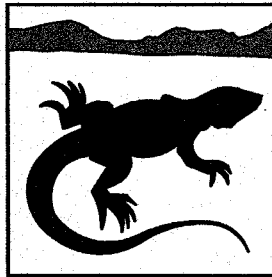
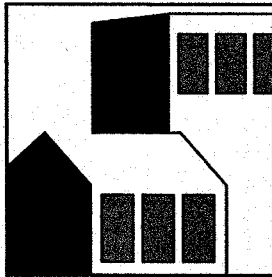


METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN AND



- **INCIDENTAL TAKE PERMIT PRT-786634 (ISSUED 8/24/94)**
- **IMPLEMENTATION/MANAGEMENT AGREEMENT**

**METROPOLITAN BAKERSFIELD
HABITAT CONSERVATION PLAN**

City of Bakersfield
County of Kern

APRIL 1994

SCH# 89020264
City of Bakersfield
Lead Agency

Prepared by:
Metropolitan Bakersfield
Habitat Conservation Plan
Steering Committee

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TABLE OF CONTENTS

S.	Summary	1
	Purpose	i
	Applicable Law	i
	Species of Concern	ii
	Take and Mitigation	iii
	Implementation/Permits	iv
	Applicability of the Section 10(a) Permit	v
	Mitigation Fees	v
	Plan Administration	v
	Monitoring	vi
	Amendment	vi
	Alternatives	vii
	Environmental Impact	vii
I.	Introduction	1
	A. Background	1
	B. Plan Formulation Process	3
	1. Steering Committee Representation	3
	2. Consultant Work Program	3
	3. Public Review	4
II.	Biological Issues	5
	A. Environmental Setting	5
	B. Species of Concern in the MBHCP Area	15
	1. Research Methodology	19
	2. Present Status and Habitat Requirements	20
III.	Habitat Conservation Plan	44
	A. Plan Overview	44
	1. Actions Subject to Permit	44
	2. Urbanization and Take of Endangered Species	46
	3. Requirements for Permit	47
	4. Funding	47
	5. Impact of Plan	48
	B. Agency and Landowner Involvement/Participation	49
	1. U.S. Fish and Wildlife Service	49
	2. City of Bakersfield	49
	3. Kern County	50
	4. California Department of Fish and Game	50
	5. The Nature Conservancy	50
	6. Landowners	50

TABLE OF CONTENTS (cont.)

C.	Conservation Plan Approach and Limitations	51
1.	Species of Concern	51
2.	Dependence on Ecosystems	51
3.	Other Species	51
4.	Preservation of Populations	51
5.	Limitations in Establishing Preserves	52
D.	Funding Program	52
1.	Development Fees	52
2.	State and Federal Funds	54
3.	Expected Annual Revenues	55
4.	Alternative Fee Collection Process	56
E.	Reduction of Take	58
1.	Relocation Policy	58
2.	Relocation Program - San Joaquin Kit Fox	59
3.	Relocation Program - Plants	60
F.	Habitat Preserves	61
1.	Opportunities, Focus Areas, and Existing Preserves	61
a.	Habitat Availability Within MBHCP Area	61
b.	Habitat Availability Outside of MBHCP Area	68
2.	Acquisition Costs	77
3.	Preserve Selection and Design Guidelines	78
4.	Acquisition Strategies	79
a.	Part 1: Local Land Acquisition	80
b.	Part 2: Participation in Outside Preserve Programs	81
c.	Part 3: Cooperative Restoration	82
d.	Costs	82
5.	Preserve Development and Management	83
a.	Management Plan Policies	84
b.	Management and Restoration Programs	84
c.	Preserve Monitoring and Reporting	88
G.	Plan Implementation and Terms of Permit	90
1.	Implementation and Term of Permit	90
2.	Permit Status Monitoring	91
3.	Amendment Process	95

LIST OF FIGURES

Figure Number	Title	Page
1	Project Location	6
2	Project Area	7
3	Existing Land Use	9
4	Preserve Opportunities Inside HCP Area	10
5	Northeast - Habitat Type and Quality	12
6	Southwest - Habitat Type and Quality	13
7	Species Sightings - Animals Other Studies	24
8	Species Sightings - Animals MBHCP Studies	25
9	Northeast - Animal Species Sightings	26
10	Southwest - Animal Species Sightings	27
11	Species Sightings - Plants MBHCP Studies	35
12	Species Sightings - Plants Other Studies	37
13	Southwest - Plant Species Sightings	38
14	Northeast - Plant Species Sightings	41
15	Area of Permit	45
16	Northeast - Land Use	63
17	Northeast - General Plan Designations	64
18	Southwest - Land Use	66
19	Southwest - General Plan Designations	67
20	Sand Ridge Preserve Expansion Area	70
21	High Value Lands in Lokern Road Area	71
22	High Value Lands in Semi-tropic Ridge Area	73
23	Preserve Opportunities Outside of the Metropolitan Bakersfield Area	75
24	Preapproved Acquisition Areas	76
25	Natural Lands Remaining	93

LIST OF TABLES

Table Number	Title	Page
1	MBHCP Species of Concern	16
2	Other Species	17
3	Habitat Requirements of Animals of Concern	18
4	Summary of Existing Data and Projected Growth Data For Metropolitan Bakersfield	56
5	Typical Land Values in Metropolitan Bakersfield For Various Land Uses	77
6	Location and Brief Description of Preserve Acquisition Areas	81

METROPOLITAN BAKERSFIELD HCP - SUMMARY

S. SUMMARY

This document is the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). The MBHCP is the result of over three years of technical and planning studies overseen by a Steering Committee comprising representatives of local government, state and federal resource agencies, conservation groups, and the building and construction industry. It responds to public comment provided during a formal review period.

The MBHCP is intended to set forth in a planning document the components of a conservation plan and is not drafted as a contract document. As a result, in the event of any direct contradiction, conflict or inconsistency between the terms of the MBHCP and the associated Implementation/Management Agreement, the terms of the Implementation/Management Agreement shall control. In all other cases, the terms of the MBHCP and the terms of the Implementation Management Agreement shall be interpreted to be supplementary to each other.

Purpose

The goal of the MBHCP is to acquire, preserve and enhance native habitats which support endangered and sensitive species, while allowing urban development to proceed as set forth in the Metropolitan Bakersfield 2010 General Plan. The study area covered by the MBHCP contains both City of Bakersfield and County of Kern jurisdictions.

Existing conflicts between species of concern and urban development have prompted the City and the County to pursue a Habitat Conservation Plan and incidental take permits: a permit under Section 10(a) (1)(B) (hereafter referred to as 10(a) permit) of the United States Endangered Species Act and a permit under Section 2081 of the California Endangered Species Act. The Habitat Conservation Plan is designed to offset impacts resulting from loss of habitat incurred through the authorization of an otherwise lawful activity.

Applicable Law

The United States Endangered Species Act (ESA) provides for the protection of endangered and threatened species. Section 9 of the Act prescribes civil and criminal penalties for take of a protected species except when the take is in accordance with a valid permit issued under Section 10(a) of the Act. Development on open lands in Metropolitan Bakersfield would likely result in take and would be subject to federal enforcement action.

The California Endangered Species Act (CESA) also prohibits take of state listed threatened or endangered animal species. California Fish and Game's participation in the MBHCP will permit incidental take of state listed threatened and endangered species through the issuance of a 2081 permit (Memorandum of Understanding).

The MBHCP is intended to meet the requirements of both the state and federal Endangered Species Acts. In addition the MBHCP will comply with state and federal environmental regulations set forth in the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

METROPOLITAN BAKERSFIELD HCP - SUMMARY

Species of Concern

Species of concern in the 408 square mile area of Metropolitan Bakersfield include the following plants and animals:

ANIMALS

State and Federally Listed Endangered or Threatened

San Joaquin kit fox
Blunt-nosed leopard lizard
Tipton kangaroo rat
Giant kangaroo rat

State Listed Threatened Federal Candidate for Listing

San Joaquin (Nelson's)
antelope squirrel

State and Federal Candidate for Listing

Short-nosed kangaroo rat*

Federal Candidate for Listing

San Joaquin pocket mouse*

PLANTS

State and Federally Listed Endangered

Bakersfield cactus
Opuntia treleasei
California jewelflower*
Caulanthus californicus

Federally Listed Endangered or Threatened

San Joaquin wooly-threads
Lembertia congdonii
Hoover's wooly-star
Eriastrum hooveri
Kern mallow*
Eremalche kernensis

State Listed Threatened or Endangered

Tulare pseudobahia*
Pseudobahia peirsonii
Striped adobe lily
Fritillaria straita
Bakersfield Saltbush*
Atriplex tularensis

Federal Candidate for Listing

Bakersfield saltbush*
Atriplex tularensis
Slough thistle*
Cirsium crassicaule
Recurved larkspur
Delphinium recurvatum

* Studies conducted or reviewed in conjunction with the development of this HCP did not confirm the presence of these species within the Metropolitan Bakersfield 2010 General Plan area.

The sensitive species value is scattered generally throughout the open, non-urbanized lands of the Metropolitan Bakersfield area. According to biological surveys conducted for the MBHCP and surveys conducted by others since 1980, several of the species of concern may no longer occur in the area. The San Joaquin kit fox is the most widespread of the species of concern and is most frequently affected by urbanization in the MBHCP area. That high potential for impact coupled with the need for large preserves makes the kit fox a natural focus for the MBHCP, but it is intended that MBHCP enhancement will restore habitat value for *all* species of concern.

METROPOLITAN BAKERSFIELD HCP - SUMMARY

Much of the area is in intensive agriculture, but retains value for kit fox in prey and even for dens in berms, near water impoundments, and on fallow land. Urbanization of agricultural land will result in a take of species, loss of habitat and intensification of population related take (e.g. road kills). The natural lands of the area have greater species value and represent a more viable long-term habitat. Urbanization of these lands also results in take.

Take and Mitigation

The MBHCP will result in incidental take of some of the species. Here, take generally means destruction or displacement of individuals of the species and would result from loss of open lands incidental to development.

The state and federal permits would make this take lawful as long as it is in accordance with the conditions of the permit as described in the MBHCP. The permits issued by each authority cover the species formally listed by each authority at the time of issuance. Other species would be added by amendment.

Thus, the federal Section 10(a) permit would address:

San Joaquin kit fox	Bakersfield cactus
Blunt-nosed leopard lizard	California jewelflower
Tipton kangaroo rat	San Joaquin wooly-threads
Giant kangaroo rat	Hoover's wooly-star
	Kern mallow

The state 2081 permit would address:

San Joaquin kit fox	Bakersfield cactus
Blunt-nosed leopard lizard	California jewelflower
Tipton kangaroo rat	Tulare pseudobahia
Giant kangaroo rat	Striped adobe lily
San Joaquin (Nelson's) antelope squirrel	Bakersfield saltbush

The MBHCP describes a method of collecting funds for the acquisition and/or enhancement of natural lands and restorable lands for purposes of creating preserves. The MBHCP also provides for reduction of take within the developed areas. This is the mitigation for the take and the impact on species habitat.

The MBHCP meets the criteria set forth in the Endangered Species Act for a Section 10(a) permit. Specifically it provides for:

- Land acquisition outside of the MBHCP area, with consideration to pre-approved acquisition areas identified by CDFG. (These areas will be the primary focus of the acquisition effort).

METROPOLITAN BAKERSFIELD HCP - SUMMARY

Other options for acquiring or providing habitat include:

- Acquisition and management of between 500 and 1,000 acres of land in the northeast portion of the study area for the primary purpose of preserving the Bakersfield cactus.
- Acquisition and management of land, as feasible, adjacent to the Kern Water Bank project on the west side of I-5, south of Panama Lane.
- Pursuit of cooperative agreements for restoring and enhancing land, as feasible, within the Kern Water Bank project area and provide funding as appropriate.
- Relocation or displacement of individuals in areas affected by development as a means of reducing direct take of endangered species.

The MBHCP addresses two categories of land: 1) natural land, meaning land generally in grazing and with original soil and topography intact, and 2) open land, which includes natural land as well as agriculture and all other non-urban lands in the area. Urbanization of either category would pay the same mitigation fee, but the two are distinguished for the purposes of environmental assessment and permit monitoring.

Implementation/Permits

The MBHCP will be implemented under the terms of a Section 10(a) permit issued by the U.S. Department of Interior, Fish and Wildlife Service and a 2081 permit issued by the California Department of Fish and Game. Both permits will be issued to the City of Bakersfield and to Kern County and both permits will be issued for a concurrent period of up to twenty years or until urban development permits are issued for 15,200 acres of natural lands or 43,000 acres of open lands subject to the revocation or amendment process described below. The permits could be renewed by submitting a formal request for renewal to the Director of the USFWS and to the Department of Fish and Game.

The MBHCP has three categories of participation:

1. The U.S. Fish and Wildlife Service and California Department of Fish and Game as Permittees and advisors to the Implementation Trust,
2. The City of Bakersfield and County of Kern as Permittees and Implementation Trust administrators, and
3. Other implementing entities such as The Nature Conservancy and the California Department of Fish and Game as preserve development coordinators.

As permit holders, the City and County will be the primary entities responsible for administering the institutional elements of the MBHCP in the areas of their respective jurisdictions.

METROPOLITAN BAKERSFIELD HCP - SUMMARY

Applicability of the Section 10(a) and 2081 Permits

The MBHCP applies to the entire 2010 Plan area, but the federal Section 10(a) permit and state 2081 permit will only allow take in the area outside of the primary flood plain of the Kern River and lands within the Kern Water Bank. The river is excluded to assure that an open corridor can be maintained between the foothills to the northeast and the San Joaquin Valley floor to the west. Kern Water Bank lands are under the jurisdiction of the State of California.

The MBHCP addresses lands converted primarily to urban uses as permitted by the City or County. Activities which may result in a take but which are not subject to approval by the City or County would *not* be authorized by the proposed permit. Thus impact on natural lands from oil extraction or agriculture are not subject to this permit, although some types of ancillary oil and agricultural facilities that are subject to City or County permits would be covered. Activities not covered by this permit would have to comply separately with state and federal requirements.

Mitigation Fees

The MBHCP program will be funded through the collection of onetime mitigation fees paid on all new construction taking place within the Bakersfield 2010 General Plan Area. The fee is expected to be approximately \$1,250⁴⁰ per gross acre for all new construction on previously undeveloped land. The fee is payable to either City or County at the time of grading permit approval, grading plan approval or issuance of building permit, whichever occurs first. The fee is set in 1994 dollars and would be adjusted annually for inflation.

Upon payment of this fee and receipt of City or County project approval, a development permit applicant would become a sub-permittee and would be allowed the "incidental take" of species in accordance with state and federal endangered species laws. The MBHCP does not eliminate the need to consider endangered species under CEQA, but it does establish programmatic mitigation for project impacts on endangered species.

The fee is based on an estimated \$600 per acre land costs, \$100 per acre fencing and improvement costs, \$300 per acre management and enhancement ("endowment") costs and \$250 per acre program administration costs.

The amount of mitigation fees collected will depend on the rate of metropolitan growth. At current growth rates, fees would generate a level of funding for acquisition and management of roughly 700 acres per year. State and Federal conservation funds will be sought to augment local funds for land acquisition.

Plan Administration

Administration of the MBHCP involves the following categories: 1) local mitigation fee collection and fund management, 2) management of state and federal funding, if applicable, 3) preserve selection and acquisition, 4) preserve management, if applicable 5) land restoration and enhancement and species monitoring as necessary, 6) status report preparation and 7) enforcement.

The MBHCP program relies on the formation of an Implementation Trust which would be in charge of making major preserve acquisition decisions and for administering the plan. The Trust will comprise representatives from the City of Bakersfield and Kern County as trustees, and the U.S. Fish and Wildlife Service, the California Department of Fish and Game and member of the public as advisors. Others could

METROPOLITAN BAKERSFIELD HCP - SUMMARY

be added or consulted as deemed appropriate. Specific preserve management plans would be developed and carried out by each individual preserve management entity.

The mitigation funds collected by the City and County will be deposited into a trust fund and would be administered by the Implementation Trust. The Trust will meet as necessary to carry out the HCP. The Trust will be responsible for reporting to the U.S. Fish and Wildlife Service as to the status of enhancement.

Monitoring

The MBHCP is essentially a "pay-as-you-go" program. The amount of take, the impact on the species -- and the amount of acquisition and enhancement, the mitigation for take -- will vary from year-to-year, but the Section 10(a) permit will remain in force as long as the mitigation stays ahead of the take. Because the actual extent and location of Metropolitan Bakersfield growth cannot be predicted exactly, the HCP must rely on the ongoing preservation actions of the Implementation Trust.

Monitoring take and enhancement is the heart of the program. Each quarter, the Implementation Trust will report to the Service the cumulative status of take and enhancement. As long as the level of acquisition and provisions for enhancement are adequate, the permit is in compliance. Because the permit allows the City or County to approve activities resulting in take over a large portion of the MBHCP area, there is a possibility that there may be more intensive urbanization of natural lands than of open lands generally. For this reason, there are two tests that the Implementation Trust must meet: 1) one acre of enhancement for each acre of open land urbanized, or 2) three acres enhanced for each acre of natural land urbanized, *whichever is greater*. The accounting is done quarterly and annually, but must reflect cumulative urbanization since the beginning of the permit.

Amendment

Major amendments to the MBHCP may be initiated by any of the parties to the Implementation/Management Agreement. The party proposing the major amendment shall circulate to the other parties a statement of the reason for the amendment and an analysis of the effect of the amendment on the Species of Concern and the implementation of the MBHCP.

The other parties shall make every effort to approve the proposed amendment within 120 days of publication in the Federal Register except where longer time lines are imposed by requirements of law. Except as otherwise determined by the U.S.F.W.S. major amendments shall be limited to changes in the following: (i) the boundaries of the permit area, or (ii) the method of calculating the adequacy of mitigation.

Minor amendments to the MBHCP shall not require amendment of the Implementation/Management Agreement, and may be initiated by any of the parties to the Agreement or the 10(a) permit. The party proposing a minor amendment shall circulate to the other parties a statement of the reason for the amendment. Minor amendments require the approval of the Implementation Trust, which shall approve or deny the proposed amendment within ninety (90) days of receipt of the proposal.

The U.S.F.W.S. shall be provided an opportunity to review all minor amendments presented to the Implementation Trust. If the U.S.F.W.S. determines within sixty (60) days of its receipt of a proposed amendment, that a proposed amendment to the MBHCP is major, the parties to the Implementation/Management Agreement shall process the plan amendment as an amendment to the Agreement and the 10(a) permit.

METROPOLITAN BAKERSFIELD HCP - SUMMARY

Alternatives

During the course of formulating the proposed MBHCP, the Steering Committee evaluated a broad range of alternatives. Alternatives were examined pertaining to preserve strategy, reduction of take, and mitigation fee amount and means of assessment. The proposed plan represents an optimum selection from among alternatives that offers the greatest practical opportunity for successful implementation and reflects the current status of the species of concern in the Metropolitan Bakersfield area.

No action, meaning the City and County do not obtain a permit, would leave much of the Metropolitan Bakersfield area in conflict with the Endangered Species Act and potentially subject to civil and criminal penalties.

Since much of the land is marginal habitat, the burden of proof as to whether a take occurs from development would be up to the enforcement agencies. State and federal enforcement could be difficult and not completely effective in preventing take. Projects within areas that contain habitat would be subject to lengthy CEQA analysis on a case-by-case basis and separate consultation with the resource agencies as to appropriate mitigation. Under this circumstance, there would be no unified mitigation program and the cumulative impact of growth would continue to degrade the habitat in the Metropolitan Bakersfield area. Significant impacts on endangered species could still occur.

Development is not the only source of urban impact on the San Joaquin kit fox. Road kills and rodenticide poisoning are well documented (Murphy, pers. com.). Technically, absence of the permit could completely halt development in occupied habitat, but it would be ineffective in reducing many other threats to the kit fox populations in the Metropolitan Bakersfield area. Thus, the No Action alternative would not necessarily eliminate take.

Environmental Impact

The MBHCP would have a potentially significant impact on the habitats of the species of concern by removing a major barrier to the development of much of the Metropolitan Bakersfield area. The plan contains mitigating measures which effect off site mitigation for the cumulative impacts of urbanization on the species of concern.

Although the permit covers a large area, the take of endangered species will only occur where actual urban growth occurs. The recently adopted 2010 Plan is a reasonable guide to the portion of the permit area where growth is most likely. The area designated for urban uses (including all low density residential categories) in the 2010 Plan covers roughly 74.5 square miles (47,600 acres) of undeveloped or open land. Of this, 22.25 square miles (14,200 acres) is natural land, which currently supports populations of the species of concern, and 52.25 square miles (33,400 acres) of other open lands, primarily intensive agriculture.

Full build-out of the 2010 Plan would double the size of Bakersfield and is not expected to occur within the proposed twenty year life of the permit. Realistic projections indicate a loss of open lands at a rate of roughly one square mile per year which is assumed to be divided proportionately between natural and other open lands. At that rate, a loss of some 20 square miles of open land, including some 7 square miles of natural land will take place over the life of the permit. While actual growth and impact will vary, the mitigation program is designed to be self regulating: even a major increase in growth could be accommodated by the proposed MBHCP program.

METROPOLITAN BAKERSFIELD HCP - SUMMARY

The expected amount of natural land lost from urban development in Metropolitan Bakersfield over the next 20 years is 4,400 acres. This is based on the current level of development projected over the next 20 years. The maximum amount of natural land that could be urbanized under the 2010 General Plan is 15,200 acres. For open land, the expected amount lost in the next 20 years is 12,800 acres. The maximum open land allowed to be developed under the 2010 Plan is 43,000 acres.

Expected take of San Joaquin kit fox from loss of natural land is 2.5 to 10 foxes under the expected development scenario, and 8.5 to 34 fox under the maximum development scenario. This is based on data that one kit fox requires between 448 and 1,792 acres of land (see Table 3 on page 18). If all open land is considered kit fox habitat then the number of kit fox taken would increase to 10 to 39 under the expected development scenario and to 32 to 130 under the maximum development scenario.

It is more difficult to assess loss of individuals of the other listed animal species, Tipton and giant kangaroo rats and the blunt nosed leopard lizard, because sightings of these animals are so scarce. No giant kangaroo rats or leopard lizards were identified in areas subject to urban development in the 2010 General Plan area, thus no direct take of these animals is expected. The Tipton kangaroo rat was found on 160 acres of urban development land. The loss of this land could result in the take of between 64 to 1,600 Tipton kangaroo rats based on a utilization rate of 0.4 to 10 rats per acre.

Urbanization will impact aspects of the environment such as traffic, air quality, noise, aesthetics, cultural resources, public services and impacts on vegetation and wildlife species not addressed by the MBHCP. These potential effects are secondary impacts of the permit. The permit only addresses the question of endangered species and does not exempt City or County from the requirements of CEQA. Secondary impacts of the permit will be addressed in detail through City or County CEQA processing of specific projects.

Imposition of the mitigation fee would probably not significantly impair the economics of development, and in most cases, local availability of the Section 10(a) and 2081 permits would facilitate plan processing which would offset the direct impact of the fee itself.

The community will benefit from the MBHCP. The City of Bakersfield and Kern County will be able to proceed with the land use permitting process. Further, preserves created under the MBHCP will provide open space and enhance the beauty of natural lands and provide benefits to residents in addition to value as endangered species habitat.

I. INTRODUCTION

A. BACKGROUND

This document is the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and Final Environmental Impact Report (EIR). The goal of the MBHCP is to acquire, preserve and enhance native habitats which support endangered and sensitive species, while allowing urban development to proceed as set forth in the Metropolitan Bakersfield 2010 General Plan.

In 1973 the U.S. Congress passed the Endangered Species Act (ESA) in response to the alarming population decline of a number of plant and animal species due to loss of their habitat. The ESA was designed to slow or stop the human influenced extinctions of various species of fish, wildlife, plants and invertebrates. The legislation categorizes species as either "endangered" or "threatened" by assessing the immediacy of the threat posed to them. Among other protective features of the ESA, the United States Fish and Wildlife Service (USFWS) is required to develop recovery plans for all listed species.

Species of concern are also recognized and protected by state legislation. The California Endangered Species Act, the Native Plant Protection Act, and the California Environmental Quality Act afford protection to species of concern included on state-maintained lists.

Though both the federal and state endangered species acts provide levels of protection for species of concern, the federal act in particular prohibits "take". "Take" is defined by the ESA as: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect a federally listed, endangered species of wildlife, or to attempt to engage in any such conduct." Take not specifically allowed by federal permit under Section 10(a) is subject to enforced through civil or criminal proceedings under Section 9.

While "take" is easily understood in the sense of deliberately capturing or killing individual animals, regulations also define take to include the incidental destruction of animals in the course of an otherwise lawful activity, such as habitat loss due to development. It has been ruled that take includes significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR Section 17.3). A ruling by the Ninth Circuit Court confirmed a district court's finding that habitat degradation that could result in extinction is harm (*Palila v. Hawaii Department of Land and Natural Resources*) and therefore, considered a "take" of a species.

Bakersfield and Kern County are jointly pursuing a Habitat Conservation Plan (HCP) and Section 10(a) permit under the ESA with the aim of resolving conflicts between species of concern and development within the boundary of the Metropolitan Bakersfield 2010 General Plan area.

The MBHCP addresses existing conflicts and those resulting from projected growth as outlined in the Metropolitan Bakersfield 2010 General Plan. The General Plan area, as defined by requirements set out in the State Planning Law, includes not only all lands within the Bakersfield city limits but also, in accordance with Government Code Section 65300, all lands beyond the city limits that "bear relation to its [Bakersfield's] planning". This includes unincorporated lands under the jurisdiction of Kern County.

METROPOLITAN BAKERSFIELD HCP - INTRODUCTION

An HCP is an explicit mitigation program designed to offset impacts created by the loss of habitat incurred through the authorization of an otherwise lawful activity. According to the ESA, a Section 10(a) or "incidental take" permit may be issued by the Secretary of the Interior. It allows the "take" of listed species in conjunction with the implementation of an HCP that aims to provide long-term protection and enhancement of the species' remaining significant habitat.

An HCP is also a means for local land use authorities, such as cities and counties, to incorporate federal and state mandates for endangered species conservation into land use plans. With a Section 10(a) permit, local planning resulting in incidental take, as defined in the permit, would be in compliance with federal law. Incidental take would result when development allowed through the planning process destroys habitat on privately owned land.

The most publicized federally-listed endangered species in the MBHCP area is the San Joaquin kit fox. Undeveloped lands in the MBHCP area also support other listed or proposed endangered or threatened species, these are:

ANIMALS

State and Federally Listed Endangered or Threatened

San Joaquin kit fox
Blunt-nosed leopard lizard
Tipton kangaroo rat
Giant kangaroo rat

State Listed Threatened Federal Candidate for Listing

San Joaquin (Nelson's)
antelope squirrel

State and Federal Candidate for Listing

Short-nosed kangaroo rat*

Federal Candidate for Listing

San Joaquin pocket mouse*

PLANTS

State and Federally Listed Endangered

Bakersfield cactus
Opuntia treleasei
California jewelflower*
Caulanthus californicus

Federally Listed Endangered or Threatened

San Joaquin woolly-threads
Lembertia congdonii
Hoover's woolly-star
Eriastrum hooveri
Kern mallow*
Eremalche kernensis

State Listed Threatened or Endangered

Tulare pseudobahia*
Pseudobahia peirsonii
Striped adobe lily
Fritillaria straita
Bakersfield saltbush*
Atriplex tularensis

Federal Candidate for Listing

Bakersfield saltbush*
Atriplex tularensis
Slough thistle*
Cirsium crassicaule
Recurved larkspur
Delphinium recurvatum

* Studies conducted or reviewed in conjunction with the development of the MBHCP did not confirm the presence of these species within the study area.

METROPOLITAN BAKERSFIELD HCP - INTRODUCTION

According to the ESA, an HCP must be supported by adequate biological data allowing a quantitative impact assessment to be made for each affected species. It must also include a detailed mitigation program to offset the impacts of the taking. Possible mitigation measures might include habitat preservation, restoration, and habitat replacement.

As explained later in the discussion of biological issues, the practical effort at preservation of species of concern is through acquisition or protection and enhancement of native habitats. Preservation of native habitat will protect listed and non-listed species together. Technically, the federal and state incidental take permits apply only to those species listed according to federal or state law at the time the permits are issued. If candidate or other species become formally listed later, the permits would be amended to cover those additional species.

B. PLAN FORMULATION PROCESS

1. Steering Committee Representation

In July 1987, a Metropolitan Bakersfield Habitat Conservation Plan Steering Committee was formed for the purposes of formulating MBHCP program goals, and guiding the development and drafting of the MBHCP. The purpose of the Steering Committee is to ensure that both economic and environmental interests are considered when formulating the MBHCP. The Steering Committee is composed of representatives from:

- City of Bakersfield
- Kern County
- U.S. Fish and Wildlife Service
- California Department of Fish and Game
- Building Industry Association of Kern County
- Building Trades Council of Kern County
- Sierra Club
- The Nature Conservancy
- City of Bakersfield Planning Commission

The list of Steering Committee participants is included as Appendix A to this document.

2. Consultant Work Program

In September 1987, the City of Bakersfield, under the direction of the Steering Committee, hired a team of environmental consultants headed by Thomas Reid Associates to help with preparation of the MBHCP and EIR. The consultants work program has consisted of:

1. Performing air photo analysis of the 408 mile study area to determine existing land uses. Color infrared air photos taken in February 1988 were used in the analysis.
2. Conducting both qualitative and quantitative habitat analysis of the remaining natural lands in the study area.

METROPOLITAN BAKERSFIELD HCP - INTRODUCTION

3. Performing plant and animal field surveys in natural areas having potential to support the species of concern. Sightings of plants and animals discovered during the surveys were mapped. Results of the biological inventory are contained in a supporting document to this MBHCP. A summary of the biological work is contained in Chapter II.
 4. Identifying focus areas which were subject to more detailed biological and land use analysis. The two conceptual focus areas identified were in the northeast and southwest portion of the study area. The focusing effort is described in Chapter III.F.
 5. Performing a quantitative analysis of the Metropolitan Bakersfield 2010 General Plan to determine the scale of the ultimate loss of species habitat resulting from urban development in the study area (see Chapter IV.D.).
 6. Evaluating alternative preserve strategies with the Steering Committee. The alternatives considered are discussed in Chapter IV.C.
 7. Developing an HCP acceptable to the Steering Committee, which will: be feasible to implement; provide appropriate scale of mitigation for loss of habitat; allow the City and County to proceed with land use permitting; and preserve species habitat in perpetuity. The MBHCP is set forth in Chapter III.
 8. Evaluating the environmental impacts resulting from implementation of the MBHCP (see Chapter IV.).
3. **Public Review**

The MBHCP was first published in draft in September 1990 along with a Draft Environmental Impact Report (EIR). Public comment was received at a public hearing and in correspondence. The plan has been modified and republished along with the Final EIR. The comments and responses are included in Appendix D (bound separately).

II. BIOLOGICAL ISSUES

The description of the biological issues in this chapter is a summary of detailed information from the Endangered Species Survey, which can be found in a supporting document, Endangered Species Inventory in Support of the Metropolitan Bakersfield Habitat Conservation Plan.

A. ENVIRONMENTAL SETTING

The study area for the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) is 408 square miles of the southern portion of the San Joaquin Valley, the southernmost basin of the Great Central Valley of California. The San Joaquin Valley is bounded by the Sacramento/San Joaquin River Delta to the north, the Sierra Nevada Mountains to the east, the Tehachapi Mountains to the south, and the Coast Range to the west. The study area is entirely within Kern County whose largest city is Bakersfield. The boundaries of the MBHCP study area match the boundaries of the Metropolitan Bakersfield 2010 General Plan. (See Figures 1 and 2).

The San Joaquin Valley has a Mediterranean-type climate of cool, moist winters and hot, dry summers. Summer daytime high temperatures frequently exceed 100° F. Mean annual temperature is 65° F. With less than six inches of rainfall annually, much of the Valley is classified as desert. Precipitation normally occurs from September through April. A dense, persistent, ground fog known as "tule fog" can develop in winter resulting in overcast, damp, cool weather.

The western slopes of the Sierra Nevada Mountains are the source of the numerous rivers and streams that cross the San Joaquin Valley. The Valley is divided into two distinct subbasins: the San Joaquin Subbasin to the north and the Tulare Subbasin to the south. Rivers of the San Joaquin Subbasin join the San Joaquin River as it drains into the Sacramento River flowing into San Francisco Bay. The rivers of the Tulare Subbasin have no natural perennial surface outlet and, in the past, formed largely temporary, shallow inland lakes (Katibah 1984). The Tulare Subbasin contains roughly 2.5 million acres of nearly flat valley floor (USFWS 1989).

The Kern River, which crosses the MBHCP study area, is the most southern of the major rivers draining into the Tulare Subbasin. The river is now regulated by Lake Isabella, a reservoir created in 1954 to protect the City of Bakersfield from flooding. The waters from Lake Isabella are used primarily for irrigation. Kern River waters would only be released into the historic natural lakebeds if river flow exceeds demand and both Lake Isabella and the Kern River/California Aqueduct are at capacity. Since the historic lakebeds are presently used for agriculture, crops would be damaged by the inflow of floodwaters (Fleshman and Kaufman 1984).

Historically, virtually all watercourses in the San Joaquin Valley supported dense vegetation from the water's edge to the outer edge of the riparian (moist) zone. (Katibah 1984). It has been estimated that prior to European settlement, the riparian forests encompassed over 920,000 acres of the Central Valley. At that time, the Tulare Basin alone supported over 50,000 acres of riparian forests. Today, only 102,000 acres of the original riparian forest remain in the entire Central Valley. The majority of these forest lands are currently heavily impacted by man (Katibah 1984).

FIGURE 1 -- PROJECT LOCATION

KERN COUNTY PROJECT LOCATION

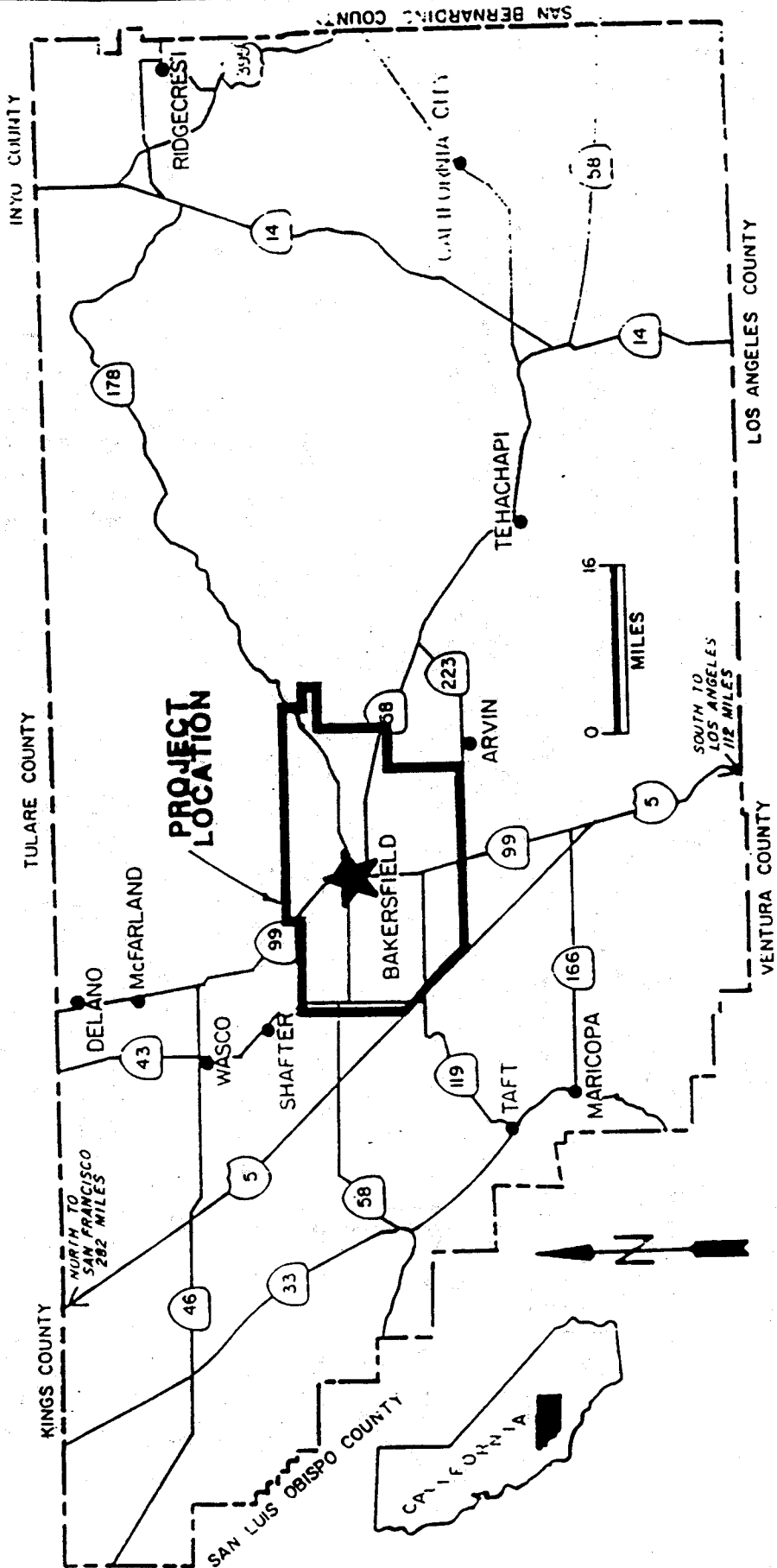
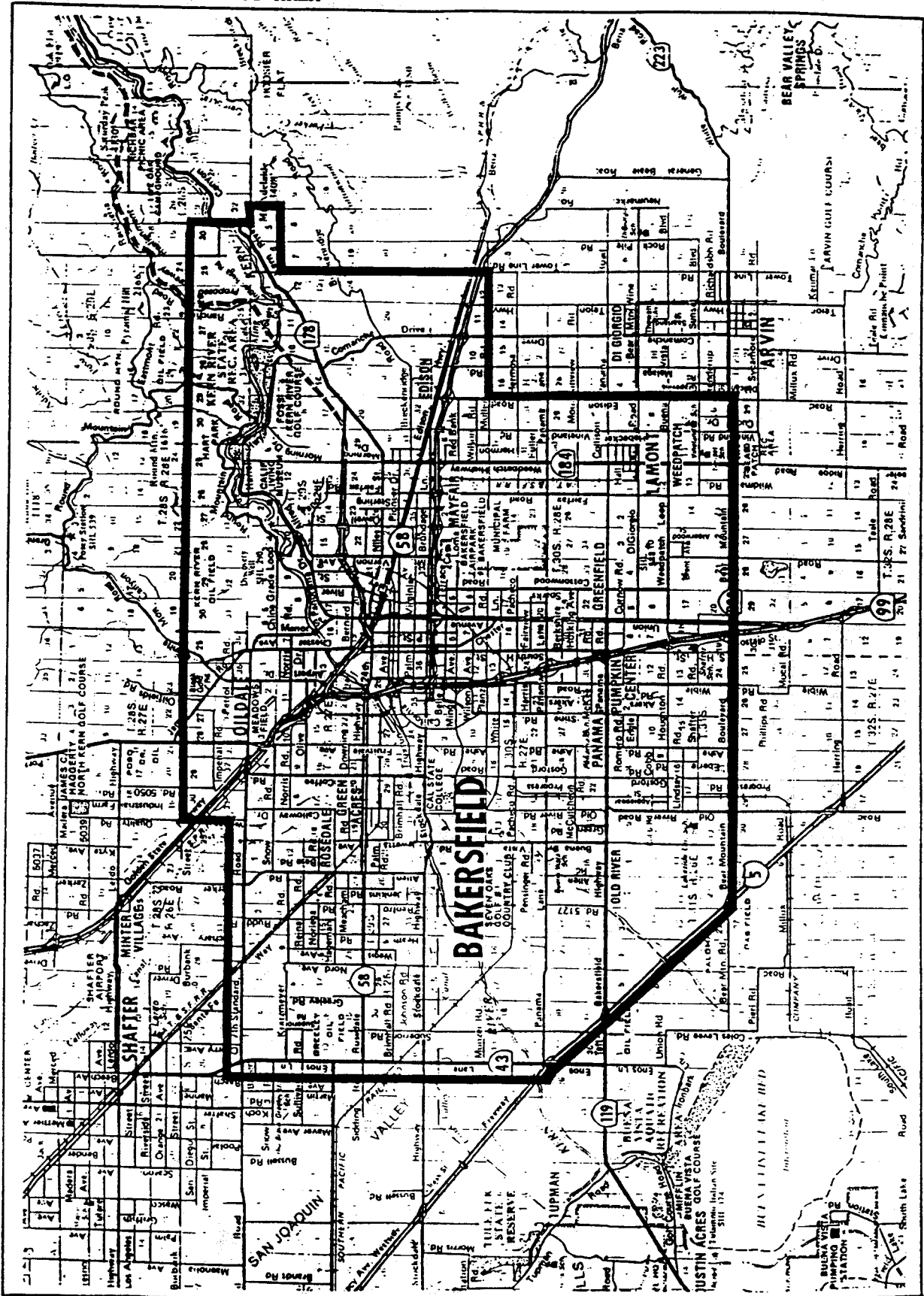


FIGURE 2 -- PROJECT AREA



METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

The channels of the Kern River in the Bakersfield area were described in a 1904 Bureau of Soils report as having "a considerable growth of cottonwood, willow and sycamore ... bordering the stream channels". Near Bakersfield, the river became wider and more shallow. It threaded "its way southwesterly through the delta lands" towards the valley and into Kern and Buena Vista Lakes and the swamp lands connecting them with Tulare Lake to the north. North and east of the delta, trees and shrubs were absent, "except for an occasional growth of saltbrush and other characteristic bushes usually found on desert or alkali lands". "A low-growing form of the prickly pear cactus" [possibly Bakersfield cactus] covered the loose sands along the southeastern margin of the area. "Grasses, including salt grass, foxtail, and erodium, covered considerable areas of the valley plains and delta lands utilized for grazing purposes" (TNC 1984).

Before industrial, agricultural and urban development, the San Joaquin Valley comprised a variety of ecological communities. Runoff from the surrounding mountains fostered hardwood and riparian forests, marshes and grassland communities. Away from the influence of the mountain runoff, several distinct dryland communities of grasses and shrubs developed along gradients of rainfall, soil texture and soil alkalinity, providing a mosaic of habitats for the assemblage of endemic plants and animals (TNC 1984).

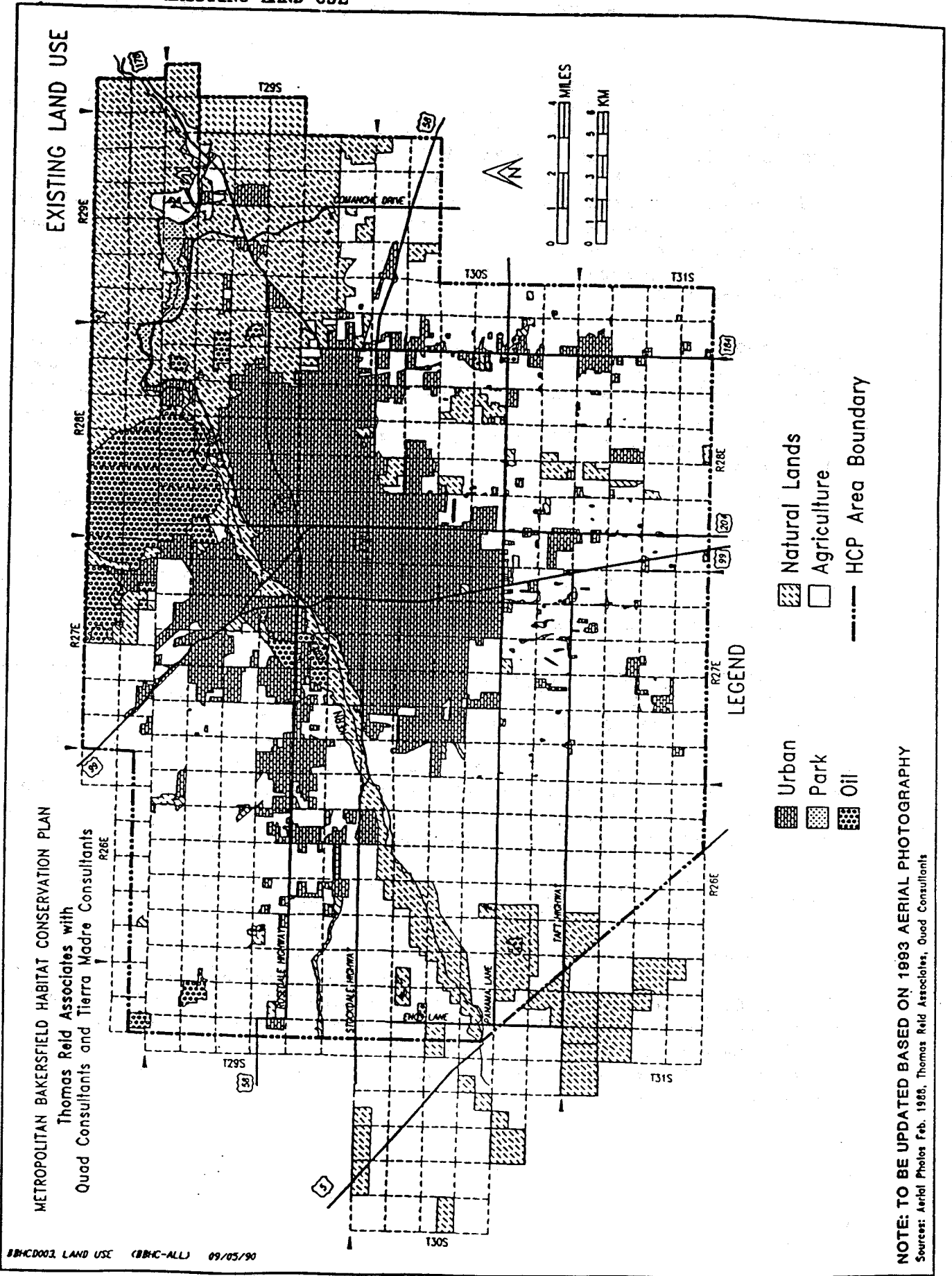
Agriculture, urban development and oil/gas extraction have caused many changes in the natural environment of the San Joaquin Valley. For example, lakes and wetland in the delta area have been drained and diverted since the 1880's when the Valley population began to increase (Twisselman 1967). Today there is little standing water on the valley floor and most lands are committed to agriculture. The Kern River channel, flowing west of Bakersfield towards Interstate 5, is undeveloped and dry (or nearly dry) during most of the year (Jones and Stokes 1988).

Loss of native plant and animal species accompanied the decrease in acreage of native lands. The Tulare Basin, along with the Carrizo Plain, the Cuyama Valley and the surrounding foothills, once contained over 6 million acres of native grasslands, shrublands, woodlands and riparian habitat. Today, approximately 96% of the native habitats of the Valley floor have been lost primarily to urbanization and ag-conversion (USFWS 1989). The recent California Energy Commission study of the 8,000 square mile southern Valley found that only 10% of the area still had significant endangered species presence or habitat value. Furthermore, the remaining undeveloped parcels in the region have been impacted by grazing, water and energy project development, off-road vehicles and mining.

Figure 3 shows the existing land use patterns in the study area and Figure 4 shows preserve conceptual focus areas for preserve opportunities inside the study area.

The introduction and spread of exotic and invasive plant species have also led to the decline of native plant communities. The composition of the vast native grasslands of the Tulare Subbasin has been the subject of speculation by botanists since introduced grassland species replaced native species during the days of the Franciscan missions. The non-native grasslands of California now account for 50-90% of the vegetative cover statewide (USFWS 1989). Standing a meter high, the non-native grasses -- germinating in fall prior to native forbs -- have pushed native species into marginal areas or supplanted them entirely.

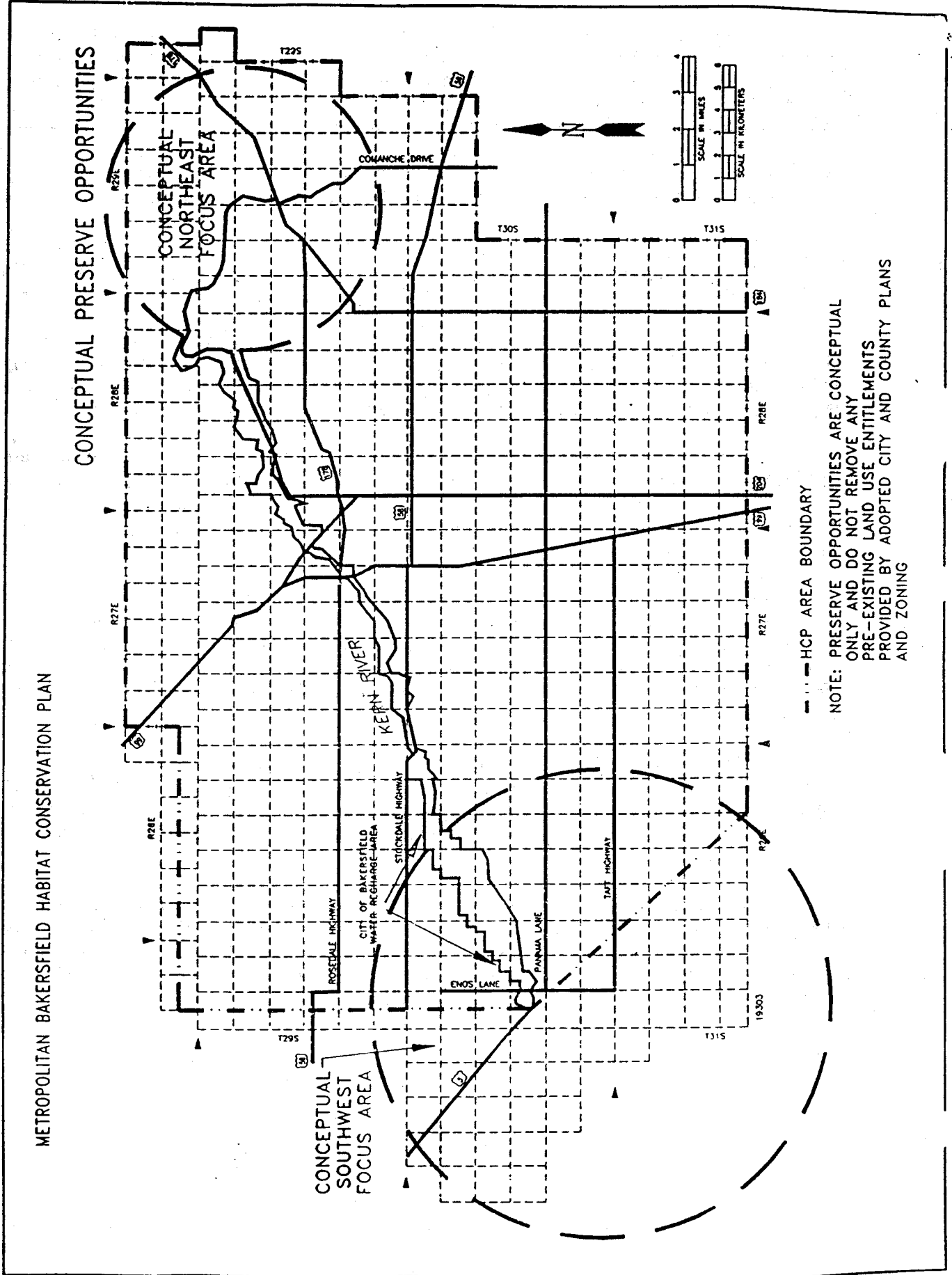
FIGURE 3 -- EXISTING LAND USE



BBHC003, LAND USE (BBHC-ALL) 09/05/90

NOTE: TO BE UPDATED BASED ON 1993 AERIAL PHOTOGRAPHY
 Sources: Aerial Photos Feb. 1988, Thomas Reid Associates, Quad Consultants

FIGURE 4 -- CONCEPTUAL PRESERVE OPPORTUNITIES



METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN

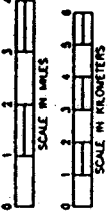
CONCEPTUAL PRESERVE OPPORTUNITIES

CONCEPTUAL NORTHEAST FOCUS AREA

CONCEPTUAL SOUTHWEST FOCUS AREA

--- HCP AREA BOUNDARY

NOTE: PRESERVE OPPORTUNITIES ARE CONCEPTUAL ONLY AND DO NOT REMOVE ANY PRE-EXISTING LAND USE ENTITLEMENTS PROVIDED BY ADOPTED CITY AND COUNTY PLANS AND ZONING



Several authors have compiled plant community associations for California: Twisselman, 1967; Kuchler, 1977; and Holland, 1986. Robert F. Holland, a vegetative ecologist with the Nongame-Heritage Program of the California Department of Fish and Game devised a classification system for plant community associations. Holland's terminology is used by the California Natural Diversity Database (CNDDDB), an inventory of locational information on the state's rare and endangered species and communities established by the Department of Fish and Game. In order to conform with CNDDDB, the MBHCP and other regional studies (such as the California Energy Commission's South San Joaquin Valley Ecosystem Preservation Program) have used the Holland classification system.

Six distinct ecological communities have been identified within the Metropolitan Bakersfield Habitat Conservation Plan area. The general location of the ecological communities and overall habitat quality of these communities are shown in Figures 5 and 6.

Non-native Grassland is the most widespread ecological community in the San Joaquin Valley. Its component species were introduced during the era of Spanish colonization and were well-established in the Valley even before the advent of agricultural and industrial development. Figure 5 shows that large tracts of non-native grassland are found in the northern portion of the MBHCP study area.

The annual grasses make a dense to sparse groundcover and are often associated with numerous species of showy, native annual wildflowers, especially in years of favorable rainfall. The grasses and flowers germinate with the onset of the late fall rains. Growth, flowering, and seed-set occur winter through spring. With few exceptions, the plants die by the summer yet these species persist as seeds until the winter rains.

Native plant species found in the non-native grassland community include the California poppy (*Eschschotzia californica*), alkali peppergrass (*Lepidium dictyotum*), baby blue eyes (*Nemophila menziesii*), fescues (*Vulpia megalura*, *V. microstachys*) and various subspecies of lupine, gilia, and tarweeds (*Hemizonia*). Non-native species typically present are wild oats (*Avena barbata*, *A. fatua*), filarees (*Erodium botrys*, *E. cicutarium*), brome grasses (*Bromus mollis*, *B. rigidus*, *B. rubens*) and Italian ryegrass (*Lolium multiflorum*).

The **Valley Sink Scrub** community once surrounded the San Joaquin Valley lakes (i.e. Kern, Buena Vista, Tulare and Goose), that have since been drained. Growing in heavily saline or alkaline clays, these perennial plants drew water from the high ground water table. But loss of habitat has caused the near extirpation of this community. Figure 6 shows that it does persist in several areas in the southern part of the study area.

Valley sink scrub lands are open to dense shrublands dominated by alkali-tolerant plants of the goosefoot family (Chenopodiaceae) such as iodine bush (*Allenrolfea occidentalis*) and sea-blite (*Sueda* spp.). Understory growth is usually absent, though a sparse cover of red brome (*Bromus rubens*) can occasionally develop. Other plant species found in this community include alkali larkspur (*Delphinium recurvatum*), saltgrass (*Distichlis spicata*), and Mojave red sage (*Kochia californica*).

FIGURE 5 -- NORTHEAST - HABITAT TYPE AND QUALITY

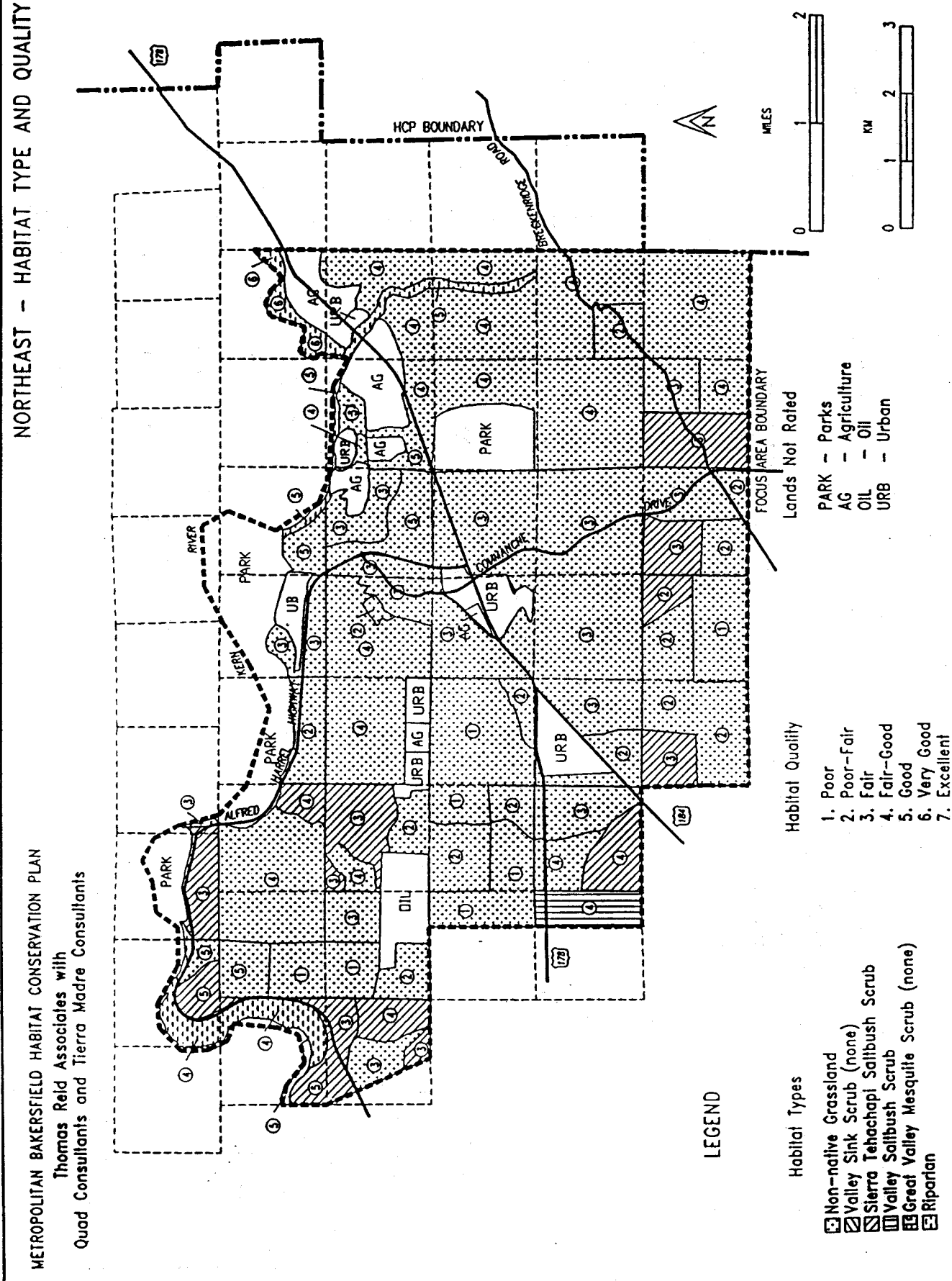
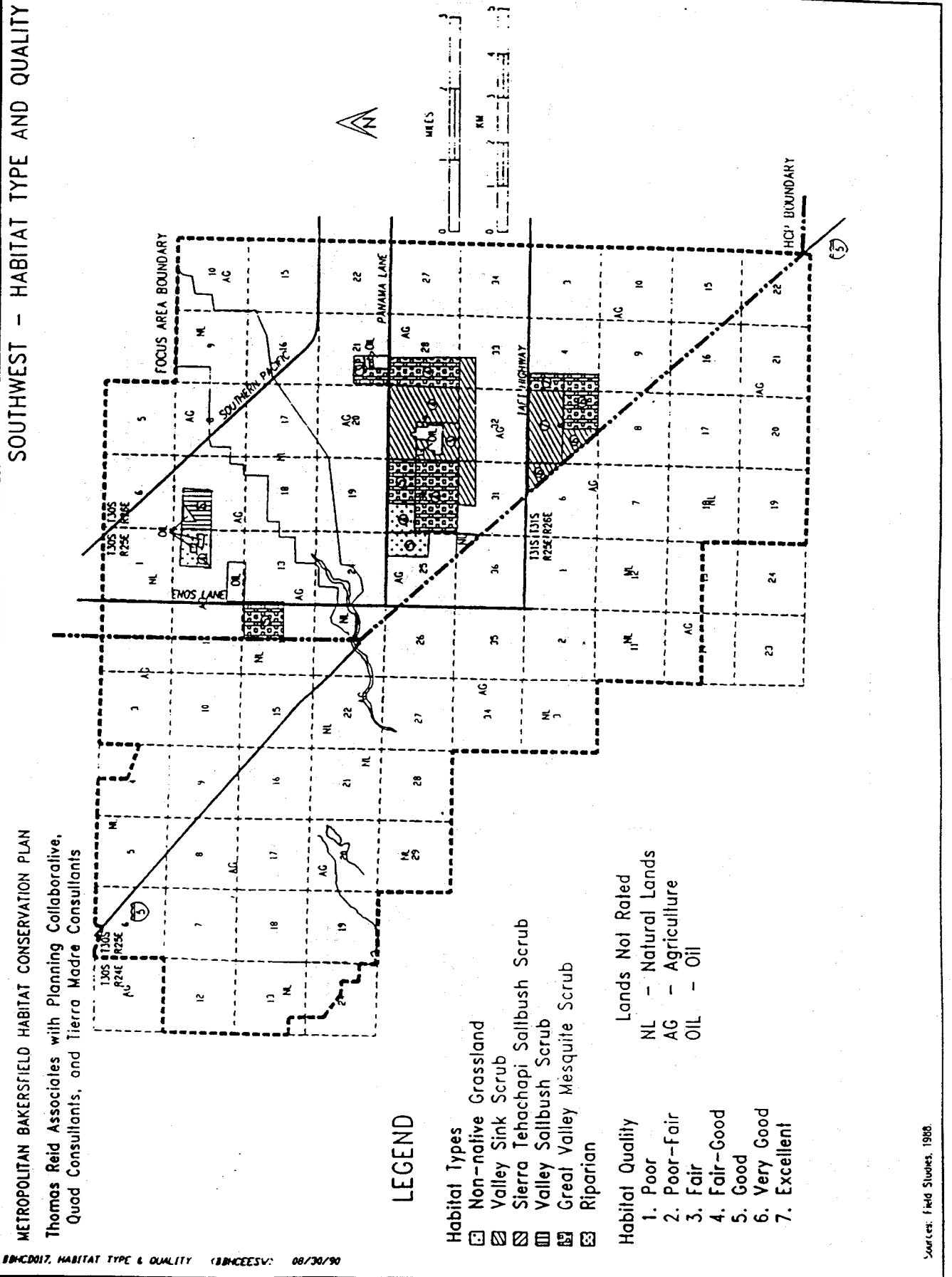


FIGURE 6 -- SOUTHWEST - HABITAT TYPE AND QUALITY



METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

Sierra-Tehachapi Saltbush Scrub thrives in alluvial, non-alkaline soils. It is found on rolling hills in areas of hot, dry summers and short, wet winters with no prolonged periods of tule fog. The community is dominated by the desert saltbrush *Atriplex polycarpa* and other shrubs, interspaced with extensive areas of non-native and native annual grasses and forbs.

Other plants associated with this community include grey California buckwheat (*Eriogonum fasciculatum polifolium*), cheese brush (*Hymenoclea salsola*), bladderpod (*Isomeris arborea globosa*), and the Bakersfield cactus (*Opuntia treleasei*).

Within the MBHCP study area, Sierra-Tehachapi saltbush scrub can be found in several locations in the northern portion with a total combined area of approximately 2 square miles (Figure 5).

Valley Saltbush Scrub community is composed of gray or blue-green shrubs of the Goosefoot (chenopod) family growing over a low, annual undergrowth. It is generally found in the gentle, rolling hills surrounding the Tulare Basin in the sandy to loamy soils of alluvial deposits. Typically, the soils lack surface alkalinity.

The community was once widespread in the San Joaquin Valley but has been nearly extirpated, or locally eliminated, by agricultural conversion, flood control, and groundwater pumping. In the study area, valley saltbush scrub was located in a half section area in the Northeast Focus Area and a remnant community in the Southwest Focus Area (Figures 5 and 6).

Typical goosefoot shrubs in the community include the desert saltbush (*Atriplex polycarpa*), arrowscale saltbush (*A. phyllostegia*) and the spiny saltbush (*A. spinifera*). Wildflowers occurring in the community include alkali larkspur (*Delphinium recurvatum*), alkali heath (*Frankenia grandifolia campestris*), *Gilia tricolor*, and creamcups (*Platystemon californicus*).

Great Valley Mesquite Scrub grows in sandy loams of alluvial origin. It is dominated by mesquite (*Prosopis glandulosa torreyana*) and the desert saltbush (*Atriplex polycarpa*). Understories are grassy during wet years, usually dominated by introduced annuals such as red brome (*Bromus rubens*).

Formerly quite extensive in the San Joaquin Valley, the community is now virtually extirpated, owing to the loss of habitat mostly to agriculture. Figure 6 shows Great Valley mesquite scrub in limited areas of the Southwest Focus Area.

Southern Cottonwood-Willow Riparian Forest, found along rivers and streams, is dominated by the broad-leaved deciduous Fremont's poplar (*Populus fremontii*) and the black cottonwood (*P. trichocarpa*). Understories usually are shrubby willows. Figure 5 shows riparian forest along the banks of the Kern River in the Northeast Focus Area.

Associated species include the sycamore (*Platanus racemosa*), Goodding's willow (*Salix gooddingii*), valley willow (*S. hindsiana*), red willow (*S. lasiandra*) and arroyo willow (*S. lasioepris*).

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

B. SPECIES OF CONCERN IN THE MBHCP AREA

The species of concern identified by the MBHCP are a diverse group of plants and animals that have become rare or endangered due primarily to loss of habitat. These species of concern share two characteristics:

- The plant or animal was historically recorded within the study area of the Metropolitan Bakersfield 2010 General Plan.
- The plant or animal has been either listed, or is under review for future listing as a rare, threatened or endangered species by USFWS, the CDFG or the California Native Plant Society (CNPS).

The three organizations (USFWS, CDFG, CNPS) that provide listings of species of concern differ in legal authority and goals in a variety of ways and categorize species of concern differently (see Key to Table 1).

Note that the state and federal permits for incidental take only pertain to formally listed species. Each agency will evaluate performance of the MBHCP with respect to the species under its statutory protection.

Table 1 lists the species of concern that historically were present within the study area of the MBHCP (and, therefore, the Metropolitan Bakersfield 2010 General Plan). The status of each species under the Endangered Species Act (Federal), the California Endangered Species Act (State) and the auspices of the California Native Plant Society (CNPS) is indicated.

There are several other plant and animal species in and around the MBHCP area which are of concern to the resource agencies or conservation organizations such as the Audubon Society or the Sierra Club (see Table 2). These species either do not have legal status or are known to occur only around the periphery of the MBHCP area, not within it. While these species are not on the formal "species of concern" list, they are thought to be declining in numbers because of habitat loss.

The Kern Audubon Society has provided a list of mammals, birds, reptiles, and amphibians which the CNPS, the USFWS and CDFG consider to be endangered, threatened or otherwise sensitive. This list is in the MBHCP Endangered Species Survey, a supporting document to the MBHCP.

Surveys for these species were not specifically conducted during the 1988 field season but their presence would have been noted during the course of regular fieldwork. While preserves will not be established under the MBHCP specifically for protection of these species, an integrated approach to preserve design and selection will be employed to preserve entire ecological systems or communities. In this way "other" species of concern could be incorporated into preserves for the MBHCP.

Table 3 describes the interrelationship between the various animal species of concern and the ecological communities present on undeveloped lands within the MBHCP study area. If known, area necessary to support one individual is noted.

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

TABLE 1 STATUS OF MBHCP SPECIES OF CONCERN

SPECIES OF CONCERN		STATUS		
COMMON NAME	SCIENTIFIC NAME	Federal	State	CNPS
<u>Plants</u>				
Bakersfield cactus	<i>Opuntia treleasei</i>	E	SE	1B
Bakersfield saltbush	<i>Atriplex tularensis</i>	C2*	SE	1B
Hoover's woolly-star	<i>Eriastrum hooveri</i>	T	-	1B
California jewelflower	<i>Caulanthus californicus</i>	E	SE	1B
slough thistle	<i>Cirsium crassicul</i>	C2		
recurved larkspur	<i>Delphinium recurvatum</i>	C2		
San Joaquin wooly threads	<i>Lembertia congdonii</i>	E	-	1B
<u>Animals</u>				
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	ST	N/A
blunt-nosed leopard lizard	<i>Gambelia silus</i>	E	SE	N/A
Tipton kangaroo rat	<i>Dipodomys n. nitratoides</i>	E	SE	N/A
short-nosed kangaroo rat	<i>Dipodomys nitratoides brevinasus</i>	C2	SSC	N/A
giant kangaroo rat	<i>Dipodomys ingens</i>	E	SE	N/A
San Joaquin antelope squirrel	<i>Ammospermophilus nelsoni</i>	C2	ST	N/A
San Joaquin pocket mouse	<i>Perognathusi. inomatus</i>	C2	-	N/A

Key to the Three Designation Systems

1) **Federal.** Federal categories per the Endangered Species Act, administered by the USFWS:

- E = Federally-listed endangered. In danger of extinction throughout all or a significant portion of its range.
- T = Federally-listed threatened. Likely to become an endangered species within the foreseeable future.
- PE = Proposed endangered. Regulations have been proposed as to the management of the species, but have not yet been finalized.
- PT = Proposed threatened. Regulations have been proposed as to the management of the species, but have not yet been finalized.
- C1 = Candidate 1. Sufficient data on file to support consideration for proposal to list as endangered or threatened.
- C1* = Sufficient data on file but presumed extinct
- C2 = Candidate 2. The threat and/or distribution data insufficient to support listing at this time.
- C2* = Insufficient data on file but presumed extinct
- C3 = Non-candidate.
- C3A = extinct.
- C3B = scientific names that, on the basis of current taxonomic understanding, do not represent a distinct "species" by the definition in the ESA.
- C3C = too widespread or not threatened at this time

2) **State.** Under the 1984 California Endangered Species Act, species of concern are listed as:

- SE = Endangered. Prospects of survival and reproduction are in immediate jeopardy from one or more causes.
- ST = Threatened. Not presently threatened with extinction but likely to be endangered in the foreseeable future in the absence of special protection and management efforts.
- SR = Rare. Not presently threatened with extinction, but in such small numbers throughout its range that it may become endangered if its present environment worsens.
- SC = Candidate. Species is currently under review for listing. This category is roughly equivalent to a "proposed" federal listing.
- SSC = Species of Special Concern. Listing of mammal and bird species that are under consideration for candidate status.

3) **California Native Plant Society.** From the CNPS's publication "Inventory of Rare and Endangered Vascular Plants of California":

- 1A = Plant presumed extinct in California
- 1B = Plant rare, threatened or endangered in California and elsewhere
- 2 = Plant rare, threatened or endangered in California, but more common elsewhere
- 3 = Plants about which we need more information - A Review List
- 4 = Plants of limited distribution - A Watch List

**TABLE 2
STATUS OF OTHER SPECIES**

SPECIES OF CONCERN		STATUS		
COMMON NAME	SCIENTIFIC NAME	Federal	State	CNPS
<u>Plants</u>				
Tulare pseudobahia	<i>Pseudobahia peirsonii</i>	C1	SE	1B
striped adobe lily	<i>Fritillaria striata</i>	C2	ST	1B
Lost Hills saltbrush	<i>Atriplex vallicola</i>	C2	-	1B
hispid bird's beak	<i>Cordylanthus mollis</i> esp. <i>hispidus</i>	C2	-	1B
calico monkey flower	<i>Mimulus pictus</i>	C3C	-	1B
Kern mallow	<i>Eremalche kernensis</i>	E	-	1B
gypsum-loving larkspur	<i>Delphinium gypsophilum</i> esp. <i>gypsophilum</i>	-	-	4
<u>Animals</u>				
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	C2	SSC	N/A
Tulare grasshopper mouse	<i>Onychomys torridus tularensis</i>	-	SSC	N/A

TABLE 3
HABITAT REQUIREMENTS OF ANIMALS OF CONCERN

SPECIES	AVERAGE DENSITY	PLANT COMMUNITY	SOIL TYPE
San Joaquin Kit Fox	1 fox requires 0.7 to 2.8 square miles.	freshwater marsh, tule marsh, alkali sink; <i>Atriplex</i> grasslands, lower Sonoran grasslands, valley grasslands upper Sonoran grasslands, California prairie, valley oak woodland, Douglas oak woodland, foothill woodland.	Well-drained, loose textured, sandy-loam or sandy clay loam. Dens seldom located in highly alkaline soil.
Blunt-nosed leopard lizard	Estimated in good habitat to be 1 to 3 lizards/acre.	valley/plain grasslands, <i>Atriplex</i> grasslands, <i>Allenrolfsia</i> grasslands, foothill grasslands, <i>Suaeda</i> flats.	gravel, sandy loam, clay hardpan
Tipton kangaroo rat	0.4 to 10 Tipton/acre	alkaline sink, spiny saltbush with scant to moderate ground cover	alkaline soils of alluvial fans and flood plains; soft powdery soils of finer texture
Short-nosed kangaroo rat	0.4 to 10 snort-nosed/acre	grassland, upland <i>Atriplex</i> , lower Sonoran desert shrub associations	highly alkaline, friable soils
San Joaquin antelope squirrel	Density not in literature. Home range is approximately 11 acres per individual.	grassland and shrub communities	light, well-drained soils such as loam or sandy loams. rarely occurs in alkaline soils
San Joaquin pocket mouse	Density and home range unknown	grasslands, alkali sink, <i>Atriplex</i> and <i>Ephedra</i> associations	friable soils; alluvial sand soils; wind-drifted sands
Giant kangaroo rat	10-21 animals per acre. Home range estimates of 2600 sq. ft.	annual grasslands or shrublands. Associated plants are <i>Schismus arabicus</i> , <i>Ephedra viridis</i> , <i>Bromus</i> spp., <i>Lepidium nitidum</i> and <i>Erodium</i> spp.	flat or gently sloping well-drained sandy loam soils

1. Research Methodology

The MBHCP study area comprises 408 square miles. Like most of California, the MBHCP area is divided into a grid by the Public Lands Survey. The basic unit of the Survey is the township, a square nominally six miles on a side. The townships are numbered by reference to a baseline and meridian. For example, much of Bakersfield is in Township 29 South, Range 28 East. The townships are further divided into 36 sections, each approximately one mile square. Thus, a section is roughly one square mile, 640 acres, or 259 hectares. The sections are numbered from one to 36 in serpentine order starting in the upper right corner and progressing back and forth across the rows towards the lower right.

To aid the reader in locating features in the MBHCP area, the various figures referred to in the text show township and section grids. On the small scale map of the whole study area, the township rows and range columns are identified at the margin of the map; sections are shown as a grid, but the numbers are omitted. Section numbering follows the serpentine convention of the public land survey:

Section Numbers in Township Grid

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

On larger scale maps, an identification code is placed in the township (example: T29S R28E) and section numbers are shown.

Prior to the commencement of the MBHCP field surveys, three background investigations were conducted to define potential preserve areas: The township identification code is in the upper left corner of the grid square (example: T29S R28E). On larger scale maps, section numbers are shown as well.

- a. Relevant biological and planning documents published since 1980 were collected. Then references to previous sightings of species of concern were plotted on a map. (Documents used are noted in Chapter V.) In addition, the California Energy Commission's Southern San Joaquin Valley Ecosystem Preservation Program and the Kern River Parkway Plan were reviewed for references.
- b. A MBHCP study area basemap was prepared and the constituent City and County land use designations were color coded onto the map in order to:
 - a) exclude areas already developed or pending development;

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

- b) identify areas already preserved for "non- biological" reasons such as floodway zones;
 - c) identify areas with a potential for conflict between development and conservation.
- c. Current land use within the study area was determined by interpreting aerial photographs. Color infra-red photos taken February 17, 1988 at a negative scale of 1:24,000 (1 inch = 2000 feet) were interpreted to up-date the basemap. This base map was then used to direct field work.

After studying MBHCP study area land use and species sightings from other studies, the MBHCP Steering Committee focused further studies to the areas with the most preserve potential. Qualitative, or "windshield" surveys, in which parcels are inspected and/or verified for habitat quality and vegetative cover, were completed for all parcels of undeveloped lands greater than 10 acres. A field form was filled out for these areas indicating habitat type and quality. These field forms are part included in the supporting document, Field Documentation of the Endangered Species Inventory in Support of the Metropolitan Bakersfield Habitat Conservation Plan.

Information from the windshield surveys and the pattern of species sightings from previous studies pointed to two areas as most appropriate for further MBHCP field work. These areas are the Northeast and Southwest Focus Areas (Figure 4). Some lands within the Southwest Focus Area extend beyond the MBHCP boundary but have been included because they are undeveloped, contiguous to the MBHCP boundary and have good habitat value.

Special field surveys were conducted for the San Joaquin kit fox, blunt-nosed leopard lizard and plants of concern. During the spring and summer field season, two technical meetings were held with USFWS and CDFG in order to focus the fieldwork. Oil lands were excluded from the field survey because the oil companies were not participating in the MBHCP program at the time of the surveys. The Kern River corridor was also excluded because field surveys were being conducted by Jones & Stokes Associates for the Kern River Parkway Plan.

2. Present Status and Habitat Requirements

a. Animals of Concern

Field survey methodology for each phase of the field work and for each species is discussed in detail in the supporting document, Metropolitan Bakersfield HCP Endangered Species Survey. A summary of the habitat requirements of the animals of concern is presented in Table 3.

1. San Joaquin kit fox (*Vulpes macrotis mutica*)

The kit fox species, *Vulpes macrotis*, represents the smallest of the four species of foxes found in North America. Of the various subspecies of kit fox, San Joaquin kit fox, *Vulpes macrotis mutica*, is the largest in size (USFWS 1983). Adult kit fox are slender, weighing 1.4 to 2.7 kg (3 to 6 pounds). Head and body length is 38 to 51 cm (15 to 20 inches) with a 23 to 30 cm (9 to 12 inch) cylindrical, bushy, black-tipped tail. The inner side of their exceptionally large ears are covered with dense, stiff white hairs (USFWS 1983). Pelage color ranges from a pale

grey with rust colors to a buffy yellow; the belly is whitish (Burt and Grossenheider 1976). The underfur is heavy and slightly harsh in texture while overhairs are scattered and meagerly developed (Grinnell et al. 1937).

Kit foxes are primarily nocturnal, emerging at sunset to hunt. Primary prey species are kangaroo rats (*Dipodomys ingens*, *Dipodomys nitratoides*, *Dipodomys heermanni*). Black-tailed jackrabbits (*Lepus californicus*), desert cottontails (*Sylvilagus auduboni*) and California ground squirrel (*Spermophilus beecheyi*) may be primary prey species in some areas and secondary prey species to the kangaroo rat in others (Zoellick et al. 1987; O'Farrell and Scrivner 1987, citing Fisher 1981; Grinnell et al. 1937; Hawbecker 1943; Knapp 1978; Laughrin 1970; Morrell 1972; Jensen 1972).

The historic range of the kit fox covered approximately 8,667 square miles of central California (USFWS 1983). The northern limit of the historic range is believed to have been Tracy in San Joaquin County based on the collection of the type specimen by Merriam in 1902 (Grinnell et al. 1937). From this northern limit, the range extended south through at least 11 counties to Rose Station in southern Kern County (CDFG 1980; Grinnell et al. 1937).

This original range of approximately 8,667 square miles may have had kit fox densities of 1 to 1.4 fox per square mile (Grinnell et al. 1937). These estimates yield a total possible population of 8,667 to 12,134 animals prior to 1930. A 1975 population estimate showed a decrease of 20% to 43% in the last 50 years to a total of approximately 7,000 individuals.

Kit fox habitat was estimated to have been reduced overall by 34% from 1959 to 1969 due mainly to agricultural conversion (Laughrin 1970, cited by Morrell 1975). A land use survey conducted in 1971 showed a loss of 490,000 acres of native vegetation between 1958 and 1970 in the San Joaquin Valley portions of Kern, Kings, Fresno and Tulare Counties (Dept. of Water Resources 1971, cited by Morrell 1972).

The completion of the California Aqueduct in 1968 further accelerated the irrigation of natural habitat lands. In Kern County alone, in the four years that followed the opening of the Aqueduct, 178 square miles (113,800 acres) of natural habitat was converted to agriculture (Jensen 1972).

Conversion of lands to intensive agriculture and urban development have eliminated much of the kit fox's habitat. Kit foxes are thought to survive in all 11 counties of its historic range and 3 counties where it historically had not been reported: Santa Barbara, Santa Clara and Monterey counties (USFWS 1983). Kit foxes are now mainly confined to the foothills and interior coast range valleys of these counties particularly in the Elk Hills, Elkhorn Plain and Carrizo Plain. Morrell (1975) estimated that 85% of the existing kit fox population is found in six counties: Kern (41%), Tulare, Kings, San Luis Obispo (10%), Fresno and Monterey.

Numerous kit foxes are found in and around the outskirts of Bakersfield and Taft where they live and forage in vacant lots, fallow fields, and other open areas (Morrell 1975; Jones & Stokes 1988).

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

In urban areas, the fox is subject to tremendous environmental stress. Many animals are killed on roads, burrows are destroyed in the path of development, some are poisoned by rodenticides, hunted or harassed by domestic dogs. Because of these stresses and the fact that development will soon encompass the area, the urban population is considered marginal (Morrell 1975).

Dens are usually found in areas of low to moderate relief in loose textured soils (O'Farrell and McCue 1981, O'Farrell et al. 1980, cited by USFWS 1983). Man-made structures such as culverts, well casings, irrigation pipes and man-made dens constructed specifically for the San Joaquin kit fox have been used by kit foxes for both transient and natal dens (Egoscue 1956, 1962 and Morrell 1972, cited by McGrew 1979; Knapp 1978; O'Farrell and Scrivner 1987).

Kern County was thought to be the home of 41% of the remaining San Joaquin kit fox population in 1975 (Morrell 1975). However, current accurate population and distribution figures are difficult to maintain. Studies quickly become dated as populations continue to suffer habitat loss, habitat degradation and mortalities from external factors. Population and distribution figures must be regarded as tentative estimates. The current range of the animal is shown as extending as far north as portions of Alameda and Santa Clara Counties (At the Crossroads 1980).

Prior to the introduction of irrigated agriculture in the valley, the prime habitat for the San Joaquin kit fox is thought to have been in the valley saltbrush scrub, alkali sink and lower Sonoran grassland ecological communities. Today, within the MBHCP study area, kit foxes still inhabit valley saltbush, valley scrub, non-native grassland and valley sink scrub communities (TRA 1989). They have been found to disperse through various types of disturbed habitat including agriculture fields, oil fields, highways, aqueducts and canals (Kato 1982). In the Bakersfield area, railroad tracks and canals are used by kit fox to travel from one habitat area to another.

Studies of San Joaquin kit fox show densities averaging from 1 fox/mile² to 1 fox/2.8 miles² (Grinnell et al. 1937; Laughrin 1970; Morrell 1975), with a maximum of two miles traveled in foraging (Grinnell et al. 1937; McGrew, 1979). An estimated minimum plot size required by the San Joaquin kit fox may be between 600-1200 acres, although a great portion of this area may be shared with other kit foxes (Morrell 1972, Knapp 1978, cited by Spiegel 1985). The San Joaquin Kit Fox Recovery Plan states that this home range estimate may be based on insufficient documentation and that an estimate of kit fox requirements on undisturbed lands is not yet available (USFWS 1983).

Preserves for the San Joaquin kit fox should be able to support an average of 1.4 animals per square mile (USFWS 1983), be composed of native communities or non-native grasslands, support prey populations, contain adequate denning sites, and have few human intrusions, particularly roads. Corridors should be wide enough to provide safety to migrating animals. The Recovery Plan calls for the protection and/or acquisition of 35,000 acres (55 square miles) of kit fox habitat in areas mapped as first priority for protection in order to meet interim plan objectives of halting the decline of the species and increase population size above 1981 levels. Meeting these interim objectives could result in the changing of the San Joaquin kit fox status from federally "endangered" to "threatened".

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

San Joaquin kit fox sightings from other surveys in the Metropolitan Bakersfield area from 1980 to 1990 are shown on Figure 7. Rapid land use change makes older field studies of little current use. The cluster of fox sightings in other studies likely reflects areas intensively studied such as the Kern Oil Field (Township 28 South, Range 28 East) and the Bakersfield State College area (Township 29 and 30 south, Range 27 east).

Figure 8 shows animal sightings from the MBHCP Field Study. In the course of the field survey for the MBHCP, kit fox scent stations were established in each quarter section having undeveloped lands in the Northeast Focus Area and one quarter section in the southern part of the Southwest Focus Area (See Figures 9 and 10). Figure 8, Species Sightings of Animals from the MBHCP Field Study, maps the result of the windshield survey and the scent stations. The map shows that kit fox sign was found throughout the Northeast Focus Area except along its southern and eastern boundaries. Occurrence of sign was more frequent in the northwestern tip of the Northeast Focus Area (Township 29 south, Range 28 east, section 1) and roughly in the middle of that Focus Area (Township 29 south, Range 29 east, sections 3,4,15,16,17).

At the request of the USFWS, additional surveys were conducted outside the Northeast Focus Area, north of the Kern River, in Township 28 South and Ranges 28 and 29 East. In this survey, kit fox sign was found in areas that contained suitable kit fox habitat (Figure 9).

Most of the southern portion of the Southwest Focus Area was surveyed to the east and west of Interstate Highway 5 for the kit fox, but not all of the "extended" Southwest Focus Area was field surveyed. The northern portion of the Southwest Focus Area west of Interstate 5 was only surveyed from a vehicle to determine habitat type and quality.

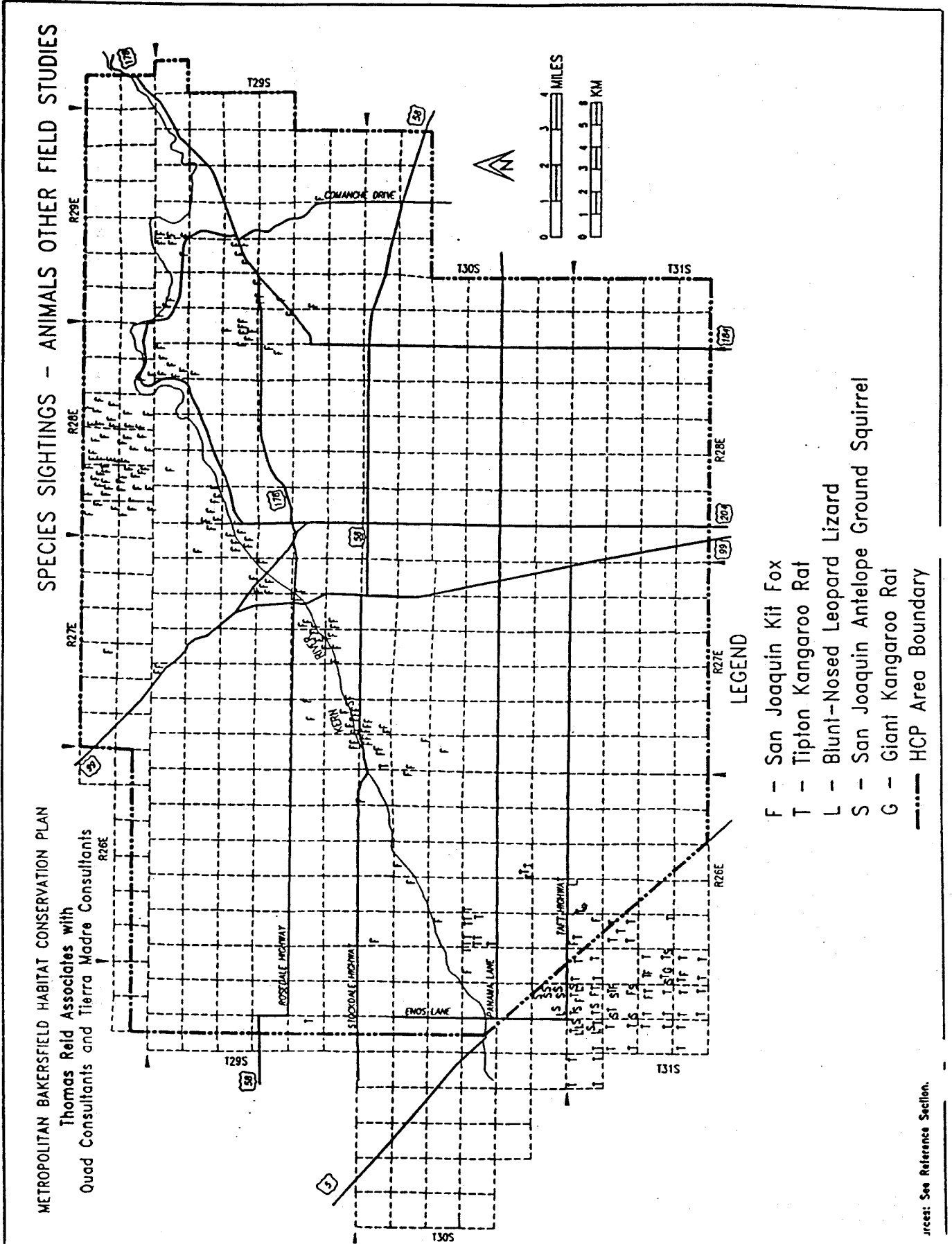
Kit fox sign was found at scent stations in the northeast and southwestern portions of the study area, indicating that both areas have existing kit fox populations. It should be noted that scent stations were placed in only one quarter section of the Southwest Focus Area. As part of the overall conservation effort for the kit fox, it will be important to retain contiguity between northeast and the Lokern area to the west of Interstate 5 along the Kern River floodplain.

2. Blunt-nosed Leopard Lizard (*Gambelia silus*)

The blunt-nosed leopard lizard is a relatively large and long-lived lizard. It is so-named because of its short, broad skull and blunt snout. The robust body and long tail display a prominent pattern of dark spots and pale cross-bars. Adult males range from 90 mm to 120 mm (3.5 to 4.8 inches) in the body (snout-to-vent length) and are slightly larger than adult females which average 85 to 107 mm SV (3.4 to 4.2 in) (USFWS 1985). If severed, the lizard's tail is able to regenerate itself.

The leopard lizard's historic range covered 7.5 million acres from the Sacramento-San Joaquin Delta on the north to the Tehachapi Mountains on the south, the Sierra foothills on the east and the Coastal mountains on the west. The historic range included San Joaquin Valley, Kettleman Plain, Carrizo Plain and Cuyama Valley (Montanucci 1965, Smith 1946, Tollestrup 1979, cited by USFWS 1985).

FIGURE 7 -- SPECIES SIGHTINGS - ANIMALS - OTHER FIELD STUDIES

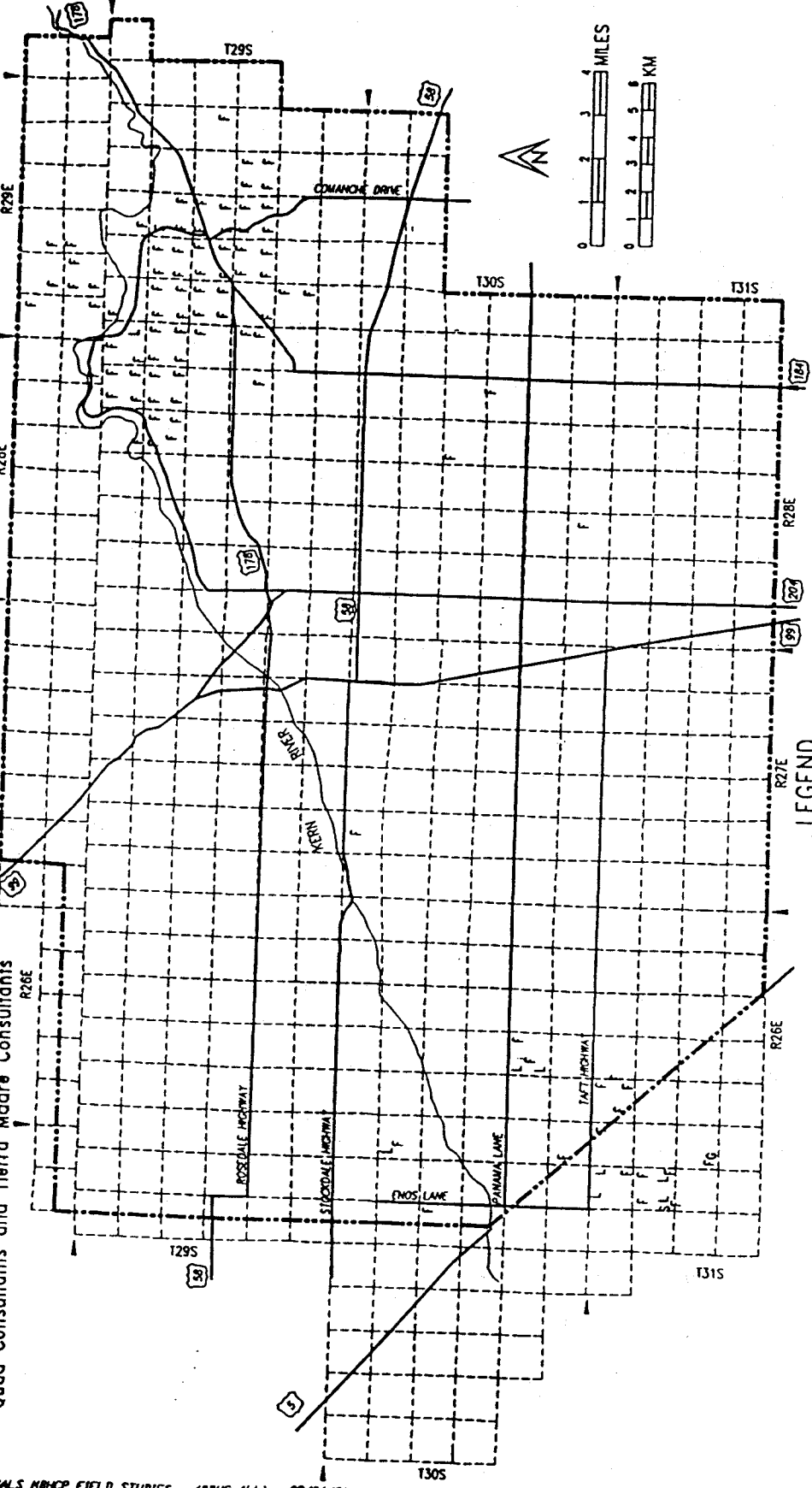


Source: See Reference Section.

FIGURE 8 -- SPECIES SIGHTINGS - ANIMALS - MBHCP FIELD STUDY

SPECIES SIGHTINGS - ANIMALS MBHCP FIELD STUDIES

METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reld Associates with
 Quad Consultants and Tierra Madre Consultants



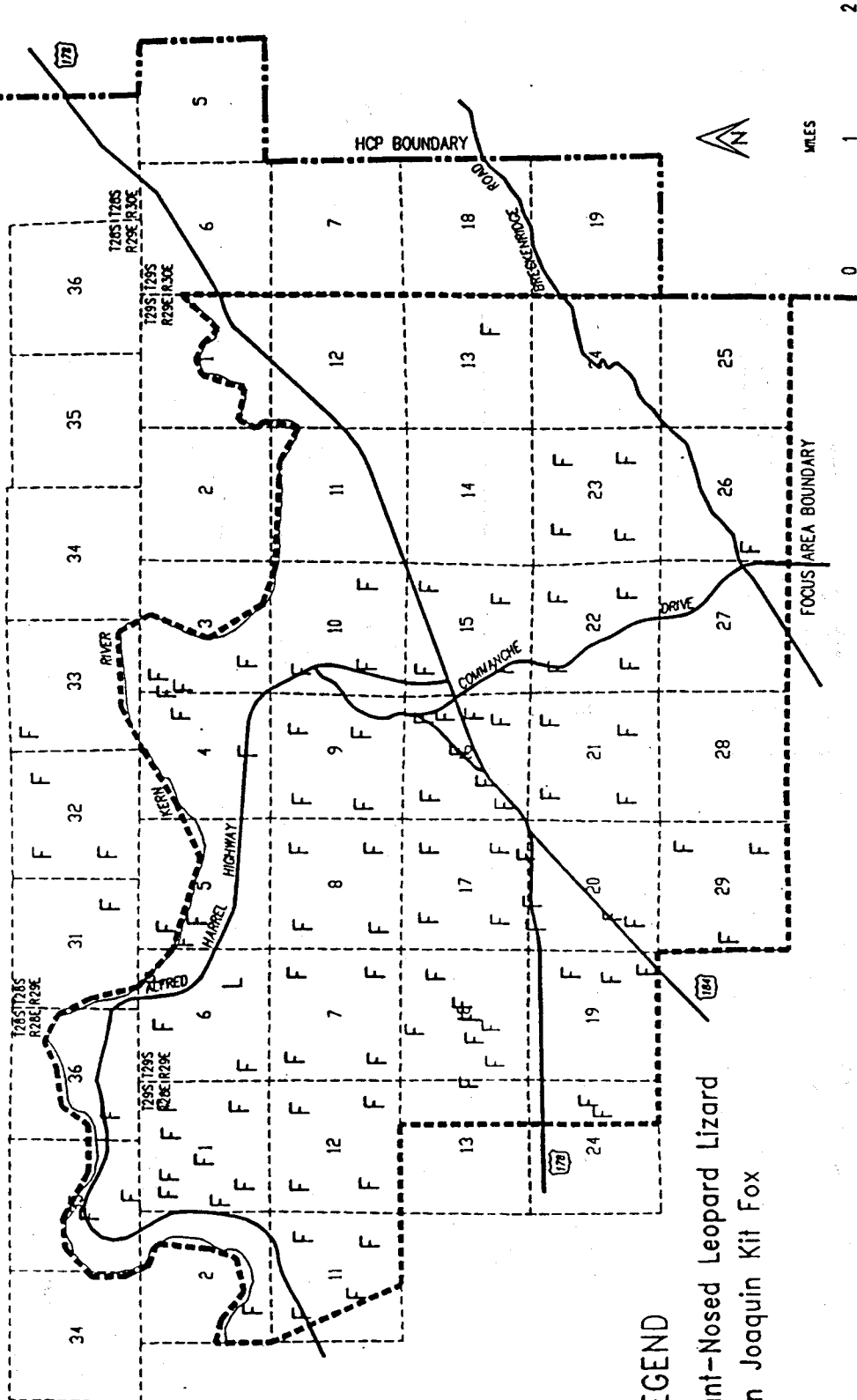
LEGEND

- F - San Joaquin Kit Fox
- S - San Joaquin Antelope Ground Squirrel
- L - Blunt-Nosed Leopard Lizard
- G - Giant Kangaroo Rat
- T - Tipton Kangaroo Rat
- HCP Area Boundary

FIGURE 9 -- NORTHEAST- ANIMAL SPECIES SIGHTINGS - ALL STUDIES

NORTHEAST - ANIMAL SPECIES SIGHTINGS

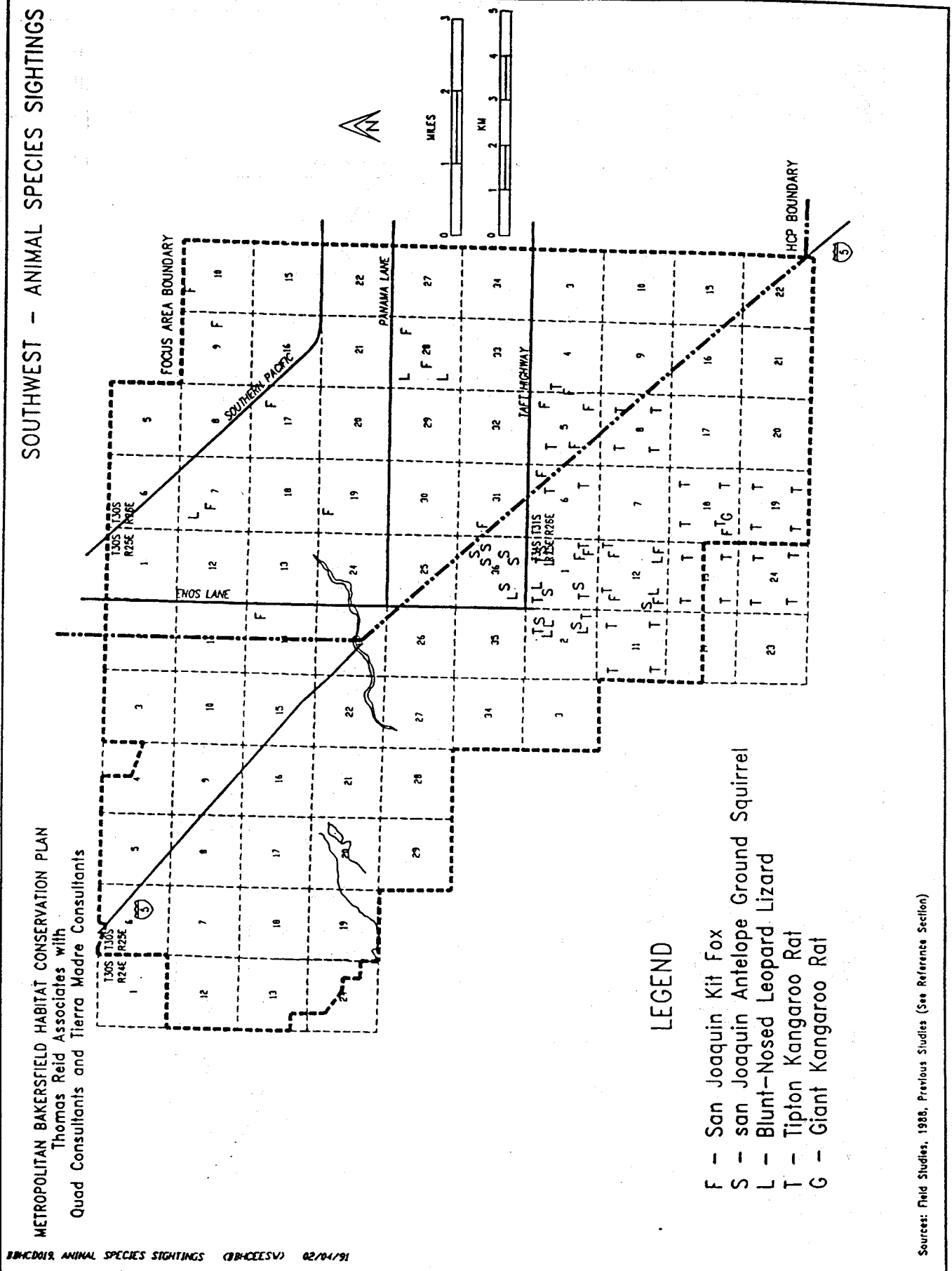
METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reid Associates with
 Quad Consultants and Terra Madre Consultants



LEGEND

- L - Blunt-Nosed Leopard Lizard
- F - San Joaquin Kit Fox

FIGURE 10 -- SOUTHWEST - ANIMAL SPECIES SIGHTINGS - ALL STUDIES



METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

The range of the blunt-nosed leopard lizard in 1985 was estimated at 415,680 acres, a reduction of 95% from the estimated historic range (USFWS 1985). The endangered status of the leopard lizard stems mainly from the reduction or modification of its habitat (Chesemore 1980).

Studies of blunt-nosed leopard lizard population density have resulted in a variety of density figures. The USFWS estimates that densities on substantially unmodified valley floor habitat are about 1 lizard per acre. Marginal habitats impacted by grazing or mineral extraction have lower densities. Given this guideline, as many as 415,680 leopard lizards could remain but this figure is probably greatly overinflated since much of the remaining habitat may be less than optimal habitat for blunt-nosed leopard lizards.

The leopard lizard does not dig its own burrow for escape, cover, shelter, or as egg-laying sites. Instead, it uses existing small mammal burrows, made by kangaroo rats, ground squirrels, pocket gophers, pocket mice and other rodents. Leopard lizard may prefer burrows in pond loam and clay loam soils on sparsely vegetated slopes of less than 30°, canyon floors, low foothills, especially in large washes and arroyos (Montanucci 1965, Chesemore 1980 cited by Uptain et al. 1985; Uptain et al. 1985).

Prey of the leopard lizard includes insects, spiders and occasionally other lizards as well as other leopard lizards (Dick 1977). Due to its foraging habits, the lizard prefers areas of relatively sparse ground cover which is more prevalent during the dry seasons and in dry years. Chesemore (1980) suggests that 15 to 30% bare ground may be the optimum openness for the blunt-nosed leopard lizard, and a site with 50% or more open ground may not be suitable for the species. Conversely, dense vegetative cover appears to interfere with running and hunting ability, thermoregulatory behavior and visibility of potential mates during the breeding season (Snow 1972; Montanucci 1965; Stebbins 1966).

Blunt-nosed leopard lizards are known to occur in valley and foothill grassland, saltbush (*Atriplex*) scrubland, iodine bush (*Allenrolfea*) grassland, *Sueda* flats. They are most numerous where large *Atriplex* and *Isomeris* bushes were numerous and widespread. Chesemore (1980) found a correlation between the presence of the blunt-nosed leopard lizard and *Schismus arabicus* (Arabian grass) which could not be reconfirmed in later studies (Uptain et al. 1985).

The Blunt-nosed Leopard Lizard Revised Recovery Plan (USFWS 1985) recommends that populations should meet or exceed a level of one blunt-nosed leopard lizard per acre average density to maintain a viable population. While Tollestrup 1976 suggested that one square mile (640 acres) of good habitat might meet minimum area requirements for perpetuating a leopard lizard population, this estimate has not been substantiated by other studies. To disperse from one area to another, the leopard lizards require natural, undisturbed washes or dirt roads with shrub vegetation along the edges for cover. The Recovery Plan identifies a minimum of 30,000 acres of essential habitat be protected within five distinct areas of the blunt-nosed leopard lizard range before the species may be re-classified as threatened, rather than endangered.

During the course of MBHCP field work, two blunt-nosed leopard lizards were observed. A juvenile was sighted in the Northeast Focus Area, Township 29 south, Range 29 east, Section 6 (Figure 9). An adult was sighted in the Southwest Focus Areas in Township 30 South, Range 26 East, Section 7. The Southwest Focus Area (specifically Township 31 South, Range 26 East, Section 5 east of Interstate 5) was surveyed by walkover transects but no lizard sign was detected. To the west of Interstate Highway 5 and north and south of the Taft Highway, Sections 1 and 12 of Township 31 South, Range 25 East contained sign of the San Joaquin leopard lizard (Figure 10). The northern portion of the Southwest Focus Area was surveyed from a vehicle to determine habitat type and quality.

3. Tipton Kangaroo Rat (*Dipodomys nitratoides*)

The Tipton kangaroo rat, whose head and body measure from 100 to 110 mm long (3.9 to 4.3 inches), is a subspecies of the smallest species of kangaroo rat, *Dipodomys nitratoides* (Williams 1985). Its tail is longer than its body length and ranges from 125 - 130 mm (4.9 to 5.1 inches). It weighs an average of 36.5 grams (1.3 ounces) (Grinnell 1920) and is slightly larger than *Dipodomys nitratoides exilis* but smaller than *D. n. brevinus*.

Like all kangaroo rats, the Tipton is adapted for bipedal locomotion (jumping), having greatly enlarged hind limbs, a long thickened tail, a short neck and a large head. The ears and eyes are on the upper sides of the head. Fur-lined cheek pouches hold seeds and other food for transport to caches which the animal locates close to its burrow. The forelimbs of the Tipton Kangaroo Rat are short, with long, stout claws and four dexterous finger-like toes.

The Tipton Kangaroo Rat commonly digs burrows on elevated spots which are not be subject to flooding. Sometimes, areas which are flooded in winter and spring are colonized during the dry seasons. Preferred habitat for Tipton burrows are within alluvial fans and floodplains and include highly alkaline fine sands and, to a lesser degree, alkaline sandy loams. The animal is most commonly associated with Alkali Sink Scrub and Valley Saltbrush Scrub on the floor of the Tulare Basin. These communities provide a habitat of sparsely scattered shrubs and a scant-to-moderate groundcover of grasses and forbs.

No information is available on home range size, mode of dispersal or dispersal rate. Williams (1985) found densities for the Tipton kangaroo rat to be from 1 to 25 animals per hectare (0.4 to 10 per acre) and from less than 1 to 50 burrow systems per hectare. Elevated areas supported the highest densities, and areas subject to prolonged flooding the lowest densities of this species.

Historic populations of the Tipton kangaroo rat are roughly estimated to have been 17,164,800 individuals. Today about 1 percent of this former estimated total or 190,200 remain. Habitat loss from agricultural conversion of lands after the completion of the Central Valley Project is the main cause of the decline of the species. Tipton kangaroo rats were formerly occupied a range that included the Tulare Lake Basin in parts of Fresno, Kings, Tulare and Kern counties. The former range of approximately 1,716,500 acres has been reduced to 63,400 acres or 3.7 percent of the original range (CDFG 1990).

Five separate publicly owned parcels totaling 6,400 acres currently support Tipton populations at low to moderate density population levels. None of these parcels is sufficiently large enough to insure the viability of the species (CDFG 1990).

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

Present Tipton kangaroo rat distribution is thought to be limited to scattered populations clustered:

- near Lemoore and Hanford in Kings County;
- west of Tipton, Pixley and Earlimart in Tulare County;
- and between the Kern National Wildlife Refuge and Delano in Kern County (Williams 1985);
- Kern River Corridor west of Bakersfield and other scattered populations in Kern County.

In general, 25 breeding pairs are needed for the "short term emergency" situation to prevent genetic problems leading to possible extinction of the population. To retain longer term fitness and adaptiveness the breeding population would have to be orders of magnitude larger (Williams 1985).

Williams (1985) estimated that 8 to 28 acres of good habitat were necessary to maintain population fitness over the "short-term", assuming a 1:1 sex ratio in a population in which all individuals contribute to breeding. Estimating for long term viability, 823 to 2806 acres of good habitat might be necessary to maintain the population (Williams 1985).

A search of previous Tipton kangaroo rat records showed numerous sightings from D. Williams within the southwest focus area (concentrated in Township 31 south and Ranges 25 and 26 east, see Figure 7). David Germano reported trapped the Tipton kangaroo rat at T30S, R27E, Section 6 and T29S, R25E, Section 26 within the MBHCP Study Area to the west of Bakersfield. Surveys conducted by the Department of Fish and Game have located the Tipton kangaroo rat on the southern side of the Kern River corridor north of Panama Lane and east of Enos Lane, also west of Bakersfield but within the MBHCP Study Area. The results of these and other surveys have led several conservation biologists to believe that the entire Kern River corridor west of Bakersfield, especially undeveloped or fallow sites, should be considered at present as possible Tipton kangaroo rat habitat (pers comm. David Germano, pers comm. Richard Anderson).

4. Short-nosed Kangaroo Rat (*Dipodomys nitratoides brevinasus*)

The short-nosed kangaroo rat, like the Tipton kangaroo rat, has four finger-like appendages on its forelimbs. Its appearance is generally similar to the Tipton kangaroo rat with the exception of head shape, color of pelage and general size.

The Short-nosed kangaroo rat weighs an average of 44 grams (1.5 ounces) with males larger than females in every characteristic except ear length (Grinnell 1920; Hoffman 1975). It has a head and body length of 107 mm. (4.2 inches) and a tail length of about 145 mm. (5.7 inches). It is slightly larger in size than *D. n. nitratoides* and significantly larger than *D. n. exilis*.

Short-nosed kangaroo rats are found in flat to gently rolling terrain with friable soils which are often highly alkaline. They are associated with Sierra-Tehachapi Saltbrush Scrub, Lower Sonoran desert-shrub associations and grasslands.

Presently, the short-nosed kangaroo rat is found on the west side of the San Joaquin Valley from near the mouth of Panoche Creek and Mendota, south to at least the Antelope Plains, west of the Lost Hills, and along the southern end of the San Joaquin Valley (Williams

unpubl.; Grinnell 1933; Hafner unpubl.; Hoffman 1975). It also occurs in the Panoche and Cuyama valleys, and on the Carrizo Plain. The distributional boundary between *D. n. nitratoides* and *D. n. brevinasus* is not well-defined.

No direct evidence of the presence of the short-nosed kangaroo rat was discovered in the course of the field surveys for the MBHCP.

Habitat preserves which contain flat to gently rolling terrain with alkaline friable soils, associated with Sierra-Tehachapi Saltbrush Scrub, Lower Sonoran desert - shrub and grasslands would be suitable for this species.

5. San Joaquin Antelope Squirrel (*Ammospermophilus nelsoni*)

The San Joaquin antelope squirrel has a yellowish-brown pelage with a creamy white line on each side of the back extending from shoulder to hip and a tail with a white underside. The head and body are 152 to 165 mm (6 to 6.5 inches) long and tail length is 64 to 76 mm (2.5 to 3 inches) (Burt and Grossenheider 1976). It weighs from 84 to 154 grams (3 to 5.5 ounces).

The squirrel is omnivorous mainly feeding on grass and forb seeds as well as insects (CDFG 1990). It will co-occupy giant kangaroo rat precincts and digs burrows in road cuts and arroyos (Williams 1979; 1985). Williams (1979) states that the range of the antelope squirrel most nearly coincides with the range of the giant kangaroo rat, but its microhabitats are different.

The historic range of the San Joaquin antelope squirrel included the western and southern portions of the Tulare Basin, San Joaquin Valley and areas to the west including the Cuyama Valley, Carrizo Plain and Elkhorn Plain. The western half of the range extended north to western Merced County. San Joaquin antelope squirrel were found the San Joaquin Valley floor in Kern County and along the Valley's eastern edge north to Tipton in Tulare County (CDFG 1990).

The San Joaquin antelope squirrel is found in flat to sloping terrain with loam or sandy loam soils in the western and southern portions of the Tulare Basin. The antelope squirrel could be found in association with the Interior Coast Range saltbush scrub, upper Sonoran subshrub scrub, non-native grassland and valley sink scrub. The habitat normally consists of species such as salt bush (*Atriplex* spp.), ephreda (*Ephreda viridis*), bladder pod (*Isomeris arborea*), goldenbush (*Haplopappus* spp.) and snakeweed (*Gutierrezia californica*). Grinnell and Dixon (1918) and Hawbecker (1953) observed that it more rarely occurred in valley floor habitats with alkaline soils (i.e. ephemerally flooded with a high water table) dominated by iodine bush (*Allenrolfea occidentalis*) and spiny salt bush (*Atriplex spinifera*). It has been observed in the non-native grassland community (Hawbecker 1958).

The home range of the San Joaquin antelope squirrel is thought to be approximately 5 to 20 ha with an average of 14.4 ha (CDFG 1990). The squirrel has a high affinity with its home range and remains there from year to year. However, each animal covers up to half of its range per day (Hawbecker 1958).

METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

Fifteen percent of the lands in the southwestern portion of the San Joaquin Valley (Elk Hills, Buttonwillow, McKittrick, Taft, Carrizo Plain) were rated by Williams as "fair to good" habitat capable of supporting from 3 to 10 antelope squirrels per hectare (1.2 to 4 per acre). Twenty to twenty-five percent of the occupied range is considered to be of fair-to-poor habitat value, supporting less than 3 antelope squirrel per hectare (less than 1 per acre).

Williams reported in 1979 that the area with the highest population of *A. nelsoni* was near Taft and McKittrick, where densities were approximately five individuals per acre. This density is half that reported by Grinnell and Dixon (1918) for the best *A. nelsoni* habitat at the time of their study in the early 1900's.

Habitat preserves which contain Interior Coast Range saltbush scrub, upper Sonoran subshrub scrub, non-native grassland and valley sink scrub would be appropriate for this species.

In the course of the field surveys for the MBHCP, the San Joaquin antelope squirrel was found in the Southwestern Focus Area, west of Interstate 5, both to the north and south of the Taft Highway (Figure 10). During the course of biological field surveys for the Kern River Parkway, San Joaquin antelope squirrels were sighted by Jones and Stokes biologists on three occasions along the Kern River north of California State College campus.

6. San Joaquin Pocket Mouse (*Perognathus inornatus*)

The San Joaquin pocket mouse is a small, soft-haired buffy-colored pocket mouse whose body size ranges from 64 to 81 mm (2.5 to 3.2 inches) with a tail roughly the same size (71 to 76 mm or 2.75 to 3 inches). It is difficult to distinguish from the other silky-furred pocket mouse of the region, *Perognathus longimembris*, but habitat of the two species usually does not overlap (Burt and Grossenheider 1976).

The habitat associations of San Joaquin pocket mice are not well known. They occur in flat to steep terrain with friable soils as well as in areas of alluvial-sand soils and wind-drifted sands. The San Joaquin pocket mouse has been collected from the eastern edge of the San Joaquin Valley in grasslands and blue oak savannas up to an elevation of about 1500 ft. Populations are known to occur in the Alkali Sink Scrub community on the floor of the Tulare Basin and in saltbrush and Mormon tea (*Ephedra californica*) habitat in the northwestern portions of the Basin (Hawbecker 1951).

The exact boundaries of the geographic range of San Joaquin pocket mouse are not known. Based on the collection locations of museum specimens, the pocket mouse has been found to occur in the Sacramento Valley from Tehama County southward, and in the San Joaquin Valley to Rose station, near the mouth of Grapevine Canyon. It is recorded from the Panoche Valley, in the upper Kern River drainage basin, and from areas in the Tehachapi Mountains such as the Walker Basin and Tehachapi Pass.

The USFWS has identified the need to preserve annual grassland habitat throughout the southern San Joaquin Valley, and to establish the distributional limits of the pocket mouse in the southern and western edges of the Valley.

Habitat preserves which contain grassland and blue oak savanne that have flat to steep terrain with friable soils, or alluvial-sand soils and wind-drifted sands, would be appropriate for the pocket mouse.

7. Giant Kangaroo Rat (*Dipodomys ingens*)

The giant kangaroo rat is the largest of the all the kangaroo rats and measures a total length of 311 to 348 mm (12.2 to 13.7 inches). Compared to other kangaroo rats, the ears and tail of the giant kangaroo rat are short in relation to its total body length. It is also the heaviest of the species weighing from 131 to 180 g (4.6 to 6.4 ounces) with males somewhat heavier than females. The fifth toe, appears only on the hind foot and is diagnostic for the giant kangaroo rat. Other kangaroo rat within the range of the giant kangaroo have four toes on the hind foot and are smaller in weight as adults (CDFG 1988).

The giant kangaroo rat prefers to dig its burrows in open areas on flat to gently sloping terrain, usually less than 10 percent slopes. The soil in these areas is fine sandy loams with a covering of annual grasses and herbs. The giant kangaroo rat usually does not occur in areas of highly alkaline soils and seasonal flooding (Grinnell 1932, Williams 1981 cited by CDFG 1988).

Original habitat of the giant kangaroo rat may have been 1,303,700 acres from Merced County south to Kern County, west to eastern San Luis Obispo County and northern Santa Barbara County (Williams in prep, cited by CDFG 1988). Of this original habitat, an estimated 97-98% has been lost to agricultural conversion of natural lands (CDFG 1988). In remaining habitat, the giant kangaroo rat continues to be impacted by the use of rodenticides and the impact of off road vehicles and other recreational uses (Williams 1985; CDFG 1990). Studies at the Elkhorn Plain Ecological Reserve and adjacent Bureau of Land Management areas are assessing the impacts of cattle grazing on the giant kangaroo rat (CDFG 1988).

Presently in the southern San Joaquin Valley, giant kangaroo rat populations with densities similar to those described before 1950 are concentrated in only 5 relatively small areas totaling about 12 square miles (Williams, in prep cited by CDFG 1988). The largest extant colonies are in the vicinity of the Elk Hills petroleum fields of Kern County and the Elkhorn Plain of San Luis Obispo County. Williams (1985b) believes that over half the colonies of giant kangaroo rats disappeared and that remaining colonies were reduced in density between 1980 and 1985.

In 1932, Grinnell reported a giant kangaroo rat density of 21 animals per acre or 13,440 per square mile. On her study site in the eastern Carrizo Plain, Braun (1985) found a density of 25 adult animals per hectare (10/acre), which Williams (1985) described as a density optimum for that habitat.

Evidence of the existence of the giant kangaroo rat was found in the Southwest Focus Area, Township 31 South, Range 25 East, southwestern quarter of Section 18 (Figure 10).

Habitat preserves which contain open areas on flat to gently sloping terrain, with fine sandy loams covered by annual grasses and herbs would benefit the giant kangaroo rat.

b. Plants of Concern

Rare plant surveys were conducted during the blooming season in 1988. Figure 11 shows plant species sightings from the 1988 MBHCP field survey. Likely habitat was investigated for the appropriate species. Detailed field methodology is presented in the Metropolitan Bakersfield HCP Endangered Species Survey.

The description and discussion of the plant species of concern, except where noted, are taken from two submission to the Federal Register by the U.S. Fish and Wildlife Service: "Proposed Endangered or Threatened Status for Five Plants From the Southern San Joaquin Valley", dated July 27, 1989; and "Endangered and Threatened Wildlife and Plants; Determination of Endangered or Threatened Status for Five Plants from the Southern San Joaquin Valley", dated July 19, 1990.

1. California Jewelflower (*Caulanthus californicus*)

The California jewelflower was listed as endangered species status by the U.S. Fish and Wildlife Service in 1990. The species was listed as endangered under the California Native Plant Protection Act in 1986.

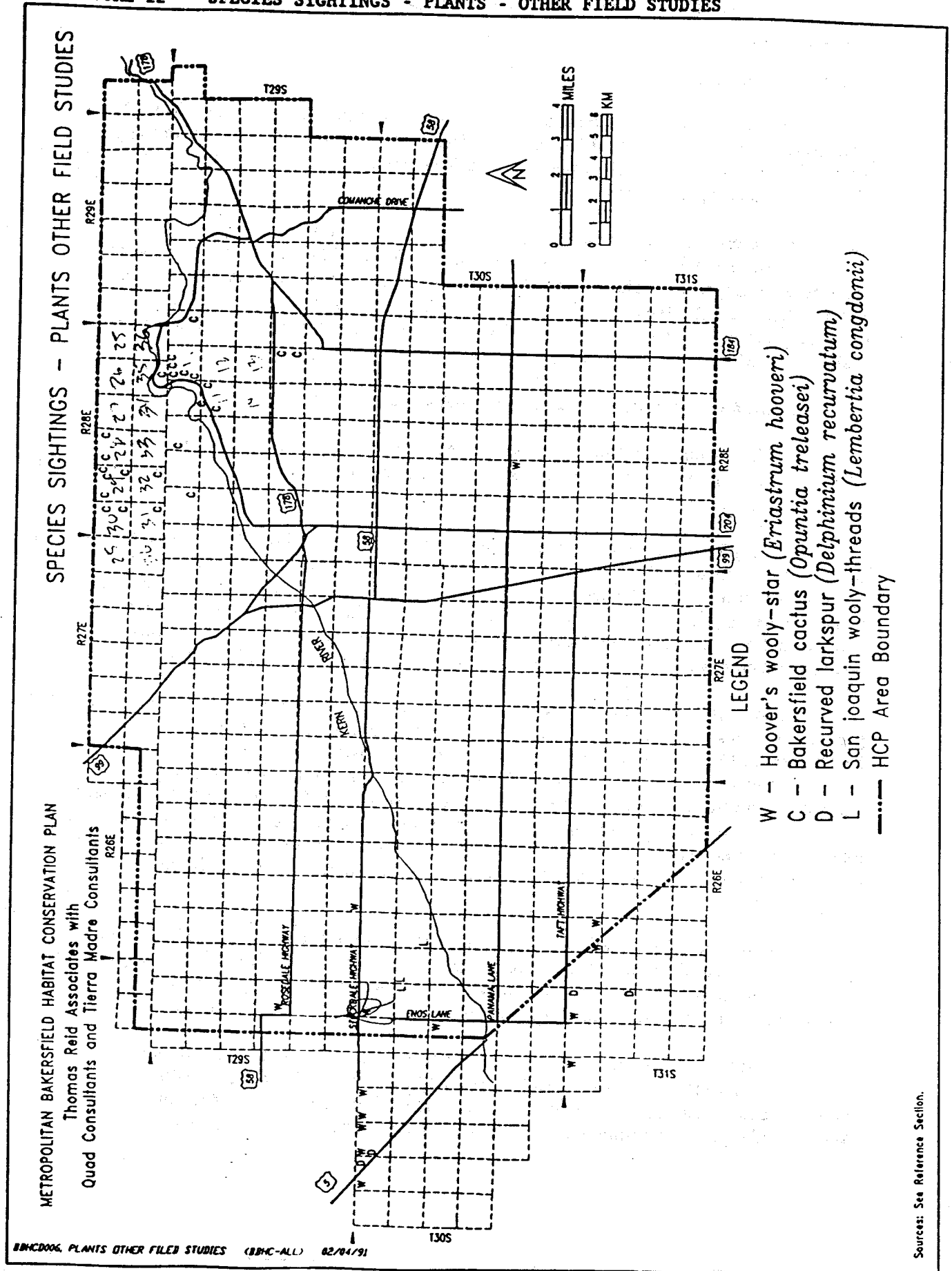
The California jewelflower is an annual herb of the mustard family (Brassicaceae), usually one foot tall, with several flower branches. The lower leaves of the jewelflower are dry, oblanceolate and lobed with wavy margins. The base of the lower leaves cling to the stem of the plant and are egg-shaped or oblong. The flowers are translucent white with purple tips that turn green at full bloom (Taylor and Davilla 1986). Thin, narrow seed pods up to one inch long are one of the factors which distinguish this plant from related species (USFWS 1989).

Historically, the California jewelflower was distributed in the general area bounded by the present-day cities or communities of Coalinga and Fresno in Fresno County, New Cuyama in Santa Barbara County and Bakersfield in Kern County (Taylor and Davilla 1986). The jewelflower was extirpated from most of its former range as a result of the expansion of agriculture and livestock grazing coupled with the conversion of San Joaquin Valley grasslands from native annual plants to european annual plants (Taylor and Davilla 1986). Of 47 historical locations, the *Caulanthus californicus* now exists as one introduced population in Kern County, a natural population in Santa Barbara County and eight populations in San Luis Obispo County. (USFWS 1990).

The introduced population grows, in wet years, on the alkali plains in The Nature Conservancy's Paul Paine/Semitropic Ridge Preserve. Historical records indicate the jewelflower was found on the floor of the San Joaquin Valley in sandy, grassland type habitat (Taylor and Davilla 1986) and on slopes under 3000 feet on the surrounding foothills (Munz 1973).

A search of other recent field studies found no recorded sightings of *Caulanthus californicus* within the study area. Historic populations in the vicinity of Bakersfield are presumed extirpated due to the elimination or modification of the habitat (Taylor and Davilla 1986). Similarly, no California jewelflowers were found during the field surveys.

FIGURE 12 -- SPECIES SIGHTINGS - PLANTS - OTHER FIELD STUDIES



2. San Joaquin Woolly-threads (*Lembertia congdonii*)

The San Joaquin woolly-threads is an annual herb belonging to the sunflower family (Asteraceae) which produces several, frequently-branching stems arising from the base and small yellow disk-flowers from March to April.

The USFWS report supporting federal endangered species status for *Lembertia congdonii* in the Federal Register 19 July 1990 states:

"Associated with the valley saltbrush scrub, only 12 populations of the San Joaquin woolly-threads remain in the San Joaquin Valley and adjoining foothills from the vicinity of Panoche Pass (San Benito County) southeasterly to Caliente Creek east of Bakersfield (Kern County). Another seven populations occur to the southwest in Cuyama Valley (San Luis Obispo and Santa Barbara Counties) and Carrizo Plain (San Luis Obispo County). Primarily as a result of ag-land conversion, 33 populations or 63% of the 52 historical and extant populations of the species have been lost (Taylor 1987)."

The plant is found in drifted sand or clayey, often alkaline soil in areas of annual grassland and saltbush scrub at elevations between 250 to 2500 feet. It is possible that it grows only in years of more than normal rainfall.

No references to sightings of the San Joaquin woolly-threads were discovered by searching through other field survey records since 1980 (See Figure 12).

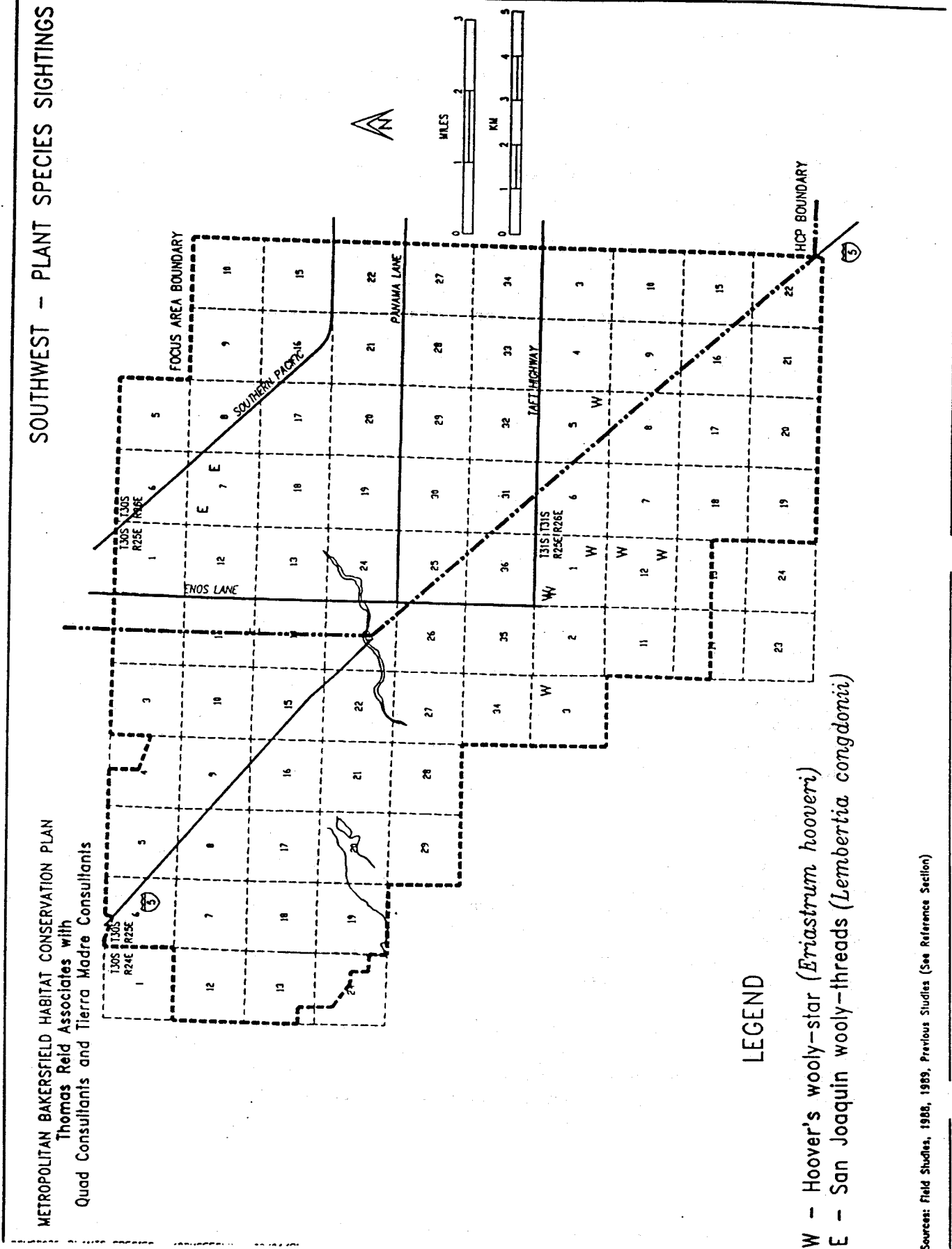
Three sightings were noted during the 1988 field season, all in the western portion of the Study Area. One population was documented in the Rosedale Quadrangle to the north of the Southwest Focus Area in Township 29 South, Range 25 East, southeastern quarter of Section 12. Two populations were found in the Stevens Quadrangle, Township 30 South, Range 26 East, Section 7, northwestern and northeastern quartersections (Figure 13). A fourth sighting was reported just west of these populations in Township 30 South, Range 25 East, Section 12 but the documentation for this sighting is unavailable.

3. Hoover's Woolly-star (*Eriastrum hooveri*)

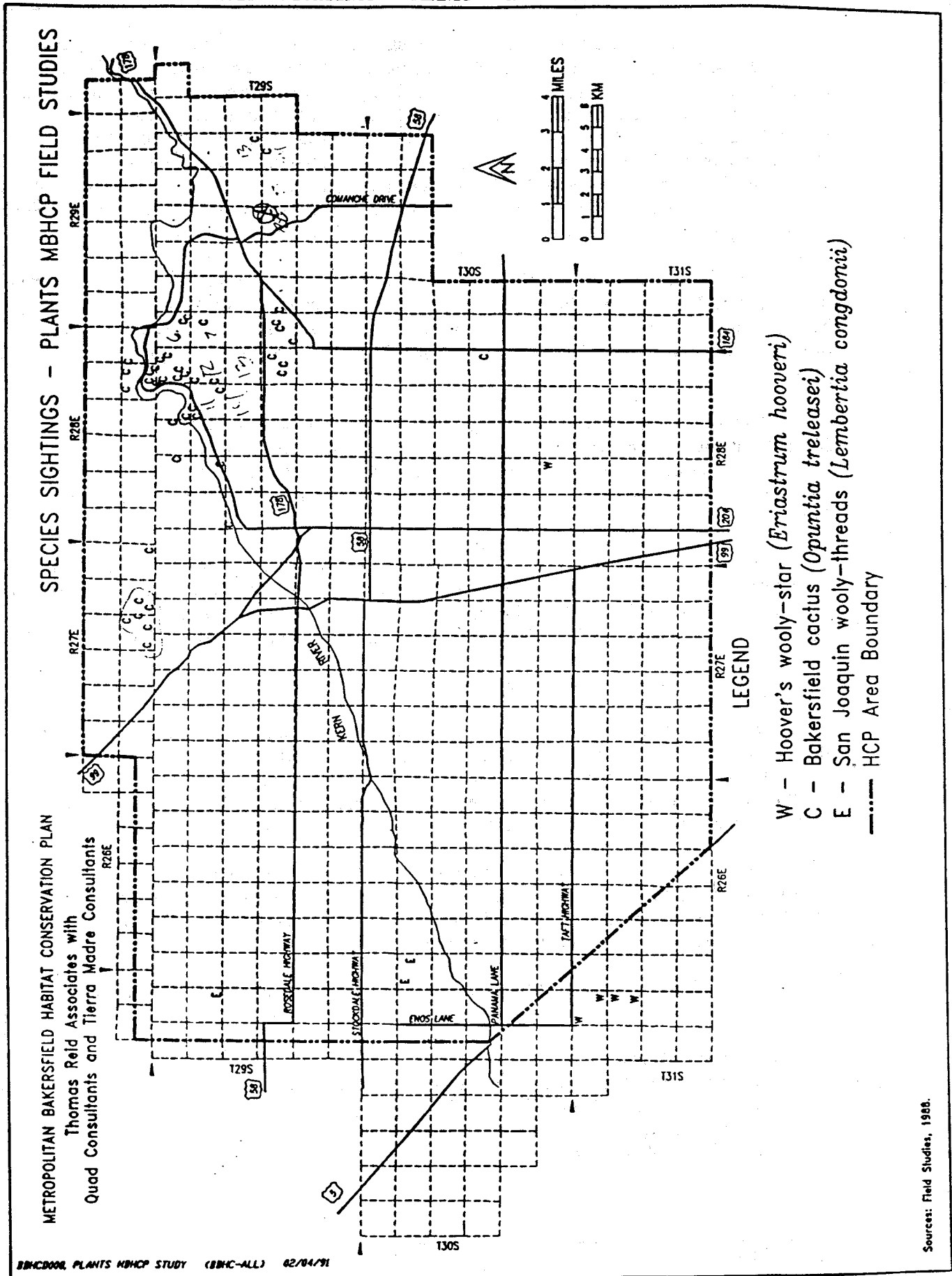
Hoover's woolly-star, an annual herb of the phlox family (Polemoniaceae), produces many wire-like branches and small white flowers from February to May (Abrams 1940). It is endemic to the southern San Joaquin Valley and adjoining South Coast Ranges, including the Elkhorn Plain, Carrizo Plain, Cuyama Valley from Kern to Fresno County, and east to San Luis Obispo County. Historical distribution of the species is discontinuous, i.e. there are no documented occurrences of *E. hooveri* in Kings or Tulare Counties.

Hoover's woolly-star grows in the sandy soils of rolling plains of valley saltbrush scrub and valley sink scrub below 500 feet. Northern populations (Fresno County) are located on more alkaline soils than southern populations (Kern County). Distribution on alkali sinks is patchy. Colonies are often located only within the patches of cryptogamic soils.

FIGURE 13 -- SOUTHWEST - PLANT SPECIES SIGHTINGS - ALL STUDIES



'FIGURE 11 -- SPECIES SIGHTINGS - PLANTS - MBHCP FIELD STUDY



METROPOLITAN BAKERSFIELD HCP - BIOLOGICAL ISSUES

Twelve of the 39 historical and extant populations of the species have been extirpated due to habitat loss (Taylor and Davilla 1986). More recently conducted surveys have both confirmed the status of existing populations as well as previously unrecorded populations on the lands of Naval Petroleum Reserve #1 within the Elk Hills and adjacent lands including the Buena Vista Valley and Buena Vista Hills (EG&G 1988; Russ Lewis pers. comm. 9 September 1989 to USFWS). These two surveys brought the total of remaining populations of *Eriastrum hooveri* to 118. However, of these 118 known populations, 100 are currently threatened by oil and gas development, ag-land conversion, urbanization or reservoir construction. One population is within a preserve, the Nature Conservancy's Paul Paine/Semitropic Ridge Preserve.

Four recent records of the Hoover's woolly-star within the Extended MBHCP Study Area were listed by Taylor and Davilla (1986) (Figures 12, 13). The largest of these is in Township 31 South, Range 25 East, Section 3 and has a population of approximately 10,000 plants. A short distance to the east, Section 1, Township 31 South, Range 25 East contained approximately 5,000 plants.

Four other populations lay just adjacent to the Study area. The largest (population 10,000 plants) was documented in 1986 just south and adjacent to the MBHCP Study Area boundary in Township 31 South, Range 28 East, Section 25, Southeast Quarter Section. The four other adjacent populations are on the western border of the extended Southwest Focus Area.

Five populations of Hoover's woolly-star (four of them in the Southwest Focus Area) were encountered during the field surveys (Figure 11). Four of these sightings are in the same general area where Taylor and Davilla had estimated to contain 5,000 plants (Figures 11, 12). The fifth sighting was found outside the two focus areas in Township 30 South, Range 28 East, Section 33.

4. Bakersfield Cactus (*Opuntia treleasei*)

The Bakersfield cactus is a low-growing member of the cactus family (Cactaceae) that typically grows in extensive thickets. It generally develops beavertail-like pads 3 to 4 inches wide and 5-7 inches long. The areoles (eye-spots) are never depressed but flush with the pad surface or somewhat raised. All areoles have spines, although they vary in number and length. The large flowers are magenta and bloom in May.

Historically, the Bakersfield cactus occurred "in dense, almost impenetrable colonies" (Twisselman 1969) along sandy bluffs, dry stream beds, rolling grassy hills and sandy flats with good drainage in the region surrounding Bakersfield. Habitat elevation ranged from 600-800 feet. Typical habitat soil is granular with large cobbles.

Currently, there are thought to be five primary population areas for the Bakersfield cactus. They are:

- o northeast of Oildale;
- o the Kern River Bluffs east and northeast of Bakersfield;
- o west and north of Caliente Creek;
- o Commanche Point;
- o northwest of Wheeler Ridge.

All five populations are threatened by development.

A search of other recent field survey records for the Bakersfield cactus show a cluster of sightings in the northern portion of the Northeast Focus Area (Figure 12) and field surveys confirmed numerous populations of Bakersfield cactus in this area both inside and outside the MBHCP boundary (Figure 14). Cactus were also found beyond the MBHCP boundary in the Kern Front oil field in Township 28 South, Ranges 27 and 28 East. Cactus found inside the boundary are concentrated in the Northeast Focus Area, particularly in Township 29 South, Range 28 East, Section 1 and Township 29 South, Range 29 East, Section 6. In all, 44 populations of the cactus were recorded. The extent of a 1988 burn in the cactus area was also mapped.

5. Bakersfield Saltbush (*Atriplex tularensis*)

The Bakersfield saltbush is in the Chenopodiaceae (Goosefoot) family. It is an erect, few-branched annual roughly 8 to 32 inches tall (20 to 80 cm), covered with bran-like, pubescence on the stems and aging to a reddish color. The whitish-gray lanceolate to ovate leaves, less than one inch long (6 to 20 mm), have smooth-edged margins and rounded bases which are attached directly to the stem. The plant is monoecious - the small, greenish flowers are either male or female. Male flowers occur in small, dense clusters while female flowers occur either singly, in small clusters or mixed with the male flowers. Diamond-shaped bracts of fruit, 0.12 to 0.14 inches long (3.0 to 3.5 mm), have a wider lower half. The lower 2 margin edges of the bracts are smooth and the upper 2 margins are toothed with a scurfy-white pubescent surface.

Similar looking species of *Atriplex* occur in the area and careful identification by experts is required. This species is closely related to *A. cordulata*, from which it can be distinguished by its much narrower leaves in proportion to their length, and its smaller seeds. The leaves of *A. tularensis* are never cordate (heart-shaped) at the base as they are in *A. cordulata* (Hall and Clements 1923).

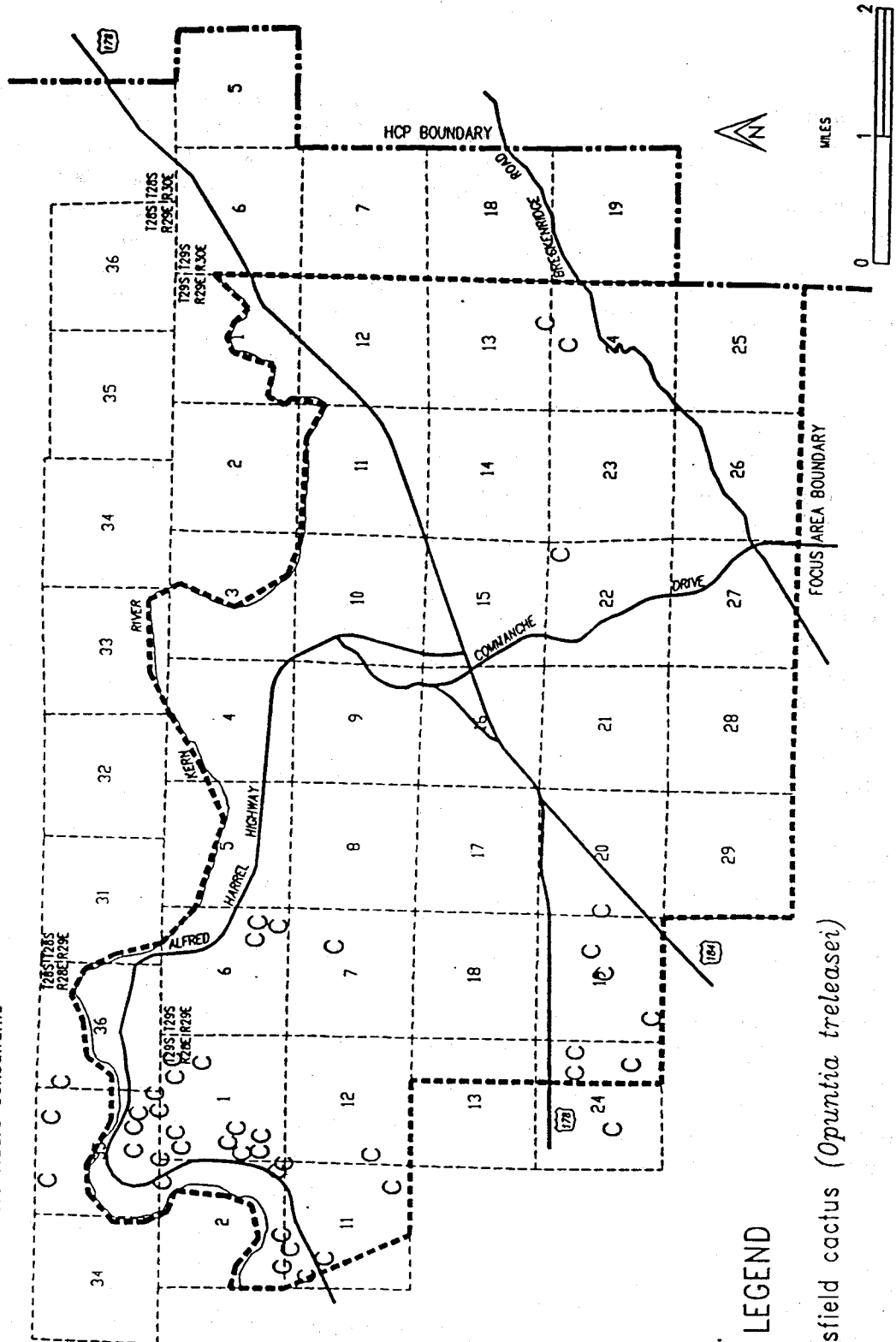
The Bakersfield saltbush historically occurred on the borders of alkali sinks and on alkaline plains in southern Kern County. First collected in the early 1890's, it had not been seen since the 1930's, until its recent rediscovery in 1983 on the southern edge of Kern Dry Lake (Gator Pond). Here it was found in relatively undisturbed alkali sink vegetation and on a narrow, low, manmade berm. It may be present only during exceptionally wet years (Twisselmann 1967) in the Lowland Valley Sink Scrub natural community, associated with rough-leaved dropseed grass (*Sporobolus asperifolius*), salt grass (*Distichlis* sp.), alkali heath (*Frankenia* sp.) and pickleweed (*Salicornia* sp.). It occurs from 300 to 400 feet (90 to 120 m) above sea level.

Since 1985, only one population is known at The Nature Conservancy's Kern Lake Preserve. No individuals of that population are known to have germinated during the dry 1989 season. Studies of *Atriplex tularensis* indicate that it may hybridize with *Atriplex serenana*, the bracted saltbush, a closely related and widespread species that tolerates drier conditions. Monitoring data over the past several years suggests that this last population is in decline and faces a serious danger of extinction (CDFG 1990).

• FIGURE 14 -- NORTHEAST - PLANT SPECIES SIGHTINGS - ALL STUDIES

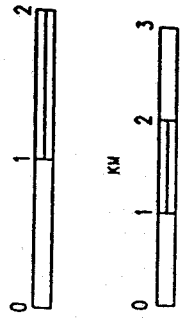
NORTHEAST - PLANT SPECIES SIGHTINGS

METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reid Associates with
 Quod Consultants and Tierra Madre Consultants



LEGEND

C - Bakersfield cactus (*Opuntia treleasei*)



The CNPS Inventory lists extirpated, historic populations of the Bakersfield saltbush in the Conner and Weed Patch USGS quadrangles. The northern quarter of each of these two quadrangle are within the MBHCP study area at extreme south and southeast respectively.

6. Slough Thistle (*Cirsium crassicaule*)

The genus *Cirsium* comprises thistle-like plants with white, pink or purplish flowers. It is in the Asteraceae (Sunflower) family. Member species have more than one flower per head. The receptacle, or end of the flower stalk on which the floral organs are lie, is non-fleshy. The pappus bristles (appendages that crown the ovary and aid in dispersal) are feathery. *Cirsium crassicaule* is an annual or biennial herb, 3.3 to 9.8 feet tall (1 to 3 m). It sometimes spreads by new rosettes from the base. The stem leaves are pinnately parted with clasping bases that form spiny ear-shaped lobes. The upper surfaces of the leaves become glabrous (smooth and hairless) with age while the lower surfaces are pubescent. The tall, subglabrous flower heads are pinkish purple or sometimes white and 0.8 to 1.2 inches wide (2 to 3 cm). The outer phyllaries (bracts below the flower head) each have a single, long, stiff terminal spine and often a few shorter lateral spines arising near the apex.

The introduced *Cirsium* that may be encountered do not have spines on the margins of the phyllaries. No other native thistle occurs in this habitat.

The slough thistle usually occurs on the banks of streams, washes, sloughs or canals, sometimes in moist to wet places. It sometimes grows in disturbed areas. Populations fluctuate from year to year. Healthy populations one year may be completely gone the next with no evident reason.

The CNPS Inventory lists a population(s) in the Tupman USGS quadrangle. The majority of that quadrangle is within the Southwest Focus Area.

8. Recurved Larkspur (*Delphinium recurvatum*)

Recurved larkspur has shallow, woody, fibrous roots. It is in the Ranunculaceae (Crowfoot) family. The stems are reddish or purplish, ranging from 7.9 to 23.6 inches tall (20 to 60 cm). The stems stand erect and are either smooth or covered with a light pubescence. The palmatifid leaves, 0.5 to 1.2 inches wide (1.5 to 3 cm), have few-parted divisions and grow mainly on the upper part of the stem from ascending-erect petioles. The ultimate leaf segments are hairy on the underside, blunt and have an abrupt, terminal point. Sepals are light blue, oblong to ovate in shape with blunt, incurved tips with sparse, flat lying bristles. Petioles are 0.4 to 0.6 inches long (10 to 16 mm). The spur, the hollow projecting appendage of the larkspur calyx is straightish and 0.4 to 0.55 inches long (10 to 14 mm). The conspicuous upper petals are white or cream colored. The lower petals are whitish to pale-blue, bearded and detoid-ovate in shape. The sinus or indentation between the lobes of the corolla, is open. The thinly haired follicles are 0.35 to 0.5 inches long (9 to 12mm). Seeds are light colored and 0.04 inches (1mm) and broadly white-winged.

The recurved larkspur lives in subalkaline soils of bushy or open places in alkali sink and valley grassland habitats. It was known in Glenn and Butte Counties and from Contra Costa County south to Kern County. It flowers from March to May.

The California Native Plant Society Inventory states that the recurved larkspur is threatened by a proposed reservoir and that field surveys need to be conducted at areas of historical records. The plant is listed as occurring in Stevens, Edison and Tupman quadrangles, sections of which are within the MBHCP Study Area.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

III. HABITAT CONSERVATION PLAN

A. PLAN OVERVIEW

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) sets forth a program for the preservation and protection of habitat for several rare or endangered species found in the study area in exchange for the loss of some existing habitat from urban development. Development allowed by the MBHCP will also result in incidental take of some of the species.

1. Actions Subject to Permit

The MBHCP describes a method of collecting funds for the acquisition and/or enhancement of natural lands and restorable lands for the purposes of creating preserves. This is the mitigation for impact on species habitat. The MBHCP relies on cooperation among local, state and federal agencies to create the preserves. MBHCP implementation will be the collective responsibility of the City of Bakersfield and the County of Kern, with participation from the U.S. Fish and Wildlife Service, California Department of Fish and Game, The Nature Conservancy, and possibly others.

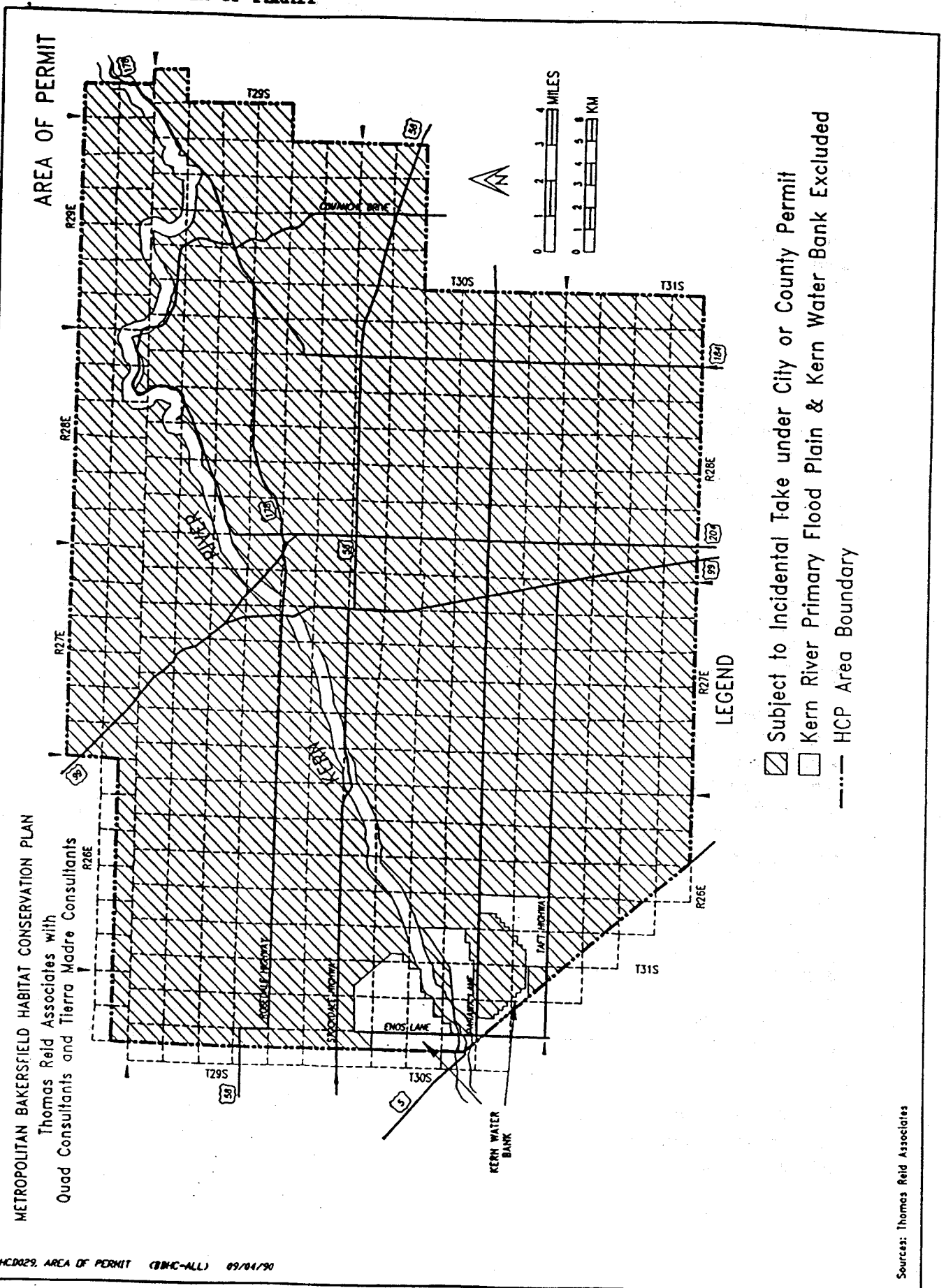
The MBHCP applies to the entire 2010 Plan area, but the permit only applies to City or County actions or actions by others which involve City or County permits. The permit and accompanying conservation plan authorize the incidental take for lands within the 2010 General Plan area excluding lands within the Kern River primary floodplain and the Kern Water Bank project area (see Figure 15).

The primary floodplain is excluded because of the need to assure a dispersal corridor through the MBHCP area. The City will continue operations in the floodplain in conformance with the Kern River Channel Maintenance Program to ensure adequate flood water discharge capacity. The river area shown on Figure 15 is schematic -- at the scale of the figure, the actual primary floodplain is difficult to depict. For implementation of the MBHCP, the exact definition of the primary floodplain is to be the Kern River Designated Floodway as adopted by the State Reclamation Board. The designated floodway boundary is delineated on 1 inch = 200 feet aerial photos prepared by the Department of Water Resources. These maps are on file at the City of Bakersfield Water Resources Department and Planning Department. Management of the designated floodway was detailed in the City of Bakersfield Kern River Channel Maintenance Program EIR (December 1985) and the Kern River Parkway Plan EIR (September 1988). These documents are on file at the City of Bakersfield Planning Department.

The Kern Water Bank is excluded because it is not anticipated that there would be City or County approved urbanization of the area and because it is targeted for MBHCP preservation action.

The MBHCP's primary focus is on lands converted to urban uses; the land subject to urbanization may be either in agriculture, oil production, or vacant --- the important factor is the ultimate land use.

FIGURE 15 -- AREA OF PERMIT



METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Land use change from a natural state to oil production or agriculture is not addressed by the MBHCP. Some ancillary land uses (e.g. a dairy, agricultural industries, or similar facilities) are subject to City or County permit and are included in the MBHCP. Exclusion from the MBHCP means that an action which results in an incidental take of an endangered species will not be covered by the City/County Section 10(a) permit and may be in violation of the Endangered Species Act.

Oil and agricultural interests may either participate in the Kern County Valley floor HCP effort, request amendment to the MBHCP to be included, or they may seek to resolve endangered species issues directly with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

Special agencies, state agencies, and entities exempt from local permitting have various options with regard to endangered species issues. In addition to the option of participation in an alternative Section 10(a) permit, special agencies can elect to participate in the City/County permit by complying with a City/County building permit or other similar approval.

2. Urbanization and Take of Endangered Species

Urbanization -- along with agriculture and oil development -- in the Metropolitan Bakersfield area has significantly reduced the amount of natural land available for use by plant and animal species. At least 9 species of concern occur or are likely to occur within the study area. Some of these are already listed as endangered by the U.S. Fish and Wildlife Service (San Joaquin kit fox, blunt-nosed leopard lizard, Tipton kangaroo rat, Bakersfield cactus) or are under review and are candidates for listing. In spite of its endangered status, the kit fox is commonly found in areas where urban development is planned, even in areas of intensive agriculture. Continuing growth in the Metropolitan Bakersfield area could result in the destruction of the listed or candidate animals and plants.

Section 9 of the Federal Endangered Species Act (ESA) protects endangered species by a prohibition against take. Without a permit pursuant to Section 10 of the ESA, it is illegal for an individual or governmental entity to take or authorize an activity resulting in the take of a listed species. The conservation planning process by which a local land use authority, such as the City of Bakersfield or Kern County, can legally allow development projects potentially resulting in take of such species is set forth in Section 10 of the ESA. This Section of the Act states that:

"The Secretary (of the Interior) may permit any act prohibited in Section 9 for scientific purposes. The Secretary may also permit any taking of fish and wildlife if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

According to the ESA the Section 10(a) or incidental take permit application must be supported by a conservation plan that specifies:

- 1) the impacts likely to result from the taking,
- 2) measures to monitor, minimize, and mitigate such impacts,
- 3) funding to implement such measures,

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

- 4) alternative actions that would not result in taking,
- 5) reasons for not utilizing such alternatives,
- 6) responses to unforeseen circumstances, and
- 7) any additional measures, the Service may require as necessary or appropriate.

The California Endangered Species Act (CESA) prohibits take of state listed threatened or endangered animal species. State Fish and Game's participation in the MBHCP will also allow incidental take of the State threatened and endangered species.

3. Requirements for Permit

The MBHCP is intended to meet the requirements of both the state and federal endangered species acts. The MBHCP would comply with state and federal environmental regulations set forth in the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Although not specifically stated in the ESA, it is appropriate for actions taken under a Section 10(a) permit to assist in carrying out species recovery plans and to improve the status of the endangered species affected by the action. In issuing a Section 10(a) Permit, the USFWS must conduct an internal Section 7 consultation. In order for the permit to be issued, the USFWS must conclude that the proposed action would not jeopardize the listed species.

The MBHCP meets these criteria in that it provides for:

1. Land acquisition outside of the MBHCP area, considering pre-approved acquisition areas identified by CDFG.
2. Acquisition and management of between 500 and 1,000 acres of land in the northeast portion of the study area for the primary purpose of preserving the Bakersfield cactus.
3. Acquisition and management of land, as feasible, adjacent to the Kern Water Bank project on the west side of I-5, south of Panama Lane.
4. Cooperative agreements for restoring and enhancing land as feasible within the Kern Water Bank project area and provide funding as appropriate.
5. Relocation or displacement of individuals in areas affected by development as a means of reducing direct take of endangered species.

4. Funding

The MBHCP will be funded through the collection of onetime mitigation fees. It will apply to all new construction taking place within the Bakersfield 2010 General Plan Area because all of the area not yet urbanized is in the historic range of the species of concern and may be occupied by the species. The mitigation fee is expected to be approximately \$1,250 per acre, due and payable at the time grading plans are approved or building permits are issued. The fee is expressed in 1994 dollars and would be increased to keep pace with inflation.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

In addition to local funding, state and federal conservation funds would be sought as a means to augment funds needed for land acquisition.

Land cost in the area varies widely, depending on location. Rangelands on the west side of I-5 may cost \$75 to \$200 per acre, while lands near existing urban infrastructure (e.g. sewer and water) in the northeast may cost up to \$10,000 an acre or more. Land acquisition for preserve development is anticipated to emphasize less accessible parcels, in better natural condition with an average cost of \$1,000/acre in the Northeast and \$500/acre in the Southwest.

Implementation of the management and enhancement activities in the preserves is expected to cost approximately \$400 per acre using CDFG figures for fencing and "endowment" costs to ensure long-term management. The mitigation fees collected on an annual basis should generate a level of funding which would pay for the acquisition and management of approximately 700 acres per year depending on the metropolitan growth rate.

Administration of the MBHCP is broken down into several categories: 1) local mitigation fee collection and fund management, 2) management of state and federal funding, if applicable, 3) preserve selection and acquisition, 4) preserve management, if applicable 5) land restoration and enhancement and species monitoring as necessary, 6) status report preparation, and 7) enforcement.

The MBHCP relies on the formation of an Implementation Trust which will be in charge of making major preserve acquisition decisions. Initial preserve management decisions will be made by the Implementation Trust, but specific preserve management plans will be developed and carried out by each individual preserve management entity.

A trust fund will be established to administer mitigation funds. At a minimum, Implementation Trust Administrators will include representatives from the City of Bakersfield and Kern County. The U.S. Fish and Wildlife Service and the California Department of Fish and Game will be advisors, but technically as permitting entities, cannot also sit as administrators for the permit holder. Other advisors could be added as deemed appropriate.

5. Impact of Plan

Urban development allowed under the Metropolitan Bakersfield 2010 General Plan will ultimately result in the loss of roughly 22.25 square miles (14,240 acres) of natural land, which currently supports populations of the species of concern. The development of public services needed to support the urban development will reduce the area of natural land by another 960 acres. An additional 52.25 square miles (33,400 acres) of other open lands, primarily agricultural, would also be affected by urban development. Public service development will affect 15 square miles (9,600) of other lands. Actual growth during the twenty year permit period is not likely to result in full urbanization of the 2010 Plan. Current growth estimates provided in Table 4 indicate that about 10,370 acres of land will be developed over the next 20 years.

The loss of natural land under the permit will be gradual, taking place over a period of 20 years. The development of habitat preserves in the MBHCP area could reduce the amount of natural land lost.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The local community will benefit from the MBHCP. The City of Bakersfield and Kern County will be able to proceed with the land use permitting process. In addition, preserves created under the MBHCP will provide open space and enhance the beauty of natural lands.

Implementation of this Habitat Conservation Plan and creation of preserves could modify but not impair development opportunities in the area. Rather it will result in the elimination of a major restriction imposed by the Endangered Species Act and allow the local jurisdictions to proceed with the customary land use planning procedures under state law. Unless an action affecting a federally listed species requires federal involvement (and subsequently a requirement for a federal Section 7 consultation), projects will no longer require separate processing and review by the USFWS. This action alone will reduce the amount of time it takes for project approval. In addition, the City and County can expedite the CEQA process as it relates to protected species on lands which comply with the ESA and CESA.

B. AGENCY AND LANDOWNER INVOLVEMENT/PARTICIPATION

1. U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) is a permitting entity and is responsible for enforcing the provisions of the Section 10(a) Permit, reviewing status reports and responding to requests for amendments submitted by the City or County.

U.S. Fish and Wildlife Service will be an advisor to the MBHCP Implementation Trust, providing guidance on how to spend mitigation fees.

The USFWS also is a primary recipient of Land and Water Conservation Fund (LWCF) monies as disbursed by the U.S. Congress. The LWCF will be valuable to have at the onset of the program and could be used to acquire land or for restoration/enhancement of already acquired land before the mitigation fees develop substantial revenues.

2. City of Bakersfield

The City of Bakersfield will undertake the following actions:

- Administer the Plan in areas within the city limits of Bakersfield.
- Collect mitigation fees for projects taking place within the city limits of Bakersfield.
- Designate a representative to act as an administrator for the MBHCP Implementation Trust. The Trustees disburse funds collected as appropriate to ensure land acquisition and preserve management consistent with the MBHCP and 10(a) and 2081 permits.
- Enact such ordinances and General Plan amendments as are necessary to establish the legal authority for local action under the Plan.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

3. Kern County

Kern County will undertake the following actions:

- Administer the Plan in areas within the County which are outside the city limits of Bakersfield and within the 2010 General Plan area.
- Collect mitigation fees paid for projects taking place outside the city limits of Bakersfield, but within the 2010 General Plan area.
- Designate a representative to act as an administrator for the MBHCP Implementation Trust. The administrators will disburse funds collected as appropriate to ensure land acquisition and preserve management consistent with the MBHCP and 10(a) and 2081 permits.
- Enact such ordinances and General Plan amendments as are necessary to establish the legal authority for local action under the Plan.

4. California Department of Fish and Game

The California Department of Fish and Game is a permitting entity and is responsible for enforcing the provisions of the 2081 Permit, reviewing annual status reports and responding to requests for amendments submitted by the City or County. The Department will also:

- Serve as advisor to the MBHCP Implementation Trust.
- Assist as appropriate in preserve ownership and management. It is the intent of the Implementation Trust to deliver title of most or all Habitat Management Lands to CDFG, along with funds for the management of such lands in perpetuity.

5. The Nature Conservancy

Since some mitigation fee money may be used to expand existing Nature Conservancy preserves outside the HCP boundary or for acquisition of TNC sponsored Bakersfield cactus preserves in the northeast, a representative of TNC may sit as an advisor to the MBHCP Implementation Trust.

6. Landowners

The general public with development interests or land holdings in the HCP area is collectively termed "Landowners". Landowners who have any parcels in the study area which is proposed for urban development will be covered by the incidental take provision of the Section 10(a) permit. Such development will be subject to the one time payment of approximately \$1,250 per gross acre of land disturbed by development activities. The fee is payable to the City or County at the time a grading permit, grading plan approval or building permit is issued.

C. CONSERVATION PLAN APPROACH AND LIMITATIONS

The legal subject of the Section 10(a) permit for Metropolitan Bakersfield is the listed species. The primary planning focus of the MBHCP is the *habitat* of the species of concern. Much of the activity to be conducted under the MBHCP is directed at protecting and enhancing (restoring) various native habitats. The ultimate goal of the MBHCP is to create and enhance habitat preserves comprising 10,000 acres or more, depending on the amount of urbanization.

The emphasis on habitat protection, rather than just the species, reflects a comprehensive ecological approach to the problem of endangered species conservation. The need for the comprehensive ecological approach stems from several legal and biological constraints.

1. Species of Concern

The species of concern for the MBHCP are a diverse group of plants and animals. While several species occupy the same habitat, others occur in habitat not occupied by other species of concern. The only feasible approach, both biologically and economically, is to preserve and protect representative habitat for all the species. In this way, one preserve will provide habitat for several species. The need for "specialty" preserves (preserves design for one species) will not be eliminated, but can be reduced.

2. Dependence on Ecosystems

The species of concern have a complex dependence on other members and components of their ecosystem, and cannot be preserved without the preservation of the entire ecological community of which they are a part. Not enough is known about the specific needs of many of the species to allow a species specific habitat manipulation program. To the contrary, a program oriented toward the greatest diversity of species is more likely to meet the long term needs of each species.

3. Other Species

In addition to the species specifically addressed in the MBHCP there are other rare, threatened or sensitive plants and animals native to the San Joaquin Valley. Some of these have state or federal protected status (refer to Table 2. Other Species). It is inappropriate to attempt a piecemeal approach to endangered species conservation involving a separate needs assessment and a separate plan for each plant or animal. Furthermore, there may be other, yet unlisted species that are in fact threatened by urban growth. If the present habitat planning effort is successful in preserving habitat for the species of concern, it is likely to preserve habitat for other species as well.

4. Preservation of Populations

The Federal Endangered Species Act affords protection to endangered species, including subspecies or populations of vertebrates. The goal of this HCP is to preserve the existing genetic variability and fitness of the species of concern and to allow for the expression of these genetic resources in the wild.

5. Limitations in Establishing Preserves

During the biological studies for the MBHCP (described in Chapter II) it became apparent that most of the natural lands in or near the MBHCP plan area are concentrated in the river corridor, the northeast, and the southwest (see Figure 3), with a few sections of natural lands isolated amidst large areas of agriculture. Some 70% to 80% of the study area is already eliminated by urban development and agriculture. As a result, the most appropriate locations for potential preserves within the study area boundary are the Northeast and Southwest Focus Areas. These conceptual preserve locations were suggested based on the clustering of species sightings from both previous sighting sources as well as the current MBHCP field work.

Species-specific preserves were considered. However it was decided that in designing preserves for the San Joaquin kit fox, large enough areas could be set aside to provide habitat for many of the other species of concern, such as the blunt-nosed leopard lizard, the kangaroo rats and even rare plants. Species-specific preserves, however, were deemed necessary for the Bakersfield cactus. Species-specific preserves may also be appropriate for small animals of limited range such as the Tipton kangaroo rat.

The majority of multi-species preserve acquisitions are expected to take place outside the permit area in pre-approved acquisition areas.

D. FUNDING PROGRAM

Section 10 of the Endangered Species Act specifically requires that the conservation plan supporting an application for a Section 10(a) permit provide an adequate funding program. Like previous HCP's elsewhere, the Metropolitan Bakersfield Habitat Conservation Plan will be primarily funded through the payment of "endangered species habitat mitigation fees" for new urban construction in potential habitat of rare and endangered species. State and federal funding will be sought as a means to augment the local funding program.

During the planning process for this HCP, both the City and County have implemented an interim habitat fee collection ordinance. That ordinance requires that private entities applying to construct new urban development must pay a \$680 per gross acre fee. Funds generated under the interim fee collection ordinance are being used to pay for preparation of the HCP and to pay for initial program implementation, including the initial purchase of preserve lands. It is expected that about \$2,000,000 will be available for initial program implementation. Upon program implementation, a permanent ordinance will be enacted by both jurisdictions or permittees to fund habitat acquisition and enhancement programs.

1. Development Fees

Local funding will be generated through the collection of one-time fees paid on all new urban construction taking place within the Metropolitan Bakersfield 2010 General Plan area. The Bakersfield 2010 General Plan "is a policy document designed to give long-range guidance to those making decisions affecting the character and future land uses in the Metropolitan Bakersfield Planning Area. It represents the official statement of the community's physical development as well as its economic, social and environmental goals" (page 1). The Draft General Plan was issued in October 1987 and adopted in 1990 after extensive public input.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The MBHCP fee is calculated at approximately \$1,250 per gross acre. The fee was determined using a \$600 per acre average land cost and adding a \$400 per acre fee which includes the cost of improvements (\$100) and management ("endowment" - \$300). Program administration costs of \$100 per acre were also added to arrive at \$1,250 per acre. All references to the mitigation fees in this document are in year 1994 dollars. A more detailed discussion of the fee calculation is included in Appendix B.

The fee will normally be collected on all new urban development at the time a grading permit, grading plan approval or building permit is issued and will be separately collected by the City of Bakersfield and Kern County. The fee will be applied to the entire parcel to be developed. Parcels with fractional acreage will be charged on a pro rata basis, for example, a half acre parcel will pay \$625 and a 1.5 acre parcel will pay \$1,875.

However, the effect of habitat fragmentation, impact of domestic animals, non-native landscaping, increased roads and traffic, is such that even low density development can effectively take kit fox or other endangered species from the general area affected. The lowest density residential classification in the 2010 General Plan is Rural Residential at one dwelling per 2.5 acres minimum. Because even this low level of development would displace species of concern, the full gross acreage will be subject to the fee. Parcels larger than 2.5 acres in size designated for residential, resource extraction or agriculture will pay based on the area actually subject to urban development but for no less than 2.5 acres.

The administrators will be responsible for protecting the fund from inflation by adjusting annual mitigation fees each year. The adjustment should be based on the Implicit Price Deflator for State and Local Government purchase of goods and services as published by the U.S. Department of Commerce. The administrators will also provide for periodic auditing of the Implementation Trust.

All City or County public projects will be covered by the Section 10(a) permit. Small scale local public projects (less than 10 acres) undertaken for strictly public purposes and incidental to urban growth are exempt from the fee requirements of the HCP since they are developed in response to increased urban development although their acreage loss must be mitigated. Mitigation fees paid by private landowners for urban development go towards mitigating impacts of the urban development and include the associated public improvements such as roads and parks needed to accommodate the specific development. Examples of exempt projects are small public works projects, sponsored by a local public agency to meet the needs of the general population. Note that roads, park, fire and library facilities responsibilities in development parcels are counted in the gross area determination and subject to the fee.

Habitat fees for the public facilities referenced above will be based on the demand for facilities resulting from the proposed development.

Public projects of a commercial nature where user fees are collected or where private entities operate facilities by franchise (e.g. a public golf course) are subject to the landowner fee provisions of the MBHCP.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Large public works projects over 10 acres in extent will be assessed a fee in order to allow the Implementation Trust to keep the cumulative mitigation in advance of take in the HCP area. Generally, a large public works project will have a long-term application that won't be paralleled by fees collected from accommodated growth over a period of only a few years. In most instances, financing for a large project could incorporate the several thousand dollars that the fee represents.

As an alternative to fee assessment for large public works projects, a large project could include open space as preserve or buffer land or meet enhancement goals in some other way deemed appropriate by the Implementation Trust.

Because the MBHCP Section 10(a) Permit only applies to actions by the City or County, state projects such as state highways, hospitals or schools in the MBHCP area which do not require permits from the City and/or County are not automatically covered by the incidental take permit. Such projects can either be incorporated into the MBHCP program on a case-by-case basis by voluntary involvement of the local permitting process without requiring an amendment to the permit, or alternately, the state can negotiate separate endangered species mitigation with the resource agencies. If MBHCP participation is sought, specific mitigation fees will be determined from the same gross acreage basis as would be used for a conventional applicant.

As with public projects, landowners with large land holdings in or near designated preserve areas may donate land *in lieu* of some or all of the mitigation fee, if consistent with the preserve acquisition criteria. This can only be done on lands where specific conservation goals are being met by the particular parcel, e.g. a small Bakersfield cactus preserve or other rare plant preserve is created, or where dedicated land is adjacent to an established preserve. Such *in lieu* arrangements must be as determined by the Implementation Trust, not by either City or County independently.

However, any project specific mitigation agreed to and/or implemented prior to the issuance of the MBHCP Section 10(a) and 2081 permits cannot be claimed to reduce mitigation requirements of the MBHCP for subsequent project approvals unless agreed to by the wildlife agencies. It is assumed that prior mitigation was both sufficient and necessary to mitigate prior development and cannot be carried forward as a credit toward mitigation for activity under the take permits. Upon the issuance of the take permits, the Trust will obtain aerial photography of the permit area as a baseline for determining the extent of prior development and mitigation.

2. State and Federal Funds

It is hoped that state and federal funds will be used to augment local fees in acquiring preserve lands. Both the U.S. Fish and Wildlife Service and the California Dept. of Fish and Game should provide assistance with seeking outside funds. Any state or federal funds allocated to the program should be used for preserve acquisition in accordance with the specific requirements of the particular funds. The Implementation Trust should make decisions on where the funds should be used.

3. Expected Annual Revenues

Bakersfield growth varies dramatically depending on market and economic factors surrounding petroleum and agriculture, the traditional mainstays of the local economy. Estimates only indicate the rough magnitude of growth trends. The City has found that the growth trends described in the Draft 2010 General Plan are too high when compared to actual recent growth. As a result the City of Bakersfield Planning Department provided more realistic data on population growth trends which reflects reasonable, fiscally conservative growth scenario. This data was used in the MBHCP revenue assessment analysis.

The metropolitan growth data provided by the City Planning Department is provided in Table 4. It shows that by the year 2010 roughly 9,570 acres of land will be developed for residential use, 480 acres for commercial use, and 680 acres for industrial use. This amounts to a total of 10,730 acres of privately sponsored urban development by year 2010.

Under the May 1989 growth trend scenario, approximately 537 acres of land in Metropolitan Bakersfield will be developed for privately sponsored urban uses each year (up to year 2010 when 10,730 acres is reached). Since public facility uses are excluded from the above average annual growth figures, it is expected that mitigation fees will be paid for all 537 acres of privately sponsored development per year. If this level of annual urban development is actually realized, approximately \$671,250 per year would be collected through the mitigation fee process, assuming the \$1,250/gross acre fee. In 20 years, approximately \$13.5 million will have been collected (1993 dollars).

The primary function of the Implementation Trust is to keep the mitigation program adjusted to actual growth (take of species). The program is structured as pay-as-you-go mitigation. If growth proceeds more rapidly, greater fee revenue will be used to fund an accelerated mitigation program. See discussion of monitoring, below.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

**TABLE 4
SUMMARY OF EXISTING DATA AND PROJECTED GROWTH DATA
FOR METROPOLITAN BAKERSFIELD**

	EXISTING *	FUTURE INCREASE 1989 TO 2010
POPULATION	285,180	83,702 **
LAND USE		
Residential		
Acres Developed	29,180	9,570 (3.5 DU/acre)
Total DU	115,161	33,481 (2.5 persons/households)
Commercial		
Acres Developed	6,515	480 (5.67 acres/1000 pop)
Total Sq. Ft.	15,257,939	6,193,950
Industrial		
Acres Developed	5,508	680 (8.12 acres/1000 pop)
Total Sq.Ft.	8,998,673	5,440,630
Total Acres Developed	41,203	10,730

* Existing taken from Table 2 in March 1989 Hearing Draft of Metropolitan Bakersfield 2010 General Plan

** Population increase figure taken by subtracting projected 2010 population (403,370) from 1989 population (319,668) shown in Table titled "Population Growth Trends, Prepared May 4, 1989" provided by the City of Bakersfield Planning Department

Source: City of Bakersfield, Thomas Reid Associates

Some \$2,000,000 of start-up money collected through the interim mitigation fee ordinance will be used to begin the preserve acquisition process prior to the actual permitted take of the threatened and endangered species. In-lieu of mitigation lands being in place during the first year of program implementation, the implementation trust may establish a separate trust account, naming the CDFG as beneficiary, which would have in it sufficient funds to provide for the acquisition of habitat management lands to satisfy the first years expected habitat acreage needs.

It is expected that about \$35,000 per year will be spent on plan administrative costs for the City and County. This money will be used by each agency to pay for fee collection, acquisition program staff costs, trust fund management, Implementation Trust meetings, status report preparation, dispensing public information, etc. All other mitigation fees collected will be used for preserve acquisition, land improvement and management ("endowment") costs.

4. Alternative Fee Collection Process

The proposed method of local funding is based on a standard fee of approximately \$1,250 per gross acre of land developed. The Steering Committee considered an alternative method where landowners would pay fees based on the valuation of new development rather than on a per acre basis. In this system, fees would be assessed based on a fixed percentage of the building evaluation calculated for building permit. The reasoning behind this is that the MBHCP is supposed to mitigate the impacts of overall urban development in Metropolitan Bakersfield, not just land disturbance. Much of the actual "take" of kit fox comes from road kills, and it appears

that a sizable population of kit fox lives scattered throughout the agricultural area and in portions of the HCP area that would not be judged "natural" in the land cover analysis. It could be assumed that the cumulative impact on kit fox and other endangered and sensitive species in metropolitan Bakersfield results from urbanization as a whole.

In addition, the current fee collection program is time consuming and requires a fairly high degree of staff time for each application. This process also does not currently have a built in inflation factor. In order to avoid this tedious process, the fees could be collected during the building permit process by simply assessing all new development a certain percentage of the valuation of the project. Those classes of construction that generally represent new ground coverage would be assessed, remodel or renovation would not be assessed.

Building valuation data for the past ten years was obtained from the City. From 1980 to 1988 the annual average value of new development in the Bakersfield area was about \$155 million. An assessment of 0.43% of permit valuation (landowner/developer paying \$433 for every \$100,000 of project value, not including land) would provide \$671,250 per year or \$13.5 million in 20 years. Adding value from County building permits, the revenues would be comparable to the revenues that would be generated by the proposed \$1,250 per acre value.

The major advantages to a building valuation fee are:

- The process is already in place as a means to collect City and County processing fees;
- It will not require additional staffing or a new permitting step for developers;
- It has a built in inflation factor -- as the cost of new development goes up so will the amount of mitigation money collected, but the percentage collected will remain constant and won't have to be revised annually;
- All major construction will need a building permit and the process will catch all urban growth activity, unlike a process tied to tract maps or zoning.

Disadvantages of this alternative are:

- It places a higher fee burden on high value development without direct regard to the extent of habitat lost;
- Commercial projects and multifamily projects would pay several times that of low density residential projects affecting the same extent of habitat;
- The fundamental measure of take is land area affected, and a value-based fee departs from the customary area-based mitigation assessment used by USFWS and CDFG.

The building valuation method was rejected by the Steering Committee. While the administrative burden of collecting an area based fee is greater, there are greater assurances that the mitigation revenues will more closely track the pace of habitat loss in the MBHCP area.

E. REDUCTION OF TAKE

Urbanization will result in two forms of incidental take: direct take of individuals during development and indirect take by habitat loss and reduction in carrying capacity. While the primary thrust of the MBHCP is long term mitigation of habitat loss, there is provision for reduction of direct take of individuals.

1. Relocation Policy

Direct take can be reduced by any method which removes individuals from the construction site. The method depends on the species. Large animals, such as the kit fox, can be trapped and relocated to a safer location. Mobile species in general can be displaced if dens are closed or other provisions are made to exclude the animal or allow it to escape during construction. Presumably much of the present-day kit fox population in the partially urbanized Metropolitan Bakersfield area is continually shifting in response to a changing environment. However, the range of displacement is very limited for small animals such as Tipton kangaroo rat and blunt-nosed leopard lizard. Salvage experiments of perennial plants through transplantation (e.g. Bakersfield cactus) and annual species through seed collection and topsoil removal can be done and applied as study results indicate.

Relocation or salvage of endangered species from construction areas was addressed during plan formulation. In principal, salvage is simple: the species is removed prior to construction so that it is not killed (taken) during construction. In practice there is considerable expense associated with locating and removing the species of interest and there is considerable uncertainty about the true long term ecological value of the effort for species which are endangered primarily by declining habitat availability. However, the MBHCP needs to mitigate on-site take to the maximum degree practicable.

The MBHCP reduces kit fox take by: 1) allowing scientific collecting permit holders to remove animals from potential development areas to relocate to preserves, and 2) requiring excavation and closure of known dens to allow animals to escape construction area and possibly relocate on its own. The program described here is preliminary and the Trust can amend the MBHCP and take permits to abandon this approach if records show no practical effect.

The principal relocation effort would be made for kit fox because techniques are available for kit fox which are not now available for other, smaller species such as Tipton kangaroo rat and blunt-nosed leopard lizard. However opportunities for reducing take of the smaller animal species may emerge and the Trust can add a small animal program without amending the incidental take permits.

It is the intent of the MBHCP that the mitigation fee monies collected in Metropolitan Bakersfield go to long term mitigation programs. Thus a relocation program is not a directly funded program but is a requirement of developers. Local agency administrative costs for the program will be recovered from the fees.

2. Relocation Program -- San Joaquin Kit Fox

1. The Implementation Trust will maintain an inventory of known kit fox dens. "Known" means verified use, not just potential use, and reflects documented history of use, either from actual observations or from obvious signs of use: digging, scat, prey remains, etc. Information will come from a variety of sources, including biological surveys conducted for CEQA compliance on a project site (e.g. initial study), but there is no MBHCP requirement for pre-construction survey for kit fox dens.
2. The Implementation Trust will encourage efforts by others to relocate animals from known dens in areas subject to development. To do this, the Trust will:
 - 2.1 Maintain a map of areas approved for development or pending approval. This information can come from City and County approvals or other sources.
 - 2.2 Maintain a list of individuals holding valid permits or performing research on the species of concern, and systematically update those individuals on areas proposed for development.
 - 2.3 Require the inclusion in all Habitat Management Plans an evaluation of the value and suitability of each Habitat Management area to serve as a recipient of relocated San Joaquin kit fox or plant Species of Concern. If accepting relocated individuals is determined by CDFG and USFWS to be appropriate for a Habitat Management site, the Habitat Management Plan shall include the cost of relocation.
 - 2.4 Coordinate with landowners to encourage relocation activities by individuals holding valid permits.
 - 2.5 Ensure that relocation activity as provided for by the MBHCP is conducted by qualified parties.

A landowner is not required under the MBHCP to pay the cost of the relocation activity.
 - 2.6 Gather data on the success of relocation activities from those engaged in relocation.
3. If relocation is not practical prior to development, the landowner will be required to destroy any known dens to allow animals to escape construction area and possibly relocate on its own.
 - 3.1 Construction is not to be delayed on account of the presence of the endangered species.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

- 3.2 Where dens are known prior to City or County issuance of a land use permit, the requirement for relocation or den destruction will be made a condition of permit approval. Den destruction immediately associated with construction and required as a condition of local government approval is considered to be an incidental take and does not require a permit other than the master City/County Section 10(a) and 2081 permit.
 - 3.3 Methods for den excavation and closure to be used for displacement will be prescribed by CDFG and USFWS.
 - 3.4 The landowner will record and report to Trust whether animals were sighted during the displacement operation.
4. Upon notification of the property owner, any person holding proper permits may remove and relocate kit fox from known dens within the approved Urban Development Permit area. Permittee gaining access to private land in this way would have to agree to hold landowner harmless from injury.
 5. As part of the Implementation/Management Agreement, CDFG and USFWS will condition scientific collecting permit holders to notify the MBHCP Implementation Trust of activity in the MBHCP area and will notify the Trust of permits issued affecting the MBHCP area.
3. **Relocation Program -- Plants**
 1. The Implementation Trust will maintain an inventory of known rare plant locations. "Known" means a verified population, either extant, or documented during the past five years. Information will come from a variety of sources, including biological surveys conducted for CEQA compliance on a project site (e.g. initial study), but there is no MBHCP requirement for a pre-construction survey for plants.
 2. The Implementation Trust will encourage efforts by others to salvage plants from areas subject to development. To do this, the Trust will:
 - 2.1 Maintain a map of areas expected to be developed within a few years. The information can come from City and County permit approvals or from other sources.
 - 2.2 Maintain a list of individuals performing scientific research on the species of concern. Thus the Trust can direct collecting or research to areas likely to be developed in the near term.
 - 2.3 Require all preserve programs to include evaluation of the value and suitability of serving as a recipient of rare plants relocated from development areas. If relocation appears appropriate, cost of relocation may become a part of the preserve operating budget.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

- 2.4 At any time, and with permission of Trust any person holding proper scientific collecting permits may remove plant material in development areas.
 - 2.5 The Trust will recommend methods approved by the USFWS and CDFG to be used, but a scientific permittee may use alternative methods.
 - 2.6 The scientific permittee will record and report to Trust what occurred during the salvage operation (e.g. species involved, amount and type of plant material taken, where taken to, etc.).
3. Upon notification of the property owner, any person holding proper permits may remove and relocate rare plants within approved Urban Development Permitted areas. Where the salvage effort would entail substantial ground disturbance, such as topsoil removal, the land owner's permission will be required.
 4. As part of the Implementing Agreement, CDFG and USFWS will condition scientific collecting permit holders to notify the MBHCP Implementation Trust of activity in MBHCP area (eg. by annual report) and will notify the Trust of permits issued affecting the MBHCP area.

The Steering Committee considered requiring mandatory relocation of the San Joaquin kit fox and salvage of rare plants as an alternative. This was rejected because: 1) Relocation of kit fox is of doubtful biological effectiveness in an area where habitat is limiting populations and existing habitat is at carrying capacity; and 2) relocation and plant salvage imposes an economic burden in direct and indirect (delay) costs beyond the proposed mitigation fee. The Steering Committee determined that as much of the economic cost of the MBHCP to the community as possible should go toward the preservation and enhancement goals of the plan and not toward activities of questionable biological value.

F. HABITAT PRESERVES

The primary thrust of the MBHCP is long term mitigation of habitat loss by establishing permanent preserves for species of concern.

1. Opportunities, Focus Areas, and Existing Preserves

Of the 408 square miles in the Plan Area, roughly 82 square miles remain undeveloped in predominantly natural condition, and therefore, capable of supporting native species. Approximately 227 square miles is in intensive agriculture, 18 square miles is in moderate-to-heavy oil development, and the remaining 81 square miles is now urban.

a. Habitat Availability Within MBHCP Area

Although it is expected that acquisition efforts will focus on areas outside the permit area, opportunities for habitat protection exist within the MBHCP area.

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The Metropolitan Bakersfield Habitat Conservation Plan Steering Committee conducted a preliminary focusing study to determine which areas within the 2010 General Plan boundary were suitable for preserve acquisition. The initial land use analysis and biological survey made it clear that the majority of natural land is concentrated in three areas: 1) the Kern River corridor, 2) the northeast and 3) the southwest (see Figure 3). Several sections of natural land are isolated amidst large areas of intensive agriculture.

With consultation from California Department of Fish and Game and U.S. Fish and Wildlife Service staff, the Steering Committee decided that the most appropriate locations for potential preserves within the study area boundary are the Northeast and Southwest Focus Areas. The conceptual preserve locations were suggested based on the clustering of species sightings from both previous sighting sources as well as the current MBHCP field work. Land use data depicted in Figure 3 for the area will be updated based on aerial photography taken within 90 days of permit issuance and may affect the data displayed on the following pages. The aerial photography update is required by CDFG and USFWS as a basis for the monitoring program.

Northeast Conceptual Focus Area

The Northeast Conceptual Focus Area comprises approximately 32 square miles. It is located in the northeast portion of the study area, south of the Kern River and east of the urban portion of Bakersfield (Figure 4).

Existing Land Use (Figure 16): Much of the land in the northeast is undeveloped. The majority of the land use is agriculture and grazing, as well as several oil fields (Ant Hill), public parks (Hart Park), and open space.

Land Ownership: Ownership patterns in the northeast reflect potential for oil production (lands owned by Chevron), large potential for residential development near the Kern River (lands owned by Nickel), extensive agricultural uses, and multiple ownership. Acquisition of large contiguous parcels (thousands of acres) may be difficult in the northeast due to multiple ownership and need to assemble the preserve from smaller parcels.

Habitat Type (Figure 5): There has been significant degradation of lands in the northeast due to illegal off-road vehicle use, trash dumping, and over grazing. As a result, much of the vegetation is poor quality. There are extensive areas of non-native grassland with small areas of riparian habitat near the river and smaller remnant patches of Sierra Tehachapi Saltbush Scrub scattered around the focus area.

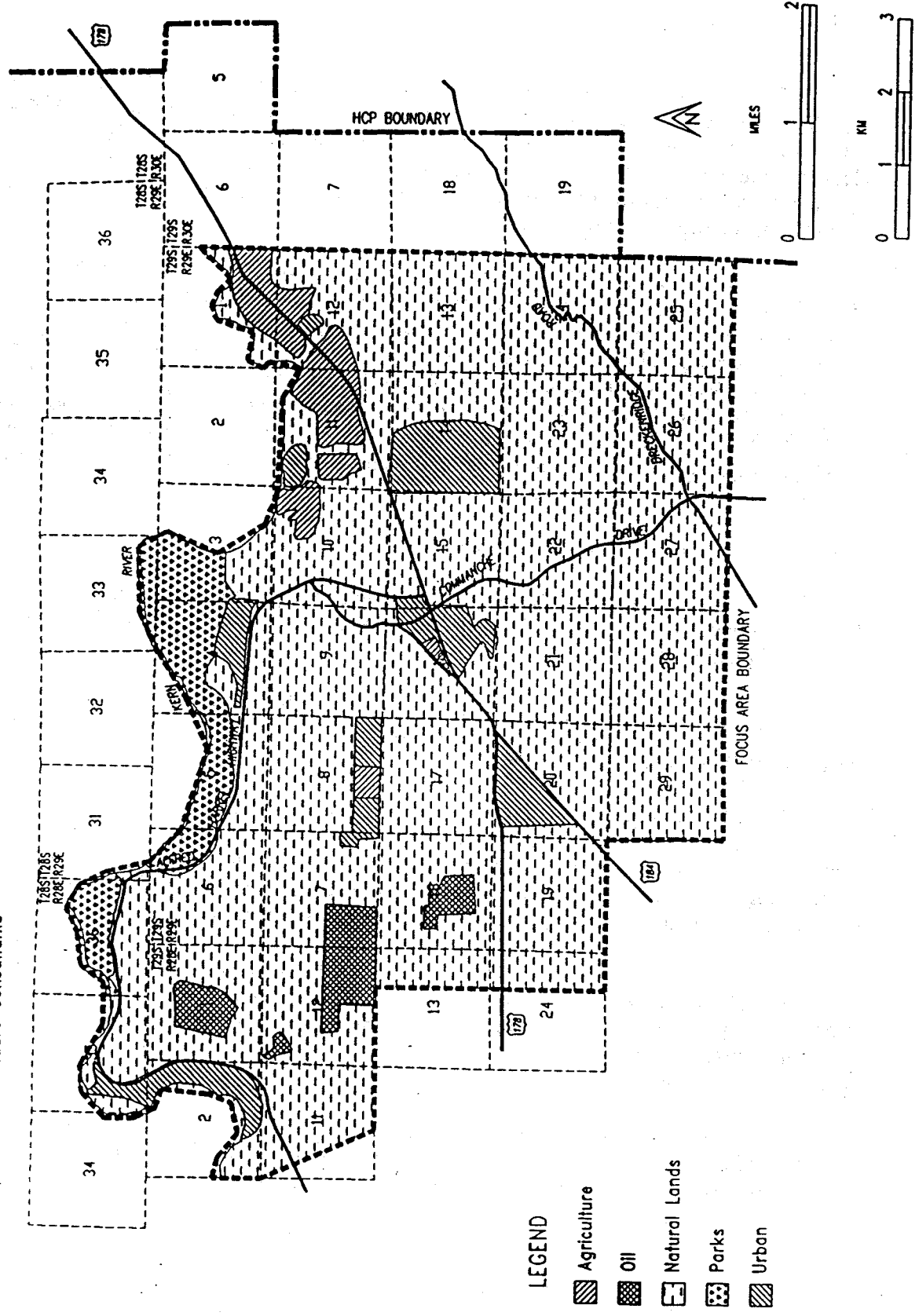
Future Land Use (Figure 17) shows that the 2010 Plan reserves much of the area as grazing land and open space along the steeper banks of the Kern River. Various categories of low density residential use are shown for land now natural, supporting kit fox.

FIGURE 16 -- NORTHEAST LAND USE






NORTHEAST - LAND USE

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 Thomas Reid Associates with Planning Collaborative,
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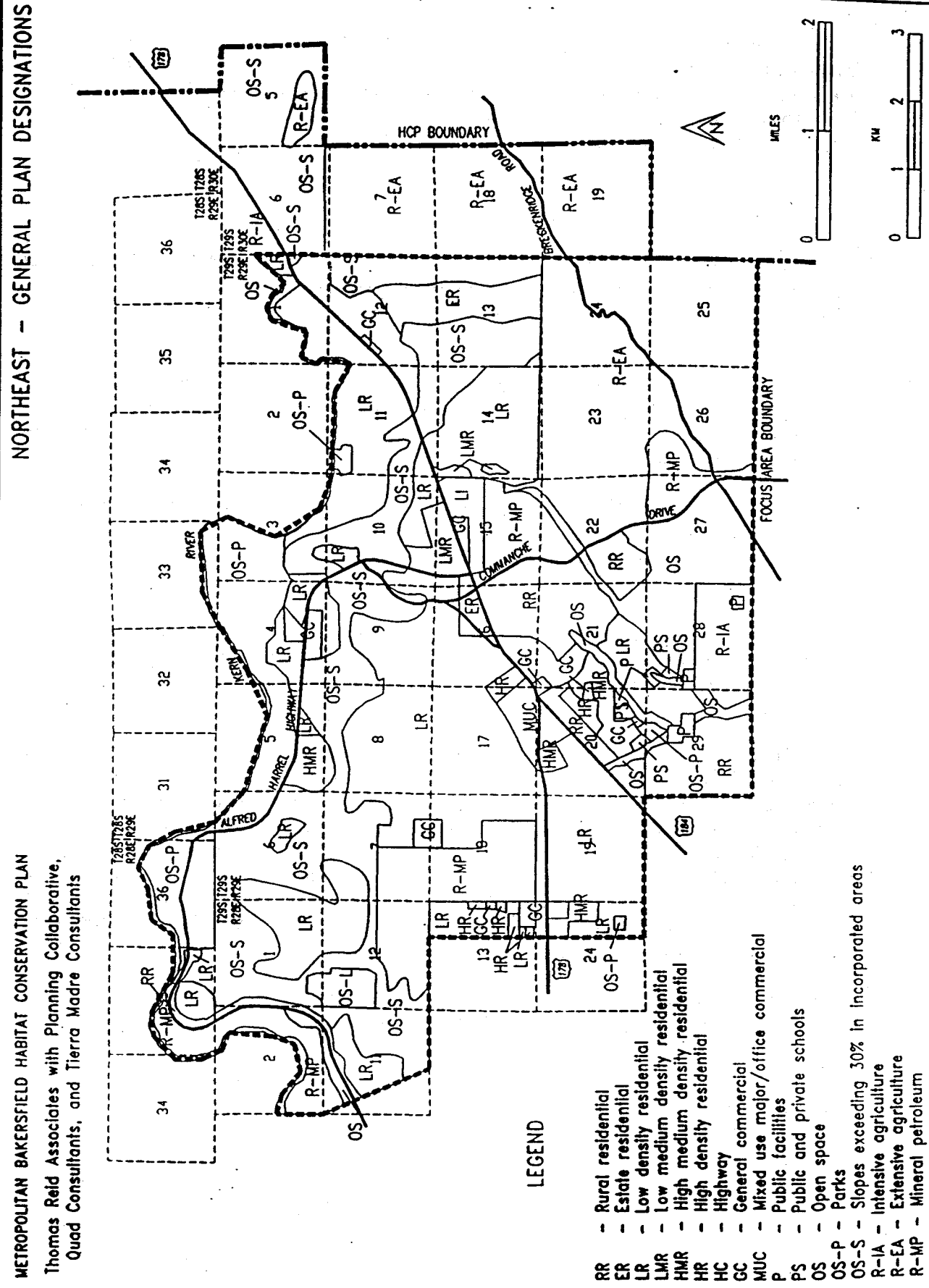


LEGEND

-  Agriculture
-  Oil
-  Natural Lands
-  Parks
-  Urban

Sources: Aerial Photos Taken Feb. 1988

FIGURE 17 -- NORTHEAST 2010 GENERAL PLAN DESIGNATIONS



Species of Concern (Figures 9 and 14): The northeast focus area has value for the Bakersfield cactus which is found along the Kern River bluffs. There were many sightings of the San Joaquin kit fox in the central portion of the focus area as well as just north and south of the Kern River. One sighting of a blunt-nosed leopard Lizard was recorded during the course of the MBHCP field survey. No other species of concern were found in the area during the 1988-89 field season.

Southwest Conceptual Focus Area

The Southwest Conceptual Focus Area is approximately 80 square miles of land on both sides of Interstate 5. A significant amount of undeveloped land, 20 square miles, supports habitat for several of the species of concern. A large area of fallow agriculture land has potential to be restored to habitat.

Existing Land Use (Figure 18): Intensive agriculture and oil production has been the dominant land use in the southwest. There are many square miles of land in intensive agriculture, fallow agriculture and oil production. Most of the natural land remaining is in low intensity oil production (Ten Section Oil Field).

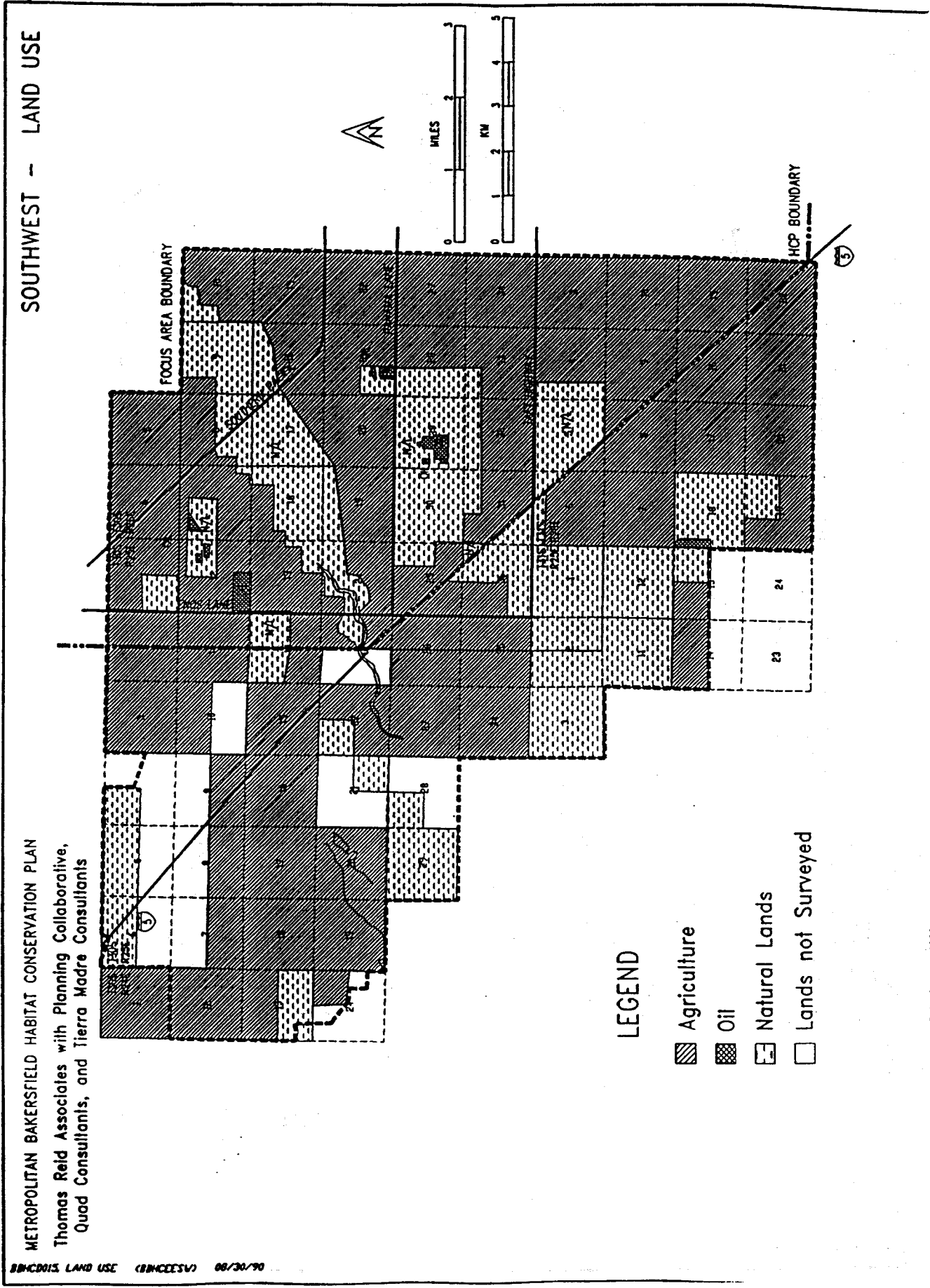
Land Ownership: Except for the Kern Water Bank project area which was purchased from Tenneco by the California Department of Water Resources, almost all lands are privately owned. A more detailed discussion of the Kern Water Bank project is contained in Chapter IV.B.2.b.

Habitat Type (Figure 6): About 30 to 40% of the land in the Southwest Focus Area is in a natural state. However, as with the natural lands in the northeast, much is of poor to moderate quality, again due to its proximity to a large urban center and a long history of oil production.

Species of Concern (Figures 10 and 13): The Southwest Focus Area currently supports populations of many of the species of concern. The majority are found in the southern portion of the focus area on the west side of I-5, south of the Taft Highway. During the 1988 field surveys performed to support the MBHCP, blunt-Nosed leopard Lizards, San Joaquin Antelope Squirrels, Tipton kangaroo rats and kit fox were observed in this area. The same area supports populations of the Hoover's Wooly-star. Kit fox are also found east of I-5. One leopard Lizard was observed west of I-5 in the northern portion of the focus area where observations of the San Joaquin Wooly-thread were made. The study also found evidence of the giant kangaroo rat in the Southwest Focus Area.

Future Land Use (Figure 19): Much of the land has an open space designation. About 22,000 acres has been targeted for the Kern Water Bank Project.

FIGURE 18 -- SOUTHWEST LAND USE



SOUTHWEST - LAND USE

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 Quad Consultants, and Tierra Madre Consultants

LEGEND





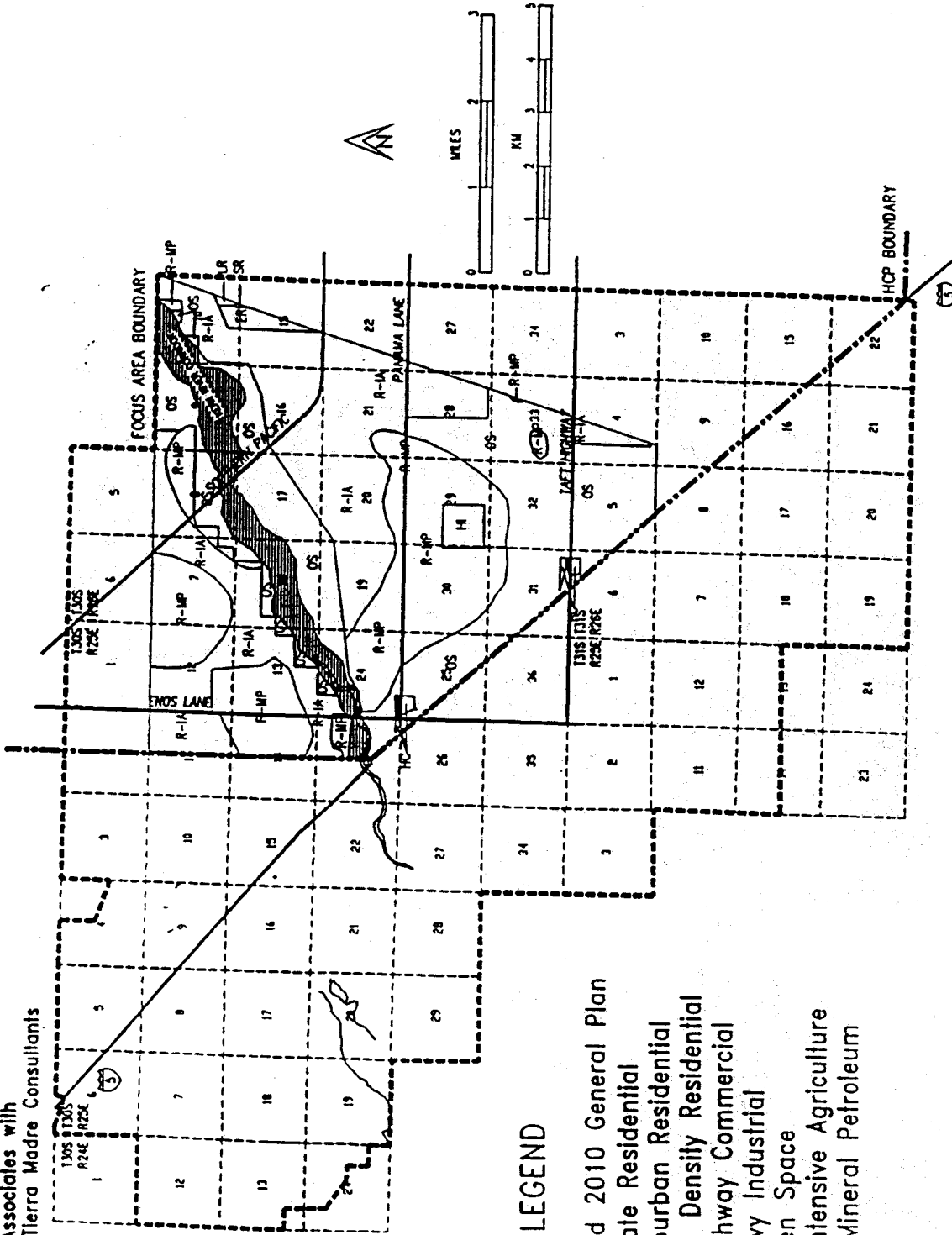
-  Agriculture
-  Oil
-  Natural Lands
-  Lands not Surveyed

FIGURE 19 -- SOUTHWEST 2010 GENERAL PLAN DESIGNATIONS

SOUTHWEST - GENERAL PLAN DESIGNATIONS

METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reid Associates with
 Quad Consultants and Terra Madre Consultants



LEGEND

- Bakersfield 2010 General Plan
- ER - Estate Residential
- SR - Suburban Residential
- LR - Low Density Residential
- HC - Highway Commercial
- HI - Heavy Industrial
- OS - Open Space
- R-IA - Intensive Agriculture
- R-MP - Mineral Petroleum

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Relationship between Conceptual Focus Areas

Other major areas of remaining natural lands are found in the Kern River Corridor and in the southwest portion of the study area. Some of the Kern River corridor is subject to development under the Kern River Parkway Plan. However, of the 1,400 acres comprising the Parkway Plan area, about two-thirds are reserved for natural open space which will act as a dispersal corridor for kit fox. Protection of the Kern River as a dispersal corridor is an important part of any preserve system. For this reason, the Section 10(a) permit will not allow City or County to permit incidental take in the primary floodplain of the Kern River. Although the river corridor floods occasionally, it is generally available for long range dispersal and can be effective in maintaining genetic exchange and in allowing natural recolonization of smaller habitat areas.

The southwest area contains far less natural land than the northeast, but is contiguous to agricultural lands which have restoration potential. In addition, there is natural land just outside the study area boundary in the southwest on the west side of I-5 which has good preserve potential.

Overall there appears to be enough potentially suitable preserve land within (and just outside) the study area to meet the project needs. However the practicality of acquiring some of these lands will depend on 1) purchase price, 2) ownership pattern, 3) contiguity with other suitable lands, and most importantly, 4) benefit to the Species of Concern.

b. Habitat Availability Outside of MBHCP Area

The Steering Committee also determined that the large extent of land suitable for preservation outside of the MBHCP area could be appropriate as long-term mitigation for activities in the Metropolitan Bakersfield area. These areas will be the focus of the acquisition effort for the MBHCP.

There is a variety of preserve opportunities outside of the MBHCP area. Several specific options are discussed here and most will be appropriate for the MBHCP mitigation effort. The actual involvement of the MBHCP will depend on the status of conservation activities in the MBHCP area and the status of outside preserve activities.

Under the MBHCP, the appropriate location, scope, and timing of participation in outside preserves will be determined by the Implementation Trust. The Steering Committee established the following participation criteria for outside preserves:

- 1) The preserve should represent the ecological communities and habitats of the species of concern for the MBHCP.
- 2) The preserves should be close to Bakersfield if possible so that populations on outside preserves could naturally or artificially exchange with populations in the MBHCP area.
- 3) Participation of the MBHCP in the preserve must clearly make a contribution to the area or management of the preserve such that there is a significant incremental benefit to the species of concern in the Bakersfield region.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

- 4) The preserve should be in Kern County if possible to confer local open space benefit to fees collected from Kern County .

Several candidate or existing preserves were evaluated for MBHCP participation. Suitability for participation will depend on among other things, species present, distance from permit area, and habitat quality. The Implementation Trust will evaluate each acquisition opportunity on a case by case basis.

Sand Ridge. The Sand Ridge Wildflower Preserve, located on the southeast margin of the South San Joaquin Valley in Kern County, is owned and managed by the Nature Conservancy (Figure 20). It is about 1 mile east of the MBHCP area. It occupies some 261 acres and includes portions of Caliente Creek. The total acreage includes a recently added extension area which contains colonies of the Bakersfield cactus and may provide habitat for the San Joaquin kit fox and blunt-nosed leopard Lizard and other species of concern. A historical population of San Joaquin wooly-threads reportedly occurred in the Sand Ridge area (Taylor 1987). If the extension area is acquired with MBHCP funds, The Nature Conservancy has expressed willingness to oversee long-term management of the area under its own funding program.

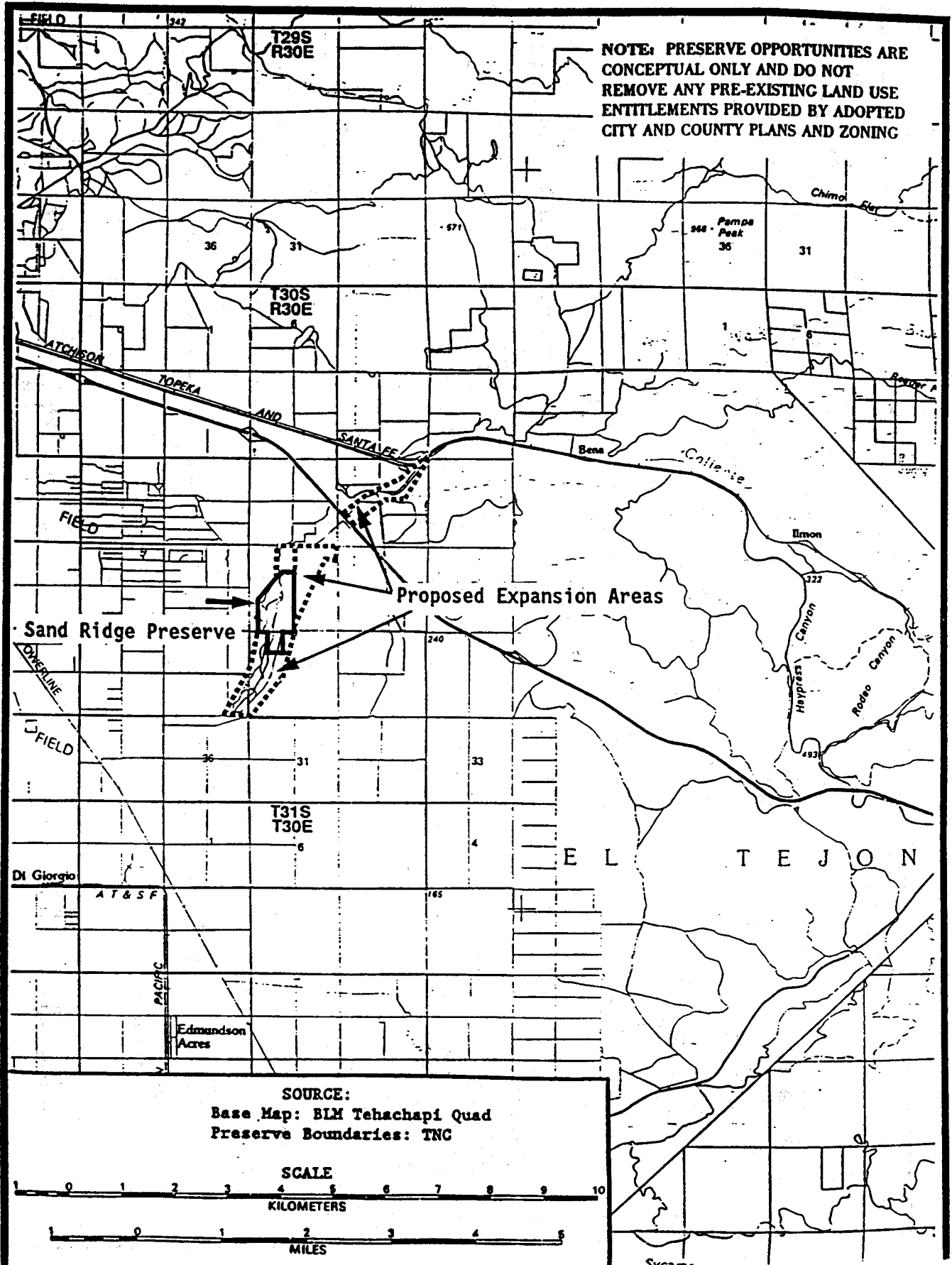
Lokern Road. This is an area of over 26,000 acres of relatively undisturbed natural land located about 20 miles west of the MBHCP area (Figure 21). The California Energy Commission has identified the area as having high preservation value since it supports many of the endangered and sensitive species found in the Southern San Joaquin Valley, including the San Joaquin kit fox, blunt-nosed leopard lizard, giant kangaroo rat, Kern mallow, and Hoover's wooly-star. The Nature Conservancy has already started the process of purchasing land in the Lokern Road area for habitat preserves and is hoping to develop an extensive preserve there someday.

The Carrizo Plain Macro Preserve project 50 miles southwest of Bakersfield will ultimately comprise 180,000 acres of natural lands -- somewhat more than half of this has already been set aside. The Committee rejected participation in the Carrizo Plain project because it is too distant and it supports substantially different species and habitat than are found in Bakersfield. Moreover, the program for creating the Carrizo Plain preserve is well established. By the time MBHCP efforts would be directed outside the Metropolitan Bakersfield area, the Carrizo Plain preserve would be essentially complete.

The Tule Elk Reserve near Tupman is managed by the California Department of Parks and Recreation (CDPR) and was originally established to provide habitat for a managed herd of Tule Elk.

More recently, the Reserve has been found to support a fairly widespread population of the Tipton kangaroo rat and San Joaquin pocket mouse (Boyd and Woodward 1987; DPR 1990). The San Joaquin antelope squirrel has been sighted several times from 1987 to 1990 on the western side. The Buena Vista Lake shrew, listed in Table 2 - Other Species of Concern, may be found at the Reserve. The area has been recommended by Williams (1986) to be included in initial studies to determine the status of this species. The Buena Vista Lake shrew and the Tulare grasshopper mouse (also listed on Table 2) are target species for a 1990 live trapping study.

FIGURE 20 -- SAND RIDGE PRESERVE EXPANSION AREA



NOTE: PRESERVE OPPORTUNITIES ARE CONCEPTUAL ONLY AND DO NOT REMOVE ANY PRE-EXISTING LAND USE ENTITLEMENTS PROVIDED BY ADOPTED CITY AND COUNTY PLANS AND ZONING

Sand Ridge Preserve
Proposed Expansion Areas

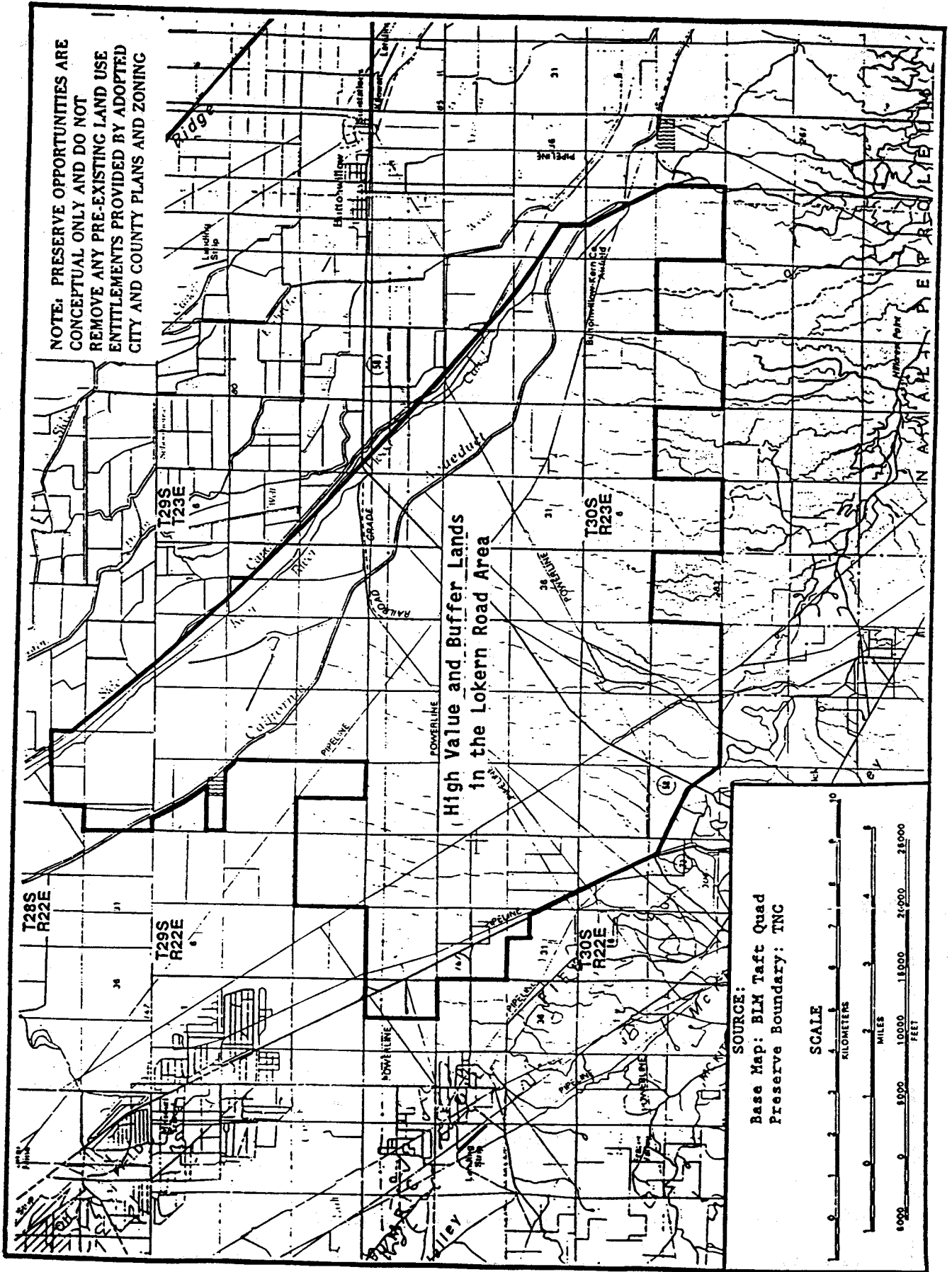
SOURCE:
 Base Map: BLM Tehachapi Quad
 Preserve Boundaries: TNC

SCALE

0 1 2 3 4 5 6 7 8 9 10
 KILOMETERS

0 1 2 3 4 5
 MILES

FIGURE 21 -- HIGH VALUE LANDS IN THE LOKERN ROAD AREA



METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Over 800 slough thistle, *Cirsium crassicaule*, were counted on the Reserve in 1988. Hoover's wooly-star, *Eriastrum hooveri*, may also be found on the west side of the Reserve as a population of approximately 2,000 plants were discovered in 1988 on land adjacent to the Reserve's western boundary.

The Reserve supports a limited population of blunt-nosed leopard lizard and is thought to provide foraging habitat for the San Joaquin kit fox (Boyd and Woodward 1987). The Reserve is approximately 956 acres in size and is approximately 18 miles southwest of Bakersfield.

Tule Elk Reserve is adjacent to the western border of the MBHCP Southwest Focus Area, the Kern Water Bank and the Elk Hills Naval Petroleum Reserve. The Reserve's strategic location could help connect the Kern Water Bank and Elk Hills with the Kern River, thereby adding a link to the Kern River dispersal corridor.

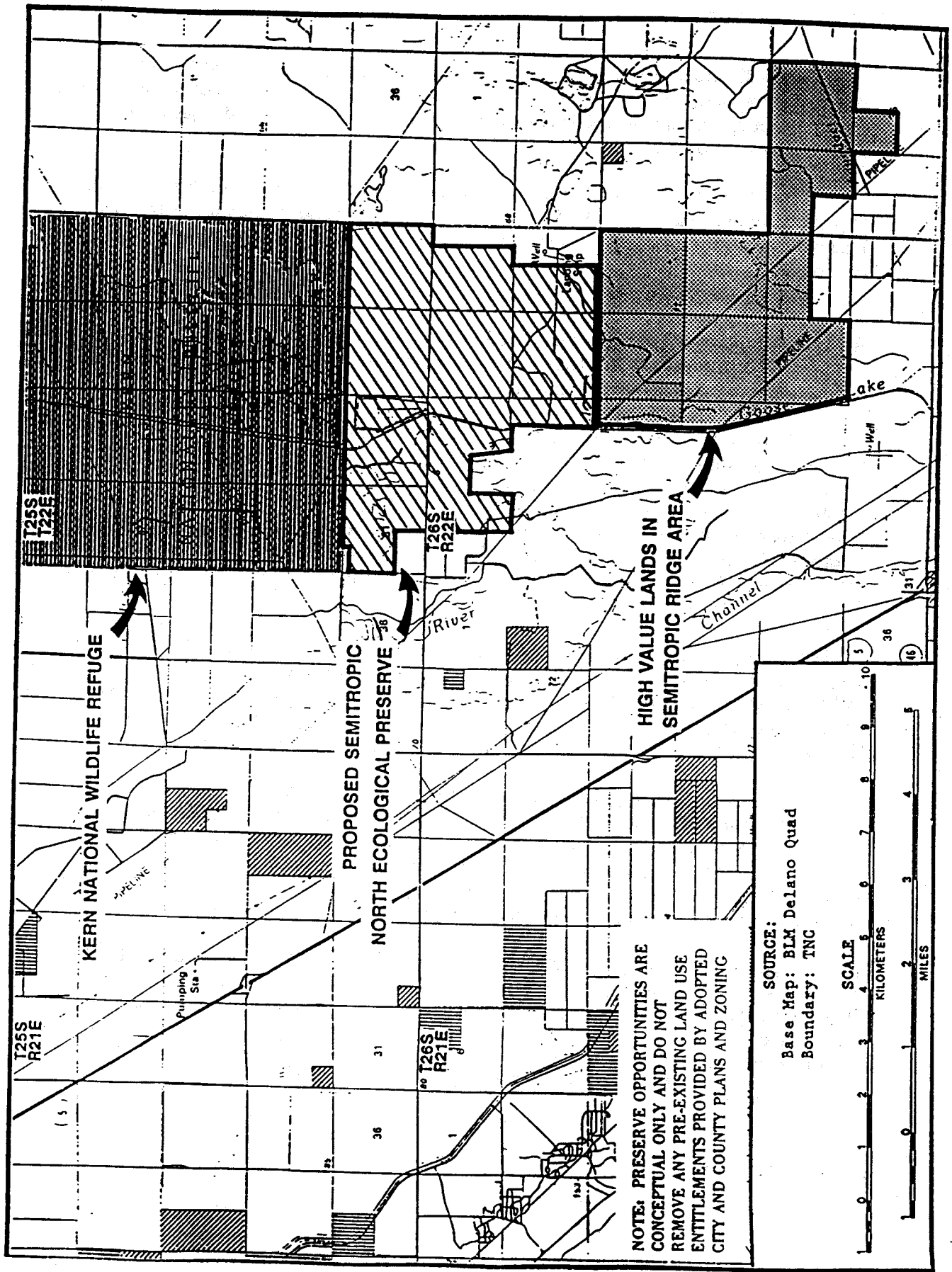
Semi-tropic Ridge and Paine Preserve, were considered to be more suitable in habitat type and geography than the Carrizo Plain project, although also outside the study area boundary. Participation in those programs was considered effective mitigation, but the area of natural land nearby remaining acquisition is limited. Participation was judged to be of lower priority than establishment of a very large preserve area, but can be done as opportunities arise. Addition of a few hundred acres will strengthen an established preserve, but would not go far toward establishing the scale of conservation necessary to mitigate the extent of growth forecast for Bakersfield (Figure 22).

The Elk Hills area southeast of Bakersfield contains much high quality natural lands and supports kit fox. However, most of these lands are within the Naval Petroleum Preserve property and the natural land with enhancement potential will probably be used to offset oil development impacts on endangered species and therefore would not be available for Metropolitan Bakersfield HCP use. This area provides a source of safe land for animals during SWRP floods.

Pixley National Wildlife Refuge, administered by U.S. Fish and Wildlife Service, is located approximately 45 miles north of Bakersfield. The approved Refuge boundary encompasses 9,330 acres, of which 5,994 acres are actually owned and managed by the U.S. Fish and Wildlife Service (Master Plan for the Pixley National Wildlife Refuge, 1986). The Refuge is known to contain blunt-nosed leopard lizards and Tipton kangaroo rats. Much of the land targeted for preservation has not yet been purchased.

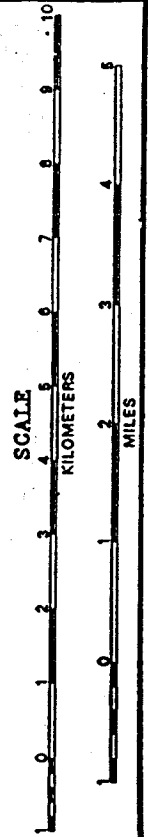
Kern National Wildlife Refuge, also administered by the U.S. Fish and Wildlife Service encompasses approximately 10,618 acres, of which approximately 6,643 acres are suitable for endangered species habitat. The Kern National Wildlife Refuge contains populations of the blunt-nosed leopard lizard and the Tipton kangaroo rat. San Joaquin Antelope Squirrels have been reported a few miles south of the Refuge but not in the Refuge itself. The Refuge is located roughly 43 miles northwest of Bakersfield.

FIGURE 22 -- HIGH VALUE LAND IN SEMI-TROPIC RIDGE AREA



NOTE: PRESERVE OPPORTUNITIES ARE CONCEPTUAL ONLY AND DO NOT REMOVE ANY PRE-EXISTING LAND USE ENTITLEMENTS PROVIDED BY ADOPTED CITY AND COUNTY PLANS AND ZONING

SOURCE:
Base Map: BLM Delano Quad
Boundary: TNC



METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The Allensworth Ecological Preserve located in southern Tulare and northern Kern counties is managed by the California Department of Fish and Game (Figure 23). The Nature Conservancy (TNC) has identified a proposed 6,000 acre high priority habitat expansion of the existing preserve. Many of the rare and endangered species of concern in the Bakersfield area are present in the Allensworth area, including the Tipton kangaroo rat, blunt-nosed leopard lizard, San Joaquin kit fox, San Joaquin antelope squirrel, the San Joaquin pocket mouse, and the California jewelflower. CDFG already owns three some 480 acres of habitat. TNC has purchased 126 acres of additional lands and plans to transfer title of those lands to the CDFG. There are ample opportunities to add additional high priority acreage to the preserve through the use of Proposition 70 funds or mitigation fees.

Other opportunities may be identified by the California Energy Commission's Southern San Joaquin Ecosystem Preservation Program. The CEC program encompasses about 8150 square miles, from the Tehachapi Mountains on the south, the Carrizo Plain on the west, the Sierra Nevada foothills on the east, and the Hanford-Coalinga line on the north. The purpose of the CEC Program is two-fold:

1. Establish a priority ranking of all remaining natural lands in the study area on the basis of habitat quality and species presence; and
2. Define candidate preserve areas from among the lands having the highest habitat value which can be acquired as off-site mitigation for energy resource development projects in the Southern San Joaquin Valley regulated by the CEC.

The MBHCP can interact with the CEC program through the use of mitigation fees collected from development projects within Metropolitan Bakersfield to help purchase high quality habitat elsewhere in the CEC study area. When determining how to spend MBHCP mitigation funds the MBHCP Implementation Trust may want to consider participating in acquisitions of CEC-designated preserve areas, particularly if there are designated preserves near the Metropolitan Bakersfield area, and if such preserves meet the habitat needs of the rare and endangered species found within the Bakersfield area.

The entire valley area of western Kern County outside of the MBHCP area is now subject to the Kern County Valley Floor HCP process. The oil and agricultural interests absent from the MBHCP with its primarily urban focus will participate in the Kern County Valley Floor HCP. Preserve opportunities may emerge from that program which could be suitable for co-participation from the Metropolitan Bakersfield area. This opportunity may be considered by the Implementation Trust.

Since the time the MBHCP Steering Committee described the above areas as meeting the criteria of habitat lands, the California Department of Fish and Game has provided the City and County with a "preapproved acquisition areas" map (see Figure 24) which identifies areas outside the study area which meet the criteria for habitat lands. Some of the areas identified include or expand upon the sites described above.

FIGURE 23 -- PRESERVE OPPORTUNITIES OUTSIDE OF METROPOLITAN BAKERSFIELD AREA

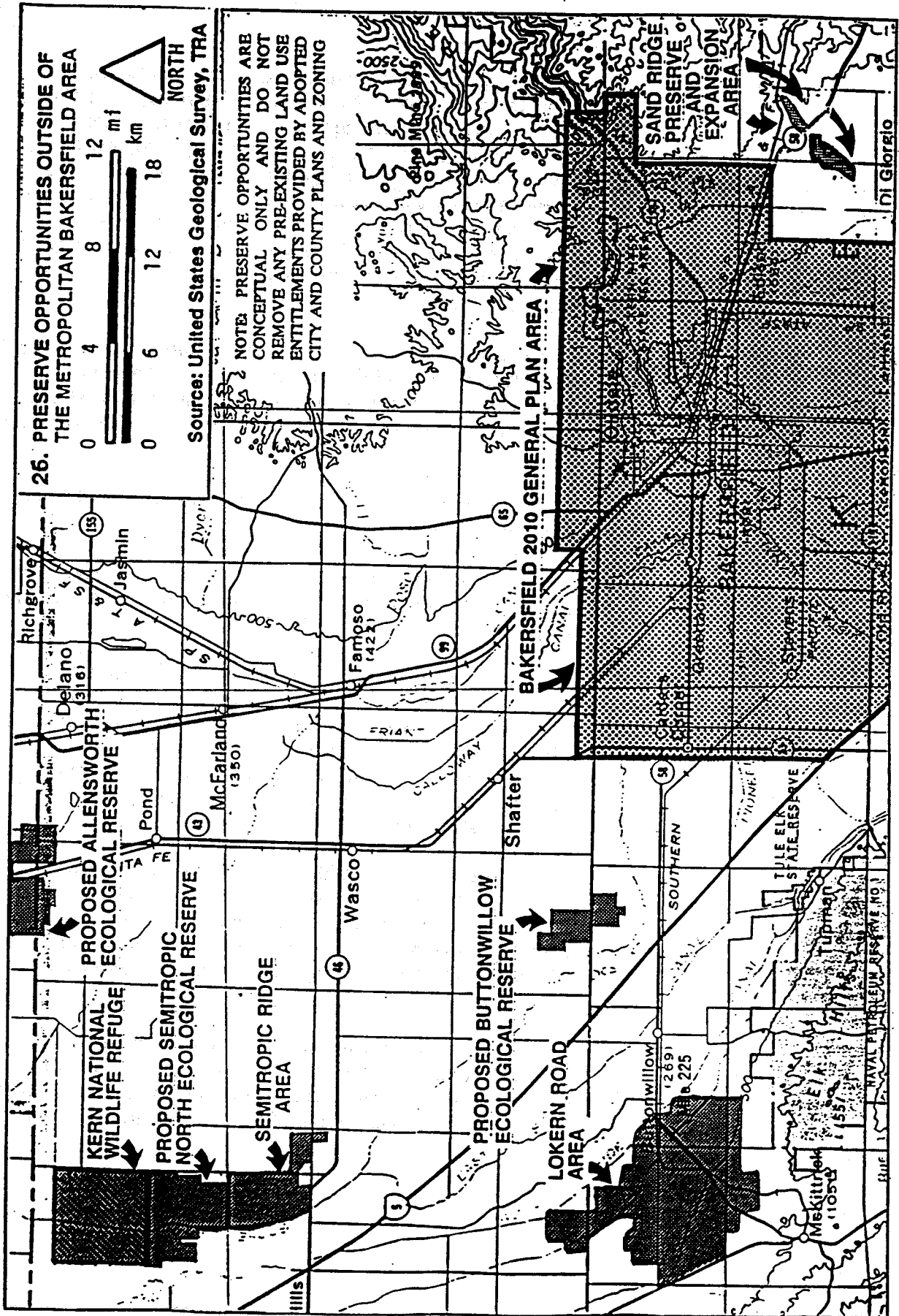


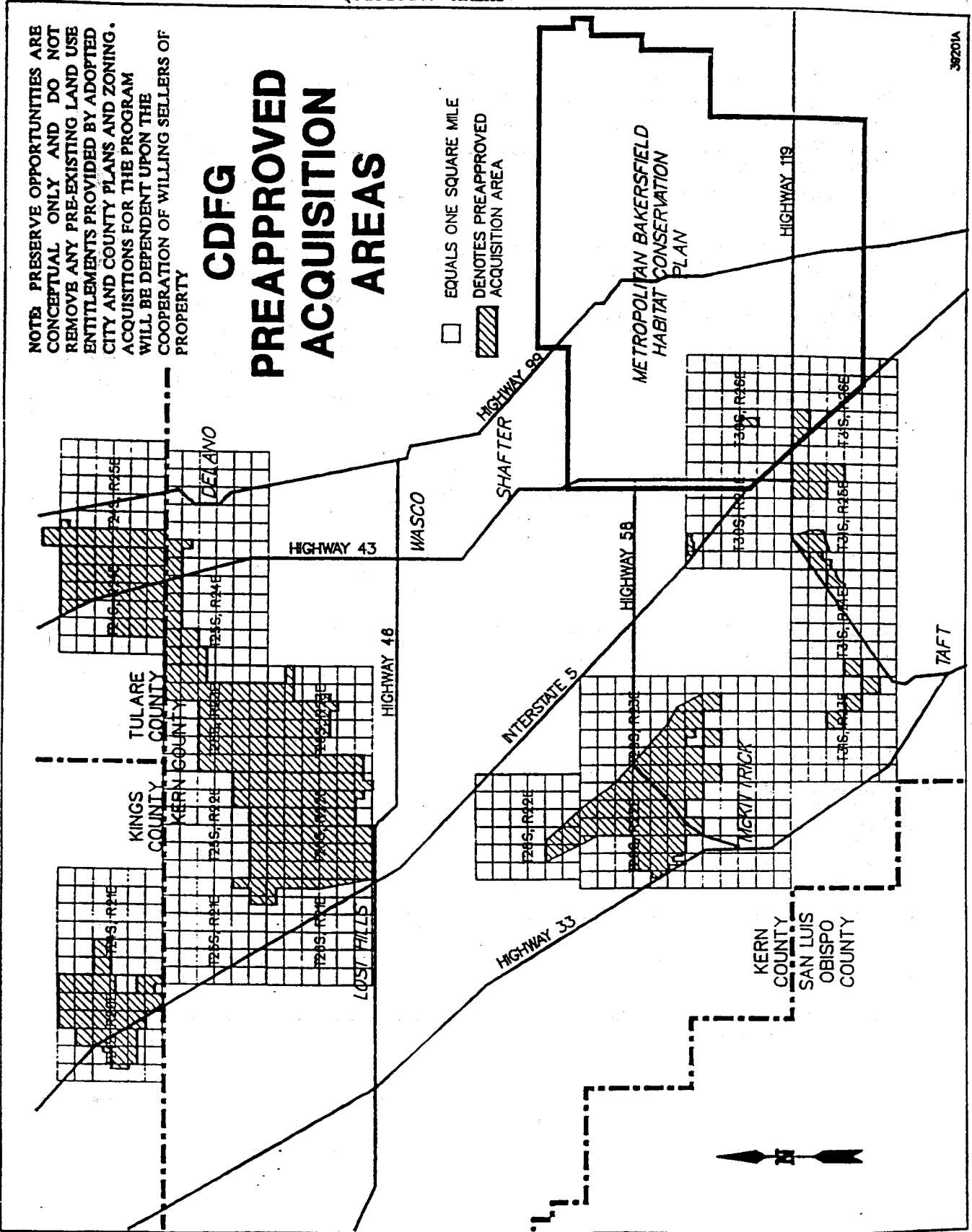
FIGURE 24 CDFG PREAPPROVED ACQUISITION AREAS

NOTE: PRESERVE OPPORTUNITIES ARE CONCEPTUAL ONLY AND DO NOT REMOVE ANY PRE-EXISTING LAND USE ENTITLEMENTS PROVIDED BY ADOPTED CITY AND COUNTY PLANS AND ZONING. ACQUISITIONS FOR THE PROGRAM WILL BE DEPENDENT UPON THE COOPERATION OF WILLING SELLERS OF PROPERTY

CDFG PREAPPROVED ACQUISITION AREAS

□ EQUALS ONE SQUARE MILE
 ▨ DENOTES PREAPPROVED ACQUISITION AREA

39201A



METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

2. Acquisition Costs

A preliminary investigation into the costs to acquire habitat for endangered species within the MBHCP Study Area was done in April 1988 by Thomas Reid Associates. The lands under study were those identified as having documented occurrences of some of the Species of Concern (particularly San Joaquin kit fox). These lands are concentrated in the Northeast (Townships T29S R29E and T28S R29E and in the Southwest (Townships T30S R25E, T30S R26E, T31S R25E, and T31S R26E).

To determine the probable range of values for these lands Ed Curtis and Associates, a land appraisal firm in Bakersfield, was consulted. According to Mr. Curtis, the cost of land is a function of its near-term development potential, proximity to existing urban development, and availability or prior existence of urban infrastructure (water, sewer) as well as physical features (topography) which may limit development potential. Table 5 illustrates the range of land costs for these lands in 1988. The values also reflect costs to acquire habitat in the general region around the Metropolitan Bakersfield but not lying with the MBHCP study area.

**TABLE 5
TYPICAL LAND VALUES IN METROPOLITAN BAKERSFIELD
FOR VARIOUS LAND USES**

LAND USE (Highest and Best Use of Immediate Use Potential)	LAND VALUE	
	Per Acre	Per Sq. Mile
Rangeland or grazing land (no infrastructure) west of I-5 or aqueduct.	\$ 75-200	\$48,000-128,000
Grazing land north of Kern River.	\$250-350	\$160,000-224,000
South of Kern River (Ant Hill).	\$500.	\$320,000
Farmland -- no water -- (e.g. near Stevens).	\$350	\$224,000
Farmland, farmed, with water.	\$1,500	\$960,000
20 acre homesites.	\$2,000-3,000	\$1.3 - 1.9 million
Subdivisions with tract maps.	\$10,000	\$6.4 million
Potential for commercial development/golf courses etc.	\$15,000+	\$9.6 million +

NOTE: Prices are for surface rights only, or surface plus mineral rights in lands explored and found to have minimal mineral value.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

In general, high value land (over \$2,000/acre) should not be considered for acquisition unless it supports a particularly significant population of a species of concern and/or there are relatively few acres involved with the acquisition. It is hoped that most land acquired will cost less than \$500/acre. Lands acquired from Tenneco by the Department of Water Resources for the Kern Water Bank project ranged from \$100/acre to \$2,200 per acre.

Over the life of the permit, impact on habitat of the species of concern will occur gradually. The MBHCP's goal is to keep preserve acquisition and restoration equal to or ahead of the impact, (i.e. natural land lost).

3. Preserve Selection and Design Guidelines

Several preserve guidelines should be considered by the Implementation Trust. While the guidelines have broad applicability, each preserve effort must necessarily reflect the land condition, property ownership patterns, land costs, and species requirements.

1. Preserves should emphasize the need to protect and/or enhance existing habitat and not rely on creating or restoring habitat. Thus, priority in acquisition should be given to land of high existing habitat value.
2. The relocation of species of concern from non-preserve areas to preserves should be encouraged, but it should not be the thrust of the MBHCP effort and should not divert funds from the primary land acquisition activity.
3. Preserves should be acquired so as to make most efficient use of limited financial resources available for endangered species conservation.
4. The size of each preserve should be large enough to support self-sustaining populations.
5. Availability of several preserves reduces the risk of a catastrophic loss to the entire population at one location. MBHCP preserve design should consider multiple preserves or design preserves in the context of preservation activities by others to maximize overall population stability.
6. The diversity of plant species and micro-habitats should be maximized in the preserve system to retain the greatest natural reserve against changing conditions.
7. Preserves should have some link or corridor to allow natural dispersal to repopulate locally extirpated areas and to provide some genetic exchange between HCP preserves and the remainder of the habitat elsewhere in the San Joaquin Valley.
8. Consider use of MBHCP funds to purchase appropriate lands adjacent to existing preserves. This will help reduce impact from adjoining land uses, make preserve management more efficient and achieve large preserves.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

9. When mineral rights cannot be acquired, mineral exploration and extraction within preserves should be limited to small areas of the preserve. Example: limit mineral extraction activities to a 2 acre drilling site for every 40 acres. Locate oil sites in the corners of a parcel and make use of existing roads. Allow flexibility for parcels of very small size and maintain consistency with established County zoning restrictions on drilling.
10. When transportation systems such as roads and freeways are planned within a preserve, their placement and design should be limited to the edges of the preserve. If feasible, locate all roads and freeways at least one quarter mile from preserve boundaries. At no time should a road or freeway cross a preserve.

Species-specific or specialty preserves were considered for the species of concern. However it was decided that in designing preserves for the San Joaquin kit fox, large enough areas could be set aside to provide habitat for many of the other species of concern, such as the blunt-nosed leopard lizard, the kangaroo rats and rare plants.

Species-specific preserves were deemed appropriate to protect isolated plant populations. Species-specific preserves may be appropriate along the Kern River Corridor for the Tipton kangaroo rat. The Bakersfield cactus would be protected if land in the northwest corner of the Northeast Focus Area were acquired. Four populations of Hoover's woolly-star would be protected if land in the southern part of the Southwest Focus Area were preserved. All other plant species would need specialty preserves for protection. Exact preserve location will need additional verification but based on the previous and current plant sightings the following areas could be suggested for specialty preserves:

<u>Species</u>	<u>Location</u>
San Joaquin woolly-threads	T29S R25E, section 12 T30S R26E, section 7
Hoover's woolly-star	T29S R25E, section 24 T30S R28E, section 33 T31S R26E, section 5 SE

4. Acquisition Strategies

The MBHCP acquisition strategy is to identify potential preserve lands, both inside and outside the MBHCP boundary and to develop a priority acquisition program that is paced with the impact of 2010 Plan development and mitigation fee collection.

It is not practical to identify specific parcels to be acquired and known or expected acquisition costs for two reasons: 1) the areas under consideration are so large and 2) to identify specific parcels for acquisition may artificially inflate the purchase price. In the absence of parcel-specific information, the MBHCP includes a detailed acquisition strategy which describes the number of acres of prime habitat per year to be purchased or degraded habitat to be enhanced within a certain time frame and general location.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

There are three parts to program implementation. Each will be pursued as opportunities arise. Because of the recent rapid loss of habitat, the first priority is protection of threatened land by acquisition. Plan Parts 1 and 2 have significant acquisition components. Part 3 and the restoration phase of Part 1 and would naturally follow the initial acquisition effort.

a. Part 1: Local Land Acquisition

Part 1 entails local land acquisition. The MBHCP Implementation Trust will determine specific acquisition strategies as mitigation fee monies become available for land purchase.

1. Acquire enough land in the northeast to create three Bakersfield cactus preserves: 1. south of Harte Park, 2. south of Highway 178, and 3. north of the airport. Up to \$1 million could be earmarked for this acquisition. Additional Bakersfield cactus preserves will be created by obtaining habitat easements on high slope lands which are on private property but which are restricted from development by slope ordinances. Lands designated in the 2010 General Plan for open space will be considered for preserve use as appropriate. Lands along the Kern River corridor or close to the river will also have value for kit fox.
2. Acquire land in the southwest depending on availability. Of the lands acquired it is anticipated that 50% will be in an existing natural condition and 50% will require restoration. It is estimated that the purchase and restoration of this land will cost between 2.5 and 5 million dollars.

Table 6 provides a list and short description of conceptual preserve area. The list is not exclusive. Other preserves may have biological value and lands along the Kern River Corridor could be considered for the Tipton kangaroo rat.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

**TABLE 6
DESCRIPTION OF POTENTIAL PRESERVE ACQUISITION AREAS**

NAME	LOCATION	ACREAGE	SPECIES PRESENT
South of Hart Park	T29S, R28E, Sec. 1,11,12 T29S, R29E, Sec. 6,7 T28S, R28E, Sec. 35 S½	2,800	Bakersfield cactus; Blunt-nosed leopard lizard; San Joaquin kit fox
South of Highway 178	T29S, R29E, Sec. 19, 24 T29S, R28E, Sec. 24	1,000	Bakersfield cactus; San Joaquin kit fox
North of Airport	T28S, R27E, Sec. 34, 35	1,000	Bakersfield cactus
Wooly-star Preserve	T30S, R28E, Sec. 33, 34	300	Hoover's wooly star; San Joaquin kit fox
Wooly-threads Preserve	T30S, R25E, Sec. 12 N½	300	San Joaquin wooly-thread; Blunt-nosed leopard lizard; San Joaquin kit fox
West of Interstate 5	T31S, R25E, Sec. 1,2,3,11,12,13,14,23,24 T31S, R26E Sec. 4,5,6,7,8,16,17,18,19,20,21,22	12,600	Hoover's wooly-star; San Joaquin kit fox; Blunt-nosed leopard lizard; Tipton kangaroo rat; Giant kangaroo rat; San Joaquin antelope squirrel

Source: Thomas Reid Associates (1988)

NOTE: Table 6 does not imply that property owners within these areas are willing sellers or participants in the MBHCP program. All or portions of Sections 1 & 12 T.31S,R.25E, and Sections 5, 6, 7, 8, 16, 17 and 18 T.31S, R.26E identified in the "west of Interstate 5" site are under contract with the City of Bakersfield for disposal of treated wastewater effluent (City Agreement 85-142).

b. Part 2: Participation in Outside Preserve Programs

Part 2 entails MBHCP participation in land acquisition programs outside of the MBHCP and immediately adjoining area.

Several endangered species and native habitat preserves already exist in Kern County. Most are 15 miles or more from the City of Bakersfield, but many support the same plant and animal species of concern in Bakersfield. It is anticipated that preserve possibilities in the MBHCP study area boundary are not adequate to mitigate the full impacts of development, and therefore, MBHCP mitigation funds should be used to expand or enhance off-site preserves. Some off-site preserve opportunities are shown in Figure 23. Additional preserve opportunities identified by CDFG and USFWS should also be considered by the implementation trust (Figure 24).

As previously stated, the acquisition effort will focus on these lands for reasons of suitability, cost and the availability of willing land managers such as the Department of Fish and Game.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

c. Part 3: Cooperative Restoration

Part 3 entails restoration of lands owned by others through a cooperative agreement, primarily the Department of Water Resources (DWR) on its Kern Water Bank (KWB) in the southwest if that agency is willing to participate in the MBHCP program. During the KWB planning process, the MBHCP should negotiate for the rights to perform restoration activities on as much land as possible. Over the initial 20 year permit it is anticipated that some 3,000 acres of the KWB land could be restored at a cost of about \$1.5 million. The balance of the lands with a right to restoration could be enhanced in the period after the initial 20 year permit.

d. Costs

Ordinarily, the Implementation Trust does not intend to receive title to properties acquired as Habitat Management Lands. Rather, the Implementation Trust intends to arrange passage of title directly to those agencies and entities who will own and manage Habitat Management Lands in accordance with the terms of the Section 10(a) Implementation Management Agreement.

As the City and County are not authorized to expend funds for acquisition prior to receiving the 10(a) permit. During the first twelve months after issuance of the Section 10(a) and 2081 permits, the "start up period" can be addressed through the establishment of a separate trust account naming CDFG as the beneficiary. The trust would deposit funds into the account adequate to provide for the acquisition of sufficient acreage of Habitat Management Lands to cumulatively satisfy the first year's mitigation requirements. The funds in the account (or pro-rata share) shall be released to the Implementation Trust at the time that the lands secured by such instruments are acquired and for the amount of land secured.

It is expected that between 500 and 700 acres of land will be developed annually by both the City and County. Initially, there will be approximately \$2,000,000 available to begin the acquisition program. Of that two million, approximately 55 percent (\$1,100,000) will be available for land costs, 36 percent (\$720,000) for improvement and management ("endowment") costs and 9 percent (\$180,000) for administrative costs. These percentages could vary depending on land costs, size of acquisition, and management entities. Using these percentages and if land is purchased for \$600 per acre, approximately 1,830 acres could be purchased with no other sources or creative financing. This acreage would accommodate 2.5 to 3.5 years of urban growth in the metropolitan area using previously stated assumptions.

With the availability of funds for program start up and funds being collected as the urban area grows, it is expected that the City and County will be able to supply ample acreage to mitigate ground disturbance caused by urbanization. The Implementation Trust will advise the City and County regarding the need for fee adjustments to account for increased land, management and administrative costs in excess of the built-in inflation increase.

The ability to increase the fee is extremely important as more services become available to develop in northeast Bakersfield where mitigation requirements are set at a higher ratio because of the natural land disturbance.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Using 1994 dollars, it is expected that every five years a minimum of \$3,000,000 would be collected to finance the land acquisition program. Over the expected 20-year life of the permit, approximately \$14 million would be made available (including start up funds) to offset the urbanization of 10,740 acres using previously stated assumptions.

Planning Tools for Conservation

In addition to direct purchase, planning tools may be available to increase the size of preserves. Where use of such tools adds permanent preservation, it can be counted as part of the mitigation effort of the MBHCP. Planning tools include:

Park Dedication. Where there are private or public properties abutting designated preserves, the preserves can be expanded by having the adjacent property dedicated as public park. The sole purpose of the park may not be to provide habitat, but the open space connected with the park can increase the size of the preserve and provide additional buffer.

Conservation Easements/Open Space Easements. Open space and conservation easements are a means for a private landowner to maintain ownership rights of their property. By recording an easement on the property the owner is assuring the public agency that the property will remain open space. Easements are also used in cases where a public entity refuses dedication of a property because there are public liabilities associated with it, such as slope failure, fire hazard, etc.

General Plan. The general plan is used by public agencies as a means of defining the type and direction of growth allowed in a program area. It involves assigning specific land use categories for each parcel. Certain general plan designations restrict the type of activities which can take place on the land. For instance general plan resource designations restrict the intensity of development on the land. Areas designated as open space or resource, or which are in agricultural use, are either flood plain zones, existing parks, resource management areas (which includes mineral extraction, petroleum uses, or agriculture), or high slope areas. In cases where there are existing open space areas near identified potential preserves, such as in the northeast, the Implementation Advisory Committee should consider incorporating these areas into the preserve. In addition, the General Plan Land Use Element policies discourage the intrusion of urban development in resource/open space areas.

Transfer of development rights. There is some potential for large landowners in the Northeast to use negotiated agreements for land transfer, rather than direct sale. Preserve lands could be offered in exchange for payment of mitigation fees on other projects.

5. Preserve Development and Management

All land acquired for preserves, whether it is purchased outright or under a conservation agreement, will require management, enhancement and/or restoration.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

During the preserve acquisition process preserve management plans should be prepared for each preserve. A management plan can be simple or complex depending on the level of management necessary to provide or maintain habitat for the species of concern. A detailed management plan should specify: stewardship responsibilities, preserve policies, management activities, restoration needs, species monitoring methodologies and annual reporting requirements. Preserve management entities will be responsible for preparing management plans for the preserves. These entities may be the Nature Conservancy, the California Department of Fish and Game, or others. Management entities other than CDFG, USFWS or the Nature Conservancy must provide a copy of the management plan to the Implementation Trust for review and approval by CDFG and USFWS.

a. Management Plan Policies

To guide management activities from year to year and to establish general goals for each preserve, the management plan should outline policies under which each preserve will be managed. In cases where land purchased is added to an existing preserve existing policies or goals of the existing preserve may be applied to the expansion area. Policy formulation should be directed toward the following issues:

Identification of Species of Concern and Determination of Habitat Requirements on the Preserve. Determine which species of concern the preserve currently supports and which species it could potentially support. Preserve policies and management activities should be oriented toward those species and care should be taken that policies do not conflict with the needs of the species.

Appropriateness of Visitor Use. The management plan should identify a level of visitor use. If visitor use is deemed appropriate what restriction should be placed on the visitors to protect resources?. For instance, should visitor use be limited to a particular area of the preserve or to a particular season? Should visitor use be allowed only on an appointment basis, or for specific purposes such as educational or scientific study? If visitor use is determined to be appropriate for a particular preserve, methods should be developed to protect sensitive resources from being negatively impacted.

Activities Strictly Controlled or Prohibited on the Preserve Land. Activities which would conflict with preserve policies or which endanger preserve resources should be described and strictly controlled or prohibited. Examples of activities to be prohibited include dumping, shooting, off-road vehicle use. Extensive oil/mineral exploration and extraction should be controlled on preserve lands as feasible.

b. Management and Restoration Programs

Stewardship Responsibility

It is expected that the MBHCP will result in the development of both small (less than 50 acres) and large (over 1,000 acres) preserves. Each preserve created under the MBHCP will be managed by a preserve management entity. This entity will be responsible for developing a

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

specific preserve management plan, providing stewardship over the preserve, and carrying out management prescriptions. Each preserve management entity will report to the Implementation Trust.

A preserve management entity should be identified for a particular preserve early on during the acquisition process. The entity should be chosen using the following criteria: willingness to manage the particular property, past experience with particular habitats found on the preserve, ability to provide independent financial support, and proximity to other preserves operated by same management entity. The management entities will include the California Department of Fish and Game and The Nature Conservancy. At some natural open space areas near established parks and along the Kern River Corridor, the City and County may also manage preserve land.

A preserve management plan will set forth the basic principles of preserve operation and will identify specific needs for fencing, restoration, habitat enhancement, public visitation, patrolling, species monitoring, etc. The plan most importantly will outline capital costs of initial preserve development (such as one time cost of putting up fences) and identify annual operating costs.

Some lands will be managed solely for the MBHCP program and others will become part of existing preserves. In cases where lands acquired are intended to enlarge an existing Nature Conservancy preserve, such as at Sand Ridge, management of the new lands would become the responsibility of The Nature Conservancy.

Management Activities

The management activities conducted within each preserve should reflect the preserves policies and work toward achieving the goals established for the preserve. Management activities for the coming year should be set forth in the annual report (discussed below). Management activities can include:

Fencing and Signing Preserve Boundaries. The boundary of each preserve will most likely require fencing to eliminate intrusion by large animals (domestic dogs, livestock) and people. The boundary of the preserve should be appropriately signed and if visitor use is allowed, signs should be strategically placed directing visitors to parking areas, preserve entrances and trails.

Patrolling. Preserve personnel should periodically patrol the preserves to control prohibited activities such as dumping, shooting, off-road vehicle activity, trespassing and any other prohibited activity. The frequency of patrolling needed to control prohibited activities will probably vary with each preserve and will depend on the preserve's location, surrounding land uses, proximity to urban areas and historic uses of the land. In addition, preserve personnel could also provide interpretative information to visitors contacted while patrolling.

Visitor Use. If the policies and goals of the preserve state that visitor use is compatible with the preserve's resources, then visitors should be managed so that they do not negatively impact sensitive resources. It should be determined whether visitor facilities such as parking areas, trail maps, interpretative brochures or kiosks need to be developed.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Resource Management. Resource management will be the main function of preserve personnel and will be the "nuts and bolts" of the management plan. Management activities will vary depending on the resources found within a particular preserve and the degree to which they must be managed. Preserves will fall into two rough categories; low intensity management and high intensity management. Low intensity management preserves will have minimal management needs and will only require fencing, periodic patrolling and species monitoring. High intensity management preserves will need intensive patrolling, visitor control, resource rehabilitation or enhancement, continuing control of impacts from surrounding lands or regular programs of controlled burning, or other labor intensive programs.

Specifically, resource management can include conducting controlled burn programs, grazing programs, exotic species control, erosion control, native community enhancement, sensitive species enhancement (such as constructing artificial dens), coyote control, control of pesticides, herbicides and rodenticide on preserve land and on adjacent lands and coordination of any research conducted within the preserves by outside groups. A copy of all research documents produced pertaining to the preserves should be obtained and kept as part of the documentation on the preserve.

Restoration and Enhancement

It is expected that some of the lands purchased for MBHCP preserves will be disturbed to some degree and will require restoration. It is likely that restoration and enhancement programs will play an important role in developing self-sustaining native communities in the MBHCP preserves.

At the time of acquisition of any habitat management lands, the Implementation Trust provide to CDFG an amount equal to one-hundred basis dollars (\$100) per acre of Habitat Management Lands for fencing and improvement of such lands.

Within six months of the date that any land is included in the calculation of the cumulative amount of Habitat Management Lands acquired or protected as mitigation, the Implementation Trust will provide to CDFG an amount equal to three hundred dollars (\$300) per acre of such lands as an endowment for the management and enhancement of such land.

The above-referenced fund amounts shall be adjusted for inflation. If any entity other than CDFG is to manage the Habitat Management Plans, CDFG will provide the funds to the approved management entity.

At such time that the Implementation Trust provides CDFG with the \$400 management fund, the Implementation Trust has no further obligations to carry out management activities.

The USFWS and CDFG would be required to approve a management entity other than CDFG and would review and approve management plans. Management plans shall address the following:

1. Which Species of Concern are currently supported by the Habitat Management Land and which Species of Concern the land could potentially support.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

2. Which other plants, animals, or ecological communities are currently or could potential be supported.
3. Appropriateness of visitor use.
4. Activities to be permitted and activities to be strictly controlled or prohibited on the Habitat Management Land including restriction of the use of the land, assuring its permanent use for protection and conservation of Species of Concern.
5. Requirements for fencing and signing Habitat Management Land boundaries.
6. Requirements for patrolling of Habitat Management Land.
7. The value and suitability of each Habitat Management area to serve as a recipient of relocated San Joaquin kit fox or plan species of concern and the estimated cost of such relocation.

Habitat Management Plans shall address the enhancement of the land covered by the plan. The discussion of enhancement activities shall include discussion of the following issues:

Restore natural drainage patterns and provide for erosion control as necessary. Restoring the natural drainage pattern of a parcel, whether it is the prevention of unnatural ponding, the restoration of natural ponding, or the channeling of runoff to appropriate areas is the precursor to establishing or enhancing native communities. To establish self-sustaining natural communities it is important to provide drainage patterns and moisture regimes suitable for native plants. In addition, the growth of exotic plant species may be deterred by the restoration of natural moisture regimes.

Control exotic and invasive plant species if they threaten to dominate native plant communities. The threat of exotic species will vary depending on the individual preserve and the species of concern which occur in the area. For example, dense, non-native grasses may not present a significant threat to the Bakersfield cactus whereas dense groundcover negatively affects the blunt-nosed leopard lizard and the Tipton kangaroo rat.

Control the presence of coyotes or domestic animals on the preserves which may threaten kit fox. Coyotes are a major threat to kit fox in some portions of the study area. Determine if kit fox mortality is caused by coyote predation, and control coyote invasion as appropriate.

Create artificial topography where appropriate to enhance habitat for certain species. It is expected that some of the lands purchased will have been used for intensive agriculture and will have been plowed and leveled. It may be desirable to create artificial topography to enhance the establishment of species of concern. Species of concern such as the Tipton kangaroo rat and the giant kangaroo rat dig burrows in elevated spots not subject to flooding, and the San Joaquin kit fox generally does not dig dens in areas subject to flooding or where the groundwater level is less than five feet below the surface (see discussions in Chapter II). Thus, if a preserve is expected to support these species suitable denning areas should be available.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Use disc or plows to loosen soil where heavily compacted soil prevents restoration from becoming effective. If preserve lands contain areas used for oil drilling pads, roads, staging areas or other intensive activities, the soil may be so compacted that revegetation is difficult. In cases such as this, discing and plowing the compacted soil will loosen it and improve the revegetation success. Though discing may assist in the revegetation of extremely compacted soils, discing often fosters weeds. As a result, discing should be used only where an influx of weeds would not adversely affect adjacent native plant communities or sensitive plant populations.

Determine appropriateness of implementing controlled burning for vegetation management. Controlled burning helps foster the establishment and growth of native plant species and recycles nutrients in the soil, while at the same time it can reduce the number and density of exotic, invasive species. While controlled burning may actually be more appropriate as a tool for continuing management rather than a method of restoration, controlled burning should be considered for preserve lands.

Consider grazing as a means of vegetation management where appropriate. Grazing certain lands can, if conducted at the right intensity, for a limited duration and at the right time of year, benefit species of concern such as the blunt-nosed leopard lizard and kangaroo rats by reducing the density of ground cover. Any grazing allowed on preserve lands should be closely monitored and any sensitive features such as rare plant colonies, kangaroo rat precincts or San Joaquin kit fox dens should be protected from trampling by the grazing animals. As with controlled burning, grazing may also be used as a long-term management tool.

Consider supplemental planting of plant species of concern in areas where it is desirable to expand existing colonies. For example, supplemental planting may be highly desirable in preserves created for the Bakersfield cactus.

c. **Preserve Monitoring and Reporting**

Preserve Monitoring involves regular observation of biological processes and of the effects management activities have had on sensitive resources. The purpose of monitoring is to assure the conditions of the MBHCP are being met and to maintain an ongoing record of the progress of implementation. Monitoring will be the basis for periodic re-evaluation of the plan to determine if modifications of any activities are needed.

The task of monitoring will be undertaken by the preserve managing entity in consultation with the Implementation Trust. For the most part, qualitative assessment in monitoring programs for biological resources can provide sufficient information to evaluate the status of the species of concern. Quantitative assessment of mammal populations would be extremely labor intensive and costly. While monitoring is an important aspect of the plan, it should not overburden the funding program and take funds away from the land acquisition or management programs.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Some of the items which will require monitoring include the following:

Habitat Quality. Monitoring the health and vigor (quality) of the various habitats found within the preserve will provide information on the ability of the preserve to support species of concern and over the long run will provide information on the effectiveness of management policies. Of primary interest is the quality and vigor of native plant communities as large tracts of healthy native communities is essential to the survival of the species of concern.

Species of Concern. Monitoring the status of species of concern is central to the main purpose of the MBHCP -- to preserve endangered species. The population status information will be a key indicator of the success or failure of the Plan. Monitoring should allow the preserve manager to determine whether species of concern are present in the preserve and whether populations are essentially stable, decreasing or increasing. Monitoring methods should be developed for each species of concern and appropriate information recorded for each. General reproduction and mortality of species of concern within the preserve should also be recorded. It will be important to note any dead individuals found on or near the preserve and describe, if possible, the suspected cause of death. In this way, different reasons for mortality can be recorded.

Restoration and Enhancement Programs. Monitoring of habitat restoration and enhancement programs is the basis on which their initial success, and biological and cost effectiveness will be evaluated. Effectiveness should be measured by: 1) the degree to which the technique produced the intended effect and 2) the degree to which endangered species utilize the newly enhanced habitat. Cost effectiveness is measured as the degree of enhancement and utilization achieved for a given level of effort and dollar cost. At this time, no standards of cost effectiveness are available.

At present the optimum cost effective techniques for monitoring are uncertain. Monitoring techniques should be developed by the preserve management entity. Initial monitoring should involve trial methods which are subject to refinement as the management entity determines that it is obtaining the proper level of information at an appropriate level of effort.

In the long run, it will be beneficial to develop standardized monitoring and recording techniques that will be used in all the preserves so that historical trends can be observed for each preserve and for the entire MBHCP preserve system as a whole. Consideration should be given to standardizing such things as qualitative measures (what is "fair", "good" or "excellent" habitat), monitoring (surveying) during the same time of year, standardized monitoring methods, and recording procedure such as a standard field form used in every preserve.

The Section 10(a) permit requires that an annual report of activities carried out under the permit be submitted to the Director of the U.S. Fish and Wildlife Service. Each preserve manager will prepare a summary of the activities which took place on the preserve for the calendar year as well as a discussion of the upcoming years activities. A standard format should be used by each preserve manager so that information from different preserves can be compared in a meaningful manner and so that the reports will build a historical record of the preserves.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The MBHCP Implementation Trust will use the preserve summary reports in preparing the more comprehensive annual report. At a minimum the comprehensive annual report should contain the following information:

- The amount of habitat proposed for Urban Development over the past year, showing the amount of Natural Land and the amount of Open Land so affected.
- An estimate of the amount of taking of any State and Federally Protected Species which has taken place within the Permit Area. The estimate of take can be based on habitat area lost and does not require a census or population estimate.
- The cumulative amount (in acres) of Habitat Management Land acquired.
- Management activities conducted during the past year and those management activities proposed for the following year on lands not transferred to CDFG or USFWS.
- Enhancement activities conducted in the past year and on those planned for the coming year on lands not transferred to CDFG or USFWS.
- A qualitative analysis of the population status of the Species of concern in each Habitat Management Land area for those lands not transferred to CDFG or USFWS.
- A description of any scientific research authorized or conducted by the City or county on the Habitat Management Lands and not transferred to CDFG or USFWS within the Permit area in the past year, and any proposed for the upcoming year.

G. PLAN IMPLEMENTATION AND TERMS OF PERMIT

The actions prescribed by the Metropolitan Bakersfield Habitat Conservation plan (MBHCP) will be carried out by a variety of public agencies and private entities. This chapter describes the mechanics of plan implementation and the amendment process.

1. Implementation and Term of Permit

The MBHCP will be implemented under the terms of a Section 10(a) permit issued by the U.S. Department of Interior, Fish and Wildlife Service to the City of Bakersfield and to Kern County. The permit will be issued for a period of twenty years or until Urban Development permits are issued for 15,200 acres of natural lands and 43,000 acres of open lands, whichever occurs first, subject to the revocation, suspension, or amendment process described below. The permit could be renewed after twenty years upon the submittal of a written renewal request to the Director of the USFWS (refer to Section 13.24 of 50 CFR 13).

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

As permit holders, the City and County will be the primary entities responsible for administering the institutional elements of the MBHCP in the areas of their respective jurisdictions. Any actions undertaken or authorized by the City and County that may result in a incidental take will be lawful as long as the City or County determined that the actions were in compliance with the MBHCP. Other agencies involved in implementation may also be permittees depending on their role in the Plan.

The restrictions of the 10(a) permit issued by the USFWS based on the MBHCP will remain in effect even in the event of apparent extirpation of any or all the species of concern from the MBHCP area.

The USFWS will have the right to revoke, terminate or suspend the Section 10(a) permit in the event of a material breach or violation of the Section 10(a) permit, the Implementation/Management Agreement or the Federal Endangered Species act by the permittees.

This statutory protection of the Section 10(a) permit passes to third parties through the land use permitting process of the City and County. The Section 10(a) permit is intended only to allow take resulting from habitat destruction due to conversion of land to urban uses. It is not intended to allow take from any other means such as for pest control, recreation, etc. It also will not cover take resulting from existing or future oil development and conversion of natural land to intensive agricultural uses which will be subject to other programs.

Both the City and County will need to enact the necessary ordinances and enter into agreements with other implementing entities to implement the Plan. A sample MBHCP ordinance is included as Appendix C.

Other implementing entities may include The Nature Conservancy which is interested in acquiring and managing Bakersfield cactus preserves in the northeast and acquiring lands adjacent to existing TNC preserves, such as at Sand Ridge and Lokern Road.

2. Permit Status Monitoring

The Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) is a pay-as-you-go mitigation program. All rural and urban activities under the jurisdiction of the City or the County will be subject to the permit and mitigation in advance of take will be accomplished by a combination of preservation and enhancement inside *and* outside of the HCP area.

This approach gives the City and County maximum permitting authority, but it imposes a strict and enforceable requirement for mitigation.

The MBHCP will progress by collecting mitigation fees and applying those fees to acquisition and enhancement programs. Because the nature and scope of all future acquisition and enhancement opportunities is not known, the MBHCP establishes a process whereby the enhancement will be done progressively. It is critical that the HCP mitigation happens in advance of the impact of urbanization.

The Section 10(a) permit will have a provision for monitoring to allow the City and County to demonstrate to the Service that the mitigation was being done as required.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The HCP Trust group will have to make quarterly and annual reports to the Department of Interior, Fish and Wildlife Service, on the status of the permit. The report will address two basic topics: impact (what take occurred under the permit) and mitigation (what was done to offset the effects of take). The amount, location and types (as classified in the MBHCP) of land subject to development (open lands or natural lands) will be monitored, along with the amount, location and types (by plant community) of lands acquired.

Impact will be measured by a description of urban activity and monitored by study of aerial photos or comparable method acceptable to the Service, taken at least as often as once every four years. The photos will be marked-up, or accompanied by a map, to show what land had been converted to urban use under the permit. The map will show what areas were originally natural land at the time the Section 10(a) permit was issued, and what lands were originally non-natural -- agriculture or other non-urban use, but not predominantly natural. The area of the lands converted will be stated. It is important for each entity to independently account for collection of fees and to verify the areas of natural/open land converted under the permit.

The monitoring will be started by establishing a master map of natural and non-natural open lands and updating that map as the required aerial photography becomes available. The mapping of natural lands depicted in Figure 25 is based on the 1988 survey and corresponds to the conditions prevailing during the drafting of the MBHCP. The mapping shows dominant land cover characteristics in relatively large parcels. At the time the take permits are issued, the map in Figure 25 will be updated based on current aerial photography to serve as a baseline for permit monitoring. From the perspective of controlling unforeseen impact on endangered species habitats, neither the omission of small natural areas from the map, nor the inclusion of small urban, agricultural, or oil uses in the area shown as natural is significant.

The permit only requires documentation of activities which take place under the permit, but there may be conversion of open lands by agriculture or by unauthorized activity which would not be covered by the permit. The Service would be made aware of these lands by the annual reporting for the Metropolitan Bakersfield permit, but the explicit function of the monitoring report is only to identify take that has occurred under the permit.

Mitigation is monitored by quarterly and annual status reports and with baseline map updates showing the areas that have been acquired and enhanced. The report will include an accounting of funds received from mitigation fees and funds spent to accomplish actual mitigation.

The thrust of the status reports will be to show that the mitigation was adequate to offset the take. Because the take will occur on two different kinds of land (natural and non-natural), the accounting must examine both. The general reasoning behind the assessment of take is twofold: First, there is habitat in the Metropolitan Bakersfield area which is in a reasonably natural condition. Loss of this habitat will constitute one kind of take under Section 9. Second, the kit fox is found throughout the open lands of the Metropolitan Bakersfield area, even along linear features such as embankments and fallow areas interspersed among intensive agriculture. Indeed, much of the present kit fox mortality is from road kills in agricultural areas. Thus, conversion of agricultural land with its interspersed areas of kit fox use also constitutes a take, albeit of a lesser degree.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

The requirement for mitigation rests primarily on enhancement -- increasing the carrying capacity of land -- to improve the net availability of habitat for the species. Acquisition is important as a protection measure, but its value is primarily to reduce take, not to mitigate take *per se*. The amount of land needed depends on the extent of marginal improvement in carrying capacity. Thus restoration of highly degraded land is more effective in creating the net improvement than restoration of land in good condition. In general application, a ratio of 3 to 1 has been used for determining the area of enhanced lands needed to compensate for loss of habitat. There are enhancement opportunities in the Metropolitan Bakersfield area, that should, on the whole, allow net improvement with a 3:1 ratio.

The open lands in the Metropolitan Bakersfield are largely disturbed by agriculture. Analysis of the 1988 air photos shows that the open lands likely to be urbanized under the 2010 General Plan are roughly one-third natural and two-thirds non-natural. Thus, using a 3:1 enhancement ratio for the natural lands is equivalent to a 1:1 ratio for all open lands in the area. The HCP is based on a basic acre-for-acre requirement to mitigate take throughout the open lands, taking into account the one-third of open lands now in a natural condition.

Because the Section 10(a) permit will apply to the entire 2010 General Plan area (except the river and Kern Water Bank), take is not just restricted to the future urban designations in the General Plan. Take under the Section 10(a) permit could occur anywhere the City and County allow urbanization in the permit area. While the 2010 Plan is believed to be a good forecast of area growth, there would be nothing in the Section 10(a) permit that would limit growth to that plan. Thus, the mitigation for the incidental take must have a means of taking into account the unpredictability of where development -- and take -- will occur.

This will be accomplished by having *two tests* for adequacy of mitigation: one measured against loss of any open lands, the other measured against loss of natural lands. According to this method, the MBHCP Implementation Trust group will have to assure the Service that the City and County are in compliance by providing adequate mitigation in advance of take.

Adequate mitigation refers to the area of land enhanced as endangered species habitat. The area requirement will be cumulative, measured from the start of the permit period. The total enhanced area will have to exceed

either

- the total acreage of open lands converted to urban use,

or

- three times the total acreage of natural lands converted to urban use,

whichever was greater.

In this way, the HCP has a way to provide for accelerated mitigation if the growth trend shifted toward primarily natural lands: the Implementation trust would have to accelerate the enhancement effort.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Example 1: If in year X of the permit, a cumulative total of 5000 acres of open land, including 1000 acres of natural land, had been converted to urban uses, then the Implementation Trust will have to show the Service that there had been at least a total of 5000 acres of enhancement. In this case, the total land conversion is the ruling measure: 5000 acres at the 1:1 ratio for open land is 5000 acres of enhancement.

Example 2: If in year X of the permit, a cumulative total of 5000 acres of open land, *but including of 2000 acres of natural land*, had been converted to urban uses, then the Implementation Trust will have to show the Service that there had been *at least a total of 6000 acres of enhancement*. In this case, conversion of natural land is the ruling measure: 2000 acres at the 3:1 ratio for natural land is 6000 acres of enhancement. The direct loss of natural lands is greater than the basic one-third proportion, so more enhancement is needed.

The primary enforcement tool is suspension of the permit. If the enhancement requirements are not met, the City and County would have to restrict further loss of open land until enhancement was deemed adequate. Practically, this means that the established mitigation fee structure (designed for all open land) may not be enough to allow mitigation of a growth scenario shifted toward predominantly natural lands. If such a growth scenario were to occur, the HCP could be amended to increase the fee, or the applicants on predominantly natural would have to wait, or the applicants would have to pay for supplemental enhancement.

3. Amendment Process

Major amendments to the MBHCP may be initiated by any of the parties to the Implementation/Management Agreement. The party proposing the major amendment shall circulate to the other parties a statement of the reason for the amendment and an analysis of the effect of the amendment on the Species of Concern and the implementation of the MBHCP. The other parties shall make every effort to approve the proposed amendment within 120 days of publication in the Federal Register except where longer times are imposed by requirements of law. Except as otherwise determined by USFWS, major amendments shall be limited to changes in the following: (1) the boundaries of the Permit Area, or (ii) the method of calculating the adequacy of mitigation.

Minor amendments to the MBHCP shall not require amendment of the Implementation/Management Agreement, and may be initiated by any of the parties to the Agreement or the 10(a) permit. The party proposing a minor amendment shall circulate to the other parties a statement of the reason for the amendment. Minor amendments require the approval of the Implementation Trust, which shall approve or deny the proposed amendment within ninety (90) days of receipt of the proposal.

Amendments to the City or County's general plans or Zoning Ordinances pertaining to land within the permit area, shall not require amendments to the MBHCP or this agreement.

The USFWS shall be provided an opportunity to review all minor amendments presented to the Implementation Trust. If the USFWS determines within (60) days of its receipt of a proposed amendment that a proposed amendment to the MBHCP is major, the parties to the Implementation/Management Agreement shall process the plan amendment as an amendment to the Implementation/Management Agreement and the 10(a) permit.

METROPOLITAN BAKERSFIELD HCP - HABITAT CONSERVATION PLAN

Major and minor amendments will be the methods employed to address unforeseen circumstances as appropriate.

The day-to-day aspect of habitat enhancement and management and the specific details of fee collection, land acquisition, and preserve management will be handled administratively through the MBHCP Implementation Trust. For example, a changed specification for fencing preserves, or assignment of fee collection from one county agency to another would not require an amendment to the HCP and Section 10(a) permit proper.



IN REPLY REFER TO

United States Department of the Interior

FISH AND WILDLIFE SERVICE
911 NE. 11th Avenue
Portland, Oregon 97232-4181

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BAKERSFIELD CITY CLERK

AUG 21 1994

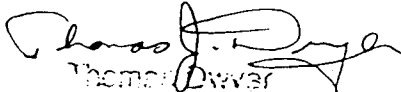
Alan Tandy, City Manager
City of Bakersfield
1501 Truxtun Avenue
Bakersfield, California 93301

Dear Mr. Tandy:

Enclosed is permit PRT-786634 which authorizes the incidental take of the San Joaquin kit fox, Tipton kangaroo rat, giant kangaroo rat, and blunt-nosed leopard lizard in the Metropolitan Bakersfield 2010 General Plan Area, Kern County, California. The authorization granted by this permit is subject to compliance with, and implementation of, your Habitat Conservation Plan and the Implementation Agreement executed by you, Kern County, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service.

Any questions you may have concerning the permit should be directed to the Field Supervisor, Sacramento Field Office, at 916-978-4866.

Sincerely,


Thomas Dwyer
Deputy Regional Director



FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

City of Bakersfield, 1501 Truxtun Ave.
Bakersfield, California 93301

Kern County, 2700 N Street, #100
Bakersfield, California 93301

2. AUTHORITY-STATUTES

16 USC 1539(a)

REGULATIONS (ARACPEC)

50 CFR 17.22

3. NUMBER

PRT 786634

4. RENEWABLE

YES
 NO

5. MAY COPY

YES
 NO

6. EFFECTIVE

8/24/94

7. EXPIRES

8/24/2014

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)

Alan Tandy, City Manager, Bakersfield
Mary Snell, Board Supervisors, Kern Co.

9. TYPE OF PERMIT

Incidental Take Permit PRT-786634

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Metropolitan Bakersfield 2010 General Plan Area, California

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

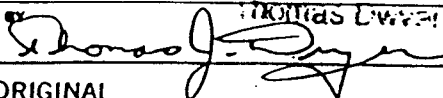
B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

SEE ATTACHED

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ON REVERSE ALSO APPLY

12. REPORTING REQUIREMENTS

ISSUED BY 

TITLE
Deputy Regional Director

DATE
AUG 24 1994

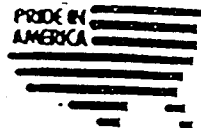
ORIGINAL

U.S. FISH AND WILDLIFE SERVICE, PORTLAND, OREGON
PERMIT CONDITIONS FOR PRT-786634

- D. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "Special Conditions for Marine Mammals and Native Endangered and Threatened Species" (copy attached).
- E. The permittees are authorized to incidentally take San Joaquin kit fox (*Vulpes macrotis mutica*), giant kangaroo rat (*Dipodomys ingens*), Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), blunt-nosed leopard lizard (*Gambelia silus*) located on up to 15,200 acres of natural land or 43,000 acres of open land, in the course of otherwise lawful development and conservation activities, as described in the permittee's application and supporting documents, and as conditioned herein.
- F. The authorization granted by this permit is subject to full and complete compliance with, and implementation of, the Habitat Conservation Plan and Implementation/Management Agreement, executed by the permittees, the California Department of Fish and Game (CDFG), and the U.S. Fish and Wildlife Service (Service).
- G. Upon location of a dead, injured, or sick endangered or threatened species specimens, initial notification must be made to the Service's Law Enforcement Office in Clovis at (209) 487-5773. Care should be taken in handling sick or injured specimens to ensure effective treatment and care or the handling of dead specimens to preserve biological material in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the finder has the responsibility to carry out instruction provided by Law Enforcement to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

In addition, a report shall be made within 3 working days to the Sacramento Field Office (Assistant Field Supervisor or Central Valley Branch Chief) at (916) 978-4866. A duplicate report shall also be made to the CDFG, Region 4 office in Fresno at (209) 445-6152.

- H. A copy of this permit must be in the possession of the permittee and designated individuals while conducting taking activities. Please refer to the permit number in all correspondence and reports concerning permit activities. Any questions you may have about this permit should be directed to the Field Supervisor, Sacramento Field Office at (916) 978-4866.



Implemented May 1982

GENERAL PERMIT CONDITIONS

1. All sections of Title 50 Code of Federal Regulations Part 13 attached to this page are conditions of the permit.
2. All applicable foreign, state, local or other federal laws, including those requiring permits, must be observed.
3. Living specimens must be handled and shipped so as to minimize risk of injury, damage to health or cruel treatment.
4. Container in which authorized wildlife is shipped must be plainly marked with name and address of shipper and consignee and an accurate description of the contents including common and scientific name and number of each within, OR with a symbol authorized by a Symbol Marking Permit.
5. Permittee must carry a copy of permit while conducting authorized activities.
6. Permit number must be legibly printed on all documents and advertisements involving activities conducted under permit.

permits authorizing import, export or reexport:

7. The permit and a completed copy of the Wildlife Declaration (Form 3-177) must be presented to a USFWS officer at the port upon import, export or reexport of wildlife shipments.
8. Import, export or reexport of pre-Act wildlife under the U.S. Endangered Species Act must be accompanied by documentation required by 50 CFR 17.4.
9. Import of species listed in Appendix I, II or III of CITES must be accompanied by proper foreign documentation from the country of export.
10. Import, export or reexport of plants must be made through a U.S. Department of Agriculture (USDA) port (list attached if applicable). Permittee shall allow an authorized USDA agent to enter his premises at any reasonable hour to inspect any specimens held, or to inspect any records.
11. Import, export or reexport of wildlife must be made through one of the following designated ports or as authorized by an Exception to Designated Port permit: New York, NY; Miami, FL; New Orleans, LA; Los Angeles and San Francisco, CA; Dallas/Ft. Worth, TX; Honolulu, HI; Chicago, IL; Seattle, WA and Portland, OR.

Exception to Designated Port Permittee:

- a. Permittee is liable for all costs incurred by USFWS in examining shipments including per diem, salary and travel costs. Payment shall be by certified check or money order, payable to U.S. Fish and Wildlife Service prior to Delivery of shipment to the consignee.
- b. The nearest USFWS Law Enforcement Office (list attached) must be notified at least 72 hours prior to import, export or reexport.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

ADDRESS ONLY THE DIRECTOR
FISH AND WILDLIFE SERVICE

Implemented June 1982

Special Conditions for Marine Mammals and Native Endangered and Threatened Species Permits

1. Permittee must comply with the attached General Permit Conditions specified by the Office of Management Authority.
2. Any dead or injured specimens of the authorized wildlife found may be salvaged or cared for.
3. Unless otherwise authorized on the face of the permit, the wildlife must be immediately released at or near the capture site after the permitted activity.
4. Unexpected death or escape of the authorized wildlife shall be reported to the Office of Management Authority (703/358-2104) before the end of the next business day.
5. BIRD BANDING, marking, radio tagging, etc., must be conducted in accordance with a Federal Bird Marking and Salvage permit.

THE FOLLOWING CONDITIONS APPLY UNTIL AUTHORIZED DISPOSAL OF THE WILDLIFE, REGARDLESS OF THE EXPIRATION DATE OF THE PERMIT:

6. The authorized wildlife may NOT be sold, donated or transferred unless the receiver has first been issued authorization by the Director.
7. Any dead authorized wildlife shall be preserved and held for scientific purposes whenever practical.
8. Any live SEA TURTLES held must be maintained in accordance with the "Care and Maintenance Standards for Sea Turtles Held in Captivity" specified by the Office of Management Authority.
9. MARINE MAMMALS must be cared for and maintained in accordance with the Animal and Plant Health Inspection Service's regulations on "Marine Mammals; Humane Handling, Care, Treatment, and Transportation."

113.22 Renewal of permits.

(a) Application for renewal. Applicants for renewal of a permit must submit a written application at least 30 days prior to the expiration date of the permit. Applicants must certify in the form required by § 13.12(a)(5) that all statements and information in the original application remain current and correct, unless previously changed or corrected. If such information is no longer current or correct, the applicant must provide corrected information.

(b) Renewal criteria. The Service shall issue a renewal of a permit if the applicant meets the criteria for issuance in § 13.21(b) and is not disqualified under § 13.21(c).

(c) Continuation of permitted activity. Any person holding a valid, renewable permit, who has complied with this section, may continue the activities authorized by the expired permit until the Service has acted on such person's application for renewal.

(d) Denial. The issuing officer may deny renewal of a permit to any applicant who fails to meet the issuance criteria set forth in § 13.21 of this part, or in the part(s) or section(s) specifically governing the activity for which the renewal is requested.

113.23 Amendment of permits.

(a) Permittee's request. Where circumstances have changed so that a permittee desires to have any condition of his permit modified, such permittee must submit a full written justification and supporting information in conformity with this part and the part under which the permit was issued.

(b) Service reservation. The Service reserves the right to amend any permit for just cause at any time during its term upon written finding of necessity.

(c) Change of name or address. A permittee is not required to obtain a new permit if there is a change in the legal individual or business name, or in the mailing address of the permittee. A permittee is required to notify the issuing officer within 10 calendar days of such change. This provision does not authorize any change in location of the conduct of the permitted activity when approval of the location is a qualifying condition of the permit.

113.24 Right of succession by certain persons.

(a) Certain persons, other than the permittee are granted the right to carry on a permitted activity for the remainder of the term of a current permit provided they comply with the provisions of paragraph (b) of this section. Such persons are the following:

(1) the surviving spouse, child, executor, administrator, or other legal representative of a deceased permittee; and

(2) A receiver or trustee in bankruptcy or a court designated assignee for the benefit of creditors.

(b) In order to secure the right provided in this section the person or persons desiring to continue the activity shall furnish the permit to the issuing officer for endorsement within 90 days from the date the successor begins to carry on the activity.

[29 FR 1161, Jan. 4, 1974, as amended at 47 FR 30786, July 15, 1982; 54 FR 38148, Sept. 14, 1989.]

(a) Permits issued under this part are not transferable or assignable. Some permits authorize certain activities in connection with a business or commercial enterprise and in the event of any lease, sale, or transfer of such business entity, the successor must obtain a permit prior to continuing the permitted activity. However, certain limited rights of succession are provided in § 13.24.

(b) Except as otherwise stated on the face of the permit, any person who is under the direct control of the permittee, or who is employed by or under contract to the permittee for purposes authorized by the permit, may carry out the activity authorized by the permit, as an agent for the permittee.

113.26 Discontinuance of permit activity.

When a permittee, or any successor to a permittee as provided for by § 13.24, discontinues activities authorized by a permit, the permittee shall within 30 calendar days of the discontinuance return the permit to the issuing office together with a written statement surrendering the permit for cancellation. The permit shall be deemed void and cancelled upon its receipt by the issuing office. No refund of any fees paid for issuance of the permit or for any other fees or costs associated with a permitted activity shall be made when a permit is surrendered for cancellation for any reason prior to the expiration date stated on the face of the permit.

113.27 Permit suspension.

(a) Criteria for suspension. The privileges of exercising some or all of the permit authority may be suspended at any time if the permittee is not in compliance with the conditions of the permit, or with any applicable laws or regulations governing the conduct of the permitted activity. The issuing officer may also suspend all or part of the privileges authorized by a permit if the permittee fails to pay any fees, penalties or costs owed to the Government. Such suspension shall remain in effect until the issuing officer determines that the permittee has corrected the deficiencies.

(b) Procedure for suspension.

(1) When the issuing officer believes there are valid grounds for suspending a permit the permittee shall be notified in writing of the proposed suspension by certified or registered mail. This notice shall identify the permit to be suspended, the reason(s) for such suspension, the actions necessary to correct the deficiencies, and inform the permittee of the right to object to the proposed suspension. The issuing officer may amend any notice of suspension at any time.

(2) Upon receipt of a notice of proposed suspension the permittee may file a written objection to the proposed action. Such objection must be in writing, must be filed within 45 calendar days of the date of the notice of proposal, must state the reasons why the permittee objects to the proposed suspension, and may include supporting documentation.

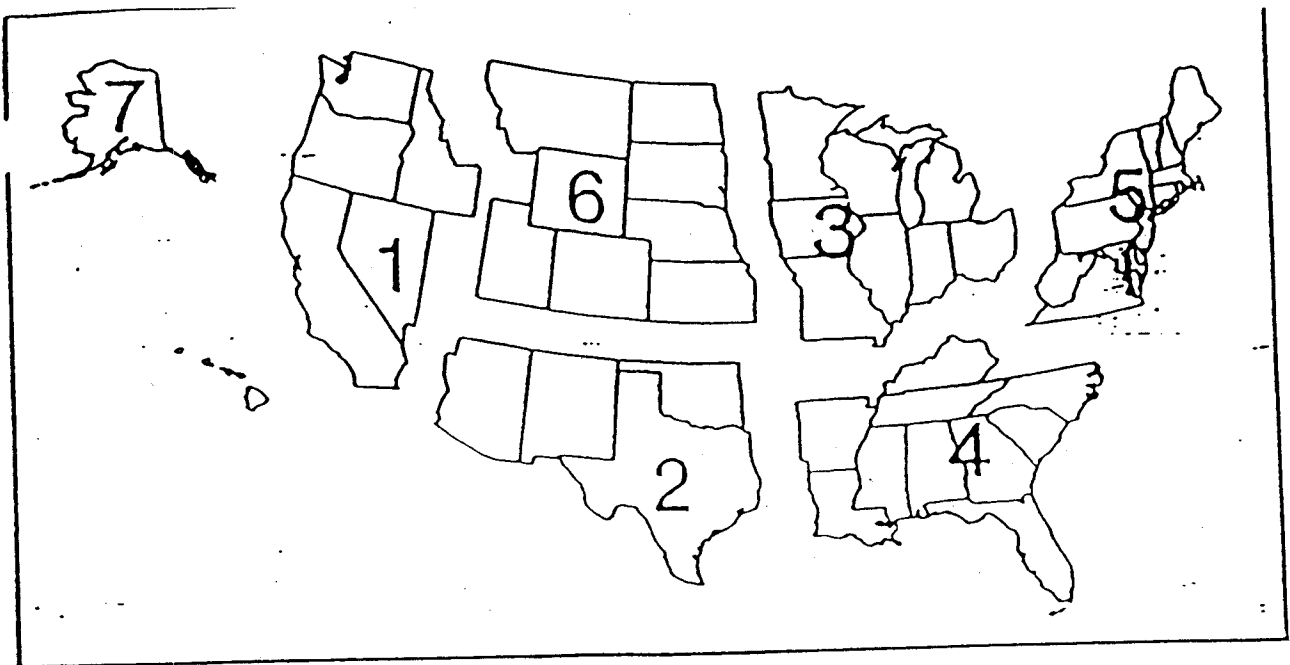
(3) A decision on the suspension shall be made within 45 days after the end of the objection period. The issuing officer shall notify the permittee in writing of the Service's decision and the reasons therefore. The issuing officer shall also provide the applicant with the information concerning the right to request reconsideration of the decision under § 13.29 of this part and the procedures for requesting reconsideration.

113.28 Permit revocation.

(a) Criteria for revocation. A permit may be revoked for any of the following reasons:

(1) The permittee willfully violates any Federal or State statute or regulation, or any Indian tribal law or regulation, or any law or regulation of any foreign country, which involves a violation of the conditions of the permit or of the laws or regulations governing the permitted activity; or

(2) The permittee fails, within 60 days to correct deficiencies that were



JURISDICTION

Region 1: California, Hawaii, Idaho, Nevada, Oregon, Washington, American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and the Pacific Trust Territories

Region 2: Arizona, New Mexico, Oklahoma, and Texas

Region 3: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin

Region 4: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the U.S. Virgin Islands

Region 5: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and West Virginia

Region 6: Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming

Region 7: Alaska

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copy of Bakersfield copy

430-94

CITY OF BAKERSFIELD
Agreement No. 94-159
Approved AUG 10 1994

Implementation/Management Agreement

By and Among

United States Fish and Wildlife Service,
California Department of Fish and Game,
City of Bakersfield
and
County of Kern

Regarding the Metropolitan Bakersfield Habitat
Conservation Plan

April 1994

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1.0 RECITALS	1
2.0 DEFINITIONS	2
2.1 Acquired and Acquisition	2
2.2 Administrator	2
2.3 Basis Dollars	3
2.4 Cooperative Agreements	3
2.5 ESA and CESA	3
2.6 Federally Protected Species	3
2.7 Habitat Management Lands	3
2.8 Implementation Trust	3
2.9 Management Permit and 2081 Permit	4
2.10 Mitigation	4
2.11 Natural Land	4
2.12 Open Land	4
2.13 10(a)2081 Permit Area	4
2.14 Permittee	4
2.15 Project	5
2.16 Section 10(a)(1)(B) Permit	5
2.17 Other Species of Concern	5
2.18 Plan Area	5
2.19 State Protected Species	5
2.20 Urban Development	6
2.21 Urban Development Permit	6
2.22 Urban Development Permittee	6
3.0 OBLIGATIONS OF THE PARTIES	6
3.1 City and County and Implementation Trust	6
3.2 USFWS	10
3.3 CDFG	10
4.0 HABITAT MANAGEMENT AND PROTECTION	11
4.1 Administration of MBHCP	11
4.2 Annual Reporting	11
4.3 Habitat Management Land Acquisition	12
4.4 Habitat Management Entity	12
4.5 Potential Habitat Management Land Enhancement	13
4.6 Habitat Management Plans	13
4.7 Salvage and Relocation	14
5.0 MUTUAL ASSURANCES	16
6.0 AMENDMENT AND REMEDIES	19
6.1 Amendment	19
6.2 Remedies in General	20
6.3 Suspension	20
6.4 USFWS Right to Revoke, Terminate or Suspend	21
6.5 Severability	21
7.0 MISCELLANEOUS	21
7.1 Term of Agreement	21
7.2 Amendments	23
7.3 Notices	23
7.4 Captions	24
7.5 Counterparts	24
7.6 Governing Law	24
7.7 Complete Agreement	24
7.8 Third Party Beneficiaries	24
7.9 Conflict with MBHCP	24
7.10 No Authorization To Federal Agencies	25
7.11 No Authorization To State Agencies	25

IMPLEMENTATION/MANAGEMENT AGREEMENT

THIS IMPLEMENTATION/MANAGEMENT AGREEMENT is entered into as of the 15th day of AUGUST, 1994, by and among the UNITED STATES FISH AND WILDLIFE SERVICE, an Agency of the Department of the Interior of the United States of America ("USFWS") the CALIFORNIA DEPARTMENT OF FISH AND GAME, a Subdivision of the Resources Agency of the State of California ("CDFG"), the CITY OF BAKERSFIELD ("City") and the COUNTY OF KERN ("County").

1.0 RECITALS

This Agreement is based on the following facts and assumptions, intentions and expectations:

1.1 The Metropolitan Bakersfield Habitat Conservation Plan ("MBHCP") describes a cooperative federal, state, and local program of conservation for a number of plant and animal species of concern, as listed and defined in Section 2 of this Agreement (the "Federally Protected Species, State Protected Species, and/or Other Species of Concern"). The MBHCP is a product of lengthy study and negotiation and represents coordination of private development and conservation interests with federal, state and local governments.

1.2 The species of concern are found in or may use or inhabit portions of the Metropolitan Bakersfield area and as a consequence, urban growth foreseeable over the next twenty years may result in a diminution of habitat and an unintentional taking of individuals of the Federally Protected Species, State Protected Species, and/or Other Species of Concern incidental to the normal course of urban development.

1.3 The MBHCP is a long-term program for the protection of the Federally Protected Species, State Protected Species, and/or Other Species of Concern. The MBHCP establishes the conditions under which the County and the City for the benefit of landowners and other urban development permittees are seeking permits to allow the taking of Federal and State protected species incidental to development and other land uses within a portion of the historical range of the Federally Protected Species, State Protected Species, and/or Other Species of Concern. The Agreement establishes the terms and conditions of a permit by the Secretary of the United States Department of the Interior under Section 10(a)(1)(B) of the Endangered Species Act ("ESA") and a permit (Exhibit A) from CDFG under Section 2081 of the California Fish and Game Code, each for a term identified in Section 7.1 of this Agreement. The MBHCP and this Agreement also serve the City and County as an expenditure/capital improvement plan pursuant to Government Code Section 66000.

1.4 The intention of the MBHCP and this Agreement is to establish a regional conservation program for the Federally Protected Species, State Protected Species, and/or Other Species of Concern and to thereby eliminate the review of individual projects by the USFWS and CDFG and eliminate the imposition of project-specific mitigation measures by the parties to this Agreement to protect the Federally Protected Species, State Protected Species, and/or Other Species of Concern or their habitat except as provided herein.

1.5 The purpose of this Agreement is to define the respective rights and obligations of the parties and identified beneficiaries of this Agreement with respect to the implementation of the MBHCP.

AGREEMENT

FOR AND IN CONSIDERATION of the recitals set forth above, the covenants set forth herein and other consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto do hereby agree as follows:

2.0 DEFINITIONS

The following terms as used in this Agreement shall have the meanings set forth below:

2.1 Acquired and Acquisition. The terms "acquired" and "acquisition" shall mean and refer to any of the following:

- (a) Ownership of fee interest in real property.
- (b) Ownership of a wildlife conservation easement, substantially in the form of the attached hereto as Exhibit B, in perpetuity, or similar estate in real property.
- (c) Recordation of an irrevocable offer to dedicate a fee interest, or a wildlife conservation easement in perpetuity or similar estate in real property.
- (d) A transferor's contingency-free contract or escrow to purchase a fee interest as provided in subsection (a) or a wildlife conservation easement as provided in subsection (b); provided that the Implementation Trust executes a trust agreement, or provides a letter of credit or other security instrument which secures the acquisition of such real property.
- (e) A transferor's contingency-free contract or escrow to purchase a fee interest or other interest acceptable to CDFG, in offered lands referred to in section 4.4, provided that CDFG has notified the implementation trust that it intends to accept the offered lands in accordance with section 4.4.

2.2 Administrator. The term "administrator" shall mean the representatives of the City and County to the Implementation Trust.

2.3 Basis Dollars. The term "basis dollars" means dollar values expressed in 1994 valuations. The basis dollars shall be adjusted for inflation using the Implicit Price Deflator for State and Local Government Purchase of Goods and Services as published by the U.S. Department of Commerce. The Implicit Price Deflator as published is determined for the 3rd calendar quarter of the current year and compared to the 3rd quarter of the previous year.

2.4 Cooperative Agreements. The term "Cooperative Agreements" means the use of a variety of different tools, including easements or other mechanisms, to assure the acquisition, management, enhancement and/or improvement of potential Habitat Management Lands.

2.5 ESA and CESA. The term "ESA" means the Endangered Species Act of 1973, as amended, and the term "CESA" means the California Endangered Species Act, as amended.

2.6 Federally Protected Species. Federally Protected Species are the following:

Animals:

San Joaquin kit fox	<i>Vulpes macrotis mutica</i>
Blunt-nosed leopard lizard	<i>Gambelia silus</i>
Tipton kangaroo rat	<i>Dipodomys n. nivatoides</i>
Giant kangaroo rat	<i>Dipodomys ingens</i>

Plants:

Bakersfield cactus	<i>Opuntia treleasei</i>
California jewelflower	<i>Caulanthus californicus</i>
San Joaquin wooly-threads	<i>Lembertia congdonii</i>
Hoover's wooly-star	<i>Eriastrum hooveri</i>
Kern mallow	<i>Eremalche kernensis</i>

2.7 Habitat Management Lands. The term "Habitat Management Lands" means a parcel of land or an aggregation of parcels of land protected from future urban development or other disturbance, and managed as a unit for the conservation and protection of Federally Protected Species, State Protected Species, and/or Other Species of Concern. Habitat Management Lands include any of the following: (a) natural land acquired by the Implementation Trust, (b) land, other than natural land, acquired by the Implementation Trust, which is covered by a Habitat Management Plan required by Section 4.4, and (c) land for which the Implementation Trust has entered into a Cooperative Agreement pursuant to Section 4.5.

2.8 Implementation Trust. The term "Implementation Trust" shall mean that body established pursuant to a Joint Powers Agreement ("JPA") (Exhibit C) between the County and the City for the purpose of carrying out provisions of this Agreement. The Implementation Trust comprises representatives of the City and the County as administrators. Representatives from USFWS and CDFG shall be mandatory advisors. In addition, a member of the public will be appointed as a mandatory advisor. The member of the public will serve a two year term and will be alternately appointed by the City Council and Kern County Board of Supervisors. The administrators may consult any other advisors as necessary. In this context mandatory advisor

shall mean a person who attends Implementation Trust meetings and consults with the administrators, however, a mandatory advisor will not have fiduciary responsibilities and will not be voting member. Should either party terminate the JPA, the City and County each agree to perform the responsibilities and obligations of the Implementation Trust within their respective jurisdictions.

2.9 Management Permit and 2081 Permit. The terms "Management Permit" and "2081 Permit" are interchangeable and shall mean a permit for management of threatened and endangered species issued by the California Department of Fish and Game under Section 2081 of the California Fish and Game Code.

2.10 Mitigation. The term "Mitigation" includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by providing permanent replacement resources or environments through the acquisition and reservation of land and the provision of adequate funding for perpetual conservation, protection, or enhancement of species of concern

2.11 Natural Land. The term "Natural Land" means undeveloped land which has not been significantly altered by human activity. Natural land generally includes open brushland/woodland, dense brushland/woodland, scrubland, riparian areas, wetlands, ephemeral flooded land, bare ground, sand dunes, rock outcroppings, grasslands, grasslands subject to grazing, and non-crop agricultural land which has retained natural contours or has reverted back to natural vegetation. Natural Land does not include former agricultural land which has been leveled or graded to facilitate irrigation or production activities, and land which has been out of production for less than five consecutive years. Natural Land in the Permit Area is shown on Exhibit D.

2.12 Open Land. The term "Open Land" includes Natural Land and land which has been significantly altered by agricultural or industrial use, but which has not been substantially developed for urban uses. Open Land in the Permit Area is shown on Exhibit E.

2.13 10(a)(1)(B)/2081 Permit Area. The term "Permit Area" means those portions of the City and the County covered by the Metropolitan Bakersfield 2010 General Plan, except the area of the Kern River primary floodplain and the Kern Water Bank Project, as shown on Exhibit F.

2.14 Permittee. The term "Permittee" shall mean the City and the County.

Metropolitan Waterfield ECA Implementation Management
2.15 Project. The term "project" means the whole of an action, which has a potential for resulting in a physical change in the environment, directly or ultimately, and that is any of the following:

- (1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities.
- (2) An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- (3) An activity involving the issuance to a person of a lease, permit, grading approval, license, certificate, or other entitlement by one or more public agencies.

2.16 Section 10(a)(1)(B) Permit. The term "Section 10(a)(1)(B) Permit" shall mean generally the permit issued by the U.S. Department of Interior under Section 10(a)(1)(B) of the ESA.

2.17 Other Species of Concern. The term "Other Species of Concern" means one or more of the following species:

Animals:

Short-nosed kangaroo rat	<i>Dipodomys nitratoides brevinasus</i>
San Joaquin pocket mouse	<i>Perognathus i. inornatus</i>

Plants:

Slough thistle	<i>Cirsium crassicaule</i>
Recurved larkspur	<i>Delphinium recurvatum</i>

2.18 Plan Area. The term "Plan Area" shall mean generally the southern San Joaquin Valley including portions of Kern County, Kings County, Tulare County and the Carrizo Plain area of San Luis Obispo County.

2.19 State Protected Species. The term "State Protected Species" shall mean those plants or animals listed under the CESA that are found or may be found in the Permit Area. They include:

Animals:

San Joaquin kit fox	<i>Vulpes macrotis mutica</i>
Blunt-nosed leopard lizard	<i>Gambelia silus</i>
Tipton kangaroo rat	<i>Dipodomys n. nitratoides</i>
Giant kangaroo rat	<i>Dipodomys ingens</i>
San Joaquin (Nelson's) antelope squirrel	<i>Ammospermophilus nelsoni</i>

Plants:

Bakersfield cactus	<i>Opuntia treleasei</i>
California jewelflower	<i>Caulanthus californicus</i>
Tulare pseudobahia	<i>Pseudobahia peirsonii</i>
Striped adobe lily	<i>Fritillaria striata</i>
Bakersfield saltbush	<i>Atriplex tularensis</i>

2.20 Urban Development. The term "Urban Development" means a change in land use from Open Land to any other land use for which a permit such as a grading permit, grading plan approval, building permit or use permit is required from the City or County, including but not limited to, the construction of buildings on lots of record and projects undertaken directly by the City or County. The term does not include a change from Natural Land or Open Land to agricultural use, nor does it include a change from Natural Land, Open Land, or agricultural use to oil production except for associated ancillary facilities for which the City and County exercise discretionary authority over the issuance of such permits or approvals pursuant to the California Environmental Quality Act.

2.21 Urban Development Permit. The term "Urban Development Permit" means issuance of a building permit by the City or County for a project that would result in Urban Development. Where a project would ultimately result in Urban Development, the term "Urban Development Permit" also means issuance of a use permit or grading plan approval, or approval of activities undertaken by a public agency including but not limited to public works construction and related activities, if applicable by the City or County.

2.22 Urban Development Permittee. The term "Urban Development Permittee" shall mean landowners and other private parties that are grading, building, or conducting other development activities within the Permit Area as approved by the Permittee under the terms of this Agreement.

3.0 OBLIGATIONS OF THE PARTIES.

3.1 City and County and Implementation Trust.

3.1.1 Neither the City nor the County shall issue any Urban Development Permit for any parcel of land located within the Permit Area which will allow any Urban Development of such parcel by any person, firm or entity unless the City and County and the Urban Development Permittee comply with the applicable requirements of Section 3.1.8 or 3.1.13.

3.1.2 Subject to all of the terms and conditions of this Agreement, all Federally Protected Species addressed in the MBHCP and included in the Section 10(a)(1)(B) permit, and State Protected Species addressed in the MBHCP and included in the Section 2081 permit may be taken and their habitat modified during the construction, operation and maintenance of Urban Development Permit activities.

3.1.3 Upon issuance of an Urban Development Permit and if the City or County is in compliance with Section 3.1.1, the City or County as the 10(a)(1)(B) and 2081 Permittees shall issue an Acknowledgement indicating that the Urban Development Permittee is allowed to construct, maintain and operate a project which may result in the take of State and Federally Protected Species consistent with the conditions in the 10(a)(1)(B), 2081 and Urban Development Permits in the area for which the Urban Development Permit is issued. The issuance of the Acknowledgement by the City or County is intended to be purely ministerial.

3.1.4 The Acknowledgement shall be in writing and may be incorporated into the form or language of Urban Development Permit issued by the City or County. It shall contain the substance of the following text:

In consequence of the City/County having complied with the terms of the Section 10(a)(1)(B) Permit issued pursuant to the Federal Endangered Species Act, the Section 2081 Permit issued pursuant to the California Endangered Species Act, and this Agreement, and the City and County having issued the Urban Development Permit, the Urban Development Permit holder, its successors, assignees and agents acting as beneficiaries of the Metropolitan Bakersfield Habitat Conservation Plan Implementation/Management Agreement are permitted to construct, operate and maintain the project [name and legal description of the specific project] which may result in a legally permitted take of State Protected Species and Federally Protected Species which are listed in the City's and County's Section 10(a)(1)(B) and 2081 Permits. The take authorization provided by Section 10(a)(1)(B) and 2081 Permits applies only to activities on the parcels which are carried out in full compliance of the 10(a)(1)(B) and 2081 Permit Conditions, including the City/County complying with the cumulative mitigation requirements of Section 3.1.8 of Metropolitan Bakersfield Habitat Conservation Plan Implementation/Management Agreement.

If sufficient evidence is presented to demonstrate that the Urban Development Permittee violates conditions of the Urban Development Permit and/or the Section 10(a)(1)(B) and 2081 Permits, the City or County, as applicable, shall respond by notifying the Urban Development Permittee of said violation and shall issue an order in accordance with procedures specified in the applicable City or County Building Code that prohibits development activities which may result in ground disturbance ("Stop Work Order") until the alleged violation is corrected or resolved. The City or County shall also, at that time, notify the USFWS and CDFG of said violation. Upon the Urban Development Permittee providing the City or County with written notice from the USFWS and CDFG that the violation has been corrected, the project will be deemed in compliance with the Section 10(a)(1)(B) and 2081 Permits.

3.1.5 Within 180 days of issuance of the Section 10(a)(1)(B) and 2081 Permits, the City and County shall prepare a baseline map for purposes of monitoring take and mitigation within the Permit Area. The map shall be provided to the Fresno Office of CDFG and the Sacramento office of the USFWS for review and approval. If, within 60 days of the receipt of the baseline map, CDFG and USFWS have not provided, in writing, specific objections to the information on the map, the baseline map shall be deemed approved. If corrections of the map are requested by either CDFG or USFWS, the map shall be so corrected by the City and County within 60 days and shall become the baseline map for the 10(a)(1)(B) and 2081 Permits and this Agreement,

except that the City or County may appeal any determination regarding the baseline map to the Sacramento office of CDFG or the Portland office of the USFWS. The map, shall be based on aerial photography taken approximately (within 90 days) at the time of issuance of the 10(a)(1)(B) and 2081 Permits. Aerial photo interpretation shall be done by staff professionals trained to interpret aerial photography and the name(s) of the person(s) doing the interpretation shall be provided to USFWS and CDFG when the proposed baseline map is submitted to USFWS and CDFG. The aerial photos used for developing the base map shall be available to the CDFG and USFWS during the 60 day review period and shall become property of CDFG upon approval of the base map. The Implementation Trust shall be the designated custodian of the photos.

3.1.6 The City and County each and separately shall maintain and provide the Implementation Trust, USFWS and CDFG with a record of the following on a quarterly basis, calculated from the date of this Agreement:

- (i) The cumulative amount of Project lands (in acres) subject to Habitat Management Land acquisition requirements under the 10(a)(1)(B) and 2081 Permits for which the County and City have issued an Urban Development Permit ("Approved Urban Development") or otherwise approved by the City or County; and
- (ii) The cumulative amount of Natural Lands approved for Urban Development and subject to the terms of the 10(a)(1)(B) and 2081 Permits and this Agreement; and
- (iii) The cumulative amount of Open Lands approved for Urban Development and subject to the terms of the 10(a)(1)(B) and 2081 Permits and this Agreement.

At 4 year intervals starting from the date of the Issuance of the 10(a)(1)(B) or 2081 Permits, whichever occurs first, the City and County shall provide an updated map (based on aerial photography taken within 90 days of the due date of the map) showing the amount of Natural and Open Lands remaining within the Permit area. The four year interval may be reasonably altered subject to the approval of USFWS and CDFG to eliminate cost redundancy if adequate aerial photography is available in connection with another project.

3.1.7 The Implementation Trust shall maintain and provide the City, County, USFWS and CDFG with a record of the following on a quarterly basis, calculated from the date of this Agreement:

- (i) The amount (in acres) of Mitigation Credits (as provided for in Exhibit "G") outstanding and unused, and the holder of record of such credits; and
- (ii) The cumulative amount (in acres) of Habitat Management Lands which have not been committed as mitigation for the cumulative amount of Project lands identified pursuant to Section 3.1.6 (i) and not including the area associated with unused Mitigation Credits reported under Section 3.1.7 (i).

3.1.8 At all times the amount of Habitat Management Lands shall be greater than the greater of the following: (i) The amount of Approved Urban Development on Open Land or (ii) Three times the amount of Approved Urban Development on Natural Land, as shown on the record referred to in Section 3.1.6.

3.1.9 Prior to the issuance of an Urban Development Permit the City or the County as appropriate, shall conduct the calculation described in Section 3.1.8, adding to Approved Urban Development the amount of Natural Land and Open Land proposed for Urban Development in the project.

3.1.10 A project applicant may elect to expend Mitigation Credits, held by the applicant by notifying the City or the County at the time of the application for approval of Urban Development. In the event that a project applicant elects to expend Mitigation Credits the City or County shall conduct the calculation described in Section 3.1.8, adding to the area of Approved Urban Development the amount of Natural Land and Open Land proposed for Urban Development in the project, and adding to the area of Habitat Management Lands the amount of Mitigation Credits (in acres) which the project applicant has elected to expend. In no event shall the calculations made pursuant to Section 3.1.8 include any Habitat Management Lands for which the Implementation Trust has issued Mitigation Credits until such time as the holder of such Mitigation Credits expends such Mitigation Credits by relinquishing the Mitigation Credits, or appropriate portion thereof, in writing to the City or County or an approved management entity, as appropriate.

3.1.11 For purposes of the calculations conducted pursuant to sections 3.1.8, 3.1.9, and 3.1.10, the amount of Habitat Management Lands shall include only (a) lands which are within the potential Habitat Management Land areas shown on Exhibits H, I and J, (b) lands which are recommended by CDFG and USFWS advisors to the Implementation Trust for acquisition or for a cooperative agreement acceptable to the CDFG and the Implementation Trust, and (c) lands which are otherwise approved by CDFG and USFWS for acquisition.

For purposes of Sections 3.1.8, 3.1.9 and 3.1.10, the Implementation Trust shall receive one hundred percent acreage credit where land disturbance for paved surfaces, concrete lined canals, graded roads and oil and gas production well pads and appurtenant structures (collectively "Disturbances") is less than or equal to two percent (2%) of the total land area being considered. Where the amount of land attributable to Disturbances is greater than two percent of the land area being considered for acquisition as Habitat Management Lands, the Implementation Trust shall not receive credit for the area of Disturbance exceeding two percent, unless USFWS and CDFG approve a greater credit. Calculations shall be rounded to the nearest percentage point. The calculations of Habitat Management Lands pursuant to this paragraph shall be made by the Implementation Trust as of the date of the notice referred to in Section 4.4.

The parties recognize that it will be difficult to calculate the precise amount of "disturbances" on lands and that it is appropriate for the Implementation Trust to make such calculations utilizing County Assessor's maps and aerial photos. Nothing in this Section is intended to require the use of legal descriptions or detailed mapping when computing areas not subject to Habitat Management Lands credit.

3.1.12 The amount of Mitigation Credits expended shall be reported to CDFG and the USFWS on a quarterly basis.

3.1.13 Notwithstanding the provisions of section 3.1.8 and 3.1.11, during the first 12 months after the issuance of either the Section 10(a)(1)(B) or 2081 Permits, whichever occurs later, the City and County may approve Urban Development Permits if the Implementation Trust has established a separate trust account naming the CDFG as the beneficiary, and has deposited such funds into such account or has established an irrevocable letter of credit naming CDFG as beneficiary and in an amount which is adequate (based on \$600 per acre land costs) to provide for the acquisition of sufficient acreage of Habitat Management Lands to satisfy the requirements of Section 3.1.8. The trust agreement or letter of credit shall provide that the funds (or a pro-rata share thereof) shall be released to the Implementation Trust at the time that the lands secured by such instruments are acquired and for the amount of land secured.

All Habitat Management Land responsibilities accumulated during the first twelve months of MBHCP program operation shall be accounted for in the form of Acquired Habitat Management Lands within the first twenty-four months of MBHCP program operation.

3.1.14 On land proposed for Habitat Management Land status the Implementation Trust shall cause the escrow officer, within ten days after the opening of escrow, to send a notice by certified mail substantially in the form of Exhibit L to all easement holders shown on the preliminary title report, not including mineral interest holders without a right of surface entry, to the address shown on the instrument creating the easement, or as shown on the most recent assessor's roll.

3.2 USFWS.

3.2.1 After issuance of the Section 10(a)(1)(B) Permit, the USFWS shall monitor the implementation of the Section 10(a)(1)(B) Permit, the MBHCP and the activities thereunder, including but not limited to, the selection, acquisition, modification, management, operation and maintenance of the Habitat Management Lands in order to insure compliance with this Agreement.

3.2.2 The USFWS, to maximum extent possible, shall actively participate in meetings of the Implementation Trust, and shall insure the availability of its staff for informal consultations and meetings with the staffs, boards or councils of the other parties to this Agreement to insure the appropriate monitoring of permitted incidental take, and to insure that the implementation of the MBHCP is consistent with, and will not render invalid, any finding upon which the Section 10(a)(1)(B) Permit is based. USFWS enforcement remedies are addressed in Section 6.4 of this Agreement. The USFWS shall devote best efforts to assist the Implementation Trust in obtaining additional funding from sources including, but not limited to, existing and future grant programs and existing and future bond issues.

3.2.3 USFWS shall manage any Habitat Management Lands conveyed to it pursuant to the Implementing Agreement for the conservation of Federally Protected Species, State Protected Species and, as appropriate, Other Species of Concern.

3.3 CDFG.

3.3.1 After issuance of the 2081 Permit, the CDFG shall monitor the implementation of the 2081 Permit, the MBHCP and the activities thereunder, including but not limited to, the selection, acquisition, modification, management, operation and maintenance of the Habitat Management Lands in order to insure compliance with this Agreement, and consistent with CDFG trustee duties pursuant to CESA.

3.3.2 The CDFG, to the maximum extent possible shall actively participate in meetings of the Implementation Trust, and shall insure the availability of its staff for consultations and meetings with the staffs, boards or councils of the other parties to this Agreement to insure the appropriate monitoring of permitted activities which may lead to take of State Protected Species. CDFG remedies for enforcement of this Agreement are addressed in Section 6.2 of this Agreement. The CDFG will assist (to the extent authorized by the Legislature) the Implementation Trust in obtaining additional funding from sources including, but not limited to, existing and future grant programs and existing and future bond issues.

3.3.3 CDFG shall manage any Habitat Management Lands conveyed to it pursuant to the Implementing Agreement for the conservation of Federally Protected Species, State Protected Species and, as appropriate, Other Species of Concern.

4.0 HABITAT MANAGEMENT AND PROTECTION

4.1 Administration of MBHCP. The Implementation Trust shall be responsible to administer the selection and acquisition of Habitat Management Lands. The Implementation Trust shall maintain complete, accurate and up-to-date records of the amount and location of the Habitat Management Land acquired, and the amount of Approved Urban Development. Prior to the passage of title to anyone other than CDFG or USFWS, the Implementation Trust shall record a conservation easement (similar to the form of Exhibit B and subject to approval of CDFG and USFWS) in favor of CDFG.

Ordinarily, the Implementation Trust does not intend to receive title to properties acquired as Habitat Management Lands. Rather, the Implementation Trust intends to arrange the passage of title directly to those agencies and entities who will own and manage Habitat Management Lands in accordance with the terms of the Section 10(a) (1)(B) and 2081 Permits.

4.2 Annual Reporting. The Implementation Trust shall make an annual report within thirty (30) days after the end of the City and County fiscal year to USFWS and CDFG on the status of the MBHCP. The report will provide the following information:

- (1) The amount of habitat proposed for Urban Development over the past year, showing the amount of Natural Land and the amount of Open Land so affected.
- (2) An estimate of the amount of taking of any State and Federally Protected Species which has taken place within the Permit Area. The estimate of take can be based on habitat area lost and does not require a census or population estimate.
- (3) The cumulative amount (in acres) of Habitat Management Land acquired.

- (4) Management activities conducted during the past year and those management activities proposed for the following year on lands not transferred to CDFG or USFWS.
- (5) Enhancement activities conducted in the past year and on those planned for the coming year on lands not transferred to CDFG or USFWS.
- (6) A qualitative analysis of the population status of the Federally Protected Species, State Protected Species, and/or Other Species of Concern in each Habitat Management Land area for those lands not transferred to CDFG or USFWS.
- (7) A description of any scientific research authorized or conducted by the City or County in the past year on the Habitat Management Lands not transferred to CDFG or USFWS, and any proposed research for the upcoming year.

4.3 Habitat Management Land Acquisition. The Implementation Trust shall identify potential Habitat Management Lands, following the preserve design guidelines of the MBHCP and recommendations of the CDFG and USFWS as advisors to the Implementation Trust, both inside and outside the Permit Area, and shall develop a priority acquisition program. Potential Habitat Management Lands are identified on Exhibits H, I and J. Exhibits H, I and J may be revised from time to time by the Implementation Trust with the written concurrence of CDFG and USFWS without requiring an amendment to this Agreement. Exhibit J is provided as representation of lands which have been approved by CDFG and USFWS for acquisition without additional biological review.

4.4 Habitat Management Entity. Prior to or at the time of the acquisition of any parcel of Habitat Management Lands, the Implementation Trust shall provide written notice ("Notice") to CDFG and USFWS of its acquisition of or intent to acquire, such lands and shall offer to grant such lands ("Offered Lands") to CDFG to be managed for the conservation of the Federally Protected Species, State Protected Species, and/or Other Species of Concern. Within sixty (60) days of the Notice, CDFG shall notify the Implementation Trust whether it intends to accept the Offered Lands. The CDFG and USFWS shall specify what management measures shall be included in any Habitat Management Plan developed pursuant to Section 4.6. In the event that the CDFG declines the Offered Lands, the Implementation Trust shall designate a habitat management entity, approved by the CDFG and USFWS, for the Habitat Management Lands within which the parcel will be located. Habitat management entities may include, but are not limited to, the USFWS and The Nature Conservancy. Any entity acting as the habitat management entity (including CDFG and USFWS) shall adopt a Habitat Management Plan acceptable to CDFG and USFWS within one hundred twenty (120) days following acquisition of the first parcel of Habitat Management Land. If within sixty (60) days of the receipt of a Habitat Management Plan the CDFG and USFWS have not provided, in writing, specific comments on the Habitat Management Plan, the Habitat Management Plan shall be deemed approved. The CDFG and USFWS shall only disapprove the Habitat Management Plan if the Plan does not include the management measures specified by CDFG and USFWS at the time that CDFG declined to accept the Offered Lands. Prior to accepting title to and/or management responsibility for any Habitat Management Lands, any management entity other than CDFG and USFWS must sign an agreement to manage land for the conservation of Federally Protected Species, State Protected Species and, as appropriate, Other Species of Concern in accordance with the MBHCP and this Agreement.

4.5 Potential Habitat Management Land Enhancement. The Implementation Trust may identify and prioritize lands, other than Habitat Management Land sites, which may be suitable for enhancement as Habitat Management Lands. The Implementation Trust may enter into an agreement with the landowner for the management and enhancement of potential Habitat Management Lands ("Cooperative Agreements"). The Implementation Trust may also enter into Cooperative Agreements to protect and enhance potential Habitat Management Land prior to acquisition. Each Cooperative Agreement shall include a plan for the management and enhancement, as appropriate, of the subject land consistent with the guidelines described in Section 4.6 ("Habitat Management Plan"), and shall include provisions for monitoring and reporting to the USFWS and CDFG. Potential Habitat Management Lands shall not be classified as Habitat Management Lands until so approved by the CDFG Regional Office and the USFWS Sacramento Field Office. The Implementation Trust may appeal any decision of the CDFG Regional Office and the USFWS Sacramento Field Office to the Sacramento Office of CDFG and the Portland Regional Office of the USFWS.

4.6 Habitat Management Plans.

Habitat Management Plans shall address the following issues:

- (1) Which Federally Protected Species, State Protected Species, and/or Other Species of Concern are currently supported by the Habitat Management Land and which Federally Protected Species, State Protected Species, and/or Other Species of Concern the Land could potentially support.
- (2) Which other plants, animals, or ecological communities are currently or could potentially be supported.
- (3) Appropriateness of visitor use.
- (4) Activities to be permitted and activities to be strictly controlled or prohibited on the Habitat Management Land including restriction of the use of the land, assuring its permanent use for protection and conservation of Federally Protected Species, State Protected Species, and/or Other Species of Concern.
- (5) Requirements for fencing and signing Habitat Management Land boundaries.
- (6) Requirements for patrolling of Habitat Management Land.
- (7) The value and suitability of each Habitat Management area to serve as a recipient of relocated San Joaquin kit fox or plants that are Federally Protected Species, State Protected Species, and/or Other Species of Concern that are plant species and the estimated cost of such relocation.

Habitat Management Plans shall address the enhancement of the land covered by the plan. The discussion of enhancement activities shall include discussion of the following issues:

- (1) Control of exotic and invasive plant species.

- (2) Control of the presence of coyotes or domestic animals on the Habitat Management Land.
- (3) Creation of artificial topography where appropriate to enhance habitat for Federally Protected Species, State Protected Species, and/or Other Species of Concern.
- (4) Discing or plowing to loosen soil where heavily compacted soil prevents other enhancement activities from being effective.
- (5) The appropriateness of implementing controlled burning for vegetation management.
- (6) Grazing as a means of vegetation management where appropriate.
- (7) Supplemental planting of plant Federally Protected Species, State Protected Species, and/or Other Species of Concern in areas where it is desirable to expand existing populations.
- (8) Habitat Management Plans must include an annual report itemizing expenditures of the management funds cited under 4.7.6 and 4.7.7.

4.7 Salvage and Relocation. Salvage and Relocation of the Federally Protected Species, State Protected Species, and/or Other Species of Concern shall be encouraged by the Implementation Trust to reduce on-site take to the greatest extent practicable.

4.7.1 At the time of the execution of this Agreement, it is considered practical to provide for the Salvage and Relocation of the San Joaquin kit fox and Federally Protected Plant Species and State Protected Plant Species. It is not considered practical to provide for the Salvage and Relocation of the other animals of concern ("small animals") due to their biological requirements. It is anticipated that such Salvage and Relocation of small animals may become practical at some time in the future and appropriate requirements can be adopted by the Implementation Trust without requiring an amendment to this Agreement.

4.7.2 The Implementation Trust shall maintain an inventory of known kit fox dens and known locations of Federally Protected Plant Species and State Protected Plant Species. The Implementation Trust shall be a repository for information regarding Federally Protected Species, State Protected Species, and/or Other Species of Concern. For the purposes of Section 4.7, "known" means a verified den site reflecting a documented history of use, either from actual observations of kit fox or from recent evidence of use and plotted on the map maintained by the Implementation Trust. With respect to Federally Protected Plant Species and State Protected Plant Species, "known" means a verified population, either extant or documented during the past five years and plotted on the map maintained by the Implementation Trust. Information may come from a variety of sources, including biological surveys conducted for CEQA compliance related to a project. However, there is no separate requirement for biota or preconstruction survey for Federally Protected Species, State Protected Species, and/or Other Species of Concern.

4.7.3 The Implementation Trust shall encourage efforts by others to relocate kit fox and Federally Protected Plant Species and State Protected Plant Species from areas for which Urban Development Permits have been issued. To do this, the Implementation Trust shall:

- (1) Maintain a map of areas approved for development or pending approval. This information can come from City and County approvals or other sources.
- (2) Maintain a list of individuals holding valid permits or performing research on the species of concern, and systematically update those individuals on areas proposed for development.
- (3) Coordinate with landowners to encourage relocation activities by individuals holding valid permits.
- (4) Ensure that relocation activity as provided for by the MBHCP is conducted by qualified parties and conducted at their own expense.
- (5) Gather data on the success of relocation activities from those engaged in relocation.

4.7.4 The City and County shall require, as a condition of approval of any Urban Development Permit that no later than five (5) working days prior to the initiation of any ground disturbance activities (the "Grading Start Date") by an Urban Development Permittee on parcels containing known dens, such Permittee shall agree to permit appropriate access for salvage purposes and notify the Regional Office of CDFG and USFWS of its intent to initiate such activities. If the CDFG or USFWS are unable to relocate the kit foxes by the Grading Start Date, the Urban Development Permittee shall then be required to eliminate the known den in the manner, described in Exhibit K, which allows for the San Joaquin kit fox to escape the construction area prior to project grading. Issuance of Urban Development permits shall be conditioned upon the compliance with this requirement. Den destruction associated with an approved Urban Development permit is considered to be take authorized by the 2081 and 10(a)(1)(B) Permits and does not require additional CESA or ESA permits. The Urban Development Permittee shall record and report to the Implementation Trust on any sightings of San Joaquin kit fox during den destruction.

4.7.5 Upon notification of the property owner, any person holding proper permits may remove and relocate kit fox from known dens within approved Urban Development Permitted areas. Any person proposing to remove or relocate kit fox or other listed species pursuant to an agreement or memorandum of understanding with CDFG shall be considered under contract to CDFG and their activities associated with relocations shall be covered by Fish and Game Code Section 2056. An Urban Development Permittee is not required under this Agreement or the MBHCP to pay the cost of the relocation or salvage activity or be responsible for obtaining necessary permits to relocate any Federally Protected Species, State Protected Species, and/or Other Species of Concern. If for any reason the persons responsible for relocating Federally Protected Species, State Protected Species, and/or Other Species of Concern are unable to carry out the relocation activities prior to the Grading Start Date, the Urban Development Permittee may proceed to engage in the supervised destruction of known dens as described in Section 4.7.4 and otherwise initiate approved construction activities.

4.7.6 At the time of the acquisition of any Habitat Management Lands, the Implementation Trust shall deposit into an account designated by the CDFG an amount equal to one-hundred basis dollars (\$100.00) per acre (credited pursuant to 3.1.11) of Habitat Management Lands acquired by the Implementation Trust. Such funds shall be adjusted for inflation each year as described in section 2.3 and shall be utilized by the CDFG, or provided by the CDFG to the entity responsible for the management of such lands, for the fencing and improvement of the acquired Habitat Management Lands.

4.7.7 Within six months of the date that any land is included in the calculation of the cumulative amount of Habitat Management Lands acquired or protected pursuant to this Agreement in Section 3.1.8, the Implementation Trust shall provide to CDFG an amount equal to three-hundred basis dollars (\$300.00) per acre (credited pursuant to 3.1.11) of such lands as an endowment for the management and enhancement of such land (the "Endowment"). Such funds shall be adjusted for inflation each year as described in section 2.3. In the event that any entity other than CDFG, which has an approved management agreement, has responsibility for the Habitat Management Lands, CDFG shall periodically provide accrued interest on the Endowment associated with the Specific Habitat Management Lands to the management entity for management of the habitat lands. At the time that the Implementation Trust provides to CDFG the funds required by Sections 4.7.6 and 4.7.7, the Implementation Trust shall have no further obligations to carry out management activities or to expend funds for the management of lands for which such funds have been provided to CDFG.

5.0 MUTUAL ASSURANCES

5.1 The primary purpose of this Agreement is to provide for the long-term reconciliation of new Urban Development within the Permit Area with the conservation and protection of the Federally Protected Species, State Protected Species, and/or Other Species of Concern. Based on and in consideration of this Agreement and the MBHCP, the parties hereby agree, and USFWS and CDFG hereby assure the City, the County, and Third Party Beneficiaries (as defined in Section 7.8) that:

- (i) Compliance with the terms of this Agreement constitutes compliance with the provisions of the ESA, the CESA and the California Native Plant Protection Act (Fish and Game Code section 1900 et seq.);
- (ii) Implementation of this Agreement, the MBHCP, and the CESA Management Permit for Urban Development will adequately provide for the conservation and protection of the Federally Protected Species, State Protected Species, and/or Other Species of Concern and their habitat in the Permit Area;
- (iii) Except as otherwise required by law and barring Unforeseen Circumstances, no further Mitigation, enhancement or compensation will be required by USFWS or CDFG pursuant to the ESA or the CESA or the California Native Plant Protection Act with respect to new Urban Development permitted within the Permit Area to provide for the conservation or protection of the Federally Protected Species, State Protected Species, and/or Other Species of Concern or their habitat;

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- (iv) CDFG shall consider adherence to the terms of this Agreement, the MBHCP, and the CESA Management Permit for Urban Development to be compliance with the provisions of the California Environmental Quality Act, the Planning and Zoning Law, the Subdivision Map Act, the Porter-Cologne Act, and the Cortese-Knox Act, as they relate to the CDFG responsibilities for the Federally Protected Species, State Protected Species, and/or Other Species of Concern.

5.1.1 The City and the County agree to maintain and establish (1) ordinances generally in the form of Exhibit G providing sources of funding that are sufficient to implement the MBHCP and (2) permitting procedures, classifications of project types, or make other changes in process or procedures which are necessary to implement this Agreement. The intent of the MBHCP is to provide for the acquisition of Habitat Management Lands to mitigate the impact of urban development in advance of incidental take of Federally Protected Species and State Protected Species and/or Species of Concern.

5.2 The parties to this Agreement acknowledge that Urban Development Permittees participating in the MBHCP may also be subject to permit requirements of agencies not parties to this Agreement. Except as otherwise required by law and barring Unforeseen Circumstances, the parties agree that participation in the MBHCP as provided in this Agreement, shall constitute the full extent of mitigation required for take of Federally Protected Species, State Protected Species, and/or Other Species of Concern related to the otherwise lawful Urban Development of land within the Permit Area. Except as provided in this § 5.2, the parties agree that they will not seek to impose additional mitigation requirements directed specifically at the protection and conservation of Federally Protected Species, State Protected Species, and/or Other Species of Concern or their habitat on Urban Development Permittees within the Permit Area through any other agency approval process whether or not such agency is a party to this Agreement.

The intent of the foregoing provision is to preclude recommendations and requirements for additional mitigation measures directed at Federally Protected Species, State Protected Species and/or Other Species of Concern. The provision does not preclude recommendations or requirements directed at species not addressed in this Agreement.

5.3 Consideration of MBHCP in USFWS Decisions. To the extent permitted by the ESA, the USFWS shall consider the MBHCP and this Agreement in any future determination by the USFWS with regard to the listing of one or more Other Species of Concern as an endangered species or threatened species.

5.4 Considerations of MBHCP in CDFG Decisions and Recommendations. To the extent permitted by the CESA, the CDFG shall consider the MBHCP and this Agreement in any future determinations and recommendations by the CDFG with regard to the listing of one or more of the Federally Protected Species, State Protected Species, and/or Other Species of Concern as an endangered species, threatened species or candidate species pursuant to the CESA.

5.5 **ESA Listing of Other Species of Concern. Barring Unforeseen Circumstances**, in the event that one or more of the other species of concern that are not Federally Protected Species ("Additional Federal Protected Species") are listed as an endangered species or threatened species pursuant to the ESA, the MBHCP shall be adequate documentation to support an application for a Section 10(a)(1)(B) permit to take such Additional Federally Protected Species incidental to Urban Development activities covered by the MBHCP. The USFWS shall publish notice ("Application Notice") of the Section 10(a)(1)(B) permit application in the Federal Register as soon as possible after the receipt of an executed Section 10(a)(1)(B) permit application by the City or County. The USFWS shall, after public review and comment and a determination that all biological and procedural requirements have been met, issue a Section 10(a)(1)(B) permit on the basis of the MBHCP and this Agreement authorizing incidental takings of the Additional Federally Protected Species in accordance with the MBHCP as soon as possible after publication of the Application Notice in the Federal Register. Unless USFWS makes a determination that there are Unforeseen Circumstances as provided in Section 5.8, in any Section 7 consultation with regard to the issuance of the Section 10(a)(1)(B) permits, the USFWS shall adopt the biological opinion issued for the MBHCP as the biological opinion issued pursuant to Section 7(b) of the ESA.

5.6 **CESA Listing of Federally Protected Species, State Protected Species, and/or Other Species of Concern**. In the event that one or more of the Federally Protected Species, State Protected Species, and/or Other Species of Concern that are not State Protected Species are listed as an endangered species, threatened species, or candidate species pursuant to the CESA ("Additional State Protected Species"), the MBHCP and this Agreement shall be deemed to be adequate and appropriate documentation which supports an application for a Section 2081 Permit for such Additional State Protected Species. Absent a finding by the Director of the CDFG that there are Changed Biological Conditions as provided in Section 5.7, and after taking into account comments received on the Section 2081 Permit application, the CDFG shall issue a Section 2081 Permit, as an appendix to this Agreement, substantially in the form and content of the Section 2081 Permit to take the Additional State Protected Species and its habitat within the 2081 Permit Area.

5.7 **Determination of Changed Biological Conditions**. For the purpose of this Section and Section 5.6 of this Agreement, the term "Changed Biological Conditions" shall mean (i) conditions that result in the development of greater than 15,200 acres of Natural Lands or the development of 43,000 acres of Open Lands within the 10(a)(1)(B)/2081 Permit Area, (ii) information developed subsequent to the execution of this Agreement indicates that the implementation of the MBHCP and this Agreement will cause effects to the Additional State Protected Species or Additional Federal Protected Species that will jeopardize the continued existence of such Additional State Protected Species or Additional Federal Protected Species, or (iii) the MBHCP is subsequently modified in a manner that causes an effect on the Additional State Protected Species or the Additional Federal Protected Species or their critical habitat that was not considered in the MBHCP. At least ninety (90) days prior to making a finding of Changed Biological Conditions, CDFG shall meet with the City and County to discuss the proposed finding and to provide an opportunity to the City and County to submit information to rebut the proposed finding.

5.8 For the purpose of Sections 5.1, 5.2, and 5.5 of this Agreement, "Unforeseen Circumstances" shall mean: (i) a significant adverse change in (A) the population of a Federally Protected Species or Other Species of Concern within their range, (B) the habitat and other biological resources of the Plan Area, or (C) the anticipated impacts of the Urban Development Activities or in other factors upon which the MBHCP is based, or (ii) any significant new or additional information relevant to the MBHCP (including information presented during a public comment period on a permit application or proposed rule) that was not anticipated by the Parties at the time the MBHCP was approved and that would likely result in a significant adverse change in (A), (B) or (C) above. Unforeseen Circumstances shall include (i) conditions that result in the development of greater than 15,200 acres of Natural Lands or the development of 43,000 acres of Open Lands within the 10(a)(1)(B)/2081 Permit Area, (ii) information developed subsequent to the execution of the Agreement that indicates that the implementation of the MBHCP will result in affects to the Federally Protected Species or Other Species of Concern that is likely to jeopardize the continued existence of the Federally Protected Species of Other Species of Concern that was not considered in the MBHCP. As soon as possible prior to making a finding of Unforeseen Circumstances, the USFWS shall meet with the City and County to discuss the proposed finding and to provide a reasonable opportunity to the City and County to submit information to rebut the proposed finding. Unforeseen circumstances shall not include the changes anticipated to occur as a result of the urban development activities anticipated by the Section 10(a)(1)(B) permit, the Section 2081 permit, or as otherwise approved by USFWS.

6.0 AMENDMENT AND REMEDIES

6.1 Amendment.

6.1.1 Major amendments to the MBHCP shall require amendment of the Agreement and the Section 10(a)(1)(B) permit and may be initiated by any of the parties to this Agreement. The party proposing the major amendment shall circulate to the other parties a statement of the reason for the amendment and an analysis of the effect of the amendment on the Federally Protected Species, State Protected Species, and/or Other Species of Concern and the implementation of the MBHCP. The other parties shall make every effort to approve the proposed amendment within 120 days of publication in the Federal Register except where longer time lines are imposed by requirements of law. Except as otherwise determined by the USFWS pursuant to Section 6.1.2, major amendments shall be limited to changes in the following: (i) the boundaries of the Permit Area, or (ii) the method of calculating the adequacy of mitigation described in Section 3.1.8.

6.1.2 Minor amendments to the MBHCP shall not require amendment of this Agreement or the Section 10(a)(1)(B) permit, and may be initiated by any of the parties to the Agreement or the Section 10(a)(1)(B) permit. The party proposing a minor amendment shall circulate to the other parties a statement of the reason for the amendment. Minor amendments require the approval of the Implementation Trust, which shall approve or deny the proposed amendment within ninety (90) days of receipt of the proposal. The USFWS shall be provided an opportunity to review all minor amendments presented to the Implementation Trust. If the USFWS determines within sixty (60) days of its receipt of a proposed amendment, that a proposed amendment to the

MBHCP is major, the parties to the Agreement shall process the plan amendment as an amendment to this Agreement and the Section 10(a)(1)(B) permit in accordance with 50 CFR § 13.23.

6.1.3 Amendments to the City or County's General Plans or Zoning Ordinances pertaining to land within the Permit Area, as shown on Exhibit F, shall not require amendments to the MBHCP or this Agreement.

6.1.4 Minor amendments to the MBHCP shall not require the approval of an amendment of the Section 10(a)(1)(B) or 2081 Permits.

6.2 Remedies in General. The Signatories to this Agreement and the Third Party Beneficiaries (as defined in Section 7.8) shall have all of the remedies available in equity (including specific performance and injunctive relief) and at law to enforce the Terms of this Agreement and the Section 10(a)(1)(B) and Section 2081 Permits and to seek remedies and compensation for any breach thereof, consistent with and subject to the terms of this Agreement. By way of example and not limitation, remedies in equity include requiring specific performance of the obligation by the City and County to comply with Sections 3.1.8, 4.7.6 and 4.7.7. No party shall be liable in monetary damages to any party or other person for any breach of this Agreement, any performance or failure to perform a mandatory or discretionary obligation imposed by this Agreement, or any other cause of action arising from this Agreement. Notwithstanding the foregoing: (i) all parties shall retain whatever liability they would possess for their present and future acts or failure to act without the existence of this Agreement, and (ii) all Signatories shall retain whatever liability they possess as holders of interests in land. The remedies specified above shall not provide third party beneficiaries any greater standing/remedies than exist in current law.

6.3 Suspension.

6.3.1 CDFG agrees they will not suspend the 2081 Permit for any reason except as provided in this Section 6.3.

6.3.2 Except where the CDFG determines that emergency action is necessary to protect a State Protected or Federally Protected Species from imminent and substantial injury, the CDFG shall not suspend their respective permits without first: (i) Requesting the City and/or County to take appropriate remedial actions; and (ii) providing to the affected Permittee(s) notice in writing of the facts or conduct which may warrant the suspension and an opportunity for such affected Permittee to demonstrate or achieve compliance with the ESA, CESA, regulations issued thereunder, the Permits and this Agreement.

6.3.3 Any suspension under Section 6.3 shall be rescinded immediately upon the reasonable determination by CDFG that the violation or imminent and substantial injury has been effectively redressed. As soon as possible, but no later than ten (10) working days after any suspension of one of the Permits, the permitting agency having suspended a 2081 permit shall consult with the affected Permittee (i.e. City or County) concerning actions taken to effectively redress the violation or imminent and substantial injury that necessitated the suspension. As soon as possible, but not later than thirty (30) days after the conclusion of the consultations, the

CDFG shall transmit to the affected Permittee written notice of the CDFG's determination of actions necessary to effectively redress the violation or imminent and substantial injury. Upon full performance of the necessary actions specified by the CDFG in its written notice, the CDFG shall rescind the suspension.

6.3.4 The CDFG can suspend the 2081 Permit under the following conditions: (i) The CDFG determines that emergency action is necessary to protect a State Protected or Federally Protected Species from imminent and substantial injury which will jeopardize the continued existence of such species; (ii) The amount of land disturbed pursuant to any Urban Development Permit issued by the City or the County violates the terms of Section 3.1.8 of this Agreement; or (iii) the City or County fail in their assurances in 5.1.1.

6.3.5 If the Section 2081 Permit is suspended, the affected Permittee shall not have the authority pursuant to the Permit to approve or carry out any actions which would violate the ESA or CESA in the absence of such Permit, and persons conducting activities which will result in the taking of Federally Protected Species and State Protected Species will be required to obtain necessary approvals from the CDFG.

6.4 USFWS Right to Revoke, Terminate or Suspend. The USFWS shall have the right to revoke, terminate or suspend the Section 10(a)(1)(B) Permit in the event of a material breach or violation of the Section 10(a)(1)(B) Permit, this Agreement or the ESA by the permittees. The regulations found at 50 CFR 13.27 - 13.29 shall govern the suspension and revocation or termination of any Section 10(a)(1)(B) Permit issued by USFWS under this Agreement.

6.5 Severability. The violation of the Section 10(a)(1)(B) Permit or the Section 2081 Permit by a Permittee or an Urban Development Permittee or their agents, with respect to any one or more Urban Development projects shall not adversely affect or be attributed to, nor shall it result in the loss or diminutions of any right, privilege or benefit under this Agreement of, any non-responsible Permittee (City or County) or Urban Development Permittee. Any action taken by the Urban Development Permittee which is not authorized pursuant to an Urban Development Permit issued in accordance with the terms and conditions set forth in the 10(a)(1)(B) and 2081 Permits and this Agreement, is not covered by the 10(a)(1)(B) and 2081 Permits. CDFG and/or USFWS shall not take enforcement actions against the City and/or County in such instances, except where the City and/or County or their employee(s), in the performance of their duties as City and County employee, carries out such actions, unless the City and County fail to comply with 3.1.4.

7.0 MISCELLANEOUS

7.1 Term of Agreement. This Agreement shall be immediately effective upon execution by all parties and issuance of the Section 10(a)(1)(B) permit ("Effective Date") and shall remain in effect for twenty (20) years from the Effective Date or:

- (1) until Urban Development permits are issued for 15,200 acres of Natural Lands:

- (2) until Urban Development permits are issued for 43,000 acres of Open Lands; or
- (3) unless terminated pursuant to the provisions of 7.1.1.

7.1.1 (a) Termination by Permittees. The City or County may terminate this Agreement only in the event that each terminating party has complied with its obligations to date under section 3.1.8 hereof, and either (i) the legislative body of the terminating party makes a written finding at a noticed public hearing that they have determined that it is not economically feasible based on the best economic information available to acquire sufficient acreage of Habitat Management Lands to satisfy the requirements of section 3.1.8, or to otherwise comply with the requirements of this Agreement, with funds on hand for, or projected to be allocated to, the MBHCP, or (ii) in the event that there is any change in state or federal laws, regulations, programs or circumstances relating to endangered species protection, including but not limited to termination or suspension of the Section 10(a)(1)(B) Permit or the 2081 Permit, and the legislative body of the terminating party thereafter makes a written finding at a noticed public hearing that further compliance with this Agreement is no longer in the best interest of that entity. Economic infeasibility analysis shall require consideration of impacts associated with urban development including but not limited to acquisition costs of Habitat Management Lands, administrative costs of the program and impact mitigation exactions, all of which shall be given equal weight. Termination of this Agreement shall not be effective any earlier than sixty (60) days after the City or County provides written notice to the CDFG and USFWS of their adoption of the findings required by this paragraph. Such notice shall include a copy of the required written findings. If the City or County terminates this Agreement, then: (1) Except as provided in paragraph (c) of this section 7.1.1, the Section 10(a)(1)(B) Permit and 2081 Permit shall thereafter be null and void, and the activities within the permit area shall be subject to all of the requirements of the ESA and CESA, and (2) upon termination of this Agreement interim mitigation fees collected, less administrative costs incurred prior to the effective date of this document, shall be devoted to habitat mitigation acceptable to USFWS and CDFG, however the amount to be used for habitat mitigation shall be reduced by 5% per year until depleted, and (3) all Habitat Management Land obligations incurred prior to termination shall be transferred to a Habitat Management Entity, pursuant to section 4.4 of this Agreement.

(b) Termination by CDFG . The CDFG may terminate the Section 2081 Permit and this Agreement only if the Director of the CDFG makes written findings supported by the best scientific information available and after conducting a noticed public hearing in the City of Bakersfield that the Urban Development contemplated by the MBHCP and this Agreement will result in a substantially increased likelihood of the extinction of State Protected Species. Termination of this Agreement shall not be effective any earlier than sixty (60) days after the CDFG provides written notice to the City, County and Implementation Trust of the adoption of the findings required by this paragraph. Such notice shall include a copy of the required findings and be published at least 30 days in advance of the hearing, in a newspaper of general circulation in Kern County. A copy of the notice shall be mailed to the City and the County pursuant to Section 7.3 at least 30 days in advance of the hearing.

(c) Effect of Termination. In the event that this Agreement is terminated by the CDFG or USFWS, the Section 2081 Permit, with respect to termination by CDFG, and the Section 10(a)(1)(B) Permit, with respect to termination by USFWS, shall be null and void and all activities within the Permit Area shall be subject to applicable requirements of the ESA and

..... ~~Implementation Management Agreement~~

CESA, except that the Section 2081 Permit and the Section 10(a)(1)(B) Permit shall continue in effect with regard to any Urban Development activity that has not been completed as of the date of the termination ("Pending Urban Development") but for which (i) Habitat Management Lands have been acquired and (ii) the amount of Habitat Management Lands as of the effective date of the termination are sufficient to satisfy the requirements of section 3.1.8 after including the acreage of the Pending Urban Development. In the event that the amount of Habitat Management Land is only sufficient to satisfy the requirements of section 3.1.8 after including a portion of the acreage of the Pending Urban Development, the Implementation Trust shall identify the portion of the Pending Urban Development that will continue to receive the benefits of the Section 2081 and Section 10(a)(1)(B) Permit.

7.2 Amendments. This Agreement may be amended only in a writing signed by all of the parties hereto. Only those proposed amendments to the Agreement that would materially modify the legal rights and obligations of the parties under the Agreement or implemented major amendments to the MBHCP as defined in Section 6.1.1 shall require amendment of the Section 10(a)(1)(B) or 2081 permits. The terms, provisions and conditions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

7.3 Notices. Any notice required or permitted to be given hereunder shall be in writing and shall be given by personal delivery or by first class mail, postage prepaid, and shall be deemed sufficiently given if addressed at the following addresses of the respective parties:

City of Bakersfield
Planning Department
1501 Truxtun Avenue
Bakersfield, CA 93301

County of Kern
Department of Planning and
Development Services
2700 M Street
Bakersfield, CA 93301

United States Fish and Wildlife Service
Office of Regional Director
911 Northeast 11th Avenue
Portland, OR 97232-4181

with a copy to:

Field Supervisor
U.S. Fish and Wildlife Service
2800 Cottage Way, Room E-1803
Sacramento, CA 95825

Director
California Department of Fish and Game
1416 9th Street 12th Floor
Sacramento, CA 95814

with a copy to:

Legal Advisor
California Department of Fish and Game
1416 9th Street, 12th Floor
Sacramento, CA 95814

Regional Manager
California Department of Fish and Game
1234 E. Shaw Avenue
Fresno, CA 93710

Any party may give notice to the others specifying a different address for notice purposes.

7.4 Captions. The headings of the various sections hereof are for convenience only, and shall not affect the meaning of any provision of this Agreement.

7.5 Counterparts. This Agreement may be executed in multiple counterparts, all of which shall constitute but one and the same instrument.

7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the ESA, the CESA and the internal laws of the State of California.

7.7 Complete Agreement. This Agreement constitutes the full and complete agreement between the parties concerning the subject matter hereof and supersedes any prior or contemporaneous agreements or understandings, whether oral or written, all of which shall be deemed to have been merged herein, it being the intention of the parties that this be a completely integrated agreement.

7.8 Third Party Beneficiaries. Urban Development Permittees are intended beneficiaries ("Third Party Beneficiaries") of this Agreement. None of the rights or benefits created by this Agreement shall inure to or benefit any person other than the identified parties herein and their successors and assigns and the Third Party Beneficiaries and their successors and assigns, except as may be provided pursuant to the ESA and CESA.

7.9 Conflict with MBHCP. The MBHCP and each of its terms are intended to be and by this reference are, incorporated herein. This Agreement is intended to specify, in contract language, the obligations of the Parties under the MBHCP recognizing that the MBHCP is intended to set forth in a planning document the components of a conservation plan and was not drafted as a contract document. As a result, in the event of any direct contradiction, conflict or inconsistency between the terms of this Agreement and the MBHCP, the terms of this Agreement shall control. In all other cases, the terms of this Agreement and the terms of the MBHCP shall be interpreted to be supplementary to each other.

7.10 No Authorization To Federal Agencies. Nothing in this Agreement is intended to eliminate or modify the obligation of a federal agency to consult with the USFWS pursuant to section 7(a) of the ESA (16 U.S.C. Section 1536(a)). Any recommendations or decisions by USFWS pursuant to such consultation with regard to private Urban Development permitted activities shall comply with the requirements of Section 5.1 and 5.2 of this Agreement.

7.11 No Authorization To State Agencies. Nothing in this Agreement is intended to eliminate or modify the obligation of a state lead agency to consult with CDFG pursuant to Fish and Game Code section 2090 and Public Resources Code section 21104.2. Any requirements or decisions by CDFG pursuant to such consultation with regard to private Urban Development permitted activities shall comply with the requirements of Section 5.1 and 5.2 of this Agreement.

08/01/94

03/11/94

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

UNITED STATES FISH AND WILDLIFE SERVICE

By: *Thomas J. Payne* 8/24/94

Name: Thomas Payne

Title: Deputy Director

CALIFORNIA DEPARTMENT OF FISH AND GAME

By: *John A. Sullivan*

Name: JOHN A. SULLIVAN

Title: CHIEF DEPUTY DIRECTOR

CITY OF BAKERSFIELD

By: BOB PRICE

Name: *Bob Price*

Title: MAYOR

COUNTERSIGNED:

[Signature]
Finance Director

APPROVED as to content:

[Signature]
Department Head

COUNTY OF KERN

By: *Ben Austin*


Name: BEN AUSTIN

Title: Chairman, Board of Supervisors,
County of Kern

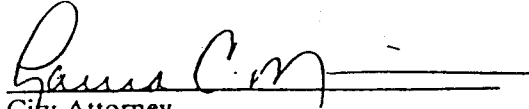
Approved as to Form:

Department of Interior
Office of the Solicitor

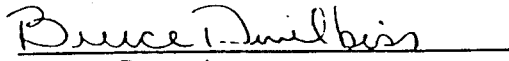
Approved as to Form:



Legal Advisor
California Department of Fish and Game



City Attorney



County Counsel

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LIST OF EXHIBITS

EXHIBIT A: CDFG 2081 Permit

EXHIBIT B: Example Wildlife Conservation Easement Agreement

EXHIBIT C: Example Form of Joint Powers Agreement

EXHIBIT D: Area of Natural Land

EXHIBIT E: Area of Open Land

EXHIBIT F: Permit Area

EXHIBIT G: Example Ordinance

EXHIBIT H: Habitat Management Land Opportunities Inside MBHCP Area

EXHIBIT I: Habitat Management Land Opportunities Outside MBHCP AREA

EXHIBIT J: CDFG Preapproved Acquisition Areas

EXHIBIT K: Kit Fox Den Excavation Requirements

EXHIBIT L: Easement Holder Notice

EXHIBIT A

California Endangered Species Act Management Permit (CESA 9322) for Urban Development,

County of Kern, Metropolitan Bakersfield Area
Kern County, California

SUMMARY

The County of Kern (County) has requested a Permit for Management of Endangered Species pursuant to Fish and Game Code Section 2081 permit for urban development within the 2010 General Plan Area of Metropolitan Bakersfield. Urban development within the 2010 Plan area is anticipated to eliminate up to 45,000 acres of listed species habitat, of which 67 % is agricultural land and undeveloped disturbed grassland and 33% is saltbush, valley sink scrub and naturalized annual herbaceous rangeland. The urban development will eliminate 45,000 acres of habitat for five state- and/or federally-listed threatened or endangered species during the next 20 years. These species are the threatened San Joaquin kit fox (*Vulpes macrotis mutica*), the endangered blunt-nosed leopard lizard (*Gambelia silus*), the endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), the endangered Bakersfield cactus (*Opuntia trealesi*), the endangered giant kangaroo rat (*Dipodomys ingens*), the endangered Tulare pseudobahia (*Pseudobahia peirsonii*), the threatened striped adobe lilly (*Fritillaria striata*), the endangered Bakersfield saltbush (*Atriplex tularensis*) the endangered California jewel flower (*Caulanthus californicus*) and the threatened San Joaquin antelope ground squirrel (*Ammospermophilus nelsoni*). It is the Department's determination that the project including the acquisition, enhancement, and long-term management of 45,000 acres of habitat for the above species within Kern County or at other locations acceptable to the Department will offset the project impacts and result in the preservation of core area for the species which will help achieve sustainable populations. The Department has also determined that the project, with the implementation of the management conditions, will not likely jeopardize the

continued existence of the above listed species. Except as otherwise specifically noted, terms used in this document shall have the same definition as such terms defined in the Implementation/Management Agreement.

PROJECT DESCRIPTION

The 2010 Plan area encompasses approximately 261,120 acres (408 sq. mi.) in central Kern County, centered around Bakersfield. The lands within the project area are primarily privately owned and, with about 192,900 acres under county jurisdiction and 68,200 acres under the jurisdiction of the City of Bakersfield. The California Department of Water Resources and Kern County Water Agency are major public land owners in the western portion of the permit area. Urban development for the purpose of this permit is defined as "a change in land use from open land to any other land use for which a permit such as a grading permit, grading plan approval, building permit or use permit is required from the County, including but not limited to, the construction of buildings on lots of record and projects undertaken directly by the City or County". The term does not: (1) include agricultural uses; (2) oil production and exploration, except for associated ancillary facilities for which the County exercises discretionary authority over the issuance of such permits or approvals pursuant to the California Environmental Quality Act; (3) water recharge and extraction facilities (not including wells developed in and urban setting) within lands owned by the city, county, Department of Water Resources, Kern County Water Agency or other water districts, (4) any flood control activities requiring notification to the Department pursuant to Fish and Game Code 1600 et. seq. or (5) other activities not normally considered "urban development".

The lands within the Plan Area are broken into three categories, urbanized (those lands already developed) , natural (lands which support natural habitats, i.e. grasslands, valley sink shrub, saltbush scrub, etc.) and open lands (those lands which have not yet been urbanized). This project (2010 Plan Urban Development) will result in the conversion of up to 15,000 acres of natural lands and up to 45,000 acres (this includes the 15,000 acres of natural lands) to urban uses. The permit area does not include the primary flood plain of the Kern River nor lands owned by the California Department of Water Resources. This Permit also does not cover state agency projects (e.g.. Reclamation Board, CalTrans, Division of Oil and Gas, projects) or projects over which state agencies have CEQA lead agency responsibility.

As part of the project, the County will provide to the Department or an entity approved by the Department one acre of habitat (including providing for its enhancement and long-term management) for each acre of urban development approved by the County.

LISTED SPECIES

Based on biological studies of the project site and adjacent areas, state-listed species may use the project area. These species are the threatened San Joaquin kit fox (*Vulpes macrotis mutica*), the endangered blunt-nosed leopard lizard (*Gambelia silus*), the endangered Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), the endangered Bakersfield cactus (*Opuntia trealesi*), the endangered giant kangaroo rat (*Dipodomys ingens*), the endangered Tulare pseudobahia (*Pseudobahia peirsonii*), the threatened striped adobe lilly (*Fritillaria striata*), the endangered Bakersfield saltbush (*Atriplex tularensis*) the endangered California jewel flower (*Caulanthus californicus*) and the threatened San Joaquin antelope ground squirrel (*Ammospermophilus nelsoni*). A summary of the life history information for each species follows.

Blunt-nosed Leopard Lizard

The state- and federally-listed endangered blunt-nosed leopard lizard (*Gambelia silus*) is a relatively robust species with a large blunt head. It historically was distributed over the San Joaquin Valley and adjacent foothills, plains, and valleys (Montanucci 1965). Adults are approximately 3.5 to 5 inches in snout-vent length (USFWS 1985a), and may be up to 13 inches in total length (Smith 1967). Coloration consists of a light grayish, tan, or brown background with a conspicuous pattern of dark overlaying spots and pale cross-bars. During the courtship season (spring) both sexes may develop reddish markings on the sides, tail, and belly. From two to three eggs are laid in excavated chambers at the end of rodent burrows. Hatchlings emerge in early August (USFWS 1985a).

Blunt-nosed leopard lizards are active during the day, usually when air temperatures are between 75 and 95 degrees Fahrenheit. Most activity occurs between the months of April and early October and they overwinter underground in rodent burrows (USFWS 1985a). Food consists primarily of insects such as grasshoppers, although smaller lizards may also be consumed (Montanucci 1967).

Leopard lizards occur on "sparsely vegetated" plains, lower canyon slopes, on valley floors, and in washes. Vegetation may include a variety of grasses, saltbush (*Atriplex* spp.), goldenbush (*Happlopappus* sp.), iodine bush (*Allenrolfea occidentalis*), and seep-weed (*Sueda fruticosa*) (USFWS 1985a). Results of several systematic inventories for the species on Federal lands in the San Joaquin Valley region (Chesemore 1980; Jones 1980; O'Farrell et al. 1981) have demonstrated an affinity for open habitats, wash systems, and relatively level topography.

Population densities of blunt-nosed leopard lizards are highly variable. Chesemore (1980), in a study of two sites near Taft (Kern County), estimated densities between 0.1 and 0.5 lizards per acre. Densities of blunt-nosed leopard lizards obtained from

analyses of several survey plots at Pixley National Wildlife Refuge (Tulare County) ranged from 0.12 to 4.14 lizards per acre (Uptain et al. 1985).

Habitat loss is the principal reason for both State and Federal listing. Much of the historical habitat of this species has been altered as a result of agricultural production. Data generated by CDFG show that approximately 93 percent of wildlands present in the San Joaquin Valley were lost by 1979; remaining habitats (exclusive of those receiving current protection) will be lost under present rates of development by 1996 (USFWS 1985a). In addition to agricultural development, other factors influencing this species include mineral development, livestock grazing, and application of some pesticides (USFWS 1985a).

Tipton Kangaroo Rat

The state- and federal-listed endangered Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*) one of three recognized subspecies of the San Joaquin kangaroo rat (*Dipodomys nitratoides*). The historic range of the Tipton kangaroo rat extended over the Tulare Basin portion of the San Joaquin Valley floor; from Lemoore and Hanford in the north, south approximately to the southern edge of the Buena Vista Lake basin in the vicinity of Bakersfield. The range extended as far east as Delano and to Kettleman City on the west (Williams, 1985). Preferred habitats consist of alkaline sink communities, with "characteristic" shrub vegetation as saltbush (*Atriplex spp.*), iodine bush (*Allenrolfea occidentalis*), and seep-weed (*Sueda fruticosa*) (Williams, 1985). Habitats also includes saltbush scrublands characterized by several species such as *Atriplex polycarpa*, *A. spinifera*, *A. lentiformis*, and *A. phyllostegia* (Williams, 1985).

The Tipton kangaroo rat is a small species of the genus *Dipodomys*, approximately 8 to 9 inches in total length. Overall appearance is that of a compact rodent, with a flattened head with small ears, short neck, and cylindrical body. The hind legs are elongated, and serve as the principal means of locomotion. A long tufted tail, comprising about one-half of the total length of the animal provides balance. Coloration is brownish above, changing to whitish ventrally. The underside of the tail is also white in coloration. The presence of four toes on the feet of this taxon distinguishes it from other kangaroo rat species with which it is sympatric (Uptain, 1989).

Shallow burrows are excavated from which animal forage at night for seeds that are cached. Fur-lined cheek pouches are used by these animal to hold seeds collected while foraging. Williams (1985) notes that burrows are often placed on slightly elevated ground to reduce the likelihood of seasonal flooding; such sites include "the berms of roads (where placed above ground level), canal embankments, railroad beds, and bases of shrubs and fences where windblown soils accumulate above the surrounding terrain."

Little information is available regarding population densities of the Tipton kangaroo rat. Williams (1985) when assessing the status of the species for the U.S. Fish and Wildlife Service (USFWS), relied heavily on population studies conducted on the closely related Fresno kangaroo rat (*Dipodomys nitratiodes exilis*). Population densities range from approximately 7 to 10 per acre (Hoffmann, 1974; Koos, 1977). Population turnover is rapid; very few individual animals probably survive more than one year (Hoffman, 1974). Density estimates for the Tipton kangaroo rats range between 0.65 and 1.95 per acre west of Buttonwillow, and between 0.6 and 3.06 per acre on the Paine Wildflower Preserve, Kern County (Clark et al. 1982).

Habitat loss as a result of agricultural production was the primary reason for designation this rodent as a state- and federal-listed endangered species. Williams (1985) estimated that the original geographic range of the Tipton kangaroo rat encompassed 1,716,000 acres. As of July 1985, only 63,500 acres (3.7%) remained. The extant habitats is primarily comprised of widely scattered small parcels separated by agricultural fields. A detailed listing of known occupied habitat is available in Williams (1985). Additional factors contributing to the endangerment of the Tipton kangaroo rat include habitat modification associated with urbanization and possibly rodenticide use (Williams, 1985).

San Joaquin Kit Fox

The state-listed threatened and federally-listed endangered San Joaquin kit fox (*Vulpes macrotis mutica*) 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 10 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 8-10 inches in height and less than 8 inches in width (O'Farrell 1987), but may be as small as 4 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 1-2 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 such animals 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 foxes 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 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).

Giant Kangaroo Rat

The state- and federally-listed endangered giant kangaroo rat (*Dipodomys ingens*), historically occurred throughout the San Joaquin Valley, from southern Merced County to southwestern Kern County and northern Santa Barbara County (Hall 1981). Conversion of native valley grasslands to agricultural lands has reduced the distribution of the giant kangaroo rat to approximately 2-3 percent of its historic range (Williams 1980). This species is now found only in small, widely scattered colonies along the western edge of the Tulare Basin, San Joaquin Valley, and adjacent lands to the west in the upper Cuyama Valley, and on the Carrizo and Elkhorn Plains (Williams pers. comm.).

Giant kangaroo rats prefer sparsely vegetated grasslands that are characterized by good drainage, fine sandy-loam soils, and a slope of less than 10 percent. Populations are limited to areas with less than 6 inches of mean annual rainfall and 3,000-foot

elevation. Giant kangaroo rats typically avoid areas with halophytic vegetation, dense shrub cover, or excessively rocky or gravelly terrain.

Giant kangaroo rat burrow systems (precincts) are distinctive because of the size and orientation of the holes and because they clear vegetation for about 18-feet around their burrows (Williams 1980). Each precinct has an average of seven holes, each measuring 2.5-3.5 inches in diameter (O'Farrell and Scrivner 1987). Other characteristics of giant kangaroo rat precincts include tracks of their distinctively large feet and dragging tails, "haystacks" of seeds drying near the burrows and large scat near the burrow entrances. Individual precincts are usually connected with other precincts by well-worn paths and are relatively easy to spot from a distance (Williams 1980).

These nocturnal rodents forage for seeds and sprouts and cache the seeds just below the surface of the soil. Caches are later transferred to their underground burrows (Williams 1980). Their food-caching habits may account for the giant kangaroo rats' affinity for arid sites; if rainwater penetrated and spoiled these stores, giant kangaroo rats would lose their fall and winter food supplies (Williams 1980).

Giant kangaroo rats often occupy habitats in secondary stages of succession. Williams (in press) noted that they occur in areas with heavy grazing pressure, found increased densities after fires destroyed shrublands, and observed that individuals will colonize fallow fields where there are populations nearby on uncultivated ground.

Habitat loss due to agriculture and other land modifying actions is the primary reason for the giant kangaroo rat's dramatic population decline. The decline is apparently continuing. Habitat loss continues to be a threat to this species, as does the application of rodenticides (Williams 1980).

San Joaquin Antelope Ground Squirrel

The San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), a state-listed threatened species, historically occupied approximately 1,398,600 ha. located from southern Merced County south to Kern County, and portions of the Carrizo Plain in San Luis Obispo County and Cayuma Valley in San Luis Obispo and Santa Barbara Counties. Currently, San Joaquin antelope ground squirrels are primarily restricted to approximately 275,200 ha. located within the extreme southwestern portion of the San Joaquin Valley and the Carrizo Basin (Williams 1980). Preferred habitat consists of Valley Grassland and Saltbush Scrub communities on loam and sandy loam soils. They inhabit areas of scattered shrubs; in areas that are devoid of shrubs or have dense shrubs, few of the San Joaquin antelope ground squirrels are found (Hawbecker 1953). They are spotty in occurrence and are not found in Alkali Sink communities or previously cultivated fields.

The pelage of San Joaquin antelope squirrels is pinkish to yellowish-brown with a narrow white line on each side of the back. Its dorsum is buffy or sometimes yellowish. The white underside of the tail can be seen as the tail curves over the back as the squirrel is running. Its total length is approximately 10 inches and its tail is about 4 inches.

This squirrel uses giant kangaroo rat burrows and constructs its own burrows in the berms of roads, wash banks, and cuts made for pipelines and drilling platforms. Burrows are also dug among dry weeds caught by fences in otherwise shrubless terrain (Williams 1980). Their principal foods are filaree (*Erodium cicutarium*) and red-brome (*Bromus rubens*) but insects are important in their diets during dry months (May through October) (Hawbecker 1947). They have also been observed to eat carrion (Uptain, Pers. Obs.).

Population densities are approximately 3 to 10 per ha. in about 15 percent of extant habitat, less than 3 per ha. in about 25 percent of extant habitat, and less than 1 ha. in the remaining portion of suitable habitat (Williams 1980). Thus, approximately 60 percent of the extant habitat is marginal and probably contains mainly young, dispersing squirrels; it may be unsuitable for breeding populations.

Habitat loss as a result of agricultural development is a chief reason for State-listing of threatened for this rodent. Other factors contributing to its decline include habitat loss associated with urban development, poisoning, and possibly pesticide use.

California Jewel Flower

The California Jewel flower (*Caulanthus californicus*), a state- and federally-listed endangered species, is a member of the family Brassicaceae and was initially described in 1880 by Sereno Watson (Taylor and Davilla, 1986). Historically the range of the California Jewel flower included Fresno, King, Kern, Santa Barbara, San Luis Obispo and Tulare Counties, with at least 41 localities. Today, only three known populations exist, including one in the Upper Cuyama Valley of Santa Barbara County, one on the Carizo Plain, and an artificial population at the Paine Wildflower Preserve, Kern County. Appropriate habitat for this species is slightly alkaline sandy loam soils of relatively undisturbed grassland communities below an elevation of 3,000-feet. The California Jewel flower blooms March-April.

The California Jewel flower is an erect annual reaching a height of six to fifteen inches. Sparse hairs appear only around the lobed basal leaves while upper leaves are toothed. White to greenish-yellow flowers bloom from approximately March to April, each containing four narrow petals with wavy margins and arranged in an open one sided raceme. Each flower contains four purple-tipped white seals, six stamens (which are usually not fused) and a two lobed stigma. The seeds are brown and wingless and the cotyledons are three lobed (California Native Diversity Data Base, 1987).

Conversion of habitat to agriculture and heavy grazing has nearly eliminated this species within its historic range. The sandy, non-alkaline soils which are a necessity to this species, now almost exclusively have been turned into orchards and vineyards (Taylor and Palmer, 1986), or significantly altered by grazing (California Native Diversity Data Base, 1987). It is currently listed as endangered by the State of California, proposed for endangered listing by the federal government and is listed by The California Native Plant Society as status 1B, meaning rare, threatened, or endangered in California and elsewhere (California Native Plant Society, 1988).

Bakersfield Saltbush

Bakersfield saltbush (*Atriplex tularensis*), a state-listed endangered species is a small, gray-green, unbranched or sparsely branched, inconspicuous annual plant with white bran-like grains on its leaves and stems. Depending on the amount and timing of precipitation, plants may be just a few inches tall to over 2 feet tall. Leaves are oval to lance-shaped, 0.25 to 1 inch in length. The small inconspicuous flowers are found in the leaf axils. Fruits, covered by bracts, are oval to rhombic in shape and about 0.125 inches long. Bakersfield saltbush usually flowers from June through October in years with sufficient late spring rainfall.

Bakersfield saltbush prefers alkali sink scrub habitat types in areas with a high ground water table supplying soil moisture into the summer months. Commonly associated species are iodine bush (*Allenrolfea occidentalis*), quailbush (*Atriplex lentiformis*), saltgrass and pickle weed (*Salicornia subterminalis*).

Only six historic occurrences of Bakersfield saltbush are known, all in the Tulare Plain south of Bakersfield. Several of the historic collections are from the vicinity of Greenfield and Weedpatch. Today only one extant population is known from the Nature Conservancy's Kern Lake Preserve, about 20 miles south of Bakersfield.

Bakersfield Cactus

The Bakersfield Cactus (*Opuntia treleasei*), a state- and federally-listed endangered species, is in the family Cactaceae and was first described by J.M. Coulter in 1896. It is apparently endemic to Kern County, and occurs southeast of Bakersfield, on low hills below 1000-foot elevation between the Kern River and Caliente Wash, and from the Kern Mesa area to Comanche Point (California Native Plant Society, 1977). Reported sightings from the San Gabriel Mountains, the Turtle Mountains and Arizona by Bensen (1969) remain unverified and require further study.

The Bakersfield Cactus is a succulent perennial appropriately named by its flattened "beaver tail-like" stem pads branching from its base. These blue-green to yellow-

green pads are one to three decimeters long and characterized by many eye spots with tufts of tiny spinelets (California Native Plant Society, 1977) and spines reaching twelve to fifteen millimeters in length on the areoles. The Bakersfield Cactus grows as scattered clusters of immense colonies. This species blooms during May, producing bright purple-red flowers.

The Bakersfield Cactus occurs in arid grasslands in a variety of soil types on low hills immediately adjacent to valley flat lands, on mesas and along dry river and stream beds (California Native Plant Society, 1977). Its distribution may be directly related to competition with grasses (Twisselman, 1967). Areas receiving sufficient precipitation to support dense *Avena* grasslands lack Bakersfield Cactus, and the species occurs mainly in grasslands dominated by *Bromus rubens* which require minimal rainfall.

Urbanization of Kern County, habitat conversion to agriculture and oil development have greatly reduced the population of this species. The Bakersfield cactus is currently listed as endangered by the State of California, and has been proposed for listing as endangered by the federal government. It is also listed as category 1B by the California Native Plant Society (1988), meaning rare, threatened or endangered throughout its range.

Tulare Pseudobahia

Tulare pseudobahia (*Pseudobahia peirsonii*), a state listed-endangered species, is a small, erect, yellow-flowered, woolly annual herb in the sunflower family (*Asteraceae*). It grows on the grassy valley floors and rolling foothills of the eastern San Joaquin Valley, and in scattered pockets from Kern County to Fresno County. One population occurs on lands owned by Fresno Metropolitan Flood Control District and another is located on a Caltrans easement adjacent to Highway 180 in eastern Fresno County. All other populations are on private lands.

Approximately one-third of the more than 20 historic Tulare pseudobahia sites have been extirpated by agricultural development. Extant populations are seriously threatened or damaged by agriculture, urbanization, overgrazing by sheep and cattle, competition by introduced weeds and a flood control project in Fresno County. Several populations are within the study corridor of a proposed highway. The 1989 Tulare pseudobahia management plan recommends that preserves be established to protect one or more populations and that studies be initiated to determine the environmental requirements of the species and evaluate the effects of livestock grazing and competition from exotic plants. The 1991 study of this plant revealed one new site and the Department of Fish and Game is negotiating mitigation associated with proposed urban development of the site. The trend for Tulare pseudobahia is one of decline.

Striped Adobe Lily

The state-listed threatened striped adobe lily (*Fritillaria striata*) is a member of the lily family (*Lilaceae*). It is a slender, bulbous perennial with fragrant, white to pink bell-shaped flowers with burgundy stripes. It grows on heavy clay soils in open annual grasslands bordering blue oak woodlands. This lily is found in eastern Tulare and Kern counties in the Sierra Nevada foothills. Twelve populations are known, including several east of Porterville in Tulare County, and about ten in Kern County in the Greenhorn and Tehachapi mountains.

Urbanization and agricultural conversion have probably extirpated striped adobe lily from some of its historic range. Most populations are on private rangeland with varying degrees of protection. One population occurs partially on Army Corps of Engineers land and land that may be purchased by the Department of Fish and Game. California Endangered Species tax check-off funds were used in 1991 to conduct an analysis of the striped adobe lily's status and management needs. Several new populations were located and permanent protection was secured, with the help of The Nature Conservancy, in the form of a conservation easement with one landowner. The overall trend for the striped adobe lily is one of stability.

EFFECTS ON LISTED SPECIES

Tipton Kangaroo Rat

Tipton kangaroo rats may be subject to direct and indirect adverse impacts associated with urban development. The project area where impacts to this species may occur encompasses approximately 6,000 acres. Direct take will occur as a result of urban development on lands occupied by the species and urban development will result in additional take from increased human related activities (dogs, cats, off highway vehicle use, etc.) on land within the Permit area (but not subject to urban development) and lands adjacent to the permit area. This permit does not authorize management take of Tipton kangaroo rats outside of the permit area from the indirect effects of urban development within the permit area.

San Joaquin Antelope Squirrel

San Joaquin antelope squirrels may be subject to direct and indirect adverse impacts associated with urban development. The project area where impacts to this species may occur encompasses approximately 2,000 acres. Direct take will occur as a result of urban development on lands occupied by the species and urban development will

result in additional take from increased human related activities (dogs, cats, off-highway vehicle use, etc.) on land within the permit area (but not subject to urban development) and lands outside but adjacent to the permit area. This permit does not authorize management take of San Joaquin antelope squirrels outside of the permit area from the indirect effects of urban development within the permit area.

San Joaquin Kit Fox

San Joaquin kit fox may be subject to direct and indirect adverse impacts associated with urban development. The project area where impacts to this species may occur encompasses approximately 45,000 acres. Direct take will occur as a result of urban development on lands occupied by the species and urban development will result in additional take from increased human related activities (dogs, cats, off-highway vehicle use, etc.) on land within the permit area (but not subject to urban development) and lands outside but adjacent to the permit area. This permit does not authorize management take of San Joaquin kit fox outside of the permit area from the indirect effects of urban development within the permit area.

Blunt-nosed Leopard Lizard

Blunt-nosed leopard lizards may be subject to direct and indirect adverse impacts associated with urban development. The project area where impacts to this species may occur encompasses approximately 20,000 acres. Direct take will occur as a result of urban development on lands occupied by the species and urban development will result in additional take from increased human related activities (dogs, cats, off-highway vehicle use, etc.) on land within the permit area (but not subject to urban development) and lands outside but adjacent to the permit area. This permit does not authorize management take of blunt-nosed leopard lizards outside of the permit area from the indirect effects of urban development within the permit area.

Bakersfield Cactus

Bakersfield cactus may be subject to direct and indirect adverse impacts associated with urban development. The project area where impacts to this species may occur encompasses approximately 4,000 acres. Direct take will occur as a result of urban development on lands occupied by the species and urban development will result in additional take from increased human related activities (theft, off-highway vehicle use, etc.) on land within the permit area (but not subject to urban development) and lands outside but adjacent to the permit area. This permit does not authorize management take of Bakersfield cactus outside of the permit area from the indirect effects of urban development within the permit area.

Giant Kangaroo Rat

Giant kangaroo rats are not known to currently occur within the permit area, but marginally suitable habitat (approximately 2,000 acres) for the species is present in the southwest corner of the permit area. Giant kangaroo rats may become re-established on this habitat during the permit period and be subject to take. Urban development will result in additional take from increased human related activities (dogs, cats, illegal dumping, off-highway vehicle use, etc.) on lands outside but adjacent to the permit area. This permit does not authorize management take of giant kangaroo rats outside of the permit area from the indirect effects of urban development within the permit area.

Bakersfield Saltbush

Bakersfield saltbush is not known to currently occur within the permit area, but marginally suitable habitat (approximately 2,000 acres) for the species is present in the southwest corner of the permit area. Bakersfield saltbush may become re-established on this habitat during the permit period and be subject to take. Urban development will result in additional take from increased human related activities (illegal dumping, off-highway vehicle use, etc.) on lands outside but adjacent to the permit area. This permit does not authorize management take of Bakersfield saltbush outside of the permit area from the indirect effects of urban development within the permit area.

Tulare Pseudobahia

Tulare pseudobahia is not known to currently occur within the permit area, but marginally suitable habitat (approximately 2,000 acres) for the species is present in the northeast corner of the permit area. Tulare pseudobahia may become re-established on this habitat during the permit period and be subject to take. Urban development will result in additional take from increased human related activities (illegal dumping, off-highway vehicle use, etc.) on lands outside but adjacent to the permit area. This permit does not authorize management take of Tulare pseudobahia outside of the permit area from the indirect effects of urban development within the permit area.

Striped Adobe Lilly

Striped adobe lily is not known to currently occur within the permit area, but marginally suitable habitat (approximately 2,000 acres) for the species is present in the northeast corner of the permit area. Striped adobe lily may become re-

established on this habitat during the permit period and be subject to take. Urban development will result in additional take from increased human related activities (illegal dumping, off-highway vehicle use, etc.) on lands outside but adjacent to the permit area. This permit does not authorize management take of listed species outside of the permit area from the indirect effects of urban development within the permit area.

California Jewelflower

California jewelflower is not known to currently occur within the permit area, but marginally suitable habitat (approximately 2,000 acres) for the species is present in the southwest corner of the permit area. California jewelflower may become re-established on this habitat during the permit period and be subject to take. Urban development will result in additional take from increased human related activities (illegal dumping, off-highway vehicle use, etc.) on lands outside but adjacent to the permit area. This permit does not authorize management take of California jewelflower outside of the permit area from the indirect effects of urban development within the permit area.

SPECIFIC CONDITIONS REQUIRED BY THE MANAGEMENT PERMIT

The terms and conditions of this permit are the terms and conditions of the Implementation /Management Agreement by and among the City of Bakersfield, the County of Kern, the U.S. Fish and Wildlife Service and the California Department of Fish and Game. The conditions of the Implementation/Management Agreement are summarized below. In the event of any conflict between the conditions summarized below and the terms of the Implementation/Management Agreement, the terms of the Implementation/Management Agreement shall prevail.

1. The County shall not issue any Urban Development Permit for any parcel of land located within the Permit Area which will allow any Urban Development of such parcel by any person, firm or entity unless the County and the Urban Development Permittee comply with the applicable requirements of this permit.
2. Upon issuance of an Urban Development Permit pursuant to this permit, the County shall issue an Acknowledgment indicating that the Urban Development Permittee is allowed to construct, maintain and operate a project which may result in the take of State Protected Species consistent with

the conditions in this permit. The Acknowledgment shall be in writing and may be incorporated into the form or language of Urban Development Permit issued by the County. It shall contain the substance of the following text:

In consequence of the County having complied with the terms of the Section 2081 Permit issued pursuant to the California Endangered Species Act the County having issued the Urban Development Permit, the Urban Development Permit holder, its successors, assignees and agents acting as beneficiaries of this permit are permitted to construct, operate and maintain the project [name and legal description of the specific project] which may result in a legally permitted take of State listed species which are listed in this 2081 Permit. The take authorization provided by the Section 2081 Permit applies only to activities on the parcels which are carried out in full compliance of the 2081 Permit Conditions, including the County complying with the cumulative mitigation requirements of this permit.

3. If the Urban Development Permittee violates conditions of the Urban Development Permit and/or the 2081 Permit, the County shall respond by notifying the Urban Development Permittee of said violation and shall issue an order in accordance with procedures specified in the County Building Code that prohibits development activities which may result in ground disturbance ("Stop Work Order") until the violation is corrected or resolved. The County shall also, at that time, notify CDFG of said violation.
4. Within 180 days of issuance of the 2081 Permit, the County shall prepare a baseline map for purposes of monitoring take and mitigation within the Permit Area. The map shall be provided to the Fresno Office of CDFG for review and approval. If, within 60 days of the receipt of the baseline map, CDFG has not provided, in writing, specific objections to the information on the map, the baseline map shall be deemed approved. If corrections of the map are requested by CDFG, the map shall be so corrected by the County within 60 days and shall become the baseline map for the 2081 Permit. The County may appeal any determination regarding the baseline map to the Sacramento office of CDFG. The map, shall be based on aerial photography taken approximately (within 90 days) at the time of issuance of the 2081 Permit. Aerial photo interpretation shall be done by staff professionals trained to interpret aerial photography and the name(s) of the person(s) doing the interpretation shall be provided to CDFG when the proposed baseline map is submitted to CDFG. The aerial photos used for developing the base map shall be available to the CDFG and USFWS during the 30 day review period and shall become property of CDFG upon approval of the base map. The Implementation Trust (as established by the County of Kern and the City of Bakersfield) shall be the designated custodian of the photos.

5. Prior to issuance of an Urban Development Permit, the County shall provide to CDFG or and entity approved by CDFG, one (1) acre of CDFG approved Habitat Management (HM) Land for each one (1) acre of Urban Development being approved by the County. For each acre of HM Land accepted for management by CDFG, the County shall provide to CDFG \$100 (concurrent with or prior to the Department's acceptance of or designation of HM Lands for a specific project) for improvement of the lands (fencing, etc.) and \$300 (prior to, concurrent with or within 6 months of the Department's acceptance of or the designation of HM Land for a specific project) as an endowment for the long-term management of the HM Land. The improvement and endowment funds shall be adjusted annually based on the Implicit Price Deflator for State and Local Government Purchase of Goods and Services as published by the U.S. Department of Commerce.
6. The County shall maintain and provide CDFG with a record of the following on a quarterly basis, calculated from the date of this Permit:
 - (a) The cumulative amount of Project lands (in acres) subject to Habitat Management Land acquisition requirements under this 2081 Permit for which the County has issued an Urban Development Permits or projects otherwise approved by the County; and
 - (b) The cumulative amount of Natural Lands approved for Urban Development and subject to the terms of this 2081 Permit ; and
 - (c) The cumulative amount of Open Lands approved for Urban Development and subject to the terms of this 2081 Permit.
7. At 4 year intervals starting from the date of the issuance of this 2081 Permit, the County shall provide an updated map (based on aerial photography taken within 90 days of the due date of the map) showing the amount of Natural and Open Lands remaining within the Permit area.
8. At all times the amount of Habitat Management Lands (or cash security, letter of credit, escrow account or trust agreement for the acquisition of HM lands) provided to CDFG shall be greater than the greater of the following: (i) The amount of Approved Urban Development on Open Land or (ii) Three times the amount of approved Urban Development on Natural Land.
9. Prior to the issuance of an Urban Development Permit the County shall conduct the calculation described in Condition 8, adding to Approved Urban Development the amount of Natural Land and Open Land proposed for Urban Development in the project.
10. Concurrent with the passage of title to CDFG or CDFG approved entity, the County or its agent shall record a conservation easement (either substantially

in the form of Exhibit B of the Implementation/Management Agreement or otherwise approved by the CDFG) in favor of CDFG.

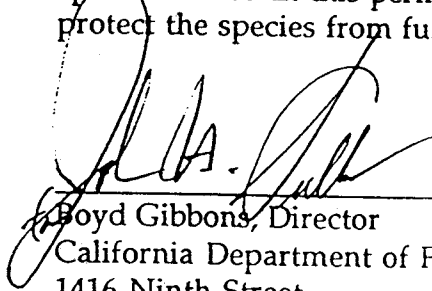
11. The County or its agent shall make an annual report within thirty (30) days after the end of the fiscal year to CDFG on the status of the implementation of the permit. The report will provide the following information:
 - (a) The amount of habitat proposed for Urban Development over the past year, showing the amount of Natural Land and the amount of Open Land so affected.
 - (b) An estimate of the amount of taking of any State -listed species which has taken place within the Permit Area. The estimate of take can be based on habitat area lost and does not require a census or population estimate.
 - (c) The cumulative amount (in acres) of Habitat Management Land acquired.
 - (d) Management activities conducted during the past year and those management activities proposed for the following year on lands not transferred to CDFG .
 - (e) Enhancement activities conducted in the past year and on those planned for the coming year on lands not transferred to CDFG.
 - (f) A qualitative analysis of the population status of the Species of Concern in each Habitat Management Land area for those lands not transferred to CDFG.
 - (g) A description of any scientific research authorized or conducted by the County in the past year on the Habitat Management Lands not transferred to CDFG and any proposed research for the upcoming year.
12. The County (either directly or through its agent) shall maintain (and update as new information becomes available) an inventory of known kit fox dens and known locations of state-listed plant species. For the purposes of this management condition, "known" means a verified den site reflecting a documented history of use, either from actual observations of kit fox or from recent evidence of use. With respect to plant Species of Concern, "known" means a verified population, either extant or documented during the preceding five years and plotted on the map maintained by the County. Information may come from a variety of sources, including biological surveys conducted for CEQA compliance related to a project. Updated copies of the maps (known kit fox dens and state-listed plant species) shall be provided to CDFG annually on the anniversary date of this permit.

13. The County shall encourage efforts by others to relocate kit fox and state-listed plant species from areas for which Urban Development Permits have been issued. To do this, the County (either directly or through its agent) shall:
- (a) Maintain a list of individuals holding valid permits or performing research on the species of concern, and systematically update those individuals on areas proposed for development.
 - (b) Maintain a map of areas approved for development or pending approval. ~~This information can come from County approvals or other sources.~~
 - (c) Coordinate with landowners to encourage relocation activities by individuals holding valid permits.
 - (d) Ensure that relocation activity as provided for by this permit is conducted by qualified parties and conducted at their own expense.
 - (e) Gather data on the success of relocation activities from those engaged in relocation.
14. The County shall require, as a condition of approval of any Urban Development Permit that no later than five (5) working days prior to the initiation of any ground disturbance activities (the "Grading Start Date") by an Urban Development Permittee on parcels containing known dens, such Permittee shall notify the Regional Office of CDFG and USFWS of its intent to initiate such activities. If the CDFG or USFWS are unable to relocate the kit foxes by the Grading Start Date, the Urban Development Permittee shall then be required to eliminate the known den in the manner, described in Exhibit K of the Implementation/Management Agreement, which allows for the San Joaquin kit fox to escape, by themselves, from the construction area prior to project grading. Issuance of Urban Development permits shall be conditioned upon the compliance with this requirement. Den destruction associated with an approved Urban Development permit is considered to be take authorized by the 2081 and does not require additional CESA or ESA permits. The Urban Development Permittee shall record and report to the County (either directly or through its agent) on any sightings of San Joaquin kit fox during den destruction.
15. This Permit shall be immediately effective upon execution of the Permit and Management Agreement by all parties and shall remain in effect for twenty (20) years from the Effective Date or:

- (a) until Urban Development permits are issued for 15,200 acres of Natural Lands; or
- (b) until Urban Development permits are issued for 43,000 acres of Open Lands; or
- (c) until the associated Implementation/Management Agreement is terminated

DEPARTMENT FINDINGS

If the conditions of this permit and the Management Agreement implementing this permit are satisfied in a timely manner as specified, the Department finds that the Urban Development within the County's jurisdiction of the Metropolitan Bakersfield 2010 Plan Area will not likely jeopardize the continued existence of the species named in this permit and may, through the acquisition of habitat lands, protect the species from further degradation.



Boyd Gibbons, Director
California Department of Fish and Game
1416 Ninth Street
Sacramento, CA 95814

Date: 8/17/94

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RECORDING REQUESTED BY:
MAIL TO:

DRAFT

Above Space for Recorder's Use

CONSERVATION EASEMENT GRANT

THIS CONSERVATION EASEMENT GRANT is made this _____ day
of _____, 19____ by _____, a
[_____] ("Grantor"), in favor of
[_____] ("Grantee").

WITNESSETH:

WHEREAS, Grantor is the sole owner in fee simple of
certain real property in the City of _____, State of
_____, more particularly described in Exhibit "A"
attached hereto and incorporated by this reference (the
"Property"); and

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

WHEREAS, the property provides high quality habitat for
the _____ (listed species) and contains native
[grasslands, riparian areas and coastal sage scrub].

WHEREAS, the Department of Fish and Game has, pursuant
to the Fish and Game Code section 1802, jurisdiction over the
conservation, protection, and management of fish, wildlife,
native plants and the habitat necessary for biologically
sustainable population of those species.

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

WHEREAS, Grantee agrees by accepting this grant to
honor the intentions of Grantor stated herein and to preserve and
to protect in perpetuity the conservation values of the Property
in accordance with the terms of this Conservation Easement for
the benefit of this generation and the generations to come;

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 voluntarily grants and conveys to Grantee a conservation easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

1. Purpose. It is the purpose of this Easement to assure that the Property will be retained forever in an 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, including without limitation, those involving the preservation and enhancement of native species and their habitat in a manner consistent with the habitat conservation purposes of this Easement.

2. Rights of Grantee. 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.

(d) Mineral Rights - Grantee is, by this agreement, conveyed all mineral, air and water rights to be held for the benefit of the biological resources of the easement lands.

(e) Development Rights - Grantee is, by this agreement, conveyed all development rights excluding the right to construct a laboratory of not more than ___ square feet of research structures on lands not occupied by the _____ (listed species)

3. Prohibited Uses. 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, unseasonal watering, 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. Grantor shall not authorize the use by Grantor, his agents or third party _____ of off-road vehicles, grazing or surface entry for exploration or extraction of minerals.

4. Reserved Rights. 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.

5. Grantee's Remedies. If Grantee determines that Grantor is 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 inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantor fails to cure the violation within fifteen (15) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a fifteen (15) days period, fail to begin curing such violation with the fifteen (15) day 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 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 Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that 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 available legal remedies. Grantee's remedies described in this 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 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 Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantor, including, without limitation, costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation or negligence under the terms of this Easement shall be borne by Grantor. If Grantor prevail in any action to enforce the terms of this Easement, Grantor's costs of suit including, without limitation, attorneys' fees and fees for expert witnesses, shall be borne by Grantee.

5.2 Grantee's Discretion. 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 Acts Beyond Grantor's Control. 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, 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.

6. Fence Installation and Maintenance. Grantor shall install and maintain a temporary fence around the _____ until the seed has set and is collected at which time a permanent chain-link fence shall be constructed around the entire on-site preserve.

7. Access. This agreement does not convey a general right of access to the public, however, access for scientific research and interpretive purposes shall be reserved to the Grantee or his designee.

8. Costs of Liabilities. 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 Taxes. 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 Hold Harmless. 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 and against all liabilities, penalties, costs, losses, damages, expense, causes of action, claims, demands, or judgments, including without limitation, 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; (2) the obligations specified in paragraphs 7 and 7.1; and (3) the existence or administration of this Easement.

8.3 Condemnation. The habitat conservation purposes are presumed to be the best and most necessary public use as defined at CCP section 1240.680 notwithstanding CCP section 1240.690 and 1240.700.

9. Assignment. 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 grant is intended to advance continue to be carried out.

10. Subsequent Transfers. 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 intent to transfer of any interest at least fifteen (15) days prior to the date of such transfer. Grantee shall have the right to approve all subsequent transfers to insure that all subsequent claimants or transfers have notice of the included restrictions. 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.

11. Estoppel Certificates. 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.

12. Notices. 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 sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

To Grantee:

Department of Fish and Game
Region _____

_____ California

Department of Fish and Game
Legal Advisor's Office
1416 Ninth Street, 12th Floor
P.O. Box 944209
Sacramento, California 95814-2090

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

13. Recordation. Grantor shall promptly record this instrument in the official records of Riverside County, California and immediately notify the Grantee through the mailing of a conformed copy of the recorded easement. Grantee may re-record it at any time as may be required to preserve its rights in this Easement.

14. General Provisions.

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

(b) Liberal Construction. 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) Severability. 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 than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(d) Entire Agreement. 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) No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

(f) Successors. 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 in perpetuity with the Property.

(g) Captions. 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) Counterparts. 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.

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

GRANTOR:

GRANTEE:

(Name and Address)

(Name and Address)

BY: _____
(TITLE)

BY: _____
(TITLE)

Approved as to title

BY: _____
Eugene V. Toffoli
Legal Advisor
California Department
of Fish and Game

JOINT POWERS AGREEMENT

CITY OF BAKERSFIELD
Agreement No. 93-168
Approved AUG 25 1993

FOR THE FORMATION OF THE METROPOLITAN BAKERSFIELD

HABITAT CONSERVATION PLAN IMPLEMENTATION TRUST GROUP

THIS AGREEMENT, which shall be effective upon the 9th day of August, 1993, between the City of Bakersfield, a chartered municipal corporation (hereinafter referred to as "City") and the County of Kern, a political subdivision of the State of California (hereinafter referred to as "County")

W I T N E S S E T H:

WHEREAS, it has been determined that federally listed endangered animal and plant species exist within the Metropolitan Bakersfield area; and

WHEREAS, the United States Department of the Interior, Fish and Wildlife Service, administering the Endangered Species Act (16 U.S.C. Sections 1531 - 1541), has determined that no "take" of endangered species shall be allowed unless compensation for habitat loss and individual species impacts is provided; and

WHEREAS, the presence of such endangered species and the need for their protection is an area-wide issue and a Habitat Conservation Plan (hereinafter "H.C.P.") is appropriate for the parties to obtain a permit under Section 10(a) of the Endangered Species Act of 1973 and a permit under State of California Fish and Game Code Section 2081 to most appropriately provide a comprehensive approach to the protection of endangered species while allowing reasonable urban growth; and

WHEREAS, the City and County desire that local development comply with State and Federal endangered species statues and regulations, which will provide for continued economic growth and development and helps to provide a healthy economic environment for its citizens and industries; and

WHEREAS, the Habitat Conservation Plan will provide a comprehensive method of mitigating impacts of development within the plan area on State and Federally



protected plant and animal species: and

WHEREAS, the Habitat Conservation Plan will be implemented under the terms of a Section 10(a)(1)(B) permit issued by the U.S. Department of the Interior, Fish and Wildlife Service and a Section 2081 Permit issued by the California Department of Fish and Game: and

WHEREAS, as Section 10(a)(1)(B) and 2081 Permit holders, the City and County will be responsible for administering the Habitat Conservation Plan programs and strategy in the areas of their respective jurisdictions: and

WHEREAS, the City and County desire to establish a joint authority with the power to administer the Habitat Conservation Plan Program: and

WHEREAS, the City and County have entered into this Agreement to define relationships between each jurisdiction and to establish an Implementation Trust Group with responsibility for administering the Habitat Conservation Plan acquisition and enhancement program strategy up to 20 year Section 10(a)(1)(B) and 2081 Permit term.

NOW THEREFORE, it is mutually agreed as follows:

I. FORMATION

Upon the effective date of this agreement, there is hereby established the Metropolitan Bakersfield Habitat Conservation Plan Implementing Trust Group (hereinafter referred to as "Agency").

II. IMPLEMENTATION TRUST GROUP

The implementation of the Habitat Conservation Plan relies on the formation of an Agency which is responsible for program administration. The Agency is composed of the following:

1. City of Bakersfield as Administrator
2. County of Kern as Administrator
3. U.S. Fish and Wildlife Service as Mandatory Advisor
4. California Department of Fish and Game as Mandatory Advisor
5. Alternately appointed City/County member of the public as Mandatory Advisor

III. MEETINGS

The Agency shall meet as often as warranted to conduct business. All meetings shall be scheduled and conducted pursuant to the provisions of the Ralph M. Brown Act (Gov. Code Section 54950 et seq.). The secretary of the Agency shall keep minutes of all meetings and shall, as soon as possible after each meeting, forward a copy of the minutes to each member of the Agency.

IV. POWERS OF THE IMPLEMENTATION TRUST GROUP

The Agency shall have and shall exercise powers common to the City and County with and shall develop and coordinate programs and procedures as follows:

- A. Mitigation fee collection and fund management in their respective jurisdictions.
- B. Management of State and Federal Grant Programs if applicable.
- C. Preserve Acquisition.
- D. Land Restoration and Enhancement.
- E. Species Monitoring and Annual Report Preparation.
- F. Develop and administer the Habitat Conservation Plan implementation agreement.
- G. Employ agents, consultants, advisors, independent contractors and employees, and contract for professional services.
- H. Make and enter into contracts.
- I. Acquire, hold and convey real and personal property.
- J. Incur debts, obligations and liabilities.
- K. Accept contributions, grants, or loans from any public or private agency or individual, or the United States or any department, instrumentality, or agency thereof, for the purpose of financing its activities.
- L. Invest money that is not needed for immediate necessities, as the governing Board determines advisable, in the same manner and upon the same conditions as other local entities in accordance with Section 53601 of the Government Code.
- M. Reimburse Agency members the actual amounts of their reasonable and necessary expenses incurred in attending the meetings of the Agency or any committee of the Agency and in performing the duties of their office.

N. Sue and be sued.

O. Do all other acts reasonable and necessary to carry out the purpose of this Agreement other than power of eminent domain.

Such powers shall be exercised in the manner provided by the Agreement, and except as expressly set forth herein, subject only to the restriction upon the manner of exercising said powers as is imposed upon or effected upon the City and County in the exercise of similar powers. Notwithstanding the generality of the foregoing, the Agency shall have no power to bind the City or County to any monetary obligation whatsoever other than that expressly authorized by the mutual written consent of the City and County. The Agency shall be strictly accountable for all funds received, held and disbursed by it and shall be subject to the reporting requirements for all receipts and disbursements as provided for in Government Code Section 6505. Mitigation funds collected by the City and County will be deposited quarterly into a single trust fund to be administered by the Agency.

V. PRESIDING OFFICER

An administrative officer shall be selected by, and shall serve at the pleasure of and upon the terms prescribed by the Agency, and shall perform such duties as the Agency shall require.

VI. DUTIES AND RESPONSIBILITIES OF THE AGENCY

- A. Rules. The Agency shall develop and adopt rules and regulations to govern the conduct of the Agency.
- B. Enforcement. The Agency shall also develop audit and review procedures to assist in ensuring compliance with the Section 10(a)(1)(B) and 2081 Permit Implementing Agreement.

VII. FINANCING

- A. Funds shall be derived and supplied by the City and County mitigation fees, federal grants, or other available sources. The Agency shall also apply for available state or federal funds and

shall make new and additional applications from time to time as appropriate. The Agency may also establish and collect various fees for services provided by it.

3. All expenditures of funds, from whatever source received, shall be approved by the Agency.

VIII. LIMITATION ON FISCAL OBLIGATIONS AND PARTIES' LIABILITY

Notwithstanding the general powers of the Agency set forth in paragraph 1 of this Agreement, the Agency shall not incur any financial or contractual obligations unless it has already obtained sufficient funds or a binding commitment for funds to pay for the full cost of said obligations. The Agency shall specify in all contracts for purchase of goods and services that responsibility for payment is that of the Agency and not of any of the parties to this Agreement. The debts, liabilities and obligations of the Agency shall not be the debts, liabilities or obligations of the parties to this Agreement or of any of them.

IX. TERMINATION AND DISSOLUTION

The City or County may terminate this Agreement only in the event that each terminating party has complied with its obligations to date under Section 3.1.8 of the Implementation Management Agreement (IMA) and either (i) the legislative body of the terminating party makes a written finding at a noticed public hearing that they have determined that it is not economically feasible based on the best economic information available to acquire sufficient acreage of Habitat Management Lands to satisfy the requirements of Section 3.1.8 of the IMA, or to otherwise comply with the requirements of the IMA, with funds on hand for, or projected to be allocated to, the MBHCP, or (ii) in the event that there is any change in state or federal laws, regulations, programs or circumstances relating to endangered species protection, including but not limited to termination or suspension of the Section 10(a)(1)(B) Permit or the 2081 Permit, and the legislative body of the terminating party thereafter makes a written finding at a noticed public hearing that further compliance with the IMA is no longer in the best interest of that entity. Economic infeasibility analysis shall require

consideration of impacts associated with urban development including but not limited to acquisition costs of Habitat Management Lands, administrative costs of the program and impact mitigation exactions, all of which shall be given equal weight. Termination of the IMA shall not be effective any earlier than sixty (60) days after the City or County provides written notice to the CDFG and USFWS of their adoption of the findings required by this paragraph. Such notice shall include a copy of the required written findings. If the City or County terminates the IMA, then (1) Excepts as provided in paragraph (c) of Section 7.1.1 of the IMA, the Section 10(a)(1)(B) Permit and 2081 Permit shall thereafter be null and void, and the activities within the permit area shall be subject to all of the requirements of the ESA and CESA, and (2) upon termination of the IMA interim mitigation fees collected, less administrative costs incurred prior to the effective date of this document, shall be devoted to habitat mitigation acceptable to USFWS and CDFG, however the amount to be used for habitat mitigation shall be reduced by 5% per year until depleted, and (3) all Habitat Management Land obligations incurred prior to termination shall be transferred to a Habitat Management Entity, pursuant to Section 4.4 of the IMA.

This Agreement shall remain in force and effect for a term of up to 20 years commencing from the effective date of a Section 10(a)(1)(B) and 2081 Permit as approved by the Department of the Interior and California State Department of Fish and Game or until terminated.

X. AMENDMENTS

This Agreement may be amended in writing by the parties.

XI. SEVERABILITY

Should any part, term, portion or provision of this Agreement be finally decided to be in conflict with any law of the United States or the State of California, or otherwise be unenforceable or ineffectual, the validity of the remaining parts, terms, portions or provisions shall be deemed severable and shall not be affected thereby, provided such remaining portions or provisions can be construed in substance to constitute the Agreement which the parties intended to enter into in the first instance.

XII. EXECUTION IN COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original, all of which together shall constitute one and the same instrument.

XIII. INDEMNIFICATION

The City and County each agree to indemnify and hold the other harmless from and against any and all demands, liabilities, causes of action, losses or claims against the other arising solely from each's own acts or omissions either directly or through or by agents, officers, or employees resulting from furnishing work, services, materials or supplies to the Agency. To the extent the Agency acts through its own employees, the Agency agrees to indemnify, defend, and save harmless the City and County from and against any and all claims and losses whatsoever occurring or resulting to person, firms or corporations furnishing or supplying work, services, materials or supplies to the Agency caused by an employee of the City or County performing work from the Agency in connection with the performance of this Agreement.

XIV. INSURANCE

Prior to employing personnel, the Agency shall obtain at its sole cost and expense, at least the following insurance policies which shall be kept in full force during the entire period of this Agreement:

- A. Comprehensive General Liability insurance on an occurrence policy form in an amount of not less than \$2 million.
- B. Workers' Compensation insurance in accordance with the California Labor Code, at all times the Agency has employees.

Said insurance coverage shall be obtained from commercial insurance carriers licensed to do business in the state of California, and rated B+ VII or better, and shall provide coverage for all employees of the Agency. In addition, the parties hereto shall be named as additional insureds, and said insurance shall be primary. Premiums shall be paid from Agency funds. Said coverage shall provide for thirty (30) day notices prior to the effective date of cancellation.

and the Agency shall notify all parties promptly upon receipt of such notice.

IV. WAIVER OF DEFAULT

The failure of any party to enforce against another a provision of this Agreement shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Agreement.

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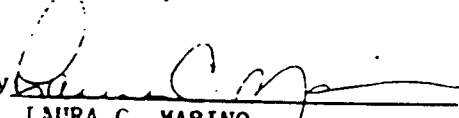
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed, the date and year first-written above.


APPROVED AS TO FORM:

"CITY"

LAWRENCE M. LUNARDINI
City Attorney

CITY OF BAKERSFIELD

By 
LAURA C. MARINO
Assistant City Attorney

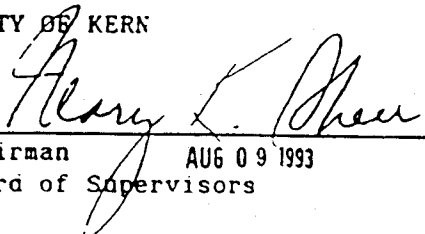

BOB PRICE, Mayor

COUNTERSIGNED:

By  FOR
GREGORY J. KLIMKO
Finance Director

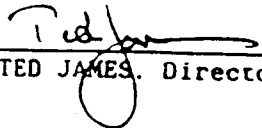
"COUNTY"

COUNTY OF KERN


vice-Chairman AUG 09 1993
Board of Supervisors

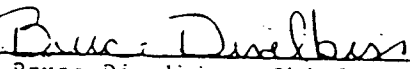
RECOMMENDED FOR APPROVAL:

PLANNING AND DEVELOPMENT SERVICES

By 
TED JAMES, Director

APPROVED AS TO FORM:

Office of County Counsel

By 
Bruce Divelbiss, Chief Deputy

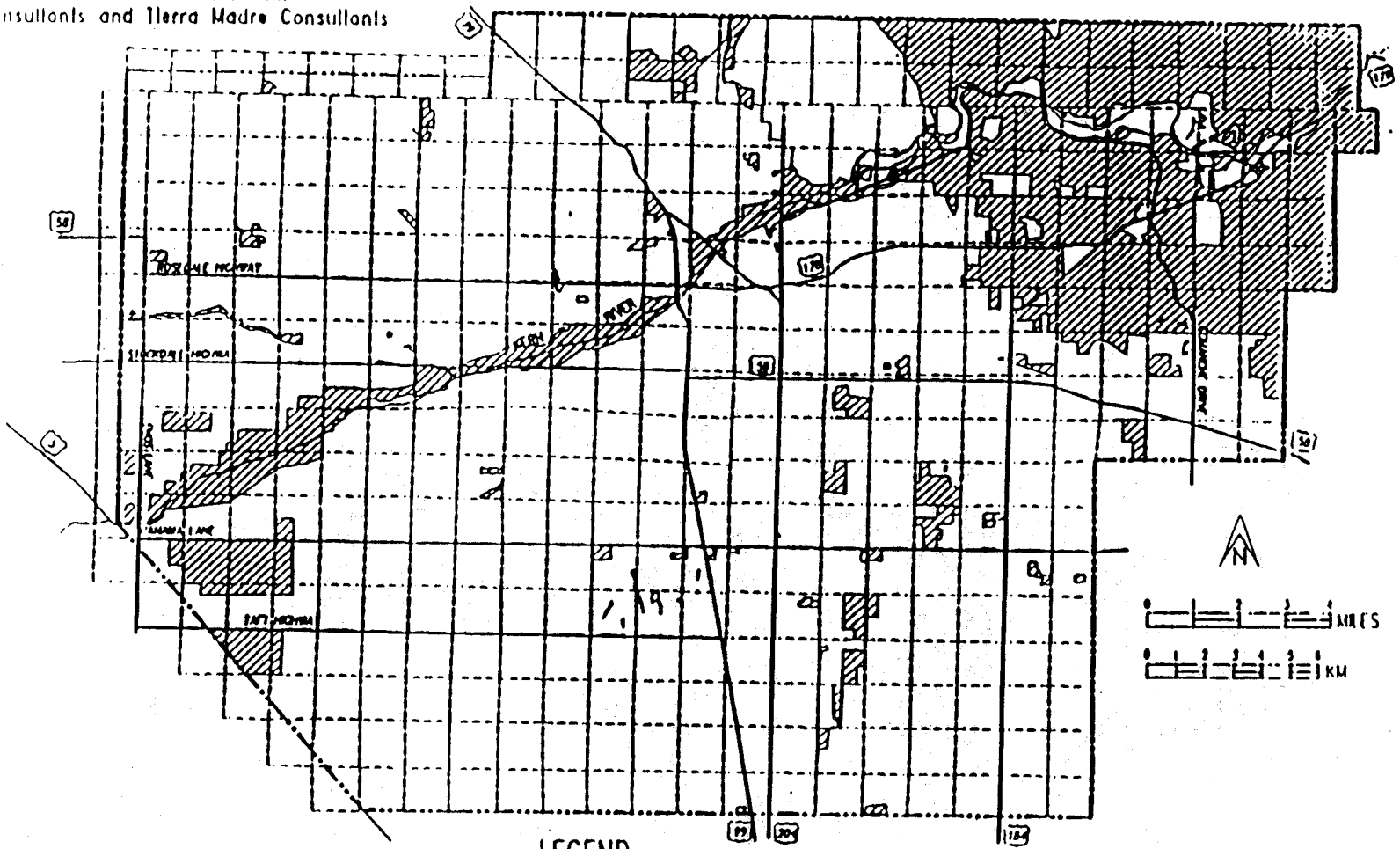
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METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reid Associates with
 Quad Consultants and Tierra Madre Consultants

NATURAL LANDS REMAINING

NATURAL LANDS REMAINING (SPECIAL MAP)



LEGEND

-  Natural Lands
-  HCP Area Boundary

NOTE: To Be Updated Pursuant
 to 3.1.5

MARCH 1991

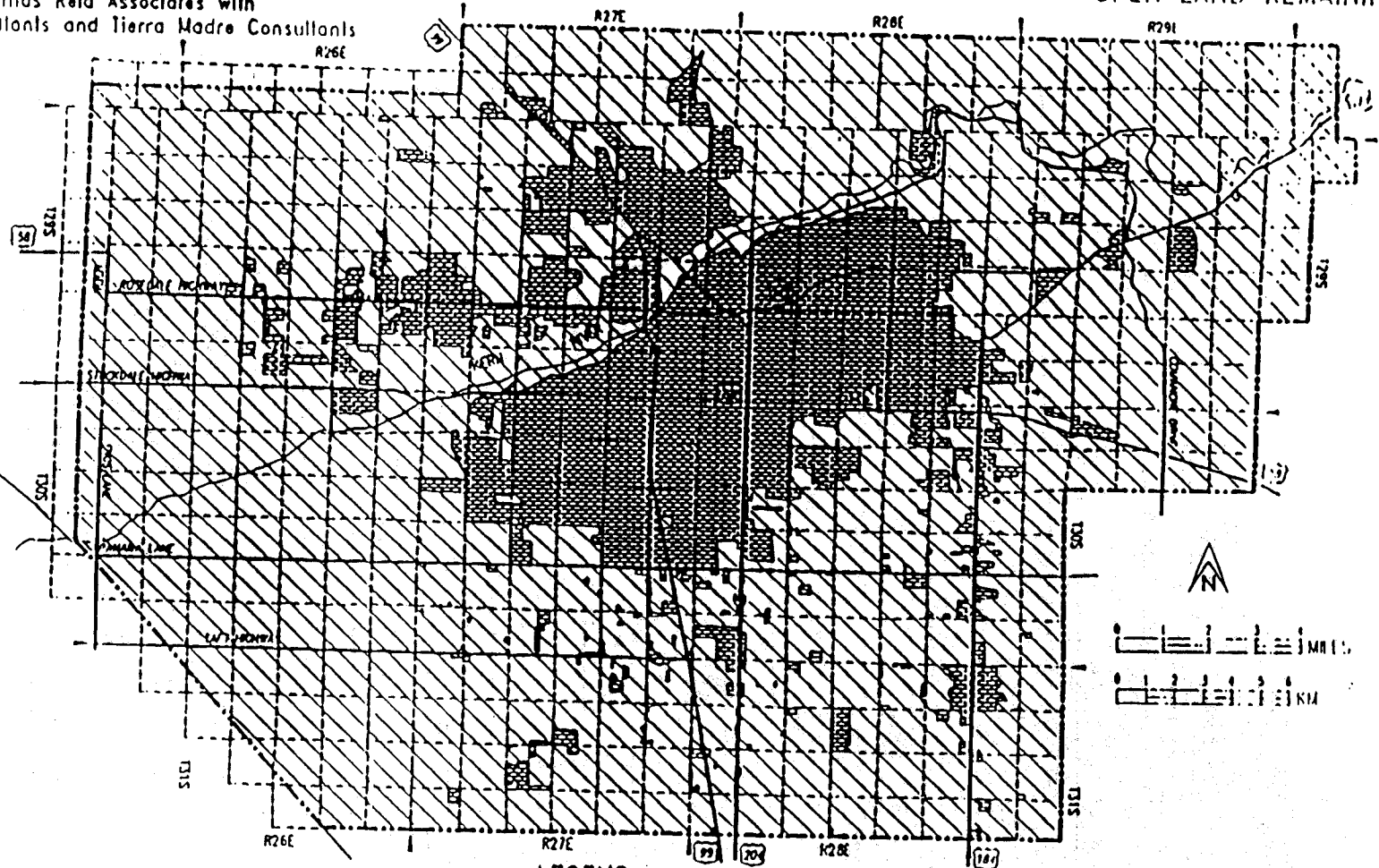
Sources: Aerial Photos Feb 1988, Thomas Reid Associates, Quad Consultants

METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN

Thomas Reid Associates with
Quad Consultants and Tierra Madre Consultants

OPEN LAND REMAINING

16/01/88 17/01/88 18/01/88 19/01/88 20/01/88 21/01/88 22/01/88 23/01/88 24/01/88 25/01/88 26/01/88 27/01/88 28/01/88 29/01/88 30/01/88 31/01/88



LEGEND

Urban

Open Land

HCP Area Boundary

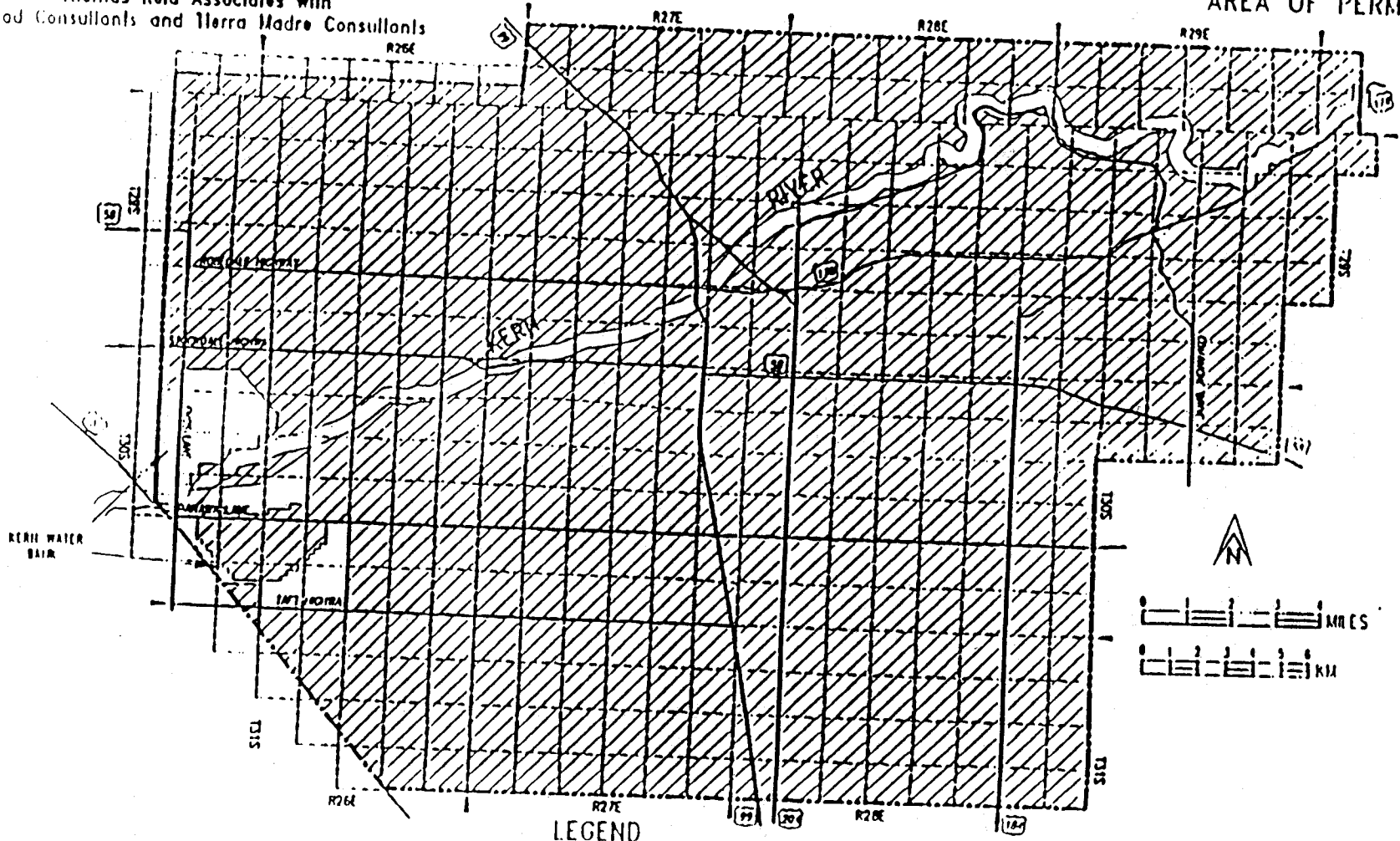
NOTE: To Be Updated Pursuant
to 3.1.5

METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN



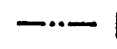
Thomas Reid Associates with
Quod Consultants and Terra Madre Consultants

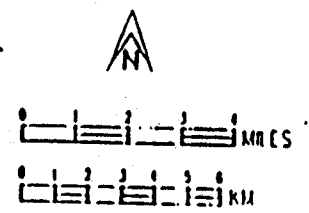
AREA OF PERMIT

INCIDENTAL AREA OF PERMIT (Hatched) STATIONING



LEGEND

-  Subject to Incidental Take under City or County Permit
-  Kern River Primary Flood Plain & Kern Water Bank Excluded
-  IICP Area Boundary



MARCH 1991

Sources: Thomas Reid Associates

**ORDINANCE AMENDING CHAPTER 15.78 OF THE
BAKERSFIELD MUNICIPAL CODE RELATING TO
MITIGATION FOR URBAN DEVELOPMENT IMPACTS
ON ENDANGERED SPECIES.**

BE IT ORDAINED by the Council of the City of Bakersfield as follows:

SECTION 1.

Chapter 15.78 of the Bakersfield Municipal Code is hereby amended to read as follows:

CHAPTER 15.78

**Metropolitan Bakersfield Habitat Conservation Plan (MBHCP)
Mitigation Program**

Sections:

15.78.010	Definitions.
15.78.020	Designation of MBHCP Section 10(a)(1)(B) and Section 2081 permit area.
15.78.030	Implementation of fee.
15.78.040	Fee setting and adjustment.
15.78.050	Disposition of fees.
15.78.060	In-lieu payment.
15.78.070	Salvage.
15.78.080	Adoption of regulations.

15.78.010 **Definitions.**

As used in this ordinance, the following words and phrases are defined as follows:

- A. "Accessory building" or "Accessory structure" means a building or structure detached from a principal building on the same lot and customarily incidental and subordinate to the principal building or use.
- B. "Fee assessment area" means the land within the Metropolitan Bakersfield Habitat Conservation Plan study area boundary.
- C. "Habitat Conservation Plan" (HCP) means a plan prepared pursuant to the provisions of 16 U.S.C. Section 1539.

CITY OF BAKERSFIELD
ORIGINAL

D. "Habitat management lands" means a parcel of land or an aggregation of parcels of land protected from future urban development or other disturbance, and managed as a unit for the conservation and protection of species covered by the MBHCP.

E. "Habitat Mitigation Fee" (H.M.F.) means fees established by uncodified ordinance to be paid by Urban Development Permittees to fund the Implementation Trust activities including, but not limited to, the cost of land acquisition, land endowment, habitat management land improvement, public facilities mitigation, and administration of the HCP program.

F. "Implementation trust" means that body established pursuant to a Joint Powers Agreement (JPA) between the City and the County for the purpose of carrying out the provisions of the MBHCP.

G. "Known den" means a verified den site reflecting a documented history of use, either from actual observations of kit fox or from recent evidence of use and plotted on a map maintained by the Implementation Trust.

H. "Mitigation credits" means an amount, in dollars, equal to the acreage of land transferred to CDFG or its designee multiplied by the land value portion of the H.M.F. in effect at the time of transfer, rounded to the nearest dollar.

I. "Natural land" means undeveloped land which has not been significantly altered by human activity. Natural land generally includes open brushland/woodland, dense brushland/woodland, scrubland, riparian areas, wetlands, ephemeral flooded land, bare ground, sand dunes, rock outcroppings, grasslands, grasslands subject to grazing, and non-crop agricultural land which has retained natural contours or has reverted back to natural vegetation. Natural land does not include former agricultural land which has been leveled or graded to facilitate irrigation or production activities, and land which has been out of production for less than five consecutive years.

J. "Oilfield development" means application and development for the purpose of petroleum extraction or enhancement of petroleum extraction.

K. "Open land" includes natural land and land which has been significantly altered by agricultural or industrial use, but which has not been substantially developed for urban uses.

L. "2081 Permit" means a permit issued under the California Endangered Species Act (Fish and Game Code Section 2050-2098).

M. "Undeveloped" means land not previously occupied by a building or used for a purpose subject to H.M.F. or land for which a permit was not issued prior to the effective date of this Ordinance.

N. "Urban development" means a change in land use from Open Land to any other land use for which a permit such as a grading permit, grading plan approval, building permit or use permit is required from the City, including but not limited to, the construction of buildings on lots of record and projects undertaken directly by the City. The term does not include a change from Natural Land or Open Land to agricultural use, nor does it include a change from Natural Land, Open Land, or agricultural use to oil production except for associated ancillary facilities for which the City exercises discretionary authority over the issuance of such permits or approvals pursuant to the California Environmental Quality Act.

O. "Urban development permit" means issuance of a building permit by the City for a project that would result in urban development as defined in the implementation agreement for 10a(1)(B) and 2081 permits. Where a project would ultimately result in urban development, the term "Urban Development Permit" also means issuance of a use permit or grading plan approval, or approval of activities undertaken by a public agency including but not limited to public works construction and related activities, if applicable by the City.

P. "Urban development permittee" means landowners and other private parties that are grading, building, or conducting other development activities within the permit area as approved by the City.

15.78.020 Designation of MBHCP Section 10(a) (1)(B) and Section 2081 permit area.

All those certain lands located in the City of Bakersfield and County of Kern Metropolitan Bakersfield 2010 General Plan area are hereby constituted and shall be designated as the Metropolitan Bakersfield Habitat Conservation Plan program area.

15.78.030 Implementation of fee.

A. During the time the H.M.F. is in effect, prior to the approval of any urban development permit in the Metro Bakersfield Habitat Conservation Plan program area, the City will collect an H.M.F. With respect to use permits, the H.M.F. shall be paid prior to issuance of a grading or building permit, whichever comes first. If no grading or building permit is required for the use authorized by the Use Permit, the H.M.F. shall be paid prior to establishment of the authorized use.

B. H.M.F. will not be required for the following:

1. Additions, remodels or reconstructions totaling not more than 50 percent of the square footage of the pre-existing development:
2. Mobilehome replacement:
3. Oil and gas production and extraction including accessory or incidental structures and improvements.
4. Commercial agricultural practices, uses and structures including but not limited to tillage, cultivation, grading, ditching, storage, stacking, barns, equipment buildings and agricultural housing.
5. Development of any parcel for which the United States Fish and Wildlife Service and California Department of Fish and Game has approved other mitigation procedures through issuance of 2081 and 10(a)(1)(B) permits constituting full mitigation.
6. Local public projects less than ten (10) acres in size undertaken for strictly public purposes and incidental to urban growth.
7. Demolition.
8. Those projects having already paid the Interim HCP fee are exempt for the area covered by the previous fee payment.

C. For parcels less than 2-1/2 acres in size, the H.M.F. shall be calculated for the entire gross acreage of the parcel.

D. For those parcels 2-1/2 gross acres or larger, the H.M.F. calculation shall be on the associated disturbance but not less than 2-1/2 gross acres. However, if the applicant can adequately demonstrate to the City that a portion of his parcel shall not be disturbed by, but not limited to, grading, drainage, or storage, the H.M.F. will not be calculated for that portion of the parcel.

15.78.040 Fee setting and adjustment.

The City Council shall, by resolution, establish the fee, on a gross acre basis, required under this chapter.

15.78.050

Disposition of fees.

The City will hold H.M.F. collected by it in a separate trust for payment of habitat mitigation trust activities as identified in the MBHCP Implementation Management Agreement, which include but are not limited to the cost of land acquisition, land endowment, habitat management land improvement, public facilities mitigation, and administration of the HCP program. Funds shall be transferred to the Implementation Trust for use in implementation of the MBHCP upon request by the Implementation Trust.

15.78.060

In-lieu payment.

A. An urban development permittee may transfer title to land in-lieu of payment of a portion of the H.M.F., if preservation of the land is consistent with the habitat management land acquisition criteria set forth in Section B, and is acceptable to the Implementation Trust as set forth in Section C.

B. Land is appropriate for acquisition as all or part of habitat management lands, and may at the discretion of the Implementation Trust qualify in-lieu of payment of H.M.F., if it is (i) within one of the potential habitat management lands acquisition areas identified in the Implementation/Management Agreement and CDFG, USFWS, The Nature Conservancy, or other habitat management entity approved by CDFG, has provided written notification to the Implementation Trust that they are willing to accept title and act as the management entity for said lands, or (ii) in an area determined by the Implementation Trust and the CDFG advisor to the Implementation Trust to provide benefits to one or more of the species of concern and CDFG, USFWS, The Nature Conservancy, or other habitat management entity approved by CDFG, has provided written notification to the Implementation Trust that they are willing to accept title and act as the management entity for said lands. Notwithstanding this section and Section C, the transfer of title to land in-lieu of the payment of H.M.F. shall not be included in the calculations conducted pursuant to Section 3.1.8 of the Implementation/Management Agreement for the purposes of determining the cumulative amount of Habitat Management Lands unless the transferred land qualifies as Habitat Management Lands.

C. Landowners proposing transfer of title to land in-lieu of payment of mitigation fees shall submit a petition for a transfer consistency determination and a processing fee to the Implementation Trust. The fee for processing this petition shall be as established by uncodified ordinance. The Implementation Trust shall be responsible for determining the completeness of the petition. The petition shall provide a description of the land proposed for transfer, a preliminary title report, a report prepared by a qualified biologist on the value of the land as habitat for species of concern, a preliminary site assessment for hazardous waste contamination, correspondence from CDFG, USFWS, or any habitat management entity approved by

CITY OF BAKERSFIELD
ORIGINAL

CDFG and USFWS. regarding their ability and desire to accept title and management responsibilities, a calculation of the percent acreage credit requested for said lands in accordance with the MBHCP Implementation/Management Agreement, and a statement of the monetary value of the land supported by an appraisal or disclosure of purchase price as required by the Implementation Trust. The petition shall be processed in accordance with the following time limits.

1. If upon review of the petition, the Implementation Trust finds the information provided to be inadequate for determining consistency, the Trust shall, within forty-five (45) days of receipt of the petition, provide the landowner with a written statement of the additional information required. The 45-day period can be extended if both parties agree.

2. Upon receipt of an adequate petition, the Implementation Trust shall, within forty-five (45) days of receipt of the petition, issue a written determination with respect to the acceptability and consistency, and amount of credit of the land proposed for transfer with the Habitat Management Lands criteria set forth in Section B. The 45-day period can be extended if both parties agree.

3. If the Implementation Trust fails to make a written determination of consistency or lack of consistency within the 45-day period, the land proposed for transfer will be deemed to be acceptable and consistent with the Habitat Management Land acquisition criteria set forth in Section B. The 45-day period can be extended if both parties agree.

D. The Implementation Trust shall make the final determination on the amount of Habitat Management Lands which will count toward mitigation credits and is under no obligation to accept land that does not, in its sole discretion, provide benefits to one or more species of concern and does not benefit the MBHCP program.

E. If, in consultation with the USFWS and CDFG as advisors, the Implementation Trust determines that the land proposed for transfer is acceptable and consistent with the Habitat Management Lands acquisition criteria set forth in Section B., the transfer may be used in-lieu of payment of the portion of the Mitigation Fee attributable to the estimated cost of acquiring Habitat Management Lands. Therefore, an urban development permittee utilizing mitigation credits in-lieu of payment of the land value portion of the H.M.F. shall pay a fee in the amount of the H.M.F. attributable in the uncodified ordinance to the cost of fencing the habitat management lands, the cost of ensuring the management and enhancement of the habitat management lands as specified in the Implementation/Management Agreement and the administrative costs attributable to the MBHCP program. Upon the recordation of a grant deed to the CDFG or its designee, the transferor shall receive credits for mitigation fees ("Mitigation Credits"). Mitigation credits may be expended at any time by a notarized City form signed by the transferor requesting use of the mitigation credits for the project in-lieu of the payment of a portion of the H.M.F.

F. It is understood that mitigation credits shall be freely and independently transferable between private entities, and between public and private entities, and may be expended by the transferee to off-set H.M.F. in the same manner as specified in Subsection E above. Mitigation credits may be expended in either the city or the county jurisdiction.

G. Mitigation credits shall be applicable only to the MBHCP program and in no event, including termination of the MBHCP program, may they be used to offset any other City fee or charge. Mitigation credits shall have no actual cash value for any City purpose.

15.78.070 Salvage.

A. No later than five (5) working days prior to the initiation of any ground disturbance activities (grading start date) by an urban development permittee on parcels containing known dens, the urban development permittee shall notify the Regional Office of CDFG and USFWS of the intent to initiate ground disturbance activities and shall agree to permit appropriate access for salvage purposes.

B. Upon notification of the property owner, any person holding proper permits may remove and relocate kit fox from known dens within approved urban development permitted areas. Any person proposing to remove or relocate kit fox shall indemnify and hold harmless the property owner from and against any claims, damages, or causes of action arising from such removal or relocation. An urban development permittee is not required under this agreement or the MBHCP to pay the cost of the relocation or salvage activity or be responsible for obtaining necessary permits to relocate any species of concern. If for any reason the persons responsible for relocating species of concern are unable to carry out the relocation activities prior to the grading start date, the urban development permittee may proceed to engage in the supervised destruction of known dens as and otherwise initiate approved construction activities.

C. If the CDFG or USFWS are unable to relocate the kit foxes by the grading start date, the urban development permittee shall then be required to eliminate the known den in the manner described by the City of Bakersfield which allows for the San Joaquin kit fox to escape the construction area prior to project grading.

D. The urban development permittee shall record and report to the Implementation Trust any sightings of San Joaquin fox during den destruction.

15.78.080 Adoption of regulations.

The City Council may, from time to time, by resolution adopt regulations for the administration and implementation of this ordinance not inconsistent with it. Such regulations, and any amendments thereto, shall be adopted after a duly noticed public hearing.

CITY OF BAKERSFIELD
ORIGINAL

SECTION 2.

This Ordinance shall be posted in accordance with Bakersfield Municipal Code and shall become effective upon issuance of a 10(a) (1)(B) permit for the MBHCP but no less than thirty (30) days from and after the date of its passage.

-----o0o-----

I HEREBY CERTIFY that the foregoing Ordinance was passed and adopted by the Council of the City of Bakersfield at a regular meeting thereof held on AUG 25 1993 by the following vote:

AYES: COUNCILMEMBERS McDERMOTT, EDWARDS, DeMOND, SMITH, BRUNNI, ROWLES, SALVAGGIO
NOES: COUNCILMEMBERS None
ABSTAIN: COUNCILMEMBERS None
ABSENT: COUNCILMEMBERS Smith

Carol Williams
CITY CLERK and Ex Officio Clerk of the
Council of the City of Bakersfield

APPROVED AUG 25 1993

Bob Price
BOB PRICE
MAYOR of the City of Bakersfield

STATE OF CALIFORNIA,
County of Kern)

I, CAROL WILLIAMS, City Clerk of the City of Bakersfield, St. California, hereby certify the foregoing and annexed to be a full, true and copy of the original PERMITS NO. 3556

on file in this office and that I have compared the same with the original
WITNESS my hand and seal this 26th day of August 1993

CAROL WILLIAMS, City C

By _____
City Clerk
By Angela J. Roe
Deputy City Clerk

APPROVED as to form:
Lawrence M. Lunardini
LAWRENCE M. LUNARDINI
CITY ATTORNEY of the City of Bakersfield

JM:pjt
ord\ohcp.cc
July 27, 1993



Chapter 15.78

EXHIBIT "A"

Wording Change for Clarification Purposes

Reword 15.78.030 B.1. to say:

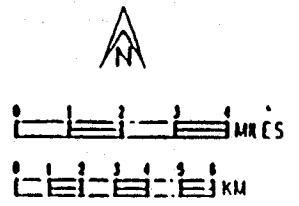
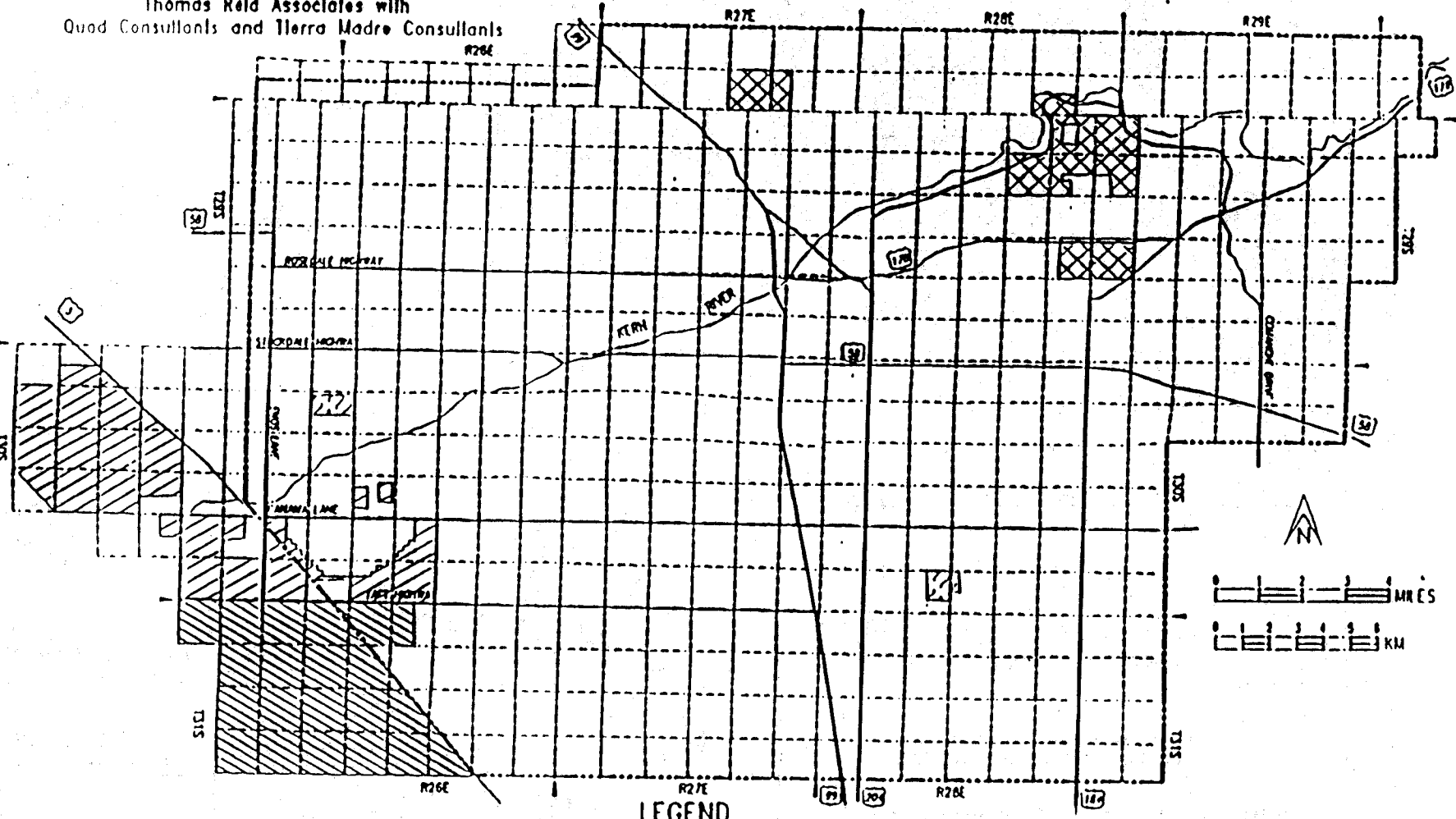
Additions, remodels or reconstructions totalling not more than a 50 percent increase from the square footage of per-existing development;

CITY OF BAKERSFIELD
ORIGINAL

MARCH 1991

INFORMATIVE ACQUISITION STRATEGY GENERAL MAP

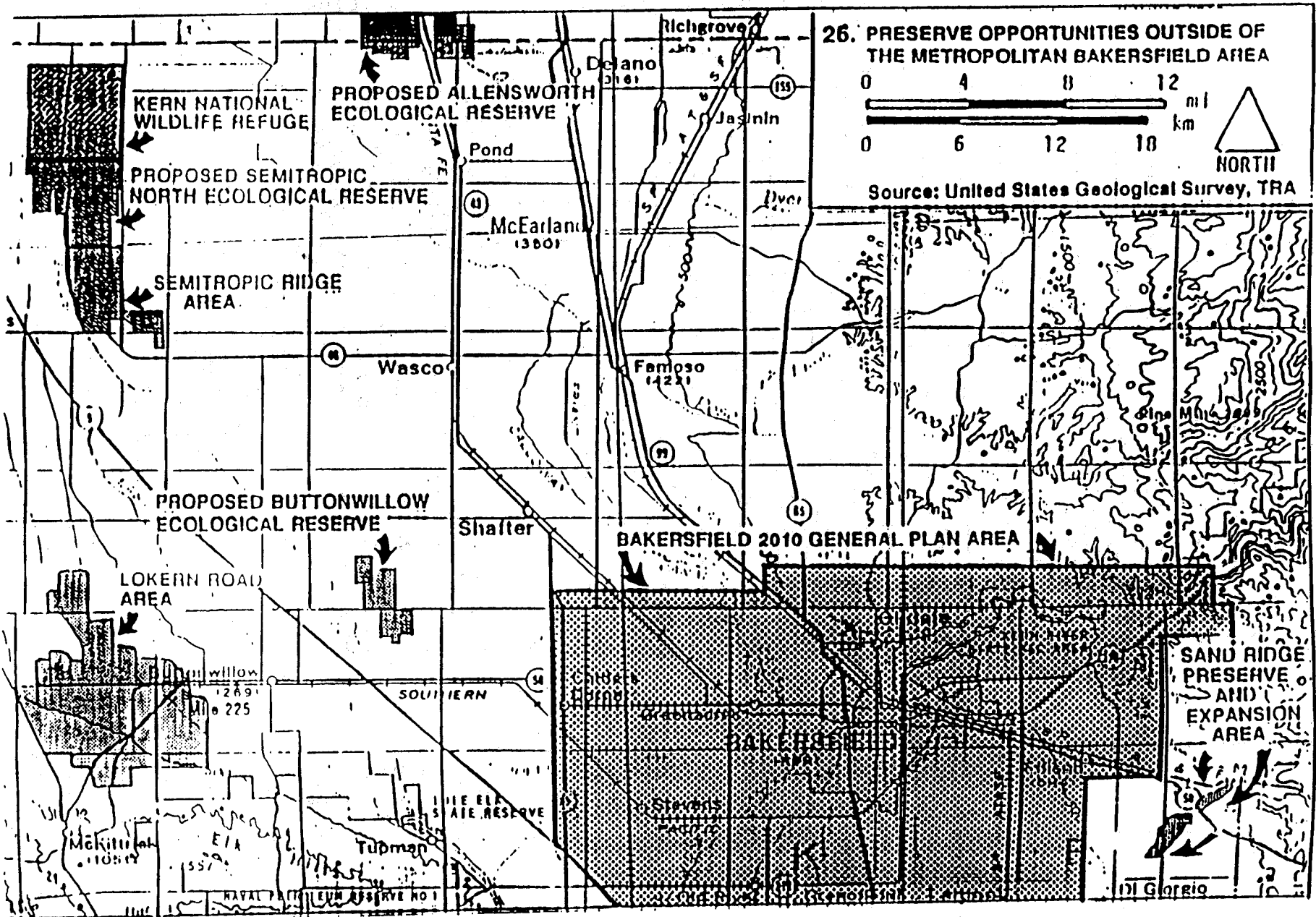
METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN
 Thomas Reid Associates with
 Quad Consultants and Tierra Madre Consultants

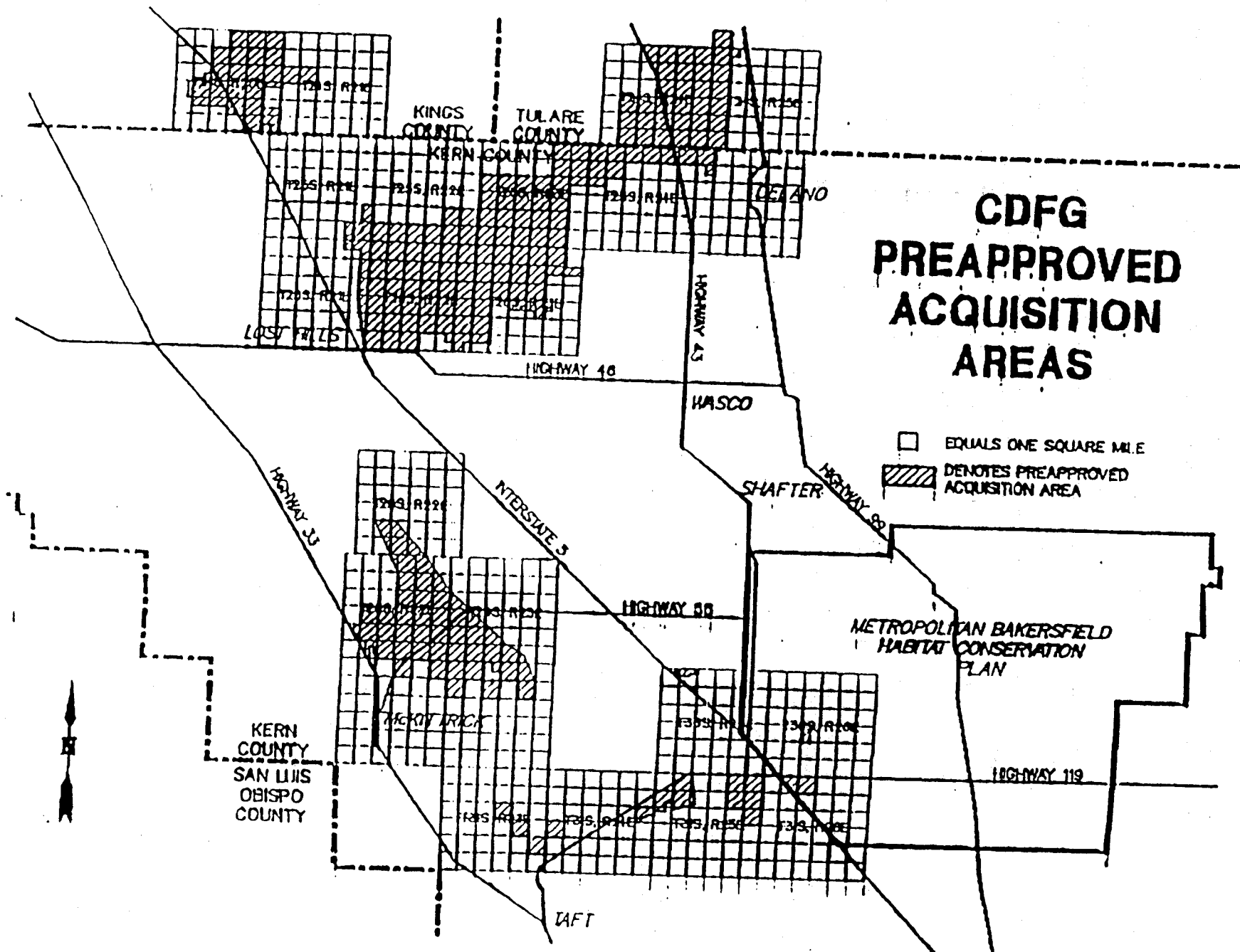


NOTE: PRESERVE OPPORTUNITIES ARE CONCEPTUAL ONLY AND DO NOT REMOVE ANY PRE-EXISTING LAND USE ENTITLEMENTS PROVIDED BY ADOPTED CITY AND COUNTY PLANS AND ZONING

- LEGEND**
- Specially Plan Preserve
 - Cactus Preserve Acquisition Areas
 - South West Land Preserve Acquisition Area
 - DWR Conservation/Enhancement Priority Lands
 - HCP Area Boundary

Sources: Thomas Reid Associates, 1989.





CDFG PREAPPROVED ACQUISITION AREAS

□ EQUALS ONE SQUARE MILE
 ▨ DENOTES PREAPPROVED ACQUISITION AREA



EXHIBIT K: PROPOSED KIT FOX DEN EXCAVATION REQUIREMENTS

All known San Joaquin kit fox dens that will be unavoidably destroyed by project actions shall be carefully excavated by or under the direct supervision of a qualified wildlife biologist. Dens shall be completely excavated and subsequently back-filled and compacted to prevent later use by kit foxes prior to onset of project construction. Monitoring of dens shall be conducted prior to excavation to ensure that dens are not occupied by kit foxes when excavated. If a kit fox is inadvertently found inside a den during excavation, the animal(s) shall be allowed to escape unhindered.

The Metropolitan Bakersfield Implementation Trust maintains an inventory of known kit fox dens and known locations of plant ~~Species of Concern~~ Federally Protected Species, State Protected Species, and/or Other Species of Concern. For the purposes of excavation requirements "known" means a verified den site reflecting a documented history of use, either from actual observations of kit fox or from recent evidence of use and plotted on the map maintained by the Implementation Trust.

EXHIBIT L: EASEMENT HOLDER NOTICE

To: Easement Holder

The City of Bakersfield and Kern County are in the process of acquiring Parcel _____ as Habitat Management Lands for endangered species pursuant to the Metropolitan Bakersfield Habitat Conservation Plan and associated permits and agreements.

Ownership of Parcel _____ will be transferred to the California Department of Fish and Game (CDFG) or CDFG approved management organization. It is the intent of CDFG to enhance and manage the parcel for threatened and endangered species protected by the State and Federal Endangered Species Acts. Management actions may include, but are not limited to control of access, grass, forb, shrub and tree planting, creation of micro-relief, installation of artificial dens and burrows.

Please be advised that any easement holder activities, on the above described parcel, which may affect threatened or endangered species or their habitat will require permits pursuant to the State and Federal Endangered Species Acts. If you have any questions regarding endangered species act permitting, please contact the Fresno office Department of Fish and Game at (209) 445-6152.

P:IA3.17

**CERTIFICATE OF ADOPTION OF RESOLUTION
AUTHORIZING CHAIRMAN TO SIGN INSTRUMENT**

The undersigned, Clerk of the Board of Supervisors of the County of Kern, hereby certifies that the following resolution was adopted by said Board of Supervisors at a regular meeting duly convened on the 15th day of August, 1994:

"WHEREAS, this Board has determined that the County of Kern should enter into a certain contract with United States Fish and Wildlife Service, the State of California, Department of Fish and Game, and City of Bakersfield, bearing the date August 15, 1994, and entitled: Implementation Management Agreement re Metropolitan Bakersfield Habitat Conservation Plan, bearing Kern County Agreement No. 430-94.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Kern, State of California, that said instrument be, and it is hereby executed on behalf and in the name of said County of Kern, and the Chairman of this Board is hereby authorized and directed to sign his name thereto on behalf of said County."

The undersigned further certifies that on the date last mentioned the person who so signed said instrument was the duly elected Chairman of said Board and that his signature on said instrument is genuine.

The undersigned further certifies that said resolution was adopted by the following vote:

Ayes: Austin, Larwood, Peterson, Shell

Noes: None

Absent: Ashburn

Dated: August 15, 1994

SUE DAVIS
Clerk of the Board of Supervisors
County of Kern

Reference No. 949779

By:

Kaaren Shatswell
Kaaren Shatswell, Deputy

RECORDING REQUESTED BY:)
MAIL TO:)
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)
)

Above Space for Recorder's Use

CONSERVATION EASEMENT GRANT

THIS CONSERVATION EASEMENT GRANT is made this _____ day
of _____, 19____ by _____, a
[_____] ("Grantor"), in favor of
[_____] ("Grantee").

WITNESSETH:

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

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

WHEREAS, the property provides high quality habitat for the (federally and state listed species and other species of concern) and contains native (habitat type); and

WHEREAS, the Department of Fish and Game has, pursuant to the Fish and Game Code section 1802, jurisdiction over the conservation, 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 in perpetuity; and

WHEREAS, Grantee agrees by accepting this grant to honor the intentions of Grantor stated herein and to preserve and to protect in perpetuity the conservation values of the Property in accordance with the terms of this Conservation Easement, the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) and the Implementing Agreement (IA) for the benefit of this

generation and the generations to come; and

WHEREAS, City of Bakersfield (City), the County of Kern (County), the California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS) have entered into the MBHCP and IA (attached as exhibits to this conservation easement) which provides for the acquisition and management of habitat for the conservation of federally and state listed and other species of concern pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act and Section 2081 of the California Fish and Game Code;

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 voluntarily grants and conveys to Grantee a conservation easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

1. Purpose. It is the purpose of this Easement to assure that the Property will be retained forever 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, including without limitation, those involving the preservation and enhancement of native species and their habitat in a manner consistent with the habitat conservation purposes of this Easement.

2. Rights of Grantee. 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 to otherwise enforce the terms of this Easement; provided that 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.

(d) All mineral, air and water rights required to

protect and to sustain the biological resources of the Easement lands.

(e) All present and future development rights.

3. Prohibited Uses. Any activity on or use of the Property inconsistent with the habitat conservation purposes of this Easement, the MBHCP and IA is 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. Grantor shall not authorize the use by Grantor, Grantor's agents, or any third party of off-road vehicles, grazing or surface entry for exploration or extraction of minerals.

4. Reserved Rights. 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 prohibited herein and are not inconsistent with the purpose of this Easement and MBHCP and IA.

5. Grantee's Remedies. If Grantee determines that Grantor is 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 inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantor fails to cure the violation within fifteen (15) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a fifteen (15) days period, fail to begin curing such violation with the fifteen (15) day 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 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 Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that 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 available legal remedies. Grantee's remedies described in this 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 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. The United States acting through the USFWS shall be considered a third party and shall have standing as an interested party in any proceeding affecting this Easement.

5.1 Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantor, including, without limitation, costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation or negligence under the terms of this Easement shall be borne by Grantor.

5.2 Grantee's Discretion. 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 Acts Beyond Grantor's Control. 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, 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.

6. Fence Installation and Maintenance. Grantor shall install and maintain a fence around the Easement area to protect the conservation purposes contained in this Easement.

7. Access. This agreement does not convey a general right of access to the public; however, access for scientific research and interpretive purposes and management purposes conducted pursuant to the MBHCP and IA shall be reserved to the Grantee or to the designee of the Grantee.

8. Costs of Liabilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind including transfer costs, costs of title and documentation review, expenses incurred from other state agency reviews, and costs related to the ownership, operation, upkeep, and maintenance of the Property.

8.1 Taxes. 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 Hold Harmless. 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 and against all liabilities, penalties, costs, losses, damages, expense, causes of action, claims, demands, or judgments, including without limitation, 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; (2) the obligations specified in paragraphs 7, 8, and 8.1; and (3) the existence or administration of this Easement.

8.3 Condemnation. The habitat conservation purposes are presumed to be the best and most necessary public use as defined at CCP section 1240.680 notwithstanding CCP section 1240.690 and 1240.700.

9. Assignment. This Easement is transferable, but Grantee may assign its rights and obligations under this Easement only to the USFWS or subject to prior approval of the USFWS to: (1) 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); or (2) an appropriate federal, state or local agency. As a condition of such transfer, Grantee shall require that the conservation purposes of the MBHCP and IA that this grant is intended to advance continue to be carried out and notice of such restrictions shall be recorded in the county where the property is located.

10. Subsequent Transfers. 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 intent to transfer of any interest at least fifteen (15) days prior to the date of such transfer. Grantee shall have the right to approve all subsequent transfers to insure that all subsequent claimants or transfers have notice of the included restrictions. 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.

11. Estoppel Certificates. 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.

12. Notices. 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 sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

To Grantee:

Department of Fish and Game
Region _____

Department of Fish and Game
Legal Affairs Division
1416 Ninth Street, 12th Floor
P.O. Box 944209
Sacramento, California 95814-2090

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

13. Recordation. Grantor shall promptly record this instrument in the official records of _____ County, California and immediately notify the Grantee through the mailing of a conformed copy of the recorded easement. Grantee may re-record it at any time as may be required to preserve its rights in this Easement.

14. General Provisions.

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

(b) Liberal Construction. 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) Severability. 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 than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(d) Entire Agreement. 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) No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

(f) Successors. 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 in perpetuity with the Property.

(g) Captions. 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) Counterparts. 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.

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

GRANTOR:

GRANTEE:

(Name and Address)

(Name and Address)

BY: _____

(TITLE)

BY: _____

(TITLE)

Approved as to form:

BY: _____

Craig Manson
General Counsel
California Department
of Fish and Game

- SPACE FOR NOTARIZATION -
