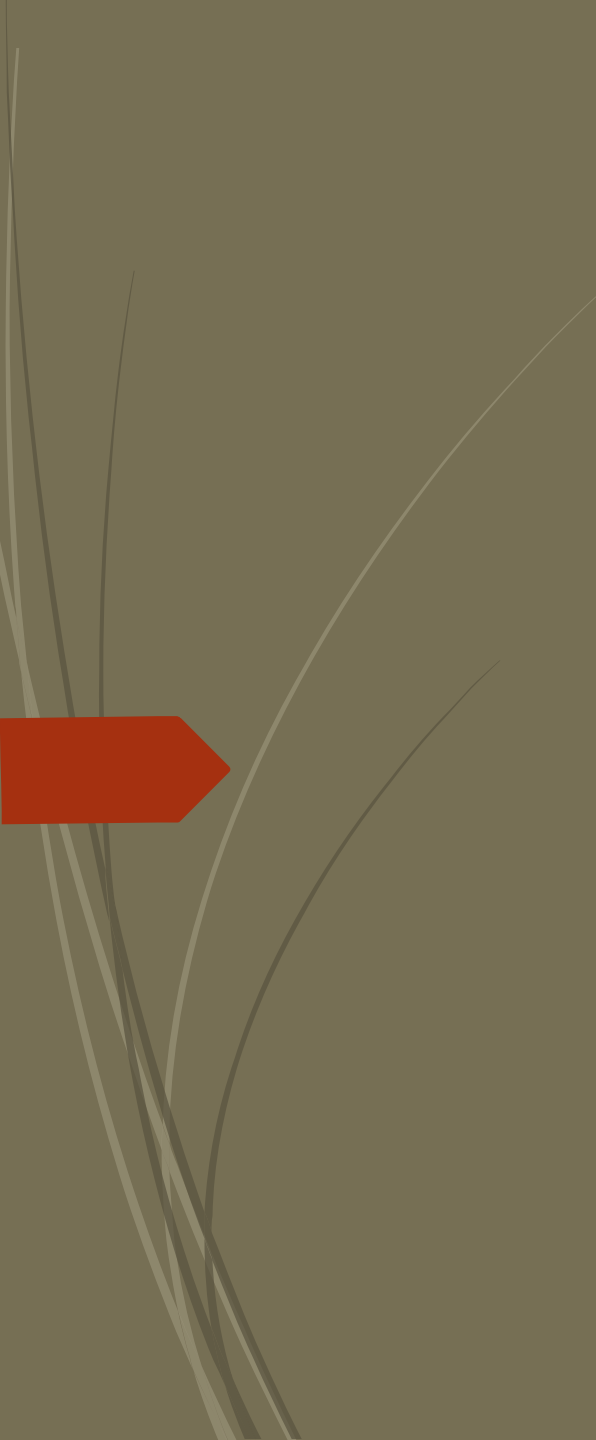
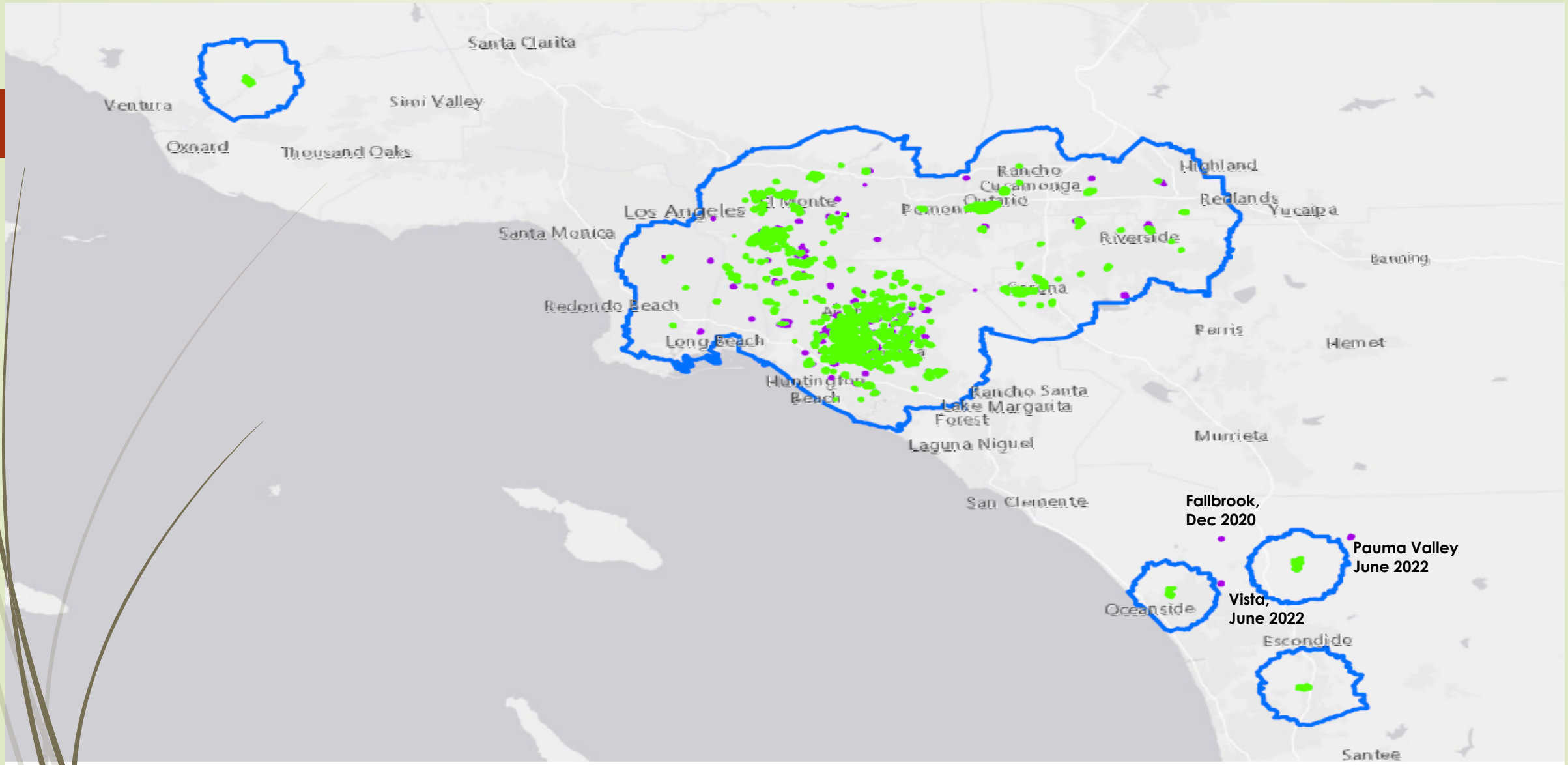




HLB Detection, Delimitation, and Tree Removal Updates

Southern District

July 10, 2024



HLB Quarantine and Treatment Area

6/28/2024

-  HLB Quarantine Area
-  HLB Treatment Area
-  Mandatory
-  Non-mandatory

0 5 10
Miles


CITRUS PEST & DISEASE
PREVENTION DIVISION


cdfa
CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

HLB Detection Updates

- First hlb positive tree detection in the city of Commerce in Los Angeles County.
- A total of 453 positive trees were detected in the last three months.
 - 63% in Orange, 19% in Los Angeles, 13% in Riverside, and 5% in San Bernardino County.
- Delimitation survey and treatments were completed in Valley Center, San Diego County.
 - No pending PDRs with the lab.
- Resampling of find sites and adjacent properties was initiated in the Rancho Bernardo area of San Diego County.
- Multiple detections occurred in the neighborhoods of Brea, Yorba Linda, Irvine, Santa Ana, Anaheim, Costa Mesa, Orange, Duarte, Ontario, and Corona.

HLB Delimitation Survey I

Areas	Total Properties	Properties Surveyed	No Host Properties	Refusals/No Contact-Pending	Completion Percentage
Glendora (1)	51	51	30	0/5	100%
Los Angeles (5)	10	10	9	0/0	100%
Azusa (2)	52	52	24	0/19	100%
Duarte (2,8-9,13,15-18,21-24, 32,39,48-51)	183	130	42	7/34	71%
San Gabriel (1,14,21,23-24)	431	431	256	1/14	100%
Valley Center (6-7)	10	10	1	0/0	100%

HLB Delimitation Survey II

Areas	Total Properties	Properties Surveyed	No Host Properties	Refusals/No Contact-Pending	Completion Percentage
Costa Mesa (10-18)	450	325	165	16/16	72%
Irvine (17-19)	517	354	133	27/39	68%
Yorba Linda (5-10)	135	79	25	7/9	59%
Brea (2)	121	83	40	7/3	69%
Ontario (74-81)	331	297	143	7/34	90%
Jurupa Valley (3,6,10,13-14)	98	94	40	3/7	96%
Corona (13,24,32,40,53-57)	816	470	237	12/346	58%

Quadrant Survey 2024

(Find sites, Adjacent, Inconclusive samples)

County	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Los Angeles	149	153	161	68	38	38						
Orange	178	179	118	17	110	151						
Riverside	57	41	15	42	36	125						
San Bernardino	46	23	37	49	59	54						
San Diego	33	42	37	111	107	30						
Imperial	0	0	0	3	0	0						
Total	463	438	368	290	350	398						

HLB Positive Trees (April thru June)

County	Detected	Removed	Cumulative Pending
Los Angeles	86	64	32
Orange	284	339	161
San Bernardino	24	22	10
Riverside	58	56	17
San Diego	1	1	0
TOTAL	453	482	220



California Department of Food & Agriculture Plant Pest Diagnostics Center HLB Testing Program 2024

Total number of plant and ACP samples per month – Fig. 1a, Fig1b

Number of samples tested for HLB per year from 2008 –2023 – Fig. 2

Tally of positive detections by county and city – Tables 1a-1d.

Number of detections yearly from 2012-2024– Table 2

If you have any questions, please call or email me at 916-738-6710 lucita.kumagai@cdfa.ca.gov.

Fig 1a. 2024 -
Total number
of plant and
ACP samples
submitted
per month.

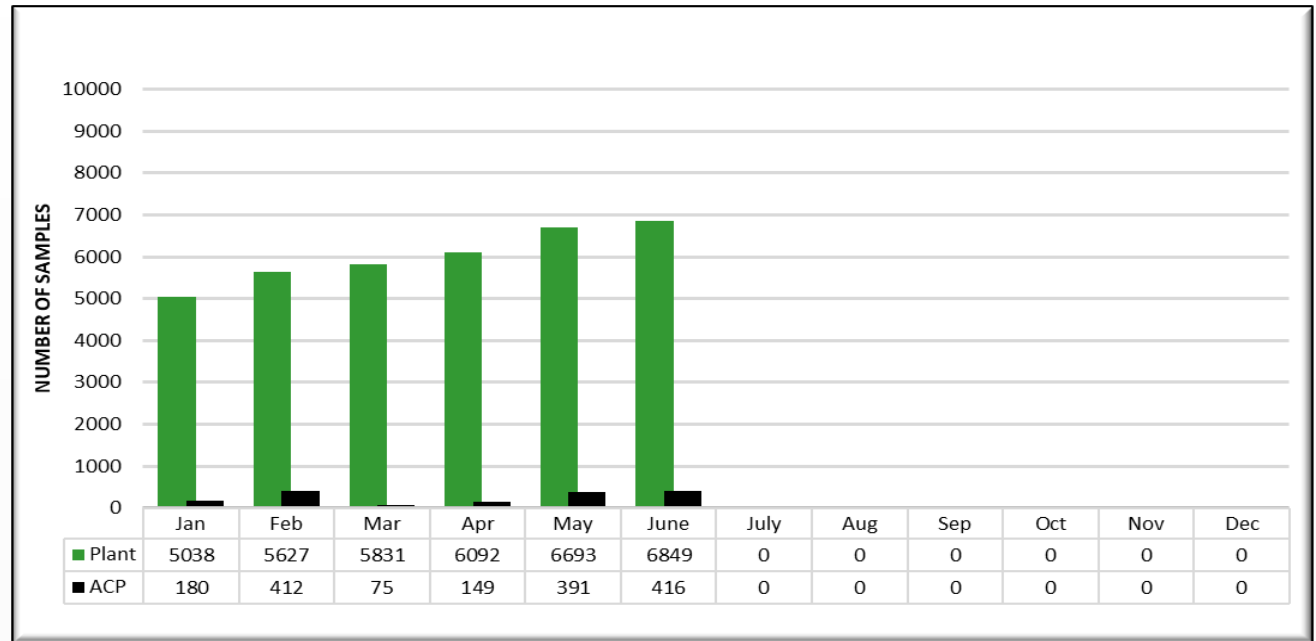


Fig 1b. 2023 -
Total number
of plant and
ACP samples
submitted per
month last
year.

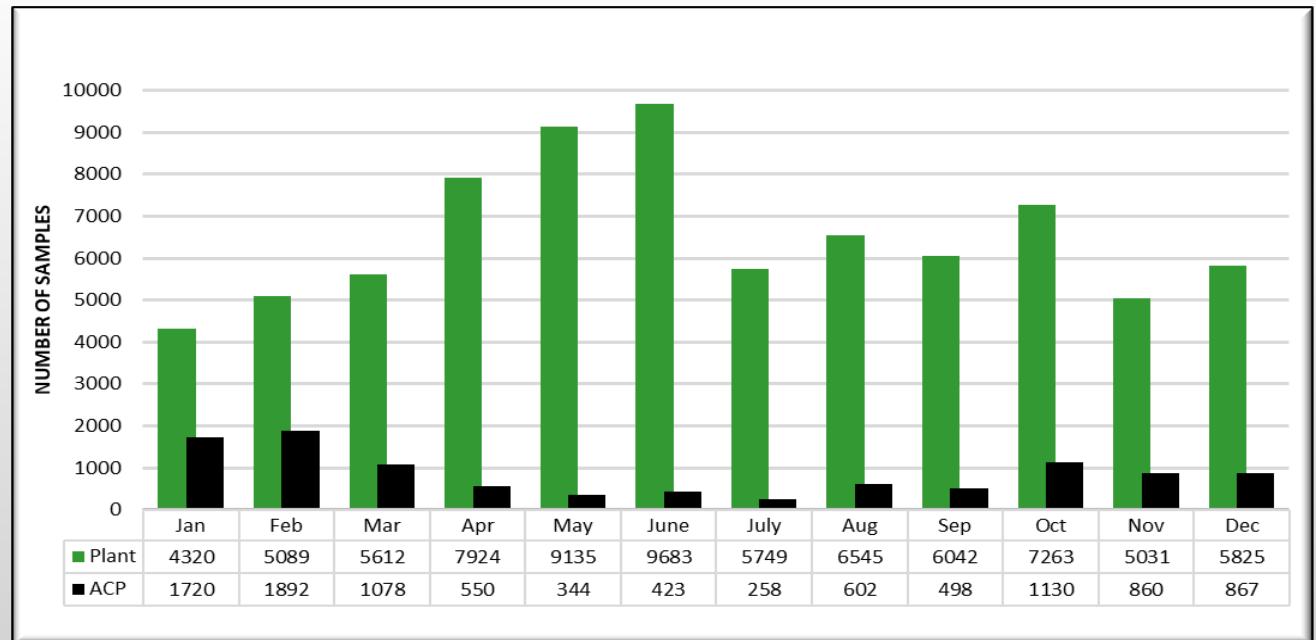
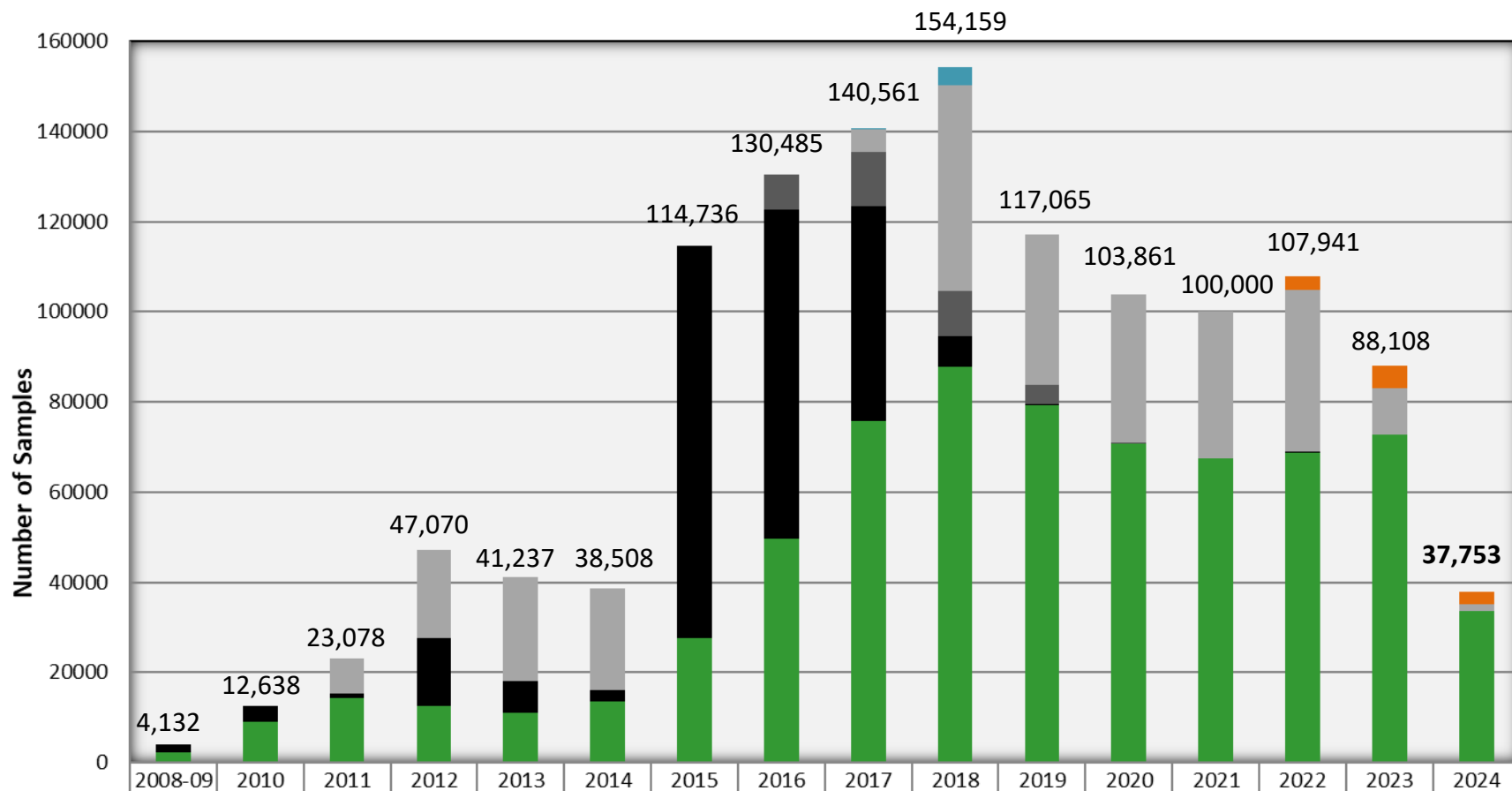


Fig 2. Number of samples tested for HLB per year from 2008 – 2024.



	2008-09	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CRB Plant														3122	5065	2528
CPDP ACP									94	4020	0	0	0	0	0	0
CRB ACP			7740	19380	23222	22568	0	0	5085	45550	33247	32920	32507	35948	10222	1612
U AZ ACP								7881	11896	10079	4310	205	0	0	0	0
CDFA ACP	1923	3527	1105	15032	6872	2300	87052	72832	47619	6698	133	130	29	163	39	11
CDFA Plant	2209	9111	14233	12658	11143	13640	27684	49772	75867	87812	79375	70606	67464	68708	72782	33602

Combined total of plant and ACP samples tested from 2008 – 2024 is 1,261,332

Tables 1a-1d. Tally of positive sites, positive trees, and Clas+ ACP samples by city and county as of 7/3/2024.

2012-2024	# Sites	# Trees	ACP sample
Grand Total	5273	8144	812

Orange County Positives			
City	# Sites	# Trees	# ACP samples
Garden Grove	727	1255	122
Santa Ana	701	1135	97
Anaheim	911	1556	165
Westminster	371	628	22
Orange	321	461	43
Tustin	52	64	10
Fountain Valley	15	22	3
Huntington Beach	27	30	2
Placentia	89	123	15
La Habra	7	8	1
Fullerton	17	22	8
Yorba Linda	47	50	8
Irvine	98	134	4
Costa Mesa	66	99	3
Brea	27	41	0
Buena Park	9	16	2
Cypress	5	1	5
Stanton	5	6	1
Midway City	11	20	0
Los Alamitos	1	0	1
Villa Park	1	1	0
Total	3508	5672	512

Los Angeles County Positives			
City	# Sites	# Trees	# ACP samples
Whittier	207	253	45
Pico Rivera	184	253	65
Montebello	80	111	2
San Gabriel	89	123	7
Rosemead	50	69	7
Paramount	29	35	5
La Mirada	53	72	6
La Puente	45	53	9
Norwalk	15	12	5
Cerritos	7	9	5
Hacienda Heights	5	5	1
Lakewood	5	6	0
Duarte	141	217	6
El Monte	74	106	8
South El Monte	23	43	4
Alhambra	3	4	0
Temple City	12	11	2
Compton	1	1	0
Glendora	1	0	1
South Gate	10	10	6
Long Beach	8	8	3
Los Angeles	8	6	2
Downey	28	35	5
Carson	4	3	1
Monrovia	29	42	0
Rowland Heights	2	0	2
Pomona	10	13	2
Artesia	7	8	0
Bellflower	5	5	0
Monterey Park	1	1	0
West Covina	1	0	1
City of Industry	1	2	0
Claremont	1	0	1
Santa Fe Springs	2	1	1
Azusa	8	16	2
Covina	1	0	1
Commerce	1	1	0
Total	1151	1534	205

Riverside County Positives			
City	# Sites	# Trees	# ACP samples
Corona	178	255	32
Riverside	27	29	5
Eastvale	2	2	0
Jurupa Valley	33	52	4
Moreno Valley	1	1	0
Norco	4	7	0
Total	245	346	41
San Bernardino County Positives			
Rancho Cucamonga	3	7	2
Montclair	8	7	1
Colton	6	11	3
San Bernardino	2	1	1
Ontario	219	352	22
Fontana	30	41	9
Chino	18	28	2
Total	286	447	40
San Diego County Positives			
Fallbrook	1	0	1
Oceanside	4	9	4
Pauma Valley	1	0	1
Vista	1	0	1
San Diego	26	42	0
Valley Center	5	19	2
Total	38	70	9
Ventura County Positives			
Santa Paula	45	75	5
Total	45	75	5

Table 2. Positive detections by year

Positive Detections by Year			
Year	# Sites	# Trees	# ACP samples
2012	1	1	1
2015	10	10	3
2016	13	19	3
2017	295	269	116
2018	422	699	82
2019	532	756	75
2020	362	488	44
2021	385	598	59
2022	884	1342	166
2023	1817	2965	229
2024	552	997	34
Total	5273	8144	812

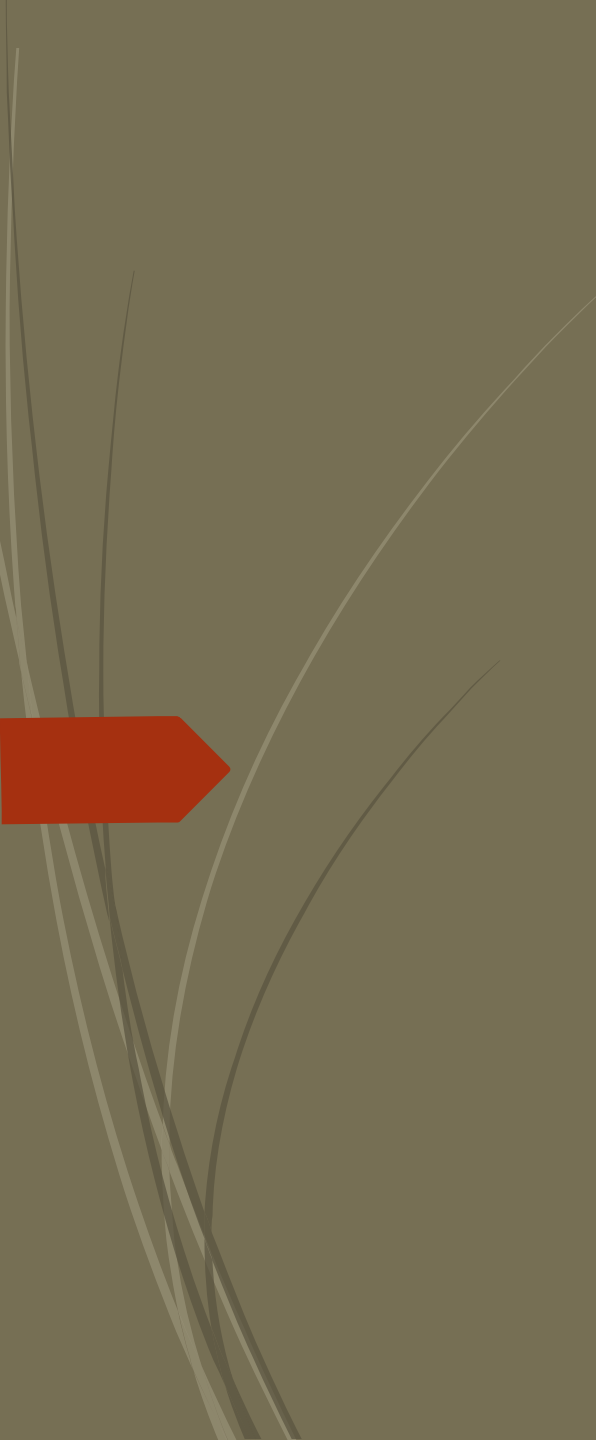
County Monthly Activity Report
October 2023 - April 2024

County	FY 2023 24 Budget Amount	Percent Expended	CA's Issued	Grower Inspections	Transporter Inspections	Packer/Processor Inspections	Fruit Seller Inspections	Harvester/FLC Inspections	Regulatory Incidents	NOVs Issued	NOPAs
Fresno	\$105,077.25	100%	52	1	433	0	0	0	3	64	0
Imperial	\$57,684.66	80%	11	25	14	4	0	0	0	0	0
Kern	\$80,000.00	58%	116	10	455	4	0	1	1	7	0
Kings	\$19,602.20	48%	0	0	0	54	0	17	0	0	0
Los Angeles	\$291,633.41	43%	2	20	0	0	297	0	0	0	0
Monterey	\$15,760.55	45%	2	23	0	0	0	0	0	0	0
Orange	\$88,048.50	62%	2	60	0	0	3	0	0	0	0
Riverside	\$751,593.75	80%	16	88	729	4	13	0	0	5	0
San Bernardino (*1)	\$18,674.83	8%	1	2	1	0	0	0	0	0	0
San Diego	\$612,471.94	65%	7	144	124	53	62	0	0	11	0
San Luis Obispo	\$8,676.04	83%	9	0	0	0	0	0	0	0	0
Santa Barbara (*1)	\$12,785.73	100%	3	4	3	0	22	0	0	1	0
Tulare	\$410,044.56	62%	162	0	2,887	6	15	0	0	46	6
Ventura (*4)	\$284,784.70	23%	10	7	52	3	5	0	1	6	0
Total	\$ 2,756,838.12	63%	393	384	4,698	128	417	18	5	140	6

(*#) = number of invoices missing from reporting period

County Regulatory Proposed Budget

County	FY 2023 24 Budget Amount	Proposed FY 2024 25 Budget	Percent Change
Fresno	\$105,077.25	\$85,000.00	-19%
Imperial	\$57,684.66	\$40,000.12	-31%
Kern	\$80,000.00	\$70,000.00	-13%
Kings	\$19,602.20	\$10,121.50	-48%
Los Angeles	\$291,633.41	\$150,000.00	-49%
Monterey	\$15,760.55	\$16,834.54	7%
Orange	\$88,048.50	\$55,000.00	-38%
Riverside	\$751,593.75	\$300,000.00	-60%
San Bernardino	\$18,674.83	\$14,520.18	-22%
San Diego	\$612,471.94	\$350,000.00	-43%
San Luis Obispo	\$8,676.04	\$9,279.65	7%
Santa Barbara	\$12,785.73	\$12,838.28	0%
Tulare	\$410,044.56	\$350,005.84	-15%
Ventura	\$284,784.70	\$220,008.54	-23%
Total	\$ 2,756,838.12	\$ 1,683,608.65	-39%



HLB Treatment Updates

Southern District

April 10, 2024



Treatment Updates

- Delimitation treatments were conducted in the following areas:
 - Anaheim Hills, Yorba Linda, Costa Mesa, Irvine, Orange, Westminster, Placentia, Fullerton, Garden Grove, Santa Ana, Whittier, South Gate, La Puente, Jurupa Valley, Corona, Ontario, Azusa, Glendora, and Duarte.
- Public meetings:
 - To treat delimitation areas in Riverside and San Bernardino counties: April 30, May 28, and July 9, 2024.
 - To treat delimitation areas in Los Angeles and Orange counties: April 3, June 3, and July 2, 2024.

HLB Delimitation Treatments

Areas	Total Properties	Properties Treated	No Host Properties	Refusals/ No Contact	Completion
Jurupa Valley(3,6,10,13-14)	100	34	57	5/7	100%
Corona (51-54,57)	674	178	110	4/390	43%
Ontario (1-2,5-6,11-13,17-18,21-22,65-67,71-76,80-81)	916	367	476	33/48	92%
Duarte (2-5,8-9,15,17-18,20-22,28-29,32-36,48-54)	490	277	164	33/16	90%
Azusa (2)	242	34	205	1/2	100%
Los Angeles (6)	45	12	29	3/1	100%
Glendora (1)	672	125	540	4/3	100%
Anaheim Hills (157-161)	397	30	361	1/5	100%
Yorba Linda (1-20)	2,172	501	1,472	43/35	91%
Costa Mesa (7,14-18)	28	5	23	0/0	100%
Irvine (2,6,10-11,17-20)	637	388	188	33/11	90%

HLB Delimitation Treatments – FS and Adj. in LA and Orange County

Areas	Total Properties	Properties Treated	No Host Properties	Refusals/ No Contact
Placentia	11	6	3	0/2
Fullerton	26	21	5	0/0
Westminster	179	82	87	7/5
Santa Ana	196	118	62	10/6
Orange	485	205	249	14/18
Garden Grove	391	136	218	16/19
Anaheim	335	200	106	18/11
La Puente	62	27	25	4/6
South Gate	18	13	2	1/2
Whittier	15	3	10	1/1

Southern District Staffing Updates

County	Permanent	Seasonal	Pending Hiring	Hiring Status
Los Angeles	26	4	One PPA III	Will not be backfilled at this time.
Orange	15	0	Two PPA I and One ES	Will not be backfilled at this time. ES start date 7/15.
Riverside and San Bernardino	16	6	One PPA II	Will not be backfilled at this time.
San Diego and Imperial	17	0	One PPA I	Will not be backfilled at this time.

Staff Distribution By Activities

Counties	Delimitation and other Surveys	Treatments and Tree Removals	Regulatory
Los Angeles and Orange	25	16	3
Riverside and San Bernardino	10	8	4
San Diego and Imperial	13	2	2



**Central District Update
Operations Subcommittee Meeting
July 10, 2024**

Central District Update

- No new ACP detections in the Central Valley.
 - One adult ACP in Fresno County confirmed on May 2, 2024. Regulatory incident.
- Detection, delimitation, and grove trapping remains status-quo.
- Multi-pest risk survey is on-going.
- CYVCV survey in the cities of Tulare and Visalia is on pause until temperatures fall below 90 degrees.



As of July 3, 2024



Total Properties Surveyed	Total Survey Refusals	Total Properties Treated	Total Treatment Refusals	Total HLB+ Trees	Total HLB+ Trees Removed	Total Tree Removal Refusals
1,381	17	658	30	75	64	10

Santa Paula



Before



After

HLB symptoms





Central District Update - Projects

Office	Survey	Trapping	Treatment
Fresno	5	7	0
Visalia	5	4	0
Shafter	6	2	0
Camarillo	8	0	2



Central District Update - Staffing

County	Total Perm Staff (current)	Pending Hiring (vacancies)	Hiring Status
Fresno County (Fresno)	12	N/A	1 PPA I on loan to PD/EP
Kern County (Shafter)	8	N/A	1 PPA I on loan to PD/EP
Tulare County (Visalia)	10	N/A	Fully Staffed
Tulare County (Visalia Regulatory)	1	--	--
Ventura County (Camarillo)	10	N/A	1 PPA I & PPA III on loan to PD/EP

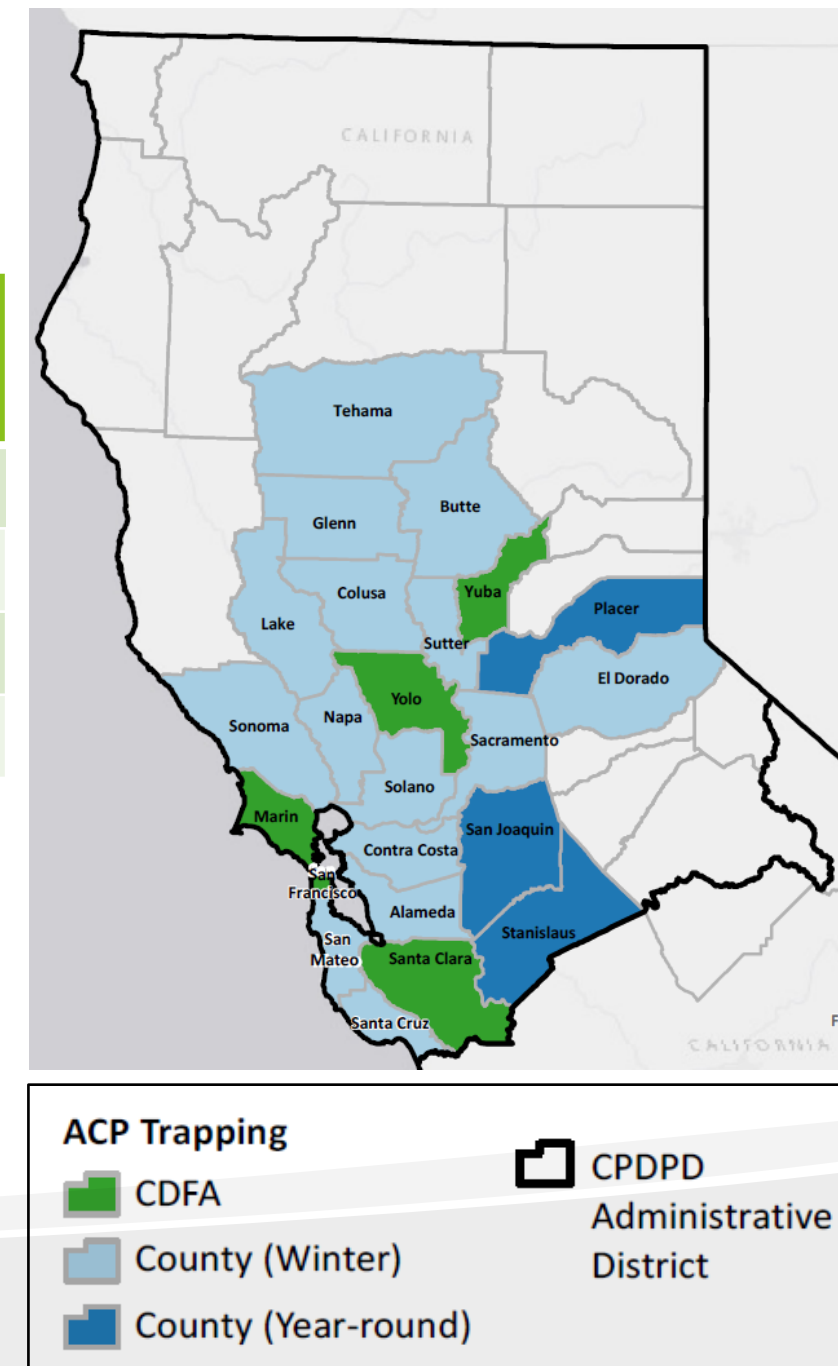


Northern District Update
Operations Subcommittee Meeting
July 10, 2024

Northern District Update | ACP Trapping

General Detection

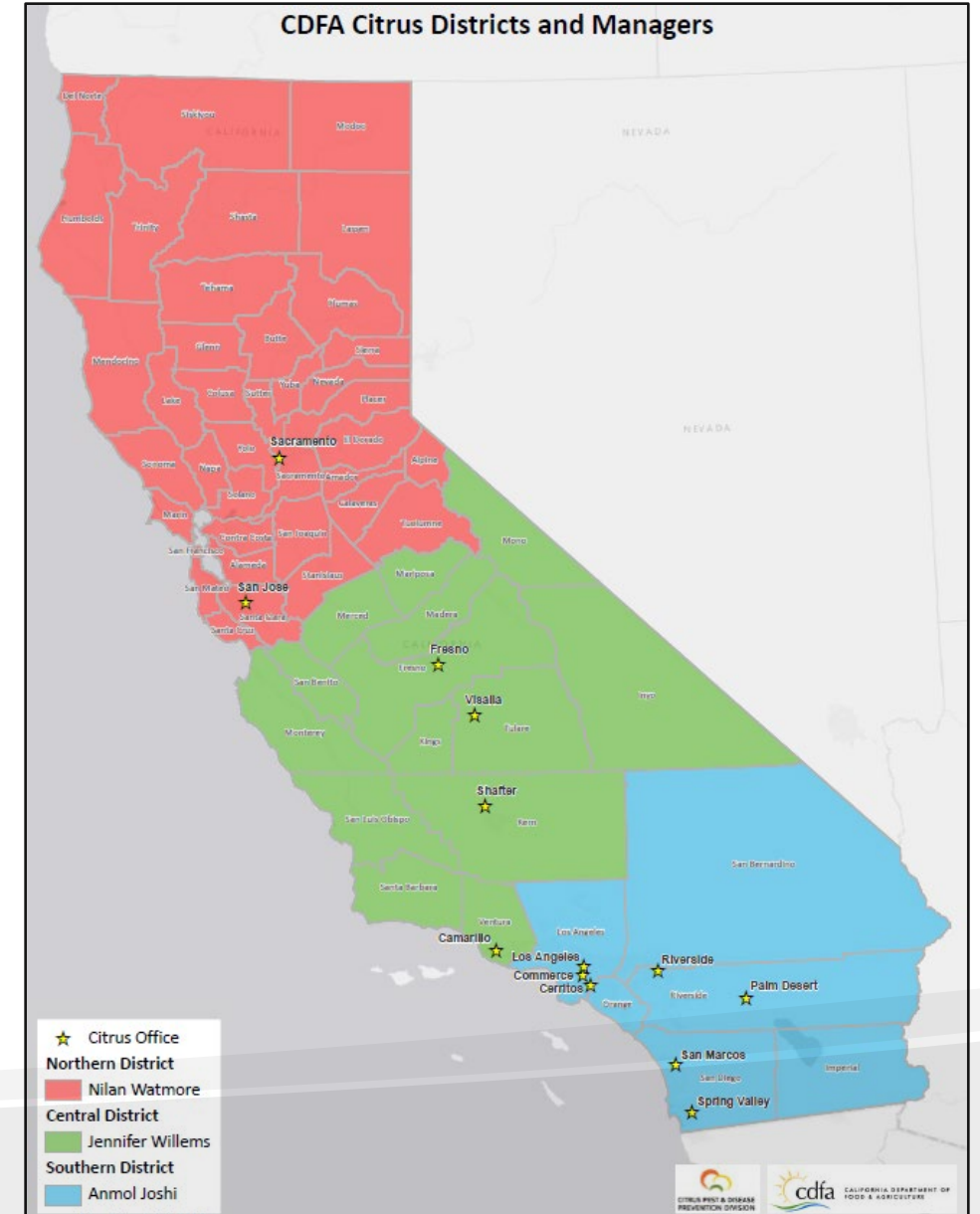
Entity	Type	Number of Counties	Number of Traps
County	Commercial	3	139
County	Residential (YR)	3	1350
County	Residential (W)	15	5530
State (CDFA)	Residential (W)	5	1358



Northern District Update | ACP Trapping

Delimitation & Treatment

- Santa Clara County
 - 720 delimitation traps
 - 4 new detections since last Operations Subcommittee meeting on April 10, 2024
 - Spot treatment of 75 properties completed in June 2024
 - 54 with citrus hosts treated
 - 21 had no citrus hosts
 - 1 refusal
 - 1 no contact



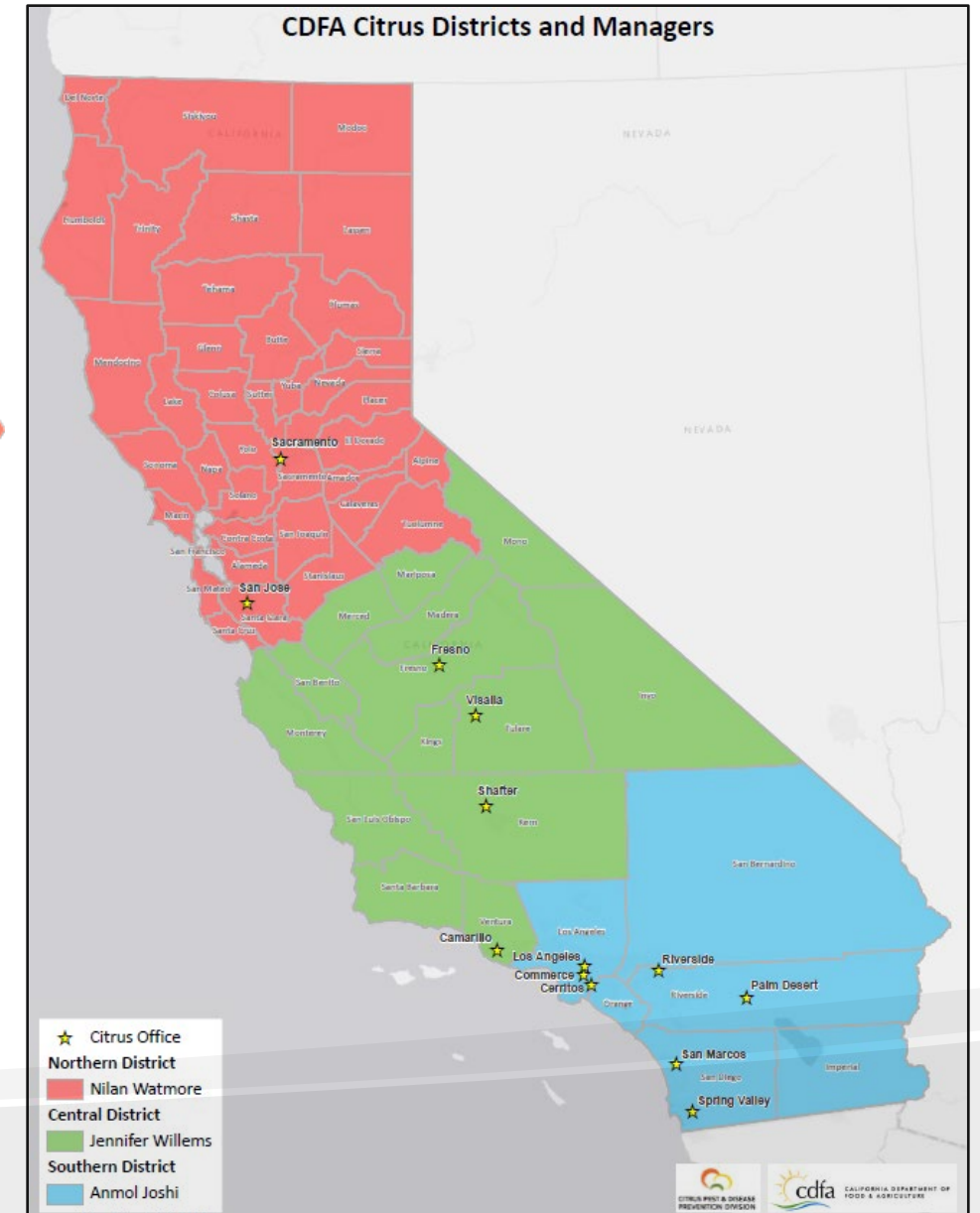
Northern District Update | HLB Risk-Based Survey

2024 Cycle 1 Counties

Alameda	San Mateo
Contra Costa	Santa Clara
Marin	**Solano
Placer	Sonoma
Sacramento	Stanislaus
San Francisco	Yolo
San Joaquin	

*Currently 30% of Cycle 1 is complete

**Risk-Survey for Cycle 1 is complete



Northern District Update | Staffing

Classification	Total Perm Staff (current)	Vacancies	Hiring Status
Senior Environmental Scientist (Supervisory)	3	0	
Senior Environmental Scientist (Specialist)	2	0	
Environmental Scientist	8	2	One new hire starts July 22, 2024
Research Data Specialist I	1	1	Hiring anticipated July 2024
APC Supervisor	1	0	
APC Specialist	1	1	New hire starts July 22, 2024
Pest Prevention Assistant II	5	2	
Pest Prevention Assistant I	3	0	

Santa Clara Spot Treatment Update

Citrus Pest and Disease Prevention
Operations Subcommittee

July 10, 2024

Ravneet Behla
Program Supervisor
Northern District, CPDPD



Asian Citrus Psyllid Biocontrol Update



June
2024



CITRUS PEST & DISEASE
PREVENTION DIVISION
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Biological Control Agent Releases

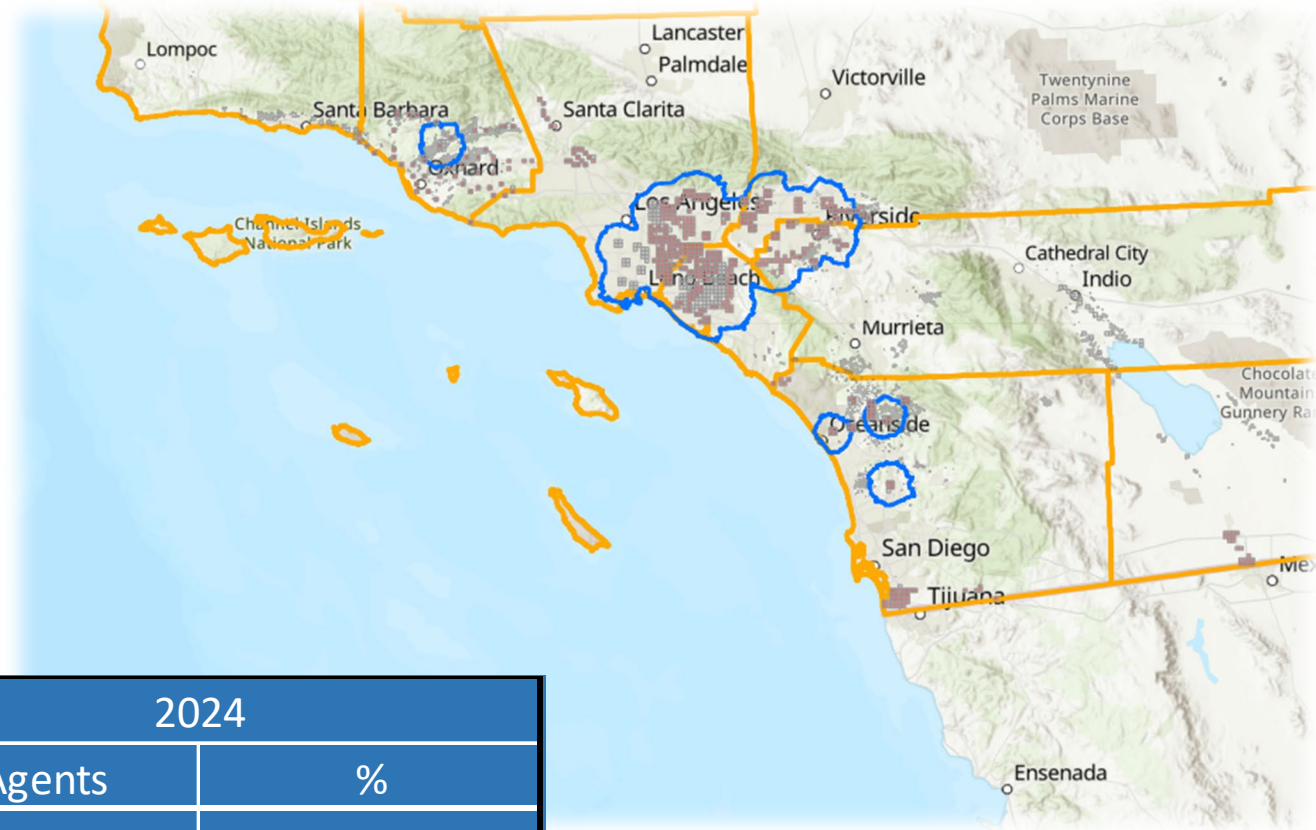
County	Releases Previous Month	Releases, 2024	Releases 2011-2023	
	June 2024	<i>T. radiata</i> Released	<i>T. radiata</i> Released	<i>D. aligarhensis</i> Released
Imperial	0	35,000	690,543	10,295
Los Angeles	106,600	427,500	8,458,024	107,734
Orange	73,800	327,400	6,638,716	71,179
Riverside	33,300	126,500	4,226,102	127,739
San Bernardino	37,400	134,700	2,395,415	57,252
San Diego	18,800	136,900	3,331,764	86,403
Ventura	29,600	114,700	2,534,406	16,830
Santa Barbara	4,400	27,000	433,182	12,012
Kern	0	3,200	407,664	0
Santa Clara	6,000	36,000	326,037	0
Placer	0	0	3,400	0
San Luis Obispo	0	0	139,200	0
Tulare	0	0	63,400	0
Fresno	0	8,000	35,000	0
Monterey	0	0	29,000	0
Madera	0	0	5,600	0
Arizona	0	0	253,500	0
Mexico	0	0	306,000	0
TOTAL	309,900	1,376,900	30,276,953	489,444
	TOTAL (2011-2021):		30,766,397	



Biological Control Agent Release Areas

Releases in:

- HLB Quarantine areas
- Borders
- Trade routes
- Area-wide management
- Newly established ACP



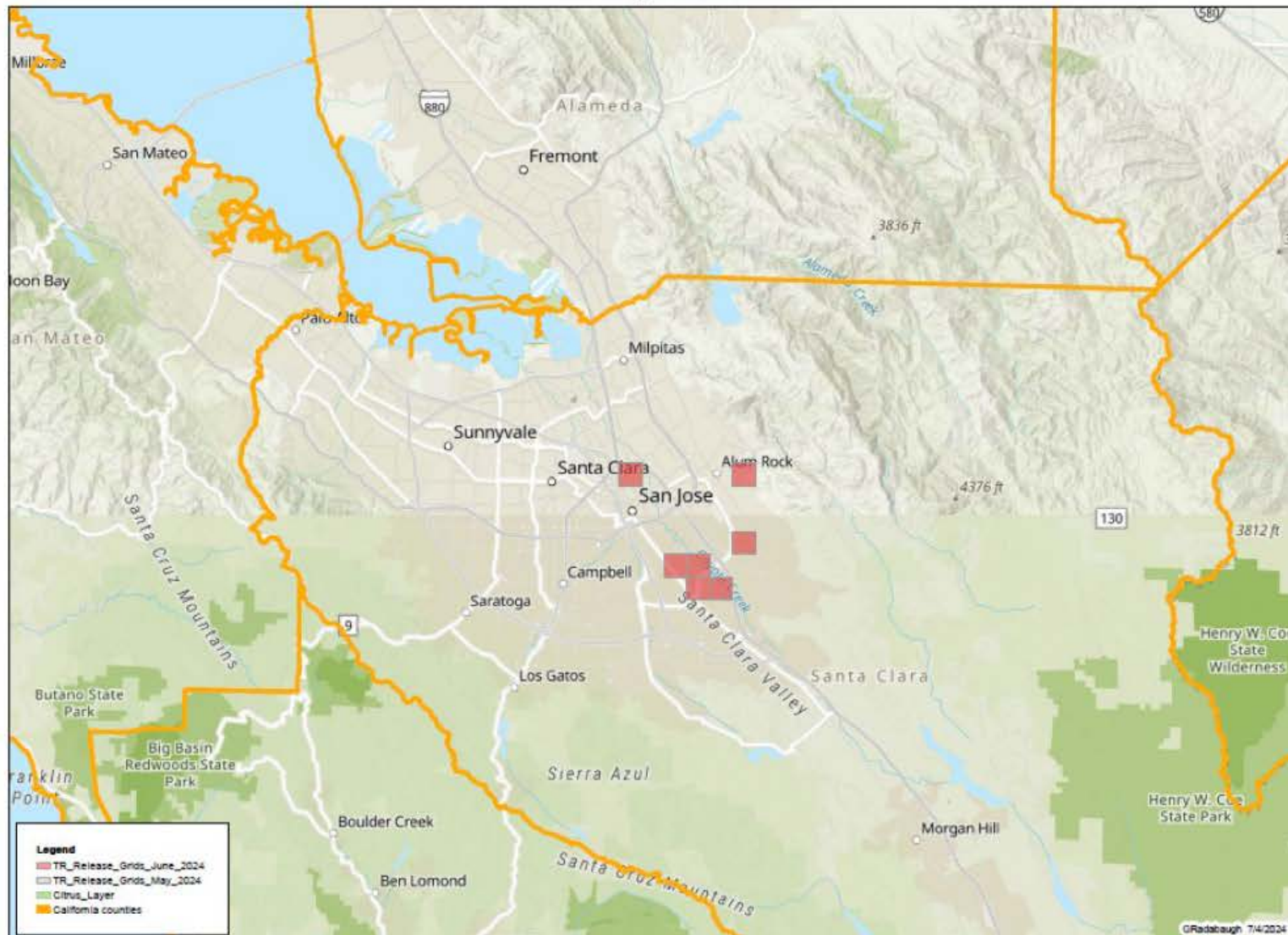
Release Type	2023		2024	
	# Agents	%	# Agents	%
Borders	99,800	4	35,000	3
HLB	1,889,615	80	1,153,000	84
New	147,900	6	47,200	3
Routes	232,300	10	141,700	10



BioControl Data

2024 Release sites 6/1 - 6/30/2024

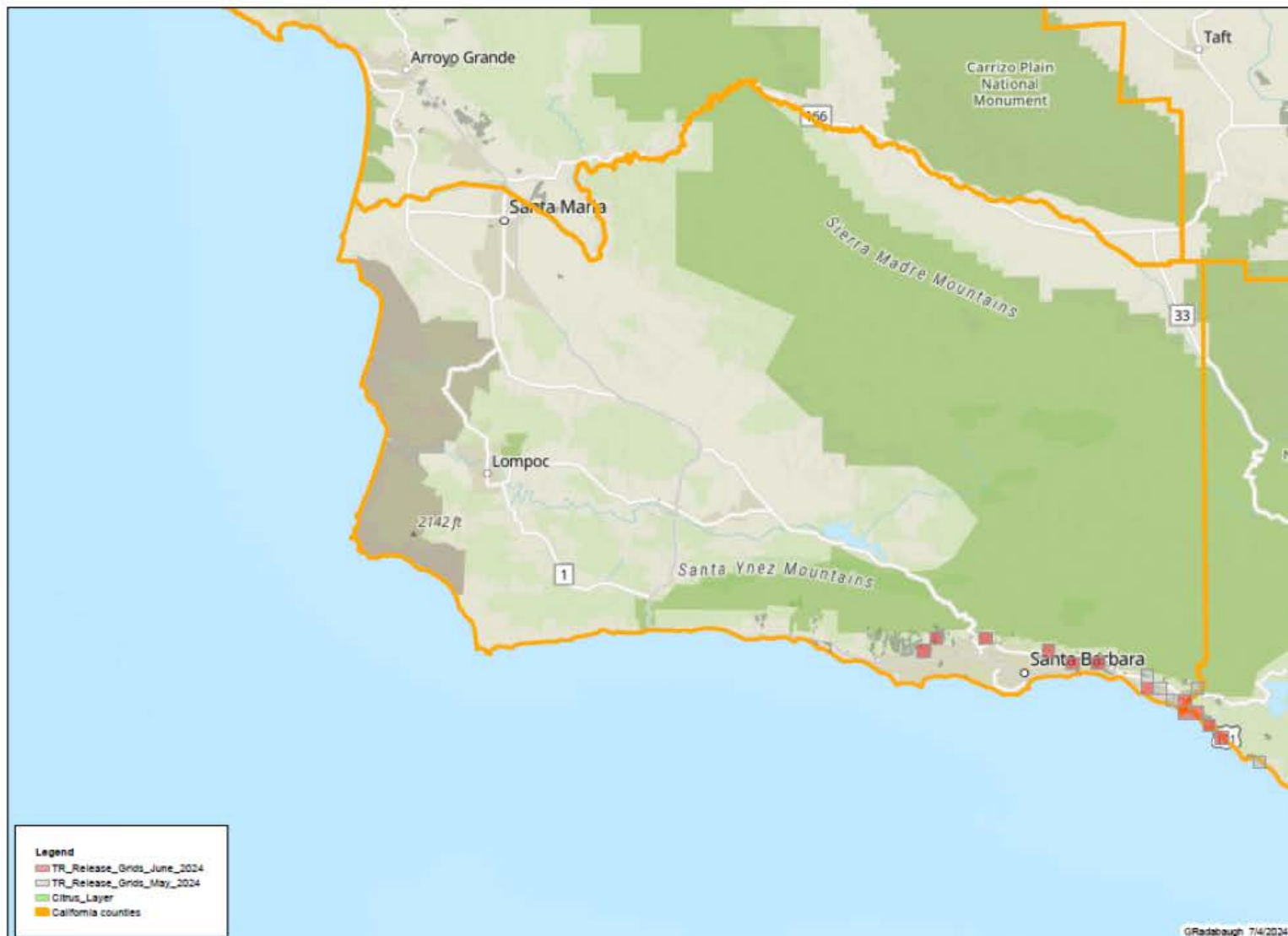
Vicinity: Santa Clara



BioControl Data

2024 Release sites 6/1 - 6/30/2024

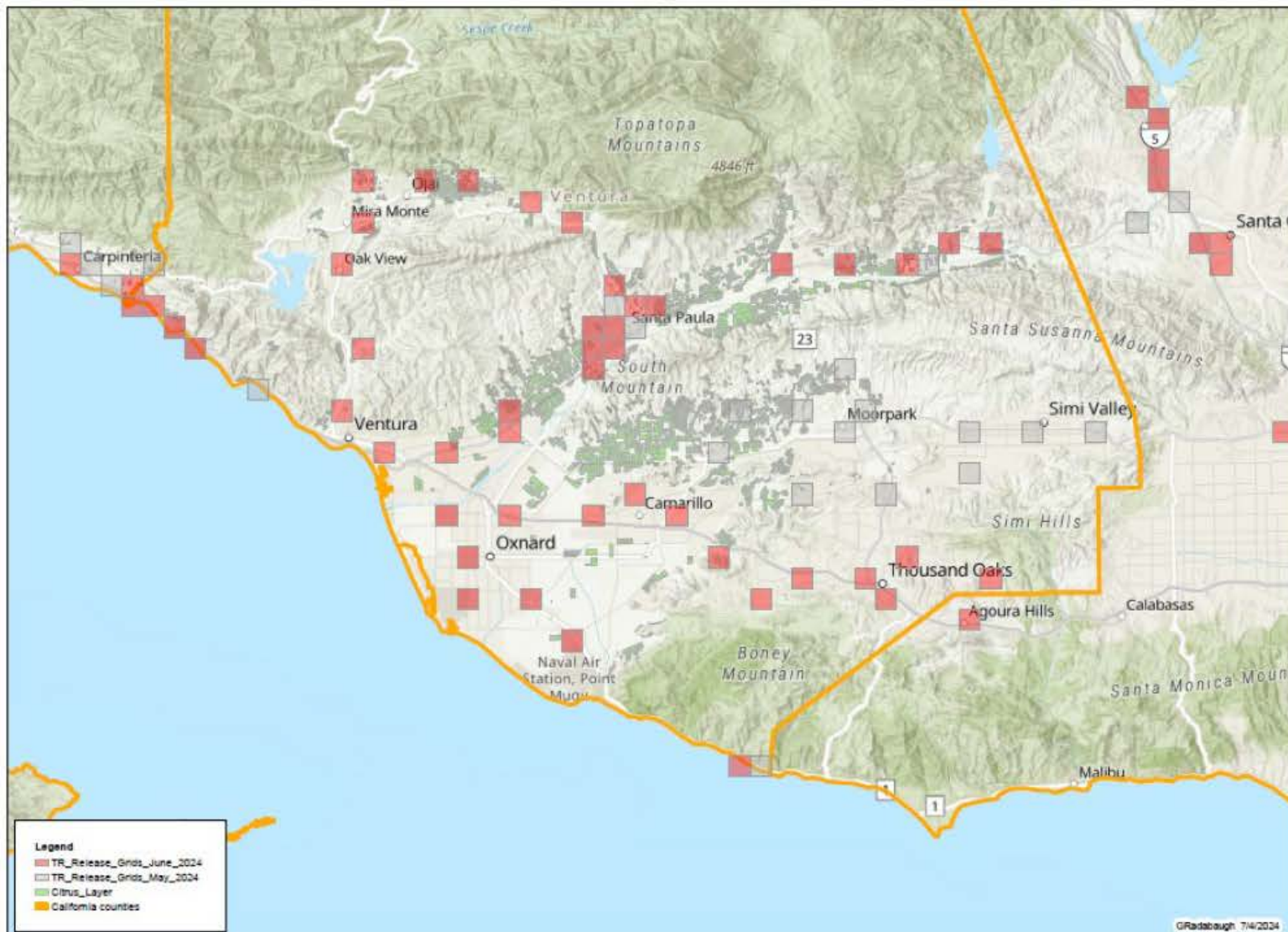
Vicinity: Santa Barbara



BioControl Data

2024 Release sites 6/1 - 6/30/2024

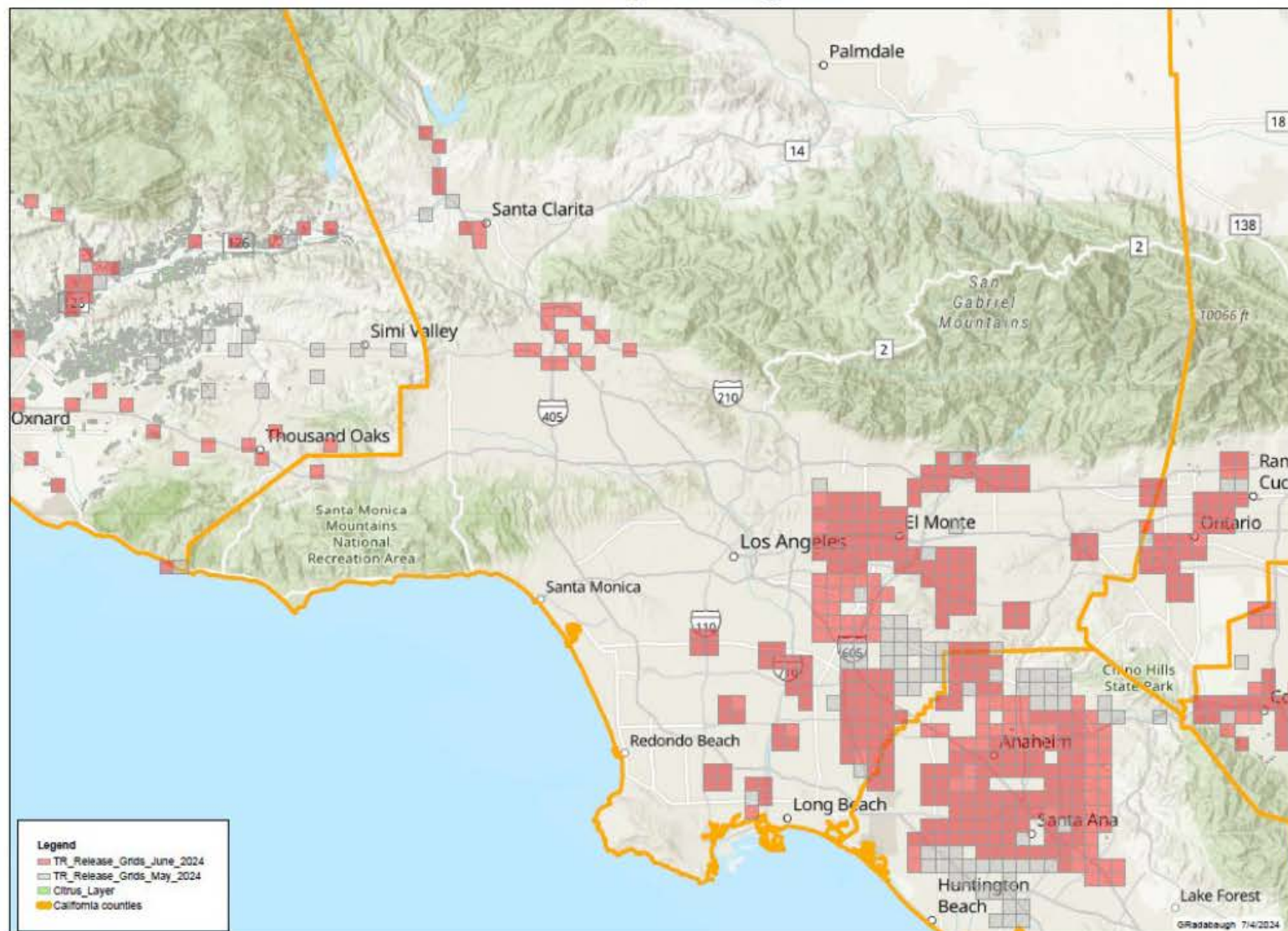
Vicinity: Ventura



BioControl Data

2024 Release sites 6/1 - 6/30/2024

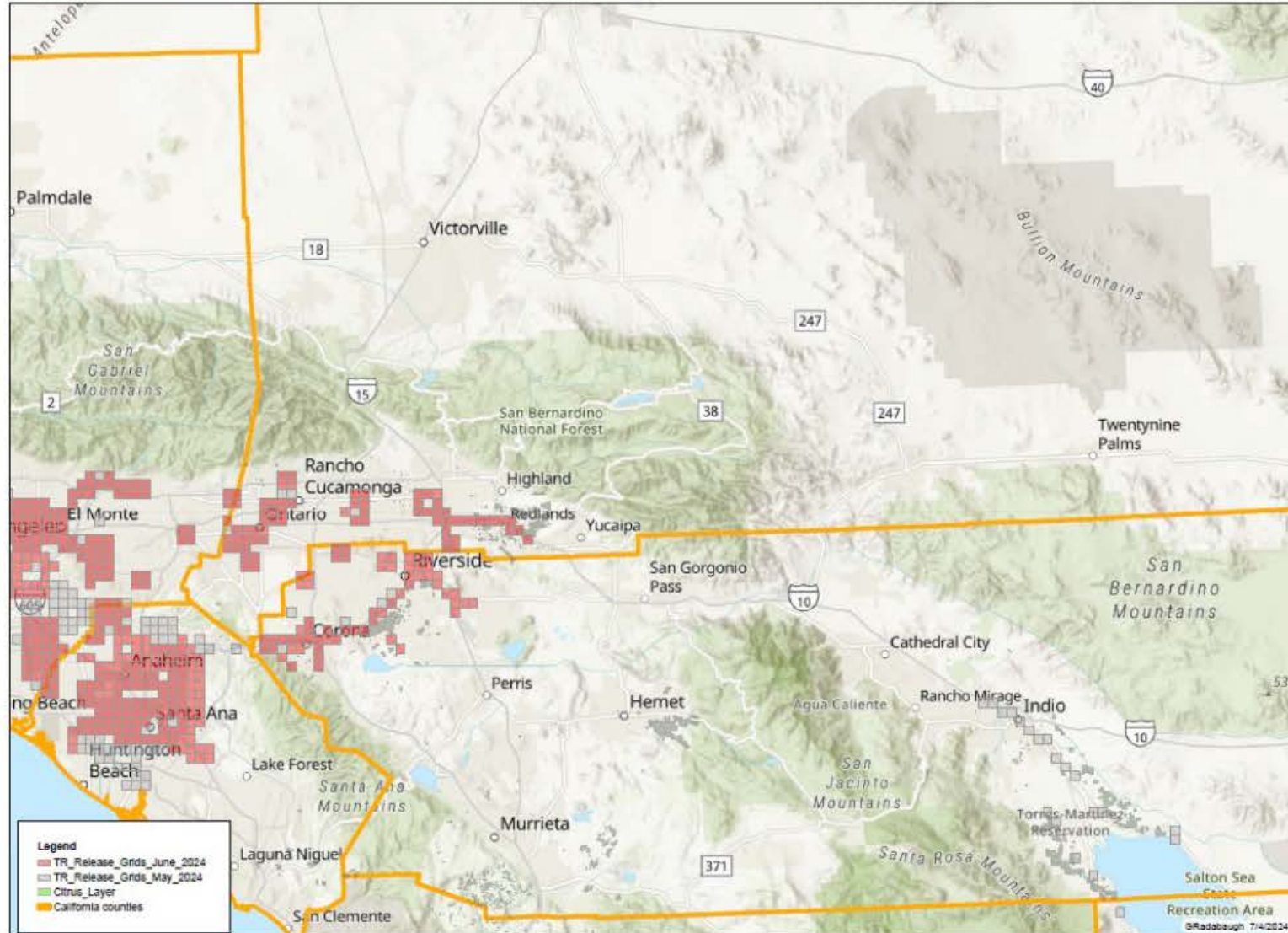
Vicinity: Los Angeles



BioControl Data

2024 Release sites 6/1 - 6/30/2024

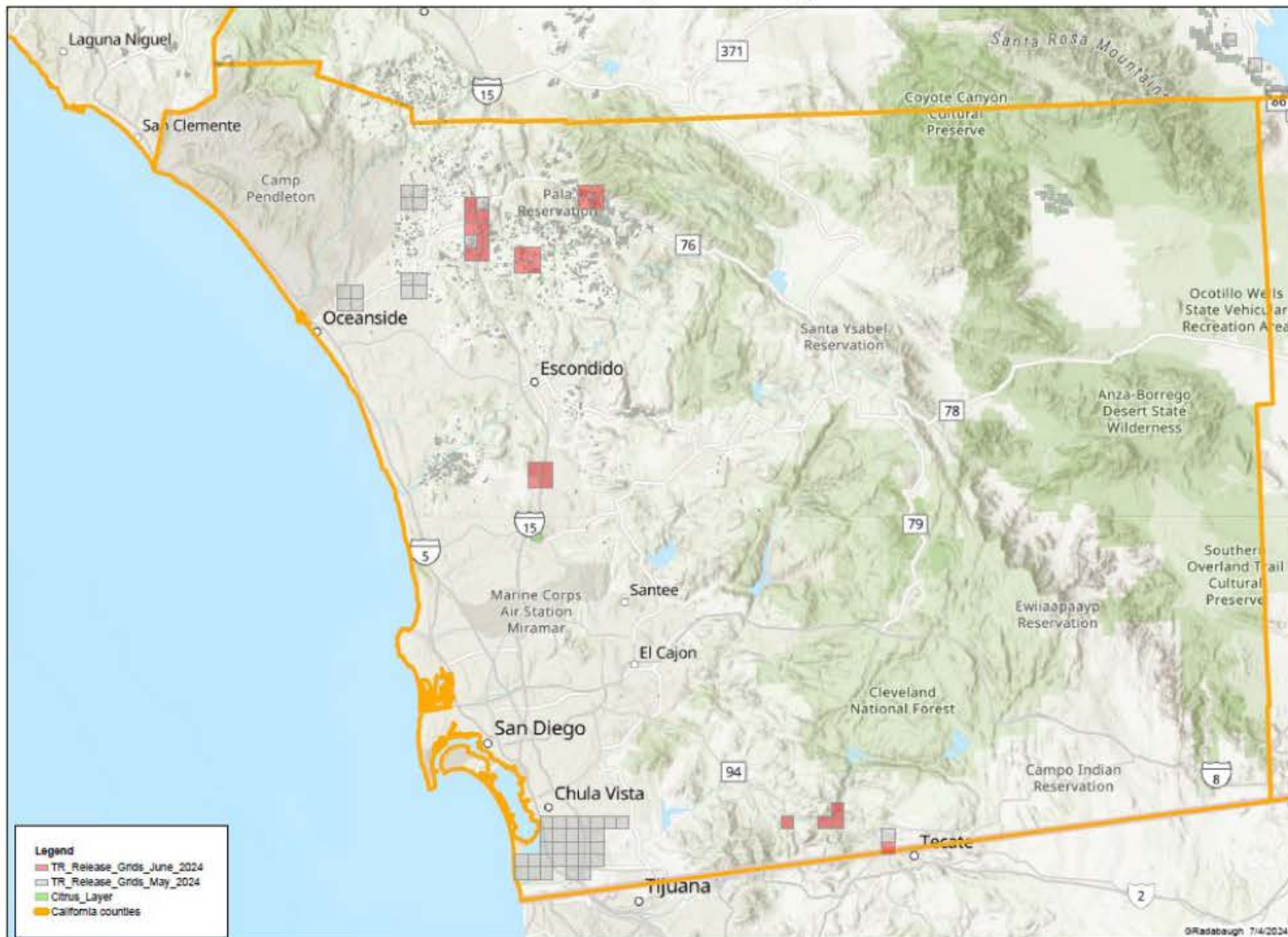
Vicinity: San Bernardino



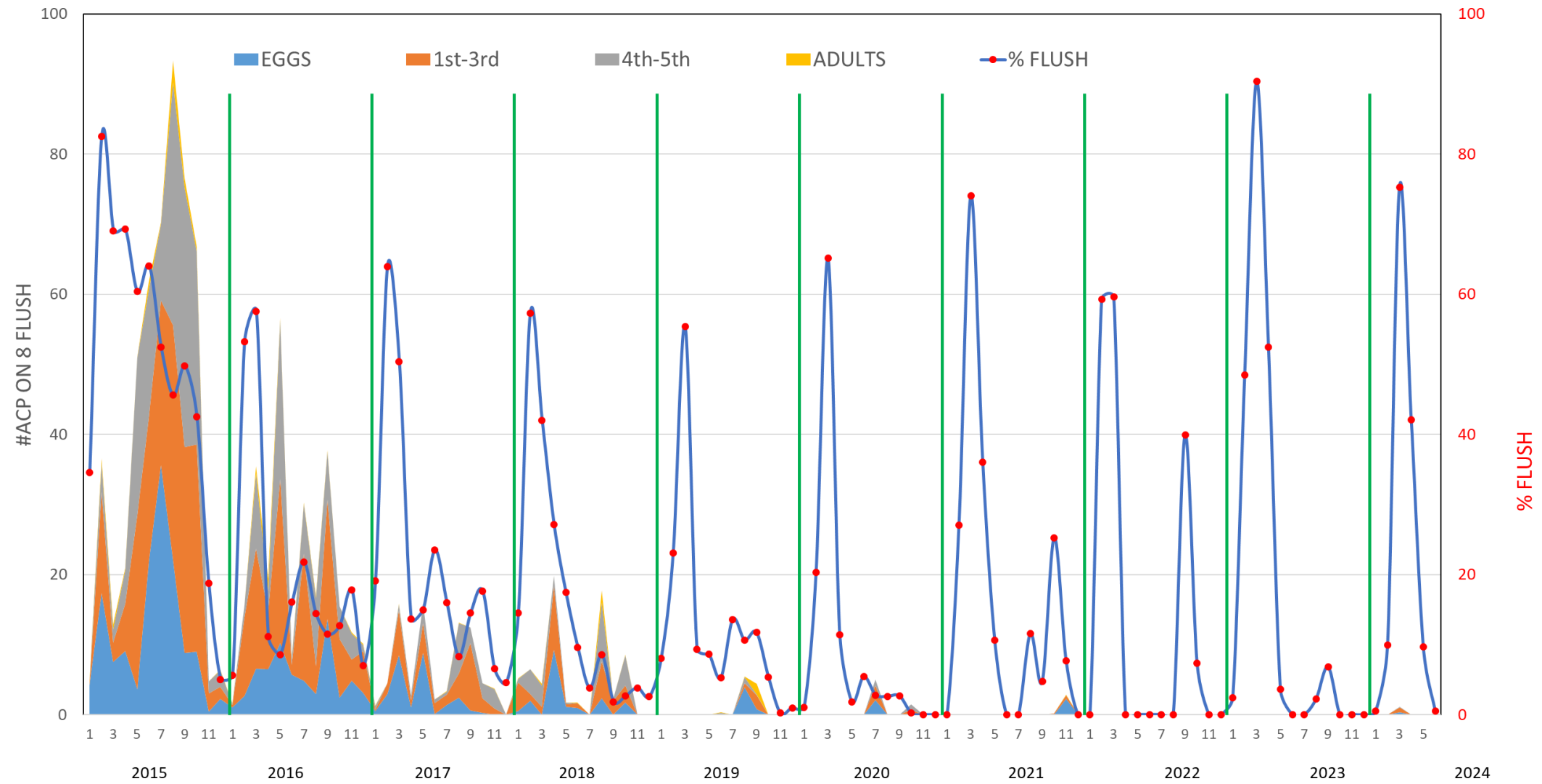
BioControl Data

2024 Release sites 6/1 - 6/30/2024

Vicinity: San Diego



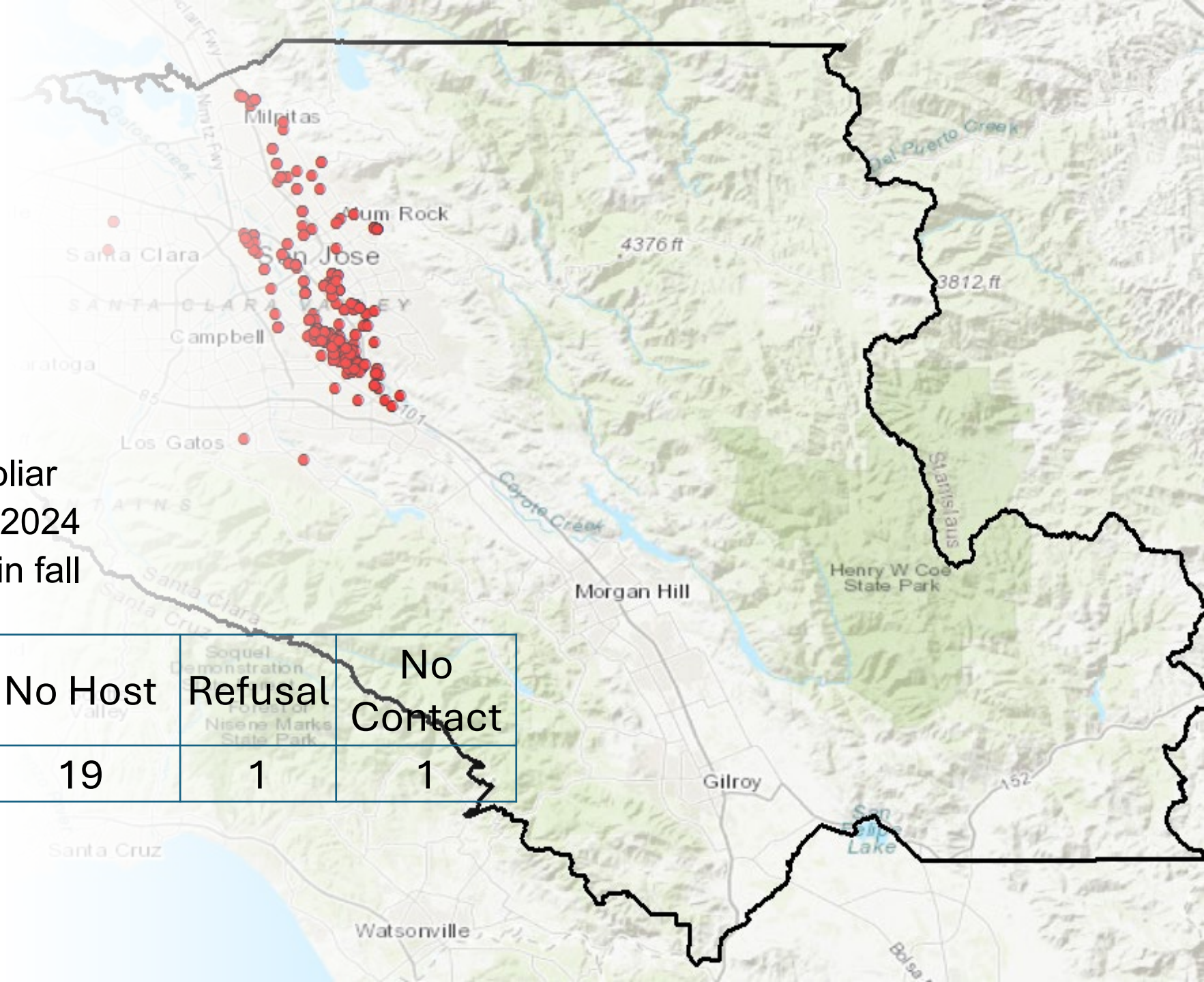
Region-Wide Urban Monitoring 2015 - Present



Updates

- Public Meeting
 - June 5, 2024
- Treatment
 - Tempo SC Ultra/ Foliar
 - June 10 - June 25, 2024
 - Merit 2F, expected in fall

Total Properties	Treated	No Host	Refusal	No Contact
75	54	19	1	1



- Sincere Thanks to Santa Clara County!!
- Questions?



CDFA Winter Trapping Optimization

Sandra Olkowski, PhD

Victor Alves

David Phong

Marina Kaiser, PhD



**CITRUS PEST & DISEASE
PREVENTION DIVISION**
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE



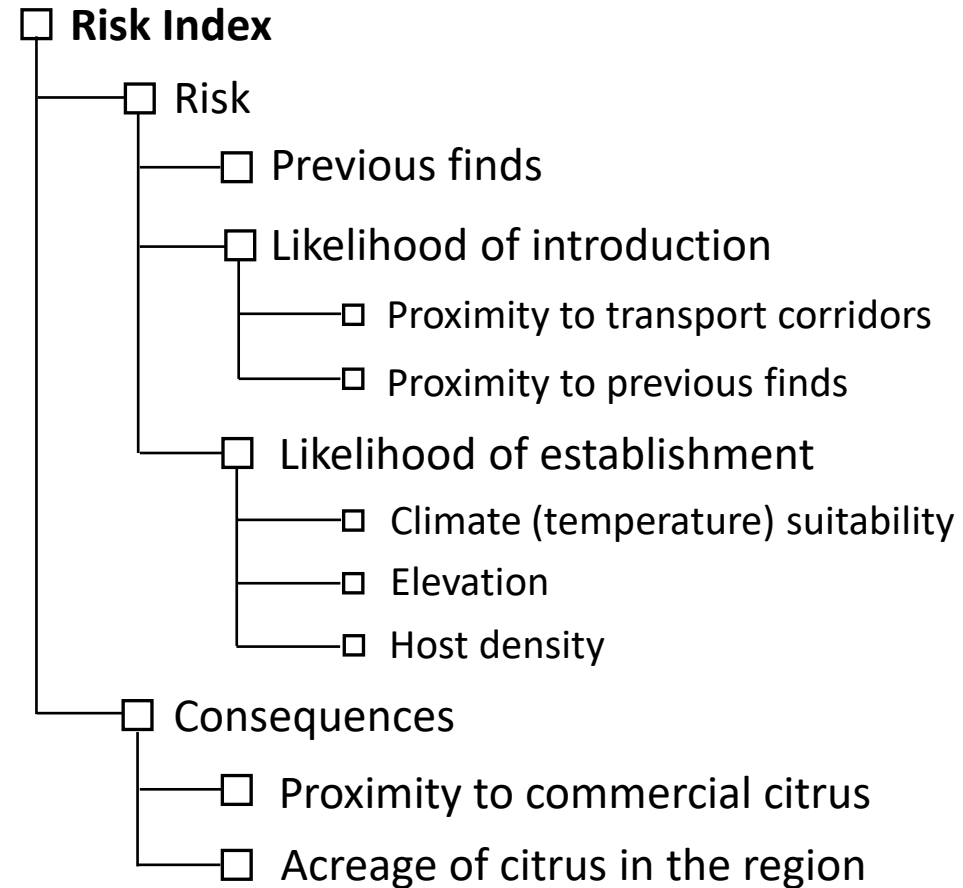
Goal:

Optimizing ACP Winter Trapping:

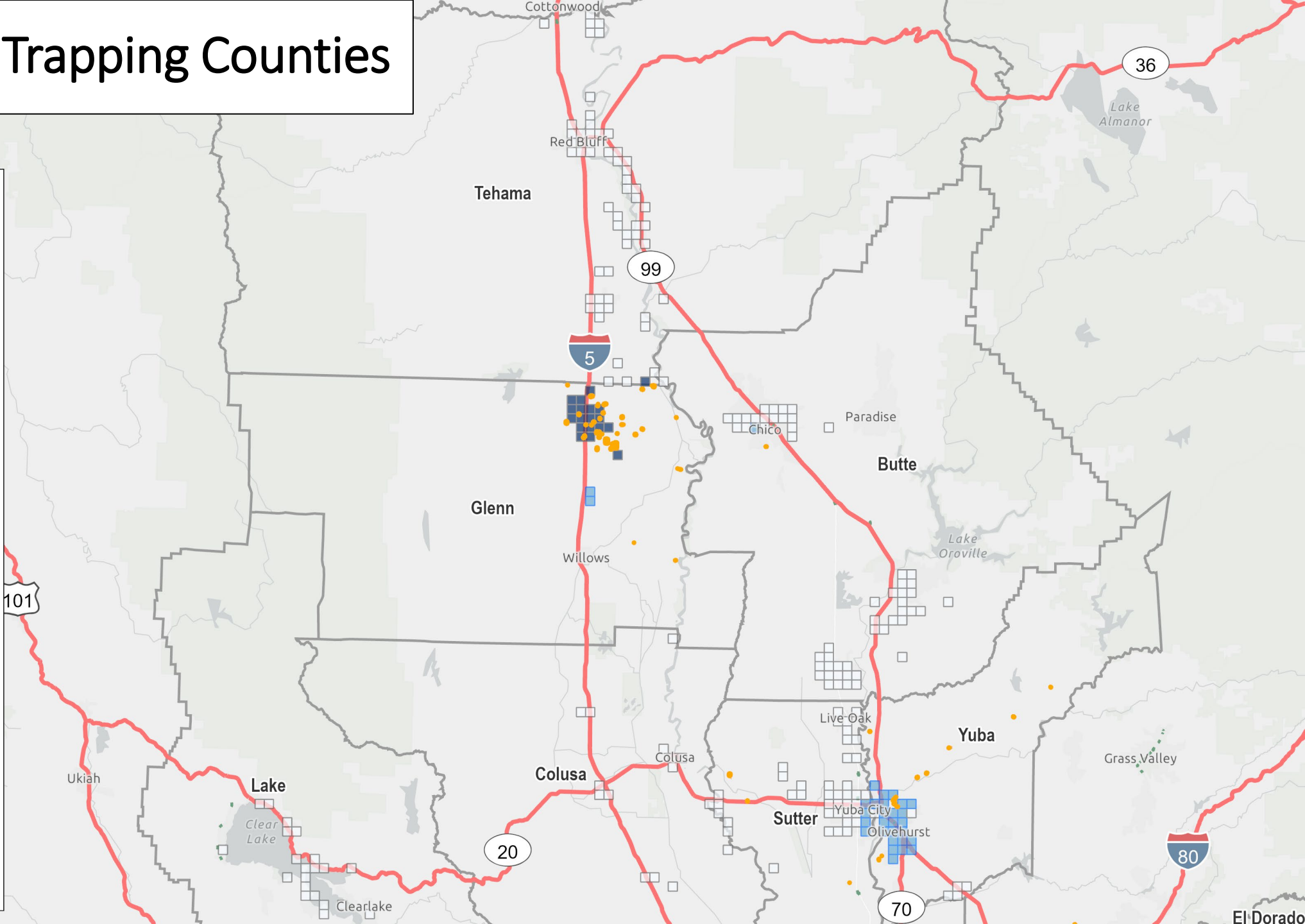
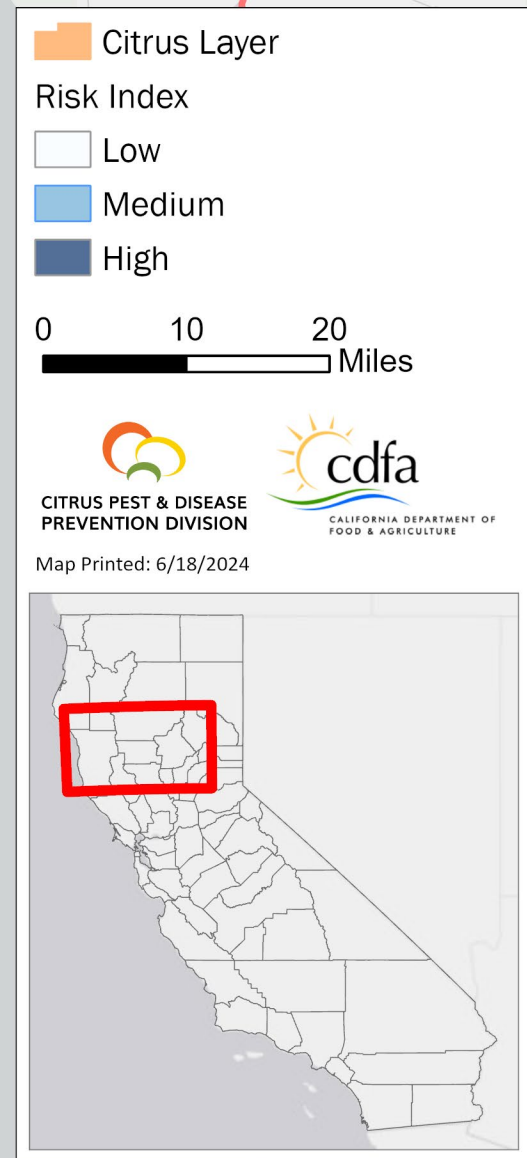
- Phase 1 - CDFA Counties - Completed
 - Phase 2 - CAC Counties - Ongoing
- ✓ Data-driven / evidence-based
 - ✓ Objective
 - ✓ Transparent
 - ✓ Generalizable to other locations

Method:

Balancing ACP
Risk versus
Consequences
of ACP
Establishment



Results: Upper Trapping Counties



Results: Middle Trapping Counties

Citrus Layer

Risk Index

Low

Medium

High

0

10

20

Miles



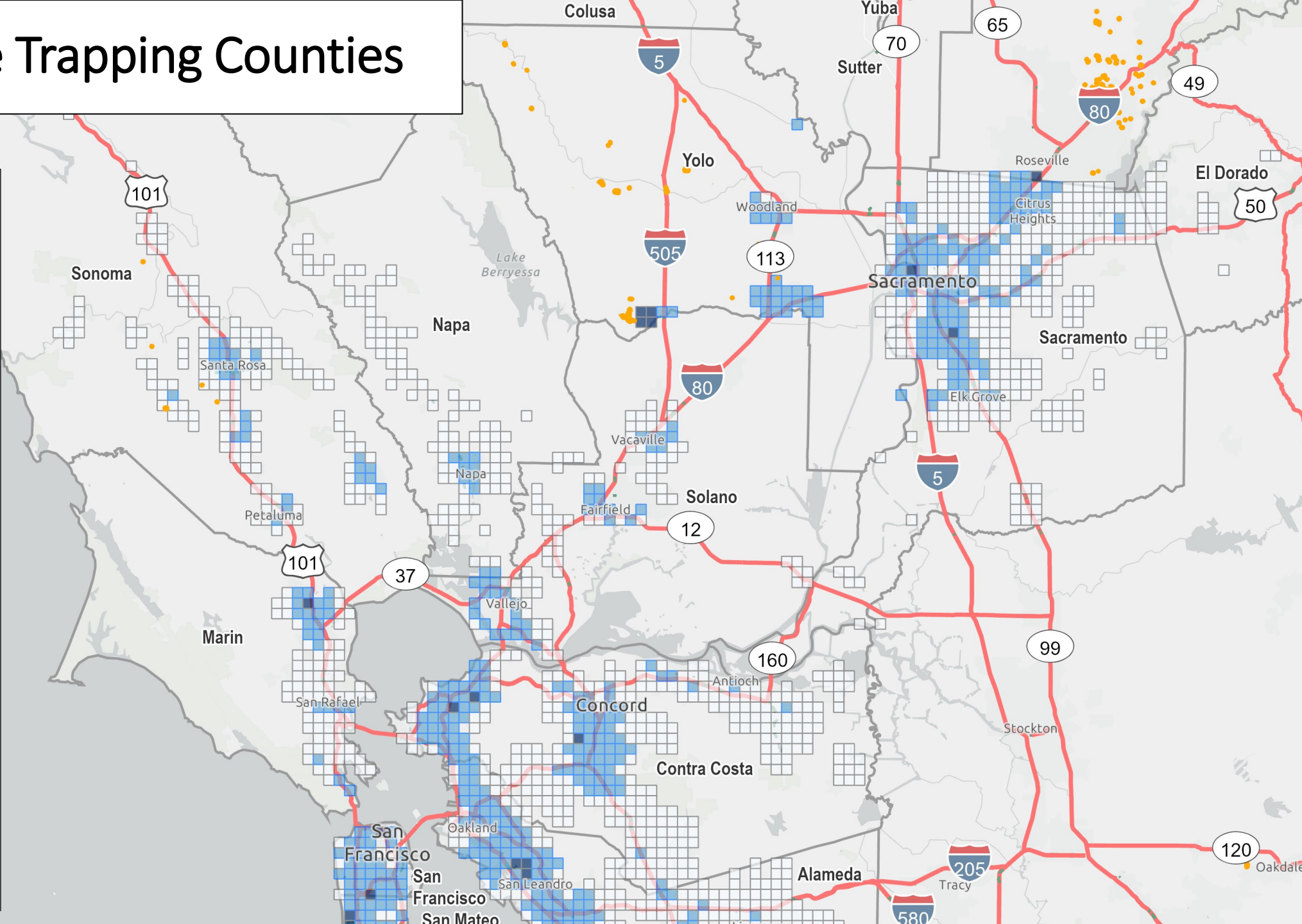
CITRUS PEST & DISEASE
PREVENTION DIVISION



cdfa
CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Map Printed: 6/18/2024





Results: Lower Trapping Counties

 Citrus Layer

Risk Index

 Low

 Medium

 High

0

10

20

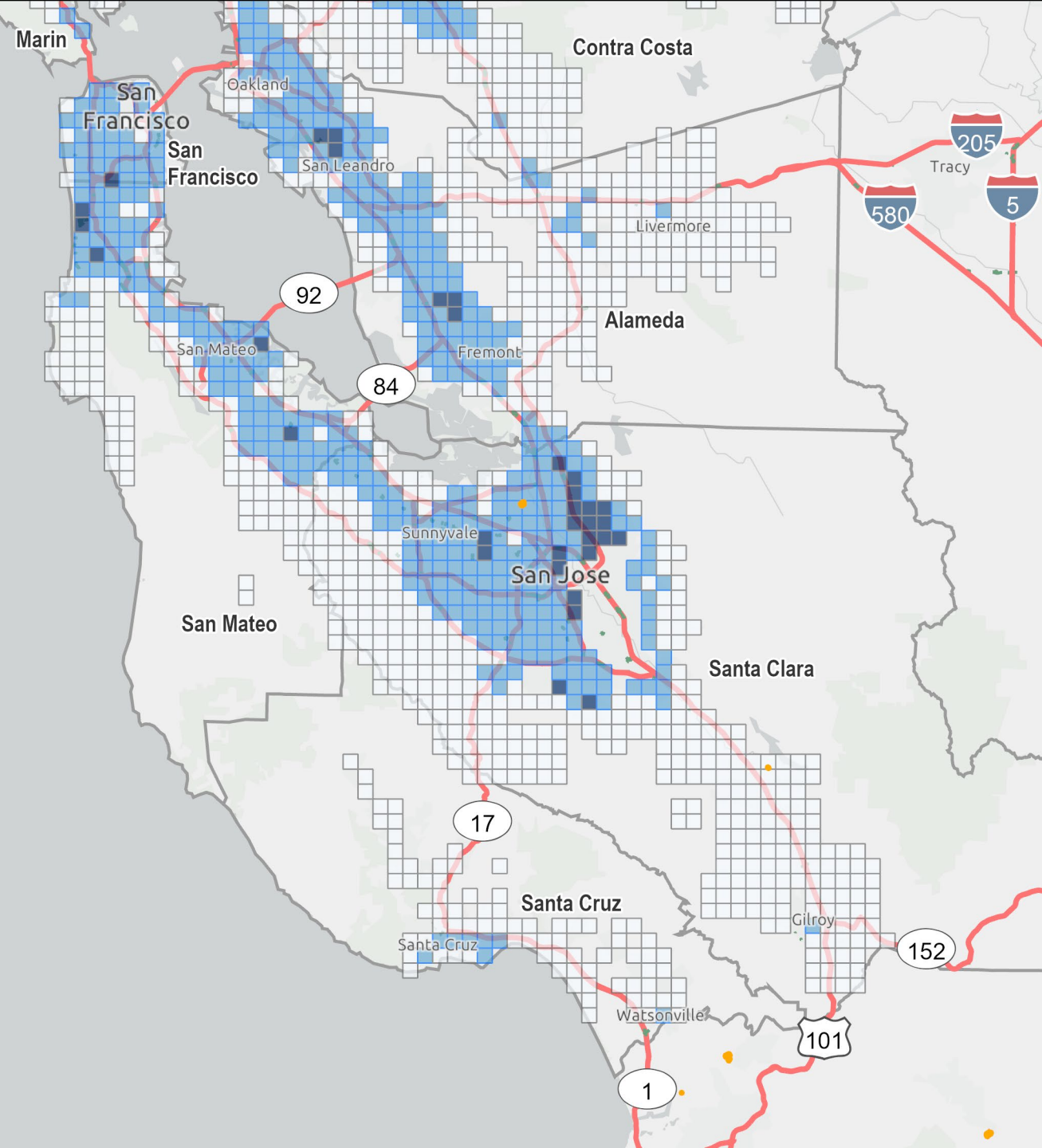
Miles

 CITRUS PEST & DISEASE PREVENTION DIVISION

 cdfa
CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Map Printed: 6/18/2024





Result Summary

County	Total ACP Detections	Winter ACP Detections	Last ACP Detections	Current Traps	Pre-County Discussion Proposed Traps	Post-County Discussion Proposed Traps
Alameda	8	7	12/31/2021	902	725	725
Butte	0	0	N/A	155	5 ^a	110
Colusa	0	0	N/A	50	0	0
Contra Costa	4	4	11/25/2020	861	465	510
El Dorado	0	0	N/A	49	0	0
Glenn	0	0	N/A	50	50	50
Lake	0	0	N/A	46	0	0
Napa	0	0	N/A	120	60	60
Sacramento	1	1	2/22/2019	1,400	635	635
San Mateo	4	3	2/1/2019	625	505	530
Santa Cruz	0	0	N/A	264	0	TBD
Solano	5	4	7/27/2017	287	175	200
Sonoma	1	1	12/21/2022	437	130	150
Sutter	0	0	N/A	160	20	20
Tehama	0	0	N/A	124	35	60
Total	23	20	N/A	5,530	2,805	3,040

a. The initial analysis did not consider significant amount of grove data in Butte County.

Conclusion:

- The annual total ACP winter trapping contract amount for 15 counties is \$690k for 5,530 traps.
- This project proposes a **reduction of ACP traps by 45%**, using data-driven methods and county inputs. The total number of traps to retain is 3,040