State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
1416 Ninth Street
Sacramento, CA 95814

GRAY DAVIS, *Governor*

December 20, 2001

Mr. EJ Koford
CH2M HILL
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833

Re: CNACC Maps

Dear Mr. ~~Koford~~ EJ:

Enclosed are copies of the California Natural Areas Coordinating Council's (CNACC) maps of Scenic, Scientific, Recreational and Educationals Resource Areas ("Areas") and their descriptions, per your request.

I searched for such Areas on all USGS 7½' topo quads within a 30-mile radius of Rancho Seco, Sacramento County. Areas are denoted by a six-digit code. Please note that not all quads had Areas delineated on them and that I could not locate descriptions for 5 of the Areas. Please also note that in the interest of completeness, I've included topos with no Areas on them, but with occurrences of rare species (denoted by letter codes). These have certainly been updated by the California Natural Diversity Data Base, and that data set should be used instead of relying on the mapped occurrences on these quads.

Regarding the Areas themselves, they were identified in 1975 and have not been updated since then. They have been replaced by the current Signficant Natural Areas dataset, which has its own limitations currently, as we've discussed. I'm sure that there is some value in recognizing these Areas during the planning process, although more recent information would be preferable. I just don't think it's available from a single source!

If you have any questions, please call me at (916) 327-5956 or e-mail me at dhickson@dfg.ca.gov.

Sincerely,

Diana Hickson, Coordinator
Significant Natural Areas Program

Conserving California's Wildlife Since 1870

Natural Areas per CNAC

QUAD

X= NO DESCRIPTION AVAILABLE

✓030310	Carbondale
✓030970	Ione
✓030975	Irish Hill
X 031370	Mokelumne Hill
X 031370	Jackson
X 031850	Aukum
✓052155	Railroad Flat
090450	Placerville
090949	Camino
091650	Shingle Springs
091945	Shingle Springs
310470	Rocklin
340370	Galt
340375	Galt
340375	Bruceville
340430	Courtland
340430	Bruceville
341333	Carbondale
341645	Folsom
341950	Buffalo Creek
342370	Sacramento East
390212	Lodi South
390250	New Hope
390275	Lodi N
390310	New Hope
390450	Terminous
390450	Bouldin Island
390670	Holt
390670	Terminous
391370	Lockeford
391370	Lodi N
391370	New Hope
391370	Bruceville
391558	Bouldin Island
391650	Lodi N
391998	Isleton
392085	Holt
392348	Terminous
552310	Standard
X 570890	Davis
572570	Liberty Island
572570	Saxon
572570	Clarksburg
X 381370	Clements (attached to 391370)
✓340165	Folsom
✓341870	Folsom

ALL QUADS W/IN 30 mi RADIUS OF RANCHO SECO

√ = CNRCC MAP EXISTS

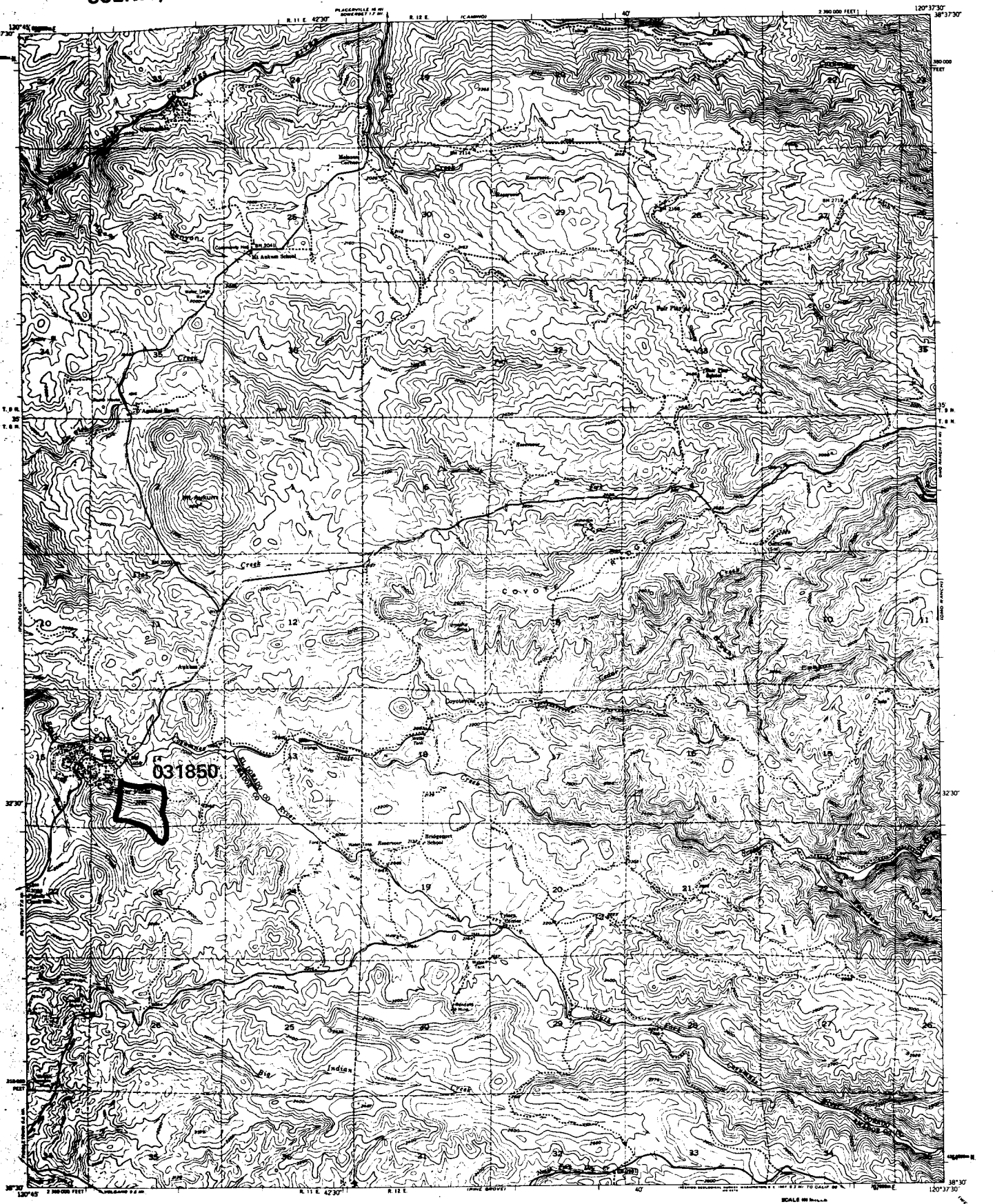
X = NO CNRCC MAP (NO SIG. AREAS ON THE QUAD)

QUADNAME	USGSCODE	Q100NAME	UTMZONE	B_M
ROSEVILLE	X 38121G3	SACRAMENTO	10	M
ROCKLIN	√ 38121G2	SACRAMENTO	10	M
PILOT HILL	√ 38121G1	SACRAMENTO	10	M
COLOMA	X 38120G8	PLACERVILLE	10	M
TAYLOR MONUMENT	X 38121F5	SACRAMENTO	10	M
RIO LINDA	√ 38121F4	SACRAMENTO	10	M
CITRUS HEIGHTS	X 38121F3	SACRAMENTO	10	M
FOLSOM	√ 38121F2	SACRAMENTO	10	M
CLARKSVILLE	√ 38121F1	SACRAMENTO	10	M
SHINGLE SPRINGS	√ 38120F8	PLACERVILLE	10	M
PLACERVILLE	√ 38120F7	PLACERVILLE	10	M
CAMINO	√ 38120F6	PLACERVILLE	10	M
DAVIS	√ 38121E6	SACRAMENTO	10	M
SACRAMENTO WEST	X 38121E5	SACRAMENTO	10	M
SACRAMENTO EAST	√ 38121E4	SACRAMENTO	10	M
CARMICHAEL	X 38121E3	SACRAMENTO	10	M
BUFFALO CREEK	√ 38121E2	SACRAMENTO	10	M
FOLSOM SE	√ 38121E1	SACRAMENTO	10	M
LATROBE	X 38120E8	PLACERVILLE	10	M
FIDDLETOWN	X 38120E7	PLACERVILLE	10	M
AUKUM	√ 38120E6	PLACERVILLE	10	M
OMO RANCH	X 38120E5	PLACERVILLE	10	M
SAXON	√ 38121D6	LODI	10	M
CLARKSBURG	√ 38121D5	LODI	10	M
FLORIN	X 38121D4	LODI	10	M
ELK GROVE	X 38121D3	LODI	10	M
SLOUGHHOUSE	X 38121D2	LODI	10	M
CARBONDALE	√ 38121D1	LODI	10	M
IRISH HILL	√ 38120D8	SAN ANDREAS	10	M
AMADOR CITY	X 38120D7	SAN ANDREAS	10	M
PINE GROVE	√ 38120D6	SAN ANDREAS	10	M
WEST POINT	√ 38120D5	SAN ANDREAS	10	M
LIBERTY ISLAND	√ 38121C6	LODI	10	M
COURTLAND	√ 38121C5	LODI	10	M
BRUCEVILLE	√ 38121C4	LODI	10	M
GALT	√ 38121C3	LODI	10	M
CLAY	X 38121C2	LODI	10	M
GOOSE CREEK	X 38121C1	LODI	10	M
IONE	√ 38120C8	SAN ANDREAS	10	M
JACKSON	√ 38120C7	SAN ANDREAS	10	M
MOKELUMNE HILL	√ 38120C6	SAN ANDREAS	10	M
RAIL ROAD FLAT	√ 38120C5	SAN ANDREAS	10	M
RIO VISTA	√ 38121B6	LODI	10	M
ISLETON	√ 38121B5	LODI	10	M
THORNTON	√ 38121B4	LODI	10	M
LODI NORTH	√ 38121B3	LODI	10	M
LOCKEFORD	√ 38121B2	LODI	10	M
CLEMENTS	√ 38121B1	LODI	10	M
WALLACE	√ 38120B8	SAN ANDREAS	10	M
VALLEY SPRINGS	√ 38120B7	SAN ANDREAS	10	M
SAN ANDREAS	√ 38120B6	SAN ANDREAS	10	M

A 1
B 2
C 3
D 4
E 5
F 6
G 7
H 8

CALAVERITAS	38120B5	SAN ANDREAS	10 M
BOULDIN ISLAND	38121A5	LODI	10 M
TERMINOUS	38121A4	LODI	10 M
LODI SOUTH	38121A3	LODI	10 M
WATERLOO	38121A2	LODI	10 M
LINDEN	38121A1	LODI	10 M
VALLEY SPRINGS SW	38120A8	SAN ANDREAS	10 M
JENNY LIND	38120A7	SAN ANDREAS	10 M
SALT SPRING VALLEY	38120A6	SAN ANDREAS	10 M
HOLT	37121H4	STOCKTON	10 M
STOCKTON WEST	37121H3	STOCKTON	10 M
STOCKTON EAST	37121H2	STOCKTON	10 M
PETERS	37121H1	STOCKTON	10 M
FARMINGTON	37120H8	OAKDALE	10 M
BACHELOR VALLEY	37120H7	OAKDALE	10 M

ENVIRONMENTAL DATA NOTEBOOK –
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



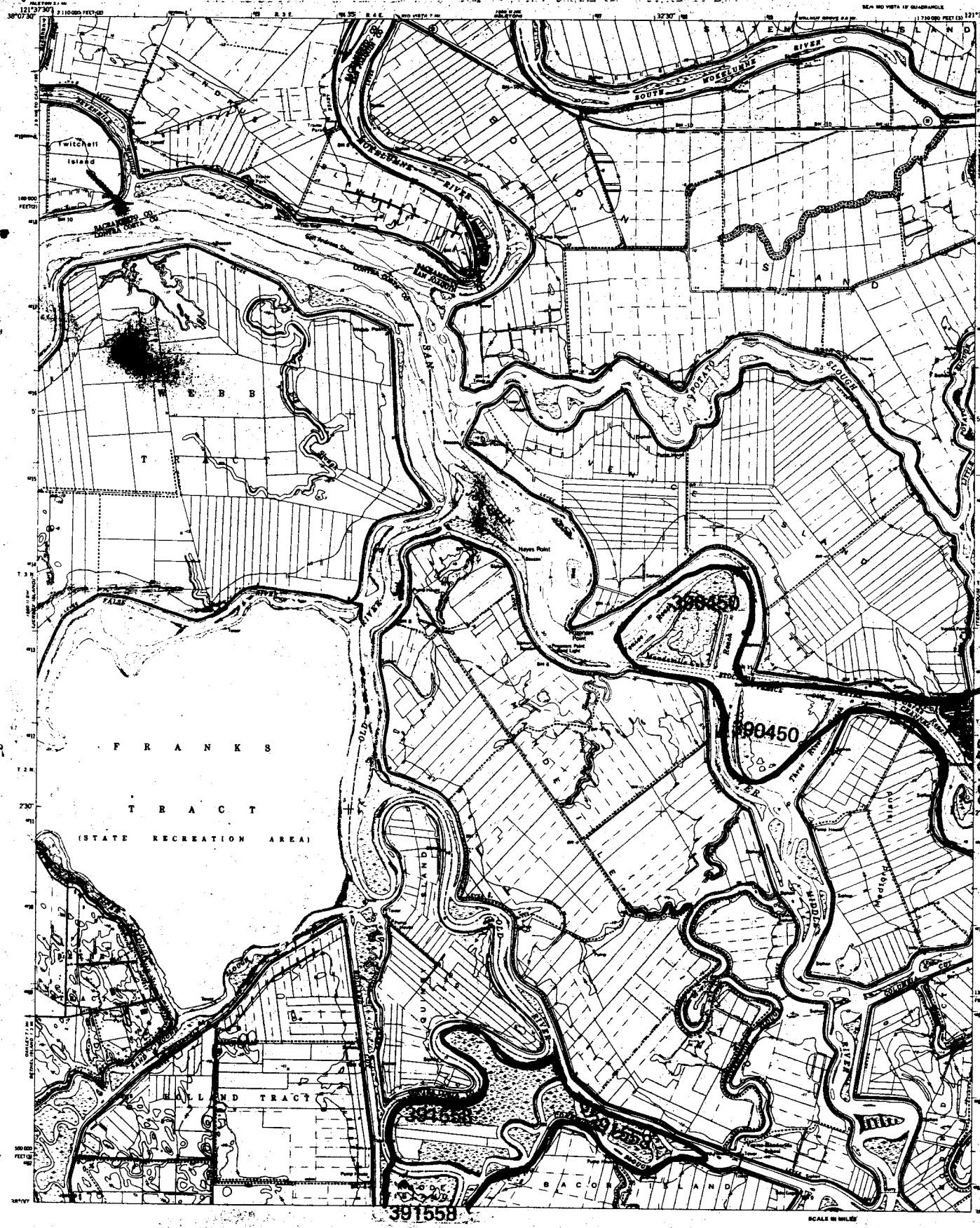
CONTOUR INTERVAL 40 FEET

AUKUM, CALIF. 39120
N3830—W12037.5/7.5

FEBRUARY 1975

This map was financed in part through a
H.U.D. 701 Comprehensive Planning Grant.

ENVIRONMENTAL DATA NOTEBOOK —
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



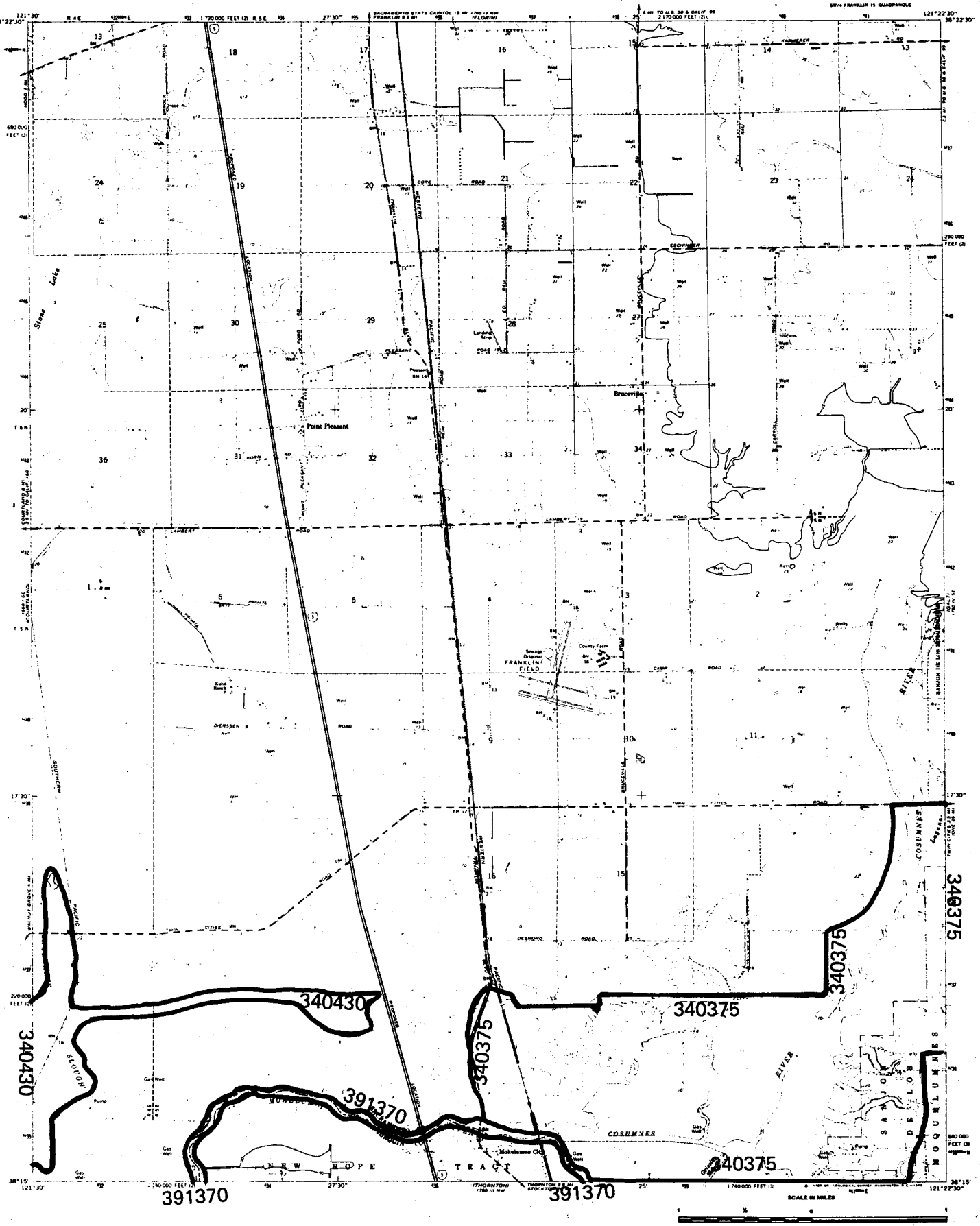
CONTOUR INTERVAL 5 FEET

BOULDIN ISLAND, CALIF. 4800

FEBRUARY 1975

This map was financed in part through a H.U.D. 701 Comprehensive Planning Grant.

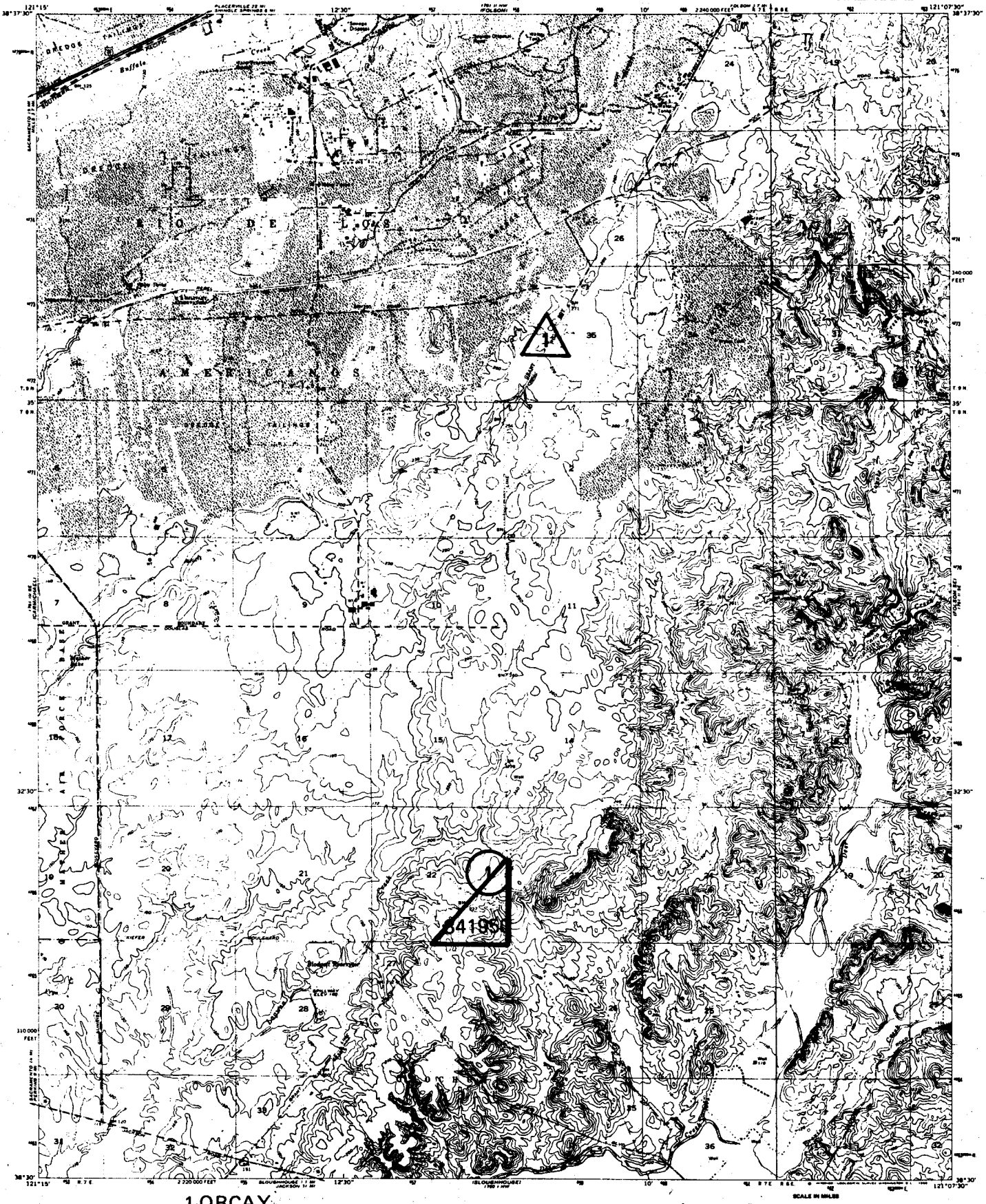
3812115



CONTOUR INTERVAL 5 FEET

BRUCEVILLE, CALIF. 496C
SW/4 FRANKLIN 15 QUADRANGLE
N3815—W12122.5/7.5

3812134



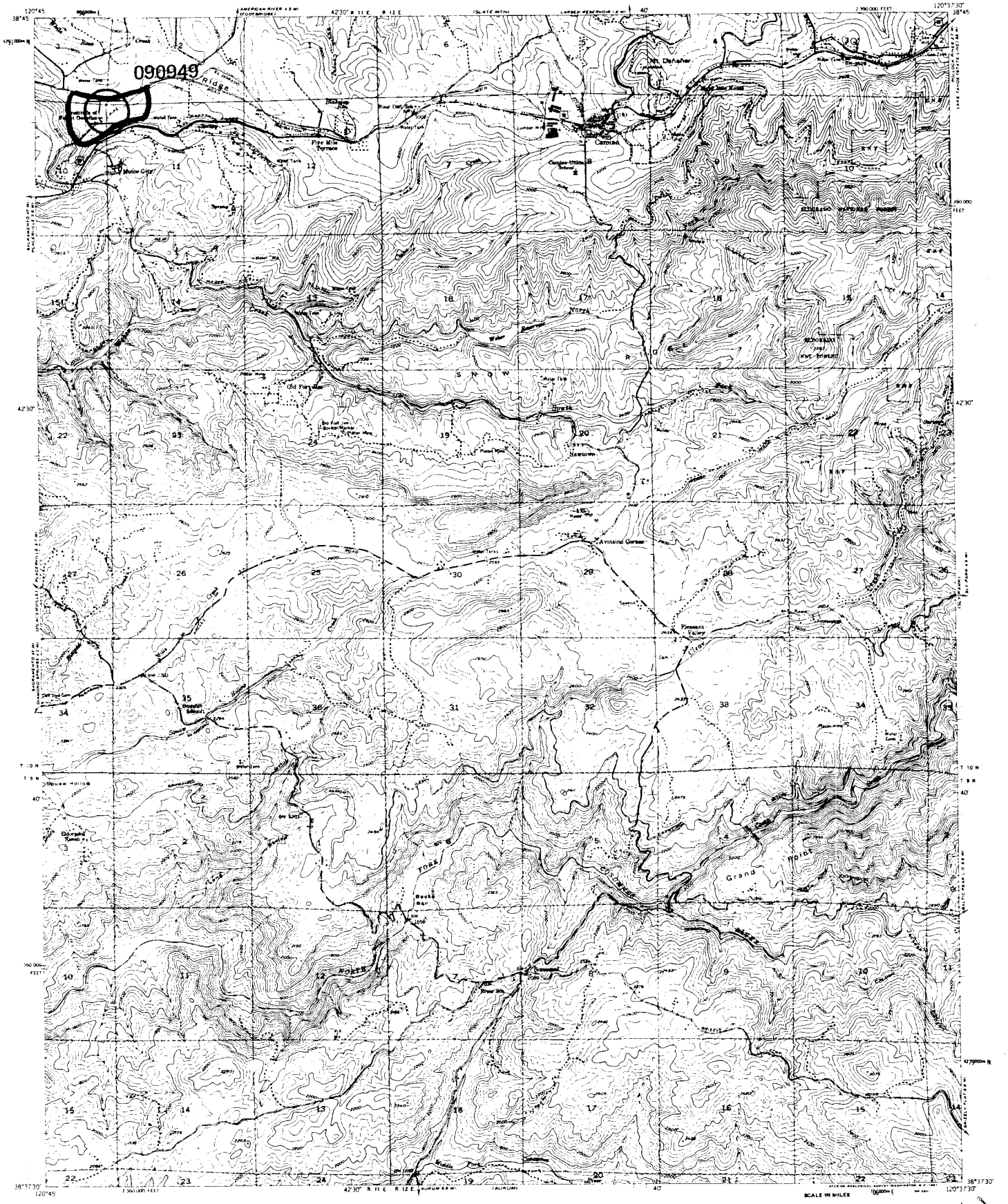
1-ORCAY

SCALE IN MILES

CONTOUR INTERVAL 10 FEET

BUFFALO CREEK, CALIF. 511c
SW/4 FOLSOM 15' QUADRANGLE
N3830—W12107.5/7.5

3812152



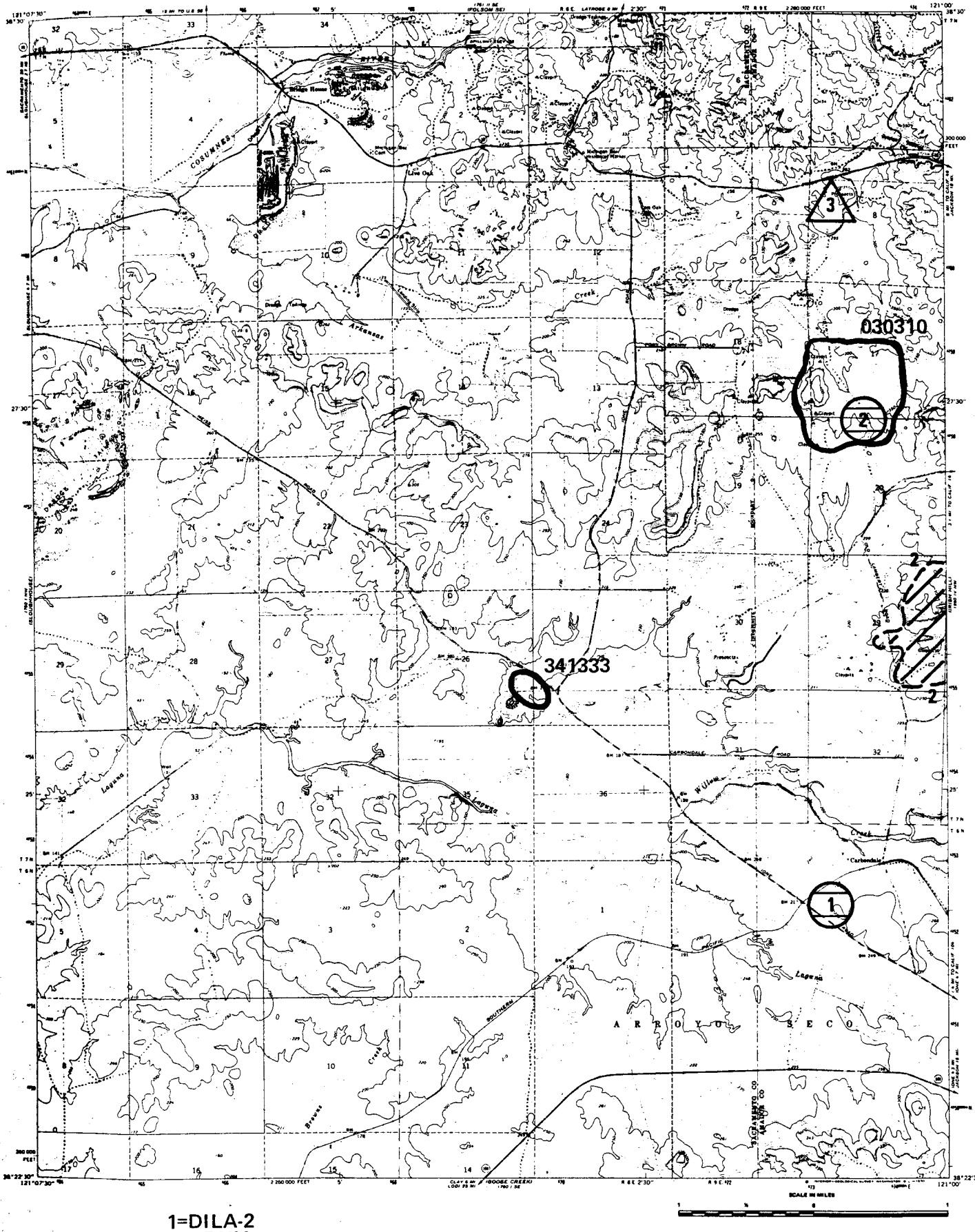
NAPRL

CONTOUR INTERVAL 40 FEET

CAMINO, CALIF. 5096
N3837.5—W12037.5/7.5

3812066

ENVIRONMENTAL DATA NOTEBOOK –
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



1=DILA-2
2=ARMY
3=HESU-2

FEBRUARY 1975

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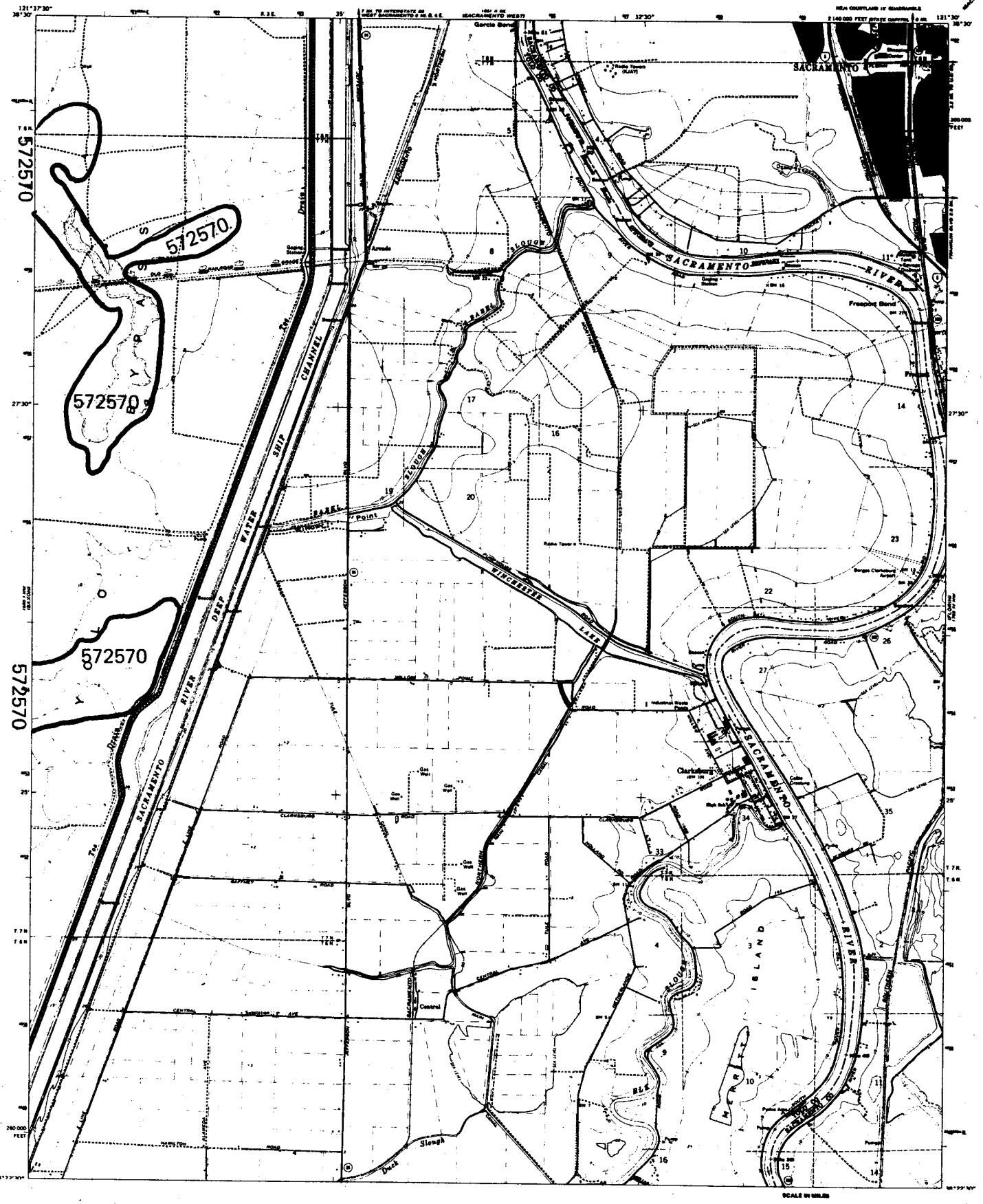
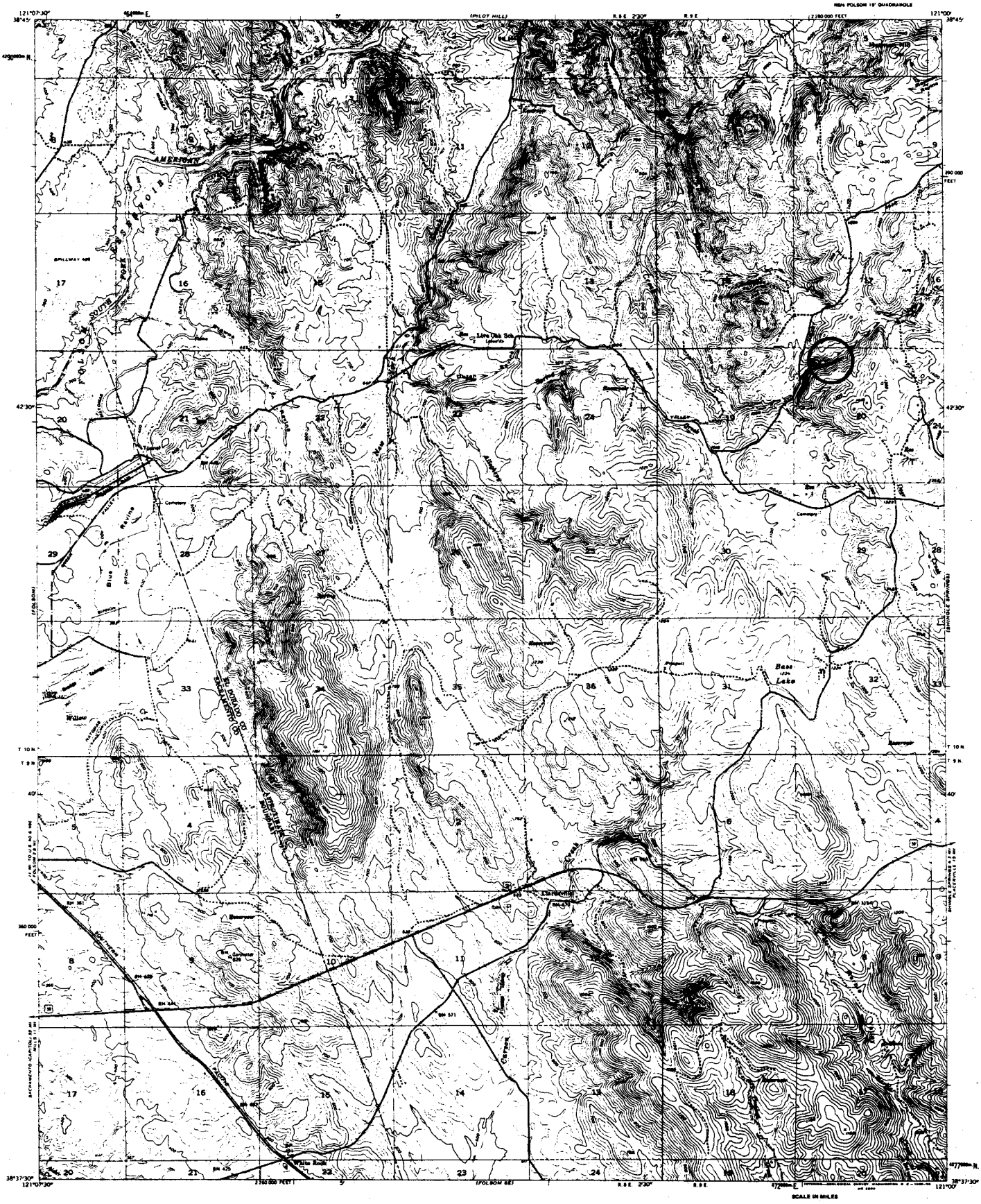


CLARKSBURG, CALIF. 497A

NEA COURTLAND 15' QUADRANGLE

N3822.5—W12130/7.5

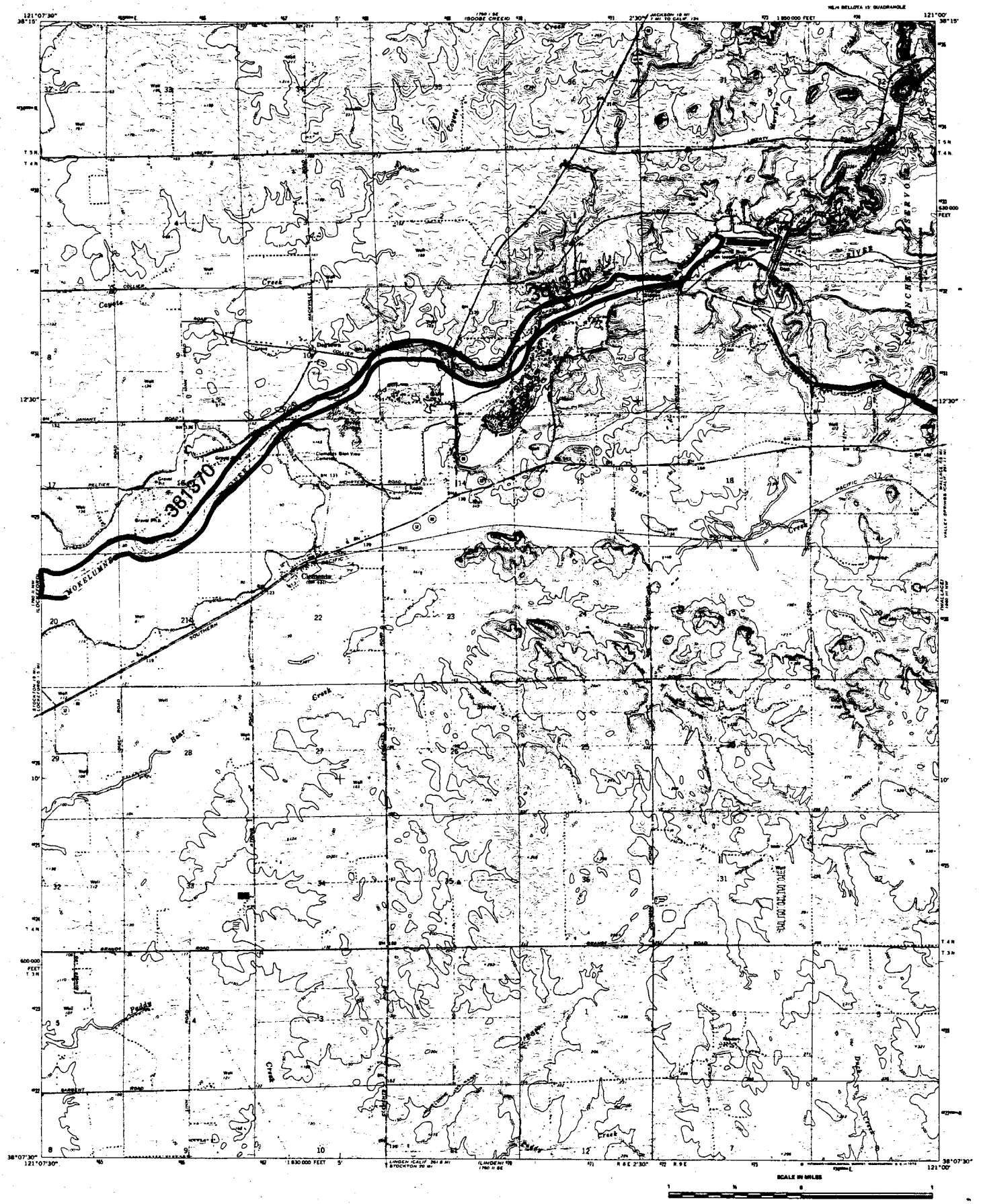
3812145



WYRE

CLARKSVILLE, CALIF 511A

3812161



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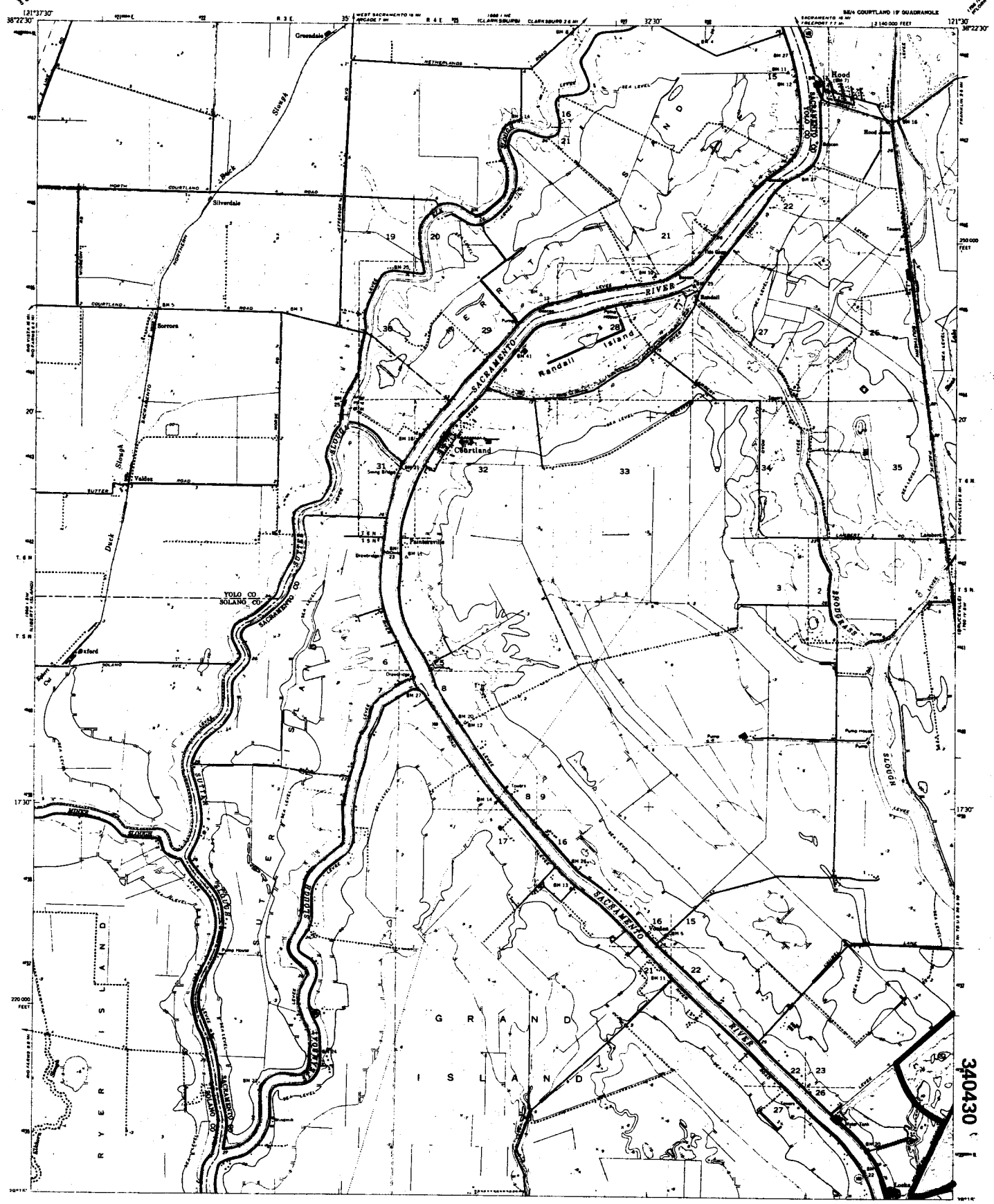
3812121

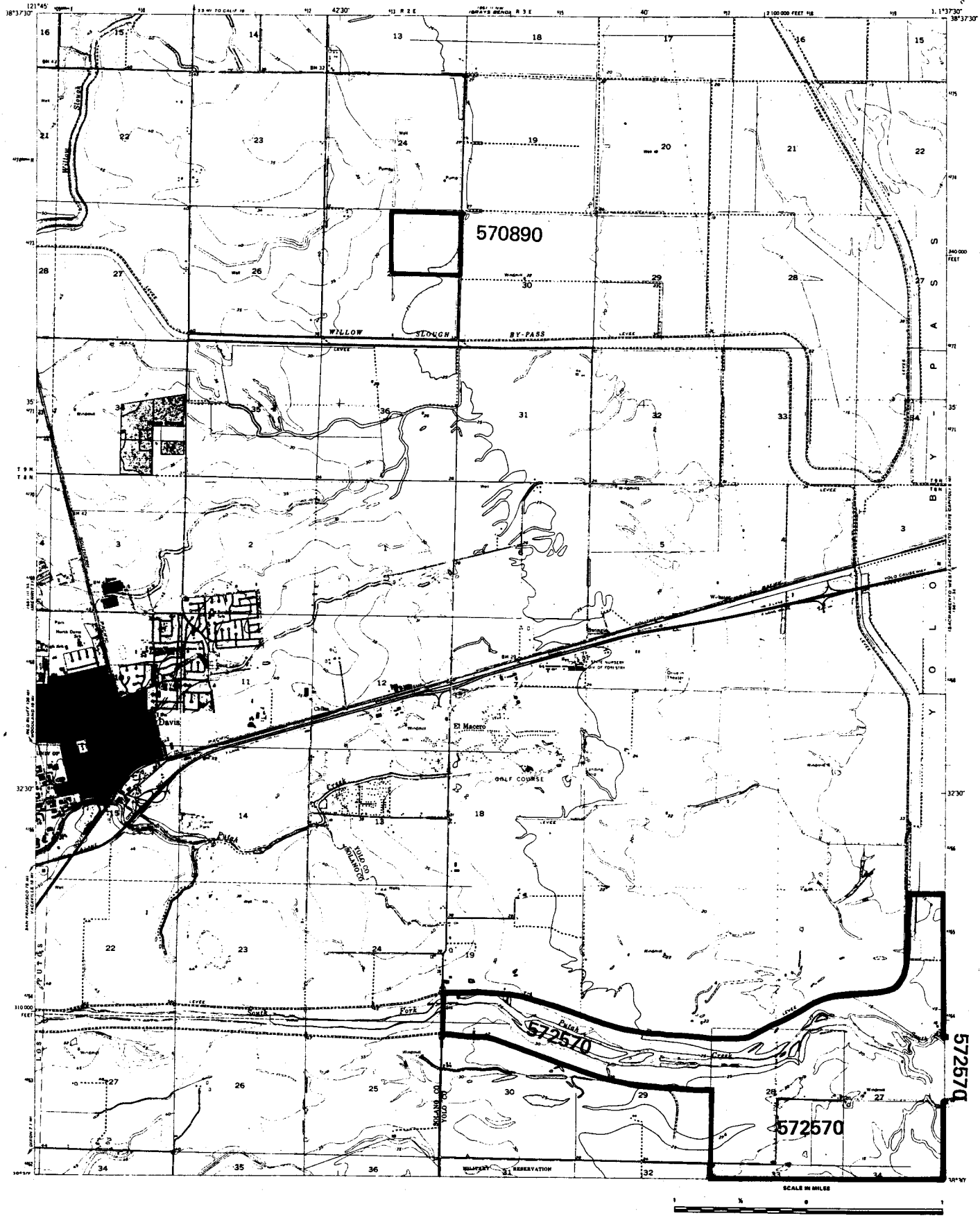


340430

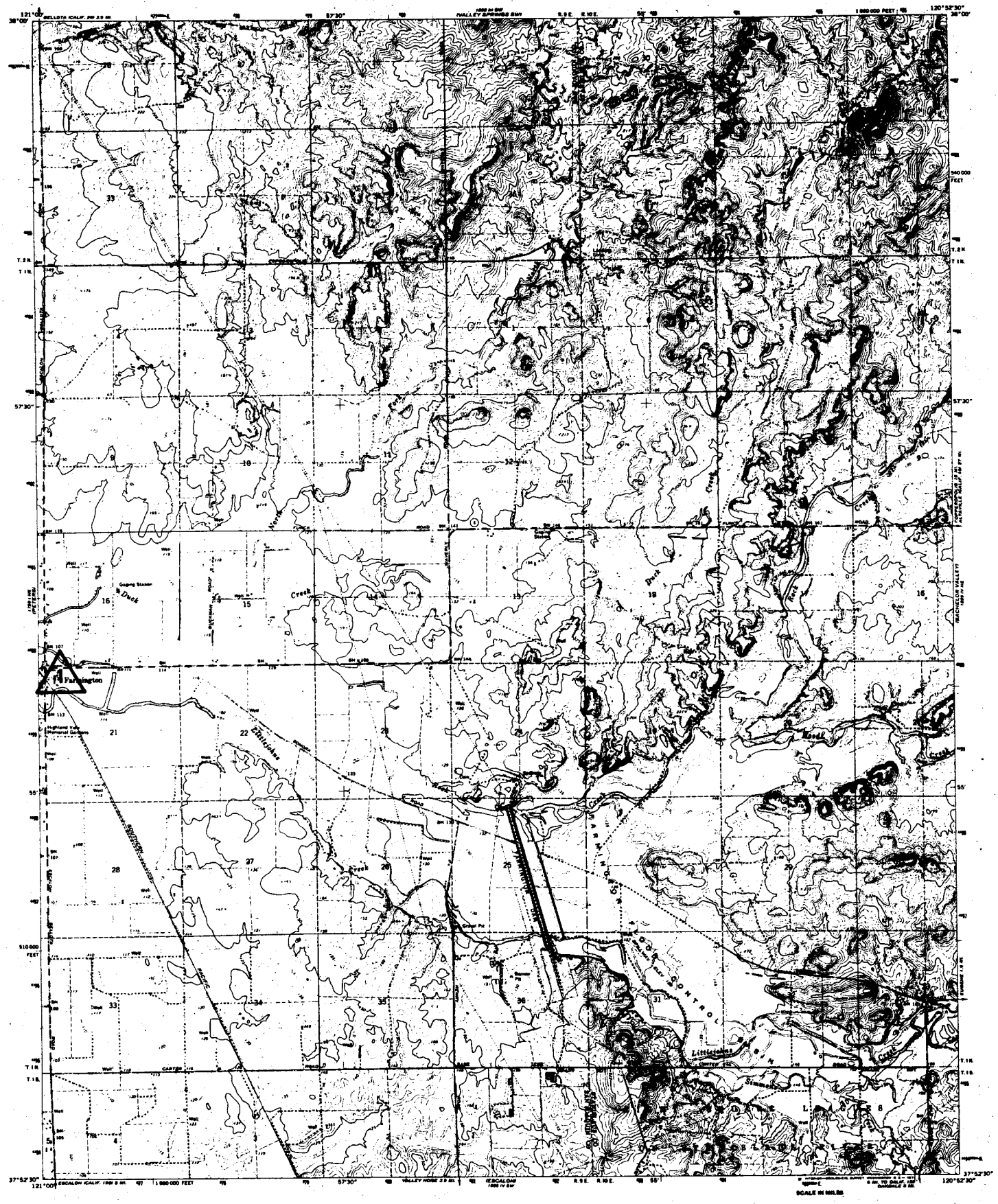
CONTOUR INTERVAL 5 FEET

COURTLAND, CALIF. 497D
SE/4 COURTLAND 15' QUADRANGLE
N3815-W12130/7.5

3812135


570890
572570
572570
572570
WILLOW SLOUGH BY-PASS
Davis
El Macero
GOLF COURSE
SCALE IN MILES
CONTOUR INTERVAL 5 FEET
DAVIS, CALIF. 5130
SW/4 DAVIS 15' QUADRANGLE
N3830—W12137.5/7.5

3812156



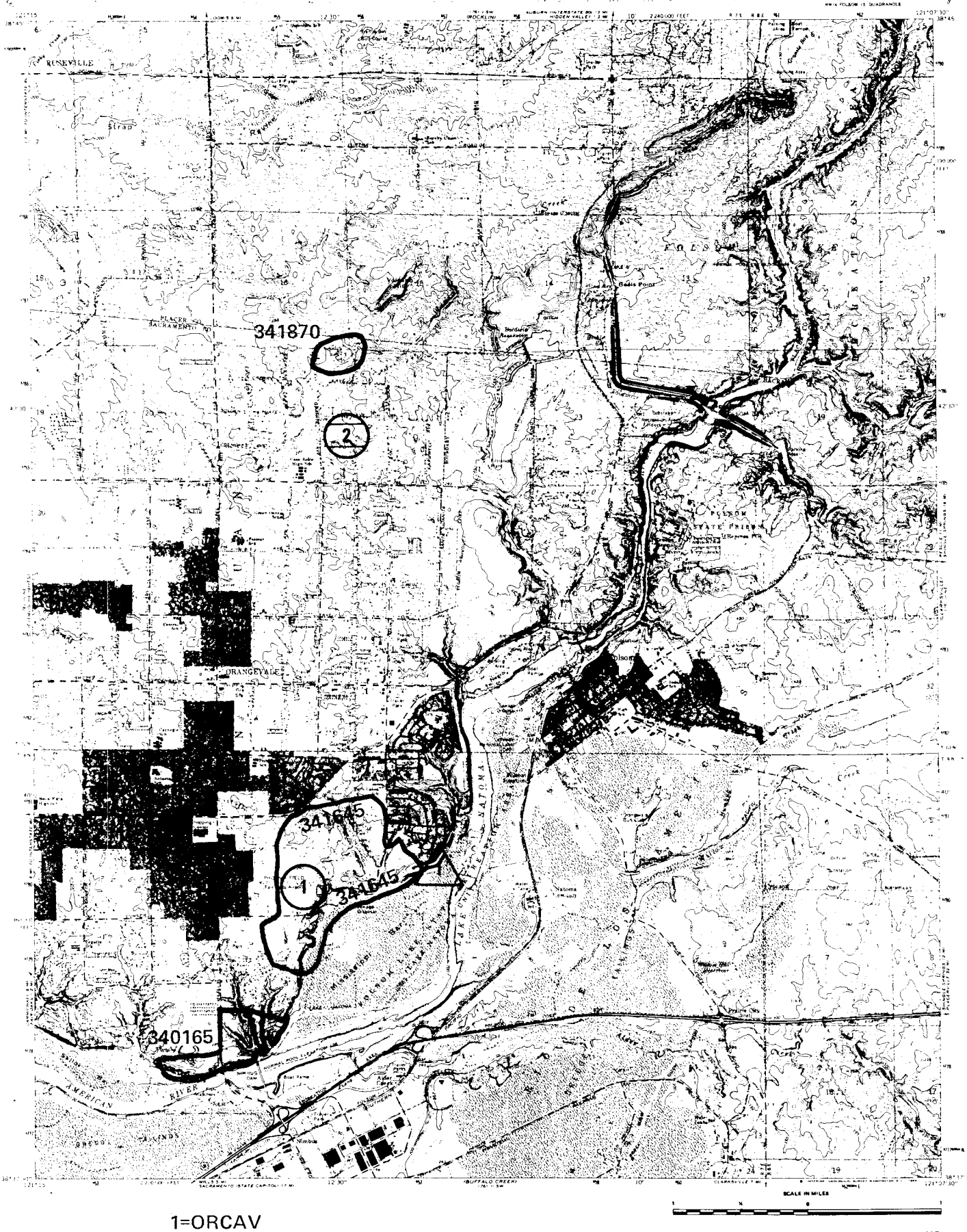
1=ORGR-1

CONTOUR INTERVAL 5 FEET

FARMINGTON, CALIF. 4008
N3752.5—W12052.5/7.5

3712089

ENVIRONMENTAL DATA NOTEBOOK –
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



1=ORCAV
2=DILA-2

CONTOUR INTERVAL 10 FEET

FOLSOM, CALIF. 511B

FEBRUARY 1975

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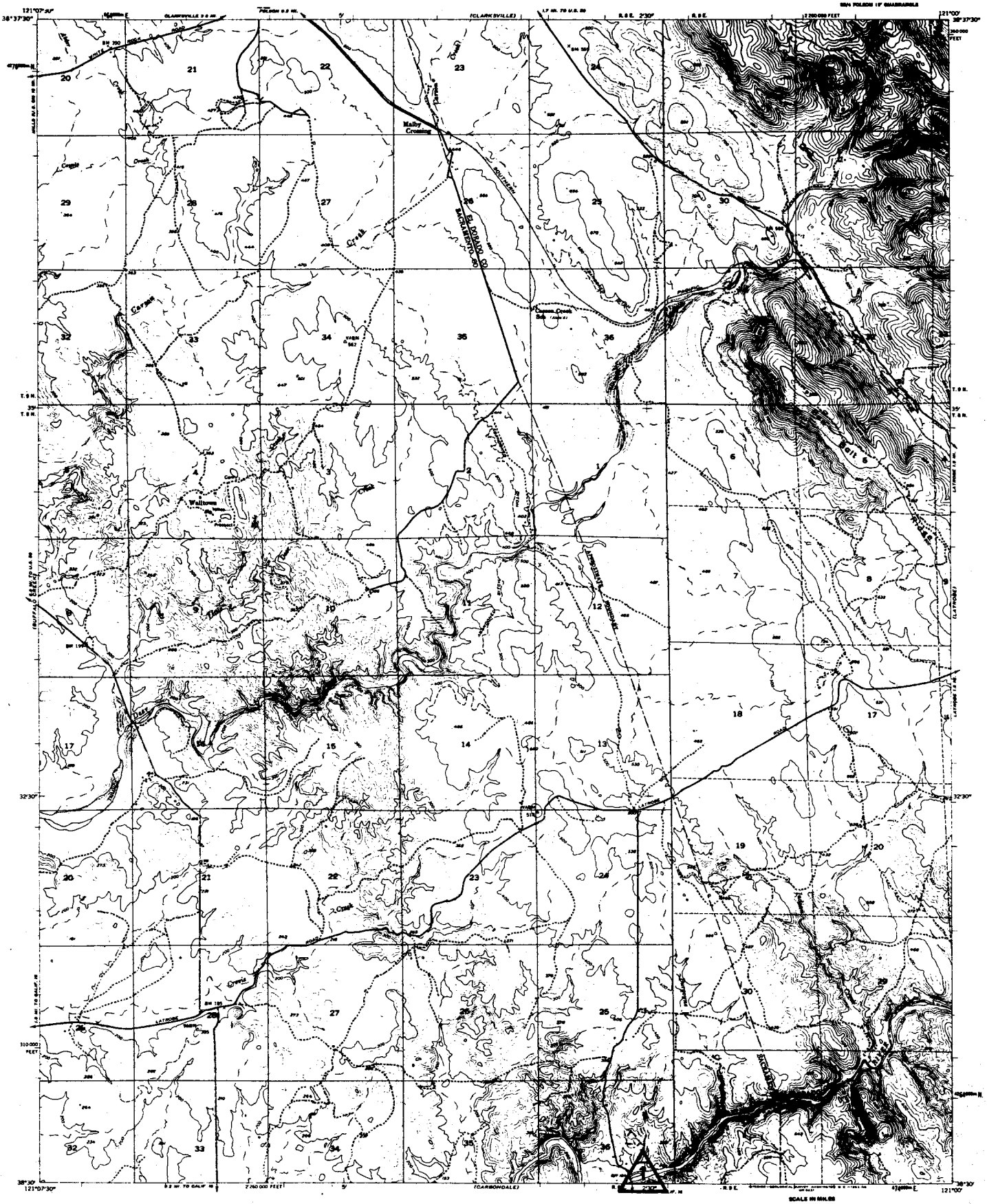
3912162

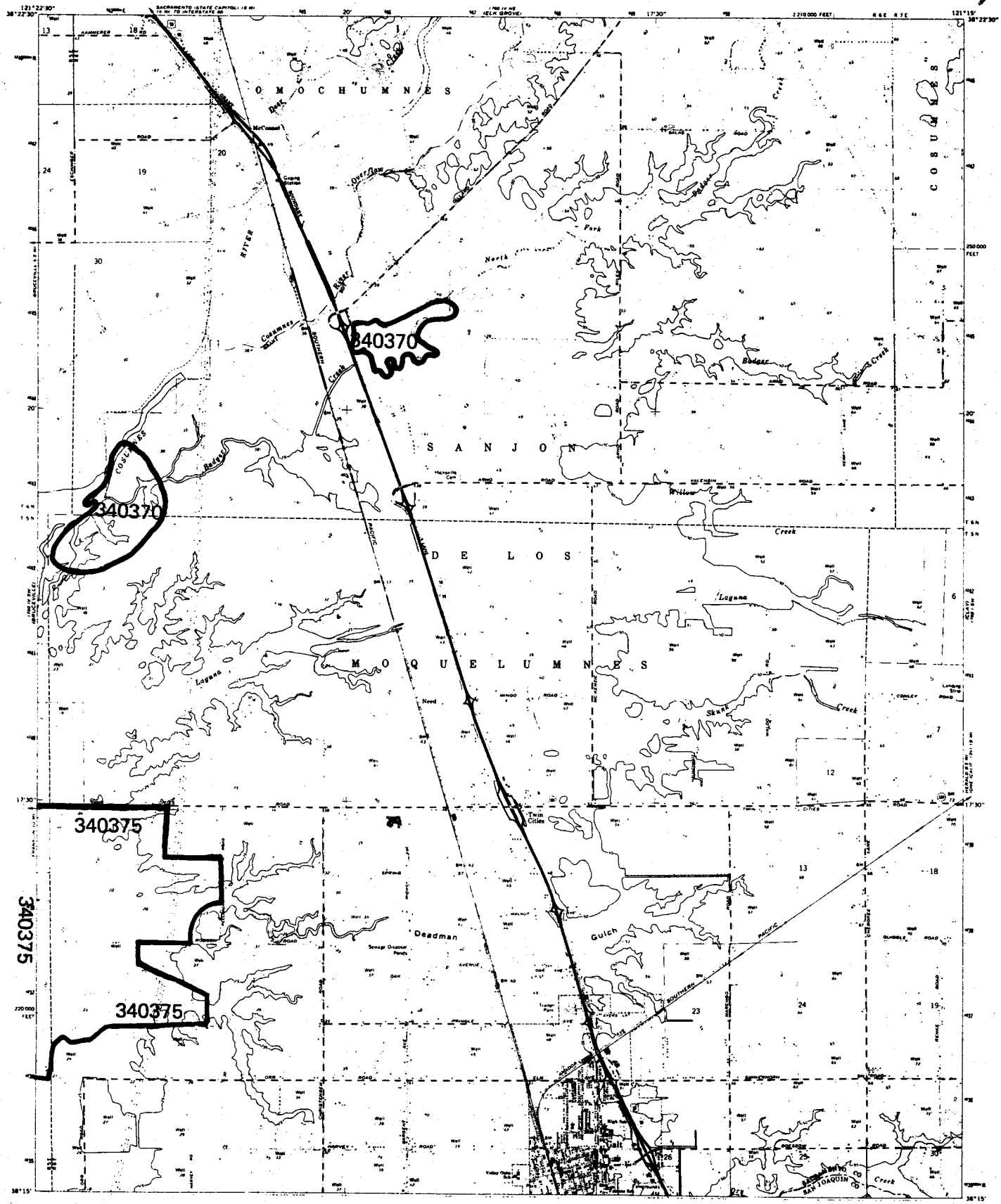


1=ERPI-2

CONTOUR INTERVAL 20 FEET

FOLSOM S.E., CALIF. 811D
SE/4 FOLSOM 15' QUADRANGLE
N3830—W12100/7.5

3812151

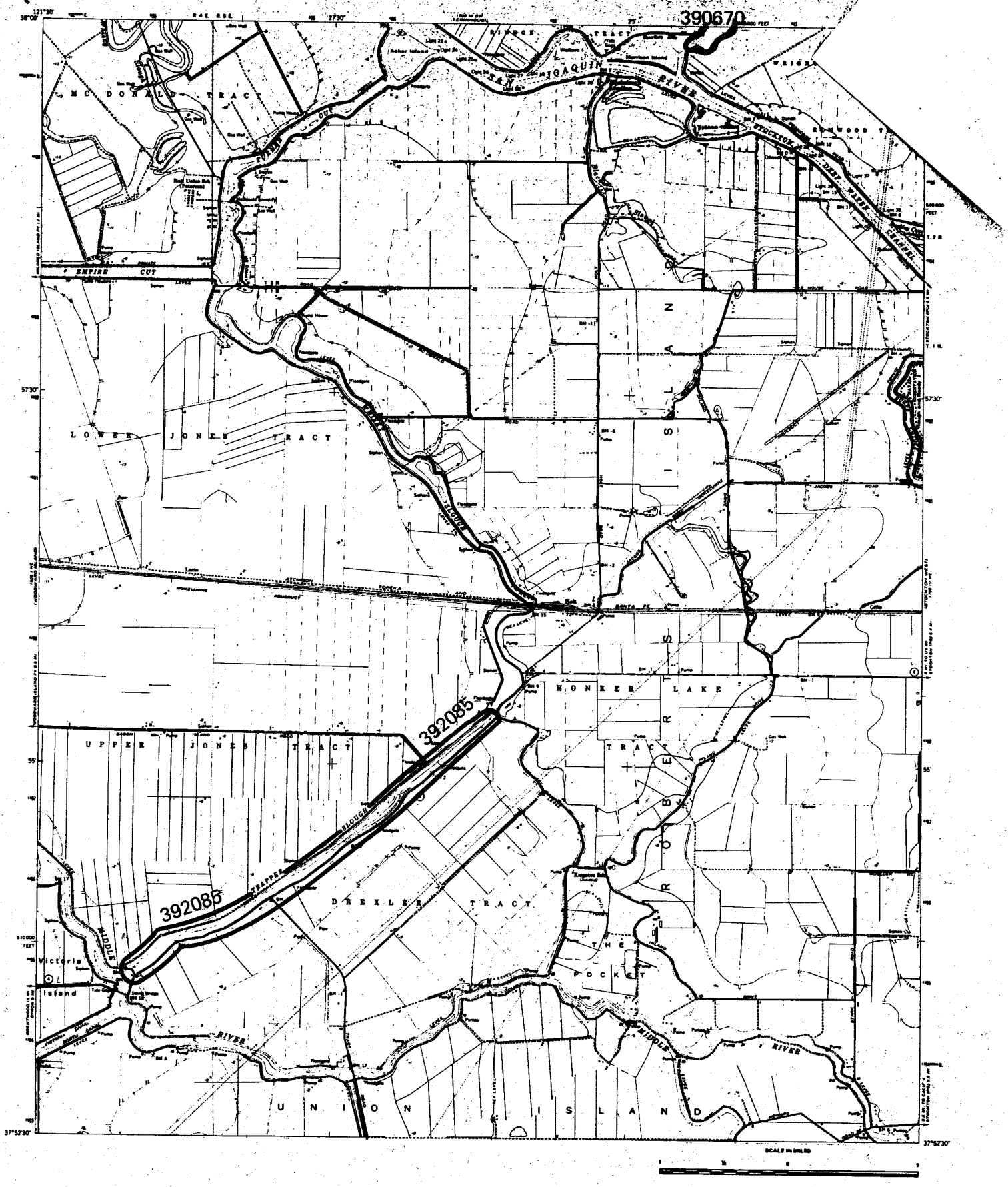


CONTOUR INTERVAL 5 FEET

GALT, CALIF. 496D
SE/4 FRANKLIN 15' QUADRANGLE
N3815—W12115/7.5

3812133

SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



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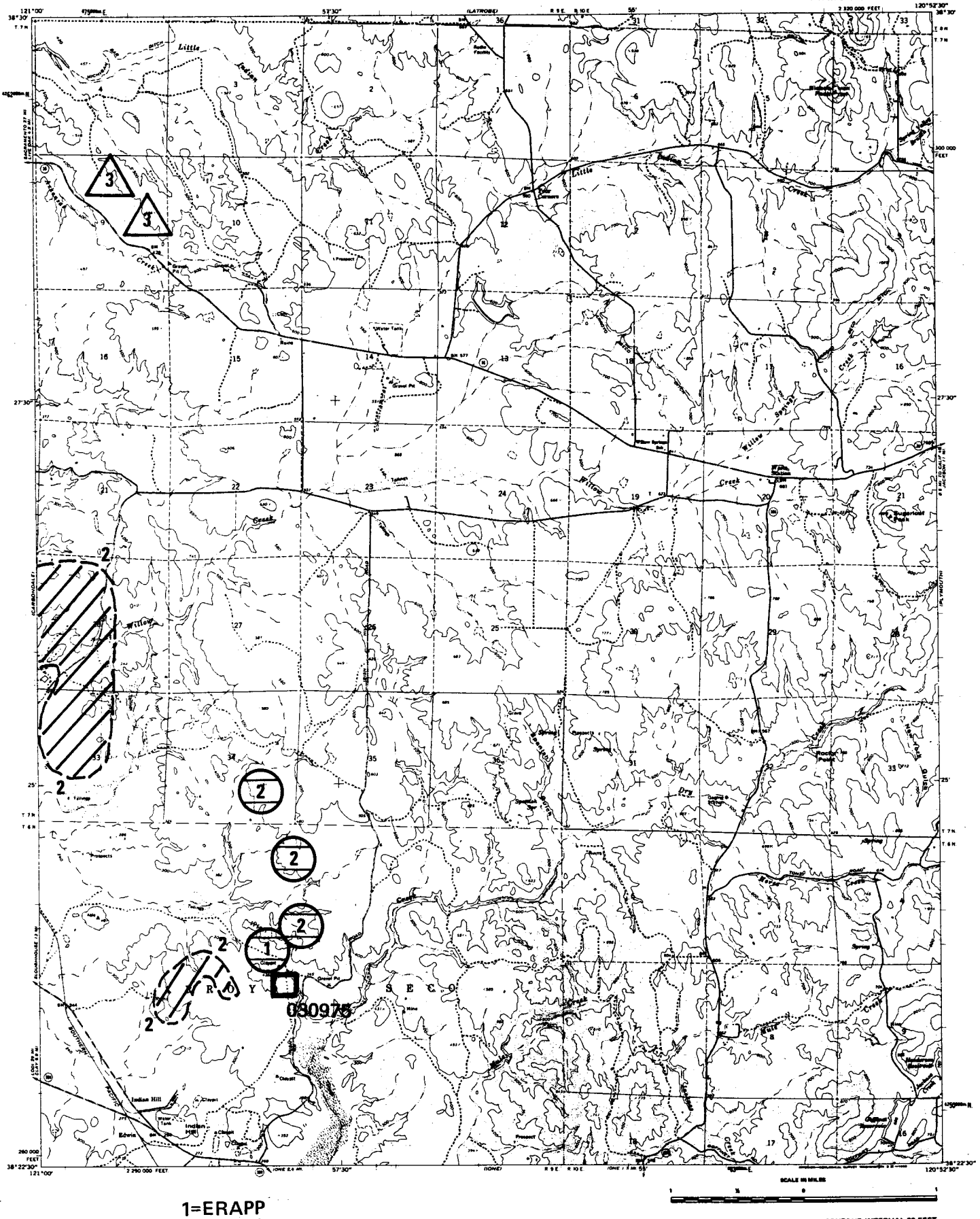
3712184

ENVIRONMENTAL DATA NOTEBOOK —
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



1=ERAPP
2=ARMY
3=HESU-2

IRISH HILL, CALIF. 494B

FEBRUARY 1975

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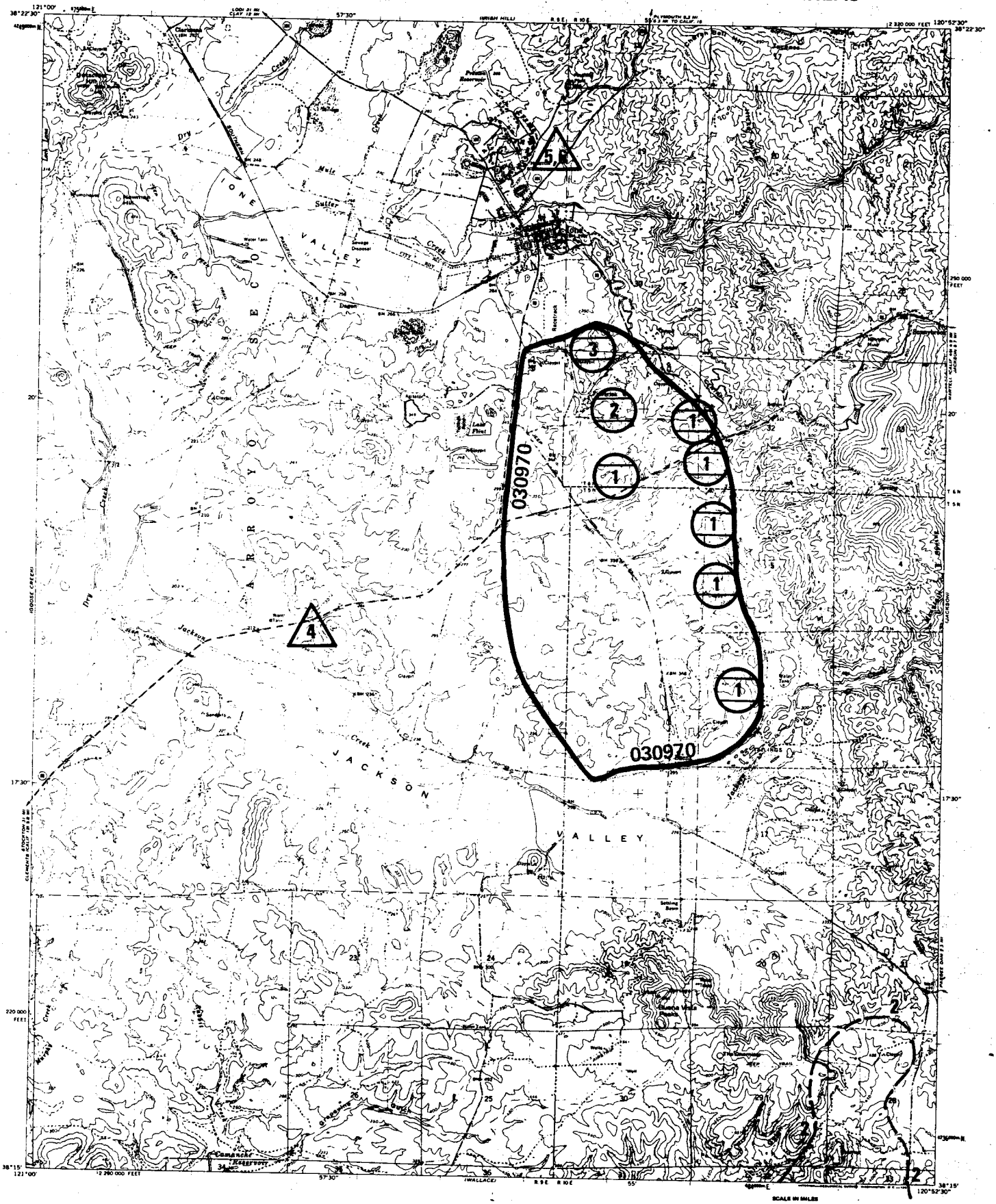
3917018

ENVIRONMENTAL DATA NOTEBOOK –
SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



1=ERAPA-2
2=ARMY
3=HESU-2
4=ERPI-2
5=PLSC
6=OPCA

FEBRUARY 1975

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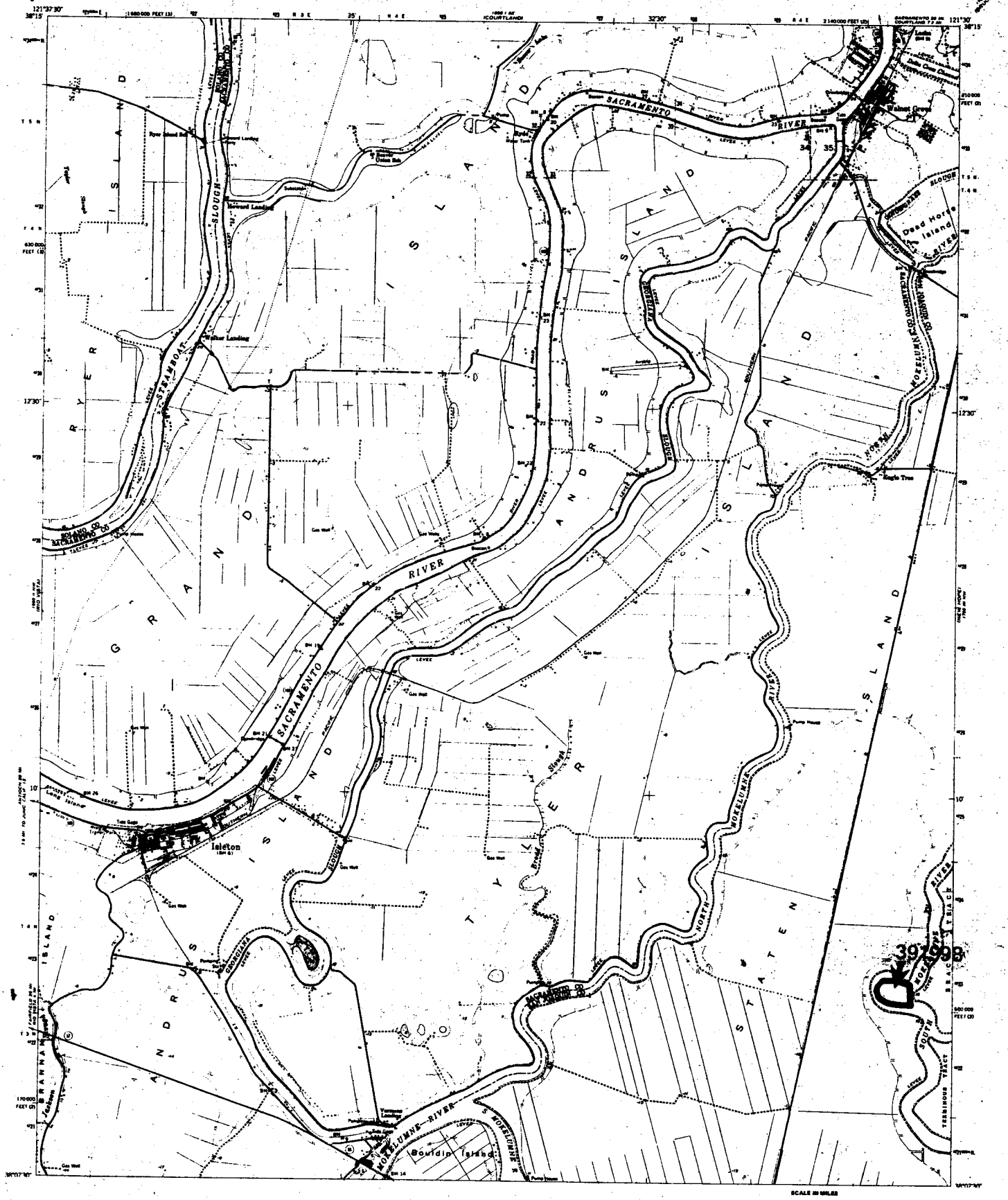
3812038

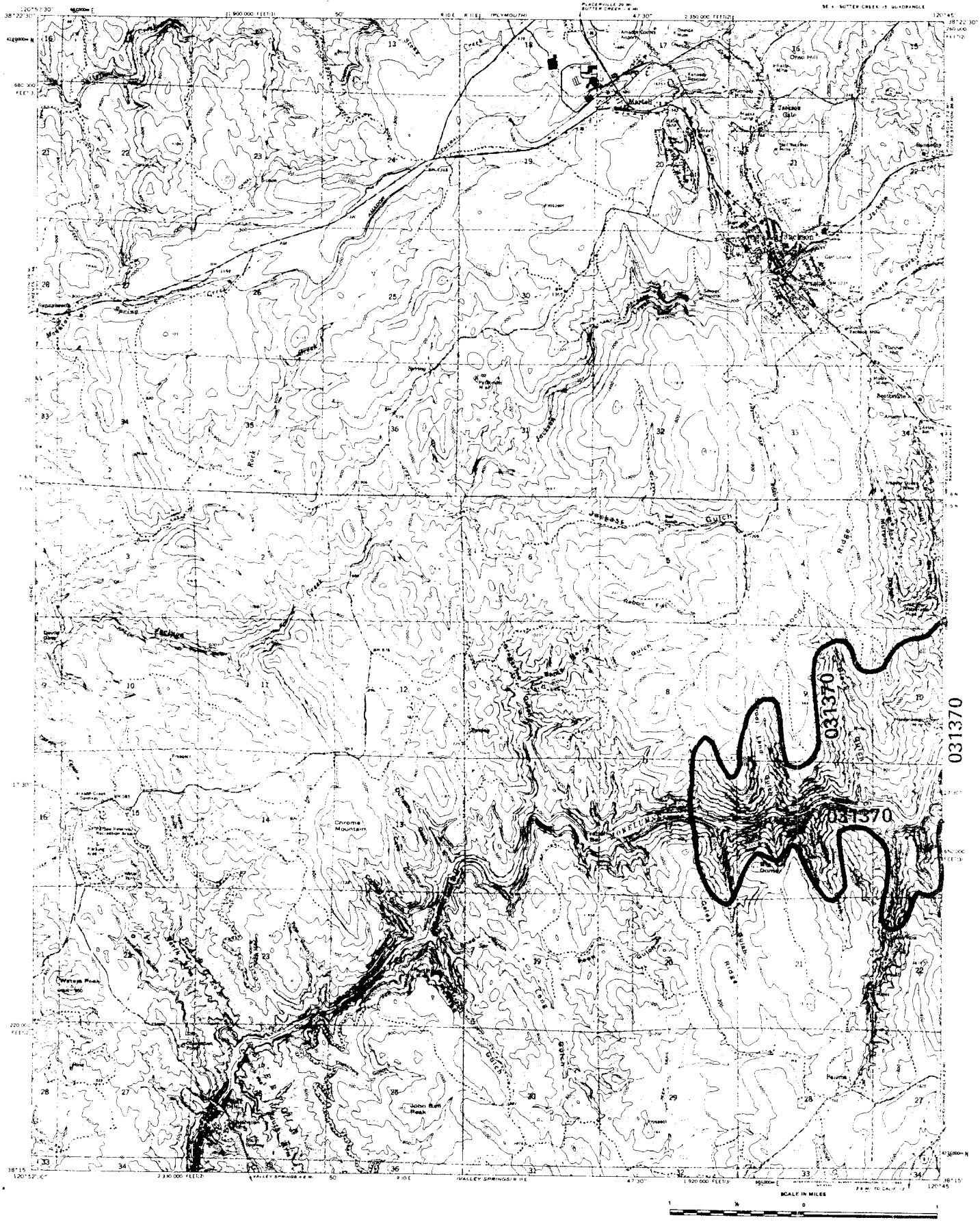


SCALE 1:62,500

CONTOUR INTERVAL 5 FEET

ISLETON, CALIF. 480A
RIO VISTA 15' QUADRANGLE
N3807.5—W12130/7.5

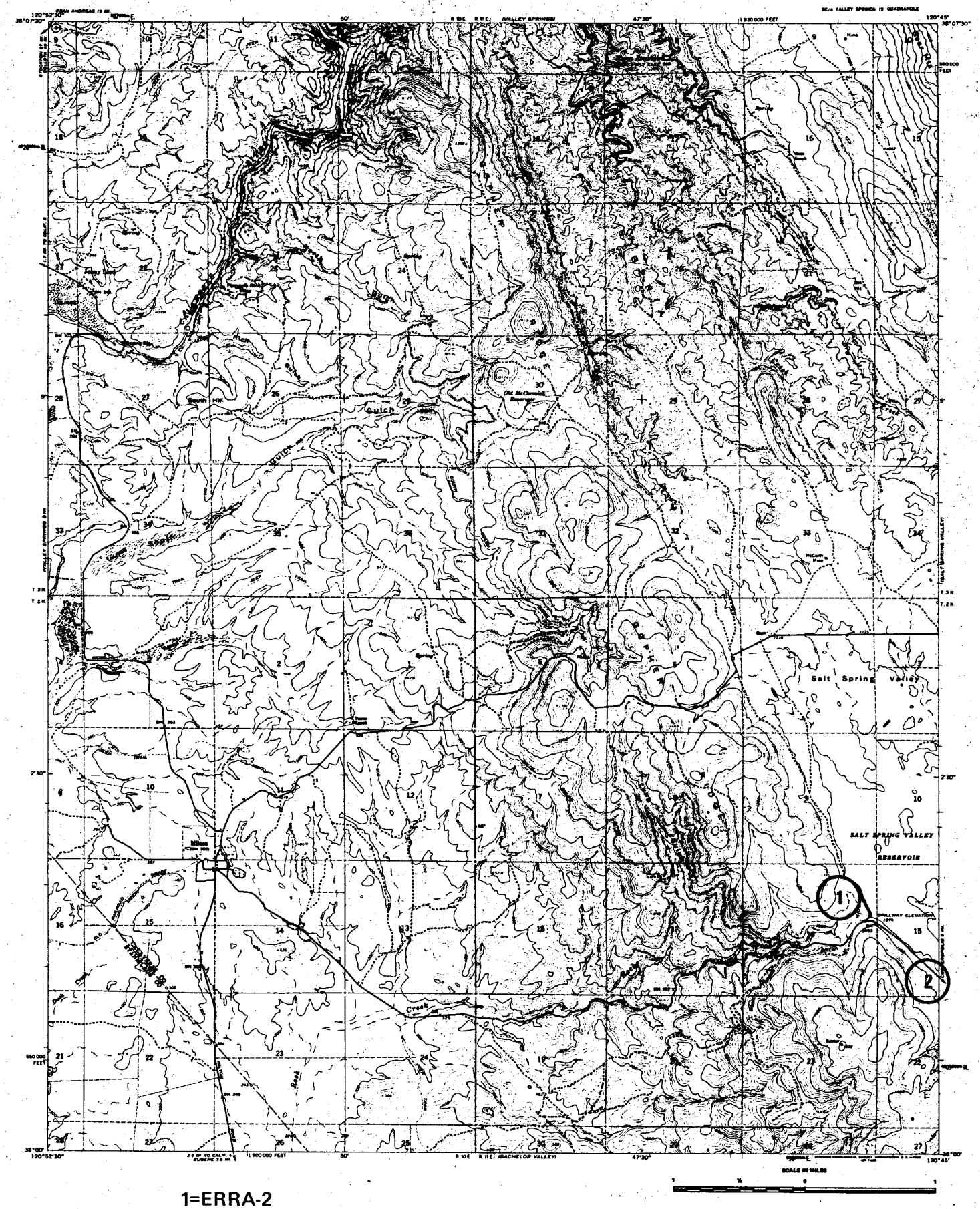
3812125



CONTOUR INTERVAL 20 FEET

JACKSON, CALIF. 4-4D
SE-4 SUTTER CREEK 15' QUADRANGLE
N3815—W12045/7.5

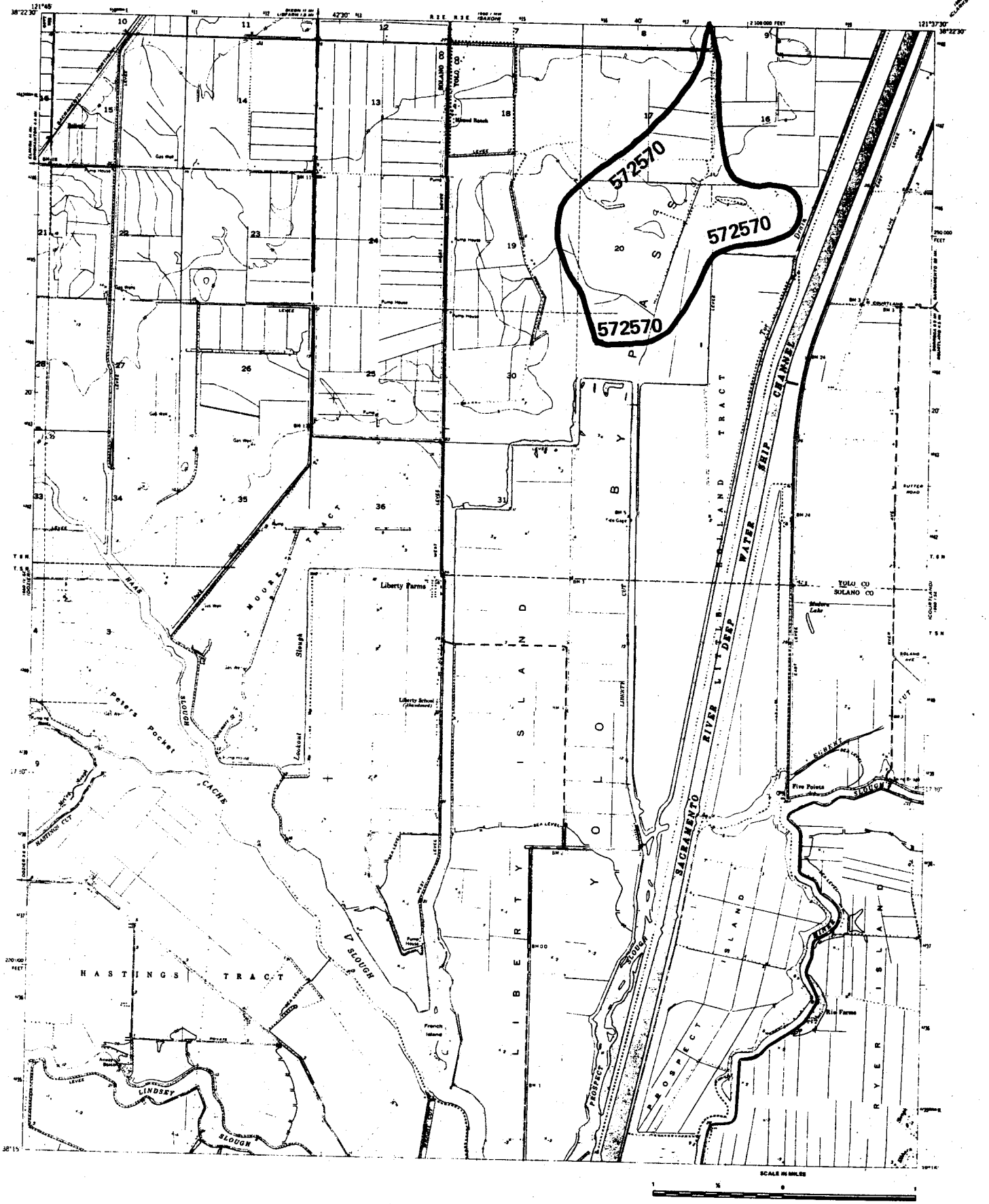
3812037



1=ERRA-2
2=ERPI-2

JENNY LIND, CALIF. 477D
SE/4 VALLEY SPRINGS 15' QUADRANGLE
N3800—W12045/7.5

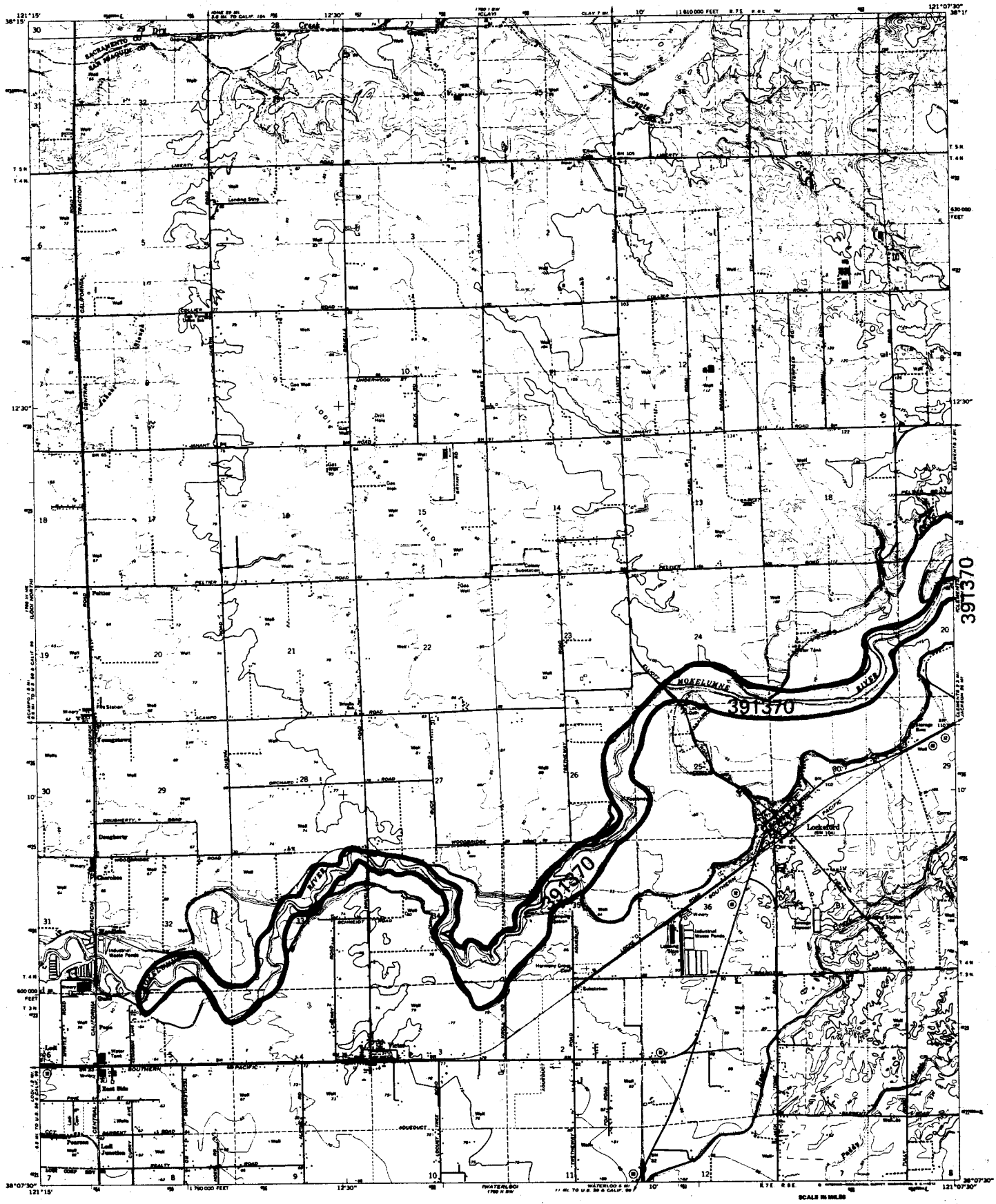
38120170



CONTOUR INTERVAL 5 FEET

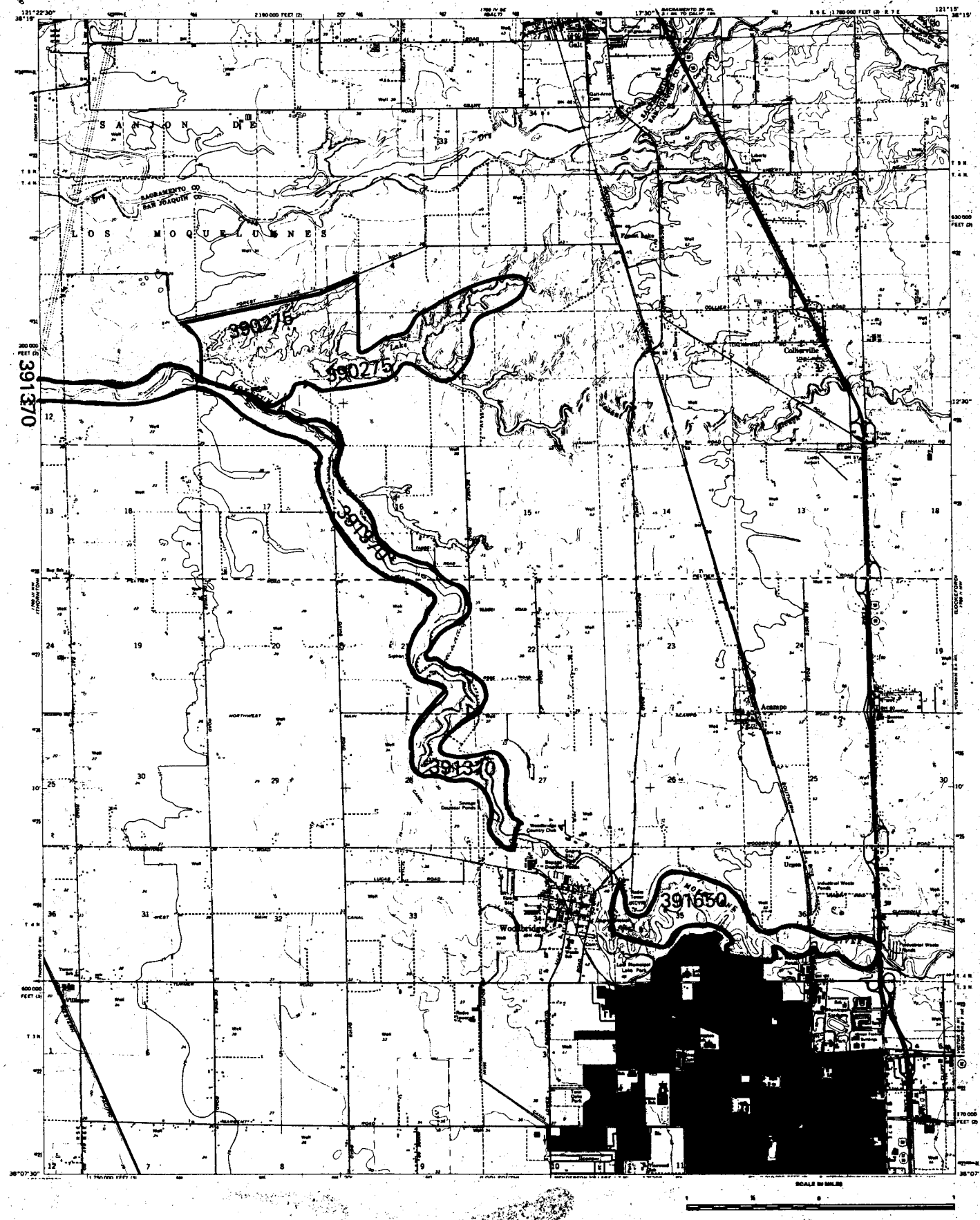
LIBERTY ISLAND, CALIF. 497C
SW/4 COURTLAND 15' QUADRANGLE
N3815—W12137.5/7.5

38 12 | 36


391370
391370
391370
MOKELUMNE RIVER
Lockeford
SCALE IN MILES
CONTOUR INTERVAL 5 FEET
LOCKEFORD, CALIF.

38 12122

SCENIC, SCIENTIFIC, RECREATIONAL AND EDUCATIONAL RESOURCE AREAS



CONTOUR INTERVAL 5 FEET

LODI NORTH, CALIF. 479A

FEBRUARY 1975

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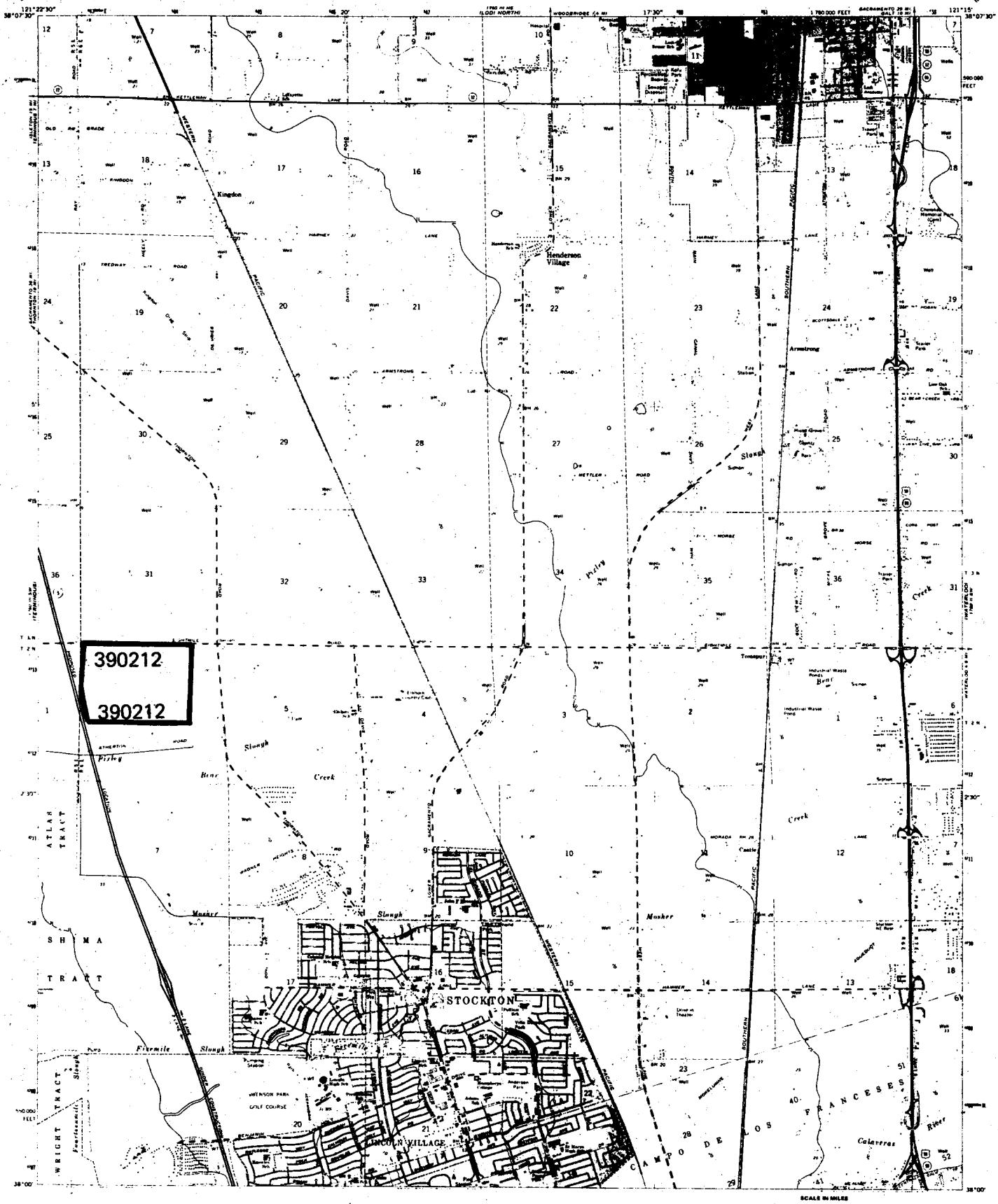
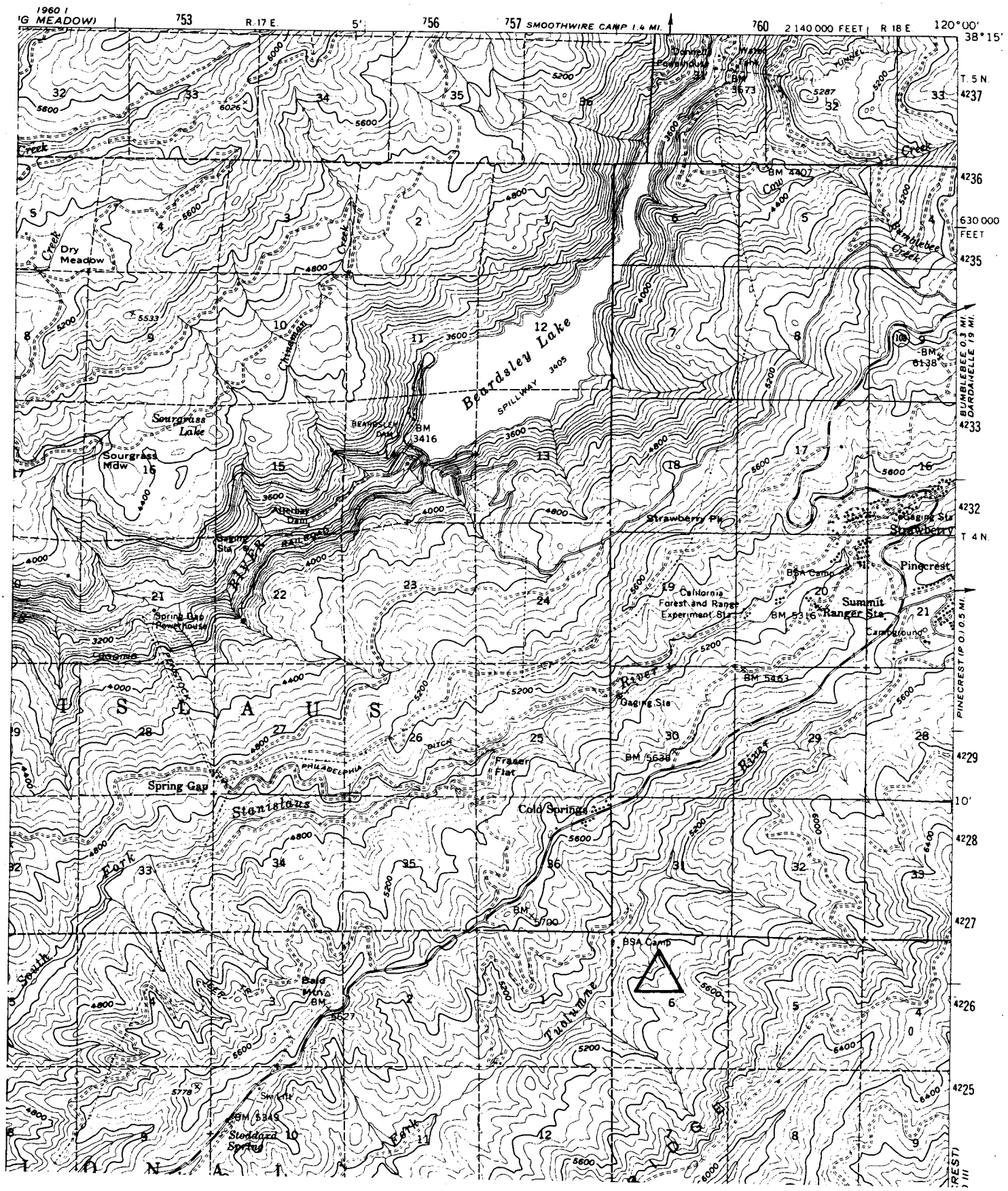
3812123



CONTOUR INTERVAL 5 FEET

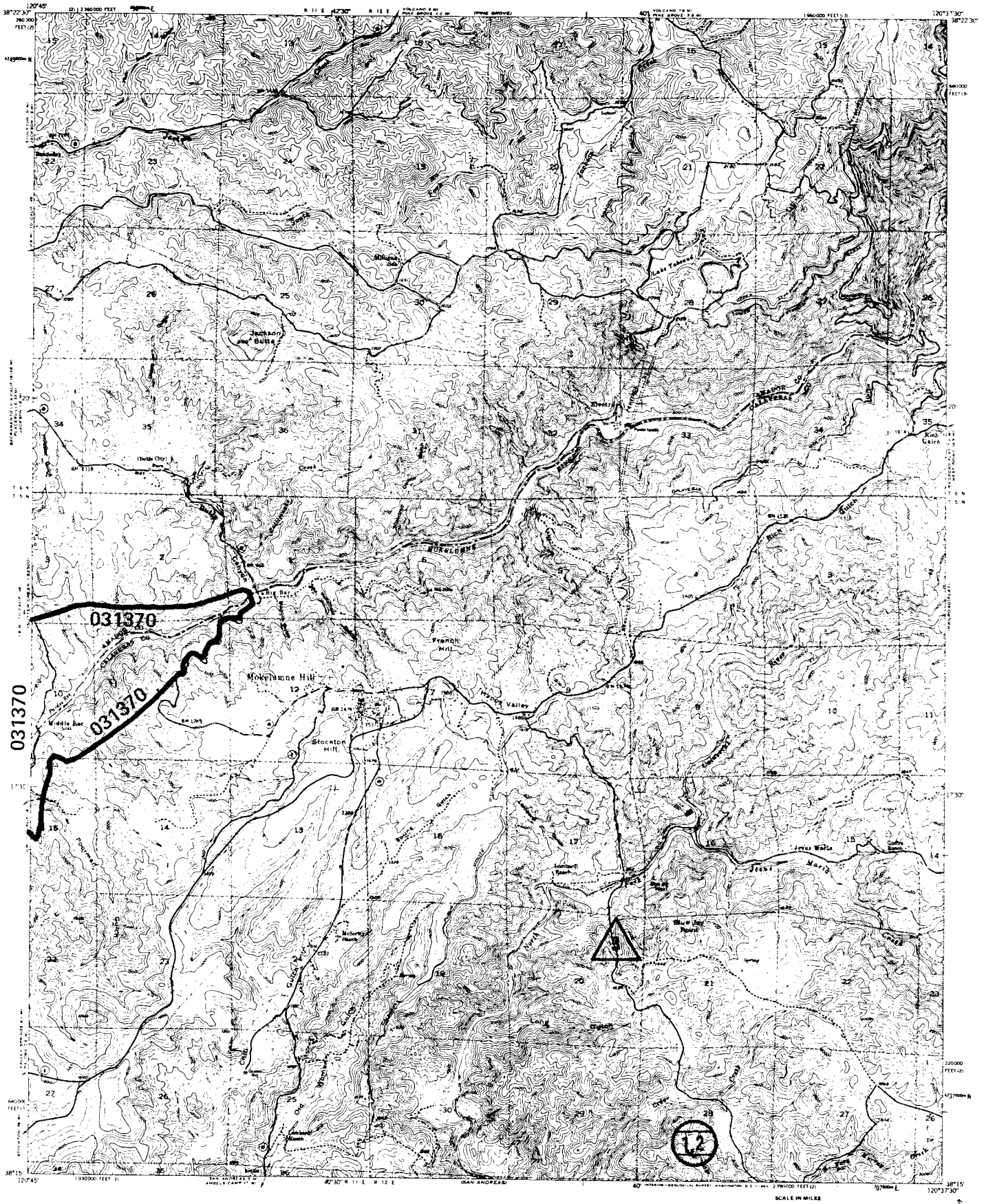
LODI SOUTH, CALIF. 479D
SE/4 LODI 15' QUADRANGLE
N3800—W12115/7.5

3812112

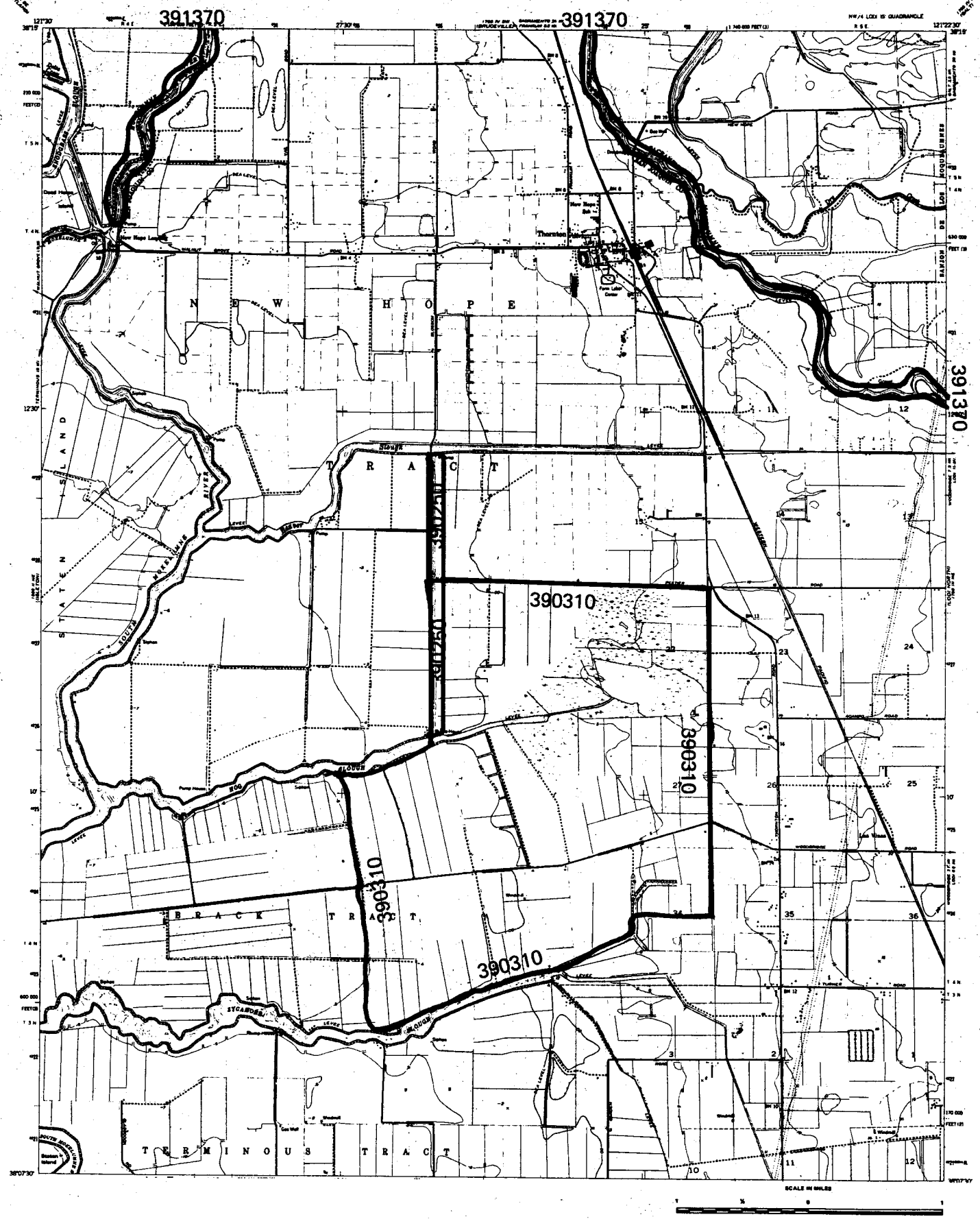


CAWH

3812021

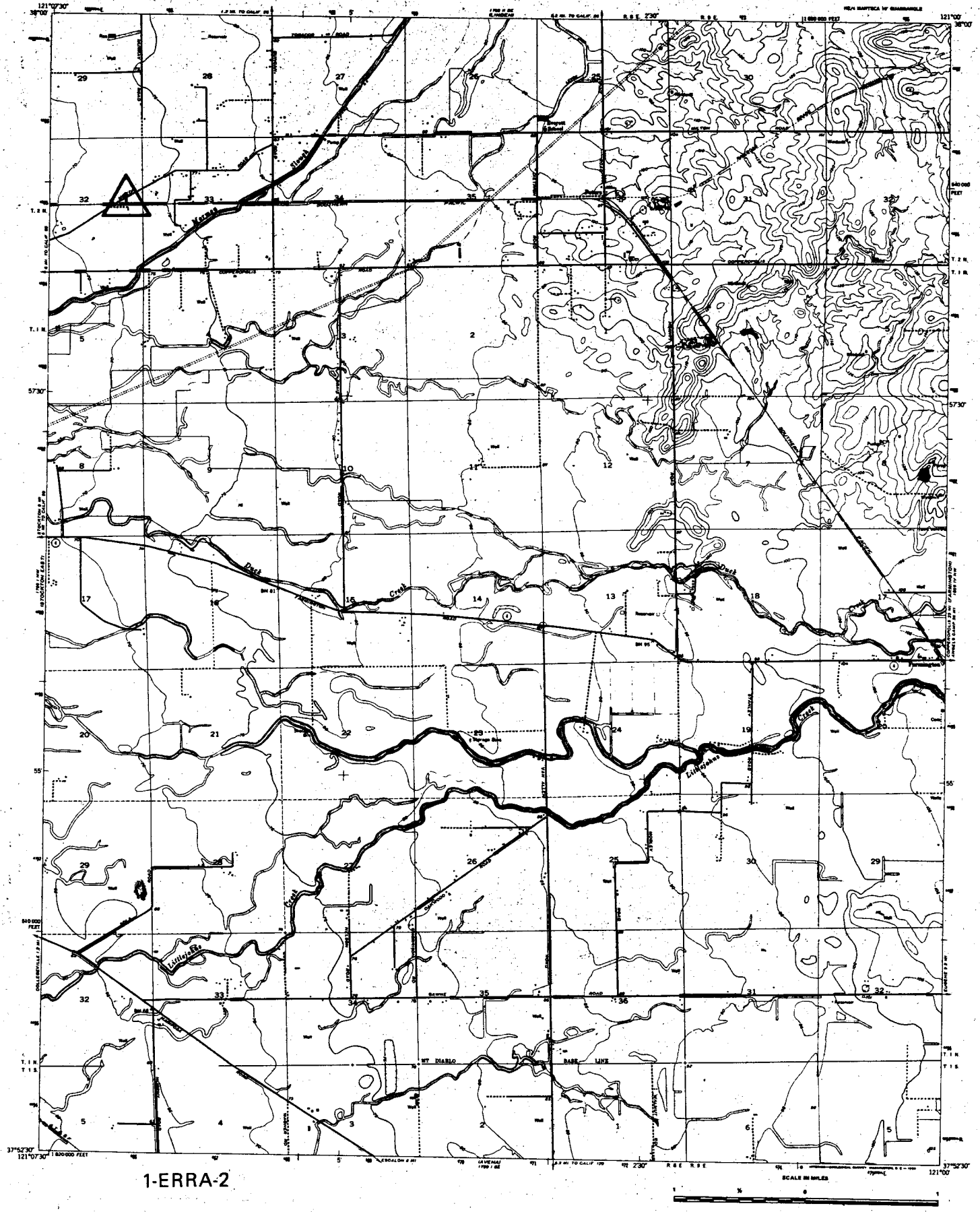


1=ARMY
2=HESU-2
3=PEBA



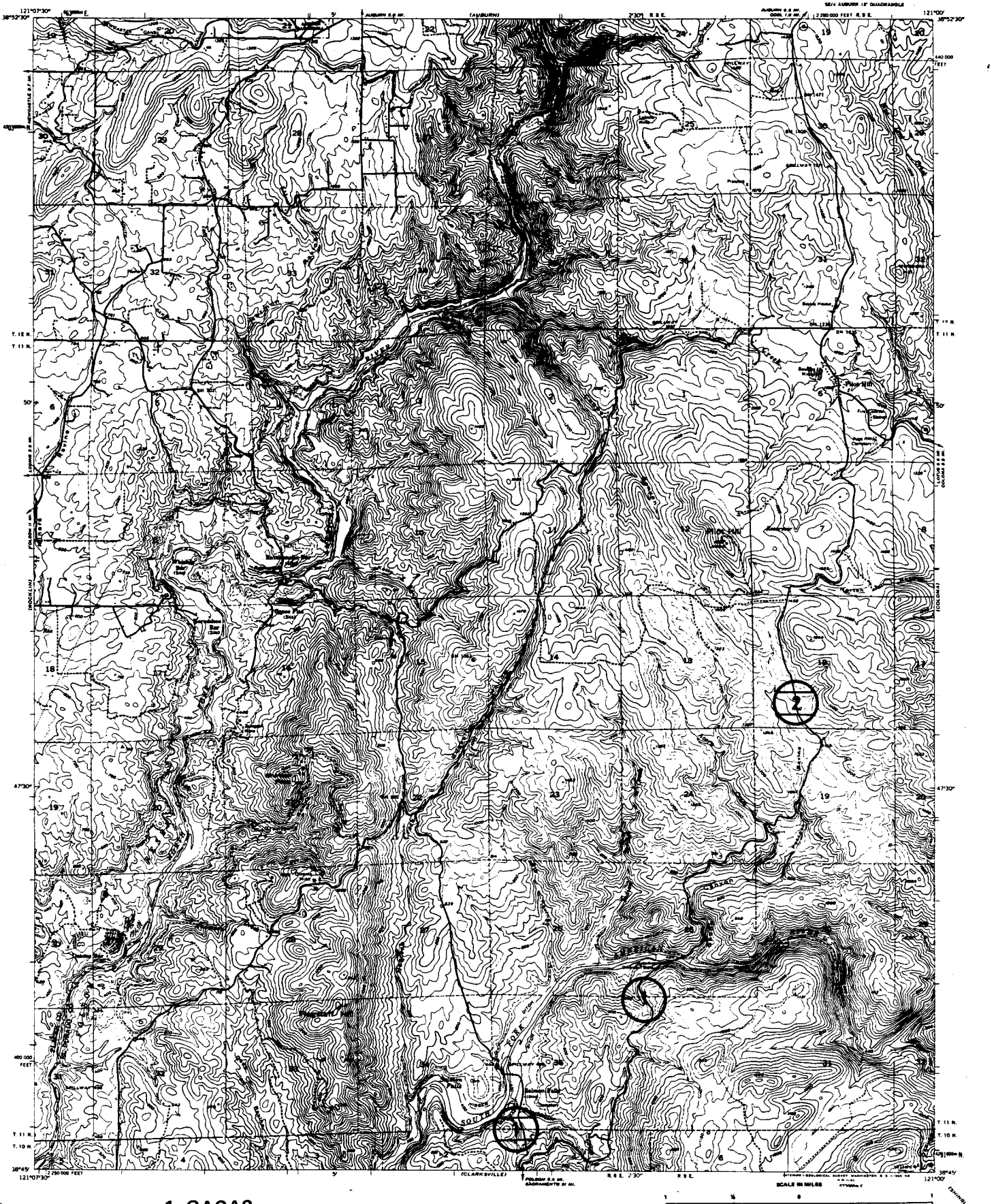
NEW HOPE, CALIF. 4978
NW/4 LOCI IS QUADRANGLE
N3807.5—W12122.5/7.5

3812124



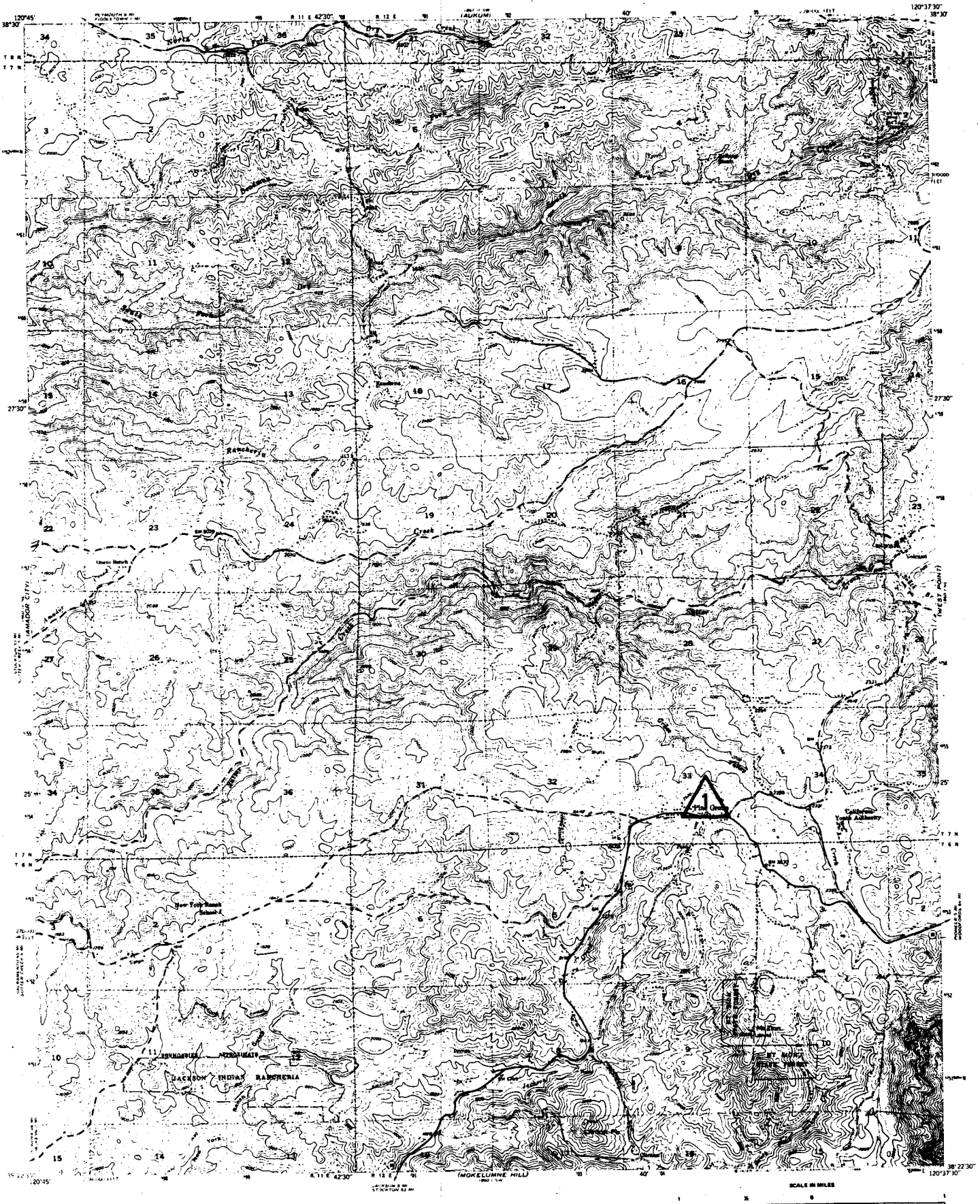
1-ERRA-2

3712181



PILOT HILL, CALIF. 827D
SE/4 AUBURN 15' QUADRANGLE
N3845—W12100/7.5

3812171



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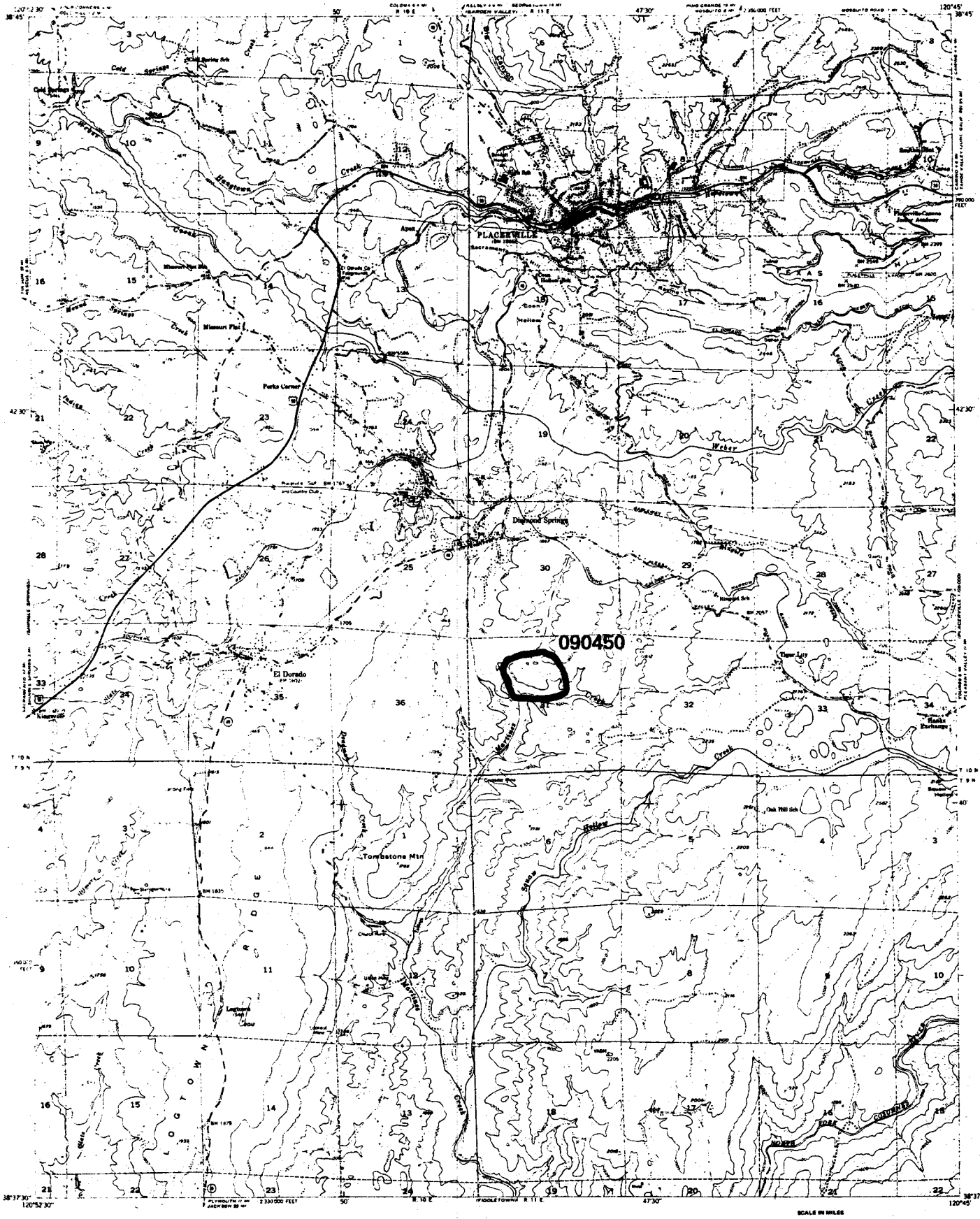
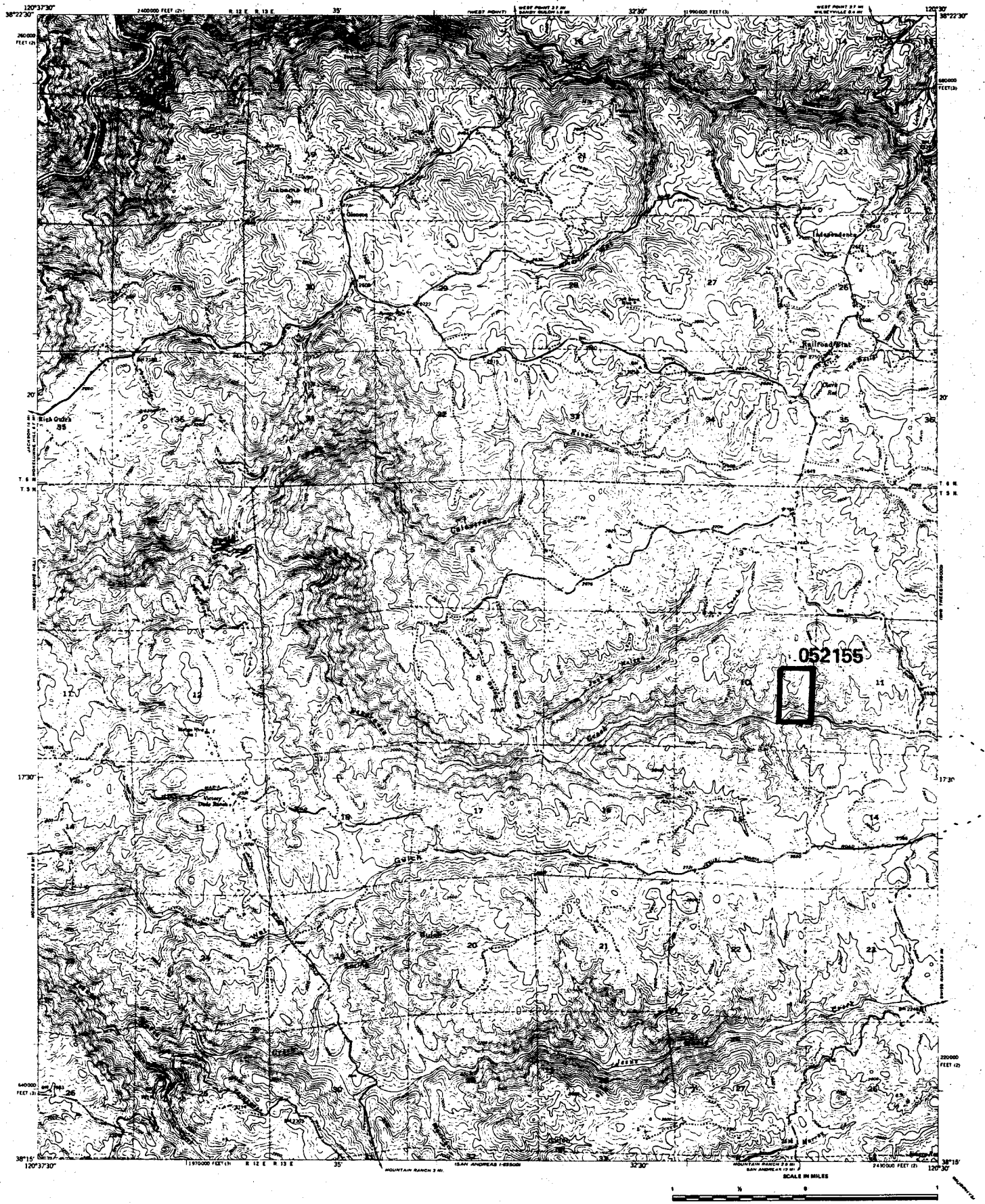
3817041



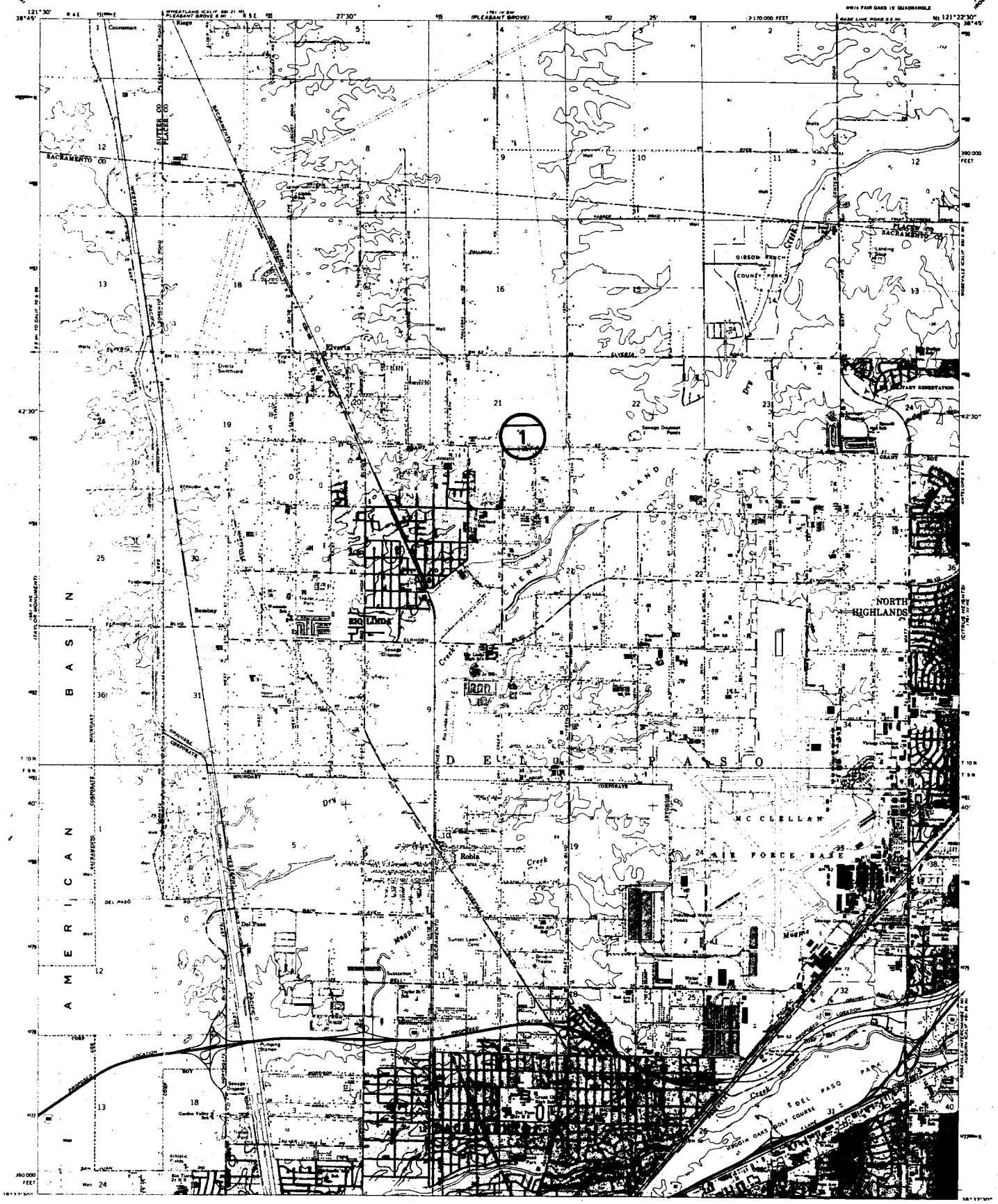
PLACERVILLE, CALIF. 510A
N3837.5—W12045/7.5

3812067



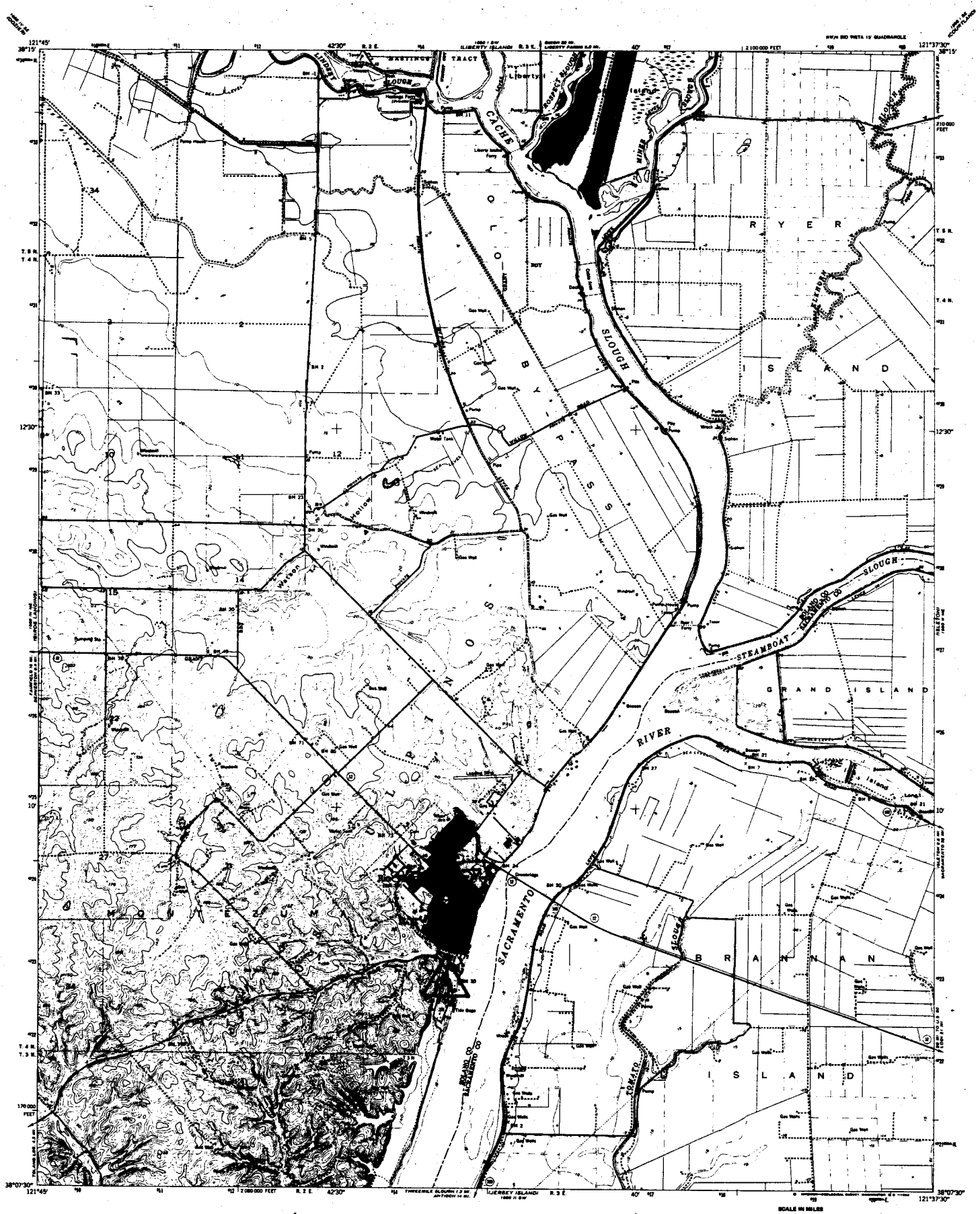
RAILROAD FLAT, CALIF. 4930
N3815—W12030/7.5

3812035



1-GRHE

38 12164



1=HICA

SCALE IN MILES

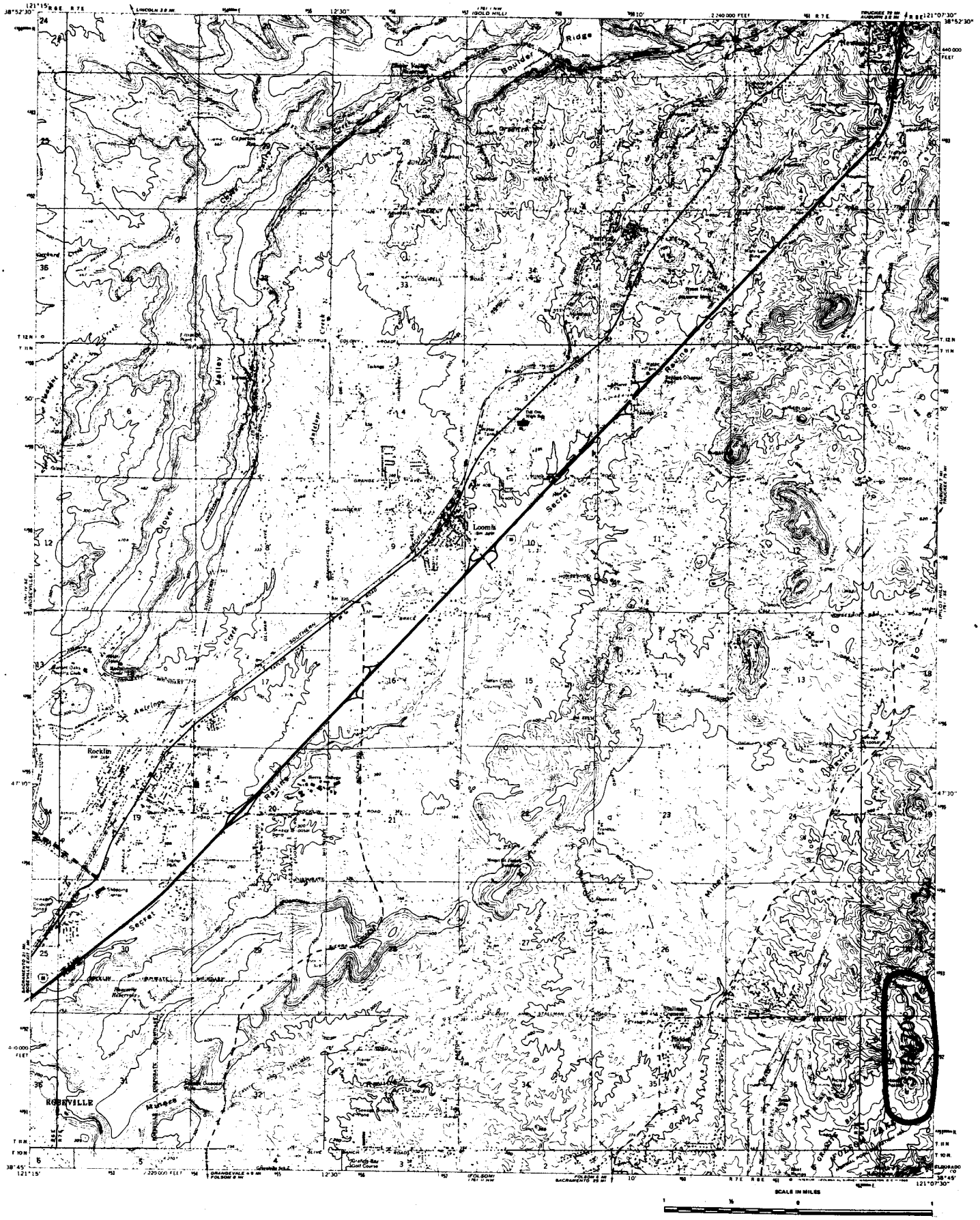
CONTOUR INTERVAL 10 FEET

RIO VISTA, CALIF. 480B

RW/4 RIO VISTA 15' QUADRANGLE

N3807.5—W12137.5/7.5

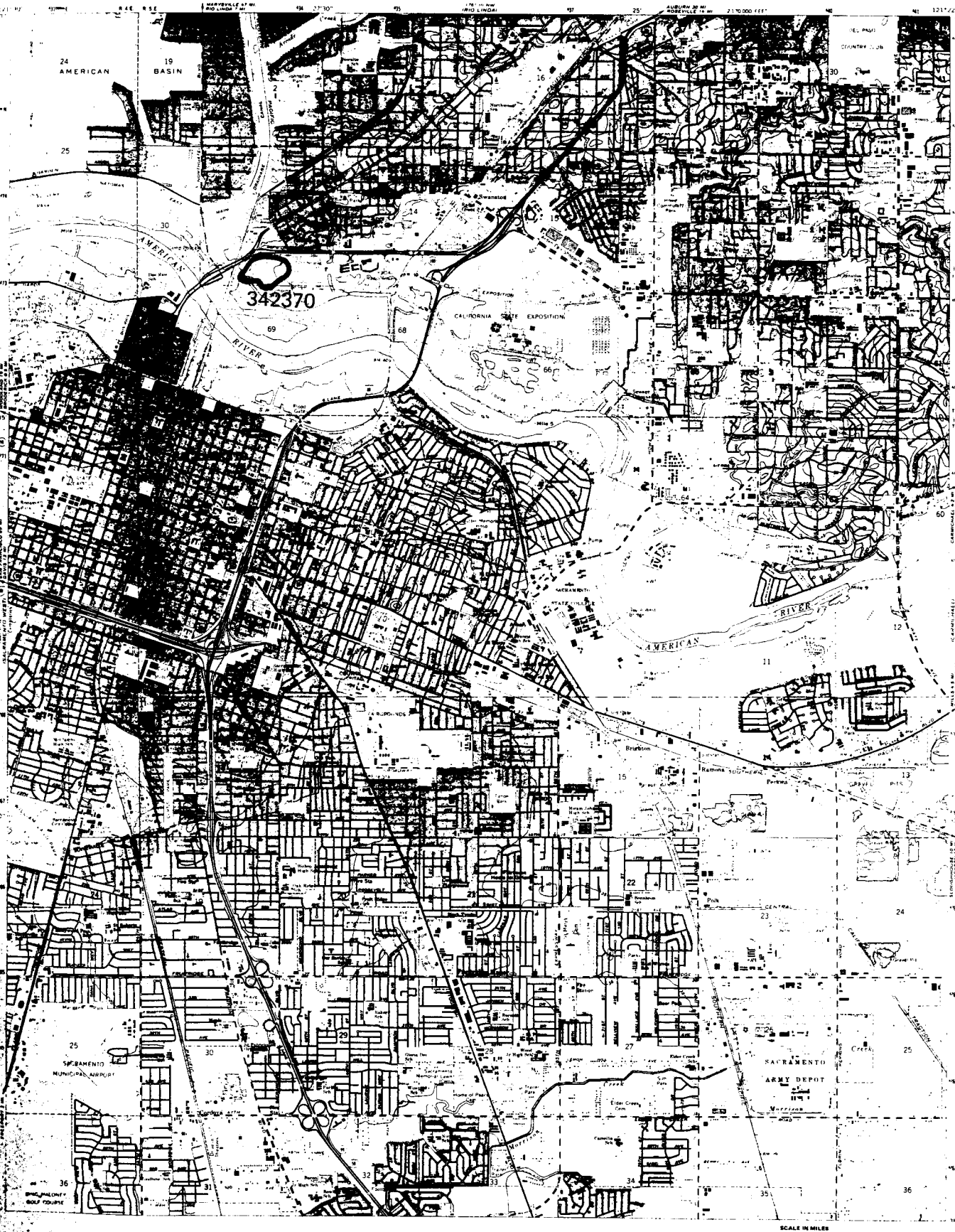
3812126



CONTOUR INTERVAL 20 FEET

ROCKLIN, CALIF. 527c
5'/4 AUBURN 15 QUADRANGLE
N3845—W12107 5/7 5

3812172



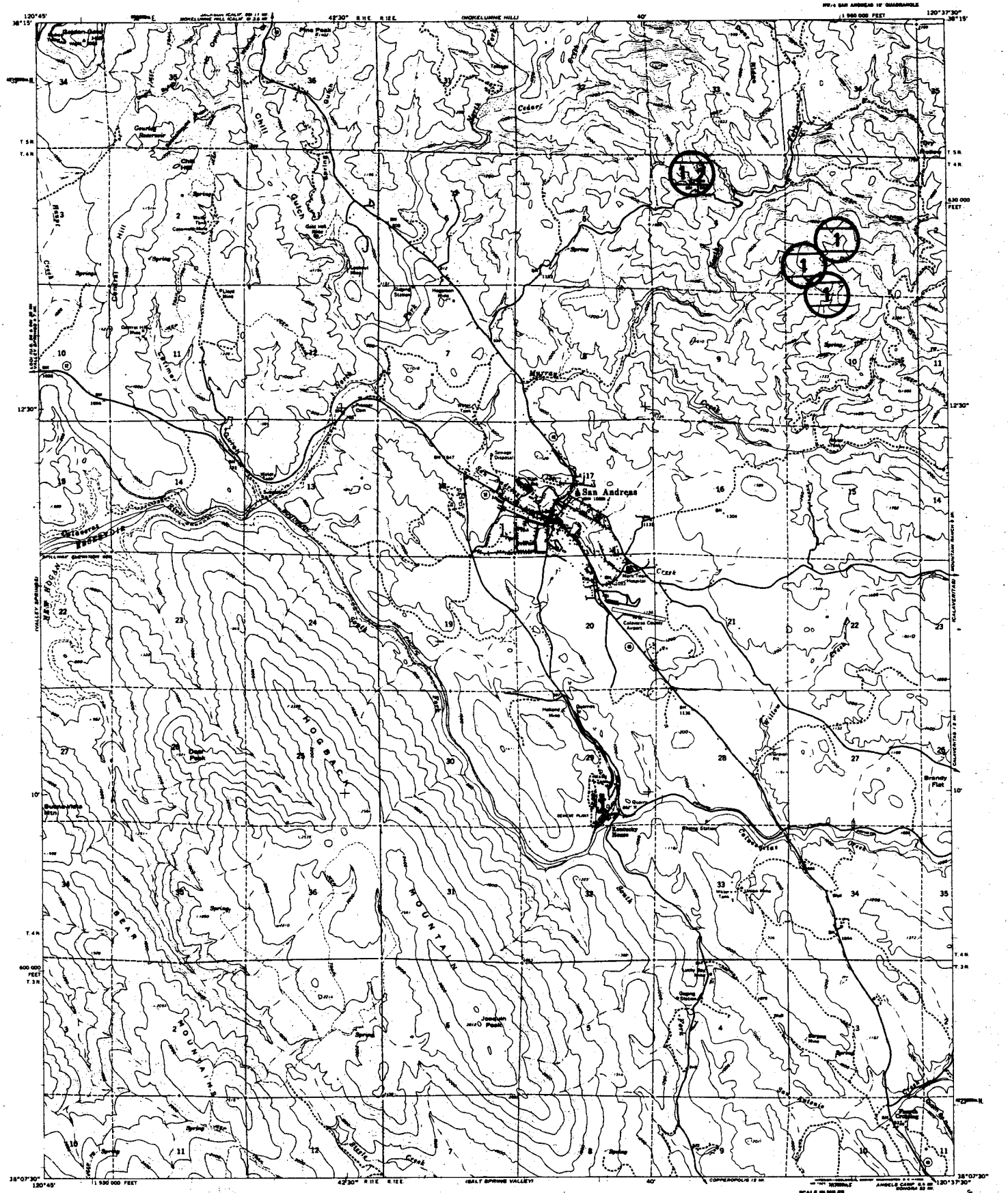
CONTOUR INTERVAL 5 FEET

SACRAMENTO EAST, CALIF. 5120

SW/4 FAIR OAKS 15 QUADRANGLE

N3830—W12122.5/7.5

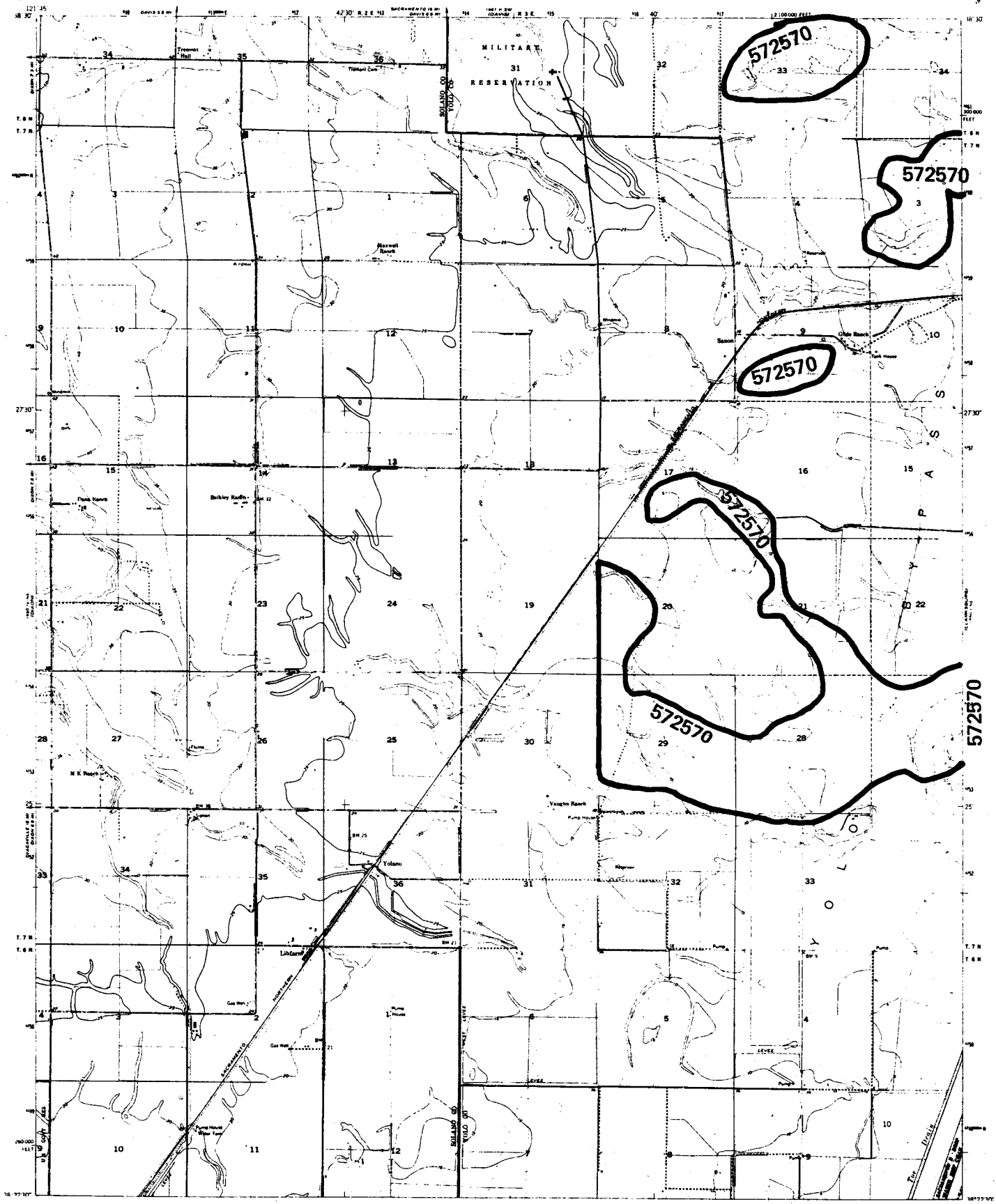
3812154



1-ARMY
2-HESU-2

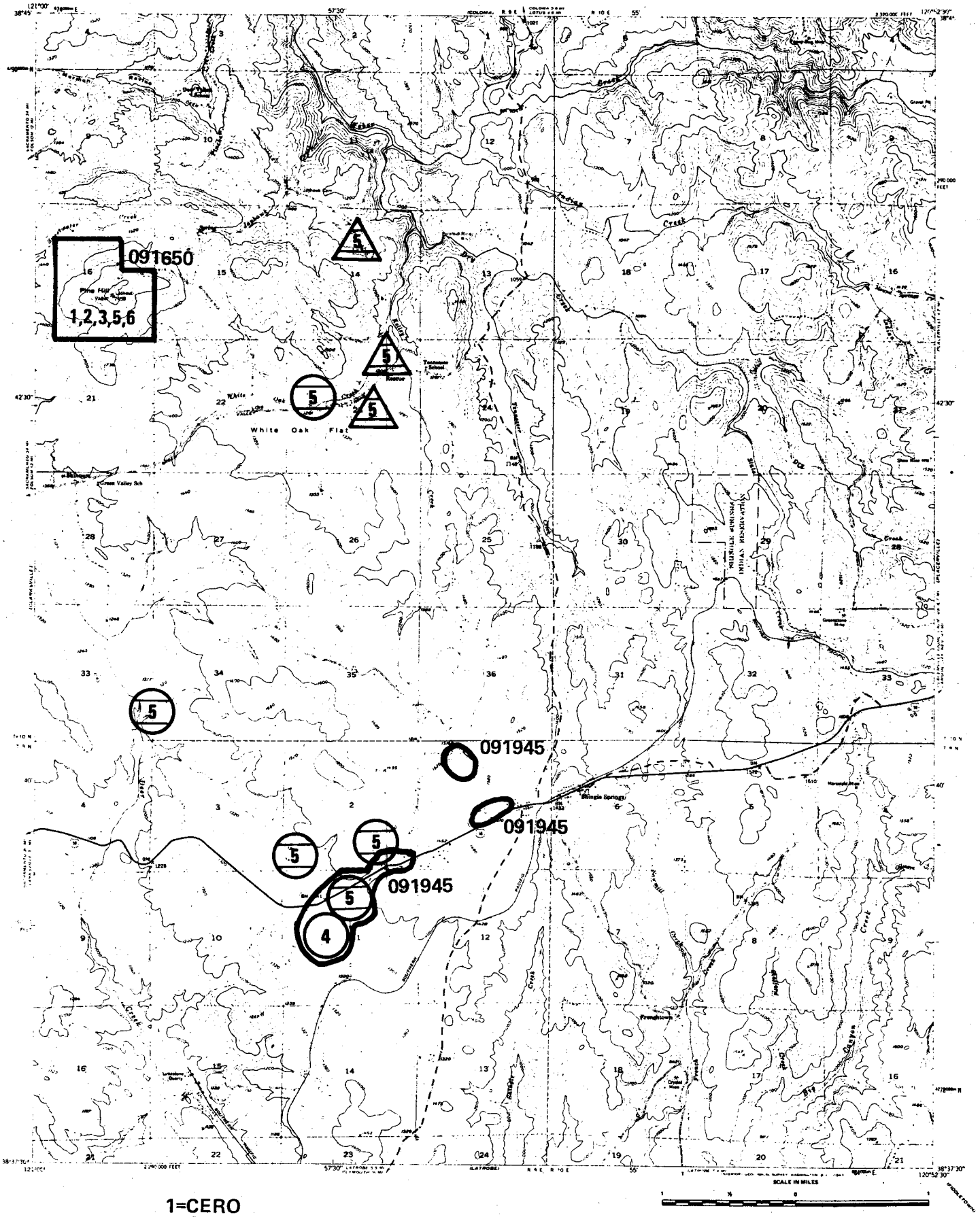
SAN ANDREAS, CALIF.
NW/4 SAN ANDREAS 15' QUADRANGLE
N3807.5—W12037.5/7.5

3812026



SAXON, CALIF. 497B
NW/4 COURTLAND 15' QUADRANGLE
N3822.5—W12137.5/7.5

38 12146



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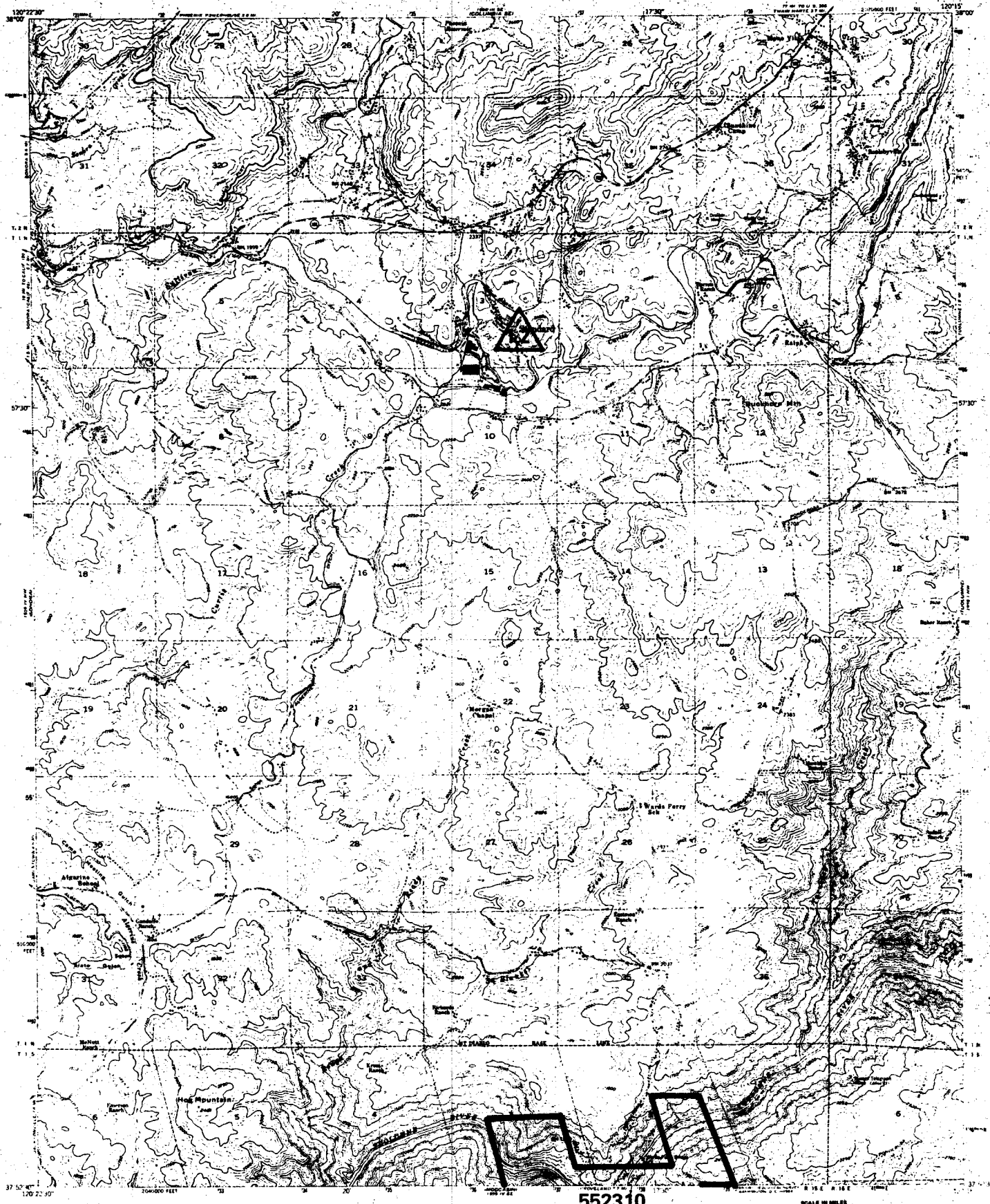
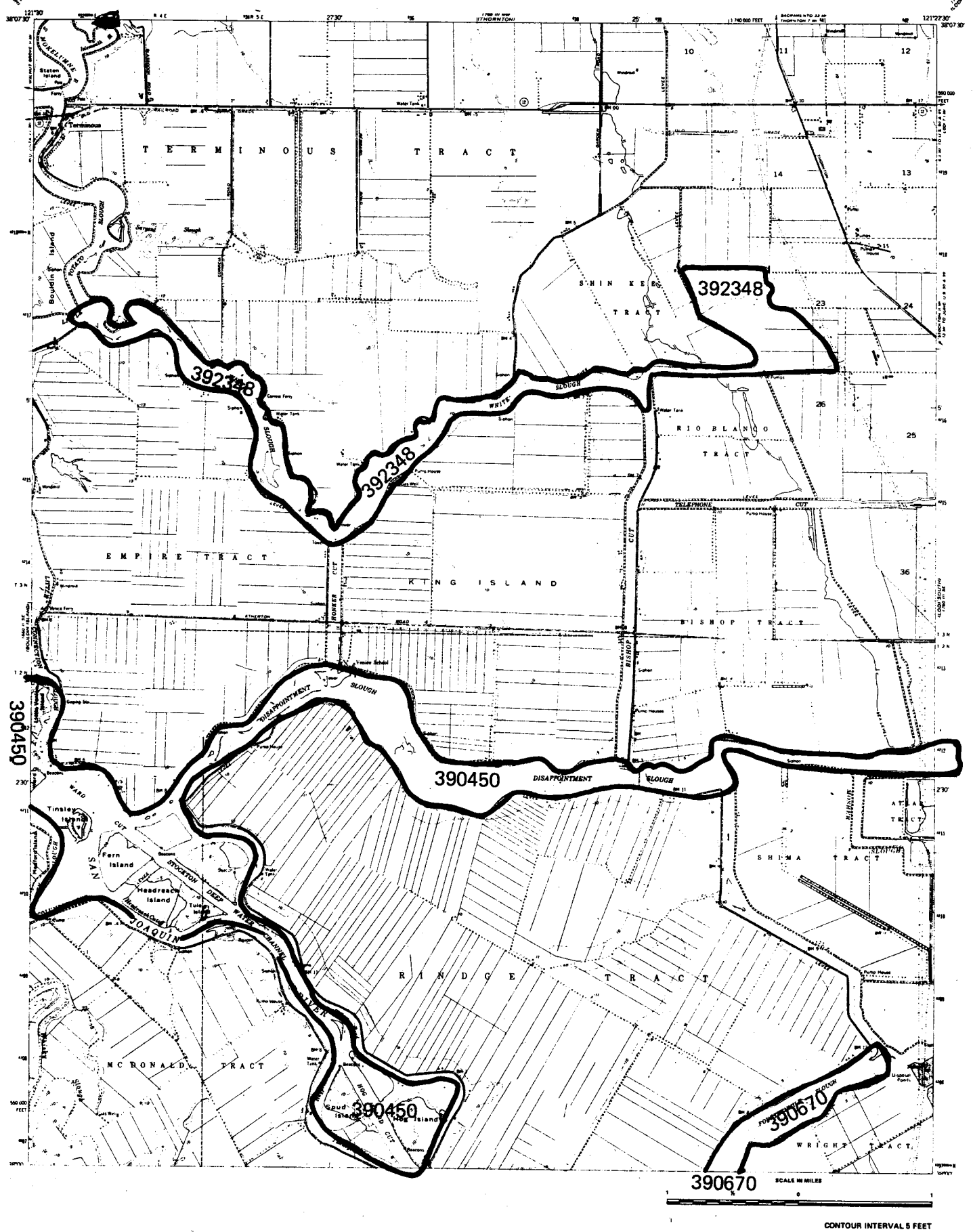
2=GACAS
3=FRDE
4=SELA-3
5=WYRE
6=HESU-2

38120681

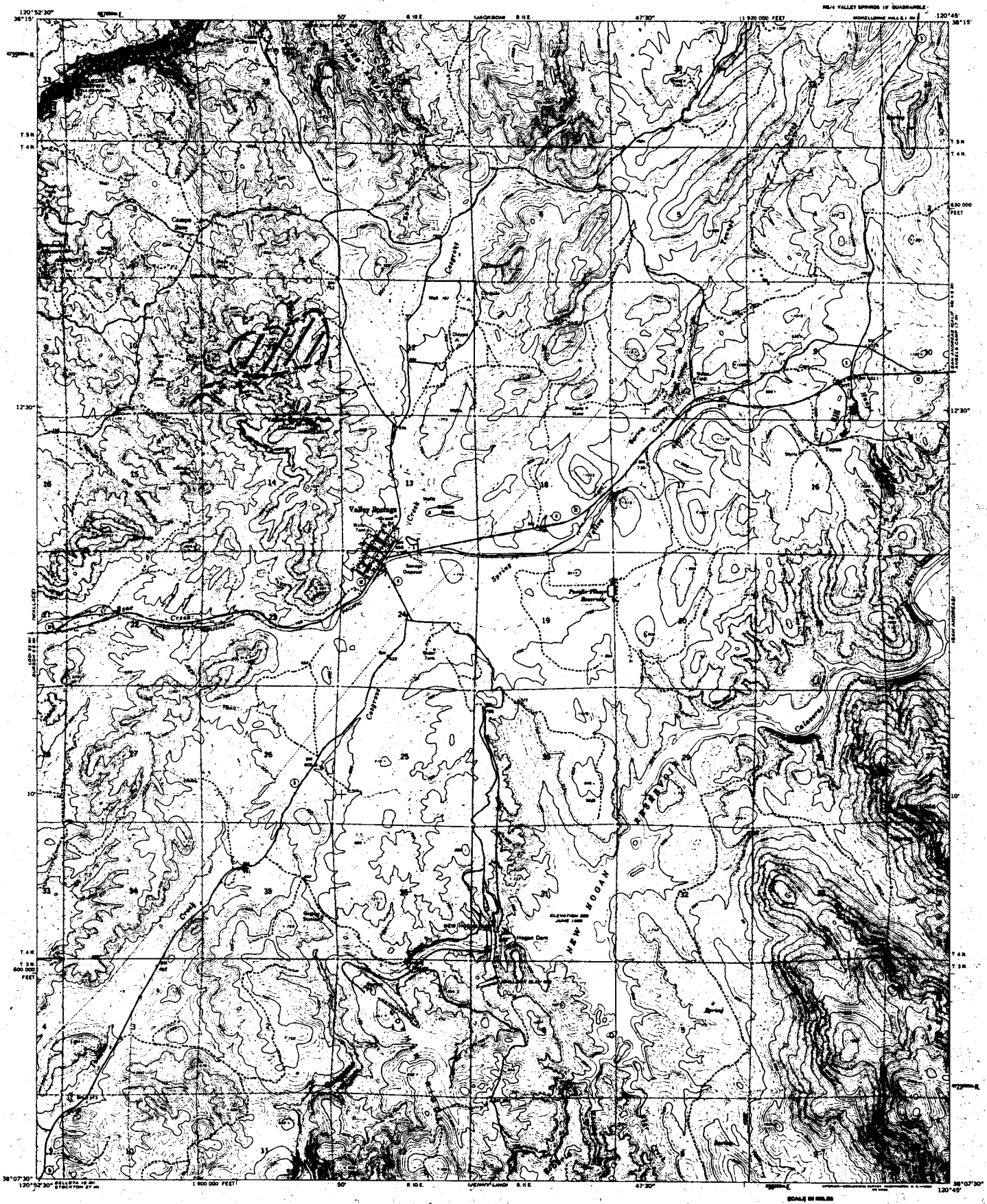

552310
1=ERTU
2=ERPI-2
CONTOUR INTERVAL 50 FEET
STANDARD CALIF

3712087



TERMINOUS, CALIF 4790

3812114



1=ARMY

CONTOUR INTERVAL 20 FEET

VALLEY SPRINGS, CALIF. 7.5'

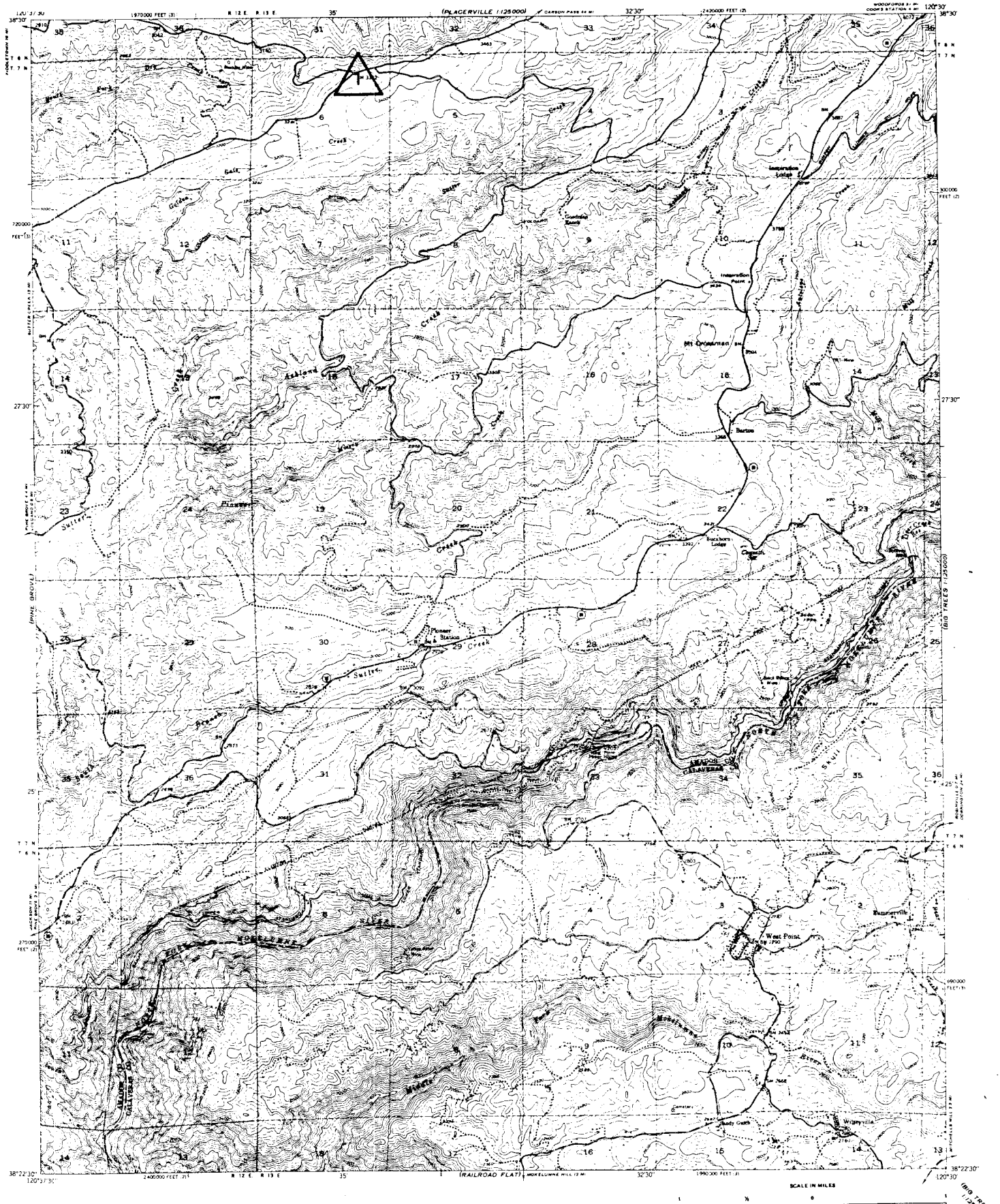
3812027

1=ARMY

CONTOUR INTERVAL 10 FEET

WALLACE, CALIF. 4778
NW/4 VALLEY SPRINGS 15' QUADRANGLE
N3807.5—W12052.5/7.5

3812028



1=NAPRP

WEST POINT, CALIF. 493A
N3822.5—W12030/7.5

3812045

CARBONDALE IONE MANZANITA AREA 030310 BE

Chaparral

Amador 38°27'30" N 121°00'30" W

Carbondale 7½' T7N R9E S 17,20

30 ha. (75 a.) 85 - 120 m. (280 - 400 ft.)

Private

A few miles north of Carbondale, in an area studded with abandoned claypits and covered with chaparral in the unquarried portions, are several stands of the rare Arctostaphylos myrtifolia. Though the plant occurs in several localities in Amador and El Dorado Counties, these are among the best examples. Additionally, there is a good population of rare endemic Eriogonum apricum, known from only this and several nearby localities. (See 030970 and 030975).

The stands grow on the soils formed from the Ione formation, a non-marine sedimentary dating from the Eocene and including sandstones, clays and, in this region, lignite.

The coal deposits in the vicinity were worked in the 1870's in a near-boom atmosphere; however, the coal was unsuitable for locomotives and, though mined for several decades, has not been mined recently.

Integrity: Clay and coal have been mined in the area and there are tracks through the chaparral; however, it has not been significantly disturbed, except for the quarries.

Use: Private

February 1976

IONE CLAY BARRENS 030970 CE

Chaparral, unique association, unique soil

Amador 38°20' N 120°55' W

Ione 7½' T5N;T6N, R10E S 6,7;31 & var.

1,120 ha. (2,750 a.) 90-140 m. (300-450 ft.)

Private

Climatic and edaphic conditions combine in this area to produce one of the most remarkable and distinctive ecological islands in the State. Several plant species are restricted to this area and others occur as disjuncts.

The dominant plant is the Ione manzanita, Arctostaphylos myrtifolia, which is restricted to this area and to several small nearby localities with similar soil conditions. This low-lying manzanita is a distinctive olive green which contrasts with the gray of the whiteleaf manzanita, A. viscida, and the taller Parry manzanita, A. manzanita, which form part of the chaparral cover surrounding and impinging upon parts of the island.

The rare wild buckwheat, Eriogonum apricum, is found only on the island and grows in a few inhospitable spots where other plants do not grow. This plant differs from the 75-odd other species of Eriogonum to the extent that its nearest relatives have not been determined.

A shrubby rockrose, Helianthemum suffrutescens, is confined to the island and its immediate vicinity. Other plants of restricted distribution occurring on the island include Ceanothus tomentosus, Horkelia parryi, Mimulus viscidus, and Plagiobothrys scriptus.

Among the disjuncts found here is Juncus confusus, a Rocky Mountain species occasionally found in the Sierra above 1,200 meters. Other disjuncts include

Agrostis exigua, Lotus balsamiferus, and Scribneria bolanderi.

The boundaries of the island coincide with the limits of the outcrop of the Ione formation in this region. This formation is composed of kaolinitic clay materials, quartz sand and ironstone. It is a marine sedimentary formation laid down in the Upper Eocene and it represents the last marine invasion of the valley. Mining cuts exhibit a colorful display of soil horizons, red soil resting on a base of white kaolinitic clay. The hilltops are capped by sheets of laterite or hard, indurated ironstone several feet thick. The hardpan clay is very poor in minerals needed for plant growth and is highly acidic (pH 2.9-3.95).

The soil horizon sequences here are identical to those in tropical India, Africa and Hawaii. These Ione laterite profiles are probably survivors of the tropical climate that prevailed in the area during part of the Tertiary period. Few, if any other sites on the continent, preserve an ancient soil regime in such magnitude and splendor.

Integrity: Clay, for use as a fire clay, has been quarried in the area for a number of years and since 1955 the white sand which is relatively free of iron has been extracted for glass manufacture. If quarrying operations are increased or new quarries opened, the main plant stands may be destroyed.

Use: Private

Ref: Gankin, R. and Major, J., 1964. Arctostaphylos myrtifolia, its Biology and Relationship to the Problem of Endemism. Ecology Vol. 45 #4, p. 792-808.

February 1975

IRISH HILL ERIOGONUM STAND 030975 CE

Rare plant

Amador 38°23'20" N 120°58' W

Irish Hill 7½' T6N, R9E

2 ha. (5 a.) 110-133 m. (360-436 ft.)

Private

An isolated colony of the rare plants Arctostaphylos myrtifolia and Eriogonum apricum var. prostratum is found in this region, growing, as elsewhere, on outcrops of the Ione formation. (See 030970). The variety of the Eriogonum is found only here.

Integrity: These stands are undisturbed though there has been quarrying in the past.

Use: Private

Ref: Myatt, R. G., 1968. The Ecology of Eriogonum apricum Howell. Unpublished thesis, University of California, Davis.

May 1975

UNIVERSITY OF THE PACIFIC - A. P. HILL 052155
FAMILY STUDY AREA

Oak Woodland, yellow pine forest

Calaveras 38°18' N 120°31'

Railroad Flat 7½' T5N, R13E, S

16 ha. (40 a.) 715-820 m. (2,350-2,700 ft

Private

This research area lies on the borderline betwee the foothill woodland and the yellow pine forest The former is dominated by canyon live and Calif nia black oaks, Quercus chrysolepis and Q. kello In the latter forest, in addition to the Western yellow pine, Pinus ponderosa, there are incense dars, Calocedrus decurrens, and Douglas fir, Pse dotsuga menziesii.

There is an all-year stream flowing through the property. The area is primarily steep, heavily wooded hillsides but there is an open section wi grassland by the stream.

Integrity: There is no present development on t property. The area is being managed to restore or retain the original vegetation.

Use: Private: education, research. For inform tion contact Department of Biology, University o the Pacific, Stockton, California.

Ref: Hensel, T. C., 1971. A Description of Vas cular Plant Species from an Area in the Central Sierra Nevada Foothills of California. Unpub. T sis, University of the Pacific, Department of Bi ogy.

February 1975

SHINGLE SPRINGS AREA 091945 AE

Chaparral

El Dorado 39°45'20" N 121°56' W

Shingle Springs 7½' T9N R9E S 1

20 ha. (50 a.) 395 - 475 m. (1,300-1,560 ft.)

State of California; some private holdings

The dominant vegetation in the area is chaparral typical of the lower western slopes of the central Sierra, with such species as chamise, Adenostoma fasciculatum, coffeeberry, Rhamnus californica, Ceanothus tomentosus, and whiteleaf manzanita, Arctostaphylos viscida.

Several rare plants are found in or near the area, including Senecio layneae, Wyethia reticulata, Chlorogalum pomeridianum, and an as yet unnamed species of Convolvulus.

There are gabbro outcrops in the area.

Integrity: Portions of the area are adjacent to a major highway and others have been subjected to some development.

Use: Research, educational, observational. Portions are private.

May 1977

PINE HILL NATURAL AREA 091650 BE

Chaparral, coniferous forest and oak-grassland

El Dorado 38°43' N 120°59' W

Shingle Springs 7½' T10N, R9E S 16

160 ha. (400 a.) 425-628 m. (1,400-2,059 ft.)

California Division of Forestry (access private)

Pine Hill is one of the prime botanical areas in the central Sierran foothills, displaying in a relatively small area three distinct biotic communities as well as several endemic species.

The flannel bush, Fremontodendron decumbens, distinguished by its peculiar habit of low growth and by its orange to red flowers, is found only on Pine Hill. A race of bedstraw, Galium californicum ssp. sierrae, is also confined to the hill. Here, too, is the type locality of Ceanothus roderickii, a prostrate form with pale blue flowers. Though similar to C. fresnensis this species probably represents a race which is distinctive to El Dorado County. It is restricted to this area and a few nearby localities. Another species which is confined to this area and to a few others in the County is Wyethia reticulata. Here there is a particularly fine stand, and during the summer blooming season this plant is one of the most conspicuous on the hill. There are several other species here which, though found in other localities in the Sierras, are not found elsewhere in the County.

The south side of the hill is covered by chaparral. On the higher elevations on the north side there is a pine forest, with Pinus ponderosa and P. sabiniana, and lower down there is an oak-grassland association.

From the lookout station, atop the hill at 627 meters (2,056 ft.), there is a fine view of the Sacramento Valley.

091650 BE

Geologically the hill is primarily gabbro and diorite of the upper Jurassic period and is related to rocks found 610 meters (2,000 ft.) higher, 16 km. (10 miles) to the east in the Sierra.

Integrity: There is a lookout station atop the hill and an access road. A firebreak destroyed much of old growth Fremontodendron several years ago; however, the plant is making a comeback.

Use: Pine Hill is managed by the California State Division of Forestry as a natural area, and is used by various educational institutions.

Ref: Gankin, Roman, 1969. The Pine Hill Disaster. California Native Plant Society Newsletter, Vol. V, No. 3 (August) p. 7-8.

January 1975

INSTITUTE OF FOREST GENETICS 090949 CD

Conifers

El Dorado 38°44' N 120°44'30" W

Camino 7½' T10N R11E S 10,11

43 ha. (106 a.) 790 - 820 m. (2,600-2,700 ft.)

United States Forest Service

Though not a natural area, the Institute is an important research center and was the first Forest Service facility devoted solely to forest genetics studies.

In the Eddy Arboretum there are some 70 pine and 30 fir species from throughout the northern hemisphere (there are approximately 80 species of Pinus and 40 of Abies).

There is a stand of ponderosa pines, P. ponderosa, with specimens from about 50 distinct geographic areas throughout western North America.

Integrity: This is an arboretum and experimental forest and was established in 1925. There are numerous buildings, roads and other facilities.

Use: Research, educational, observational. The Institute is open to visitors weekdays. For information, contact Institute of Forest Genetics, 2480 Carson Road, Placerville, California, 95667.

May 1977

DIAMOND SPRINGS MANZANITA AREA 090450 BD

Chaparral

El Dorado 38°40'56" N 120°48'40" W

Placerville 7½' T10N R11E S 31

3.2 ha. (8 a.) 475 - 550 m. (1,560-1,800 ft.)

Private

On a south-facing chaparral-covered slope above Martinez Creek is one of the larger and the southernmost known stand of the uncommon El Dorado manzanita, Arctostaphylos nissenana. This Arctostaphylos is known from only a few other sites in the County. Occurring with it in the chaparral are whiteleaf manzanita, A. viscida, chamise, Adenostoma fasciculatum, and scrub oak, Quercus dumosa.

At the base of the slope, by the creek, there are Douglas fir, Pseudotsuga menziesii, and ponderosa pine, Pinus ponderosa.

Integrity: Pristine, but development is encroaching.

Use: Private

February 1976

DOTONS POINT 310470 AD

Oak woodland

Placer 38°45'54" N 121°07'42" W

Rocklin 7½' T11N R8E S 30,31

12 ha. (30 a.) 145 - 165 m. (470 - 540 ft.)

California Department of Parks and Recreation

Lying entirely within the Folsom Lake State Recreation Area, this Point is subject to heavy use. However, away from the beach and picnic areas there is a lush oak woodland which supports an unusually heavy concentration of birds.

Vegetation in the woodland includes interior live and blue oak, Quercus wislizenii and Q. douglasii, digger pine, Pinus sabiniana, California buckeye, Aesculus californica, buck brush, Ceanothus cuneatus, coyote bush, Baccharis pilularis, and yerba santa, Eriodictyon californicum.

Over a hundred species of birds have been recorded in the area, with many nesting. Of note are the Lewis woodpecker, Asyndesmus lewis, black-chinned hummingbird, Archilochus alexandri, and the increasing numbers of Canada geese, Branta canadensis, that are wintering on the lake.

Integrity: The area is bordered by a beach and a heavily used picnic area. There is a road through the area. Indiscriminate use of the area may have an adverse effect on the breeding populations.

Use: Educational, observational.

August 1976

COSUMNES RIVER - BADGER SLOUGH 340370 BD

Valley oak, riparian woodlands

Sacramento 38°19'30" N 121°22' W

Galt 7½' T5N;T6N, R5E

160 ha. (400 a.) 9-12 m. (30-40 ft.)

Private

These two areas, only a few kilometers south of Sacramento, are excellent examples of the riparian and valley oak woodlands that once lined the rivers of the Central Valley. Before the development of the Valley, dense forests extended up to 6.5 kilometers (4 miles) inland from the rivers and streams, and some of the valley oaks, Quercus lobata, reached a diameter of 1.8 meters (6 feet) and a height of 23 meters (75 feet).

The first area, on the south bank of the Cosumnes River near the confluence with Badger Creek, is composed of both the riparian woodland and scattered valley oaks. Cottonwoods, Populus fremontii, ash, Fraxinus oregona, willows, Salix ssp., and the box elder, Acer negundo ssp. californicum, button bush, Cephalanthus occidentalis californicus, and coyote bush, Baccharis pilularis, as well as the dominant valley oak, are found here.

The second site, approximately 2 kilometers (1.3 mile) northeast on the creek, is primarily valley oak.

Mule deer, Odocoileus hemionus, once common but now rare in the Valley, and the coyote, Canis latrans, are not uncommon here. This area is also one used by migratory sand hill cranes, Grus canadensis tabida.

Integrity: Though surrounded by agricultural land or altered oak savanna, these areas show no signs of disturbance.

Use: Private. A portion of the Cosumnes is navigable.

Ref: Thompson, Kenneth, 1961. Riparian Forests of the Sacramento Valley, California. Annals Assoc. Amer. Geog. Vol. 51 (3), p. 294-315.

April 1975

COSUMNES RIVER PROPOSED PARK 340375 AD

Valley oak, riparian, marsh

Sacramento 38°16' N 121°22'30" W

Bruceville, Galt 7½' T5N R5E;R6E S num.

1,200 ha. (3,000 a.) 2 - 7 m. (5 - 25 ft.)

Some California State holdings; mostly private

This area includes the junction of the Cosumnes and Mokelumne Rivers. Though much of the area is farmed, portions preserve valley oak woodlands and marsh and riparian associations.

The valley oak, Quercus lobata, occurs in scattered groves on the higher ground, with a grassland, primarily exotics, constituting the understory in most of the groves.

There are a number of small marshes and ponds with marsh or riparian vegetation along the borders. The marsh vegetation is typical, with cattail, Typha sp., and tule, Scirpus sp., among others.

There is a good stand of riparian growth along a portion of the Cosumnes River, with cottonwood, Populus fremontii, willows, Salix spp., ash, Fraxinus latifolia, and white alder, Alnus rhombifolia.

Though a number of animals are present, the most conspicuous are the birds, particularly the waterfowl during the migratory season. Sandhill cranes, Grus canadensis, congregate in the area during the winter.

Integrity: Much of the area has been impacted by agricultural activities, and there are buildings; however, portions are relatively undisturbed.

Use: Private

February 1980

DELTA MEADOWS 340430 AD

Freshwater marsh, riparian woodland

Sacramento 38°30' N 121°30' W

Courtland and Bruceville 7½' T5N R4E S 23,26

160 ha. (400 a.) 1.5 - 3 m. (5 - 10 ft.)

Public waterway

This area includes the last remaining remnant of consequence of the original Delta wilderness. Much of the area is undisturbed freshwater marsh with a number of plant species present, including cattail, Typha latifolia, tule, Scirpus acutus, Potentilla palustris, and yellow pond-lily, Nuphar polysepalum. There are willow thickets with Salix gooddingii, S. lasiolepis, Ludwigia repens, and dogwood, Cornus occidentalis. Many of these plants were once common throughout the Delta.

Along the levees and on the higher land there are stands of riparian woodland including the cottonwood, Populus fremontii, and valley oak, Quercus lobata, as well as an understory with yerba mansa, Anemopsis californica, rye grass, Elymus triticoides, squaw bush, Rhus trilobata, and wild rose, Rosa californica, among others.

The area abounds with small animal life, including over 100 species of birds. A number of waterfowl utilize the area during the migratory season and some, particularly the wood duck, Aix sponsa, nest here.

There is an Indian burial site within the area.

Integrity: Fire burned a portion of the area in 1972, and there has been some cultivation in the southern portion. Levees bound it and a rail line bisects it. Snodgrass Slough is frequented by small craft, and the higher lands have been used for picnics and campsites.

Use: Educational, research, observational, light recreational.

AMERICAN RIVER BLUFFS 340165 AD

Blue oak woodland, floral display

Sacramento 38°38'30" N 121°13' W

Folsom 7½' T9N R7E

60 ha. (150 a.) 30 - 75 m. (100 - 250 ft.)

Folsom Lake State Recreation Area; private holdings

The American River Bluffs are composed of exposed non-marine sedimentary deposits of Plio-Pleistocene age, about 30 meters (100 feet) high, overlooking the river. These bluffs represent one of the last relatively undisturbed areas in the vicinity of Sacramento. They support a rich community on the north-facing canyons, with many typical members of the California spring flora occurring here, such as Brodiaea pulchella, B. lutea, B. laxa, Ranunculus occidentalis, R. californicus, Calochortus spp., Eschscholzia californica, E. lobbii, Gilia tricolor, Lupinus bicolor and L. nanus, among others.

On the bluffs there are small patches of blue oak woodland, with Quercus douglasii, valley oak, Q. lobata, and California buckeye, Aesculus californica.

Integrity: A powerline crosses the area but, aside from erosion caused by motorcycles in a small section, there is relatively little disturbance.

Use: Private. Portion in Lake Natoma State Park, educational, observational, research.

April 1976

FAIR OAKS BALD SPOT 340612 BE

Vernal pool

Sacramento 38°39'40" N 121°12'32" W

Folsom 7½' T9N R7E S 4

2 ha. (5 a.) 74 - 76 m. (245 - 250 ft.)

Fair Oaks Recreation and Park District; some private holdings

This small area contains several vernal pools with the associated community. Several species of Brodiaea, B. pulchella, B. laxa, B. minor, among others, are found here, as is an undescribed species. The rare Dichelostemma lacuna-vernalis occurs here.

There are some blue oaks, Quercus douglasii, on the margins.

The soil is derived from a Plio-Pleistocene non-marine sedimentary rock and is virtually impervious to water.

See 341645, which overlaps in part.

Integrity: At present the pools are relatively undisturbed, but development is pending.

Use: Research, educational, observational.

Ref: Hannibal, L. S. 1958. Title unknown. Calif. Hort. Journal.

August 1976

MEISS - IONE ROAD OVERLOOK 341333 AE

Grassland

Sacramento 38°25'40" N 121°03'26" W

Carbondale 7½' T7N R8E S 25,26

6 ha. (15 a.) 60 - 70 m. (200 - 230 ft.)

Private

In this small area with swales a dwarf Brodiaea occurs that is near B. minor and probably allied to the undescribed form found in the vernal pools at the Fair Oaks Bald Spot (see 340612). The surrounding area is grassland composed primarily of exotics.

The soil is essentially from volcanic-ash mudflows, is of poor quality and has poor drainage.

Integrity: Grazed, but the Brodiaea appears undisturbed.

Use: Private

August 1976

PHOENIX AIRFIELD and Vicinity 341645 BE

Vernal pools, oak woodland

Sacramento 38°40' N 121°12'30" W

Folsom 7½' T9N R7E S 4

240 ha. (600 a.) 60 - 83 m. (200 - 271 ft.)

Fair Oaks Recreation and Park District; some private holdings

In this area are found some vernal pools (see 340612) representative of the most diverse type in Northern California. Additionally, there is an excellent oak woodland as well as some grassland. During the spring there is an outstanding wildflower display in the area.

Among the species in the vernal pools association are Brodiaea pulchella, B. laxa, B. minor, Downingia bicornuta, D. pusilla, Ranunculus alveolatus, and Lilaea scilloides. The Orcuttia californica var. viscida is also found here.

The oak woodland is dominated by blue oak, Quercus douglasii, and valley oak, Q. lobata. Exotics constitute the bulk of the grassland species.

Integrity: Apart from the airport development, much of the area is relatively undisturbed, though development is pending. The area is one of the few undeveloped plots in the city of Fair Oaks.

Use: Research, educational, observational. Portion is private.

August 1976

ROCK CORRAL (ROBBERS' CORRAL) 341870 AD

Riparian woodland

Sacramento, Placer 38°43' N 121°12'30" W

Folsom 7½' T10N R7E S 21

16 ha. (40 a.) 120 - 135 m. (400 - 450 ft.)

Private

Biologically, this area is rich in plant and animal species characteristic of a relatively undisturbed oak woodland riparian community. Buckeye, Aesculus californica, three oaks, interior live, valley and blue, Quercus wislizenii, Q. lobata and Q. douglasii, and cottonwood, Populus fremontii, are the more prominent species.

Grasslands with some vernal pool habitats are adjacent to the area. A small stream, with associated marsh plants in the pools and backwaters, flows through the area.

There are conspicuous basaltic and limestone outcrops. Indian grinding rocks are found here.

Integrity: Grazed, and well used as a horseback riding and hiking area, the major feature of the community is intact. Historically, the area was used as a cattle rustlers rendezvous.

Use: Private. Area appears on master plan as a park, but is unfunded.

December 1975

SLOUGHHOUSE VERNAL POOL 341950 AE

Vernal pool

Sacramento 38°32' N 121°11'15" W

Buffalo Creek 7½' T8N R7E S 22

24 ha. (60 a.) 65 - 69 m. (215 - 227 ft.)

Private

A large vernal pool, about 90 meters (300 feet) long and approximately 23 meters (75 feet) wide at the widest part, occurs here in the high, rolling plain of the eastern portion of the County. Though there are several pools in the region, this one harbors the best stand of the rare Orcuttia californica var. viscida. This grass is known from only a few sites, all within a few kilometers of each other.

Integrity: Relatively undisturbed. The area abuts a highway.

Use: Private

August 1976

STONE LAKES BASIN 341953 CD

Riparian, marsh

Sacramento 38°22' N 121°29' W

Bruceville, Clarksburg, Courtland, Florin 7½' T6N;T7N R4E;R5E S var.

2,025 ha. (5,000 a.) -1 - 5 m. (-3 - 15 ft.)

California Department of Parks and Recreation; County of Sacramento; private holdings

Much of the basin is farmed; however, there are several large permanent lakes and sloughs.

Along the watercourse and parts of the lakesides there is a riparian association, with willows, Salix spp., and cottonwood, Populus fremontii, the dominant species in the overstory. In the sloughs and shallower portions of the lakes, freshwater marshes occur, with tules, Scirpus sp., and cattails, Typha sp., predominant.

A large number of animals are found in the basin, particularly migratory birds. Among the migrants observed here are sandhill cranes, Grus canadensis, Canada geese, Branta canadensis, whistling swan, Olor columbianus, white-fronted goose, Anser albifrons, pintail, Anas acuta, widgeon, Anas americana, and wood duck, Aix sponsa. Great blue heron, Ardea herodias, breed here. River otter, Lutra canadensis, are present.

Integrity: The area is bounded by a freeway, railroad embankment and several roads. There also are roads within the area. Though the basin is farmed, the riparian and marsh vegetation is relatively undisturbed.

Use: Research, educational, observational. Most private.

July 1982

WOODLAKE OAK GROVE 342370 CE

Valley oak stand

Sacramento 38°36'10" N 121°28' W

Sacramento East 7½' T9N R5E S 1

4 ha. (10 a.) 7 - 10 m. (25 - 35 ft.)

Private

In this pocket of undeveloped land is one of the few remaining stands of valley oak, Quercus lobata, in Sacramento. This remnant stand is of a mixed age and is producing seedlings. There is a small, dense understory which includes blue elderberry, Sambucus caerulea, and some 50 other plants, many exotics.

The vertebrate animals are typical, though there is a nesting pair of white-tailed kites, Elanus leucurus. There are, however, two invertebrates, the California hairstreak butterfly, Satyrium californica, and a long-horned beetle, Desmocerus californicus dimorphus, worthy of note. The butterfly is a recently discovered race which here feeds on the valley oak; the typical form feeds on Ceanothus spp. At present, less than a dozen populations of this race are known. Less than six populations of the beetle, which feeds on the elderberry, have been discovered. In this area 33 other species of butterflies have been collected, which represent 54% of the known butterflies in the Valley.

The site is on an alluvial plain.

Integrity: The area is adjacent to various urban developments and the understory shows the usual disturbance caused by the introduction of exotic species. The oaks are in excellent condition.

Use: Private

October 1977

B & L OAK GROVE 390212 AD

Valley oak woodland

San Joaquin 38°03' N 121°22' W

Lodi South 7½' T6E R2N S 6

80 ha. (200 a.) 1.5 - 3 m. (5 - 10 ft.)

County of San Joaquin, Department of Parks and Recreation

This area is a remnant of the valley oak, Quercus lobata, woodland that once was common in the central portion of the Valley. Here the woodland consists of scattered trees, with an occasional dense stand. Seedlings are now being established.

Much of the understory is composed of exotics. Native Stipa sp. is rare and scattered, but Brodiaea spp., Hemizonia sp., Asclepias sp., and Galium sp. are common.

Integrity: The area has been heavily grazed in the past, but under the County ownership the condition of the herbaceous vegetation is improving.

Use: Research, educational, observational, light recreation.

August 1976

BLOSSOM SLOUGH 390250 AD

Freshwater marsh

San Joaquin 38°11' N 121°27' W

New Hope 7½' T4N R5E

12 ha. (30 a.) 0 m. (0 ft.)

Private

With levees at both ends, this small, protected slough is valuable as a bird refuge.

Vegetation, which in places is quite thick though the slough is primarily open water, is typical of a freshwater marsh, with Scirpus sp., Juncus sp., Typha sp., Salix sp., etc.

Among the birds observed here are purple gallinule, Porphyrula martinica, American bittern, Botaurus lentiginosus, least bittern, Ixobrychus exilis, great blue heron, Ardea herodias, as well as a variety of species found in less protected areas. The blue grosbeak, Guiraca caerulea, has been reported nesting here.

Integrity: The slough is contained by levees, with a pump at the southern end. Agricultural land is found on both sides.

Use: Private

January 1976

BROVELLI WOODS 390275 AD

Oak-buckeye woodland

San Joaquin 38°12'30" N 121°21' W

Lodi North 7½' T4N R6E S 8

50 ha. (120 a.) 7 - 8 m. (23 - 25 ft.)

Private

On the flood plain of the Mokelumne River north of Lodi is a remnant typical of dense forests that once covered the alluvial fans of the valley floor. The dominant species are the valley oak, Quercus lobata, interior live oak, Q. wislizenii, and the California buckeye, Aesculus californica. The latter, which find optimum conditions here, are some 12 meters (40 feet) or more tall.

A number of small mammals and mule deer, Odocoileus hemionus, uncommon on the valley floor, 83 species of birds, as well as a variety of other animals have been observed here.

The area is flat and intersected by fingers of the flood lake Tracy Lake.

Integrity: A few fences and several dirt roads are located in the area. The area has been intensively grazed and the understory altered.

Use: Private

September 1975

CANAL RANCH, BRACK TRACT 390310 AD

Migratory bird area

San Joaquin 38°10' N 121°29' W

New Hope 7½' T4N R4E;R5E

400 ha. (1,000 a.) -2.5 - 0 m. (-8 - 0 ft.)

Private

While this area is not in a natural condition, being bounded by diked watercourses and cultivated, it has a seasonal value for migrating waterfowl which rest and feed here. It is particularly noted for the sandhill cranes, Grus canadensis, which are regular visitors to the area from November to February.

Integrity: This portion of the San Joaquin Delta is diked and cultivated.

Use: Private

March 1976

DISAPPOINTMENT SLOUGH 390450 AD

Freshwater marsh, riparian

San Joaquin 38°02'30" N 121°27'30" W

Terminous 7½' T2N R5E

320 ha. (800 a.) 0 - 3 m. (0 - 10 ft.)

Public; some private holdings

Disappointment Slough is one of the largest and most consistent of the Sacramento-San Joaquin Delta sloughs. There are low islands, virtually marshes, covered with Juncus sp. and Typha sp., with tortuous channels winding between the islands. Along the levees and on some of the larger islands there are willow thickets, Salix sp., with cottonwood, Populus fremontii. Blackberry, Rubus sp., forms a dense cover in the interiors of some of the islands.

This slough supports a fauna typical of the Delta. It is used by a variety, though never in great numbers, of migrating waterfowl, both ducks and geese, during the winter months. Muskrats, Ondatra zibethica, and raccoons, Procyon lotor, are among the more common larger mammals, though mink, Mustela vison, and the gray fox, Urocyon cinereoargenteus, may occasionally be sighted in the area. Among the fish found here, particularly near the mouth, are striped bass, Roccus saxatilis, white catfish, Ictalurus catus, and shad, Alosa sapidissima, among others.

Integrity: The slough is contained by levees and is frequented by pleasure boats.

Use: Educational, research, observational, light recreation.

April 1976

FOURTEEN MILE SLOUGH 390670 AD

Freshwater marsh

San Joaquin 38° N 121°24' W

Holt, Terminous 7½' T2N R5E

40 ha. (100 a.) 0 - 3 m. (0 - 10 ft.)

State of California

Fourteen Mile Slough has a number of marshy and low-lying upland areas typical of the Delta.

The freshwater marsh areas support cattail, Typha latifolia, tules, Scirpus sp., and sedge, Cyperus sp., among others. There are some willows, Salix sp., on the upland portions.

Muskrats, Ondatra zibethica, occur here, as do various species of birds.

Integrity: Levees line the borders of the slough.

Use: Research, educational, observational, present.

January 1980

MOKELUMNE RIVER RIPARIAN 391370 AD

Riparian

San Joaquin, Sacramento 38°11'30" N 121°07'30" W

Bruceville, Lodi North, New Hope 7½' T4N;T5N R4E;R5E;R6E

80 ha. (200 a.) 2 - 10 m. (5 - 35 ft.)

Some California State Lands; mostly private

Intermittent stands of riparian woodland line the Mokelumne River between Lodi and the branching of the river downstream near New Hope, a distance of some 30 kilometers (19 miles). Lying between the water and the levees or high-water banks, these stands vary in width from 6 to 90 meters (20 to 300 feet). In many places this woodland is interrupted by farmland which comes to the water's edge.

The riparian association includes cottonwood, Populus fremontii, white alder, Alnus rhombifolia, wild rose, Rosa californica, willows, Salix sp., wild grape, Vitis californica, elderberry, Sambucus caerulea, and, in the higher ground, valley oak, Quercus lobata.

A variety of animal life is present, including red-shouldered hawks, Buteo lineatus, kingfisher, Megaceryle alcyon, and ringtails, Bassariscus astutus.

Integrity: Some of the stands are in excellent condition, while others have been impacted by agricultural or other human activity.

Use: Private; public portions research, educational, observational.

February 1980

OLD RIVER ISLANDS #1 391558 AD

Freshwater marsh

San Joaquin 38°01' N 121°32'30" W

Bouldin Island 7½' T2N R4E

80 ha. (200 a.) 0 - 3 m. (0 - 10 ft.)

Ownership unknown

In this area, adjacent to Connection Slough, there are several various-sized islands in the Old River channel. They support a lush freshwater marsh. Cattails, Typha sp., California bulrush, Scirpus californicus, and other species are present on most of the island area. In some portions Juncus sp. and willow, Salix spp., thickets are found. There are locally abundant areas of introduced species, Iris sp., Arundo donax, and others.

Among the numerous animals found in the area, mink, Mustela vison, have been observed here.

The islands are subject to periodic flooding.

Integrity: A portion of one of the islands is being farmed, and there are navigational aids on some of the islands. The channel has been dredged and leveed.

Use: Private

January 1977

PIGS LAKE AREA 391650 AD

Riparian

San Joaquin 38°09' N 121°17' W

Lodi North 7½' T4N R6E S 35

4 ha. (10 a.) 11 - 12 m. (37 - 40 ft.)

City of Lodi

Pigs Lake is a small area in the Mokelumne River flood channel in the City of Lodi.

Bordering the lake is a riparian association with cottonwood, Populus fremontii, white alder, Alnus rhombifolia, willow, Salix sp., elderberry, Sambucus caerulea, wild grape, Vitis californica, Dutchman's pipe, Aristolochia californica, horsetail, Equisetum sp., and, on the slightly higher ground, valley oak, Quercus lobata.

Animals are relatively abundant.

Integrity: The area is maintained as a Wilderness Area.

Use: Present

January 1980

SYCAMORE SLOUGH ISLAND 391998 AD

Freshwater marsh

San Joaquin 38°08'40" N 121°31' W

Isleton 7½' T4N R4E

4 ha. (10 a.) 0 - 2 m. (0 - 5 ft.)

California State Lands

This island, which lies in the South Mokelumne River, several hundred meters upstream from the mouth of Sycamore Slough, is a good example of a Delta marsh.

Plants include cattail, Typha sp., tules, Scirpus sp., sedge, Cyperus sp., and spike-rush, Heleocharis sp. In the higher reaches there are willow thickets with Salix sp.

A number of animals are found here including a breeding colony of black-crowned night heron, Nycticorax nycticorax.

Integrity: The area is virtually undisturbed.

Use: Research, educational, observational.

January 1980

TRAPPER SLOUGH 392085 AD

Freshwater marsh, slough

San Joaquin	37°55' N	121°27'10" W
Holt 7½'		T1N, R4E,R5E
6 ha. (15 a.)		0 m. (0 ft.)

Private

Trapper Slough is one of the better examples of standing water in the Delta. The vegetation is primarily that of a freshwater marsh, with Juncus, Arundo, and Salix spp. dominating. In the quiet open water there are lush growths of water hyacinth, Eichhornia crassipes, and yellow water weed, Jussiaea repens.

Muskrats, Ondatra zibethica, are common here and there is a wide variety of birds. Many migratory ducks use the slough as a resting place. Water clarity in the slough is considerably better than the typical Delta condition.

Integrity: Levees on both sides define the slough. As it is highly productive and adjacent to a highway, it is subject to heavy fishing pressure.

Use: Private

March 1975

WHITE SLOUGH 392348 AD

Freshwater marsh, riparian

San Joaquin 38°05' N 121°27'30" W

Terminous 7½' T3N R4E;R5E

160 ha. (400 a.) 0 - 3 m. (0 - 10 ft.)

Public; some private

Both the slough itself and the islands within it, as well as an extensive freshwater marsh at the eastern end, are included in this area.

The area consists primarily of a freshwater marsh, with cattails, Typha sp., California bulrush, Scirpus californicus, and spike-rush, Heleocharis sp., the most prominent. Along the levees and the islands stands of rush, Juncus sp., are found in abundance. Elodea sp. and Myriophyllum spicatum ssp. exalbescens are present locally. On the larger islands some riparian community occurs, with cottonwoods, Populus fremontii, thickets of willow, Salix spp., and Rubus sp.

The thick cover on the larger islands provides food and shelter for a wide variety of animals. Among the more noteworthy is the white-tailed kite, Elanus leucurus, which is frequently sighted here.

Integrity: There is a levee bordering the sl and at least one island has a levee around it There also are several buildings in the area. eastern portion is a man-made channel, connec the marsh to the slough.

Use: Research, educational, observational, p Some islands private.

January 1977

WARDS FERRY NATURAL AREA 552310 AD

Oak woodland, chaparral

Tuolumne 37°52'30" N 120°17'30" W

Standard, Moccasin 7½' T1S R15E S 2,3,10,11

290 ha. (720 a.) 300 - 600 m. (1,000-2,000 ft.)

Bureau of Land Management

A mixture of oak woodland, savannah and chaparral is found in this steep-sided canyon cut by the Tuolumne River. Trees include blue oak, Quercus douglasii, black oak, Q. kelloggii, scrub oak, Q. dumosa, interior live oak, Q. wislizenii, maul oak, Q. chrysolepis, oracle oak, Q.x morehus, California buckeye, Aesculus californica, ponderosa pine, Pinus ponderosa, and digger pine, P. sabiniana.

The savannah understory consists of a rich flora of annual grasses, forbs and ferns. Brush species include chamise, Adenostoma fasciculatum, manzanita, Arctostaphylos sp., redberry, Rhamnus crocea, and poison oak, Rhus diversiloba.

Soils on the north side of the canyon are of the Auburn-Rockland association; on the south, of the Maymen-Rockland association.

Integrity: A reservoir has flooded a portion of the canyon floor; otherwise the area is virtually undisturbed.

Use: Research, educational, observational. For information, contact District Manager, Bureau of Land Management, 63 Natoma St., Folsom, Calif., 95630.

January 1976

YOLO BYPASS AREAS 572570 AD

Riparian woodland, freshwater marsh

Yolo 38°00' N 122°40' W

Liberty Island, Saxon, Clarksburg, Davis, Sacramento West 7½' T6N;T7N R3E S var.

1,820 ha. (4,500 a.) 1.5 - 8 m. (5 - 25 ft.)

Public; numerous private holdings

Within the Yolo Bypass, which is used for flood control and, during the summer months, is normally cultivated, there are several fairly undisturbed marsh and riparian habitats, usually around sloughs and overflow channels. These were once common in the bypass area as the result of flooding of the Sacramento River. The areas included in this report range from a few hectares to several hectares in size and are found from several kilometers south of the Yolo Causeway to near Liberty Island.

The riparian woodland includes cottonwood, Populus fremontii, sycamore, Platanus racemosa, and willow, Salix laevigata, and covers some 50% of the areas included. The freshwater marsh includes tules, Scirpus acutus, and cattail, Typha latifolia, among others, and covers perhaps 30% of the areas. Fields no longer cultivated constitute the remainder.

When this area is flooded during the winter months it is an important resting and feeding ground for numerous migratory waterfowl. Though many of the animal populations have been disturbed, the river otter, Lutra canadensis, is still seen in some of the areas.

The area is Quaternary alluvium, part of the Sacramento floodplain.

Integrity: Levees surround the entire Yolo Bypass and water-flow is closely controlled; however, the selected areas are not markedly disturbed.

Use: Private

October 1976