BIOLOGICAL SURVEYS AND WETLANDS DELINEATION, SIMON PROPERTY, GAVIOTA COAST, SANTA BARBARA COUNTY, CALIFORNIA

Prepared for:

DICK SIMON
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November 14, 2000

FLx

ECOLOGY GEOGRAPHY RESTORATION ENVIRONMENTAL ANALYSIS

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in collaboration with:

Thomas Olson Biological Consulting
and
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November 14, 2000

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1. INTRODUCTION

This report was prepared to provide information about the nature and extent of biological and wetland resources on a land parcel (APN 081-15-28) located on the northern side of Highway 101 along the Gaviota coast in Santa Barbara County, California (Appendix A). The project proposed by the landowner, Dick Simon, includes the construction of a single family dwelling and associated access roads on the parcel.

Botanical surveys included walking over the parcel to search for rare plant species and to identify plant communities. Plant species nomenclature in this report follows Hickman (1993). Jurisdictional wetland resources also were identified, delineated, and mapped in the field. These surveys were conducted on November 2, 2000, by biological consultants from FL*x* (Dr. Anuja Parikh, Professional Wetland Scientist PWS 841, and Dr. Nathan Gale, PWS 1216). A habitat assessment for herpetofauna was carried out by Tom Olson of Thomas Olson Biological Consulting on November 10, 2000. A field survey for bird species was conducted on November 13, 2000, by John Gallo, vertebrate biologist from the University of California, Santa Barbara. This report presents the survey results and assesses potential impacts of the proposed development on biological and wetland resources present at the site.

2. SITE DESCRIPTION AND PLANT COMMUNITIES

The Simon property comprises mostly gently to steeply sloping terrain in upland areas. Three intermittent drainages are present on the site, flowing north to south: the easternmost is Cañada de la Gallina, an unnamed drainage is found in the west-central part of the parcel, and the westernmost drainage is Cañada de Guillermo, most of which lies outside the property boundary (Appendix A). All three drainages currently are crossed by dirt track access roads. The parcel has been subject to intensive cattle grazing, and in general, both wetland and upland habitats on the site are highly disturbed, and habitat quality is relatively poor.

The site primarily is covered with non-native grassland and ruderal species. Annual introduced grasses generally dominate non-native grasslands; annual herb species also are found. Non-native grasslands occur on fine-textured, usually clay soils, that are moist to wet in the winter but dry in the summer and fall. Grazing on the parcel has reduced the height of the grasses almost to ground-level; the grasses present likely include bromegrasses (*Bromus* spp.), barley (*Hordeum* spp.), and oats (*Avena* spp.). The most common herbaceous ruderal species on the property is black mustard (*Brassica nigra*); tree tobacco (*Nicotiana glauca*), milk thistle (*Silybum marianum*), Italian thistle (*Carduus pycnocephalus*), and castor bean (*Ricinus communis*) also were observed.

Although no extensive areas of coastal sage scrub occur on the parcel, native species typically found in this community are scattered sparsely in some parts of the grassland. These species include California sagebrush (*Artemisia californica*), coyote bush (*Baccharis pilularis* var. *consanguinea*), coastal goldenbush (*Isocoma menziesii*), and giant ryegrass (*Leymus condensatus*).

The drainages present on the property, particularly the two eastern drainages, have been trampled heavily by cows. Introduced grasses dominate the bottoms of these drainages, and include Bermuda grass (*Cynodon dactylon*) and rabbitsfoot grass (*Polypogon monspeliensis*). Non-native herbs that are relatively uncommon in the grassy swales include brass buttons (*Cotula coronopifolia*) and dock (*Rumex* spp.). Small marshy areas in the low parts of these two drainages have the above species as well as the native herbaceous species southern cattail (*Typha domingensis*) and prairie bulrush (*Scirpus maritimus*). Isolated trees of arroyo willow (*Salix lasiolepis*) and elderberry (*Sambucus mexicana*) also occur in these drainages. The westernmost drainage, Cañada de Guillermo, has a broken canopy cover of relatively mature riparian trees including western sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*). Cattle grazing also has occurred here, and the understory is sparse.

3. RARE PLANT SPECIES

Typically, spring and summer would be the appropriate seasons for conducting rare plant surveys, and if possible, the parcel should be surveyed again during these seasons. In general, however, appropriate habitat for sensitive species is lacking on the parcel, and the high level of disturbance from cattle grazing precludes the likelihood of rare plants occurring at the site.

Rare plants that potentially could be present include Gaviota tarplant (*Hemizonia increscens* ssp. *villosa*), a federally endangered species, which occurs in the immediate vicinity of the site. A known reference population of tarplant on the Gaviota coast was examined before the current field surveys to check the phenology of the plants. Although November is late in the flowering season for this taxon, a few flowering and fruiting plants were present in the reference population, and it also could be identified from dead or desiccated vegetative remains. Searches were conducted on the Simon property for this species and other rare plants known to occur in the region; however, no rare species were observed during the current field surveys.

4. WILDLIFE SURVEYS

Results from wildlife surveys and a discussion of potential impacts of development on herpetofauna are presented in Appendix B. Species known to occur in the vicinity of the Simon property (reported from nearby Arroyo Hondo) are: California newt (*Taricha torosa*), California red-legged frog (*Rana aurora draytonii*), two-striped garter snake (*Thamnophis hammondii hammondii*), and southwestern pond turtle (*Clemmys marmorata pallida*). Based on a habitat assessment, the California newt and the two-striped garter snake are not expected to occur on the site. Individuals of the other two species potentially could occur on the site for short periods of time, although the probability of their occurrence is low.

Raptors observed foraging in the grasslands on the site included northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*). The most common birds observed on the Simon parcel were European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), red-winged blackbird (*Agelaius phoeniceus*),

house finch (*Carpodacus mexicanus*), and song sparrow (*Melospiza melodia*). Fourteen other bird species were observed on the site in smaller numbers.

5. WETLANDS DELINEATION

5.1 Definitions and Regulatory Framework

Currently, there are a variety of definitions of wetlands in use by different federal and state agencies. The U.S. Fish and Wildlife Service (USFWS), which developed a hierarchical classification system for wetlands, defined wetlands as follows (Cowardin *et al.*, 1979):

> *Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.*

At the state and regional levels, the California Fish and Game Commission, the California Department of Fish and Game (CDFG), the Coastal Commission, as well as Santa Barbara County, accept the USFWS definition and use it as a guide in identifying wetlands and in implementing their policies.

The U.S. Army Corps of Engineers (ACOE) is responsible for determining jurisdictional boundaries of waters of the United States, including wetlands, for regulatory and permitting purposes under Section 404 of the Clean Water Act. The ACOE normally considers waters of the United States to include perennial or intermittent streams mapped as blue-line streams by the U.S. Geological Survey (USGS) on topographical quadrangle maps, but other unmapped drainages also may qualify as jurisdictional resources. The jurisdictional limit of waters of the United States is identified by the extent of the ordinary high water mark. For delineating wetlands, the ACOE has developed a field method using a "three parameter test" that considers hydrophytic vegetation, wetland hydrology, and hydric soils. Under the ACOE definition (Environmental Laboratory, 1987), an area is considered a wetland only if all three parameters are present. Wetlands are:

> *Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.*

Information about the nature and extent of jurisdictional wetland resources identified in this survey report and additional supporting data will provide regulatory agencies such as the ACOE, CDFG, and Santa Barbara County with the necessary background information required for planning and permitting decisions concerning this project.

5.2 Methods

Five sampling stations were established on the Simon property in different topographical zones and species associations within potential wetland areas. The ACOE routine onsite method of wetland determination was used to confirm and document the presence or absence of jurisdictional wetland resources. A soil pit up to 16 inches deep was dug at each station, and field indicators for the three parameters of hydrophytic vegetation, wetland hydrology, and hydric soils were examined. Following ACOE methodology, hydrophytic vegetation is indicated when more than 50 percent of the dominant species at a station are obligate wetland (OBL), facultative wetland (FACW), or facultative species (FAC; Reed, 1988). Wetland hydrology typically is indicated when soils are inundated or saturated within 12 inches of the surface for at least 18 days during the growing season. Other wetland hydrology indicators include physical evidence of such conditions, indicated by the presence of water lines impressed on the bank, shelving, water marks or stains, drift lines (destruction or flattening of vegetation, litter and debris deposition), sediment deposits such as algal mats, and mudcracks. Hydric soils are indicated by the presence of one of the various indicators below the A horizon or 10 inches: a soil chroma of 2 or less in mottled soils, or 1 or less in unmottled soils (Munsell Color, 1990); the presence of sulfidic material or odors; and the presence of organic material. In addition to field indicators, the soil series and subgroup were noted (U.S. Department of Agriculture, 1981), as was inclusion of the soil on the 1992 List of Hydric Soils for Santa Barbara County.

Wetland boundaries were delineated in the field using results from the five sampling stations. The ACOE jurisdictional boundaries were determined on the basis of qualification as waters of the United States, as well as wetlands, satisfying the three criteria of vegetation, hydrology, and soils. The Cowardin (USFWS/CDFG) boundaries were delineated based on the positive evidence of at least one of the three wetland parameters. Where riparian vegetation occurs, this boundary was defined by the extent of the riparian canopy; in the absence of riparian vegetation, the boundary was determined by the presence of a watercourse. For the Simon property, wetland boundaries based on the ACOE and Cowardin definitions coincide for the majority of the site, and are characterized in most areas by distinct topographical changes.

5.3 Results

The primary soil types mapped for the parcel are Ayar clay, 15 to 30 percent slopes, eroded (AhE2); Ayar clay, 30 to 50 percent slopes, eroded (AhF2); and Diablo clay, 15 to 30 percent slopes, eroded (DaE2). The Ayar clays are well-drained soils with slow permeability, and are subject to landslides. They are found in foothill areas, and natural vegetation consists of annual grasses, forbs, and occasional sagebrush. The Diablo clays also are well-drained soils with slow permeability. They occur on low coastal hills, and natural vegetation consists of annual grasses, forbs, and scattered oaks (U.S. Department of Agriculture, 1981). None of these soils is listed as a hydric soil.

Of the three intermittent drainages present on the site, the easternmost Cañada de la Gallina and the westernmost Cañada de Guillermo are marked as blue-line streams on the USGS topographical map

(Gaviota quadrangle); therefore, they would qualify as jurisdictional resources. The unnamed drainage in the west-central part of the parcel is not marked as a blue-line stream. The parcel was surveyed a few days after a rainy period, and seasonal flooding has resulted in water ponding in some places in the drainages, up to a depth of about 5 inches.

An artificial earthen dam in the northernmost part of Cañada de la Gallina has created a stock pond for cattle that has open water and very little emergent vegetation. No sampling station was established here, but since this pond is a result of damming of a natural tributary, it is a jurisdictional wetland resource, qualifying as ACOE waters of the United States and as CDFG streambeds. Sampling stations also were not established in a second artificial pond adjacent to the northern part of Cañada de Guillermo. This pond appears to have been landscaped, is surrounded by a fence, and has large rocks and concrete placed at its edges. Although it has open water and emergent vegetation dominated by southern cattail (*Typha domingensis*), it was not investigated further because it appears to have been created by the neighboring property owner and lies primarily on that parcel. Since it is artificial and does not function as an impoundment of Cañada de Guillermo within its channel, this pond does not qualify as a jurisdictional resource.

Normal circumstances exist on the site, and no problem areas or atypical situations for wetlands delineation were encountered (Environmental Laboratory, 1987). Results from investigating the three wetland parameters (vegetation, hydrology, and soils) at each sampling station are described below. Data forms for wetlands delineation, photographs of the sampling stations, and maps of jurisdictional resources are presented in Appendix C.

Sampling Station SS-1. This station was located in the northern part of the unnamed drainage in the west-central part of the site. The grassy swale was dominated by rabbitsfoot grass (*Polypogon monspeliensis*) and Bermuda grass (*Cynodon dactylon*); isolated arroyo willow (*Salix lasiolepis*) trees also were present. The hydrophytic vegetation criterion was met. Wetland hydrology was indicated by the presence of ponded water about 1 inch deep. The clay soils had a matrix chroma of 1 and therefore were hydric. Station SS-1 qualifies as ACOE and USFWS wetlands, and as CDFG wetlands and streambeds.

Sampling Station SS-2. This sampling station was established in the southern part of the unnamed drainage in the west-central part of the parcel. Vegetation comprised primarily the marsh species southern cattail (*Typha domingensis*) and prairie bulrush (*Scirpus maritimus*); Bermuda grass (*Cynodon dactylon*) and rabbitsfoot grass (*Polypogon monspeliensis*) also were present. The hydrophytic vegetation criterion was met. Wetland hydrology was indicated by the presence of ponded water about 2 inches deep. The clay soils were hydric, with a matrix chroma of 0. Sampling Station SS-2 qualifies as ACOE and USFWS wetlands, and as CDFG wetlands and streambeds.

Sampling Station SS-3. This station was located in the northern part of Cañada de la Gallina in the eastern part of the site. The grassy swale was dominated by rabbitsfoot grass (*Polypogon monspeliensis*) and Bermuda grass (*Cynodon dactylon*), satisfying the hydrophytic vegetation criterion. Wetland

hydrology also was present, indicated by ponded water about 1 inch deep. The silty clay soils had a matrix chroma of 0 and therefore were hydric; organic matter and roots also were present in the soil. Station SS-3 qualifies as ACOE and USFWS wetlands, and as CDFG wetlands and streambeds.

Sampling Station SS-4. This station was located in the southern part of Cañada de la Gallina in the eastern part of the site. A small clump of prairie bulrush (*Scirpus maritimus*) occurred at this station; other species were brass buttons (*Cotula coronopifolia*) and Bermuda grass (*Cynodon dactylon*). Isolated trees of elderberry (*Sambucus mexicana*) also were present. The hydrophytic vegetation criterion was met. Wetland hydrology was indicated by the presence of ponded water about 2 inches deep. The clay soils had a matrix chroma of 1 and were mottled, and therefore were hydric. Station SS-4 qualifies as ACOE and USFWS wetlands, and as CDFG wetlands and streambeds.

Sampling Station SS-5. This station was located in the southern part of Cañada de Guillermo near the western boundary of the site. Overstory vegetation consists of western sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*); the understory contains some rabbitsfoot grass (*Polypogon monspeliensis*). The hydrophytic vegetation criterion was satisfied. Pools of water a few inches deep occur in places in the rocky streambed; wetland hydrology also is indicated by the presence of debris deposits, banks, and shelving. The sandy riverwash soils had cobbles and were too rocky to dig; hydric soils could not be confirmed. Station SS-5 qualifies as ACOE waters of the United States, as USFWS wetlands, and as CDFG wetlands and streambeds.

6. CONCLUSIONS AND RECOMMENDATIONS

The construction of a single-family dwelling and access roads into the parcel would not result in significant impacts to botanical resources on the parcel. Intensive cattle grazing has created a high level of disturbance. Although native shrub communities occur north of the parcel and likely occurred on the parcel in the past, the disturbance from grazing has destroyed most native vegetation and may well have resulted in the introduction and proliferation of weedy species. Most of the parcel, including both upland and wetland habitats, is composed of non-native grasses and weeds, which have minimal habitat value. Development on the parcel likely would preclude grazing or reduce the level of intensity of grazing; this may help the recovery of native plants and aid to improve habitat quality on the parcel.

The wetland swales found on the Simon property also have been disturbed by cattle grazing and are degraded, with minimal habitat value. With the exception of small marshy areas with native species, the drainages have a minimal cover of native plants, and mostly are degraded by the introduced perennial Bermuda grass (*Cynodon dactylon*). This species often is cultivated for lawns, and spreads rapidly in moist disturbed places. If removal of the non-native Bermuda grass (*Cynodon dactylon*) occurs during development, this would not be considered to be an adverse impact even though it qualifies as hydrophytic vegetation; in fact, it could be considered beneficial.

Since very few native habitats remain on the parcel, it would be advisable to design development to avoid impacts to the native riparian sycamore-oak woodland in Cañada de Guillermo and to the small marshy areas in the other drainages. Currently, impacts are not anticipated to occur to the woodland, since no development is planned for that area of the parcel.

New impacts to jurisdictional wetland resources on this site can be avoided by routing the access road into the parcel at the existing crossing over the unnamed drainage. If necessary, this crossing could be widened, but only to the minimum extent necessary, and the culvert under it could be replaced with a larger culvert to carry higher storm flows and prevent washouts. Using or enhancing the existing crossing would minimize wetland impacts, and would help to avoid new direct impacts or fill in jurisdictional wetland resources elsewhere in the parcel. The Biological Resources Guidelines of the Santa Barbara County Environmental Thresholds and Guidelines Manual (Santa Barbara County, 1994) call for a setback to be maintained between developed areas and wetlands. Suggested setbacks vary from 50 feet for riparian habitats to 100 to 250 feet for vernal pools or complexes. Since the wetlands that occur on the site are not vernal pools and have minimal habitat value, there appears to be sufficient area available to develop and to provide access roads into the site without resulting in significant impacts to wetlands.

7. REFERENCES

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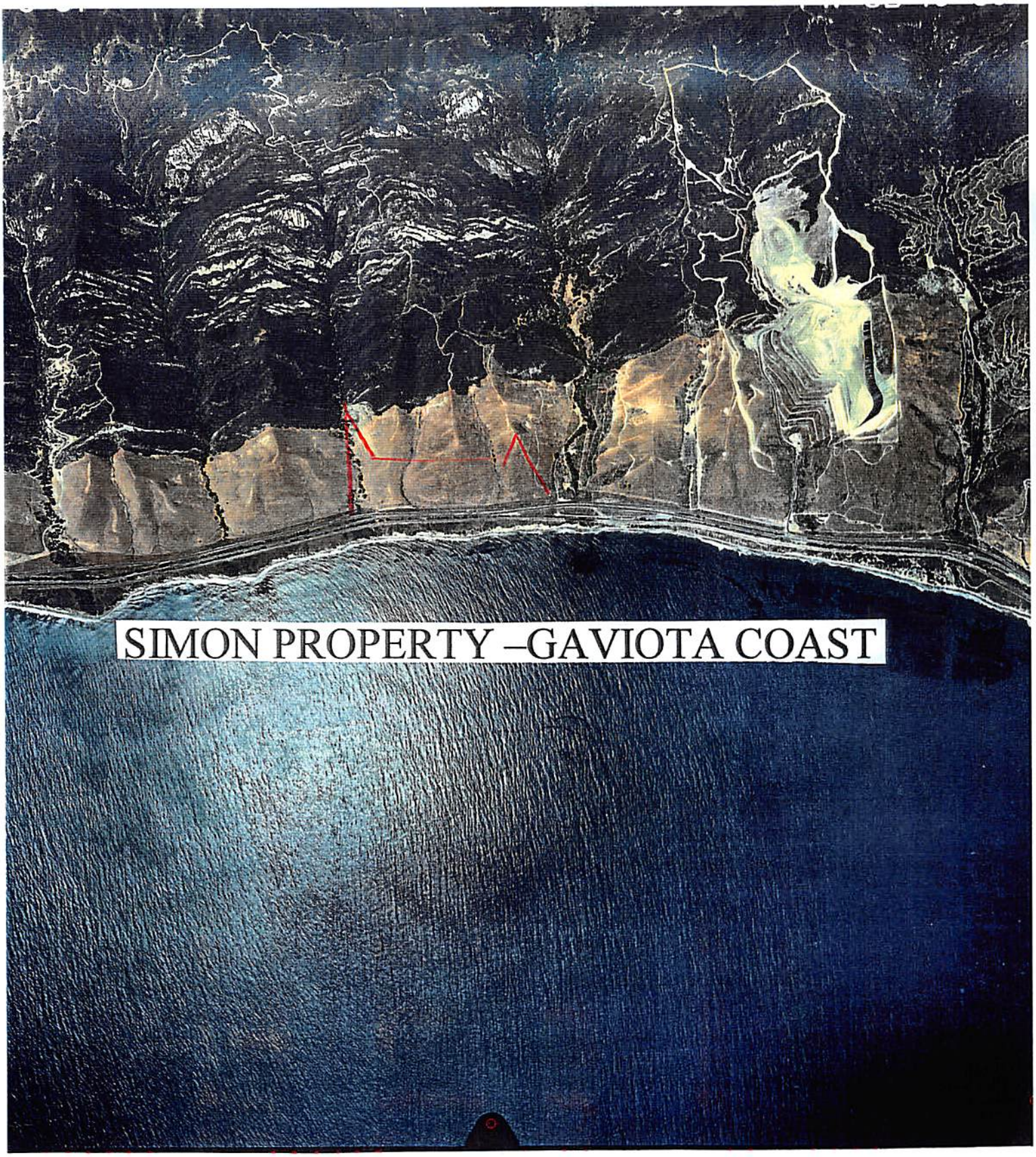
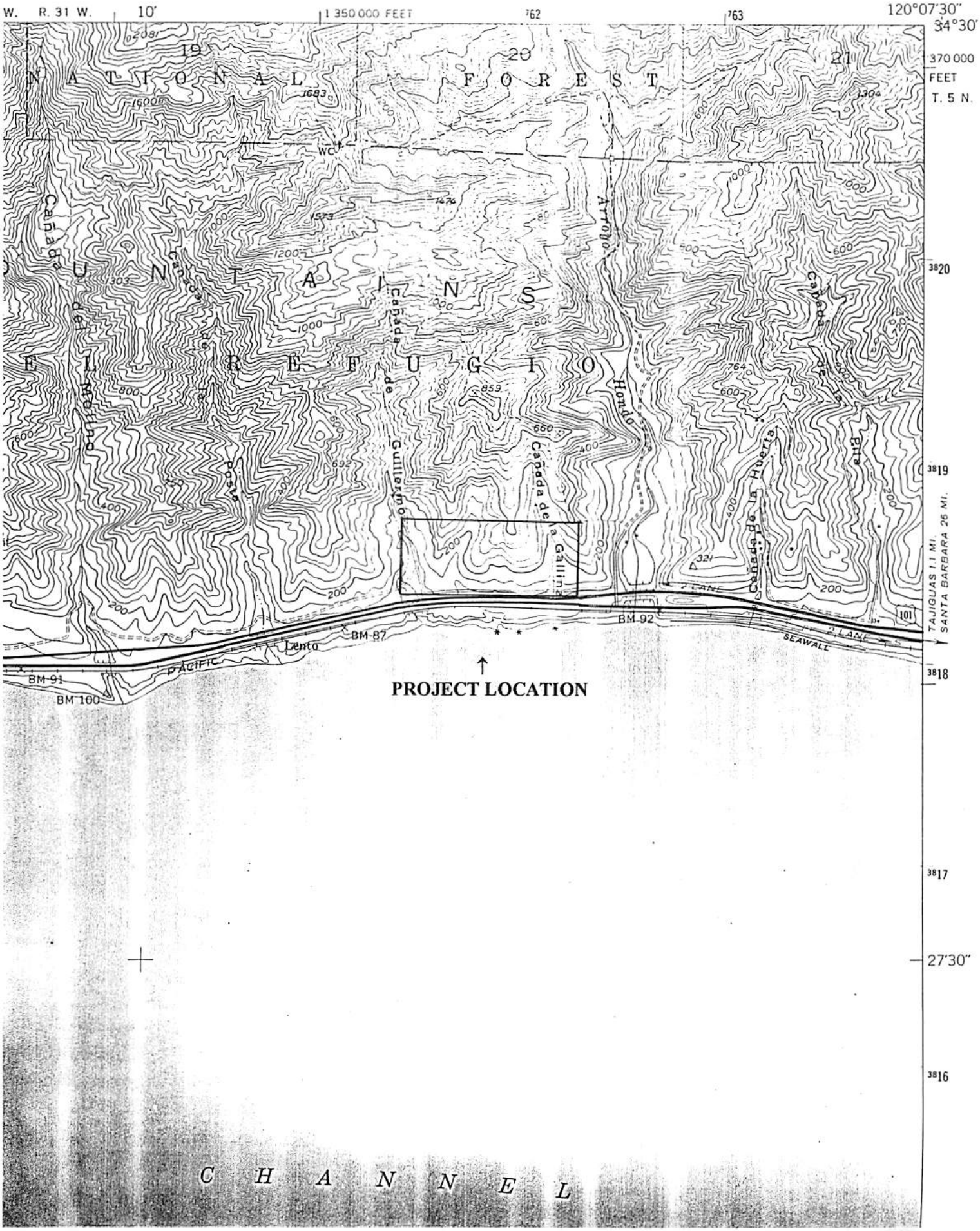
APPENDIX A

VICINITY AND SITE MAPS

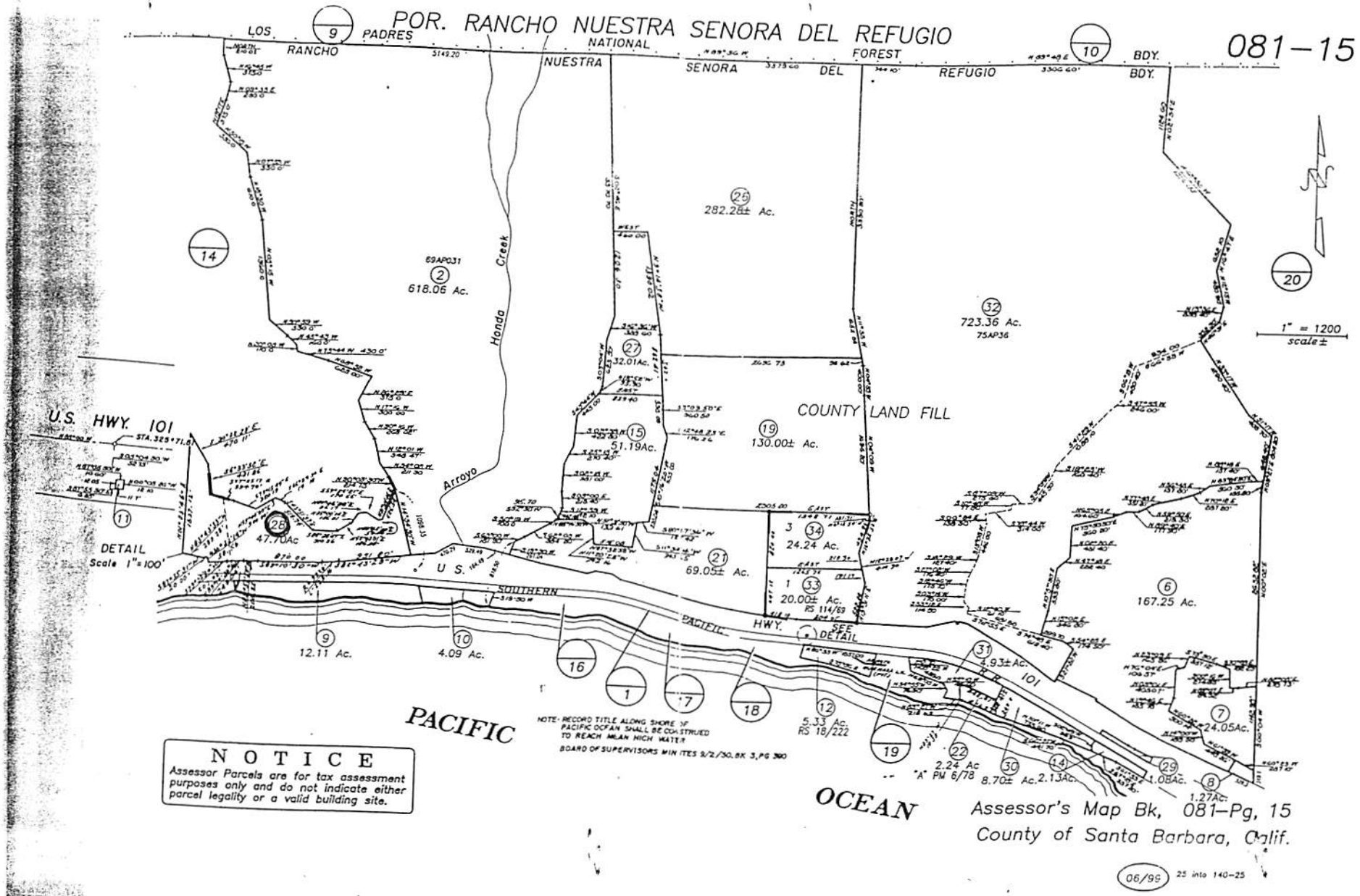

SIMON PROPERTY –GAVIOTA COAST

GAVIOTA QUADRANGLE
CALIFORNIA-SANTA BARBARA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

1953 II SE
(SANTA YNEZ)



PROJECT LOCATION


POR. RANCHO NUESTRA SENORA DEL REFUGIO
081-15
LOS PADRES NATIONAL FOREST BDY.
RANCHO NUESTRA SENORA DEL REFUGIO BDY.
9
10
14
20
69AP031
2
618.06 Ac.
Honda Creek
Arroyo
26
282.28± Ac.
32
723.36 Ac.
75AP36
27
32.01Ac.
15
51.19Ac.
19
130.00± Ac.
COUNTY LAND FILL
U.S. HWY. 101
STA. 325+71.0
11
DETAIL
Scale 1"=100'
25
47.70Ac
21
69.05± Ac.
34
24.24 Ac.
33
20.00± Ac.
RS 114/69
6
167.25 Ac.
1" = 1200
scale±
U.S. HWY. 101
SOUTHERN PACIFIC
SEE DETAIL
9
12.11 Ac.
10
4.09 Ac.
16
1
17
18
12
5.33 Ac.
RS 18/222
19
31
4.93±Ac.
22
2.24 Ac
"A" PM 6/78
30
8.70± Ac.
14
2.13Ac.
29
1.08Ac.
8
1.27Ac.
7
24.05Ac.
PACIFIC OCEAN
NOTE- RECORD TITLE ALONG SHORE OF PACIFIC OCEAN SHALL BE CONSTRUED TO REACH MEAN HIGH WATER
BOARD OF SUPERVISORS MIN ITES 9/2/50. BK 3, PG 390
NOTICE
Assessor Parcels are for tax assessment purposes only and do not indicate either parcel legality or a valid building site.
Assessor's Map Bk, 081-Pg, 15
County of Santa Barbara, Calif.
06/99
25 into 140-25

APPENDIX B

WILDLIFE SURVEYS

AMPHIBIAN AND AQUATIC REPTILE HABITAT ASSESSMENT SIMON PROPERTY COASTAL SANTA BARBARA COUNTY

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November 14, 2000

1.0 INTRODUCTION

The project involves a proposed residential site and road access along the Gaviota Coast in Santa Barbara County, California. Specifically, the project site is north of State Highway 101 between Cañada de Guillermo to the west and Cañada de la Gallina to the east. It is my understanding that the residential site will be in annual grassland that has been grazed heavily for a number of years. Current access to the project site is via an existing dirt road that crosses an unnamed intermittent drainage between the two intermittent drainages referenced above. Future access to the residence will require crossing the unnamed drainage. That will likely be accomplished by upgrading the existing dirt road, but could possibly involve the creation of a new crossing elsewhere along the drainage.

There was concern for the potential occurrence of several sensitive species of amphibians and aquatic reptiles in the unnamed drainage due to its proximity to Cañada de Guillermo and Cañada de la Gallina. In addition, Arroyo Hondo is within one-half mile of the project site. The species with known occurrence in the vicinity of the project site are:

- California newt (*Taricha torosa*) – California Species of Special Concern
- California red-legged frog (*Rana aurora draytonii*) – Federal-listed threatened species
- Two-striped garter snake (*Thamnophis hammondii hammondii*) – California Species of Special Concern
- Southwestern pond turtle (*Clemmys marmorata pallida*) – California Species of Special Concern

All four species have been reported from nearby Arroyo Hondo.

2.0 METHODS

Wildlife biologist Tom Olson of Thomas Olson Biological Consulting accompanied Nathan Gale to the site on November 10, 2000. Mr. Olson has conducted habitat assessments and protocol-level surveys for the four species listed above at numerous locations in the past 15 years. Since 1995, he has surveyed for California red-legged frog, two-striped garter snake, and southwestern pond turtle at more than 25 project sites in Santa Barbara, San Luis Obispo, and Monterey counties.

The habitat was evaluated in the unnamed drainage through which access to the residential site will be affected. Four other areas were also evaluated for suitability of habitat for sensitive herpetofauna (amphibians and reptiles). The objective of evaluating the habitats nearby was to determine if sensitive herpetofauna could potentially disperse to the project site from adjacent areas. Those locations included lower portions of Cañada de Guillermo and Cañada de la Gallina, and one manmade pond on each of the cañadas. The habitat assessment was completed during the day. No nocturnal surveys or other protocol-level surveys were conducted.

3.0 DESCRIPTION OF PROJECT SITE AND ADJACENT AREAS

3.1 Project Site

The site of the proposed residence is located in non-native annual grassland. The surrounding area is comprised of mostly the same habitat with a few scattered elements of degraded coastal sage scrub. Characteristic plants in the degraded coastal sage scrub are California sagebrush (*Artemisia californica*) and coastal goldenbush (*Isocoma menziesii*).

The access to the site will need to cross an unnamed intermittent drainage that does not appear on the USGS quadrangle. As described above, a dirt road across the drainage exists. The vegetation in the drainage is dominated by Bermuda grass (*Cynodon dactylon*) with some rabbitsfoot grass (*Polypogon monspeliensis*) also present. On November 10, 2000, there was 2- to 3-inch-deep water in the bottom of the drainage. From the marshy appearance of the drainage bottom, it appears that some surface water may be present year-round. This drainage is subject to intensive cattle grazing and trampling, as exhibited by a general lack of vegetation and a multitude of hoof prints in the mud of the drainage bottom.

There is very little cover in the drainage. The vegetation is very short due to grazing. There are no undercut stream banks or overhanging trees or shrubs to provide cover for amphibians such as red-legged frogs. The best cover is just upgradient of the existing dirt road where a patch of southern cattails (*Typha domingensis*), about 35 feet by 10 feet, occurs.

3.2 Nearby Areas

3.2.1 Cañada de la Gallina

This intermittent drainage is east of the project site. Similar to the unnamed drainage at the project site, Cañada de la Gallina has been grazed intensively by cattle. Little vegetative cover remains either in the drainage bottom, or on the banks. The most suitable habitat is located at a large elderberry shrub (*Sambucus mexicana*) in the drainage bottom. There is a small pool of water at this location. The depth of the water on November 10, 2000 was 3 to 4 inches. The elderberry shrub provides some cover, and also restricts access by cattle for a small area, allowing other vegetation underneath to remain. Just upgradient from the elderberry shrub is a stand of prairie bulrush (*Scirpus maritimus*), approximately 25 feet by 5 feet, that comprises potential cover for herpetofauna.

3.2.2 Manmade Pond Along Cañada de la Gallina

The pond was established by damming a portion of Cañada de la Gallina adjacent to the northern property boundary. Cover that could be used by herpetofauna is lacking. There is virtually no emergent vegetation around the pond. The margins of the pond are quite

uniform with no overhanging banks. Cattle use the pond for watering and the effects of trampling (multiple hoof prints and turbid water) are apparent. Small patches of arroyo willows (*Salix lasiolepis*) occur about 30 feet upgradient of the pond, providing possible cover for amphibians. However, that portion of Cañada de la Gallina does not retain surface water for long periods of time.

3.2.3 Cañada de Guillermo

This is an intermittent drainage at the western edge of the property. Most of Cañada de Guillermo is actually off the property to the west. There is better developed riparian vegetation in this drainage than in Cañada de la Gallina. Large sycamores (*Platanus racemosa*) and coast live oaks (*Quercus agrifolia*) occur in and near the drainage. Intensive grazing by cattle has removed much of the vegetation in the lower strata. This drainage has some features, such as overhanging banks and exposed tree roots that are potential cover sites for herpetofauna. At the time of this survey, there were several small pools of water (up to 6 inches deep), however, this drainage does not have year-round surface water.

3.2.4 Manmade Pond Along Cañada de Guillermo

This improved manmade pond has concrete and rocks placed at the margins and contains a large, dense stand of cattails. It is considerably larger and deeper than the pond along Cañada de la Gallina. This pond has potential for sensitive herp species, particularly red-legged frog and southwestern pond turtle.

4.0 CONCLUSIONS ABOUT POTENTIAL OCCURRENCE OF SENSITIVE HERP SPECIES

4.1 California Newt

California newts prefer coastal streams with exposed bedrock pools. The project site does not include drainages or streams with bedrock habitat. As such, this species is not expected to occur on the project site.

4.2 California red-legged Frog

California red-legged frogs occur in streams, drainages, and ponds. Generally, only those habitats with perennial surface water contain breeding populations of red-legged frogs. The water is normally 2.5 feet or more deep. Frogs are able to utilize some streams that are not perennial by taking refuge in vegetation and leaves on the ground, or in small mammal burrows during periods without surface water. More marginal habitats may also be used by non-breeding segments of red-legged frog populations. For example, dispersing subadult frogs have been observed in ponds and streams that lacked vegetation and other forms of cover. Another example is adult and subadult frogs that use marshy areas with minimal surface water (depths of 6 inches or less) during non-breeding times

APPENDIX C

DATA FORMS, PHOTODOCUMENTATION, AND MAPS FOR WETLANDS DELINEATION

5.0 RECOMMENDATIONS

Because California newts and two-striped garter snakes are not expected to occur onsite, further surveys for those two species are not considered to be necessary.

Although unlikely, a few individuals of California red-legged frog and/or southwestern pond turtle could potentially occur for short periods of time. As such, a combination of pre-construction surveys and erosion-control measures should be utilized. Because the occurrence of red-legged frogs and pond turtles is quite unlikely, protocol-level surveys for the two species does not seem to be warranted. However, an abbreviated version of surveys should be considered. A combination of one day and one night survey should be conducted. During the day, a biologist familiar with these two species could further describe the habitat at and near the precise location of the crossing. The crossing should be marked in the field with stakes prior to the start of the pre-construction survey. The biologist would also look for individuals of either species. The focus of the night survey would be to locate California red-legged frogs. If no California red-legged frogs or southwestern pond turtles are found, then erosion-control measures such as those below should be implemented. If either red-legged frogs or southwestern pond turtles are found, representatives of the U.S. Fish and Wildlife Service and the California Department of Fish and Game should be contacted and additional measures (such as monitoring during construction) should be developed.

Regardless of where the access road to the residence crosses the unnamed drainage, potential impacts to the drainage are likely to be quite limited, provided that adequate erosion control measures are implemented. If possible, the existing dirt road should be upgraded to create the access for the residence, rather than building a new access. Work on the access road should not be allowed during the rainy season. Silt fencing and straw bales should be used, as appropriate, to keep silt and sedimentation from entering the unnamed drainage and its marshy areas.

of the year. Such situations have been observed along Corral Creek, within 10 miles of the project site (T. Olson, personal observation).

The project site does not include breeding habitat for California red-legged frogs. This is particularly true for the unnamed drainage through which access to the proposed residence would be established. The drainage lacks perennial pools of water with a depth of at least 2.5 feet. Of the four nearby areas surveyed (Cañada de la Gallina, Cañada de Guillermo, and two manmade ponds), only the pond along Cañada de Guillermo appears to have the potential for a breeding population of red-legged frogs. However, the suitability of that pond may be reduced if bullfrogs (*Rana catesbeiana*) are present, or if the fish stocked for fly fishing (presumably salmonids) prey on red-legged frogs.

It is unlikely, but possible that the unnamed drainage could be used by a small number of red-legged frogs in non-breeding situations similar to those described above. Known breeding populations occur within one-half mile of the site in Arroyo Hondo. Subadults could potentially disperse to Cañada de la Gallina, Cañada de Guillermo, and the ponds along each. From there, dispersing individuals could also use marshy areas with minimal surface water in the unnamed drainage.

4.3 Two-striped Garter Snake

This species utilizes habitats similar to those described for California red-legged frogs. Generally, two-striped garter snakes rely on more structural cover (exposed roots, rocks, crevices, undercut banks) than do red-legged frogs. This species is sometimes found in upland areas and may disperse from one aquatic habitat to another. Because it is known from Arroyo Hondo, it is possible that this species could occur in the unnamed drainage at the project site. However, because of the very marginal quality of habitat in and near the project site, two-striped garter snakes are not expected.

4.4 Southwestern Pond Turtle

This species also uses ponds and pools of water in streams and drainages. The habitat differs somewhat from that of red-legged frogs in that pond turtles prefer more areas open to the sun with objects (rocks, logs, dense emergent vegetation) that extend above the surface of the water. Such sites are used by pond turtles for basking. This species is known to disperse over upland areas and utilize sub-optimal habitat, including marshy areas with minimal surface water and even sewage treatment ponds (T. Olson, personal observations).

This species could be found in the two ponds, particularly the larger pond on Cañada de Guillermo. Although unlikely, pond turtles could disperse from the ponds and/or from Arroyo Hondo to the marshy areas along the unnamed drainage and Cañada de la Gallina. If that type of use occurred, it would be by a limited number of individuals for short periods of time.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gaviota Coast APN 081-15-28 Applicant/Owner: Dick Simon Investigator: Anuja Parikh, Nathan Gale	Date: Nov 2, '00 County: Santa Barbara State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Sycamore-Oak woodland Transect ID: Plot ID: SS-5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Platanus racemosa	T	FACW	9.		
2. Polypogon monspeliensis	H	FACW+	10.		
3. Quercus agrifolia	T	UPL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). >50%

Remarks: Hydrophytic vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: pools 2 (in.)

Depth to Free Water in Pit: N/A (in.)

Depth to Saturated Soil: N/A (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water-Marks
- X Drift Lines
- X Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology present, rocky streambed, debris deposits, banks, shelving + channel present.

SOILS

Map Unit Name
(Series and Phase): AhE2 Ayar clay, 15-30% slopes, eroded

Drainage Class: well-drained

Field Observations
Confirm Mapped Type? Yes (No)

Taxonomy (Subgroup): Typic Chromoxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Soil too rocky to dig					sandy riverwash
surface layer		2.5Y 3/2, no mottles			with cobbles

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils not confirmed

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	Yes (No)	
Is this Sampling Point Within a Wetland?	Yes (No)	(Circle)

Remarks: Sample station is in ACOE waters of the U.S., and in USFWS wetlands and in CDFG wetlands & streambeds

Approved by HQUSACE 3/92

Anuja K. Parikh, PWS 841
Nathan Gale, PWS 1216

SOILS

Map Unit Name (Series and Phase): AhEz Ayar clay, 15-30% slopes, eroded

Drainage Class: well-drained

Taxonomy (Subgroup): Typic Chromoxererts

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Soil too rocky to dig					sandy riverwash
surface layer		2.5Y 3/2, no mottles			with cobbles.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils not confirmed

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	Yes (No)	
		(Circle)
		Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Sample station is in ACOE waters of the U.S., and in USFWS wetlands and in CDFG wetlands & streambed

Approved by HQUSACE 3/92

Anuja K. Parikh, PWS 841

Nathan Gale, PWS 1216

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gaviota Coast APN 081-15-28 Applicant/Owner: Dick Simon Investigator: Anuja Parikh Nathan Gale	Date: Nov 2, 00 County: Santa Barbara State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: grassy swale Transect ID: ____ Plot ID: SS-1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Polygonum monspeliensis	H	FACW+	9.		
2. Cynodon dactylon	H	FAC	10.		
3. Salix lasiolepis	T	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). > 50%

Remarks: Hydrophytic vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

x No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: N/A (in.)

Depth to Saturated Soil: N/A (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- x Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology present

SOILS

Map Unit Name (Series and Phase): AhF2 Ayar clay, 30-50% slopes eroded

Drainage Class: well-drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): Typic Chromoxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1"		2.5Y 3/3			clay
1-16"= pit bottom		5Y 3/1			clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils present, chroma 1

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample Station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands + streambeds

Approved by HQUSACE 3/92

Annie K. Pannell, PWS 841

Walter Gile, PWS 1216

SOILS

Map Unit Name (Series and Phase): AhE2 Ayar clay, 15-30% slopes, eroded

Drainage Class: well-drained

Taxonomy (Subgroup): Typic Chromoxererts

Field Observations Confirm Mapped Type? Yes (No)

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Soil too rocky to dig					sandy riverwash
surface layer		2.5Y 3/2, no mottles			with cobbles

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils not confirmed

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	Yes (No)	

(Circle)

Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Sample station is in ACOE waters of the U.S., and in USFWS wetland and in CDFG wetlands & streambed

Approved by HQUSACE 3/92

Anuja K. Parikh, PWS 841

Nathan Gale, PWS 1216

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gaviota Coast APN 081-15-28 Applicant/Owner: Dick Simon Investigator: Anuja Parikh Nathan Gale	Date: Nov 2, 00 County: Santa Barbara State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: marsh Transect ID: ____ Plot ID: SS-2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Typha domingensis	H	OBL	9.		
2. Scirpus maritimus	H	OBL	10.		
3. Cynodon dactylon	H	FAC	11.		
4. Polypogon monspeliensis	H	FACW+	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). >50%

Remarks: Hydrophytic vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)

Depth to Free Water in Pit: N/A (in.)

Depth to Saturated Soil: N/A (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: wetland hydrology present

SOILS

Map Unit Name (Series and Phase): AhF2 Ayar clay, 30-50% slopes, eroded

Drainage Class: well-drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): Typic Chromoxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1"		2.5Y 4/3			clay
1-16" = pit bottom		2.5Y 3/0			clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils present, chroma 0

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands + streambeds

Approved by HQUSACE 3/92

Renée K. Parrish PWS 841
Nathan Gale, PWS 1216

SOILS

Map Unit Name (Series and Phase): AhF2 Ayarday, 30-50% slopes, eroded

Drainage Class: well-drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): Typic Chromoxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1"		2.5Y 4/3			clay
1-16" = pit bottom		2.5Y 3/0			clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils present, chroma 0

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (Yes) No

(Circle)
Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands + streambeds

Approved by HQUSACE 3/92

Rennie K. Parrish PWS 841
Nathan Gale, PWS 1216

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gaviota Coast APN 081-15-28 Applicant/Owner: Dick Simon Investigator: Anuja Parikh; Nathan Gale	Date: Nov 2, '00 County: Santa Barbara State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: grassy swale Transect ID: ____ Plot ID: SS-3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Cynodon dactylon	H	FAC	9.		
2. Polygonum monspeliensis	H	FACW+	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). >50%

Remarks: Hydrophytic vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)

Depth to Free Water in Pit: N/A (in.)

Depth to Saturated Soil: N/A (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: Wetland hydrology present

SOILS

Map Unit Name (Series and Phase): AhF2 Ayar clay 30-50% slopes, eroded

Drainage Class: well-drained

Taxonomy (Subgroup): Typic Chromoverts

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2"		2.5Y 4/2			clay
2-16"- pit bottom		2.5Y 3/0			silty clay
					organic matter/roots
					present in soil layers

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils present, chroma 0

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands + streambeds

Approved by HQUSACE 3/92

Dennis K. Parrish, PWS 841

Nathan Gale, PWS 1216

SOILS

Map Unit Name (Series and Phase): AhFz Ayar clay 30-50% slopes, eroded

Drainage Class: well-drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): Typic Chromoverts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-2"		2.5Y 4/2			clay
2-16"- pit bottom		2.5Y 3/0			silty clay
					organic matter/roots
					present in soil layers

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- X Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric soils present, chroma 0

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands + streambeds

Approved by HQUSACE 3/92

Dennis K. Parrish, PWS 841

Nathan Gale, PWS 1216

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Gaviota Coast APN 081-15-28 Applicant/Owner: Dick Simon Investigator: Anuja Parikh Nathan Gale	Date: Nov 2, '00 County: Santa Barbara State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: marsh Transect ID: Plot ID: SS-4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Scirpus maritimus	H	OBL	9.		
2. Cotula coronopifolia	H	FACW+	10.		
3. Sambucus mexicana	T	FAC	11.		
4. Cynodon dactylon	H	FAC	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). >50%

Remarks: Hydrophytic vegetation present

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: 2 (in.)

Depth to Free Water in Pit: N/A (in.)

Depth to Saturated Soil: N/A (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- X Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: wetland hydrology present

SOILS

Map Unit Name (Series and Phase): DaE2 Diablo clay 15-30% slopes, eroded

Drainage Class: well-drained

Taxonomy (Subgroup): Chromic Pelloxererts

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast size	Texture, Concretions, Structure, etc.
0-2"		2.5Y 4/2			clay
2"-16" = pit bottom		5Y 2.5/1	7.5YR 3/4	few medium distinct	clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Hydric Soils present, chroma 1 with mottles

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands and streambeds

Approved by HQUSACE 3/92

Bruce K. Pandell, PWS 841

Nathan Gale, PWS 1216

SOILS

Map Unit Name (Series and Phase): DaE2 Diablo clay 15-30% slopes eroded

Drainage Class: well-drained

Field Observations Confirm Mapped Type? (Yes) No

Taxonomy (Subgroup): Chromic Pelloxererts

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
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Remarks: Hydric Soils present, chroma 1 with mottles

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No	(Circle)
Wetland Hydrology Present?	(Yes) No	
Hydric Soils Present?	(Yes) No	

(Circle)

Is this Sampling Point Within a Wetland? (Yes) No

Remarks: Sample station is in ACOE wetlands and in USFWS wetlands and in CDFG wetlands and streambeds

Approved by HQUSACE 3/92

Dennis K. Randall, PWS 841

Nathan Gale, PWS 1216

Photo 1: Sampling Station SS-1, northern part of the unnamed drainage

Photo 2: Sampling Station SS-2, southern part of the unnamed drainage

Photo 3: Sampling Station SS-3, northern part of Cañada de la Gallina

Photo 4: Sampling Station SS-4, southern part of Cañada de la Gallina

Photo 5: Sampling Station SS-5, Cañada de Guillermo