


DOCKET
93-AFC-2
DATE: APR 22 1994
RECD: APR 22 1994
April 22, 1994

*Procter & Gamble Project
93-AFC-2*

TO: Dockets

*FROM: Darrel "H" Woo 
Regulatory Project Manager*

RE: 4/22/94 Biology Workshop Handouts

On April 22, 1994, a workshop was held to discuss biological mitigation proposals. Staff made a presentation to educate the Applicant in the procedures involved in administering staff's proposed mitigation program.

Please find attached, a copy of the material discussed and provided to the Applicant.

Attachment

COMMISSION DECISION
Application For Certification For
THE SYCAMORE
COGENERATION PROJECT

Docket No. 84-AFC-6



George Deukmejian, Governor

DECEMBER 1986
CALIFORNIA
ENERGY
COMMISSION

P800-86-014

Verification: The BRMIP will be submitted to the CEC biology staff prior to beginning site preparation. Sycamore will notify the CEC, in writing, within 10 days of successfully satisfying each condition of the BRMIP. If any conditions of the plan are not successfully satisfied, Sycamore will submit proposed corrective actions within 30 days to the CEC for comment and approval. The Sycamore designated biologist will submit to the CEC semi-annual compliance statements verifying compliance and status of the requirements with the BRMIP and the Commission Decision for the portions relevant to Biological Resources. These statements will be submitted beginning six months after the start of site preparation and continuing until one year after the start of commercial operation. Thereafter, annual compliance statements and interim reports on studies in progress will be submitted for the life of the project. Sycamore will report any significant adverse impacts to rare, threatened or endangered species by phone to the CEC Compliance Project Manager within 24 hours during the normal work week or by the end of the next working day following a weekend or holiday.

4. Sycamore will arrange for access for the CEC to inspect biological resource impacts, mitigation measures, and study areas during preconstruction, construction, and operation activities of the power plant and related facilities. The access will be provided upon reasonable request and at times necessary to conduct biological field observations.

Verification: Sycamore will provide documentation to the CEC that arrangements have been made for the above access.

5. Sycamore, CEC, and its designee will establish an interest bearing escrow account within one year of project certification, but in no event more than 120 days after the start of construction. Sycamore will deposit the sum of \$1,100,000 into the account for the purchase of land as habitat compensation for all unmitigated impacts of the Sycamore Project. The sum in the escrow account will be used as a fund for the purchase of suitable acreage for kit fox habitat preservation and to cover related administrative, site improvement, and site protection costs.

Verification: Within one year of project certification, but in no event more than 120 days after the start of construction, Sycamore will submit to the CEC verification of the deposit to the escrow account. Sycamore will notify the CEC that the escrow account has been established and provide a signed copy of the escrow agreement and all related documents within 15 days of executing the agreement.

Procedures Governing Disbursement of Funds

1. The monies resulting from compliance with Biological Resources Condition 5, contained in the Sycamore Cogeneration AFC Decision, shall be deposited in a custodial account with a bank with fiduciary powers. The bank, with the assistance of CEC staff, will prepare a custodial agreement and the agreement will be signed by the necessary parties. Under the agreement the Sycamore Cogeneration Company will be the principal. The bank will be the custodian; a non-profit, natural resource land preservation organization such as The Nature Conservancy will be the primary beneficiary and the CEC will be the secondary beneficiary. The Staff shall present to the Commission alternative procedures, including an Invitation to Bid, for the selection of the bank. A principal selection criterion shall be maximization of income during the period the funds are in the custodial account.
2. The custodial agreement shall be reviewed and agreed to by the Executive Director, the Accounting Officer, the General Counsel, and the Chief of the Siting and Environmental Division; the final agreement shall require approval of the full Commission. The Commission will have the power of appointment for selection of beneficiary and, upon the approval of the full Commission, the custodian will release the monies to the beneficiary.
3. All monies in the custodial account, less the custodian's administrative fees, shall be used for the purchase of suitable acreage for San Joaquin kit fox habitat preservation (to be held by the beneficiary into perpetuity) and for related administrative costs (not to exceed 10 percent of the total monies), site improvement costs, and site protection costs. The Staff shall take all appropriate steps to ensure that administrative costs are minimized, including the consideration of an RFP for selection of the primary beneficiary, and that as much of the fund as possible is devoted to habitat purchase. A principal criterion for selecting the primary beneficiary shall be minimization of administrative costs.
4. The Siting and Environmental Division will appoint a staff person to ensure compliance with Biological Resources Condition 5. That person's tasks will include:
 - a. take all necessary actions to assure implementation of Biological Resources Condition 5, including the directions of this document and the conditions of the custodial account;
 - b. arrange for the custodial account, assist in preparation of the custodial agreement, and help secure necessary signatures;
 - c. solicit recommendations from and coordinate with agencies, non-profit land preservation organizations, and other organizations having information on the biological resources of the area regarding suitable acreage to be considered for preservation.

Prepare and obtain approval of Memoranda of Understanding as necessary.

- d. recommend disbursement of the funds from the custodial account based on satisfactory completion of the tasks described in Items 5 and 6 below.
 - e. carry out other activities necessary to complete the requirements of Biological Resources Condition 5.
5. An Advisory Committee of biologists, consisting of one member from the CEC biology staff (who may be the Project Manager) appointed by the CEC Executive Director, and one member each from CDFG staff and USFWS staff, will determine the acceptability of a parcel or parcels submitted to the CEC for consideration as a preserve and determine the related site improvements that are necessary to adequately preserve and protect the kit fox. The Advisory Committee shall be approved by the Commission pursuant to its adopted policy on Advisory Committees. (Resolution No. 84-0111-14.)
 6. The Advisory Committee of biologists shall consider the attached "Criteria Guiding The Selection of Off-site Parcels for San Joaquin Kit Fox Mitigation" in their evaluation of a suitable parcel or parcels of land for preservation.
 7. Staff shall formulate recommendations on the foregoing matters and submit such recommendations for approval to the full Commission.

DRAFT
Criteria Guiding The Selection Of Off-Site
Parcels For San Joaquin Kit Fox Mitigation

1. Preserve size

The area to be preserved needs to be an area or a part of an area large enough to support a self-sustaining population of kit fox. The size of this area will depend on the quality of the kit fox habitat. Since kit fox pairs are known to have a territory of at least a square mile, the minimum off-site area will need to be at least a square mile or 640 acres. From a biological perspective the preserve should be of high potential value to kit fox and large enough to support several breeding pairs. Existing ownership of land, ease of purchase, or low cost shall not be a primary factor in selecting off-site areas. The biological value of the land to support kit fox shall be the overriding consideration.

2. An area on east side of valley

To be of value to kit fox in the area of the Sycamore project, the off-site mitigation should be an area on the east side of the Valley and relatively near the Kern River oil field. CEC Staff has contacted representatives of the CDFG, USFWS and The Nature Conservancy and no one is aware of any area or information on any previous attempts to evaluate or establish a kit fox preservation area on the east side of the Valley. Therefore, the search for possible areas and the evaluation of areas for their value to kit fox must be undertaken in a timeframe responsive to Sycamore project requirements.

3. Off-site parcel, equal to or greater kit fox value

The value of the off-site area to kit fox needs to be equal to or greater than the value of the area to be disturbed by the project development. For the Sycamore project, the kit fox habitat value of the area to be disturbed by the project is not available. Testimony has indicated a range of 2.2 to 0.2 kit fox per square mile for the valley habitat used by the kit fox. In order to avoid expenditure of funds on non-land purchase costs, a general agreement on the habitat value and losses could be arrived at and the cost of a study or HEP type evaluation avoided.

4. Rehabilitate a disturbed parcel

Consideration should also be given to purchasing disturbed habitat such as overgrazed range land that could be improved for kit fox and the other sensitive species. This approach could eventually compensate for unmitigable habitat loss at the development site by increasing the population of kit fox in the restored area.

5. Preserve established in perpetuity

The preserve should be established in perpetuity. Preserve agreements should be carefully examined with regard to mineral rights. The preserve agreement should contain language that clearly addresses allowable surface disturbance if mineral rights have not been acquired.

**An Initial Survey of Plants and Animals
on approximately 9000 acres**

of the

PROPOSED PAINE PRESERVE

Submitted to:

**Rob Hansen
Kaweah Oaks Preserve Manager**

and to:

**The Nature Conservancy
California Field Office
785 Market Street
San Francisco, California 94103**

Submitted by:

BOWEN'S BIOLOGICAL SERVICE

MAY, 1987

SUMMARY OF SECTIONS BY HIGHEST QUALITY

The objective of assessing quality of each section is to establish a priority for land acquisition. We have established three priority levels based on the following factors.

- 1) presence of Rare, Threatened, Endangered or Candidate species (actual sightings of plants or animals);
- 2) High potential habitat for RTE & C plants or animals (ie. burrow systems, dens, scat, spore, etc.);
- 3) species diversity and/or uniqueness found within a given section or rare plant community;
- 4) vigor or health of the habitat;
- 5) level of previous disturbance/usage, ie. sheep grazing, duck ponds, agricultural cultivation, etc.

Recommendations for subsequent surveys and/or management are listed.

PRIORITY #1 Sections: 15,16,22,25,26,27

T26S, R22E, Section 15: See Field Map Valley Sink Scrub

1. Five Bluntnosed Leopard Lizards and three *Dipodomys nitratoides* Kangaroo Rats (1 dead) seen.
2. Active S.J. Kit Fox natal den (with 7 entrances), individual dens, scats, spore, prey remains seen; K-rat burrow sites for *D. nitratoides* and *D. heermanni* found throughout most of the section. A few S.J. Pocket Mouse burrows found. The potential habitat exists for both *Eriastrum hooveri* and *Eremolche kernensis* but none found.
3. Due to the construction of artificial duck ponds, there is an increased diversity of plants and animals.
4. The health or vigor of the habitat is fair to good and would most likely improve with the removal of intensive sheep grazing and stocking.
5. Disturbance/impacts: intensive sheep grazing, bedding, etc.; 40+ acres have been plowed and left fallow; large burn area in the SE 1/4 of the SW 1/4; large artificial duck pond in NW 1/4.
6. This section is placed in Priority #1 because of the large numbers of RTE&C seen or indicated by habitat, scat, tracks, dens, etc. and the potential habitat observed, even though several impacts were also observed. However the intensive use areas are localized and do not reflect upon the section as a whole.

7. Recommendations:

- a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.
- b. Night spotting to further determine kit fox activity/denning.
- c. Small mammal trapping for abundance.
- d. Density transects for Blunt-nosed Leopard Lizards
- e. Survey for RTE&C plants and general vegetation in successive years.

T26S, R22E, Section 16: See Field Map Valley Saltbush Scrub/V. Sink Scrub

1. Sightings were made of Blunt-nosed Leopard Lizards (13 on 29 April and 2 on May 1 and 3 on May 7); 3 S. J. Antelope Ground Squirrels; 1 *D. heermanni* Kangaroo Rat; and 1 *D. nitratoides* (dead body at owl's burrow).
NOTE: The 13 BNLL sightings on the 29th was by a large group of CEC, F&G, USFWS biologists. Our survey was on the 1st of May and the temperature had dropped considerably which accounts for the lower number of BNLL seen.
 2. Habitat was found for K-rats(*D. heermanni* & *D. nitratoides*); S. J. Pocket Mouse (burrows and tracks); and San Joaquin Kit Fox (dens, scat, tracks, and available prey base). There appeared to be excellent habitat for ERKE, *Eremolche kernensis*, but none was seen this year.
 3. This section was quite unique in comparison to all surrounding sections due to the large diversity of plant species and high numbers of Blunt-nosed Leopard Lizards. There is also an ecotonal area between Valley Sink Scrub and Valley Saltbush Scrub. This was the only section with excellent plant vigor based on size and abundance. One example is *Delphinium recurvatum* which was 2-3X larger and more abundant than on adjacent sections.
 4. Sheep disturbance was primarily in the north portion of the section and was minor in the east 3/4 of the section . The west side of the section has recently been burned with plowed strips (fire breaks) and only a few saltbushes remain. It has been heavily used by sheep.
6. Recommendations:
- a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.

- b. Night spotting to further determine S.J. Kit Fox activity/denning.
- c. Small mammal trapping for abundance.
- d. Density transects for Blunt-nosed Leopard Lizards.
- e. Survey for RTE&C plants and general vegetation in successive years.

T26S, R22E, Section 22: See Field Map Valley Saltbush Scrub/V. Sink Scrub

1. Two K-rats were flushed from burrows, and three Blunt-nosed Leopard Lizards seen.
2. Many K-rat burrow systems were found both for *Dipodomys nitratoides* and *D. heermanni*. A few S.J. Pocket Mouse burrows and San Joaquin Kit Fox scat and tracks were found. There are also *Atriplex polycarpa* enclaves that provide potential habitat for *Eriastrum hooveri*, *Eremolche kernensis*, *Eatonella congdonii* and possibly *Caulanthus californicus*.
3. Because of the ecotonal merging of Valley Sink Scrub with Valley Saltbush Scrub and the remains of a natural drainage system with lingering wet areas (which appear to have been flooded in the past) this section has increased plant diversity and uniqueness.
4. Impacts are primarily from sheep grazing.
5. Recommendations:
 - a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.
 - b. Night spotting to further determine Kit Fox activity/denning.
 - c. Small mammal trapping to determine abundance.
 - d. Abundance transects for Blunt-nosed Leopard Lizards
 - e. Survey for RTE&C plants and general vegetation in successive years

T26S, R22E, W.1/2 Section 25: See Field Map Valley Saltbush Scrub

1. Five large populations of *Eriastrum hooveri* and four of *Eremalche kernensis* were found.
2. There is potential habitat for *Caulanthus californicus*, *Eatonella congonii*, *Hemizonia pallida*, and *Trichostema ovatum*. K-rat burrows were found for *D. heermanni* and *D. nitratoides*. S.J. Kit Fox scats and potential den sites were found.
3. This half section is characterized by undulating knolls, swales, small playas and depressions that fill with water during the winter/spring. The soils are alkali and sandy loams that provide habitat for *Atriplex polycarpa* and a large diversity of annuals. This parcel is unique for it has a valley population of *Salvia carduacea*, Desert Thistle, which is usually found only in the higher hills to the east and west, but not in the valley floor.
4. There has been some cultivation toward the bottom of the parcel along the road to the pumping station, which has now revegetated with grass. Sheep use (soil compaction) is found most visible in the swales and playas. There is one small duck pond which appears to have been dug out in the recent past. Once again, the impacts appear localized, but the vigor of the plant community appears healthy.
5. Recommendations:
 - a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.
 - b. Night spotting to determine activity/denning of S.J. Kit Fox
 - c. Small mammal trapping for occurrence of *D. nitratoides*.
 - d. Blunt-nosed Leopard Lizards transects for occurrence.
 - e. Survey for RTE&C plants and general vegetation in successive years.

T26S, R22E, Section 26: See Field Map Valley Saltbush Scrub

1. Two San Joaquin Antelope Ground Squirrels; one Blunt-nosed Leopard Lizard; Two populations of *Eriastrum hooveri*; and one small population of *Hemizonia pallida* was seen during the survey. Three weeks prior to the survey, *Caulanthus californicus* and *Eremalche kernensis* were seen on the original 40 acre Paine Preserve.

2. There is potential habitat for *Eatonella congdonii*. Active S.J. Kit Fox den sites, tracks and scat were found. Scattered burrow systems were found for both K-Rats (*Dipodomys heermanni*, *D. nitratoides*) and S.J. Pocket Mice.
3. This section also has a unique and diverse plant and animal assemblage (see field notes and map) with two notable features. There is another small population of *Salvia carduacea*, and several enclaves of *Sporobolus airoides*. This once common alkali sacaton is now quite rare in the valley. A marsh has formed in the deep depression.
4. Much of the area has been flooded intermittently for duck ponds and there is a large surface disturbance that has filled in with water.
5. Recommendations:
 - a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.
 - b. Night spotting to determine activity/denning of S.J. Kit Fox.
 - c. Small mammal trapping to determine abundance.
 - d. Blunt-nosed Leopard Lizard transects for occurrence.
 - e. Survey for RTE&C plants and general vegetation in successive years

T26S, R22E, N.1/2 Section 27: See Field Map V. Saltbush Scrub/V. Sink Scrub

1. A large population of *Eriastrum hooveri* and a small one of *Eremolche kernensis* was found. One Blunt-nosed Leopard Lizard and two S.J. Antelope Ground Squirrels were seen.
2. Potential habitat exists for *Eatonella congdoni*, *Caulanthus californicus* and *Hemizonia pallida*. A few K-rat burrows were found.
3. An ecotonal area extends through this section yielding a diverse mixture of plant species i.e. there is a large stand of the Kern endemic Pale leafed golden bush; the endemic small white layia (*Layia pentachaeta albidia*); and another enclave of Alkali Sacaton growing with Salt grass.
4. There are several impacts: large scraped surface area, intensive sheep use and burm construction. However, it is important to note that the large scraped area is revegetating with several endemic species and

this parcel is adjacent the existing Paine Preserve.

5. Recommendations:

- a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.
- b. Night spotting to determine activity/dennin of S.J. Kit Fox.
- c. Rehabilitate the scrapped area by planting *Atriplex polycarpa*, *A. spinifera*, and other annuals, especially the RTE&C species that are found across Corcoran Road in the original 40 acre Paine Preserve.

PRIORITY #2 Sections: 28, 33, 34

T26S, R22E, Section 28: See Field Map Valley Sink Scrub

1. Three Blunt-nosed Leopard Lizards and one S.J. Antelope Ground Squirrel were seen.
2. There is a low potential for the RTE & C plant species; One S.J. Kit Fox scat noted; only a few K-rat and S. J. Pocket Mouse burrow systems found.
3. There are several major impacts. The west portion of the section has been cultivated (Barley) and the east portion has been subdivided and fenced (appear to be pastures). Some portions have been scrapped and revegetated and two areas have been used as a dump. A large part of the northern portions have been burned to yield thick annual grass. And there is intensive sheep use. There are enclaves of native vegetation that are relatively unharmed.
4. Recommendations PRIOR TO PURCHASE:
 - a. re-survey for Blunt-nosed Leopard Lizard density in appropriate micro-habitat, i.e. east half of section.
 - b. Small mammal trapping for occurrence at mapped burrows.

T25S, R22E, Section 33 and 34: See Field Maps Alkali Meadow

1. One Blunt-nosed Leopard Lizard found in Sec.33 and two possible Slough Thistle plants found in Sec.34 (one dead plant and one small basal). The plant identification should be checked later in the season.
2. There is potential habitat for the Slough Thistle, *Cirsium crossacaulis* and possible Kern Mallow, *Eremolche kernensis*. One active (non-natal) den and one potential den site were found for S.J. Kit Fox. There were

a few scattered K-Rat burrow systems found (most appeared to be *D. heermanni*). A few S.J. Pocket Mouse burrows also found.

3. These sections are unique because of the Alkali Meadow habitat which has been enhanced by flooding for duck clubs. This has given rise to a diverse flora which is vigorous and healthy. However this flooding also inhibits all burrowing animals. There was evidence of spectacular goldfield displays (with other annuals). The proximity to the Kern NWR makes these sections desirable.
4. These two sections were repeatedly sprayed for mosquitoes by the Mosquito Abatement Agency during our survey even though most of the ponded areas were dry.
5. Recommendations:
 - a. Intensive plant inventory during appropriate field seasons for RTE&C and general vegetation.
 - b. If these sections are purchased for plant habitat values, we further recommend that a habitat manipulation and restoration plan be designed and executed to recreate a vigorous Alkali Meadow habitat which should include the introduction of *Cordylanthus mollis hispidus*, *Atriplex tularensis*, *Eremolche kernensis*, and *Salicornia subterminalis*. This would provide a second and separate enclave of rare plants and habitat in the event that the Kern Lake Preserve is destroyed or the lease cancelled.
 - c. The dirt road on the southern borders is used frequently by passenger vehicles and there is evidence of recent hunting. Therefore a sturdy fence and more intensive management will be needed.

T26S, R22E, Sections: 3 See Field Maps Valley Sink Scrub

1. Two pocket mice, one *D. heermanni* and one *D. nitrotoides* seen. One Blunt-nosed Leopard Lizard seen.
2. One old S.J. Kit Fox den and a few scattered K-rat burrows found.
3. These sections have been impacted by plowing, and heavy livestock use.
4. Recommendations:
 - a. Eliminate sheep grazing - NOTE this may require intensive on-sight management during the early spring to prevent trespass.

- b. Night spotting to determine activity/denning of S.J. Kit Fox in SW1/4.

T26S, R22E, Section 9: See Field Maps Valley Sink Scrub

1. One S.J. Kit Fox, a three hole natal den and scats seen.
2. K-Rat burrows are few in areas previously flooded but are more dense in the *Allenrolfea* habitat. Occasional S.J. Pocket Mouse burrows were also found in the *Allenrolfea* habitat. There is a low potential for the RTE& C plant species of concern and for the Blunt-nosed Leopard Lizard.
3. The habitat is Valley Sink Scrub with artificial duck ponds.
4. Impacts are many: plowed and leveled areas, dozed out area, heavy soil compaction from large areas of flooding and intensive sheep grazing.
5. Recommendations:
 - a. Eliminate sheep grazing.
 - b. Night spotting to determine activity/denning of S.J. Kit Fox.
 - c. Maintain existing duck pond for recreational photography/example of wetland vegetation.

PRIORITY #3: Sections: 4,5,10,21

T26S, R22E, Sections: 4-5,10 See Field Maps Valley Sink Scrub

1. No RTE&C plants or animals seen.
2. A few scattered K-rat and S.J. Pocket Mouse burrows were found in the *Allenrolfea* habitat. Very low potential for RTE&C plants.
3. These sections have been impacted by burning, plowing, leveling, flooding and heavy livestock use.
4. Recommendations: None

T26S, R22E, E.1/2 Section 21: See Field Map Valley Sink Scrub

1. No RTE&C plants or animals seen, but one Whipsnake was found.
2. Presently low potential for the rare plants due to recent burning; K-Rat burrows sparse; one potential S.J. Kit Fox den found.
3. This habitat was once Valley Saltbush Scrub with viable potential for both rare animals and plants, but it has been recently burned and used extensively for sheep grazing. Therefore it is in very poor condition. A few small *Atriplex spinifera* seedlings were found, which indicates some of the Valley Saltbush Scrub community may be re-vegetating.
4. Recommendations:
 - a. If the rest of section 21 is purchased, it should be rested from all impacts and surveyed in subsequent years.
 - b. Rehabilitate habitat by planting *Atriplex polycarpa*

NOTES ON PORTIONS OF SECTIONS 8,16,17,20,21,29,36

1. **Section 29:** east portion totally converted to Barley
2. **Sections 8-21** are owned by Kern Properties (who refused entrance to their land) was survey by vehicle and most of this is very poor quality due to habitat manipulation (fire) and intensive sheep grazing. It was previously Valley Sink Scrub and Valley Saltbush Scrub.
3. **Section 36** is owned by TNC and is Valley Saltbush Scrub.
 - a. Two *Dipodomys nitratoides* Kangaroo Rat juveniles (eyes still closed) were found outside the burrow. Three populations of *Eremalche kernensis* found.
 - b. Potential habitat exists for *Colulanthus californicus*, *Eatonella congonii*, and *Eriastrum hooveri*. S.J. Kit Fox scats and old den sites were found. K-rat burrows for *D. nitratoides* & *D. heermanni* were found.
 - c. This NE1/4 section is being regularly trespassed by sheep operators and a sturdier fence is needed. On-site management during the early spring would also discourage further trespass.

METHODS & MAP

Work Plan
Bowen
Page 3

METHODS

1. Meandering transect surveys. Each section to be surveyed will be divided into four quarter sections oriented north-south. Both (two) observers will follow a meandering line that approximates the center of each quarter section. Transects should not be over 660 feet from the eastern or western edge of a section or more than 1320 feet from an adjacent transect within a section.
2. Timing of surveys: Observers will spend one full field day per section. If any field time on a given transect falls outside the BNLL activity/temperature window (22-36 degrees C range*), this will be so noted on field maps.

(* Air temperature is measured 1/2 inch above the substrate with a thermometer shaded from the sun.

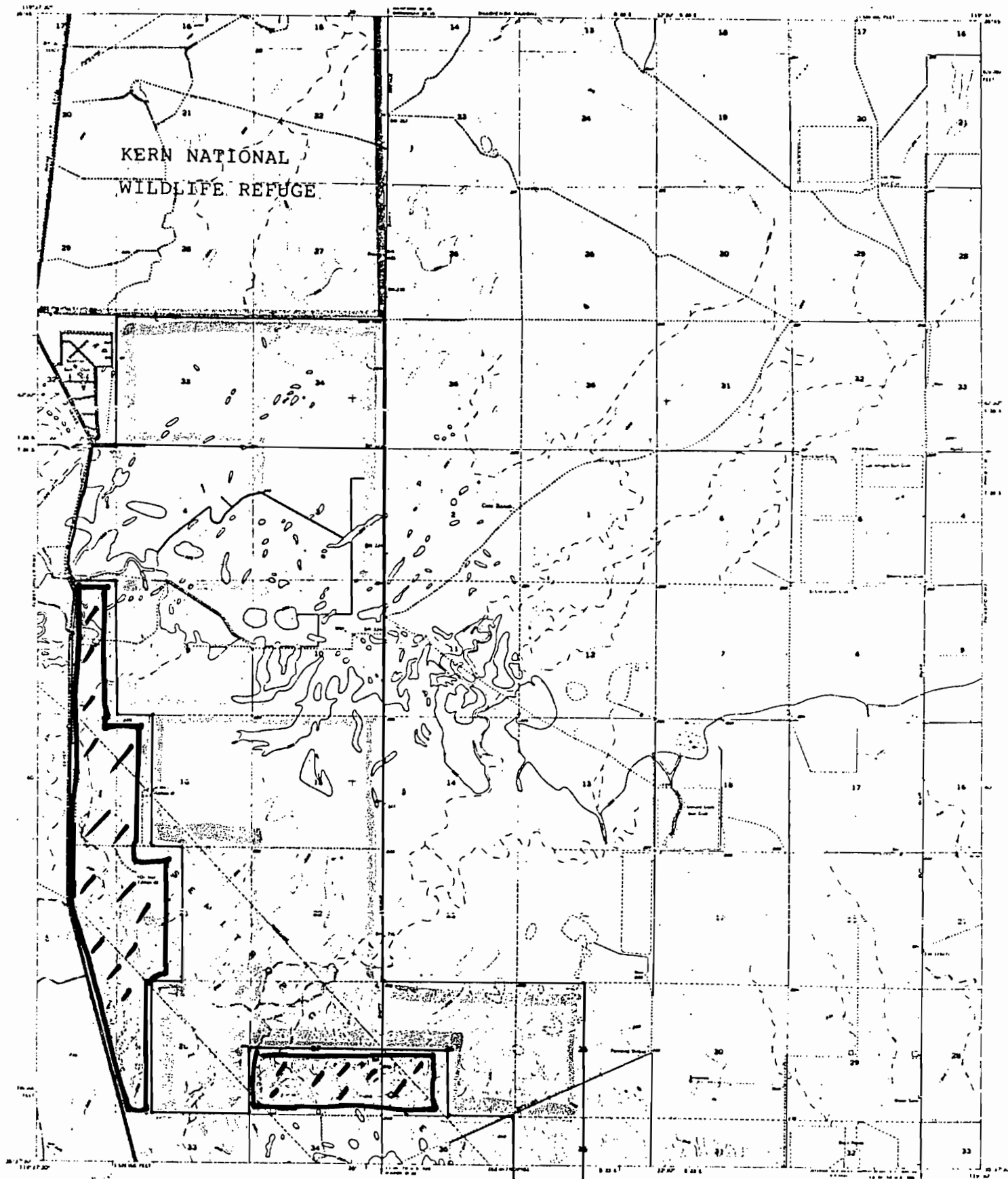
3. Blunt-nosed leopard lizard survey methods.
 - a. Weather permitting, transects should be conducted during optimum blunt-nosed leopard lizard (BNLL) activity periods. Binoculars should be carried by the investigators to aid in finding and identifying BNLL. Transects should be walked at a normal pace. The amount of time on each transect shall be recorded so that relative abundance of BNLL can be determined on a "sightings per unit time" basis. The time of day and air temperature shall be recorded at the beginning and end of each transect.
 - b. The indicators of potential BNLL habitat include:
 1. Sparsely vegetated areas such as grasslands, large washes, arroyos, and playa formations with slopes of 30 degrees or less.
 2. Areas with relatively numerous rodent burrows.
 3. BNLL scat or other signs.
 4. Direct observation of BNLL.

Investigators should keep alert for sounds of running BNLL as their footfalls are distinctively different from the jerky gait of Western whiptail.

- c. As the transects are walked, the following features shall be noted in relation to the distance along the transect:
 1. BNLL.
 2. Vegetation type.
 3. Relative number and size of animal burrows*
 4. Slope and relief of terrain. Special features such as washes, playas, and roads should be noted.

* Animal burrows are classified as less than an inch in diameter, 1-3 inches in diameter, and greater than three inches in diameter.
- d. All BNLL that are seen should be described as to age and/or sex when possible.
4. San Joaquin kit fox survey methods. Investigators may map occurrences of San Joaquin kit fox (SJKF) during BNLL surveys and during hours when lizard transects cannot be run. Known and suspected kit fox dens should be mapped along with any actual sightings of kit fox. Locations of SJKF tracks or scats should also be mapped.
5. Small mammal survey methods. All sightings of Tipton kangaroo rat, San Joaquin antelope squirrel, and San Joaquin pocket mouse should be mapped. Burrow systems which can be positively attributed to these species should also be noted on maps. Dust baths and tracks (hind foot of Heerman's is 40-45mm, Tipton hind foot is less than 40mm) may provide evidence of species presence. Owl pellets or skulls which are found should be examined as a further clue to small mammal species' presence in the area.
6. Survey methods for rare plant species: Surveys for the candidate flora should follow the attached guidelines from the California Department of Fish and Game. Investigations have been arbitrarily chosen for a field season in late April and early May when some of the Candidate species will have completed or will be part way through the flowering season. Investigators shall map occurrences of all rare plant species while conducting meandering transect surveys. Relative number of plants, phenological stage, and soil descriptions shall be recorded.
7. Access to study site. The Nature Conservancy shall contact private property owners and provide investigators with a letter authorizing their survey.

PAINE PRESERVE STUDY AREA 1987



12-surveyed for plants & animals

4-not intensively surveyed due to croplands,
and denial of permission to cross lands.

☒ - Priority 1 ☒ - Priority 2 ☐ - Priority 3

CONTOUR INTERVAL 5 FEET

LOST HILLS NE CALIF 2000
2000'S BUREAU



SAN JOAQUIN PROJECT OFFICE

5401 Business Park S., Suite 206 Bakersfield, CA 93309

(805) 323-4557

December 29, 1987

Mr. James D. Brownell
California Energy Commission
1516 9th St.
Sacramento, CA 95814

Dear Jim;

I thoroughly enjoyed our meeting and field inspection yesterday in the Semitropic Ridge area. It was good to meet both you and Mark and learn so much about the CEC's involvement in the regulatory field of thermal power plants. I didn't realize that you guys covered so much "turf" in your jurisdictions. It no doubt keeps you hopping most of the time.

I have enclosed the updated map from the Survey Report which we were referring to yesterday. Shown on the map are the three priority areas, as listed by Bowen's Biological Service; with the pink areas being Priority 1, green being #2, and blue being #3. Although the coloring looks to be rather hodge-podge, you can see that the heart of the best habitat is found in section 15, 16, 22, 25, 26, and 27. These are the areas which have been identified as the highest ecological value for all endangered and threatened species, including the San Joaquin Kit Fox and Blunt-nosed Leopard Lizard. It is within these very sections that The Nature Conservancy is concentrating its land acquisition efforts for the listed species. Taken as a whole, the Semitropic area holds a vast assemblage of unusual and sensitive species of plants, animals, and habitats worth our mutual protective efforts.

By the way, the people who conducted the Survey for us (i.e., Bruce and Charlotte Bowen) are both ex-BLM biologists who have worked extensively in the southern San Joaquin Valley. Bruce is a vertebrate ecologist who specializes in mammals and herptiles, while Charlotte's main strength lies in the botanical fields. We have had other contract work performed by the Bowens and have found their work to be most satisfactory.

Thank you very much for reviewing The Nature Conservancy's land acquisition proposal. Please don't hesitate to contact me for more information and/or further consultations. The Conservancy will work as closely and diligently as possible to accommodate the Energy Commission's requirements in this matter.

Yours sincerely,

Rick Hewett
San Joaquin Valley Field Representative

Enc.



SAN JOAQUIN VALLEY PROJECT OFFICE

5401 Business Park S., Suite 206 Bakersfield, CA 93309

(805) 323-4557

October 13, 1988

Mr. James A. Brownell, Ph.D.
California Energy Commission
1516 9th Street
Sacramento, CA 95814

RE: Grant Request to California Energy Commission for Kit Fox
Preserve Lands Acquisition under Sycamore Cogeneration.

Dear Jim:

Earlier this year, The Nature Conservancy (TNC) acquired 264 acres of prime kit fox habitat by an initial grant from the California Energy Commission (CEC), under the Sycamore/Kit Fox Cogeneration Program. We are pleased to now make our second grant request. Enclosed you will find the original and 3 copies of TNC's grant request to CEC for the acquisition, management, and administrative costs for three parcels in the Semitropic Ridge area of Kern County. Totalling 377 acres, these sites add to the Conservancy's existing preserve in the immediate area and will bring the overall total of protected habitat to almost 1300 acres. This area has been identified as high-ranking natural habitat for the San Joaquin Kit Fox and several other listed species of native wildlife.

Appendix 4 of this grant request (Stewardship and Enhancement Plan) is being sent to you under separate cover by Rob Hansen, Preserve Manager. It should be added to each of the copies to make a complete package. The Nature Conservancy is delighted with the prospects for kit fox protection and improvement resulting from these new acquisitions. Our Stewardship and Enhancement Plan is specifically designed to address the short- and long-term needs of this endangered species.

I am actively working on negotiations for several other key parcels of additional lands in the Semitropic Ridge area. I envision being able to return to CEC in the near future for other grant requests.

It is my understanding that this grant request will be scheduled for the November 16, 1988 business meeting of the Commission. If you need more information or to have a Conservancy representative at the meeting, please don't hesitate to contact me. Thank you very much.

Sincerely,

Richard P. Hewett
San Joaquin Valley Field Representative

cc: Chris Kelly and Steve Johnson, TNC

SYCAMORE KIT FOX HABITAT PRESERVATION PROGRAM

LAND ACQUISITION PROPOSAL

from

THE NATURE CONSERVANCY,

Prepared by:

Richard P. Hewett
Field Representative
San Joaquin Valley Project Office
5401 Business Park So., Suite 206
Bakersfield, CA 93309
Tel: (805) 323-4557

October 13, 1988

SUMMARY

In this proposal The Nature Conservancy presents to the California Energy Commission (CEC) the second set of nature preserve locations for acquisition approval. If these sites meet the appropriate biological criteria, and acquisition funds are awarded to The Nature Conservancy, these sites will be purchased by The Conservancy and managed as kit fox habitat preserves. These sites total 377 acres at a total purchase price of \$113,100, for an average price of \$300.00 per acre.

THE NATURE CONSERVANCY

The Nature Conservancy is a nationwide non-profit tax exempt conservation organization that acquires and manages habitat for rare and endangered species. In the Semitropic Ridge area of Kern County, in California's San Joaquin Valley, the Conservancy is acting to help implement the CEC's Sycamore-San Joaquin Kit Fox Preserves program. We have already established a core of key preserve lands in the area, called our Paul Paine Preserve system, to which these new sites will be added.

Our San Joaquin Valley Project Office, opened on November 1, 1987 and staffed by a full-time field representative, has as its primary objective the acquisition of San Joaquin Valley natural lands in cooperation with the state and federal agencies working on habitat compensation plans.

The San Joaquin Valley Project Office will be working closely with the CEC to provide all necessary information concerning proposed preserve locations, ownership purchase options and contracts, appraisals, title insurance reports and purchase packages for approval by CEC.

PURCHASE AGREEMENTS AVAILABLE AS OF OCTOBER, 1988

Included with this proposal on Page 4 is a list of three sites currently available for Conservancy acquisition. Also attached is a topographic map and an assessor's parcel map showing the locations of the sites on the Semitropic Ridge, along with the location of existing Nature Conservancy ownerships.

It is expected that escrows will close on these three sites during November, 1988. Also attached to this proposal are the recent appraisals conducted on these sites by E.S. Curtis and

Associates of Bakersfield. All three of the proposed acquisitions are at appraised value. (See Appendices 1, 2 and 3).

GRANT REQUEST

The following grant request is based upon the California Energy Commission's Sycamore Co-Generation Project AFC decision (Biological Resources No. 5, p. 124). That finding provided that an account be established which will be used "as a fund for the purchase of suitable acreage for kit fox habitat preservation and to cover related administrative, site improvement and site protection costs."

Accordingly, based on your May 7, 1987 contract specifications and The Nature Conservancy's specification of services available, dated May 5, 1987, the following services are hereby offered:

1. Fee title acquisition of the parcels indicated in this proposal for the net amount of \$89,100. This figure reflects a \$24,000 contribution received from Santa Fe Energy Company towards the purchase of 1/2 of its 160 acre parcel (80 acres) in Section 15, thereby reducing the overall acquisition costs from a total of \$113,100 down to the net figure of \$89,100.
2. Land management and habitat enhancement of the acquired preserves in the amount of \$33,930 (at 30% of the total acquisition cost of \$113,100). This amount will be placed in a separate land management account drawn against solely for direct expenses at the Semitropic Ridge/Paine Preserve sites.
3. 10% administrative overhead at \$11,310. These funds will be placed in a Nature Conservancy operations account to reimburse the direct expenses relating to the proposed acquisitions. Approved expenses will include appraisals, surveys, telephone, document preparation, legal expenses, title insurance, postage, and personnel, office and travel expenses directly chargeable to the acquisition and management of the CEC parcels.

Nature Conservancy expenses and accounting will remain available to CEC and its representatives for future inspection and verification.

The total grant request is thus calculated as follows:

\$89,100	Land Acquisition
33,930	Stewardship
11,310	Administration

\$134,340	TOTAL

The Nature Conservancy will be closing escrow on these parcels during November, 1988. Grant funds from CEC are requested at this time in order for the Conservancy to meet its financial obligations on these key habitat areas.

STEWARDSHIP/ENHANCEMENT PLAN

Attached to this grant proposal is a Stewardship and Enhancement Plan for the CEC-acquired parcels in the Semitropic Ridge area (see Appendix 4). This document represents the Conservancy's goals and objectives for the active management of these specified kit fox habitat areas. It is an integral component of this grant proposal and contains detailed plans to protect and improve these critically-important kit fox sites. It has been developed by Conservancy stewardship staff in consultation with the CEC's Committee of Biologists. Please refer to this plan.

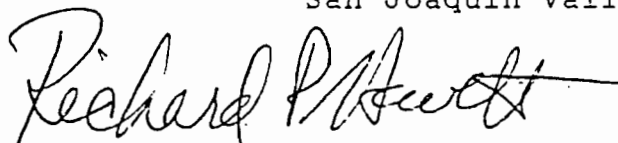
CONCLUSION

In accordance with the above, The Nature Conservancy request a grant from the California Energy Commission for acquisition, management and administration of kit fox preserves sites in the San Joaquin Valley Semitropic Ridge in the total amount of \$134,340.

If I may provide any additional information, please contact me.

Respectfully,

Richard P. Hewett
San Joaquin Valley Field Rep.



SEMITROPIC RIDGE KIT FOX PRESERVE

NATURE CONSERVANCY PURCHASE AGREEMENTS, OCTOBER, 1988

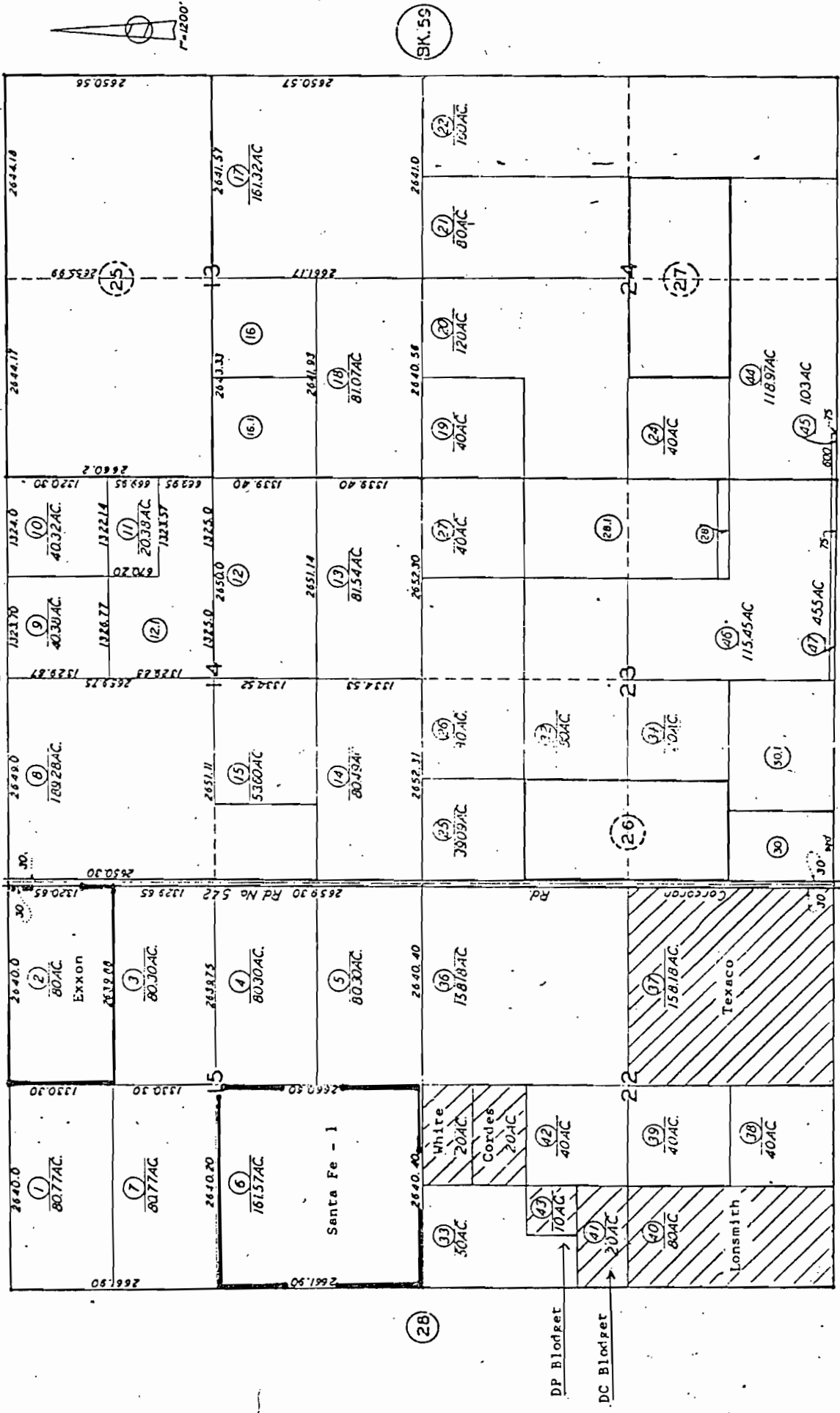
	<u>TRACT</u>	<u>ACRES</u>	<u>PRICE</u>	<u>PRICE PER ACRE</u>
A)	SANTA FE - 1 SECTION 15 APN 058-240-06	162 54	\$48,600	\$300
B)	SANTA FE - 2 SECTION 25 APN 058-291-33	135	\$40,500	\$300
C)	EXXON SECTION 15 APN 058-240-02	80	\$24,000	\$300
		---	-----	----
		377	\$113,100	\$300
Less contribution from Santa Fe:			<u>-\$ 24,000</u>	
	<u>TOTAL:</u>	<u>377</u> 293	<u>\$ 89,100</u>	<u>\$300</u>

58-24

T.26 S. R.22 E.

SCHOOL DIST. 117-2

58-24

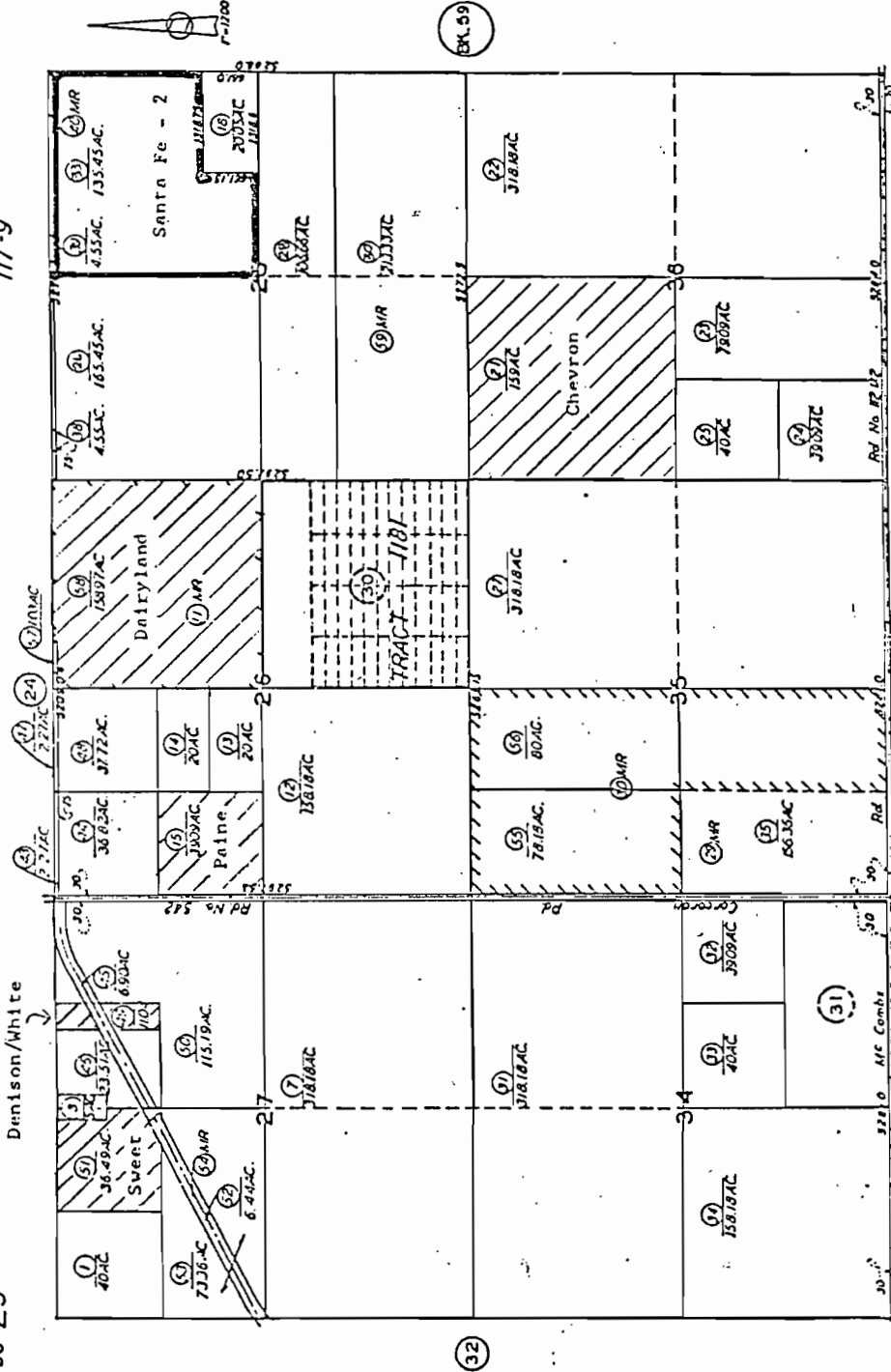


ASSESSOR'S MAP NO 58-24

Revised 12-10-87

29

58-29 T26 S. R.22 E. SCHOOL DIST. 117-2 117-9 58-29



ASSESSORS MAP NO. 58-29
COUNTY OF KERN 487

E.S. CURTIS & ASSOCIATES, INC.

Real Estate Appraisers and Consultants

Member:

American Institute of Real Estate Appraisers
American Society of Farm Managers and Rural Appraisers
National Association of Real Estate Boards

June 15, 1988

The Nature Conservancy
5401 Business Park South, Suite 206
Bakersfield, California 93309

RE: LETTER OPINION OF VALUE
SOUTHWEST 1/4 OF SECTION 15
TOWNSHIP 26 SOUTH, RANGE 22 EAST
KERN COUNTY, CALIFORNIA

Attn: Mr. Rick Hewett

Gentlemen:

In response to your request, I have inspected that certain parcel of real property hereinafter described for the purpose of providing a letter opinion of value as to the current fair market value of said property.

Fair market value is defined as the most probable price in terms of money which a property should bring in a competitive and open market under all conditions, requisite to a fair sale, with the buyer and seller each acting prudently and knowledgeably, and presuming the price is not affected by undue influence.

The date to which the value estimate applies is June 15, 1988.

The property rights appraised represent the unencumbered fee simple interest in the real property, exclusive of mineral rights, and subject to restrictions, reservations, easements, and limitations of record.

The property which is the subject of this appraisal is legally described as follows:

All of the Southwest 1/4 of Section 15, Township 26 South, Range 22 East, Mount Diablo Base and Meridian, in the unincorporated area of the County of Kern, State of California according to the Official Plat thereof.

The subject property is located in Northwestern Kern County, California approximately 17 miles northwest of the City of Wasco and 46 miles northwest of the City of Bakersfield.

The property is located within the boundaries of the Semi-Tropic Water Storage District but in a non-service area. Surrounding lands for the most part remain undeveloped or have been utilized for dry farming purposes owing primarily to poor soil quality and the lack of a suitable underground water supply for irrigated agriculture.

The property comprises a square parcel of land being 1/2 mile in length, 1/2 mile in width, and contains a gross area of 161.57 acres.

The property lies 1/2 mile west of Dairy Road, the nearest paved public right-of-way, and is accessible by dirt roads extending westerly therefrom through other ownerships.

The property is generally level in topography lying at the approximate 230 foot elevation with slight fall towards the northeast.

There are no building improvements or structures located thereon.

The soils of the subject property are predominately Pond Clay Loam, a relatively poor soil, having strong concentrations of Alkali in its native state.

There is no economic source of irrigation water available to the property that would permit the land to be reclaimed for irrigated agricultural purposes.

It is therefore my opinion that, the highest and best use of the land is primarily to hold for future speculation or for general recreational purposes.

In arriving at an indicated value for the subject property, a sales investigation was made on comparable lands in the general vicinity.

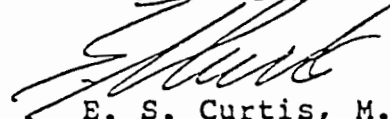
Five recent sales of similar type land in the area show a range in unit prices from \$190 to \$350 per acre depending primarily upon physical characteristics of the property and accessibility.

It is my understanding that the Nature Conservancy is currently in negotiations to purchase the subject property at a unit value of \$300 per acre.

As a result of my investigation and based on comparable market data in the immediate vicinity and other areas of Kern County, it is my opinion that, the negotiated price of \$300 per acre, or the sum of \$48,470, is indicative of current fair market value for the subject property.

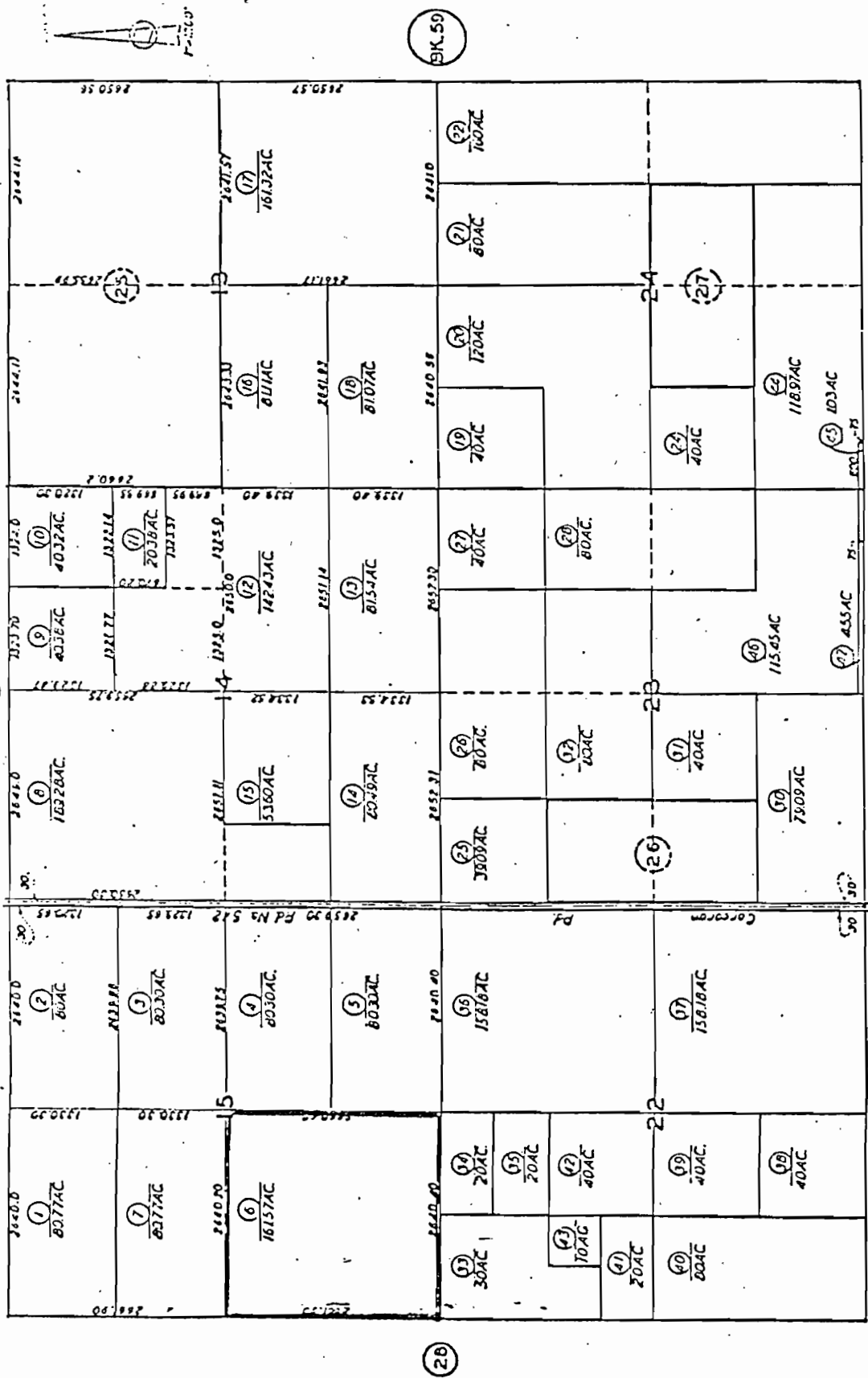
As per your request, a detailed and fully documented narrative appraisal report has not been prepared on the subject property. The supporting valuation data utilized in arriving at the opinion of value set forth above is retained in my files and can be made available upon request.

Very truly yours,



E. S. Curtis, M.A.I.

ESC/dt



ARMED AND DANGEROUS

E.S. CURTIS & ASSOCIATES, INC.

Real Estate Appraisers and Consultants

Member:

American Institute of Real Estate Appraisers

American Society of Farm Managers and Rural Appraisers

National Association of Real Estate Boards

June 15, 1988

The Nature Conservancy
5401 Business Park South, Suite 206
Bakersfield, California 93309

RE: LETTER OPINION OF VALUE
NORTHEAST 1/4 OF SECTION 25
TOWNSHIP 26 SOUTH, RANGE 22 EAST
KERN COUNTY, CALIFORNIA

Attn: Mr. Rick Hewett

Gentlemen:

In response to your request, I have inspected that certain parcel of real property hereinafter described for the purpose of providing a letter opinion of value as to the current fair market value of said property.

Fair market value is defined as the most probable price in terms of money which a property should bring in a competitive and open market under all conditions, requisite to a fair sale, with the buyer and seller each acting prudently and knowledgeably, and presuming the price is not affected by undue influence.

The date to which the value estimate applies is June 15, 1988.

The property rights appraised represent the unencumbered fee simple interest in the real property, exclusive of mineral rights, and subject to restrictions, reservations, easements, and limitations of record.

The property which is the subject of this appraisal is legally described as follows:

All of the Northeast 1/4 of Section 25, Township 26 South, Range 22 East, Mount Diablo Base and Meridian, in the unincorporated area of the County of Kern, State of California according to the Official Plat thereof.

Excepting therefrom all of the South 1/2 of the Southeast 1/4 of the Northeast 1/4 of said Section 25.

The subject property is located in Northwestern Kern County, California approximately 15 miles northwest of the City of Wasco and 44 miles northwest of the City of Bakersfield.

The property is located within the boundaries of the Semi-Tropic Water Storage District but in a non-service area. Surrounding lands for the most part remain undeveloped or have been utilized for dry farming purposes owing primarily to poor soil quality and the lack of a suitable underground water supply for irrigated agriculture.

The property comprises an irregular area of land being approximately 1/2 mile in width, 1/2 mile in length, and containing a gross area of 135.45 acres.

The property lies approximately 2 miles north of McCombs Road and 2 miles east of Dairy Road, the nearest paved public rights-of-way. Access is achieved by dirt farm roads extending through other ownerships.

The property is generally level in topography lying at the approximate 230 foot elevation with slight fall towards the north.

There are no building improvements or structures located thereon.

The soils of the subject property are predominately Pond Clay Loam, a relatively poor soil, having strong concentrations of Alkali in its native state.

There is no economic source of irrigation water available to the property that would permit the land to be reclaimed for irrigated agricultural purposes.

It is therefore my opinion that, the highest and best use of the land is primarily to hold for future speculation or for general recreational purposes.

In arriving at an indicated value for the subject property, a sales investigation was made on comparable lands in the general vicinity.

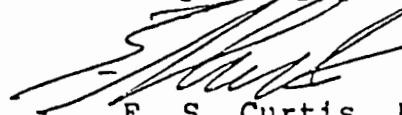
Five recent sales of similar type land in the area show a range in unit prices from \$190 to \$350 per acre depending primarily upon physical characteristics of the property and accessibility.

It is my understanding that the Nature Conservancy is currently in negotiations to purchase the subject property at a unit value of \$300 per acre.

As a result of my investigation and based on comparable market data in the immediate vicinity and other areas of Kern County, it is my opinion that, the negotiated price of \$300 per acre is indicative of current fair market value for the property or the sum of \$40,635.

As per your request, a detailed and fully documented narrative appraisal report has not been prepared on the subject property. The supporting valuation data utilized in arriving at the opinion of value set forth above is retained in my files and can be made available upon request.

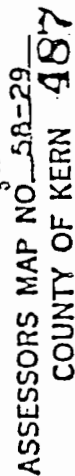
Very truly yours,



E. S. Curtis, M.A.I.

ESC/dt

5B-29



MANUEL

E.S. CURTIS & ASSOCIATES, INC.

Real Estate Appraisers and Consultants

Member:

*American Institute of Real Estate Appraisers
American Society of Farm Managers and Rural Appraisers
National Association of Real Estate Boards*

June 15, 1988

The Nature Conservancy
5401 Business Park South, Suite 206
Bakersfield, California 93309

RE: LETTER OPINION OF VALUE
NORTH 1/2 OF NORTHEAST 1/4 OF SECTION 15
TOWNSHIP 26 SOUTH, RANGE 22 EAST
KERN COUNTY, CALIFORNIA

Attn: Mr. Rick Hewett

Gentlemen:

In response to your request, I have inspected that certain parcel of real property hereinafter described for the purpose of providing a letter opinion of value as to the current fair market value of said property.

Fair market value is defined as the most probable price in terms of money which a property should bring in a competitive and open market under all conditions, requisite to a fair sale, with the buyer and seller each acting prudently and knowledgeably, and presuming the price is not affected by undue influence.

The date to which the value estimate applies is June 15, 1988.

The property rights appraised represent the unencumbered fee simple interest in the real property, exclusive of mineral rights, and subject to restrictions, reservations, easements, and limitations of record.

The property which is the subject of this appraisal is legally described as follows:

All of the North 1/2 of the Northeast 1/4 of Section 15, Township 26 South, Range 22 East, Mount Diablo Base and Meridian, in the unincorporated area of the County of Kern, State of California according to the Official Plat thereof.

The subject property is located in Northwestern Kern County, California approximately 17 miles northwest of the City of Wasco and 46 miles northwest of the City of Bakersfield.

The property is located within the boundaries of the Semi-Tropic Water Storage District but in a non-service area. Surrounding lands for the most part remain undeveloped or have been utilized for dry farming purposes owing primarily to poor soil quality and the lack of a suitable underground water supply for irrigated agriculture.

The subject property comprises a rectangular shaped parcel fronting 1/4 mile along the west line of Dairy Avenue and extends westerly over a uniform depth of 1/2 mile. Within the subject parcel there is a gross area of 80 acres. The property has Dairy Road frontage and therefore is directly accessible therefrom.

The property is generally level in topography lying at the approximate 225 foot elevation.

There are no building improvements or structures located thereon.

The soils of the subject property are predominately Pond Clay Loam, a relatively poor soil, having strong concentrations of Alkali in its native state.

There is no economic source of irrigation water available to the property that would permit the land to be reclaimed for irrigated agricultural purposes.

It is therefore my opinion that, the highest and best use of the land is primarily to hold for future speculation or for general recreational purposes.

In arriving at an indicated value for the subject property, a sales investigation was made on comparable lands in the general vicinity.

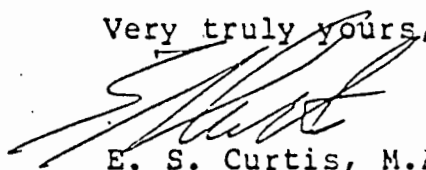
Five recent sales of similar type land in the area show a range in unit prices from \$190 to \$350 per acre depending primarily upon physical characteristics of the property and accessibility.

It is my understanding that the Nature Conservancy is currently in negotiations to purchase the subject property at a unit value of \$300 per acre.

As a result of my investigation and based on comparable market data in the immediate vicinity and other areas of Kern County, it is my opinion that, the negotiated price of \$300 per acre, or the sum of \$24,000, is indicative of current fair market value for the subject property.

As per your request, a detailed and fully documented narrative appraisal report has not been prepared on the subject property. The supporting valuation data utilized in arriving at the opinion of value set forth above is retained in my files and can be made available upon request.

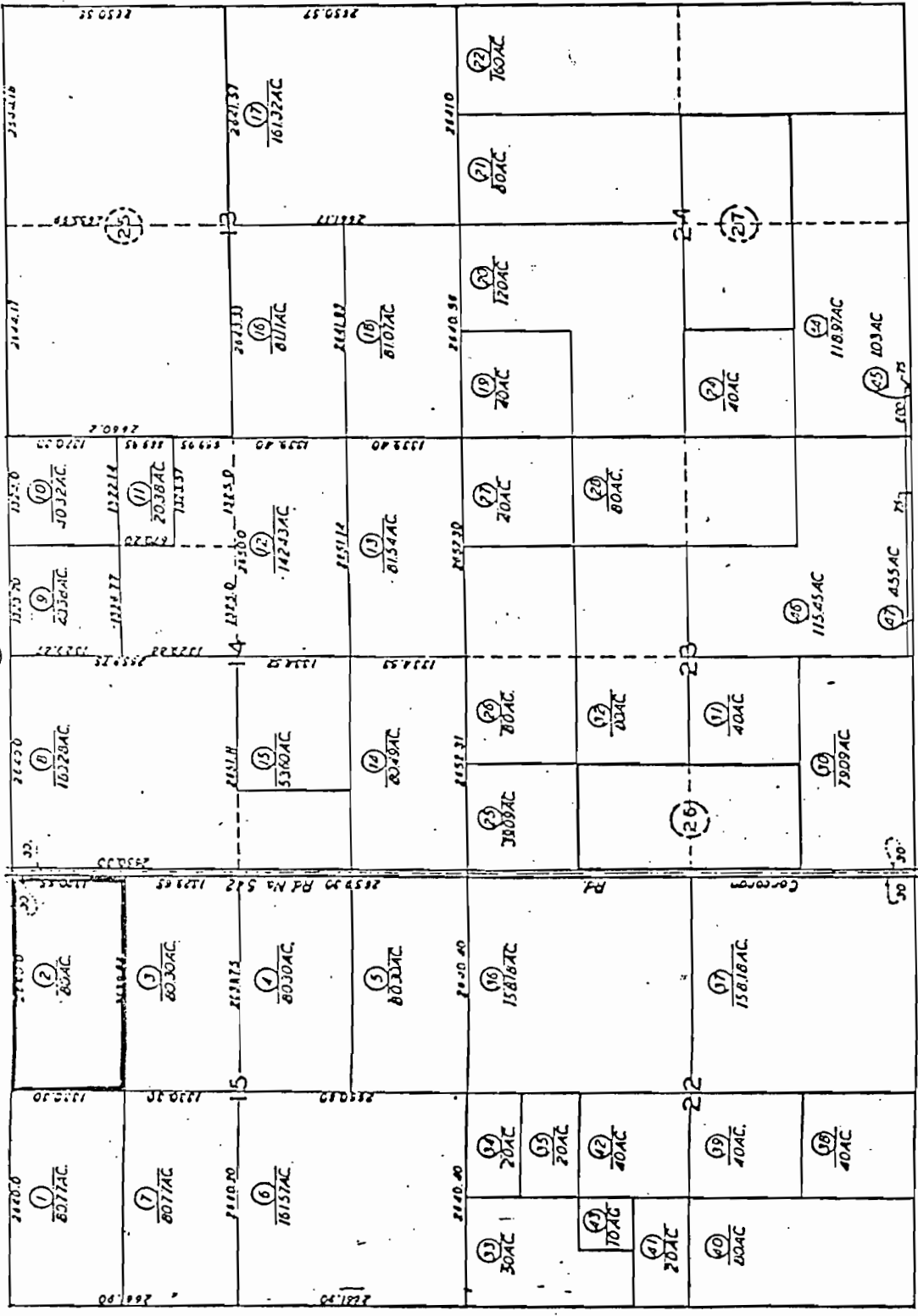
Very truly yours,

A handwritten signature in dark ink, appearing to be 'E. S. Curtis', written over the typed name.

E. S. Curtis, M.A.I.

ESC/dt

(15)



ASSESSORS MAP NO. 58-24
COUNTY OF KERN

PAPARCEL MAP

APPENDIX 4

SEMITROPIC RIDGE/PAINE PRESERVE STEWARDSHIP AND ENHANCEMENT PLAN

On August 31, 1988 Rick Hewett sent a Draft Stewardship Plan to all CEC Sycamore Cogeneration Committee Biologists. Biologists from CEC, USFWS, CDFG, and TNC discussed nine proposed action items during a conference call on September 21, 1988.

Specific details about these nine action items (including approximate costs and implementation schedule) are described below. All action items will be implemented by TNC staff (and volunteers under staff supervision) unless otherwise noted. The Semitropic Ridge/Paine Preserve map and the Stewardship Action Plan chart that were included in that Draft Plan are still appropriate references for this Stewardship and Enhancement Plan.

Item #1: FENCING. Sheep-proof fence will be erected on all exterior boundaries of the final preserve design and on those parcels immediately adjacent to Corcoran Road. Fencing standards are to be as follows: 6' steel T-posts to be pounded in until the tops of the flanges are flush with the ground surface. T-posts to be on 10' centers. Wooden peeler cores, double-braced with smooth wire, will be used at all corners and as $\frac{1}{4}$ mile braces. 40# nails will be used to secure all braces; all brace wires will be stapled to peeler cores. 39" hog wire (8-10" above the ground) will serve as the bottom of the fence. It will be secured by 4 clips/T-post. Two strands of two-prong barbed wire will be secured to the T-posts above the hog wire. Cattle guards will be installed at major road access points. To discourage off-road vehicle access, temporary two-strand barbed wire fences will be installed to protect sensitive interior locations until ultimate preserve boundaries are established.

Costs: \$2850/mile for materials (Oct. 1988 costs). Labor supplied by TNC volunteers. Cattle guards are approx. \$2000 each. It is anticipated that most of the initial fence costs will be underwritten by way of an agreement with one of the current parcel owners.

Schedule: October 31, 1989 all boundary fences to be in place. Temporary fences to be erected as needed.

Item #2: KIT FOX MOUNDS AND DENS. In those parcels where enhancement potential is greatest (especially lands degraded by cultivation, overgrazing, or fire), a series of circular, earthen mounds and artificial dens will be constructed. The mounds, patterned after den sites observed at the Preserve, will be approximately 25' in diameter, 2 to 3' in height, with a slight depression in the center. These mounds are to be constructed

(using either bulldozer or backhoe) with local soil only in those areas where the natural topography has already been altered. Four artificial dens (of approved design) will be constructed and installed in 1989. Additional artificial dens will be installed, pending the findings of the EG&G artificial den study currently underway at Elk Hills (the den design and the number of dens to be installed/acre at Semitropic Ridge will be determined once that study is complete). The mounds and artificial dens will be encircled with native perennial shrubs (chiefly A. polycarpa).

Costs: costs for these enhancement activities will be minimal during the first two years. Materials for artificial dens is available from existing sources. Earth-moving equipment will be loaned by a cooperating agency for four days/year during the first two years. All planting will be done by crews of trained, supervised volunteers. Note: costs for two versions of concrete pipe dens at Kern NWR were \$266 and \$316 (1984 dollars).

Schedule: Four artificial dens to be established in 1989 following February, April, and June scent station and transect work (so that baseline information on kit fox and kit fox prey can be established prior to enhancement and revegetation work). Six mounds will be established in 1989; 11 mounds will be established in 1990. Atriplex plantings to be done between October and December each year on all newly established mounds and around all four artificial dens.

Item #3: HABITAT RESTORATION. This item would more accurately be listed as Revegetation. In parcels dominated by herbaceous vegetation where enhancement potential is greatest (especially lands degraded by cultivation, overgrazing, or fire), patches of native perennial vegetation will be planted. Seed, to be collected on site, will be a mixture of native perennial shrub species including: Atriplex, Haplopappus, and Suaeda. Atriplex (chiefly A. polycarpa) will be the predominant shrub species represented in the seed mix. Prior to planting, an effort will be made to determine optimum shrub density for kit fox and prey species at Semitropic Ridge. The results of a literature review (including recent CEC findings) will be compared with existing shrub densities on Semitropic Ridge. This information will be evaluated, from the standpoint of kit fox cover and denning habitat and as prey habitat, to determine appropriate shrub densities for these enhancement plantings. This determination will be made during the first winter. Once the most desirable shrub density, defined as a number ("X") of shrubs/acre, has been established, restoration will proceed as follows:

A) Identify and mark all planting sites. Planting will be done at the rate of one acre of shrubs/artificial den or kit fox mound. This does not mean that a solid acre of shrubs will be planted near each artificial den and mound; rather that scattered, small patches of shrubs will be planted at appropriate

densities so that "X" shrubs are established in the vicinity of each newly constructed den and mound.

B) Collect seed. Proven methods will be used at the proper season (as early as June for A. spinifera but mostly from July to October for A. polycarpa and other shrubs). Seed for some shrubs is available commercially but TNC prefers to use local genotypes rather than generic "southern San Joaquin Valley" material.

C) Sow seed using proven methods in the fall. Once established, it is expected that these scattered patches of shrubs will become seed sources for natural reestablishment on surrounding areas.

Costs: all seed collecting and planting to be done by trained, supervised volunteers.

Schedule: Winter 1988/1989: determine desirable shrub densities.
Summer and Fall 1989 and 1990: collect seed.
Fall 1989: plant 10 acres worth of shrubs.
Fall 1990: plant 11 acres worth of shrubs.

Item #4: K-RAT BERMS. Many kangaroo rats (Tipton and Heermann) and other rodents (including San Joaquin antelope ground squirrel) on Semitropic Ridge take advantage of slightly elevated ground when establishing their burrow entrances. In those parcels where enhancement potential is greatest (especially lands degraded by land-leveling and cultivation) a number of small earthen berms will be constructed. This "topographic enhancement" is designed to improve burrowing habitat for these rodents (including the federally endangered Dipodomys nitratoides). These berms, to be established at the rate of four berms for each artificial kit fox den and mound, will be constructed as follows: each "S-shaped" berm is to be approximately 30' long, 10' wide and from 12-18" high. The top of each berm will be planted with perennial shrubs as mentioned in Item #3 above. These berms will be incorporated into the design location of shrub plantings.

Costs: costs for construction of these berms will be minimal during the first two years. Earth-moving equipment will be loaned by a cooperating agency for four days/year during the first two years. These berms will be established on the same days that kit fox dens and mounds are constructed. All planting will be done by crews of trained, supervised volunteers.

Schedule: 40 berms (four per artificial kit fox den and mound) to be established in 1989; 44 berms to be established in 1990. Shrub plantings to be done between October and December each year on all newly established berms.

Item #5: TRASH REMOVAL. Various trash, rubbish, and garbage piles are scattered about (especially adjacent to paved and dirt roads) on Semitropic Ridge/Paine Preserve. A few sites also have stands of the exotic tamarisk (Tamarix species) on them. None of

these sites are terribly large. After prioritizing sites, TNC staff and volunteers will remove trash and tamarisk trees.

Costs: costs involved in these clean-up projects should be minimal. Stewardship staff and volunteer labor (including CCC help) will be used to clean up these areas. Approximately \$300 will be needed each year to cover the cost of trash bags, tool maintenance, and the Garlon 3A herbicide which is used to stump-treat Tamarisk trees.

Schedule: this will be an ongoing process. Most tamarisk removal will take place in the fall. Once mature trees have been eradicated, annual removal of seedlings will become a routine maintenance stewardship activity.

Item #6: SIGNS AND POSTING. Those parcels bordering roads or exterior boundary areas will be posted at 200 foot intervals with official TNC preserve signs. These 11 $\frac{1}{4}$ " X 11 $\frac{1}{4}$ " aluminum signs will be mounted on plywood backs with hardware cloth covers. Mounted signs will be attached by wire to T-posts. Signs will specifically prohibit illegal trespass, hunting, and sheep grazing.

Costs: approximately \$300 will cover the cost of signs, plywood, hardware cloth, and wire.

Schedule: signs will be attached to all newly-erected sheep-proof fence. Signs will also be attached to temporary fences at sensitive interior locations and to 4' X 4' posts at all major vehicle access points. Initial signing will be completed by the end of 1989.

Item #7: PATROLLING. TNC stewardship staff will patrol all parcels on a regular basis (a minimum of 11 days/month). Particular attention will be given to unauthorized entry, access, or use of the sites; especially for grazing, hunting, mineral exploration, agricultural activities, and dumping. TNC staff will coordinate patrol schedules with the local DFG warden and with Kern NWR staff to provide the most efficient patrol coverage with the least amount of overlap. Whenever TNC staff are in the area, they will combine patrol duties with other action items. For example; fencing, sign posting, trash clean-up, tamarisk removal, and revegetation work will occur on many of the same days that staff is on site involved in routine patrolling.

Costs: \$9250/year (1988 dollars). This covers the salary of the TNC staff as well as travel expenses (@ 20c/mile) from Creighton Ranch Preserve (70 mile round trip).

Schedule: 11 days/month; 12 months/year.

Item #8: FIRE PLAN. This item should more properly be called administration and supervision. TNC staff will have annual costs associated with administering these new parcels (office,

telephone, etc.) and with supervision of staff and volunteers. Under the category of administration, two of the most important plans to be prepared are:

A) Fire Response Plan. This plan will be prepared for all parcels in the Semitropic Ridge/Paine Preserve. This is a standard TNC document that outlines desired procedures and actions associated with the outbreak of a wildfire on the Preserve. Local fire suppression agencies (Kern County Fire Dept. and Calif. Dept. of Forestry) will be consulted, as usual, during this planning process. This plan will identify existing natural and man-made fire-breaks which can serve to isolate wildfires and reduce potential habitat damage.

B) Rodenticide Control Agreement. TNC will seek to establish a rodenticide control agreement with the Kern County Agricultural Commissioner's office. This agreement would be aimed at limiting local pesticide applications to standard treatment methods (USFWS approved) so as to reduce potential losses of lagomorph and rodent prey (and to reduce the possibility of secondary poisonings of predators, like kit fox).

Costs: \$4009/year (1988 dollars). This covers TNC staff salary, travel, and administrative costs.

Schedule: the Fire Response Plan and the Rodenticide Control Agreement will be completed by Jan. 1, 1989. Uncontained wildfire and unregulated rodenticides are two of the greatest potential threats to kit fox habitat and prey in the area so these are both priority items. Staff supervision and routine administrative duties pertaining to these parcels will be ongoing action items.

Item #9: MONITORING ENCLOSURES. In the draft plan, Item #9 simply addressed monitoring enclosures but this item should more appropriately be called Monitoring so that it may address all types of monitoring. Biological monitoring, in fact, is a very major action item in terms of time and financial investment on the part of TNC. The following types of monitoring will be conducted at the Semitropic Ridge/Paine Preserve:

A) Scent Stations. In order to help document the initial status and the changing status (relative to enhancement efforts) of kit fox on these parcels, scent stations will be established (1/160 acres) as one index of relative kit fox abundance in the area. These stations will be baited and checked (on three consecutive mornings or until tracks are found) three times/year. Stations will be run in late February (by which time vixens have presumably borne their pups in established natal dens), late April (by which time pupping dens have presumably been established), and October (following those months of highest reported juvenile mortality and dispersal). Pending acquisition of the Grant #2 parcels, 12 scent stations will initially be established. Additional stations will be added as more land (in 160 acre increments) is added to the ultimate Preserve.

B) Spotlighting. On those nights that scent stations are baited spotlighting will be conducted along Corcoran Road and along all perimeter and interior dirt roads. Because of the generally roadless nature of this area, spotlighting will not be used as an index of abundance; rather, it is viewed as a useful technique to augment scent station and ground transect data.

C) Ground Transects. Transects (on 100' centers) will be walked three times/year. Approximately 106 miles of transects will be walked in late February (by which time natal dens have presumably been established), late April (by which time pupping dens have presumably been established), and June (when pups are large enough to be foraging abroad from dens). Transects time is budgeted at approximately 2 miles/hour so that nine days (at six hours/day) will be required to cover all 1245 acres of protected Semitropic Ridge land (pending acquisition of the Grant #2 parcels) during February and April. More days (at least 11 person days) will be required to conduct June transects because June monitoring will be done only during the blunt-nosed leopard lizard temperature "window" (22-36° C). Transect data will be recorded on modified CEC 1987 field forms so that kit fox, leopard lizard, antelope squirrel, and kangaroo rat den information can be gathered on the same transect. Incidental data on lagomorph numbers, other kit fox prey species, and other lizard species will also be recorded. In order to make the most efficient use of Preserve visits by TNC staff, transects will be walked on those days when scent stations are baited and checked. Transect data can be correlated with the location of enhancement and revegetation sites to assess the long-term effects of our stewardship actions.

D) Wildfire Monitoring. Photopoints and line intercept transects (five transects of 50m each) will be established in Section 21 to document changes in the shrub community that was burned in the 1986 wildfire. This information will help determine how rapidly vegetation (especially Atriplex species) recovers from fire. This data can be compared with vegetation cover in adjacent unburned habitat. In addition, the status of kit fox and kit fox prey species in adjacent burned and unburned areas can be compared using transect data.

E) Monitoring Exclosures. A series of grazing exclosures will be erected around examples of grassland, alkali sink, and saltbush habitat to assess the long-term effects of grazing relative to our stewardship actions. These exclosures will not be established until after spring 1989 (at which time similar exclosures will have been established at Carrizo Plain; the much larger Carrizo exclosures will serve as models for the Semitropic exclosures).

Costs: most of the expense of monitoring is in staff time which has already been accounted for in previous categories. Approximately \$300/year in supplies (bait, flags, etc.) will be needed.

Schedule: - February, April, and October (1989 and 1990):
 establish and conduct Scent Stations; also conduct
 Spotlighting.
 - February, April, and June (1989 and 1990): conduct
 ground Transects.
 - May 1989: establish Wildfire Monitoring Photopoints
 and Vegetation Transects.
 - Summer 1989 (or thereafter): establish Grazing
 Exclosures.

NOTE: Some of these actions (Fire Response Plan and Rodenticide Control Agreement) can proceed even before Grant #2 parcels are acquired. Actions, such as patrolling and trash clean-up are already underway on Grant #1 parcels and will be expanded to the new parcels upon acquisition. Monitoring (to establish baseline data prior to enhancement and revegetation activities) will begin in February, 1989. Active enhancement (earth moving) and restoration (seed collection and planting) will begin in late summer and early fall 1989. Once parcels are fenced and initial enhancement and revegetation work is done (December 1990), there will probably be new parcels to acquire. By that time, enhancement and revegetation techniques and artificial den designs should be refined and it will be appropriate to update the Stewardship Plan.

The estimated total costs of Stewardship in 1989 and 1990 are as follows:

Materials for artificial dens:	1264
Tools and Herbicides:	300
Signs and sign materials:	300
TNC patrol and stewardship staffing:	9250
TNC administration and supervision staffing:	4009
Monitoring supplies:	300
Contingencies (at 10%):	1542

TOTAL FOR ONE YEAR:	\$ 16,965
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STEWARDSHIP BUDGET FOR 1989 AND 1990:	\$ 33,930
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Memorandum

To : Charles R. Imbrecht, Chairman
California Energy Commission

Date : November 4, 1988

Telephone: ATSS ()
()

From : California Energy Commission Committee of Biologists
1516 Ninth Street
Sacramento 95814 Sycamore Cogeneration Decision

Subject: RECOMMENDATION FOR APPROVAL OF LAND ACQUISITION PROPOSAL FROM THE
NATURE CONSERVANCY, OCTOBER 13, 1988

The Committee of Biologists, designated by the Sycamore Cogeneration Decision, 84-AFC-6, has reviewed and considered the October 13, 1988, "Sycamore Kit Fox Preservation Program, Land Acquisition Proposal from The Nature Conservancy" and as required are reporting their findings to the Chairman of the Commission. Based on their biological information and information provided by agency staff biologists, the Committee recommends approval and disbursement from the Sycamore-San Joaquin Kit Fox Preserve Account, Special Deposit Fund, for the purposes identified in TNC proposal. Implementation of the proposal will result in the acquisition of three land parcels of value as kit fox habitat in the Semitropic Ridge area of Kern County, totaling 297 acres (the proposal identifies 377 acres, but funding for 80 acres is provided by Santa Fe). The total request is for \$134,340. This includes \$89,100 for land purchase, \$33,930 for land management and habitat enhancement, and \$11,310 for administrative overhead.

Acquisition of lands in this proposal will result in a total of 562 acres of kit fox habitat purchased with Sycamore funds in the Semitropic Ridge area. These acquisitions are:

Proposal Date	Acres	Amount	Stewardship	Administrative Cost	TOTAL
12-09-87	264.67	\$ 74,034	\$22,210	\$ 7,403	\$103,647
<u>10-13-88</u>	<u>297.00</u>	<u>89,100</u>	<u>33,930</u>	<u>11,310</u>	<u>134,340</u>
TOTAL	561.67	\$163,034	\$56,140	\$18,713	\$237,987

In addition, the Commission advanced \$995,000 to TNC on January 20, 1988 to aid in the purchase of the Carrizo Plain Preserve. This advance was repaid to the Sycamore fund on May 5, 1988 and in-kind services were provided in accordance with the MOU in lieu of interest payments.

The Sycamore-San Joaquin Kit Fox Preserve Account was initially established with \$1.2 million. There remains \$962,013 plus

interest in the account.

The following comments were expressed by the Committee based on their review of the proposal:

1. Careful selection of the berm sites has to be made to avoid existing Tipton kangaroo rat burrow systems.
2. TNC has responded to the concern expressed by the Committee during the evaluation of the 12-09-87 proposal by submitting a more extensive two year rehabilitation and enhancement plan with this proposal. Appendix 4 of the proposal indicates that some work will be conducted on preserve areas not acquired with Sycamore funds. However, TNC has assured the Committee that their intent is to use Sycamore funds only on Sycamore purchased parcels. The Committee recognizes that certain efforts, such as fencing, development of berms and dens, may contribute significantly to improvements in carrying capacity on Sycamore purchased parcels but be more effectively carried out on other near by parcels. The Committee wants to assure that the Sycamore fund is used to assure both full rehabilitation and enhancement of lands purchased by the Sycamore funds and that the most effective biological rehabilitation and enhancement is implemented. The measures identified in this proposal are acceptable to the Committee.
3. In order to assure long term maintenance and enhancement of parcels purchased with Sycamore funds the Committee will be discussing with TNC the feasibility of establishing an endowment fund for this purpose.

The following Committee of Biologists designated by the Sycamore Cogeneration Decision recommends approval of the Land Acquisition Proposal from The Nature Conservancy, October 13, 1988.

By: James A. Brownell Date: 11-4-88
California Energy Commission
Biologist

By: Robert E. Orcutt Date: 11/4/88
California Department of Fish and
Game Biologist

By: Thomas A. Raulo Date: 11-4-88
U.S. Fish and Wildlife Service
Biologist

cc: Stephen M. Rhoads, CEC Executive Director
Sandi Fleischmann, CEC CPM
Robert Therkelsen, EFS & EP Division Chief

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:)	DOCKET NO. 84-AFC-6C
)	
THE SYCAMORE COGENERATION)	ORDER APPROVING PURCHASE
PROJECT)	OF KIT FOX HABITAT BY THE
)	CALIFORNIA NATURE
)	CONSERVANCY
)	

Based on the record of this proceeding and the comments presented at the hearing on November 16, 1988, the Commission finds the following:

1. Pursuant to the Commission Final Decision in this matter and Biological Resources Condition 5 of that Decision, the Commission must approve all proposals to purchase habitat using monies from the Sycamore-San Joaquin Kit Fox Preserve Fund. Condition 5 provides that the fund be used "for the purchase of suitable acreage for kit fox habitat preservation and to cover related administrative, site improvement and site protection costs."
2. The California Nature Conservancy, a non-profit tax exempt conservation organization that acquires and manages habitat of rare and endangered species, has proposed three parcels as nature

preserve locations in the Semitropic Ridge area of Kern County for acquisition approval. The Nature Conservancy, in a proposal dated October 13, 1988 has proposed parcels totalling 297 acres at a total purchase price of \$89,100. The proposal also requires \$33,930 for land management and habitat enhancement, and \$11,310 for administrative overhead. The total requested from the fund is \$134,340.

3. The biology committee, created by the Commission Decision in this matter to advise the Commission on the acceptability of parcels, has recommended approval of this proposal. The biology committee agrees that these parcels meet the criteria of the Commission Decision and that these parcels will help to preserve and protect the kit fox.

Therefore, the Commission hereby orders the following:

A. The proposal from the California Nature Conservancy dated October 13, 1988, attached hereto as Exhibit A, for the purchase of 297 acres at a price of \$89,100 is hereby approved.

B. The land management and habitat enhancement costs in the amount of \$33,930 is hereby approved.

C. The administrative overhead costs of \$11,310 is hereby approved.

D. The monies shall be used by the California Nature Conservancy in accordance with their proposal, Exhibit A attached.

DATED: November 16, 1988

CHARLES R. IMBRECHT, Chairman

BARBARA CROWLEY, Vice Chair

WARREN D. NOTEWARE, Commissioner

ROBERT MUSSETTER, Commissioner

RICHARD A. BILAS, Commissioner

5000



SAN JOAQUIN VALLEY PROJECT OFFICE

5401 Business Park S., Suite 206 Bakersfield, CA 93309

(805) 323-4557

December 7, 1988

Mr. James Brownell
California Energy Commission
1516 9th St.
Sacramento, CA 95814

RE: Closing of escrow on Exxon, 80 acre parcel in Semitropic Ridge

Dear Jim:

I wanted to inform you and the CEC that the Conservancy officially closed escrow today on the 80 acre Exxon parcel, Section 15, T26S, R22E, Semitropic Ridge. We greatly appreciate the grant fund support from CEC on November 16, 1988 for this purpose.

I will keep you posted on the status of the 2 parcels of kit fox habitat that we are going to acquire from Santa Fe Energy Company under the same grant. I wouldn't expect anything until after the first of the year.

Again, my thanks for your personal assistance in this process. It is an exciting time for all of us as we see our partnership produce the fruits of our labors.

Yours sincerely,

Rick Hewett
San Joaquin Valley Field Rep.

MEMORANDUM OF UNDERSTANDING

Between
The Nature Conservancy
and
The California Energy Resources Conservation
and Development Commission
Regarding
Endowment Fund Management

December 16, 1991

I. PURPOSE:

The intent of this Memorandum of Understanding ("MOU") is to define the goals and responsibilities of The Nature Conservancy (the "Conservancy") and the California Energy Resources Conservation and Development Commission (hereafter "California Energy Commission" or "CEC") in the management of lands purchased and set aside to mitigate habitat impacts caused by certain energy related development projects (the "Sycamore and Midway-Sunset Projects") in the southern San Joaquin Valley. The Nature Conservancy and the California Energy Commission are working jointly to acquire and manage land in the Semitropic Ridge and Lokern areas of Kern County, to complete mitigation efforts for impacts to the San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel. In addition, these efforts will also assist in the recovery of these species and sustain the valley's biodiversity. This Memorandum of Understanding will serve to define the use, management, and general application of certain endowment monies established for long-term stewardship of the properties described in Appendix A hereto and future land

purchases and transfers, if any, for which the Conservancy submits proposals and other information pursuant to Paragraph II.A.1 below and which CEC approves pursuant to Paragraphs II.A.2.

WHEREAS:

A. The California Energy Commission is an agency of the State of California. As a result of the California Energy Commission Sycamore Cogeneration Decision (84-AFC-6) and the Midway-Sunset Cogeneration Decision (85-AFC-3), the California Energy Commission has received and is responsible for the distribution of special deposit fund accounts for the Sycamore and Midway-Sunset Projects. Using the funds, the California Energy Commission is responsible for the purchase of mitigation habitat to preserve and protect state and federal threatened and endangered species, particularly the San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel and their habitat, overall biodiversity, and to oversee use of endowment funds provided for the management, maintenance, and monitoring of such purchased lands.

1. Biological Resources Finding No. 5, Page 124 of the Sycamore Cogeneration Decision (84-AFC-6) provides that the California Energy Commission shall use the proceeds of the mitigation fund "...for the purchase of land as habitat compensation for all unmitigated impacts of the Sycamore Project.

The sum in the account will be used for the purchase of suitable acreage for kit fox habitat preservation and to cover related administrative, site improvement, and site protection costs".

2. Biological Resources Finding No. 5b, Page 164 of the Midway-Sunset Cogeneration Decision (85-AFC-3) provides that the California Energy Commission shall use the proceeds of the mitigation fund "...for the purchase of suitable acreage for San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel habitat preservation and to cover related costs of administration, site improvement, and site protection".

3. The mitigation funds are currently held by the California Energy Commission in interest-bearing special deposit fund accounts, the Sycamore-San Joaquin Kit Fox Preserve Account and the Midway-Sunset Special Wildlife Habitat Preservation Fund account (collectively the "Deposit Funds"), with the objective of using principal and interest to maximize threatened and endangered species recovery in accordance with the Sycamore Cogeneration Decision and the Midway-Sunset Cogeneration Decision.

AND; WHEREAS,

B. The Nature Conservancy is a nonprofit, tax-exempt scientific and charitable organization which identifies, acquires and manages lands supporting rare, threatened and endangered species and ecosystems.

AND; WHEREAS,

1. Consistent with mitigation purposes specified in various California Energy Commission decisions, threatened and endangered species habitat has been and is being acquired by The Nature Conservancy at the maximum rate feasible consistent with market conditions, availability, price, regional preserve and protection design and strategy, manpower availability, and parcel approval by the California Energy Commission.

2. The Nature Conservancy has in the past provided to the California Energy Commission, proposals for the acquisition of tracts of land in the Semitropic Ridge and Lokern areas of Kern County to be acquired and managed by The Nature Conservancy as natural system preserves focusing on rare, threatened, and endangered species and their habitats. To further enhance its ability to identify, acquire and manage habitat in the Lokern and Semitropic Ridge areas of Kern County, as well as elsewhere in central California, The Nature Conservancy has opened a San Joaquin Valley Project Office in Bakersfield, California, and hired a full-time director. The Nature Conservancy is now in the position to prepare long-term management plans for the acquired lands described in Appendix A and to receive and manage endowment funds for the purpose of managing such lands in perpetuity for benefit of the San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel, and in support of the integrity of the natural systems occurring on the parcels

purchased with California Energy Commission controlled mitigation funds.

AND; WHEREAS,

The acceptance of the following agreements is intended to provide a mechanism for implementing the intent of the California Energy Commission Sycamore and Midway-Sunset Decisions concerning biological resource mitigation conditions relating to offsite mitigation.

AND; WHEREAS,

The California Energy Commission has (a) previously released Deposit Funds to the Conservancy for acquisition of the acquired lands described in Appendix A hereto; (b) agrees to release an additional \$900,000.00 of the remaining Deposit Funds (the "Initial Endowment Funds") to The Nature Conservancy for management of such acquired lands; and (c) agrees to make Deposit Funds retained by CEC after payment of the Initial Endowment (the "Retained Deposit Funds") available to the Conservancy on the terms herein for acquisition and management of additional habitat lands in the Semitropic Ridge and Lokern areas of Kern County, California.

AND; WHEREAS,

Subject to the provisions of Paragraph II.D. below, the Conservancy intends to manage the parcels in perpetuity for the integrity of the natural system and the protection of the San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel, and the overall biodiversity of these lands.

II. THEREFORE, THE CALIFORNIA ENERGY COMMISSION AND THE NATURE CONSERVANCY AGREE TO THE FOLLOWING:

A. REGARDING FUTURE LAND PURCHASES, CEC AND THE NATURE CONSERVANCY AGREE:

1. The Conservancy's proposals for acquisition of additional parcels will include an analysis which minimally provides: (a) title information (including, but without limitation, information with regard to reserved oil, gas and mineral rights), location and size of the subject parcel(s); (b) a map showing the parcel(s) in relation to previously secured and protectively managed lands; (c) the terms and conditions of the proposed sale; (d) a detailed outline of proposed biological enhancement measures and management objectives; and (e) the cost breakdown for acquisition, enhancement, and management;

2. The CEC will deliver to the Conservancy (a) approval or disapproval of the information presented by the Conservancy pursuant to Paragraph II.A.1 above; and (b) if such information is approved, Retained Deposit Funds in an amount

necessary to satisfy the cost breakdowns described in proposed materials delivered pursuant to Paragraph II.A.1(e).

B. REGARDING ENDOWMENT MANAGEMENT, CEC AND THE NATURE CONSERVANCY AGREE:

1. CEC will within 45 days after execution of this agreement deliver to the Conservancy the entire amount of Initial Endowment Funds to be held and used by the Conservancy in accordance with the terms of this MOU.

2. The Conservancy may use only interest generated by investment of the Initial Endowment Funds and by any endowment funds subsequently delivered under this MOU (collectively "Endowment Funds") for supporting the management of the acquired properties described in Appendix A and for any additional properties acquired pursuant to terms of this MOU.

3. Endowment Funds will be invested to provide a yield typical for the type and risk of the investment made. CEC acknowledges that Endowment Funds may be invested in a manner that puts principal at risk, however, the Conservancy shall use reasonable care in the management of such investments to minimize loss of principal.

4. That expenditure of income generated by invested Endowment Funds will be limited to the costs (including without limitation direct, indirect, administrative, supervisory and overhead expenses) of owning, managing and implementing stewardship plans on the subject properties at Lokern and

Semitropic Ridge and to such costs for other activities, efforts or undertakings that in the Conservancy's reasonable opinion will serve to benefit the subject properties. Permitted expenditures will also include preserve management expenditures including habitat manipulation, fencing and fencing repair, access control, security patrolling, preserve manager salary, and monitoring studies and research related to implementing or determining the success of management plans.

5. That unused income generated by invested Endowment Funds may be converted to principal and invested at the election of the Conservancy, in which case both the invested unused income, together with any income earned thereon shall be available for the uses described in Paragraph II.B.4 above.

6. That subject to provisions of Paragraphs II.D.2 and 4, the ownership of Endowment Funds representing principal shall not be severed from the ownership of the subject properties as long as they are maintained as preserves.

7. Subject to provisions of Paragraph 5, expenditures of any portion of the principal of the Endowment Funds will require review and approval by the California Energy Commission in writing prior to such use.

8. That management of the acquired property described in Appendix A hereto shall be subject to the terms and conditions of this MOU.

9. That ~~all~~ use of Retained Deposit Funds for additional future land purchases or endowments in the Semitropic Ridge and Lokern areas as mitigation for the above California Energy Commission Decisions will be covered under this Memorandum of Understanding.

C. REGARDING MANAGEMENT PLANS, CEC AND THE NATURE CONSERVANCY AGREE:

1. Subject to the provisions of Paragraph II.D below, the Conservancy will use best efforts to manage in perpetuity the land in a manner which, in the reasonable opinion of the Conservancy is consistent with sustaining the integrity of the natural system with focus on the San Joaquin kit fox, blunt-nosed leopard lizard, and San Joaquin antelope squirrel and their habitat.

2. For so long as the Conservancy is bound by the terms of this MOU, the Conservancy agrees to prepare and submit a master management plan (5 yr. goals for each fiscal year of the Conservancy commencing July 1, 1992) by January 1, 1993 and thereafter to update such plan if necessary every 5 years (such updates to be submitted by January 1 of every 5th year).

3. For so long as the Conservancy is bound by the terms of this MOU, by March 1 of each year (initially commencing 90 days after mutual execution of this agreement) The Nature Conservancy will provide a projected annual plan and budget (covering the next fiscal year commencing July 1) to the

California Energy Commission for preserves supported in whole or in part by endowment monies delivered subject to terms of this agreement.

4. The Conservancy shall submit to the California Energy Commission, beginning on September 1, 1993 and on September 1 of each succeeding year for as long as the Conservancy is bound by the terms of this MOU, an annual report for the 12 month period (approximately 16 months in the case of the 1st report) ending the prior June 30 stating total annual expenditures of endowment funds, the accomplishments, problems, research findings as appropriate, and other preserve management comments and analysis on preserve problems or issues affecting the preserves supported in whole or in part by Endowment Funds delivered pursuant to terms of this MOU.

D. REGARDING TRANSFER OR SALE OF LAND

1. The Nature Conservancy agrees to notify the *and the US Fish and Wildlife Service* California Department of Fish and Game *1/5* and notify and obtain *Sho* written approval of the California Energy Commission, which approval shall not be unreasonably withheld, prior to any transfer or sale of properties originally purchased with the California Energy Commission Endowment Funds disbursed pursuant to terms of this MOU.

To qualify for such CEC approval, the Conservancy shall present evidence that (a) in the case of a transfer, the proposed transferee meets the criteria described in Paragraph II.D.3 and

that the proposed transferee will continue to manage such lands as a preserve; or (b) in the case of a sale, that the conditions described in Paragraph II.D.4 have occurred and that the net proceeds of the sale shall be invested in acquisition of other lands as a replacement preserve with habitat suitable for the species described in paragraph I.B.2 and/or for such other rare or endangered species as CEC shall approve.

2. In the event of a transfer of (but not a sale) all or any part of the properties acquired with Deposit Funds, a pro rata share (calculated on the basis of the number of acres transferred as a percentage of the total number of acres acquired by the Conservancy with Deposit Funds and held by the Conservancy prior to such transfer) of the Endowment Funds and accrued unspent income existing at the time of transfer, minus any of the Conservancy's outstanding reimbursable expenses, will be transferred with the properties.

3. Any appropriate State (such as the California Department of Fish and Game) or Federal agency ("Government Agencies"), or any land trust organization or other qualifying non-profit organization that agrees to maintain the preserve and which is otherwise acceptable to CEC ("Qualified Non-Profits"), shall be qualified to accept a transfer of such lands proposed for transfer.

4. The California Energy Commission agrees that if adjacent land development, a catastrophe or other condition

degrades any properties acquired and subject to the terms of this MOU such that the property is no longer suitable habitat for the species described in Paragraph I.B.2, the land may be sold, upon the California Energy Commission approval pursuant to Paragraph II.D.1(b), to any person or entity on condition that net sale proceeds are ultimately applied to acquire replacement habitat. Government Agencies and Qualified Non-Profits shall be given priority over other buyers. In the event of such a sale, the Conservancy shall be entitled to retain the Endowment Funds for use consistent with the terms of this MOU in connection with the replacement habitat acquired.

5. Upon transfer of title pursuant to a CEC approved sale or transfer, the Conservancy shall have no further obligation under this MOU with respect to any such property sold or transferred.

6. The Conservancy and CEC are entitled to terminate their respective duties under Paragraph II.A. above to pursue additional acquisitions and to fund such acquisitions by delivery by either to the other of written notice of termination at least 60 days before the termination date stated in such notice. In that event, this MOU will continue in effect in all other respects until otherwise terminated by operation of Paragraph II.D.5 above or by mutual agreement of the parties.

E. REGARDING COMPLAINTS

1. The Nature Conservancy and the California Energy Commission agree to abide by the conditions of this Memorandum of Understanding, and if there is a question of compliance with this Memorandum of Understanding, The Nature Conservancy will meet with the California Energy Commission biology staff and invited parties to develop and implement mutually agreeable actions to resolve the issue(s).

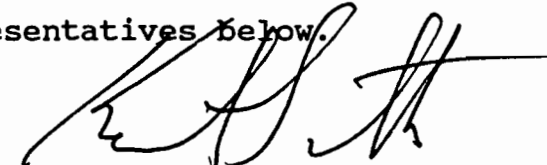
The California Energy Commission and The Nature Conservancy shall meet at the request of the California Department of Fish and Game or the U.S. Fish and Wildlife Service, the agencies responsible for enforcement of the state and federal endangered species acts, to resolve issues relating to threatened and endangered species on these properties.

2. Any unresolved issue(s) between the California Energy Commission staff and The Nature Conservancy will be brought before the full Commission for final resolution. In the event that the Conservancy does not agree with such final resolution, the Conservancy shall be entitled to commence action in any court of competent jurisdiction to enforce the terms of this MOU and/or for any other remedy available hereunder, at law or in equity.

III. CONCURRENCE

The California Energy Commission and The Nature Conservancy agree to the terms of this Memorandum of Understanding as evidenced by signatures of their respective authorized representatives below.

By:


California Energy Commission

Date:

Jan 22, 1992

By:


The Nature Conservancy

Date:

Jan 17, 1992

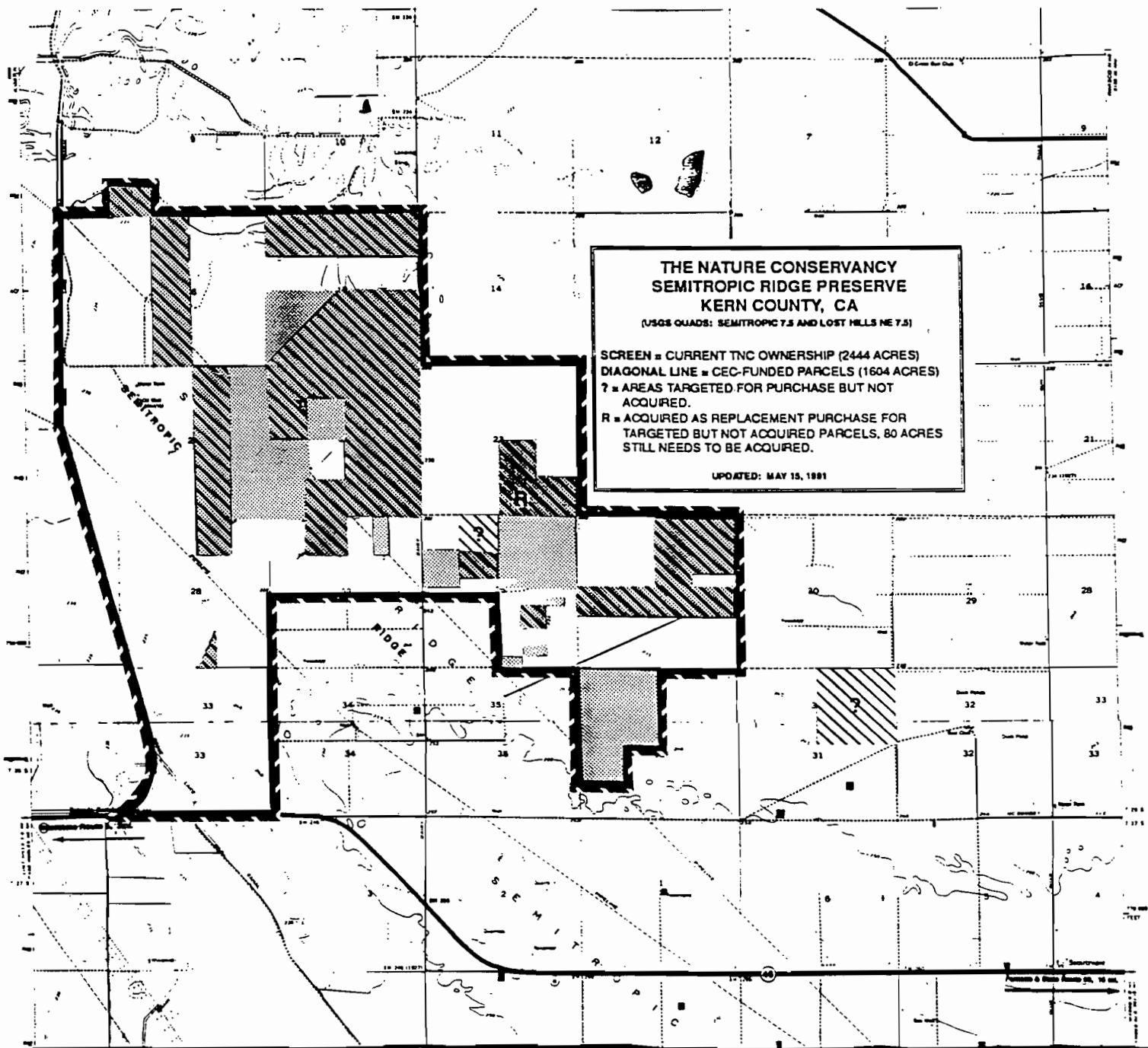
APPENDIX A

LAND PURCHASES FOR SYCAMORE AND MIDWAY-SUNSET COGENERATION FACILITY MITIGATION¹

SEMITROPIC RIDGE LAND ACQUISITIONS BY THE NATURE CONSERVANCY USING THE SYCAMORE-SAN JOAQUIN KIT FOX PRESERVE ACCOUNT					
Proposal Date	Acres	Amount	Start-up Management	Administrative Costs	Total
12-09-87	264.67	\$ 74,034.00	\$ 22,210.00	\$ 7,403.00	\$103,647.00
10-13-88	295.33	89,100.00	33,930.00	11,310.00	134,340.00
05-10-89	238.48	65,583.00	19,675.00	6,558.00	91,816.00
08-01-89	157.72	46,066.00	13,820.00	4,607.00	64,493.00
11-16-89	264.84	80,954.00	24,286.00	8,100.00	113,340.00
11-08-90	463.17	138,591.00	41,577.00	13,860.00	194,028.00
TOTAL	1,684.21 ²	\$494,328.00	\$155,498.00	\$51,838.00	\$701,664.00

LOKERN LAND ACQUISITIONS BY THE NATURE CONSERVANCY USING THE MIDWAY-SUNSET SPECIAL WILDLIFE HABITAT PRESERVATION FUND					
Proposal Date	Acres	Amount	Start-up Management	Administrative Costs	Total
04-28-89	235.00	\$29,425.00	\$8,827.00	\$3,000.00	\$41,252.00
06-02-89	76.97	23,100.00	6,930.00	2,310.00	32,340.00
09-26-89	236.95	67,325.00	20,198.00	6,733.00	94,256.00
TOTAL	548.92	\$119,850.00	\$35,955.00	\$12,043.00	\$167,848.00

- Note: For information on parcel numbers and parcel description see The Nature Conservancy proposals. These are available through the California Energy Commission compliance files.
- Total acres originally targeted for purchase. However, parcels Blodgett, et al. of 37.72 acres and Santa Fe #3 parcel of 158.18 acres could not be acquired. Instead, 115.45 acre Sackett, et al. parcel in section 23 was purchased with a portion of the Santa Fe #3 funds on 11-05-90. The difference between targeted and acquired is 80.41 acres still to be acquired using CEC controlled mitigation funds.

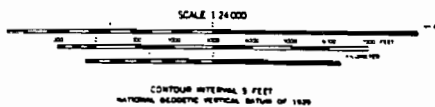


**THE NATURE CONSERVANCY
SEMITROPIC RIDGE PRESERVE
KERN COUNTY, CA**
(USGS QUADS: SEMITROPIC 7.5 AND LOST HILLS NE 7.5)

SCREEN = CURRENT TNC OWNERSHIP (2444 ACRES)
 DIAGONAL LINE = CEC-FUNDED PARCELS (1604 ACRES)
 7 = AREAS TARGETED FOR PURCHASE BUT NOT ACQUIRED.
 R = ACQUIRED AS REPLACEMENT PURCHASE FOR TARGETED BUT NOT ACQUIRED PARCELS. 80 ACRES STILL NEEDS TO BE ACQUIRED.

UPDATED: MAY 15, 1991

Revised, edited, and published by the Geological Survey
 Control by USGS and USCAGS
 Imagery by aerial photos, 1927
 Culture and drainage revised from aerial photographs taken 1950
 Road data and terrain control revised 1954
 Potentially possible, 1927 North American datum
 10,000-foot grid based on California electronic datum, zone 8
 Quaternary land area, including water bodies
 The shaded portion of this map has within a substantial area
 Containing not restricted to other various control measurements
 for various control established 1954 unless otherwise noted
 1:200,000 vertical Transverse Mercator grid used,
 zone 11, datum as then
 Elevations shown as depicted derived from aerial photographs
 taken 1973. The information has been processed



ROAD CLASSIFICATION

Highway Light duty
 Major road Unimproved dirt
 Interstate Route U.S. Route State Route



LOST HILLS NE, CALIF.
 115175 11192175
SEMITROPIC, CALIF.
 115175 11192175
 1994
 PHOTOGRAPHED 1973
 1:250,000 1:250,000

THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80260 OR BY POST, WASHINGTON, D.C. 20508
 1:250,000 1:250,000
 1:250,000 1:250,000

**THE NATURE CONSERVANCY
LOKERN PRESERVE
KERN COUNTY, CA**

BLACK LINE = ULTIMATE PRESERVE BOUNDARY
SCREEN = CURRENT TNC OWNERSHIP (1728 ACRES)
DIAGONAL LINE = CEC-FUNDED PARCELS (549 ACRES)

UPDATED: MAY 15, 1991

BUTTONWILLOW SETBACK

California Aqueduct

Lokern Road

Westside Highway

Bakersfield McKittrick Hwy

McKITTRICK

7.5 Quadrangles

- Beefidge
- Buttonwillow
- East Elk Hills
- Lokern
- Plumard
- West Elk Hills

