

Sacramento Cogeneration Authority

P.O. Box 15830, Sacramento, CA 95852-1830 • 916/732-5218

Procter & Gamble Cogeneration Project

SCA 94-028

March 16, 1994

DOCKET
93-AFC-2

DATE: **MAR 16 1994**

RECD: **MAR 16 1994**

Mr. B.B. Blevins
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512
Attn: Docket Unit

**RESPONSES TO VISUAL DATA REQUESTS AND THE BIOLOGICAL SURVEY FOR THE
FIBER OPTIC LINE FOR THE PROPOSED PROCTER AND GAMBLE COGENERATION
PROJECT(Docket No. 93-AFC-02).**

Dear Mr. Blevins:

Please find enclosed, twelve copies of the responses to the visual
resources data requests and the biological survey for the fiber
optic line for the proposed Procter and Gamble Cogeneration
Project. If you have any questions, my telephone number is
916-732-6540.

With Regards,

Diana Parker
Environmental Specialist

Enclosures

cc: Ron Simms, Walsh Construction
Rich Chapman, B&V

STATE OF CALIFORNIA

**State Resources Conservation
and Development Commission**

In the matter of:)	Docket No. 93-AFC-2
)	
Application for Certification)	PROOF OF SERVICE
of the Sacramento Cogeneration)	(rev. 12/3/93)
Authority's Procter & Gamble)	
Cogeneration Project)	
_____)	

PROOF OF SERVICE

I, Evangeline Parchamento, declare that on March 16, 1994, I deposited copies of the attached responses to Visual Data requests and the Biological Survey for the fiber optic line for the proposed Procter and Gamble cogeneration project (Docket No. 93-AFC-02) in the United States mail at Sacramento, California, with first class postage thereon fully prepaid and addressed to the following:

APPLICANT

Ms. Susan Strachan, Manager
Projects Permitting & Licensing
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Sacramento, CA 95852-1830

Steve Cohn
Senior Attorney
SMUD
P.O. Box 15830
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INTERESTED AGENCIES

\
Richard Johnson
Division Chief
Sacramento Metro AQMD
8411 Jackson Road
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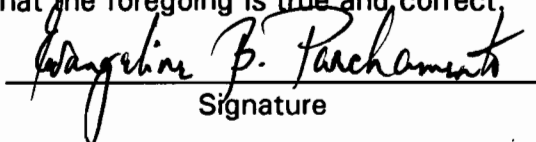
Ray Menebroker, Chief Project
Assessment Branch
Stationary Source Division
California Air Resources Board
P. O. Box 2815
Sacramento, CA 95814

Ed Schnabel
Sacramento Metropolitan Water District
5331 Walnut Avenue
Sacramento, CA 95841

CALIFORNIA ENERGY COMMISSION
(Docket Unit - 12 copies required)

Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814

I declare under penalty of perjury that the foregoing is true and correct.



Signature

Attachment

VISUAL-8

- a. Please describe the visual characteristics, including height, width, frequency, and duration, of any visible plumes created by the existing Procter & Gamble facilities, and compare them to the plumes expected from the proposed cogeneration plan.
- b. Please describe any measures that have been or are currently being employed to reduce the size of any such visible plumes.
- c. Please describe the visual characteristics, including height, width, frequency, and duration, of any visible plumes before implementation of the measures.
- d. Please describe the circumstances that led to the implementation of any such measures and any individuals, organizations, or governmental agencies involved.
- e. Please discuss the expected effect and feasibility of using similar measures for the visible plumes of the proposed cogeneration plant.
- f. Please describe the cumulative visual effect of any plumes from the existing Procter & Gamble facilities and the plumes from the proposed cogeneration plant.

SCA RESPONSE:

In 1987 and 1988, the Procter and Gamble facility in Sacramento increased the production of soap and modified bottlenecks in the tower of the their tallest stack. During certain times of the year, this caused visible emissions due to other than steam that appeared brown in color. Notices of violation of the Air District's Rule 401 (attached), dealing with opacity of the plume were issued to Procter and Gamble in May 1988. During the summer of 1988, Procter and Gamble sought and received a one-year variance from Rule 401. In the spring of 1989, the Air District received complaints from people riding light rail who observed the brownish plume and from employees of the Sacramento Army Depot who were concerned about the health effects from the water/soap droplets from the plume. In the spring of 1989, when Procter and Gamble requested a second variance, it was denied.

After investigating the problem, Procter and Gamble determined that the brownish plume was the result of steam being encapsulated by soap. To address the problem, Procter and Gamble and the Air District agreed upon the installation and operation of stack gas heaters to eliminate any plume. The average temperature increased from 142 degrees fahrenheit to 328 degrees fahrenheit with the installation of the heaters. This modification eliminated the droplets. There have been no complaints filed with the Air District since the operation of the stack gas heaters.

The characteristics and impacts of the plumes from the proposed Procter and Gamble cogeneration project are described in section 6.9.5.4 (pp. 6.9-23 through 6.9-31). The water vapor plumes from the proposed project are not expected to violate Rule 401. The Sacramento Cogeneration Authority does not propose to implement mitigation measures to reduce the visibility of the plumes from the proposed cogeneration project. The exhaust gas temperature from the proposed project is projected to be 231 degrees fahrenheit. SCA is not sure what the effects of gas heating the plume would be. Unfortunately, the stack gas heaters are a source of NOx emissions. As a result, neither the Sacramento Cogeneration Authority nor the Sacramento Metropolitan Air Quality Management District are in favor of using the heaters.

It is difficult to compare the plumes at the Procter and Gamble facility with those at the proposed cogeneration project and to describe a cumulative visual effect because Procter and Gamble prefers not to share information regarding their plumes. Although Procter and Gamble has announced the closure of their consumer products division, they have not determined whether the facility will be reused or removed. Therefore, it is not clear at this time if the stacks associated with the consumer products division will continue to operate after closure of the division.

VISUAL-10

Procter and Gamble has recently announced that it will eliminate some of its operations at its Sacramento facility.

- a. Please specify which, if any structures will be removed, and the timing of any such removal.
- b. If any of the facilities are to be shut down and removed, please discuss the feasibility of relocating the cogeneration project to that area.
- c. Please evaluate the change in the visual effect of the cogeneration project if it is relocated to the area of the facilities to be shut down.
- d. Please discuss the feasibility of using any of the existing major structures or equipment for the cogeneration project, and evaluate the change in the visual effect of the project.

SCA RESPONSE:

Earlier this year, Procter and Gamble announced the closure of their consumer products division. While the company has indicated that employees will be laid off later this year, the company has not indicated what will be done with those portions of the facility currently dedicated to the consumer products division which are located on the western side of the existing Procter and Gamble facility(see attachment). The company has also not provided a written time schedule regarding any reuse or demolition as a result of the closure.

To consider relocating the proposed cogeneration plant would result in a complete new analysis of project feasibility and impacts being conducted. Given the uncertainty of Procter and Gamble's intentions with the portion of their facility that will be affected by the closure of the consumer products division and the need to operate the proposed cogeneration plant by January 1997, SCA believes it would not be fruitful to explore this alternative location.

RULE 401 RINGELMANN CHART
Adopted 8-3-77
(Amended 4-19-83)

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101 PURPOSE

102 EXEMPTIONS

200 DEFINITIONS (NOT INCLUDED)

300 STANDARDS

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400 ADMINISTRATIVE REQUIREMENTS (NOT INCLUDED)

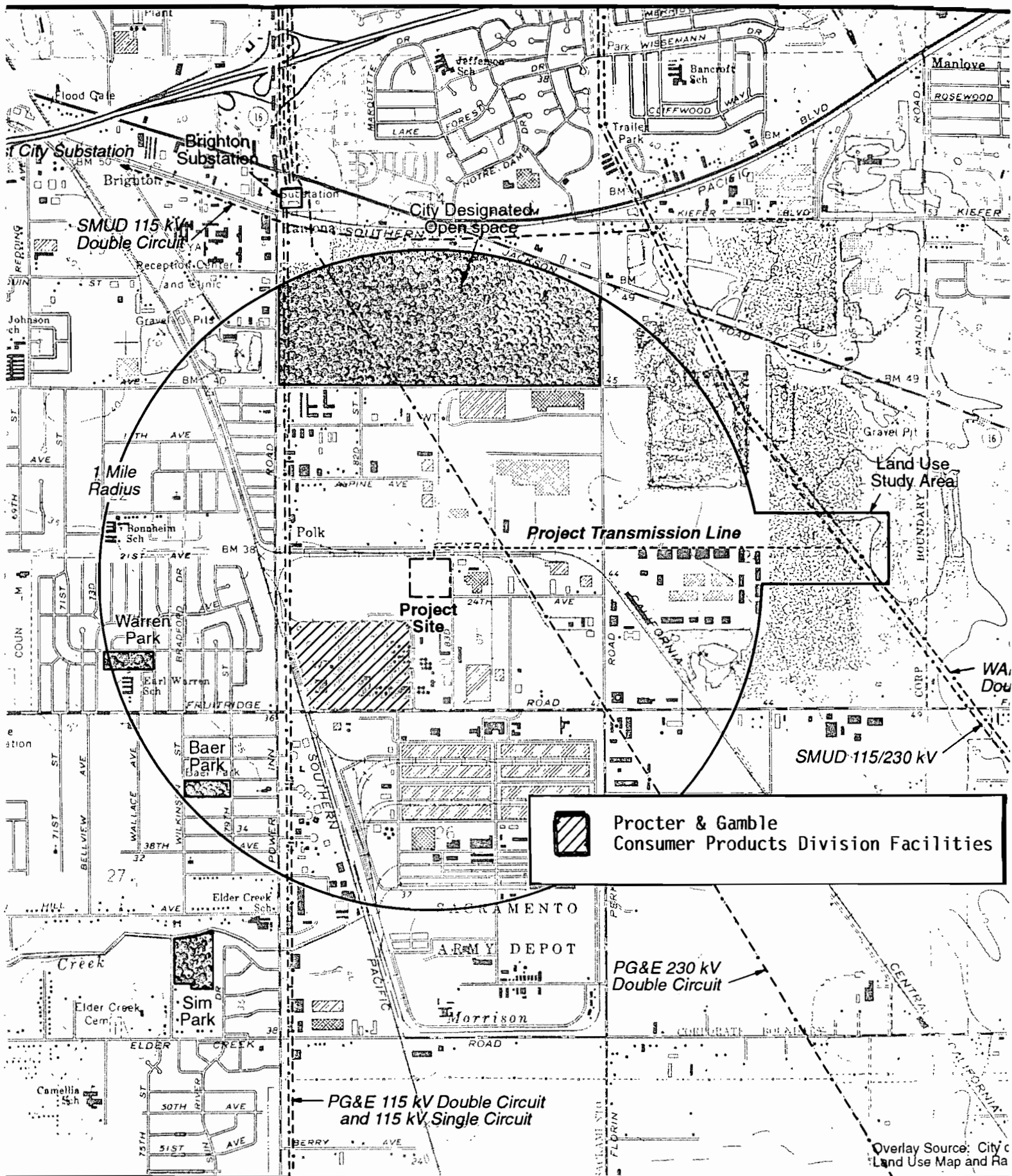
500 MONITORING AND RECORDS (NOT INCLUDED)

100 GENERAL

- 101 **PURPOSE:** To limit the discharge of air contaminants into the atmosphere through visible emissions and opacity.
- 102 **EXEMPTIONS:** The provisions of this rule shall not apply to:
- 102.1 Smoke from fires set or permitted by a public officer, if such fire is set by or permission given in the performance of the official duty of such officer and such fire, in the opinion of such officer, is necessary:
 - a. For the purpose of the prevention of a fire or health hazard which cannot be abated by any other means, or
 - b. For the instruction of public employees in the methods of fighting fires.
 - 102.2 Smoke from fires set pursuant to permit on property used for industrial purposes for the purpose of instruction of employees in methods of fighting fires;
 - 102.3 Agricultural operations in the growing of crops or raising of fowl or animals;
 - 102.4 The use of an orchard or citrus grove heater which does not produce unconsumed solid carbonaceous matter at a rate in excess of (1) gram per minute;
 - 102.5 The use of other equipment in agricultural operations necessary for the growing of crops or raising of fowl or animals;
 - 102.6 Agricultural burning for which a permit has been granted pursuant to Regulation 5;
 - 102.7 Use of any aircraft to distribute seed, fertilizer, insecticides, or other agricultural aides over lands devoted to the growing of crops or raising of fowl or animals;
 - 102.8 Open outdoor fires used only for cooking of food for human beings or for recreational purposes;
 - 102.9 Devices intended to create smoke for the purpose of training persons in the art of visual opacity determinations.
 - 102.10 Diesel pile driving hammers. (This exemption shall remain in effect until December 31, 1986 and as of that date shall be repealed.)

300 STANDARDS

- 301 **LIMITATIONS:** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:
- 301.1 As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
 - 301.2 Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than does smoke described in Subsection 301.1 of this rule.



PROCTER & GAMBLE CONSUMER PRODUCTS DIVISION FACILITIES



2953 24th Street
Sacramento, CA 95818

Vernal Pool Invertebrate Survey

and Raptor Activity Check

for ESA / SMUD

***Along Proposed Fiber Optic Alignment From
Campbell Soup to Procter & Gamble Cogeneration Plant Sites***

Debby Martin
March, 94

Introduction and Summary

In 1992 and in late April of 1993, Ebasco Environmental conducted wildlife surveys in a 200-foot width corridor along a proposed fiber optic route for SMUD. In addition to wetland delineation and surveys for other sensitive species, three short-lived aquatic invertebrates (considered to be vernal pool species) were targeted for survey: *Branchinecta lynchi*, *Linderiella occidentalis*, and *Lepidurus packardii*. All three were proposed for federal endangered listing in 1992 and are still under consideration for such listing.

In its survey document, Ebasco reported several locations of raptor activity in the study corridor. Ebasco also found one of the three invertebrate species, the vernal pool tadpole shrimp *Lepidurus packardii* (Lepa), in two locations, and indicated several other locations as supporting potential habitat for one or more of the proposed species. Ebasco acknowledged that the April survey time was probably too late for the two fairy shrimp species: *Branchinecta lynchi* (Brly), vernal pool fairy shrimp; and *Linderiella occidentalis* (Lioc), California linderiella; but reported that either species could occur in some of the wetland locations earlier in the year and/or in wetter years.

In early March of 1994, biota conducted a vernal pool invertebrate survey of the same alignment in order to determine whether any of the target invertebrate species occurred in the same or other locations along the proposed alignment. A targeted raptor survey was also conducted in the study corridor.

Branchinecta lynchi was discovered in one location, *Lepidurus packardii* in eight, and *Linderiella occidentalis* in seventeen separate locations along the route.

Findings

Table 1 on the following pages lists the wetland locations from the 1993 Ebasco report and eight additional potential wetlands which were not in the report. Note is made which, if any, of the proposed invertebrate species were found in each location by *biota* during the 1994 survey. Other relevant information is in the comment column.

In 1994, the vernal pool fairy shrimp, *Branchinecta lynchi*, was found in one location only, a ditch west of the Union Pacific railroad adjacent to SMUD's Pocket Substation. *Linderiella occidentalis*, the California linderiella, was found in numerous (seventeen) locations along the proposed fiber optic route, and *Lepidurus packardi*, the vernal pool tadpole shrimp, was found in eight locations. Photographs of confirmed locations of invertebrate species follow Table 1.


Two burrowing owl colonies within the survey corridor were reported by Ebasco in 1993, located (1) adjacent to the UPRR tracks west of Luther Burbank High School, and (2) adjacent to the UPRR tracks 1 mile south of Campbell Soup. Both colonies were found to be still active in 1994 by *biota*. Photos of location (1) follow Table 1.

A red-tailed hawk nest reported at location I-17 by Ebasco was still present but not occupied in March 1994. However, a pair of red-tailed hawks were conducting mating activities in the immediate vicinity.

No raptor evidence was noted near location F-50, where Ebasco reported red-tailed hawk activity and a possible kestrel nest.

A red-tailed hawk was noted by *biota* in the study corridor, carrying probable nesting material and landing in a large eucalyptus tree on Fruitridge Road, about 0.1 miles west of the intersection with Elk Grove-Florin Road.

A few of the aerials from the Ebasco report which have new wetlands found by *biota* or other relevant new information are provided at the end of this report.

Ebasco 6/93 document aerial figure number	Ebasco Wetland # or potential inver- tebrate habitat	Target invertebrate species located by 			Comments
		Brly	Lioc	Lepa	
I	16				No target invertebrates
	17		X		RTH nest inactive, but pair hanging around.
	18				No standing water
	19				No standing water
	23 (PART)		X	X	Lepa identified in Ebasco survey 6/93
new location	23a		X		unmapped potential wetland - probable vp
new location	23b		X		unmapped potential wetland - probable vp
	57 east		X	X*	E of RR bridge.* Lepa exoskeletons only found
	57 west			X	W of RR bridge.
J	23(part) Pot VPI			X	
	24		X		
K	37				No target invertebrates
	38				No target invertebrates; very heavy (amphibian) tadpole pop.
	39				Very polluted - no life
	40				Very polluted - no life
L	41 (Pot VPI)				No target invertebrates. Very little standing water, but ground saturated.
	42				No standing water
M	45		X		
	46		X		
N	43				No longer any standing water.
	Pot VPI				No standing water.
O	44				Photos # No standing water
	Pot VPI				No standing water
P	9		X	X	Lepa located 6/93 by Ebasco.
Q	8				No target invertebrates. Heavy bullfrog tadpole population.
new location	8a		X	X	Ditch E side UPRR tracks. Lepa noted 6/93 by Ebasco. Pools marked by Ebasco now connected, very long.
new location	8b	X	X	X	Ditch west side UPRR tracks
R	47			X	Lepa located 6/93 by Ebasco, biota 94. Very shallow puddles in heavily disturbed area.
new location No aerial	[P/G]		X		No aerial provided. On Proctor & Gamble amended transmission line route. In puddle at base of farthest west eucalyptus tree on RR tracks.

References

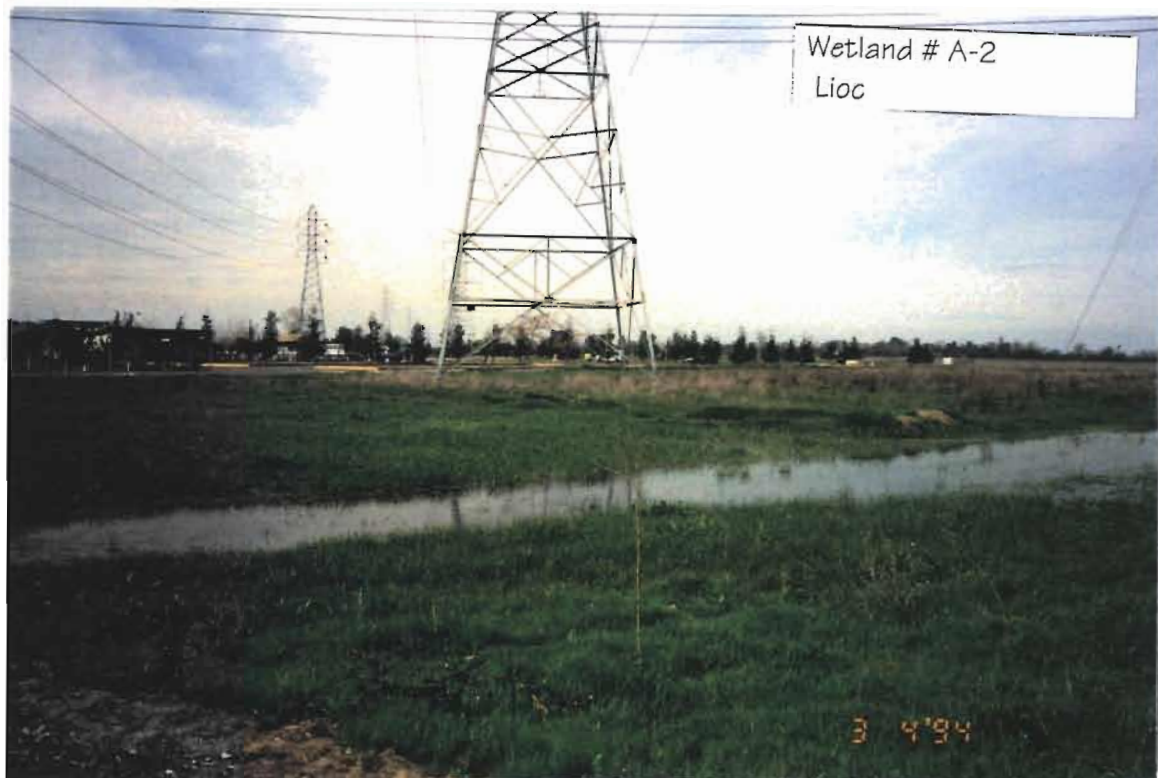
- Ahl, J.S.B. 1991. Factors affecting contributions of the tadpole shrimp, Lepidurus packardii, to its overwintering egg reserves. *Hydrobiologia* 212, 137 -143.
- Ebasco Environmental. 1993. *draft Biological Surveys Along Fiber Optic Communications Lines From Campbell Soup and Procter & Gamble Cogeneration Plant Sites*. Prepared for Sacramento Municipal Utility District, Sacramento, California. pp. 19.
- Eng, L.L., D. Belk and C.H. Eriksen. 1990. *California Anostraca: Distribution, habitat and status*. *Journal of Crustacean Biology* Vol. 10, No. 2: 247-277.
- Fugate, M. 1993. Branchinecta sandiegonensis, a New Species of Fairy Shrimp (Crustacea: Anostraca) from Western North America. *Proceedings of the Biological Society of Washington* Vol. 106: No. 2: 296-304.
- Harrison, H. H. A Field Guide to Western Birds' Nests of 520 Species Found Breeding in the United States West of the Mississippi River. Houghton Mifflin, 1979. 279.
- Thiery, A. and A. Champeau. 1988. Linderiella massaliensis, new species (Anostraca: Linderiellidae), a fairy shrimp from southeastern France, its ecology and distribution. With diagnostic characters to distinguish Linderiella occidentalis from L. massaliensis. *Journal of Crustacean Biology* Vol. 8, No. 1: 70-78.
- Thorp, James H. and Alan P. Covich, Editors. *Ecology and Classification of North American Freshwater Invertebrates*, Academic, 1991, pp. 911.

Photographs

Wetland #A - 1
Lioc



Wetland # A-2
Lioc



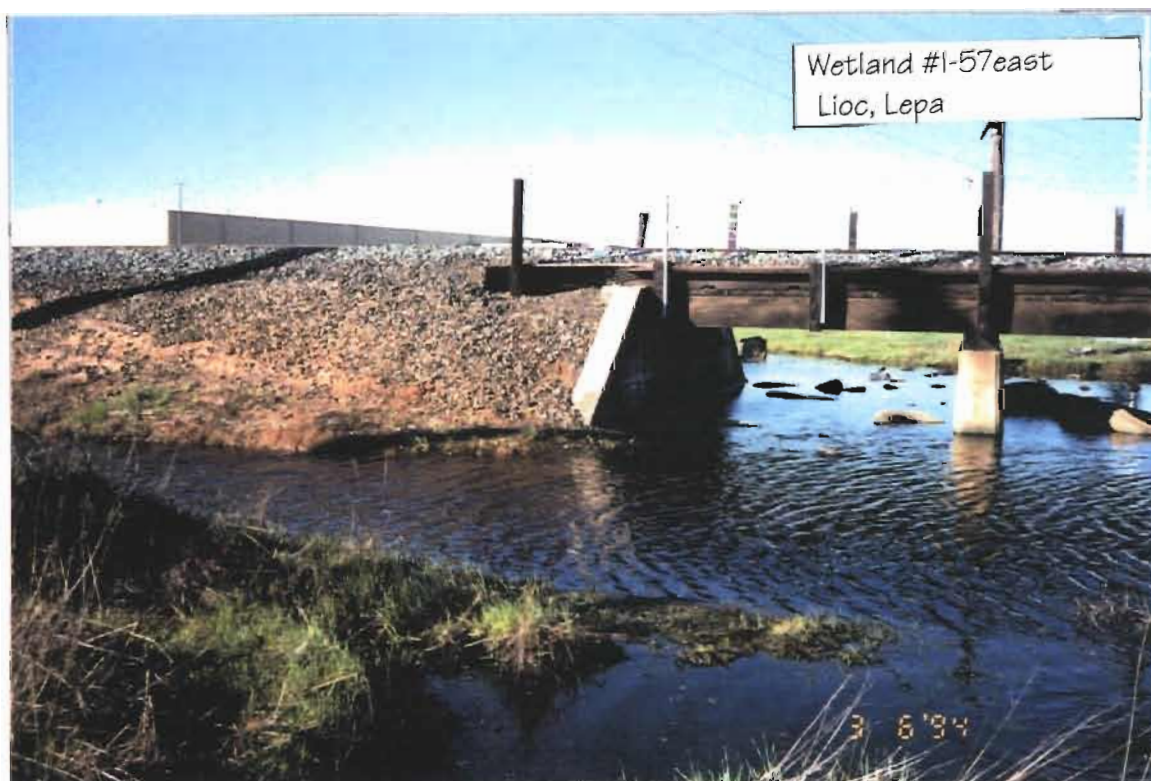




Wetland #1-17
Lioc

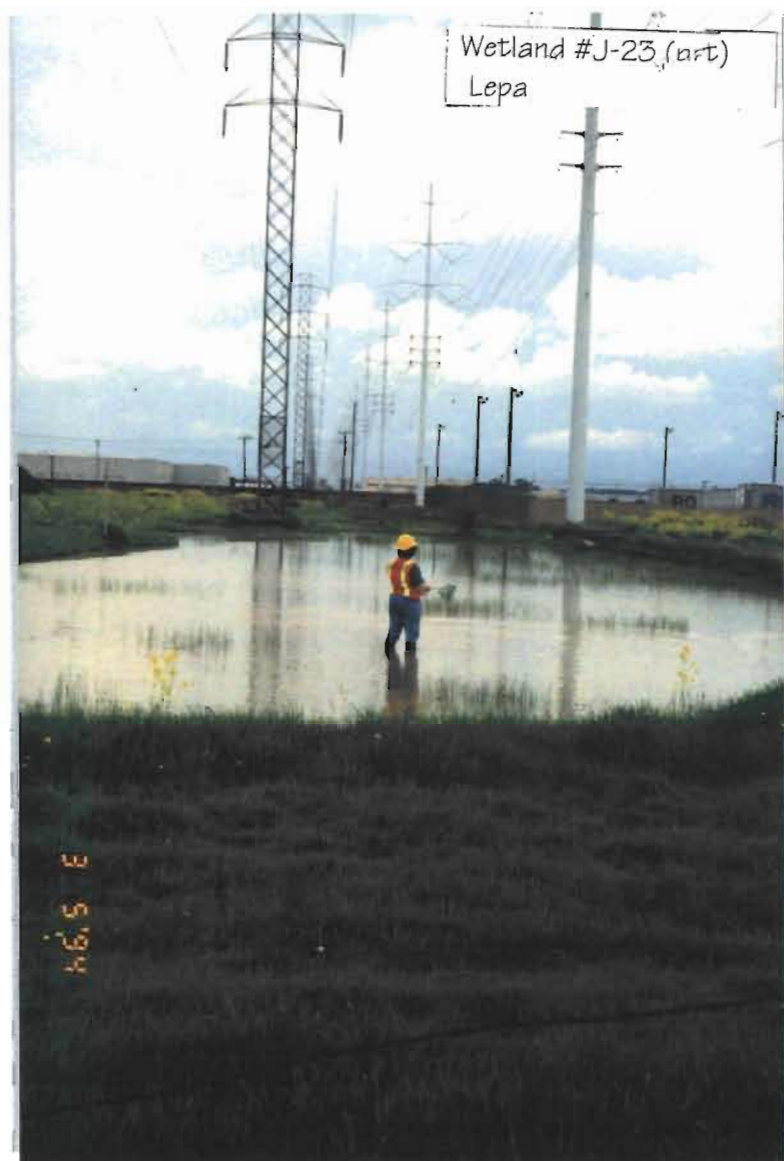


Wetland #1-23a
Lioc

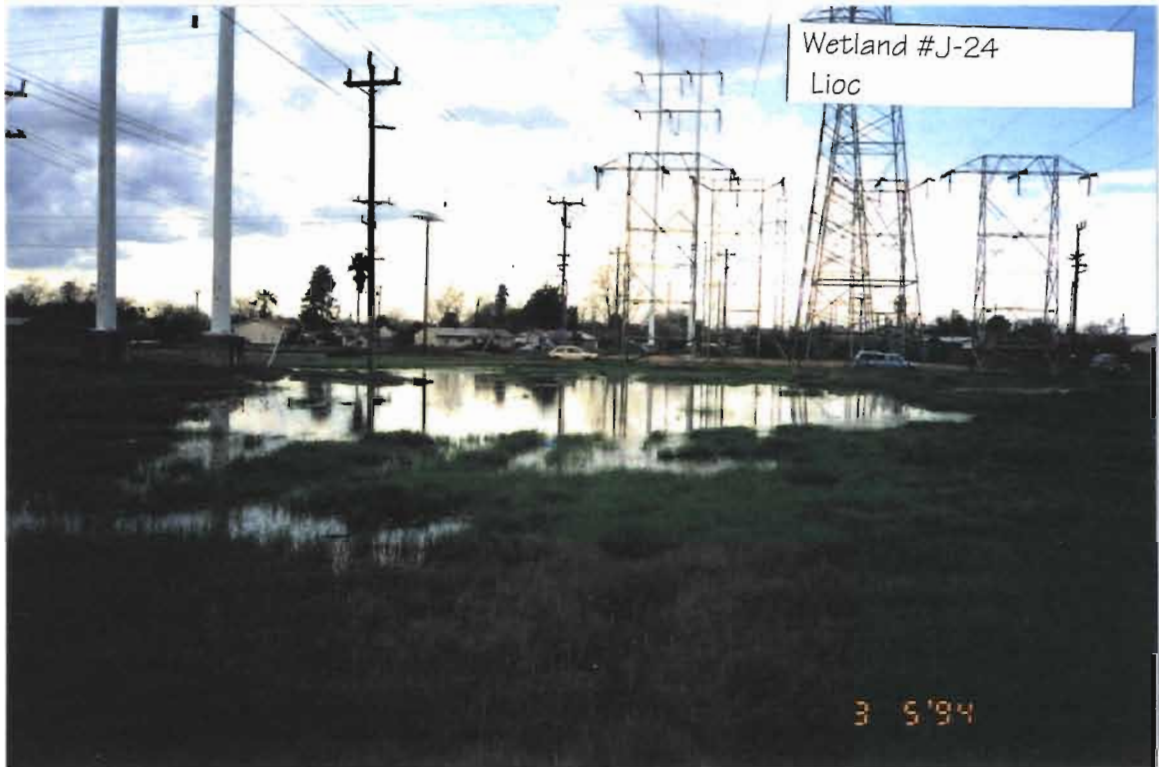




Wetland #1-57west
Lepa



Wetland #J-23 (art)
Lepa

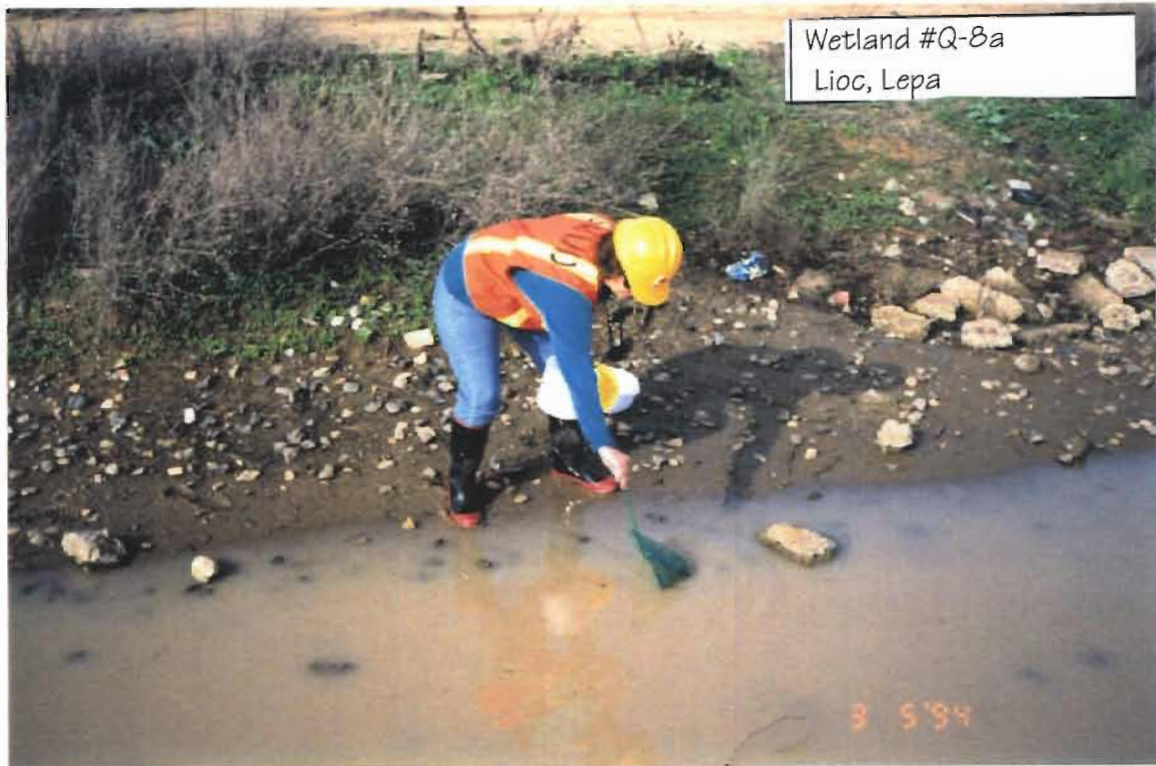


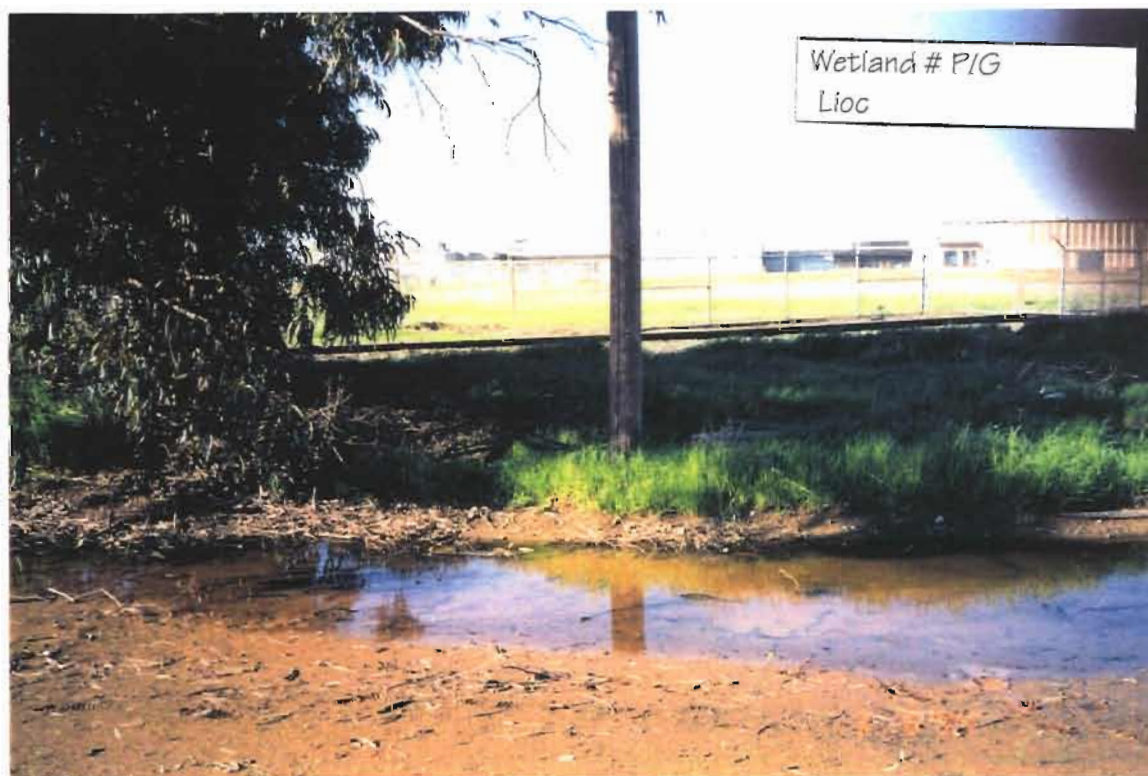
Wetland #P-9
Lioc, Lepa



Wetland #Q-8
No target invents





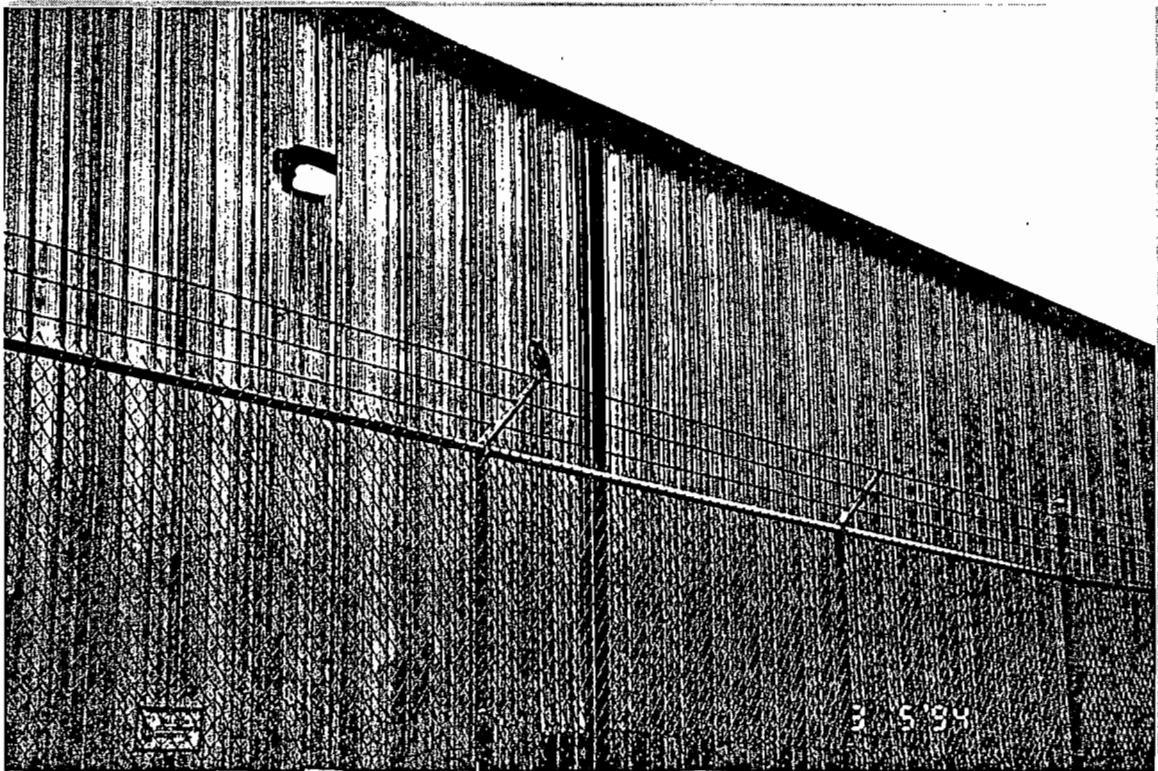




Burrowing owl colony 2
1 mile south of Campbell Soup plant
adjacent to UPRR tracks, and between
two locations on Ebasco Figure O



Active burrow of colony 2



One of three burrowing owls
flushed from colony 2



Aerials

with additional "wetland" locations

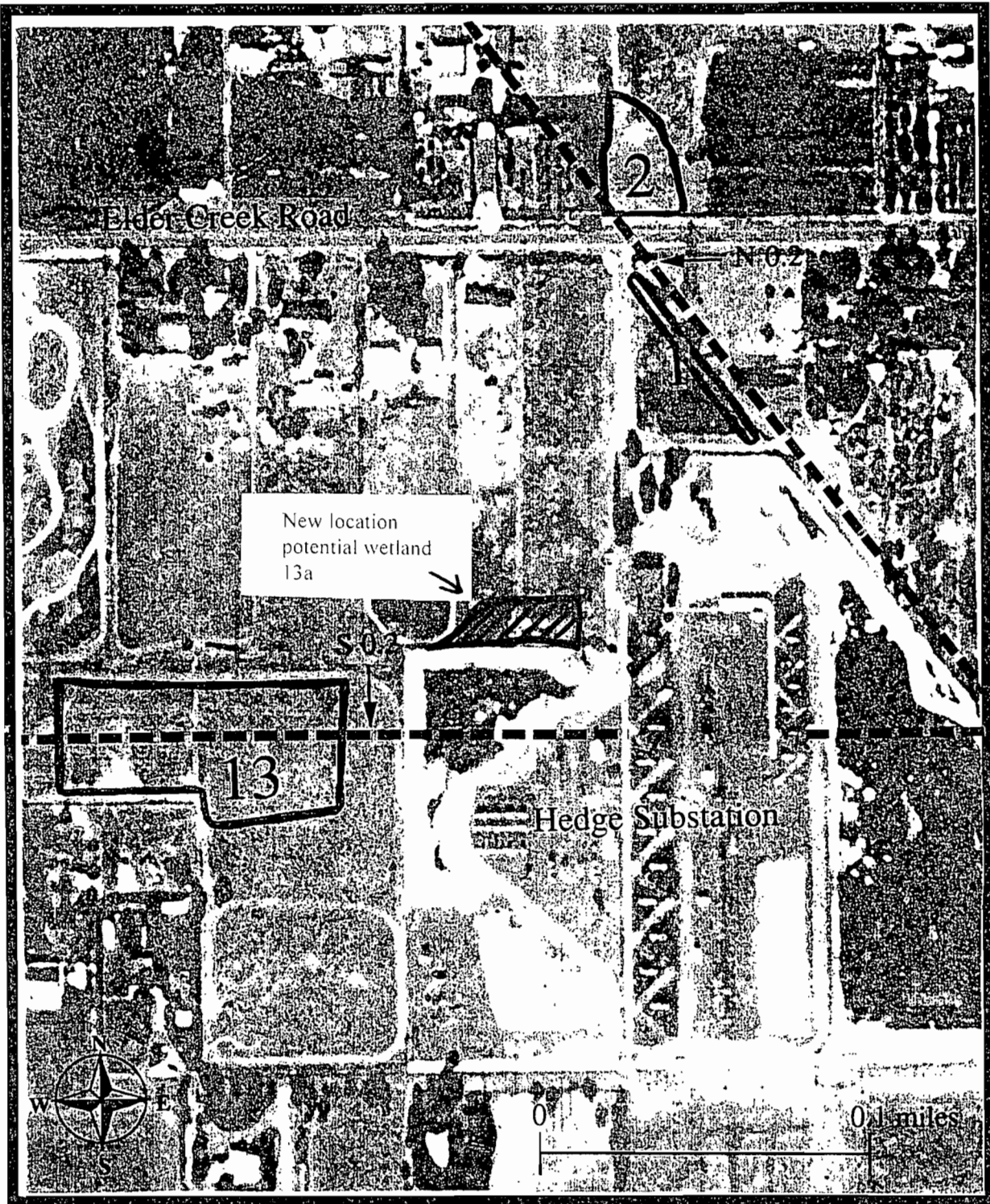


Figure A. Locations of wetlands 1, 2, and 13.

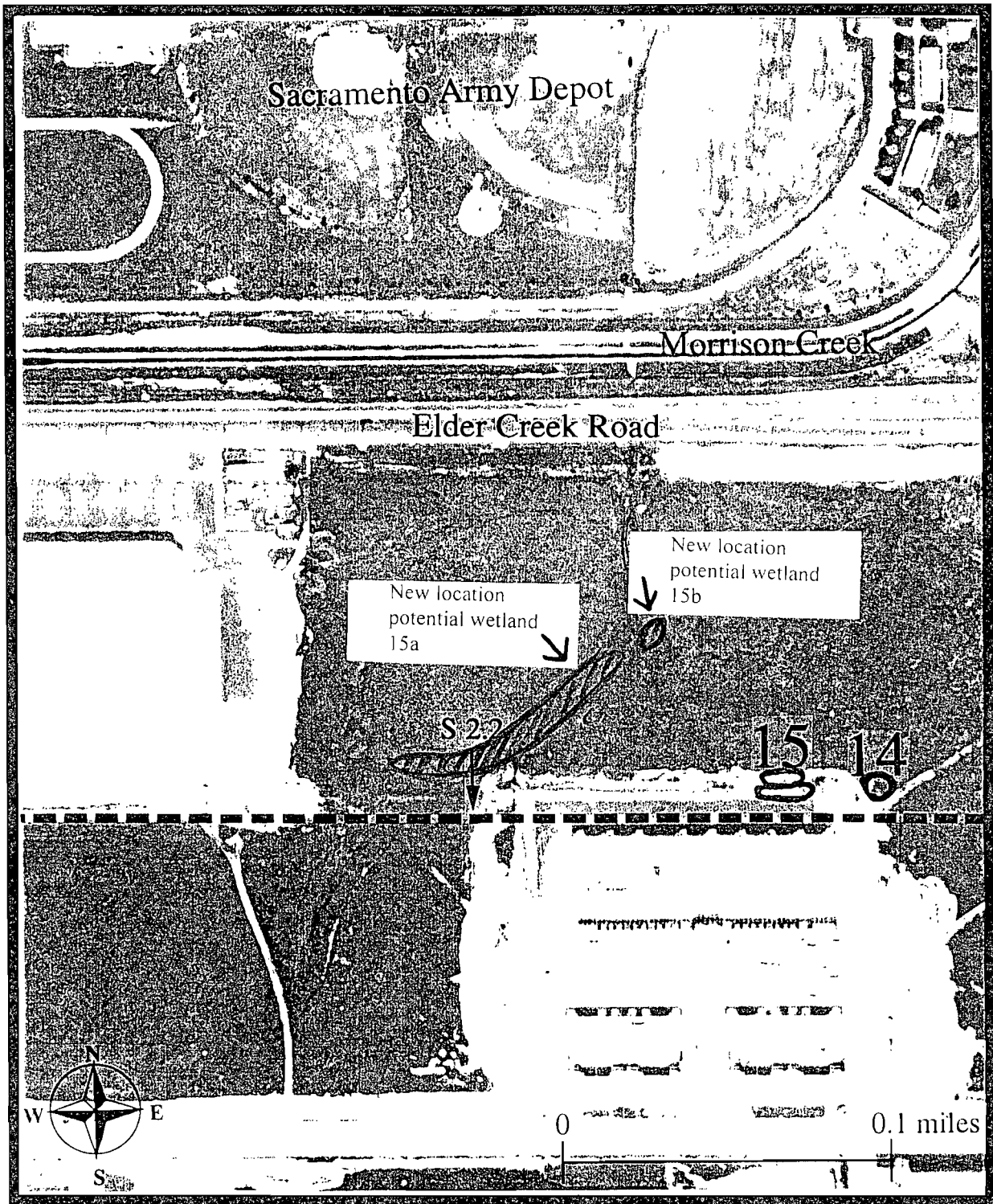


Figure G. Locations of wetlands 14 and 15.

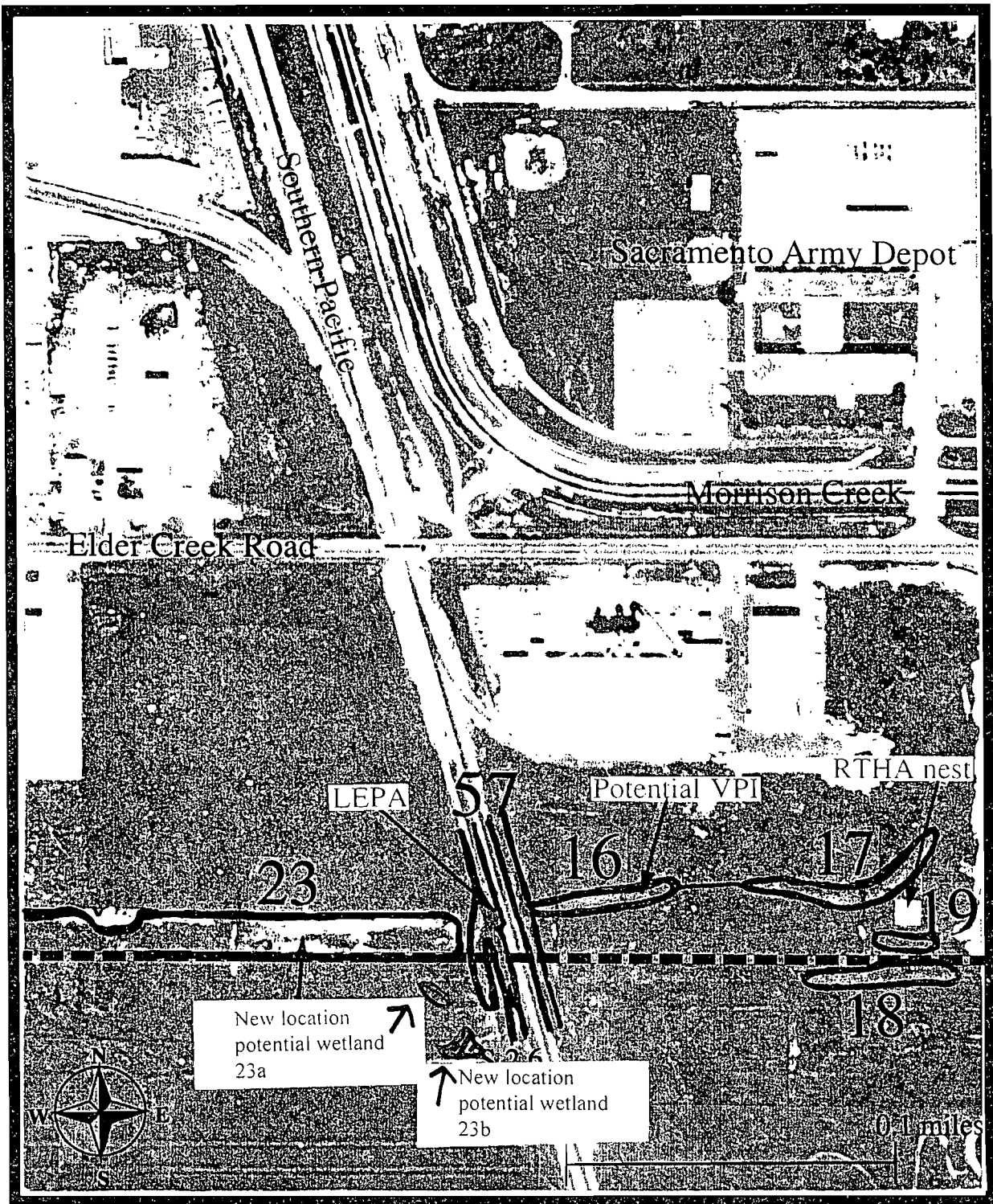


Figure I. Locations of wetlands 16, 17, 18, 19, 57, and part of 23; and locations of red tailed hawk nest, *Lepidurus packardii* observations, and potential vernal pool invertebrate habitat.

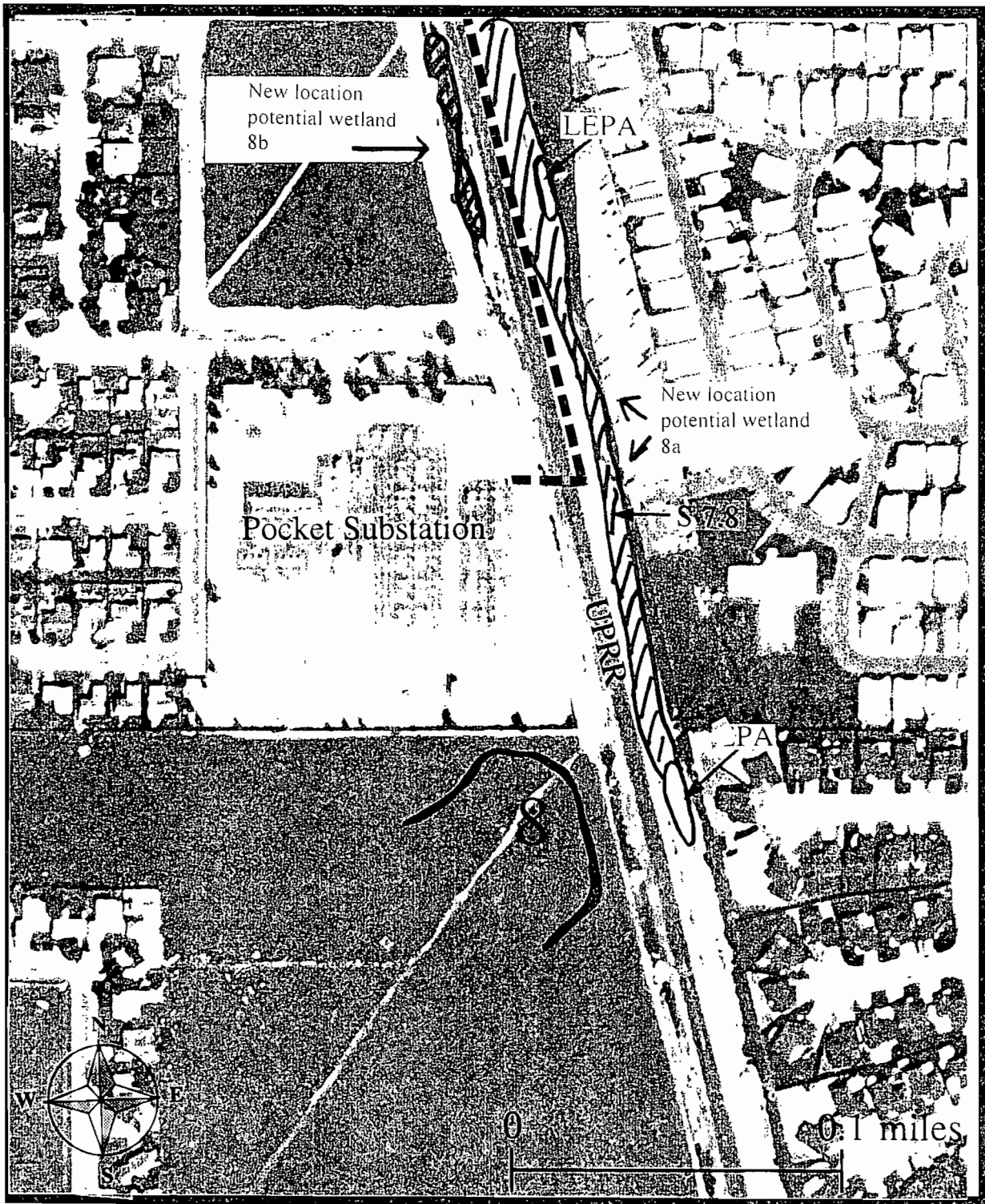


Figure Q. Locations of wetland 8 and locations of *Lepidurus packardii* observations.