Subj: **San Francisquito Creek Project - CWA Section 401 Application**
Date: 8/18/2014 4:11:37 P.M. Pacific Daylight Time
From: JLucas1099@aol.com
To: margarete.beth@waterboards.ca.gov

CALIFORNIA REGIONAL WATER
AUG 20 2014
QUALITY CONTROL BOARD

August 18, 2014

Margarete Beth
Environmental Specialist
S.F. Bay Regional Water Quality Control Board
S.F. Estuary Partnership
1515 Clay Street, 14th Floor
Oakland, CA 94612

RE: San Francisquito Creek Project - CWA Section 401 Application

Dear Margarete Beth.

In regards the modified San Francisquito Creek Flood Reduction Project as recently revised by SFCJPA I do approve reduction of rock slope protection by converting 1.6 acres to vegetative levee protection, and filling eroded low spot in levee to improve stability in levee separating creek from Faber Tract marsh, however do not favor the proposed degradation of north side creek levee, adjacent to marsh outboard of Faber Tract, that separates creek from San Francisco Bay. -1-

Though am informed an extensive modeling of design flood shows that degradation of lower San Francisquito Creek levee in an open floodplain to San Francisco Bay improves elevation of 1 % flows to manageable level, I would reference earlier creek studies that believe raise contingent concerns of high tidal action in the Bay.

In SCVWD Engineer's Report and FEIR on Proposed Flood Control Measures on the Palo Alto Flood Basin, Northwest Zone, Project Number 1039 of September 1976, it gives Engineering Evaluation of Flood Basin:

"A careful analysis of the effects of time of occurrence and magnitude of the 100-year flood, demonstrated that the most critical condition occurred when the peak flow of a 100-year flood coincided with the time of occurrence of mean sea level on the rising tide of the design tidal cycle. A composite flood hydrograph for the three streams (Adobe, Barron, Matadero) was used as the inflow flood to the Basin. It was also found that the most critical condition existed when a tide peak occurred 4 hours after the inflow peak."

These conditions were found to duplicate the timing of high stream flows with high bay tides as experienced in San Francisquito Creek's 1998 Palo Alto flood. The low barometric pressure that seems to accompany such a storm system in the Santa Cruz Mountains also affects wind and wave action that drives high tides coming down Bay from Golden Gate to rise a foot and a half above normal. To dispense with the lower reach of levee that offers some protection for the south levee adjacent to the airport seems to me to be a mistake, as it will now be fully exposed to wind and waves coming down the Bay. -2-A, -2-B-, -2-C-

To see how even slight wind and wave build-up affects levees at south end of any body of water in South Bay go observe a salt pond in afternoon hours when winds are stronger. Somehow, I do not believe modelling for this SFCJPA was conducted with full consideration of all parameters that are unique to Palo Alto location, in its distance from the Golden Gate coinciding with travel time of storm flows from mountain to bay outfall.

There are further considerations that believe demand fuller review in the 401 Water Quality Permit Application such as upstream reservoirs, in particular Lake Lagunita that appears now to be receiving no creek diversion, only rain water. Lake Lagunita is the one reservoir that has percolation capability to groundwater aquifers. Felt Lake and Searsville do not and their water is piped to Stanford campus irrigation facilities so percolation potential of San Francisquito Creek stream bed is bypassed, without historic benefit to native steelhead.run. -3-A, 3-B

Flood retention does also not appear to be a consideration in management of these reservoirs. Data on the 1998 flood is pertinent only in its absence. Have not found documentation of where flood waters originated that swamped archives in Stanford's Green Library. It could have been over-banking of San Francisquito Creek or storm runoff from foothills. The Bordeaux banker, Peter Coutts, who owned Ayrshire Farm in 1876, had water features from Page Mill to Lake Lagunita to supply his horses and cows and regulate runoff. After a 150 years of existence it is hard on tiger salamanders and frogs to degrade habitat and lose this resource.

In Box 16, Avoidance of Impacts, please stress cleaning of excavating and bulldozing equipment so that

invasives will not be introduced into sensitive wetlands and marsh refugia. (Phragmites and Spartina esp.)

Not sure that groundwater will be able to be managed at work sites as described in 13., as so prevalent. If you will observe high marsh, as is adjacent to Environmental Center, it holds ponds of water consistently. -4-

Verification of Water **Bodies delineation during July 6, 7, and 8 of 2012 does not appear to have been fortuitous in timing for evaluating resource and COE verification in drought conditions is not ideal. Do wonder how they rated salamander mitigation ponds on hillside southeast of Lake Lagunita?**

Box 24, Relationship to other Projects, needs review Palo Alto Golf Course in greater detail as to what effect loss of flood retention on these 156 acres means to both fresh and salt water flooding in Palo Alto neighborhoods from #101 to Middlefield Road. Am attaching 1998 flood maps and golf course comment I submitted belatedly a week ago to SFRWQCB. -5- A-B-C-D-E-F-

Other Projects needs to reference 40 year upgrade of Palo Alto Water Treatment Plant, proposed siting of greenwaste recycling facility and Shoreline Study of future COE Bay flood control levee. -1-

Will transmit comment at this time as computer dropped earlier version so am nervous of repeat. Will send attachments by regular mail as include pictures and maps but will e-mail legend as well.

Thank you for consideration of these concerns.

Libby Lucas

Libby Lucas
[redacted]

Subj: **San Francisquito Creek Project CWA Section 401 - cont. comment legend**
Date: 8/19/2014 3:43:39 P.M. Pacific Daylight Time
From: JLucas1099@aol.com
To: margarete.beth@waterboards.ca.gov

Margarete Beth, Environmental Specialist
S.F. Bay Regional Water Quality Control Board
1515 Clay Street, 14th Floor, Oakland CA 94612

August 19, 2014

RE: San Francisquito Creek Project - CWA Section 401 Application

Legend for Attachments 1 through 5

~ 1 ~ City of Palo Alto Baylands Master Plan - shows triangle marsh, outboard of Faber Tract, (SFCJPA proposes to lower levee separating marsh from San Francisquito Creek) in relation to all baylands facilities.

~ 2 ~ A - Photo of triangle marsh habitat that will be opened up to San Francisquito Creek flood flows as its intervening levee is lowered.
~ 2 ~ B - Low lying airport runway, Bay Trail, and high marsh will have greater exposure to high wave, wind and tidal action with removal of northern bank of San Francisquito Creek levee, especially as bay levels rise.
~ 2 ~ C - High marsh, between Bay Trail and treatment plant slough that is to function as creek flood plain.

~ 3 ~ A - San Francisquito Creek's upper watershed featrures Lake Lagunita, high and dry, (as in drought year has received no rain water) and fenced Felt Lake Diversion and Los Trancos Fish Ladder.
~ 3 ~ B - Narrow groundwater basin boundary skirts foothills, where Lake Lagunita and San Francisquito Creek have historically provided 'farm' with water resource percolation for wells.
~ 3 ~ C - Plank in tree appears to provide high water mark on Los Trancos Creek for 1998 flood flows that likely overtopped Santa Clara County stream bank, a considerable distance upstream from USGS gage.

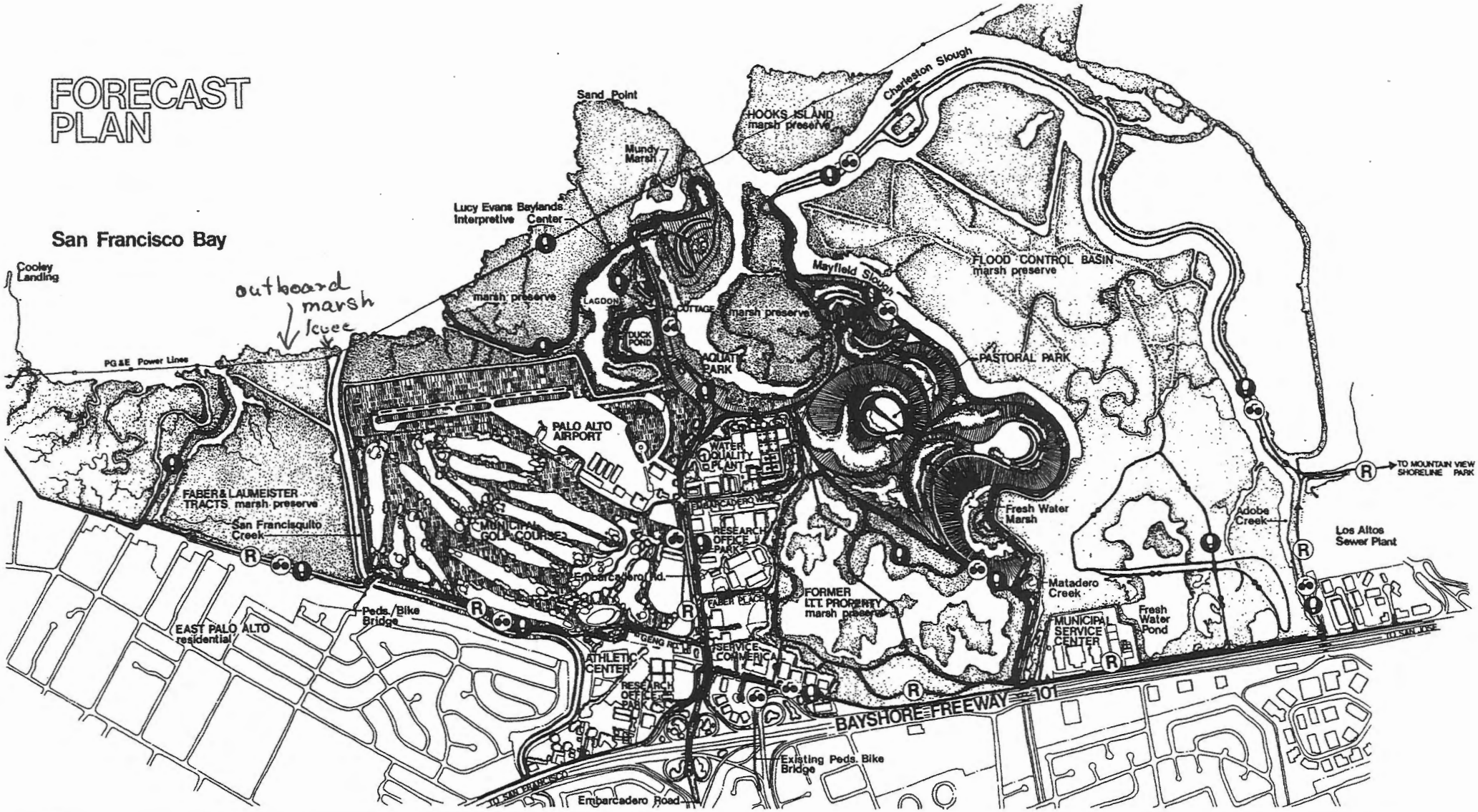
~ 4 ~ In Palo Alto Baylands high marsh holds pond for wildlife even when it is low tide in adjacent sloughs.

~ 5 ~ A-B-C-D- Flood maps show how integral Palo Allto Golf Course acreage has historically been in providing flood retention for both riverine and bay flooding incidents. Strongly feel this needs cumulative impact assessment but believe it has, so far, received none. Parameters of previous incidents show golf course to have kept waters from passing beyond Embarcadero Road so it appears course has been able to protect Palo Alto neighborhoods and adjacent city facilities and business park from flooding?
~ 5 ~ E-F- Previous letter to RWQCB notes loss of 500 trees in golf course five foot upgrade, while SFCJPA flood project estimates up to 254 trees will be lost in riparian corridor. The cumulative impact of this wildlife corridor and tree canopy loss needs to be addressed more fully as to its critical depletion of refugia for resident and migratory birds. Have attached Audubon Christmas bird counts of 2001 and 2013 to show how important Palo Alto baylands is to birds of South Bay and ultimately to waterfowl of the Pacific Flyway.

Thank you again for kind consideration of my continued comments.

Libby Lucas
[redacted]

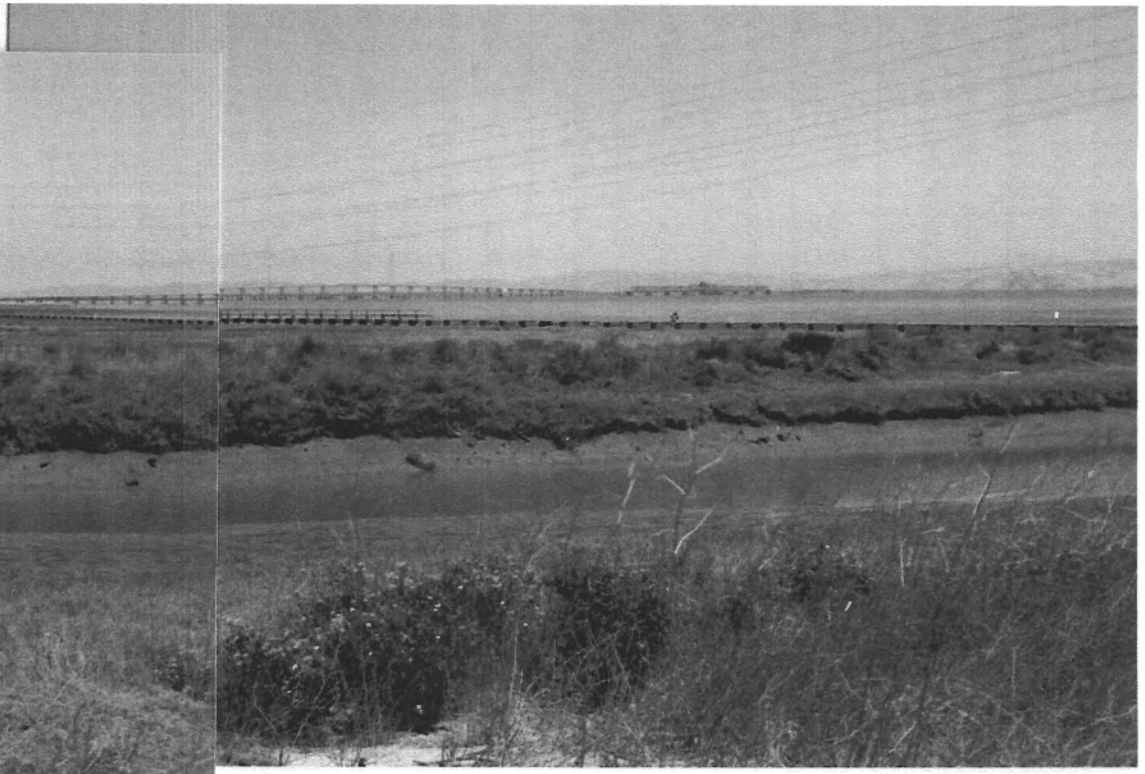
PS: 18 pp



AMENDED SUMMARY REPORT

BAY
LANDS MASTER PLAN and E.I.R.
PTED 1978
ATED and REISSUED JANUARY 1988
ECAST PLAN

- Regional Trail
- Pedestrian
- Nature Trail
- Boardwalk
- Vehicular
- Parking
- Fence
- Vegetation
- Bicycle
- Bicycle and Pedestrian
- Marsh
- Grass



OUTBOARD TRIANGLE MARSH
SFC JPA PROPOSES TO LOWER LEVEE
AND OPEN SAN FRANCISQUITO CREEK
FLOOD PLAIN TO BAY TIDAL ACTION
ACROSS MARSH - NORTH TO BRIDGE
— BAY TRAIL JUNCTION BEHIND US

←

FABER TRACT
AND EAST PALO ALTO NEIGHBORHOOD

REFUGIA FOR CALIFORNIA CLAPPER
RAIL - MANAGED BY US F&WS - ONLY
ACCESS BY BOAT

1-12-11

↑ VISTA WEST OVER AIRPORT RUNWAY AT BAY TRAIL TO RANGE OF TREES ON PALO ALTO GOLF COURSE - SAN FRANCISQUITO CREEK ON RIGHT AND OPPOSITE WHERE SFCJPA PROPOSES TO REMOVE NORTHERN BANK LEVEE AND OPEN FLOOD PLAIN TO S.F. BAY →

← LOOKING EAST OVER HIGH MARSH BAY TRAIL JUNCTURE WITH SAN FRANCISQUITO CREEK - BEHIND CAMERA

-2-B-

PALO ALTO BAYLANDS

HIGH MARSH BETWEEN BAY TRAIL AND TREATMENT PLANT SLOUGH LOOKING TOWARD SAN FRANCISQUITO CREEK AND OUTER FABER TRACT MARSH TRIANGLE

SAN FRANCISQUITO CREEK - UPPER WATERSHED

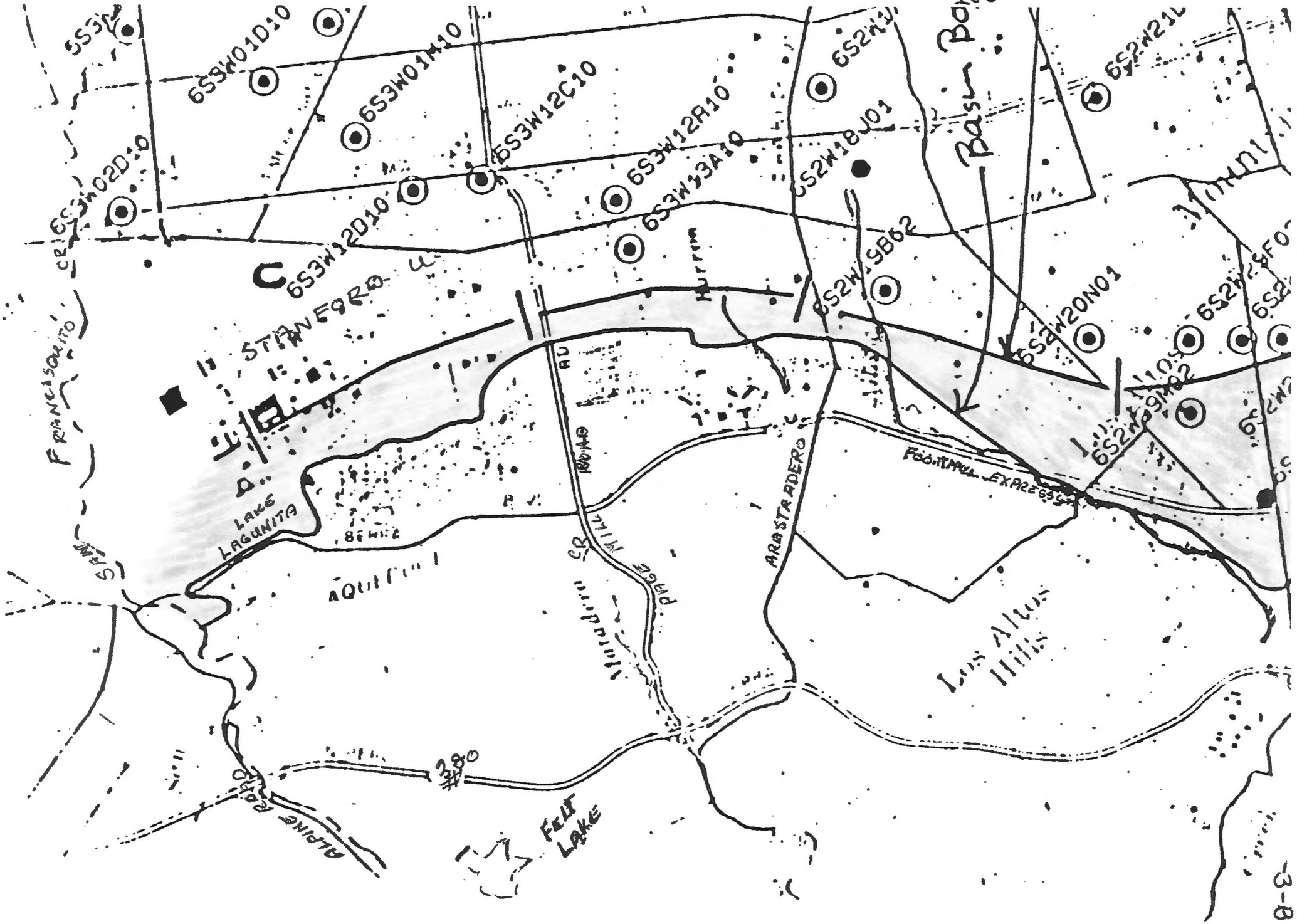
LAKE LAGUNITA

HIGH AND DRY former habitat of TIGER SALAMANDER COLONY

ONLY WATERSHED RESERVOIR WITH PERCOLATION POTENTIAL

LOS TRANCOS CREEK ↓ HIGH WATER MARK - FEB. 1998 -3-C-

FELT LAKE DIVERSION AND FENCED FISH LADDER



GROUNDWATER RECHARGE - PERCOLATION CORRIDOR/BASIN

PALO ALTO BAYLANDS
WATER TABLE IS HIGH

HIGH MARSH HOLDS
PONDS AT LOW TIDE →

ADJACENT BAY TRAIL
AND LAGOON - WESTON ENVIRONMENTAL
INTERPRETIVE CENTER - LUCY EVANS

LOW TIDE

←

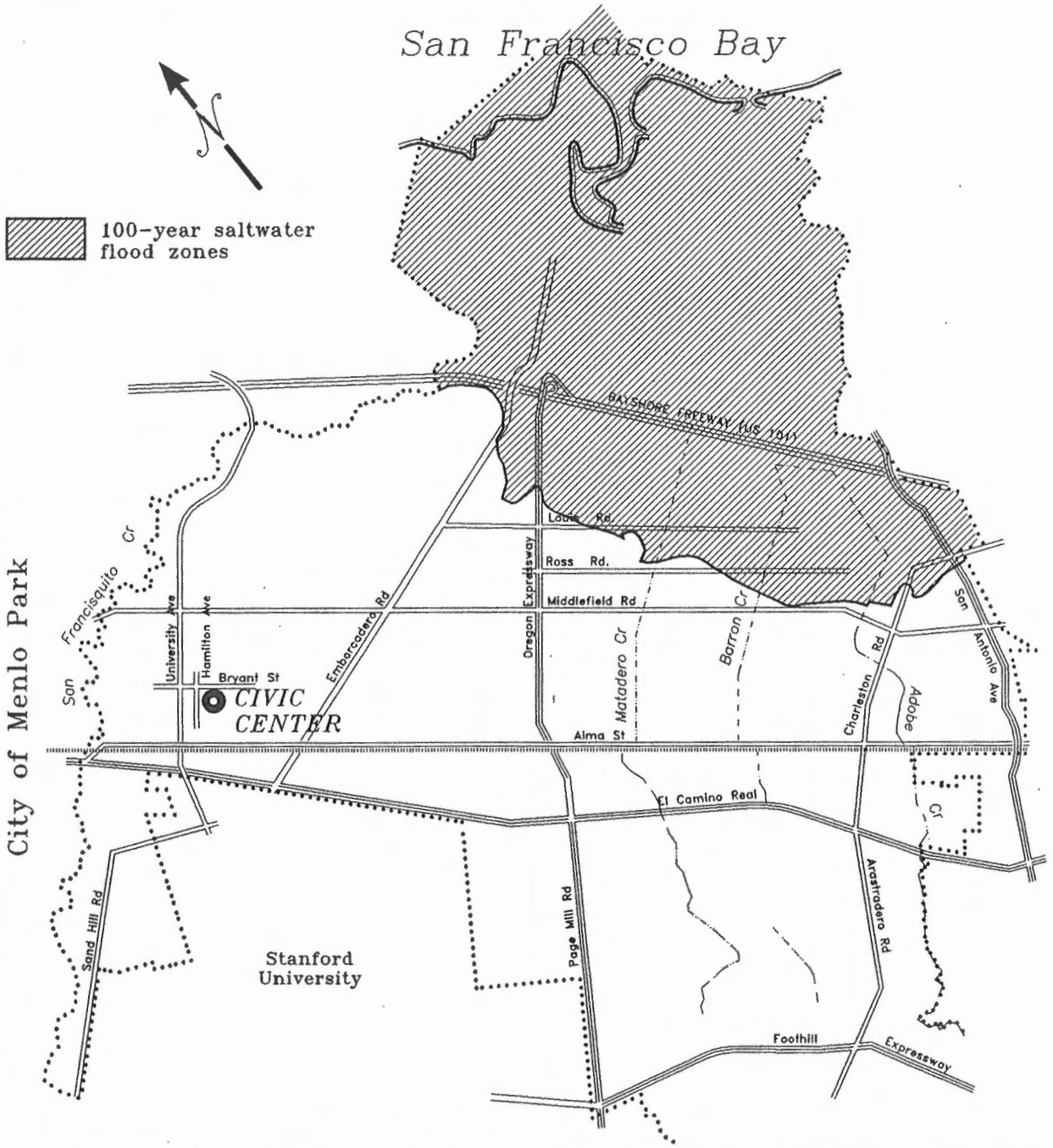
EVIDENT IN SLOUGH THAT
DRAINS PALO ALTO WATER QUALITY
TREATMENT PLANT OUT TO BAY
AT SAN FRANCISQUITO CREEK
OUTFALL

NOTICE OF STUDY SESSION OF THE PALO ALTO CITY COUNCIL TO DISCUSS IMPROVEMENTS TO ELIMINATE SALT WATER FLOODING

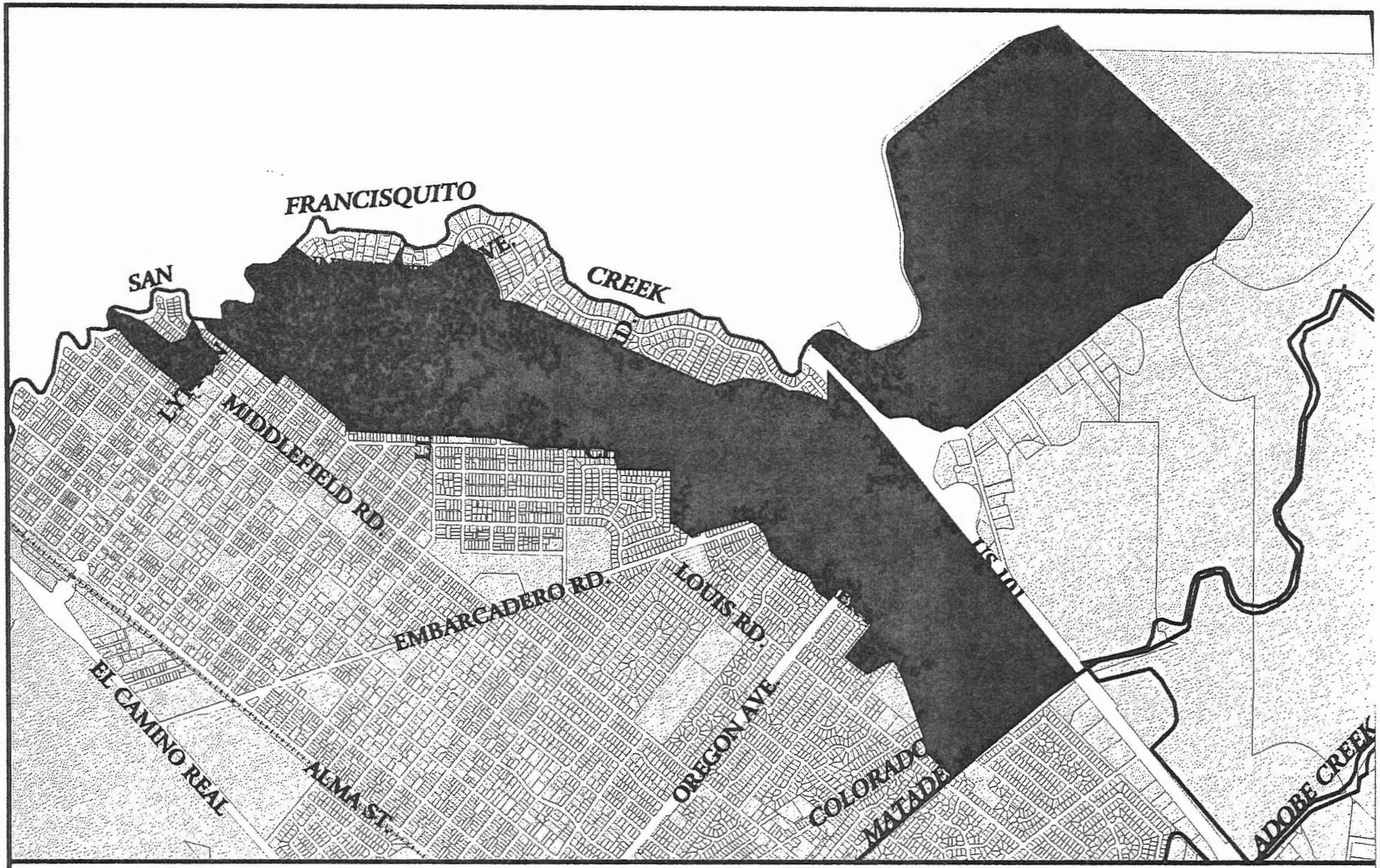
A study session will be held after the regular City Council meeting at 7:30 p.m., Monday, May 7, 1990, at the City of Palo Alto Civic Center, 250 Hamilton Avenue, Council Chambers, to discuss issues related to salt water flooding.

Representatives from the Santa Clara Valley Water District will make a presentation on the status of possible levee improvements which would eliminate salt water flood zones from current FEMA 100-year flood zone maps. Representatives from the Federal Emergency Management Agency and United States Army Corps of Engineers also will be present.

Information presented at the meeting should be helpful to anyone affected by the flood zones indicated below. The study session will be broadcast on Palo Alto Cable Channel 16.



1990 FEMA MAP - HISTORIC BAY SHORELINE



SAN FRANCISQUITO CREEK FLOODING
FEBRUARY 1998

SANTA CLARA VALLEY WATER DISTRICT REPORT - 1998

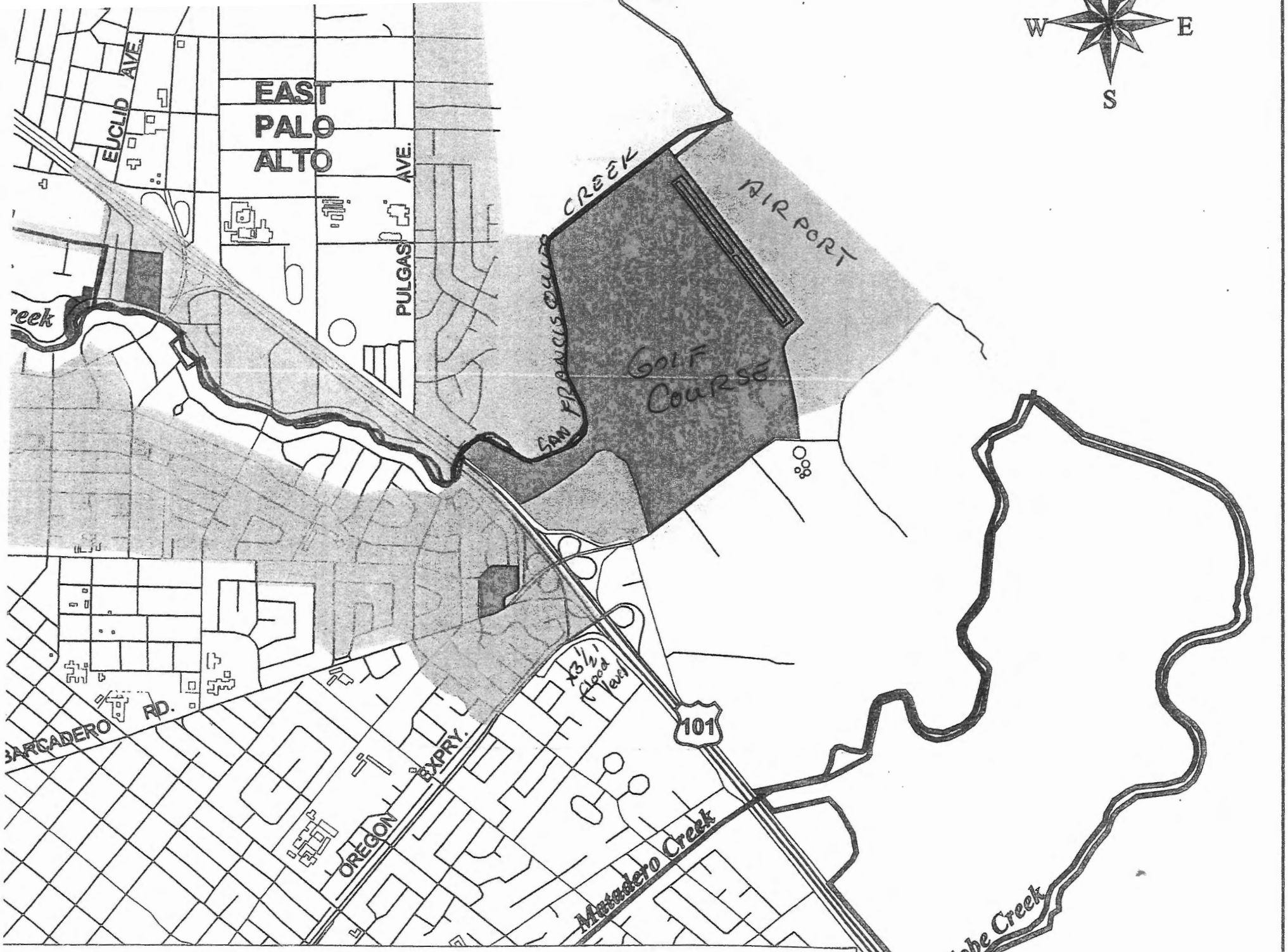


Figure 3.1 STANFORD U. REPORT

RE SAN FRANCISQUITO - 1998 FLOOD (released 1999)

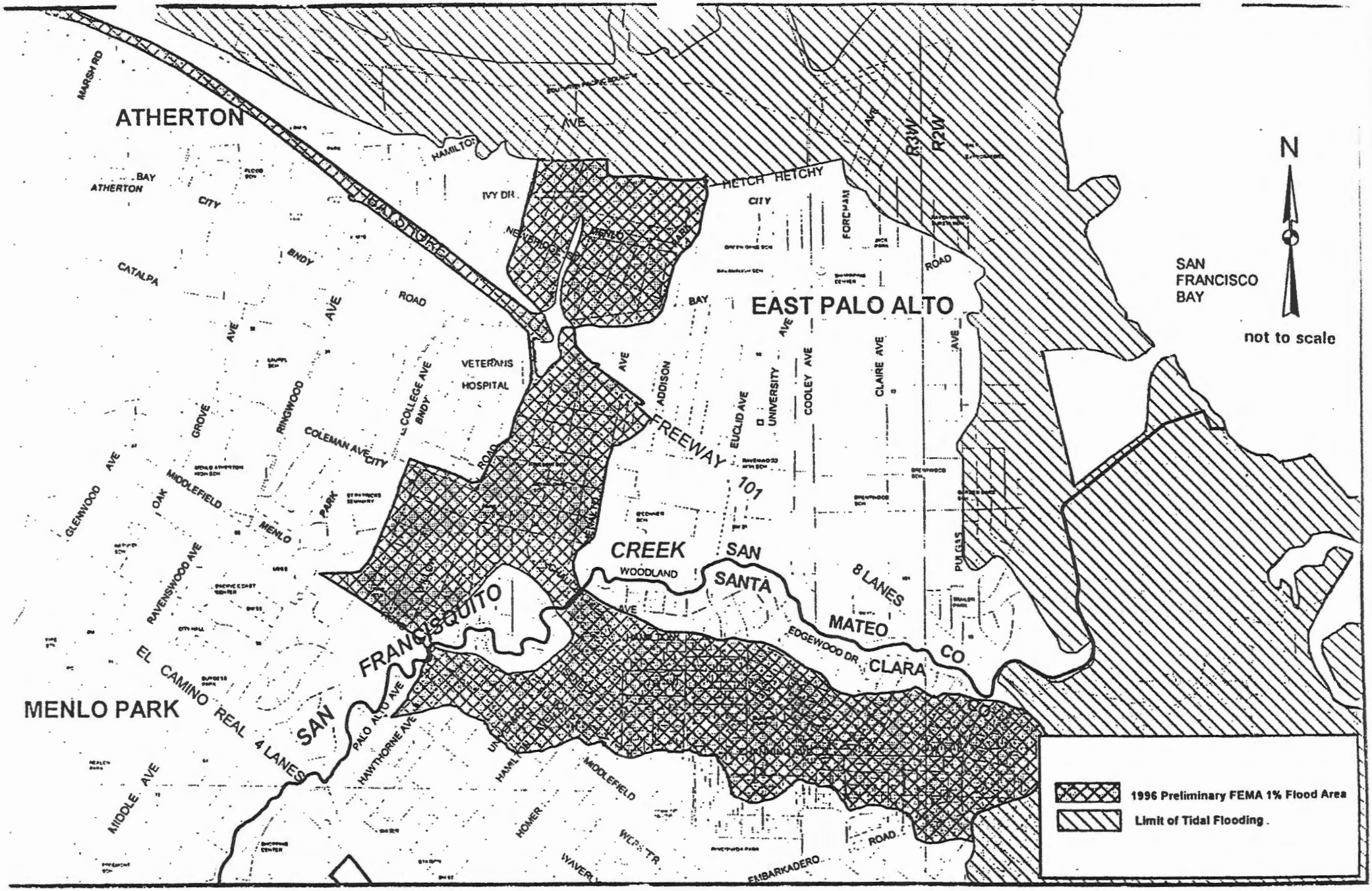


Figure 3
San Francisquito Creek
Flood Zone Map

-5-0

-5-E-

Subj: **Palo Alto Municipal Golf Course Project - 401 Water Quality Certification -RWQCB**
Date: 8/13/2014 1:57:26 P.M. Pacific Daylight Time
From: JLucas1099@aol.com
To: brian.wines@waterboards.ca.gov

Brian Wines
Region 2, California Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
Via Email: brian.wines@waterboards.ca.gov

August 13, 2014

RE: 401 Water Quality Certification Application for the Palo Alto Municipal Golf Course Project

Dear Brian Wines,

In regards the water quality permit application for the Palo Alto Municipal Golf Course there are cumulative implications of this project that do not believe have been adequately addressed. Primarily these impacts are on migratory and residential wildlife habitat and on the hydrology of extensive acres of bay lands open space.

Reconfiguration of Palo Alto's golf course will result in loss of 500 trees, in addition to the riparian tree loss incurred by JPA's adjacent San Francisquito Creek flood project. Though some course trees are assessed as degraded the total vegetative canopy does provide critical refugia for residential and migratory waterfowl and species of birds known to inhabit bay lands. (2001 Santa Clara County Christmas bird count attached).

There is remnant riparian corridor of historic San Francisquito Creek alinement which passes along western boundary of present golf course that does provide a continuity of wildlife corridor to Mayfield Slough marsh which will be lost. There is a gray fox den with pups in trees adjacent to water quality control plant that will ultimately become isolated if they survive.

Recent loss of 100 trees in SCVWD's project on Matadero Creek permanently displaced a Black-crowned Night Heron colony and resident flock of Salt Marsh Yellowthroat. Some mitigaton for Matadero losses were to be absorbed on San Francisquito Creek but no longer appear to be a consideration. In past decade there has been sufficient cumulative depredation of tree canopy and refugia to make this 2001 bird count history.

In addition to the San Francisquito Creek flood project, and this proposed golf course configuration, there is an ongoing 40 year upgrade of Palo Alto's Water Treatment Plant, the siting of a greenwaste compost facility between remnant Mayfield Slough and Emily Renzel marsh, and the City of Palo Alto has applied to acquire the Santa Clara County airport, (outboard of the golf course clubhouse,) which may need runway upgrade.

All these facilities are, at present, on a level with golf course, but when that 156 acres is padded up five feet, they may have problems with rising bay tides and cumulative storm water hydrology. Attached, by surface mail, are SCVWD and Stanford U. maps of parameters of 1998 San Francisquito Creek flooding which show extent to which golf course acreage absorbed flood flow and buffered adjacent Embarcadero Road business.

Flood reports were inconclusive as to whether any bay lands flooding was tidal. SCVWD map of 100-year saltwater flood zone which extends to Middlefield Road shows extent to which Palo Alto neighborhoods may be affected by the loss of from 468 to 780 acre feet of water storage when golf course is raised. Do not believe this cumulative impact was addressed in EIR or related documents and it is a critical concern.

Do know for certain that in February 1998 event that 3 1/2 feet of water in living rooms of residences near Oregon Expressway and two blocks inboard of #101 originated from San Francisquito Creek, not the Bay. and not from Matadero Creek. Flooding in this area in 1955 from San Francisquito Creek was slightly lower. However, in future scenarios, if SCVWD mapping is to be believed, golf course acreage will be major factor.

In the Golf Course EIR there were inaccuracies, such as mapping golf course as in Adobe Creek watershed rather than San Francisquito Creek's, referencing SCVWD as water supply rather than Hetch Hetchy, and a reference to capability of groundwater recharge in bay lands from golf course. But, the most important deficiency was an absence of discussion as to how raising golf course five feet might affect sheet flows throughout this low bay front business park, and ultimately remove historic buffer from tidal flooding for neighborhoods inboard of #101.

Basically I do support presence of golf course as an element of bay lands open space. Do believe, however, that it should be designed to reinforce essential resources of site such as wildlife refugia, wetlands habitat and associative flood water absorption or directive dry creeks. The proposed five foot pad-up of this 156 acres challenges common sense, seems an expensive exercise in denial of historic as well as future flood events.

Regret that am unable to be more positive in comment but Palo Alto Baylands used to be model marsh for all of South Bay and Audubon ladies came out in force to protect its unique environment. Sic transit gloria.

Libby Lucas, [redacted]

2013 SANTA CLARA COUNTY CHRISTMAS BIRD COUNTS

Species	SJ 12/15/13	PA 12/16/13	MtH 12/29/13	Cal-MH 12/28/13
Greater White-fronted Goose	-	1	-	-
Ross's Goose	1	-	-	-
Cackling Goose	10	4	-	1
Canada Goose	1226	1208	4	710
Wood Duck	-	CW	5	76
Gadwall	181	171	8	110
Eurasian Wigeon	2	4	-	-
American Wigeon	2201	1798	153	203
Mallard	1155	634	46	713
Blue-winged Teal	5	2	-	-
Cinnamon Teal	81	9	-	-
Northern Shoveler	5215	5127	2	35
Northern Pintail	731	1446	1	-
Green-winged Teal	1857	828	36	9
Canvasback	3581	2754	2	29
Redhead	23	76	-	-
Ring-necked Duck	32	34	85	108
Greater Scaup	836	177	-	28
Lesser Scaup	757	435	5	15
aythya, sp	1940	2691	-	-
Surf Scoter	60	123	-	-
Bufflehead	1138	288	82	179
Common Goldeneye	289	322	-	36
Hybrid Goldeneye	-	1	-	-
Hooded Merganser	47	27	2	9
Common Merganser	81	74	9	412
Red-breasted Merganser	102	7	-	-
Ruddy Duck	7072	16713	155	181
duck sp	3102	3320	-	-
California Quail	168	71	329	445
Ring-necked Pheasant	2	-	-	-
Wild Turkey	234	37	61	349
Pied-billed Grebe	194	101	27	88
Horned Grebe	16	24	-	2
Eared Grebe	2248	400	6	27
Western Grebe	141	63	-	63
Clark's Grebe	59	22	-	4
aechmophorus, sp	189	13	-	-
Double-crested Cormorant	397	268	-	438
American White Pelican	88	21	-	1
Brown Pelican	16	11	-	-
American Bittern	1	-	-	-
Great Blue Heron	51	29	8	24
Great Egret	67	47	3	46
Snowy Egret	124	53	-	25
Cattle Egret	-	-	-	1
Green Heron	4	5	-	5
Black-crowned Night-Heron	99	94	-	6
Turkey Vulture	206	92	4	292
Osprey	1	-	-	2
White-tailed Kite	27	18	-	24
Bald Eagle	4	-	8	4
Northern Harrier	42	19	1	21
Sharp-shinned Hawk	2	6	5	5
Cooper's Hawk	12	12	2	14
accipiter, sp	1	3	-	1
Red-shouldered Hawk	29	34	1	47
Red-tailed Hawk	188	145	50	215
Ferruginous Hawk	2	-	2	7
Golden Eagle	14	1	10	22
Clapper Rail	-	5	-	-

Species	SJ 12/15/13	PA 12/16/13	MtH 12/29/13	Cal-MH 12/28/13
Virginia Rail	40	5	4	-
Sora	77	6	5	3
Common Gallinule	10	2	-	3
American Coot	5033	6328	191	1837
Black-necked Stilt	829	100	-	3
American Avocet	1390	1764	-	-
Black-bellied Plover	198	3798	-	-
Snowy Plover	35	-	-	-
Semipalmated Plover	3	6540	-	-
Killdeer	224	77	12	83
Spotted Sandpiper	8	3	-	9
Greater Yellowlegs	62	62	8	6
Willet	324	1329	-	-
Lesser Yellowlegs	9	1	1	-
Whimbrel	3	-	-	-
Long-billed Curlew	382	8	-	8
Marbled Godwit	479	912	-	-
Ruddy Turnstone	-	1	-	-
Red Knot	-	14	-	-
Dunlin	3591	1839	1	-
Least Sandpiper	1777	682	-	31
Western Sandpiper	11736	7467	-	-
peep sp	1020	5080	-	-
Short-billed Dowitcher	6	69	-	-
Long-billed Dowitcher	610	62	-	-
dowitcher sp	1147	1232	-	-
Wilson's Snipe	36	9	8	29
Bonaparte's Gull	60	14	-	-
Mew Gull	242	9	-	3
Ring-billed Gull	738	426	-	79
Western Gull	115	17	-	8
California Gull	1640	488	-	1730
Herring Gull	6478	60	-	5900
Thayer's Gull	75	6	-	677
Glaucous-winged Gull	293	50	-	623
Glaucous Gull	-	-	-	2
Glaucous-winged x Western Gull	-	2	-	2
gull sp	604	1010	-	807
Forster's Tern	1026	15	-	-
Rock Pigeon	1430	636	18	785
Band-tailed Pigeon	93	38	141	66
Eurasian Collared-Dove	58	28	27	93
Mourning Dove	240	165	23	198
Barn Owl	1	1	-	5
Western Screech-Owl	2	5	5	8
Great Horned Owl	10	4	8	12
Northern Pygmy-Owl	2	1	1	-
Burrowing Owl	7	5	-	3
Short-eared Owl	2	-	-	4
White-throated Swift	46	11	2	4
Anna's Hummingbird	393	533	12	411
Belted Kingfisher	9	6	1	20
Lewis's Woodpecker	-	-	79	-
Acorn Woodpecker	216	287	411	342
Yellow-bellied Sapsucker	1	-	-	-
Red-breasted Sapsucker	15	7	18	19
hybrid Sapsucker	-	1	-	2
Nuttall's Woodpecker	65	111	44	122
Downy Woodpecker	13	18	1	7
Hairy Woodpecker	7	31	10	15

Protected Migratory Birds

2001 SANTA CLARA COUNTY BIRD CHRISTMAS COUNTS BAYLANDS AND PALO ALTO FLOOD BASIN

Species	PA 12/7/01	
Pied-billed Grebe	✓	
Horned Grebe	✓	
Eared Grebe	✓	
Red-necked Grebe	✓	
Western Grebe	✓	
Clark's Grebe	✓	
Aechmophorus, sp	-	
American White Pelican	✓	
Brown Pelican FE	✓	
Double-crested Cormorant	✓	
American Bittern	✓	
Great Blue Heron	✓	
Great Egret	✓	
Snowy Egret	✓	
Green Heron	✓	
Black-crowned Night-Heron	✓	
Greater White-fronted Goose	-	
Snow Goose	-	
Canada Goose	✓	
Wood Duck	✓	
Green-winged Teal	✓	
Mallard	✓	
Northern Pintail	✓	
Blue-winged Teal	✓	
Cinnamon Teal	✓	
Northern Shoveler	✓	
Gadwall	✓	
Eurasian Wigeon	✓	
American Wigeon	✓	
Canvasback	✓	
Redhead	✓	
Ring-necked Duck	✓	
Greater Scaup	✓	
Lesser Scaup	✓	
Aythya, sp	-	
Surf Scoter	✓	
Common Goldeneye	✓	
Barrow's Goldeneye	✓	
Bufflehead	✓	
Hooded Merganser	✓	
Common Merganser	✓	
Red-breasted Merganser	✓	
Ruddy Duck	✓	
duck, sp	-	
Turkey Vulture	✓	
Osprey	-	
White-tailed Kite SP	✓	
Bald Eagle	-	
Northern Harrier CSSC	✓	
Sharp-shinned Hawk CSSC	✓	
Cooper's Hawk	✓	
Accipiter, sp	-	
Red-shouldered Hawk	✓	
Red-tailed Hawk	✓	
Red-tailed (Harlan's) Hawk	-	
Ferruginous Hawk	-	
Golden Eagle CSSC, SP	✓	
American Kestrel	✓	
Merlin CSSC	✓	

Species	PA 12/7/01	
Peregrine Falcon FE, SE, SP	✓	
Prairie Falcon CSSC	CW	
Falcon, sp	-	
Ring-necked Pheasant	✓	
Wild Turkey	✓	
California Quail	✓	
Clapper Rail	✓	
Virginia Rail	✓	
Sora	✓	
Common Moorhen	✓	
American Coot	✓	
Sandhill Crane	-	
Black-bellied Plover	✓	
Snowy Plover	-	
Semipalmated Plover	✓	
Killdeer nests	✓	
Black-necked Stilt nests	✓	
American Avocet	✓	
Greater Yellowlegs	✓	
Lesser Yellowlegs	✓	
yellowlegs, sp	-	
Willet	✓	
Spotted Sandpiper	-	
Whimbrel	✓	
Long-billed Curlew CSSC	✓	
Marbled Godwit	✓	
Ruddy Turnstone	-	
Red Knot	✓	
Sanderling	✓	
Western Sandpiper	✓	
Least Sandpiper	✓	
Sharp-tailed Sandpiper	-	
Dunlin	✓	
Ruff	-	
Calidrid ("peep"), sp	-	
Short-billed Dowitcher	✓	
Long-billed Dowitcher	✓	
dowitcher, sp	-	
Common Snipe	✓	
Bonaparte's Gull	✓	
Mew Gull	-	
Ring-billed Gull	✓	
California Gull CSSC	✓	
Herring Gull	✓	
Thayer's Gull	✓	
Iceland Gull	*	
Lesser Black-backed Gull	-	
Western Gull	✓	
Glaucous-winged Gull	✓	
Glaucous Gull	-	
gull, sp	-	
Forster's Tern Federal Watch Bird	✓	
Black Skimmer	✓	
Rock Dove	✓	
Band-tailed Pigeon	✓	
Mourning Dove	✓	
Greater Roadrunner	-	
Barn Owl	✓	
Western Screech-Owl	✓	

Species	PA 12/7/01	
Great Horned Owl	✓	
Northern Pygmy-Owl	-	
Burrowing Owl CSSC	✓	
Northern Saw-whet Owl	-	
White-throated Swift	CW	
Anna's Hummingbird	✓	
Rufus Hummingbird	-	
Belted Kingfisher	✓	
Lewis's Woodpecker	-	
Acorn Woodpecker	✓	
Yellow-bellied Sapsucker	-	
Red-breasted Sapsucker	✓	
Nuttall's Woodpecker	✓	
Downy Woodpecker	✓	
Hairy Woodpecker	✓	
Northern (Yel-sh) Flicker	-	
Northern (Red-sh x Yel-sh) Flicker	-	
Northern (Red-sh) Flicker	✓	
Pileated Woodpecker	✓	
Black Phoebe	✓	
Say's Phoebe	✓	
Horned Lark CSSC	-	
Tree Swallow ✓	-	
Violet-green Swallow	✓	
Barn Swallow ✓	-	
swallow, sp	-	
Steller's Jay	✓	
Western Scrub Jay	✓	
Yellow-billed Magpie ✓	-	
American Crow	✓	
Common Raven	✓	
Chestnut-backed Chickadee	✓	
Oak Titmouse	✓	
Bushtit	✓	
Red-breasted Nuthatch	✓	
White-breasted Nuthatch	✓	
Pygmy Nuthatch	✓	
Brown Creeper	✓	
Rock Wren	-	
Canyon Wren	-	
Bewick's Wren	✓	
House Wren	-	
Winter Wren	✓	
Marsh Wren	✓	
American Dipper	-	
Golden-crowned Kinglet	✓	
Ruby-crowned Kinglet	✓	
Blue-gray Gnatcatcher	-	
Western Bluebird	✓	
Townsend's Solitaire	-	
Hermit Thrush	✓	
American Robin	✓	
Varied Thrush	✓	
Wrentit	✓	
Northern Mockingbird	✓	
California Thrasher	✓	
Black-backed Wagtail	-	
American Pipit	✓	
Cedar Waxwing	✓	

Species	PA 7/01
Phainopepla	-
Loggerhead Shrike CSSC	✓
European Starling	✓
Hutton's Vireo	✓
Orange-crowned Warbler	✓
Yellow Warbler CSSC	-
Yellow-rumped Warbler (form	✓
(Myrtle)	-
(Audubon's)	-
Black-throated Gray Warbler	-
Townsend's Warbler	✓
Common Yellowthroat	✓
Western Tanager	-
Spotted Towhee	✓
California Towhee	✓
Rufous-crowned Sparrow	-
Vesper Sparrow	-
Lark Sparrow	-
Sage Sparrow	-
Savannah Sparrow	✓
Grasshopper Sparrow	-
Fox Sparrow	✓
Fox Sparrow, Eastern form	-
Song Sparrow	✓
Lincoln's Sparrow	✓
Swamp Sparrow	CW
White-throated Sparrow	✓
Golden-crowned Sparrow	✓
White-crowned Sparrow	✓
Lark Sparrow	CW
sparrow, sp	-
Dark-eyed Junco (form?)	✓
Dark-eyed (Oregon) Junco	-
Nutmeg Mannikin	-
Red-winged Blackbird	✓
Tricolored Blackbird CSSC	✓
Western Meadowlark	✓
Brewer's Blackbird	✓
Brown-headed Cowbird	✓
blackbird, sp	
Bullock's Oriole	-
Purple Finch	✓
House Finch	✓
Pine Siskin	✓
Lesser Goldfinch	✓
Lawrence's Goldfinch	-
American Goldfinch	✓
Goldfinch sp	-
House Sparrow	✓
Total Species	163
Total	own

Key: sp = species undetermin
CW = Count Week
* = Report submitted fo
** = unestablished exoti
SJ = San Jose: compiled
PA = Palo Alto:only the subset p
MtH = Mount Hamilton: compiled
Cal-MH = Calero-Morgan HillMaria