribution and abundance. Wildlife Management Branch Administrative Report No. 70-2. Department of Fish & Game, Wildlife Management Branch Sacramento, CA.
- McGrew, J. C. 1979. <u>Vulpes macrotis</u>. Mammalian Species. No. 123: 1-6.
- O'Farrell, T. P. 1983. San Joaquin kit fox recovery plan. Us Fish and Wildlife Service Contract #DE-ACOB - 76NV01183: 1-84.

10.0 DEPARTMENT FINDINGS

If the above-written conditions of this permit and the Management Agreement and Plan implementing this permit are satisfied in a timely manner, as provided herein, the Department finds that construction and operation of the County airport will not result in jeopardy to the continued existence of the species and may, through the dedication of the Conservation Easement on approximately 814.5 acres, protect the species from further degradation.



