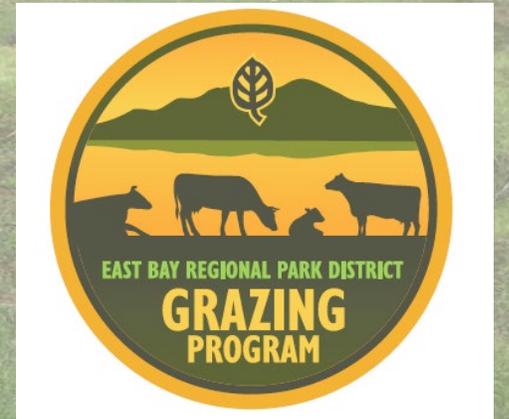


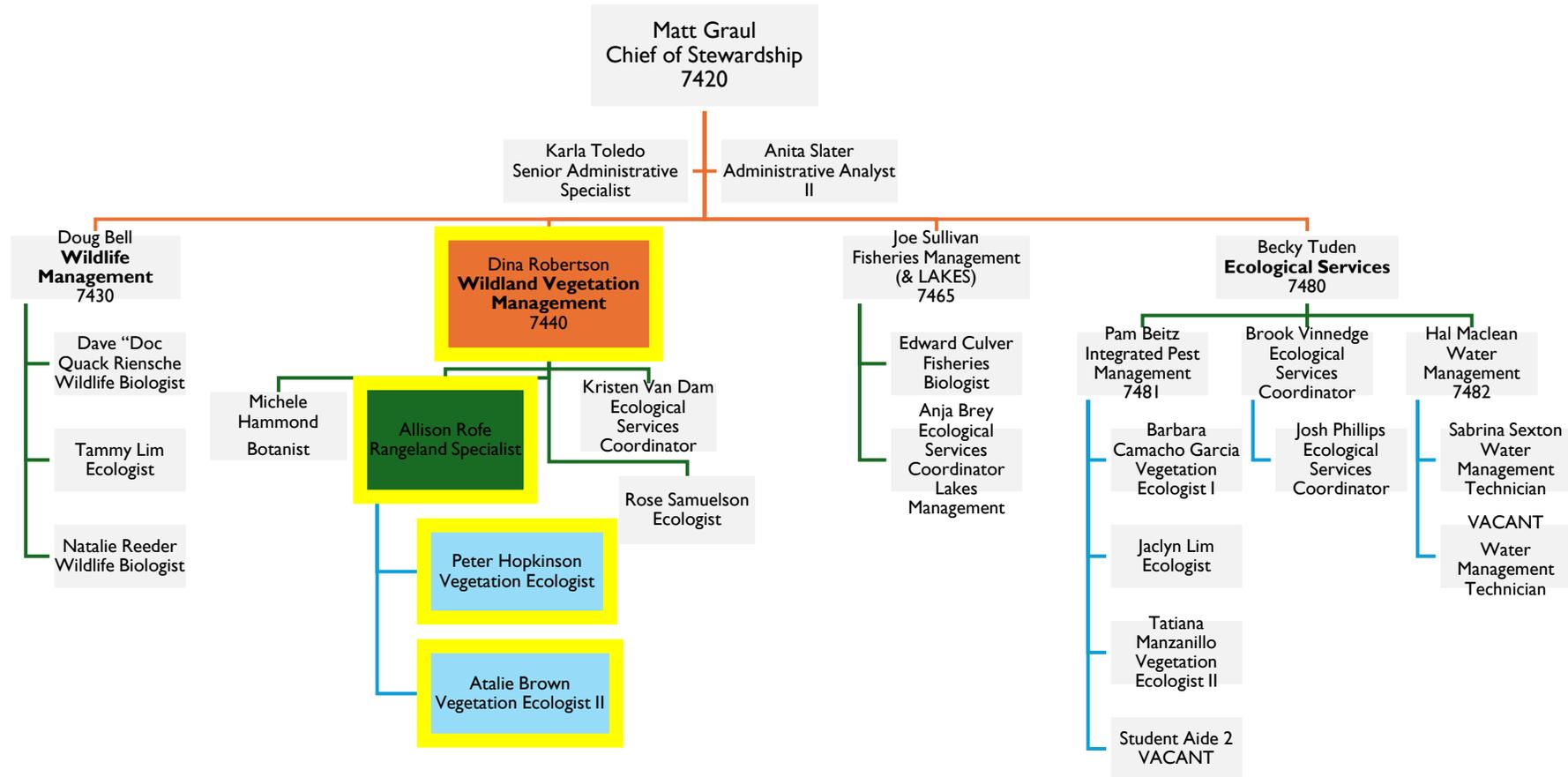
Conservation Grazing Overview and the Importance of Pond Management



Natural & Cultural Resources Committee – 7/31/24

Presented by: Dina Robertson, Wildland Vegetation Program Manager
& Allison Rofe, Rangeland Specialist

Stewardship Org Chart

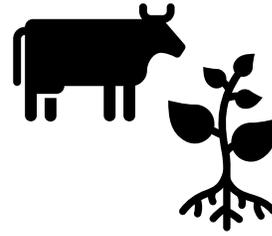


Grazing Program Team

Allison



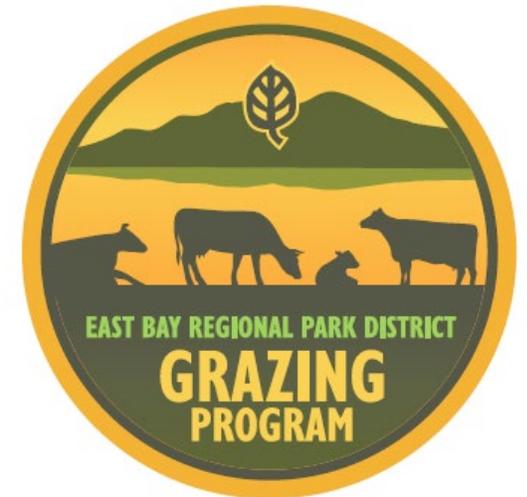
Dina



Peter



Atalie



Sunol – 1962, 1st park with livestock grazing

1967 – 5 Parks with grazing

- Focused solely on fire prevention (Lands)

1977 – 28,752 grazed acres

- Grassland management started in the parks (Lands)

1987 – 43,000 grazed acres

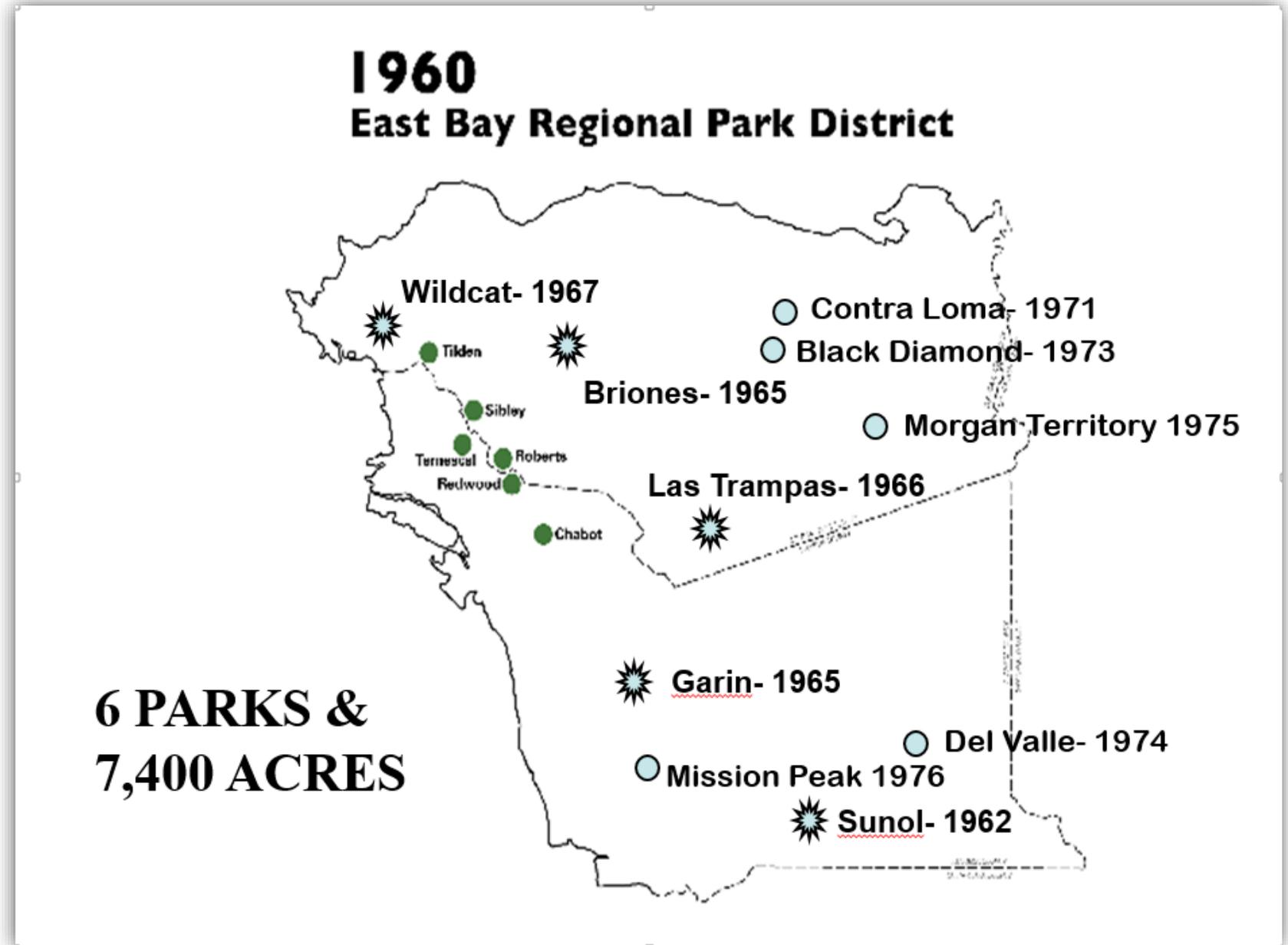
- Stewardship Dept. created (1st Vegetation Manager)

2006 – over 60,000 grazed acres

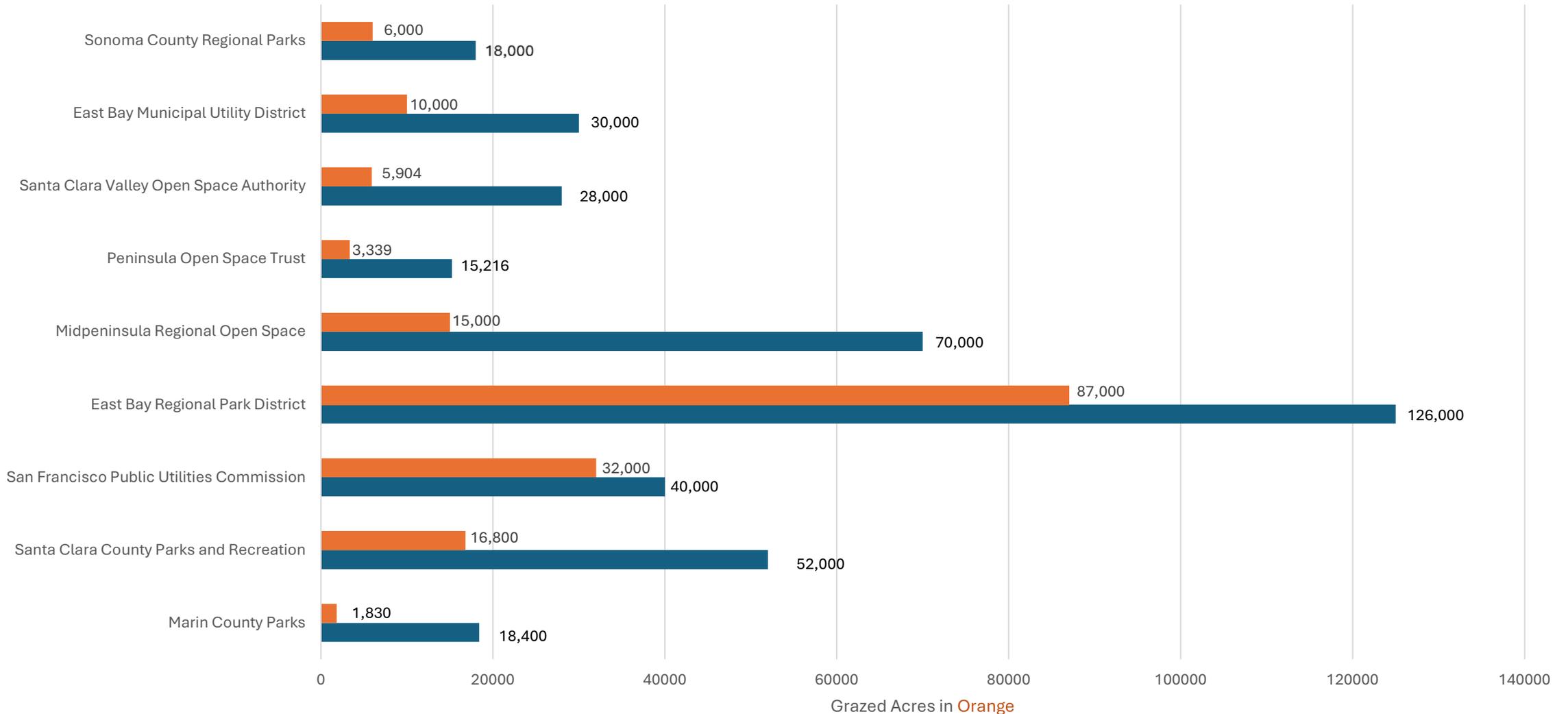
- Veg Manager and Veg Ecologist (Stewardship)

2019 – over 80,000 grazed acres

- 1st Rangeland Specialist

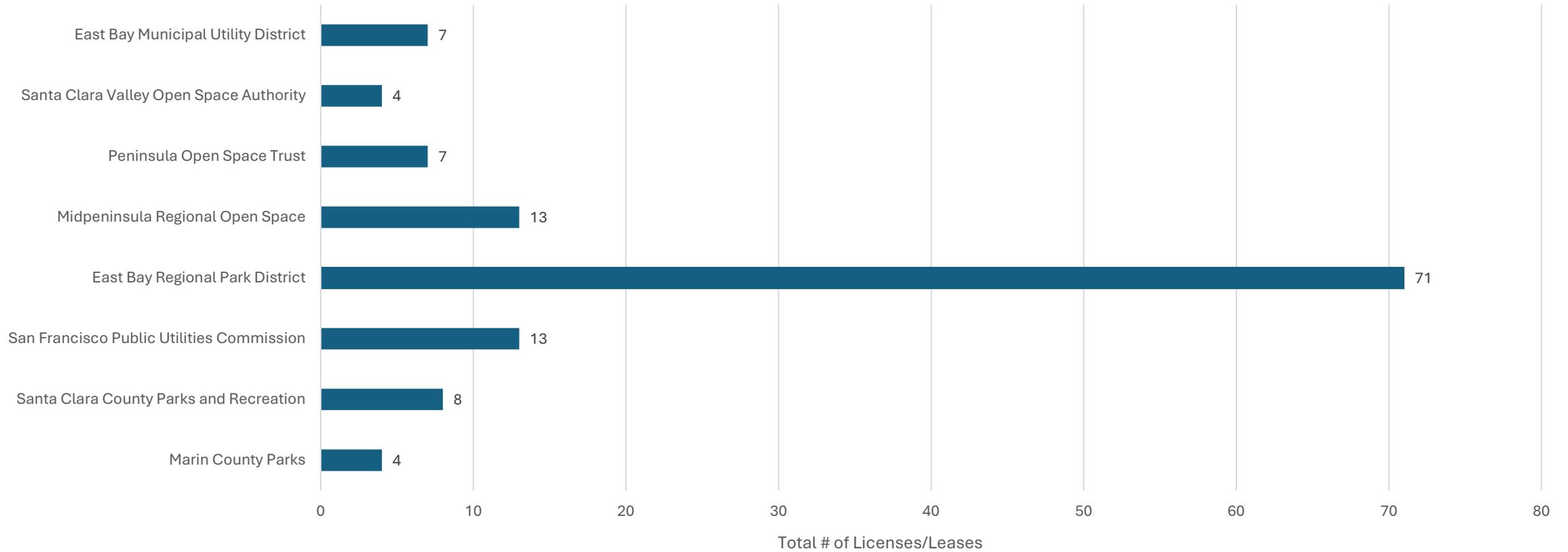


Bay Area Sister Agency Grazing Program Acreages



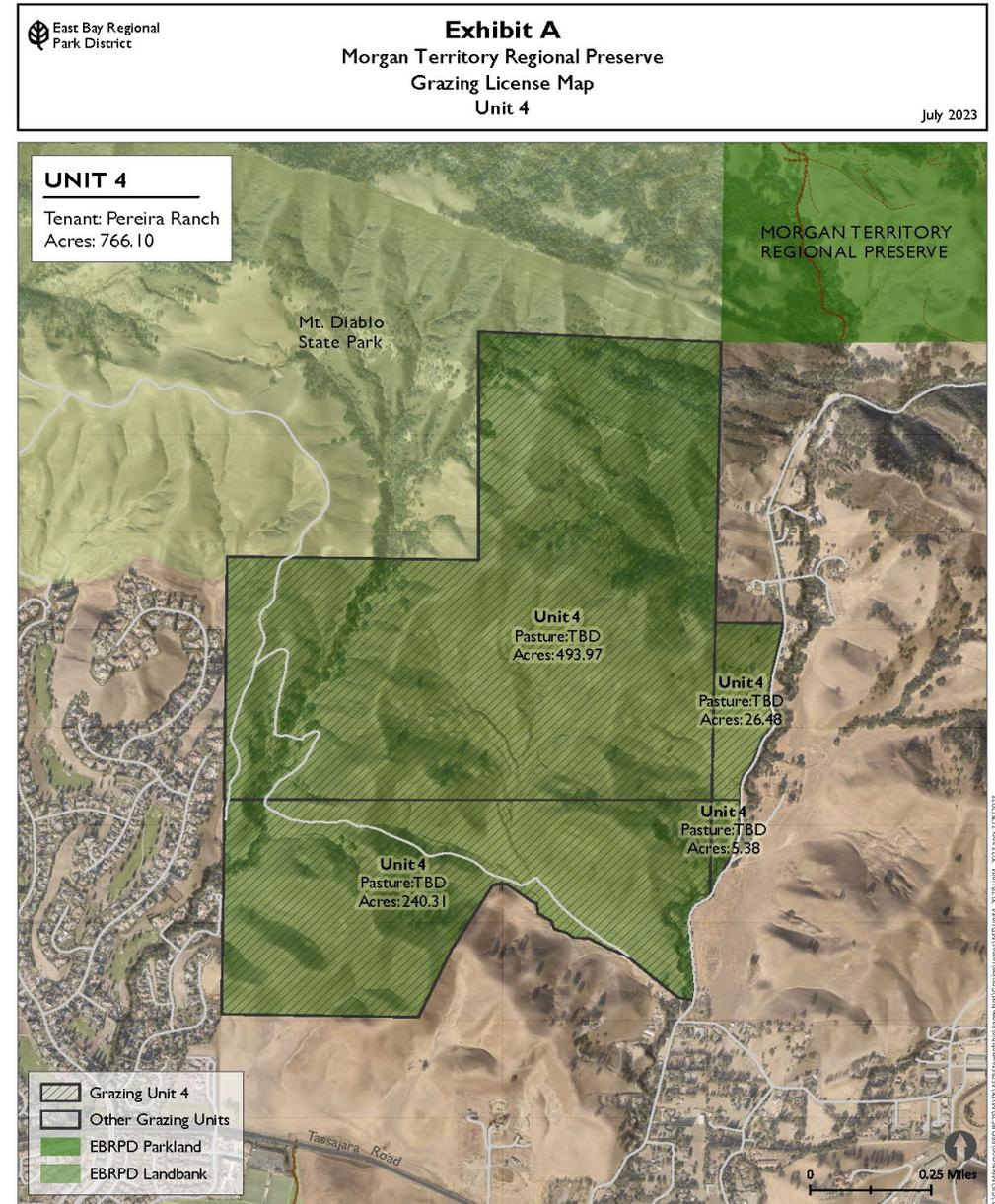
Bay Area Sister Agency Grazing Program Number of Licenses/Leases

Grazing Licenses



Land Acquisitions add Grazed Acres

Year	New Grazed Acreage	New Tenants/ Grazing Licenses
2019-2023	4387 acres	5
2025 (projected)	2566 acres	?



Conservation Grazing

- Use of livestock grazing to promote biodiversity and conservation outcomes
- Ecosystem management approach i.e., wildlife habitat vs. traditional livestock and forage production
- Recreational Sensitivity
(troughs away from trails, calving in less populated areas, minimize trail damage)



Livestock Grazing Management Objectives



1. Reduce fuel loads to minimize wildfire potential and shrub encroachment
2. Maintain grassland communities
3. Control and manage invasive weedy vegetation
4. Enhance and support wildlife habitat
5. Control and minimize erosion potential (RDM)

Healthy Grasslands





Reducing fine fuel loads along urban edges`



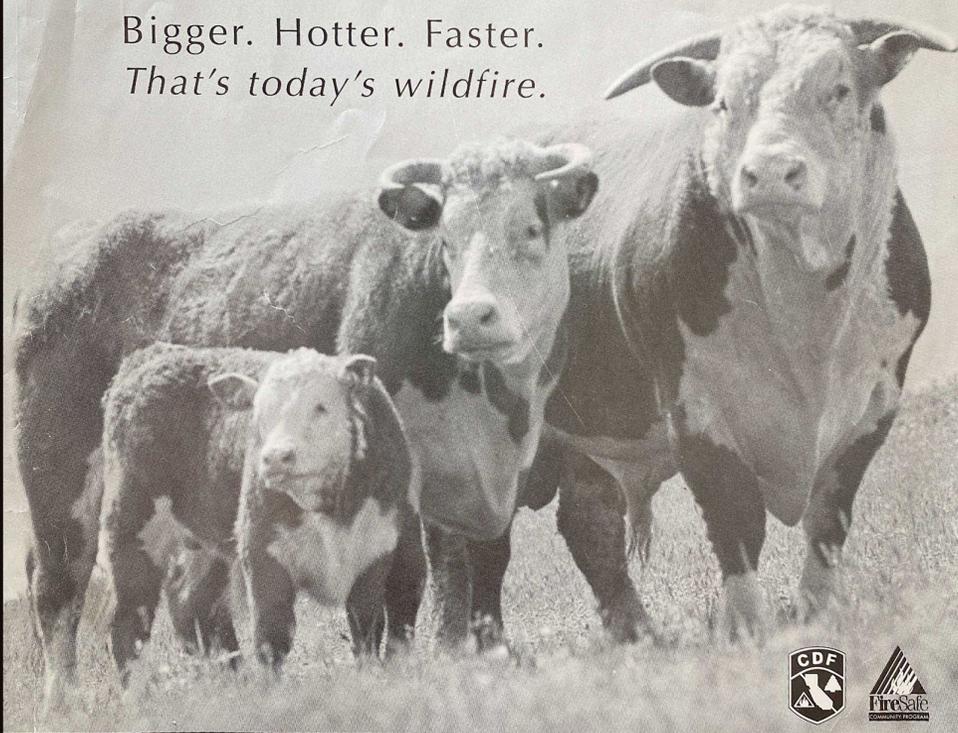
Black Diamond, 2023



Mission Peak, 2024

THIS FAMILY COULD SAVE YOUR FAMILY

Bigger. Hotter. Faster.
That's today's wildfire.



The California Department of Forestry and Fire Protection (CDF) reports that in the last five years, over 35,000 wildfires have burned more than 670,000 acres causing more than \$250 million in damage.

CDF Director Richard Wilson says that grazing livestock will thin overgrown vegetation that can ignite and fuel a wildfire. "Livestock can help stop fires before they start. They can save your life and property by establishing defensible space. Protect yourself from dangerous wildfires. Establish your defensible space. Help make California fire safe."

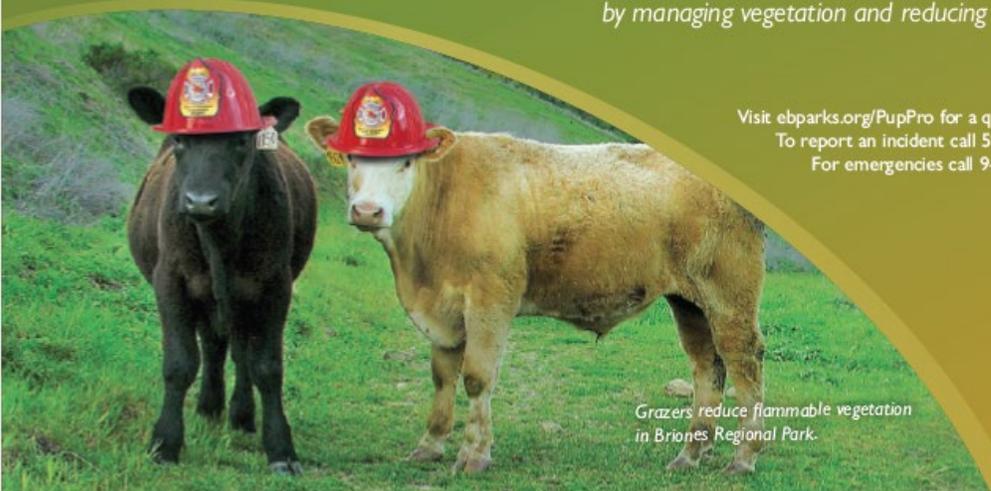


BE A PUP PRO!

Support Our Hoofed Firefighters!

Leash your dog around cattle
Grazing cattle play an important role in wildfire protection by managing vegetation and reducing fire risks.

Visit ebparks.org/PupPro for a quick guide to the dog rules.
To report an incident call 510-881-1833.
For emergencies call 9-1-1.



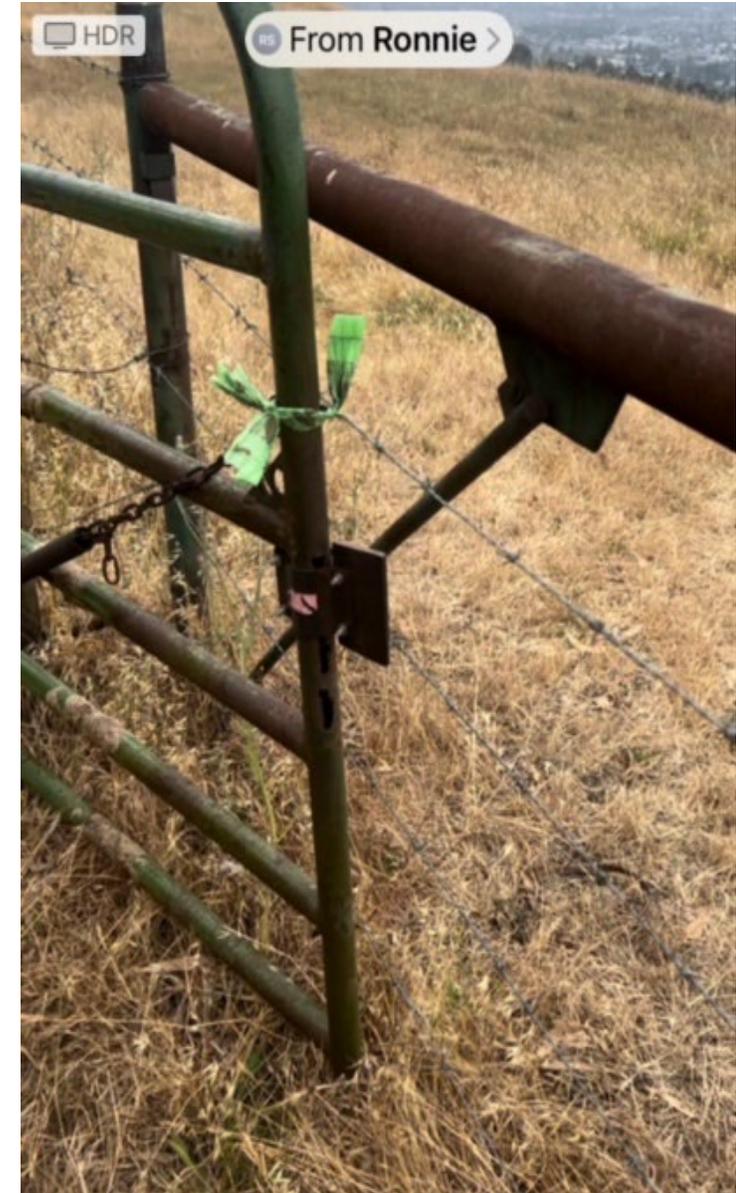
Grazers reduce flammable vegetation in Briones Regional Park.

East Bay Regional Park District
Healthy Parks Healthy People

#PupPro

Our Ranchers

- Relationships with park users
- Know the land intimately
- Members of the local community



Ranchers are First Responders



- Help with access
- Volunteer firefighters
- Animal Safety #1 priority

Livestock Infrastructure Project Planning





Brushy Peak, 2024



Mission Peak, 2023

Old Grazing Infrastructure



Briones Regional Park, 2024

Briones Regional Park, Deer Creek Pasture

Legend

- As Built Pipeline



Water Meter for Livestock Water!!!



Carquinez Regional Shoreline, 2023



Corral Projects



Old Corral, Thurgood Marshall 2022

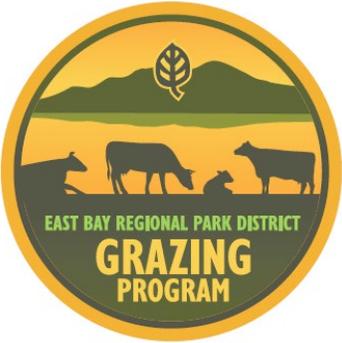


New Corral, 2024

Budget Year & Fund Sources	2019	2020	2021	2022	2023	2024 in progress	2025 projected
Wildland Vegetation Dept. Funds (101)	\$379,804	\$511,851	\$453,275	\$353,929	\$901,428	\$980,423	\$901,428
Drought Recovery Funding (one time)				\$429,741	\$231,847	\$136,756	0
Response to Fire Damage – 2020 (one time)		\$907	\$66,181	\$198,977	\$7,587	\$13,500	\$50,000
Grazing Infrastructure Development (one time)			\$208,303	\$87,961	\$110,256	\$174,000	0
Grand Total	\$384,804	\$515,758	\$727,759	\$1,069,607	\$1,027,179	\$1,305,679	\$951,428
Number of Projects	20	24	43	62	63	60~	50~

Matching Funds for Livestock Grazing Projects

Year	2019	2020	2021	2022	2023	2024 estimated
Cost Share Totals	\$128,514	\$56,862	\$319,866	\$390,610	\$654,098	\$441,781

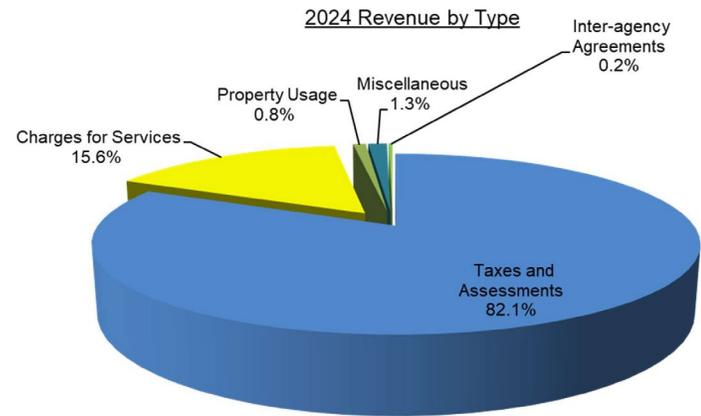


Five Year Grazing License Revenue

Five Year Grazing Revenue



Grazing rent goes into General Fund



Shifts and Challenges of the Grazing Program



1940's – 1980's: Decades of Pond Creation

THE LIVERMORE HERALD Second Section
Livermore, Alameda County, California, Friday, September 3, 1948.

WITH GOVERNMENT HELP

Stock Ponds Put Arid Livermore Hills To Good Use

By HERB BOODY
Intervention Specialist
Conservation Service

What can ranchers do when there's not a lick of stock water?

California stockmen are finding the answer lately in low-cost storage ponds, banks to capture and maintain moisture grazing. Sponsored by their local conservation district's technical assistance program, they're digging around 7,500 water "holes" in high country.

Many more ponds are needed to meet the needs of various types of livestock and wild game animals than the state.

One of the best kept secrets in Alameda County since 1932, the Soil Conservation Service has helped farmers and ranchers put to nearly 500 storage reservoirs. Stockmen outside the district installed another 40 to 50 ponds.

To get the facts about ponds, we looked up Art Carls, who from his Livermore SAC's office, has helped ranchers in the Eastern and Western Alameda SAC's work out many tough water problems.

Carls told us, "With livestock water from wells and springs so short, ponds are the rancher's last bet."

HALF MOUNTAINS

"About half the grazing land in Alameda county, or 150,000 acres, is steep hill and mountain range which cattle would gain up if water wasn't close by. Ponds are making much of this kind of range a 'promised land' for cattle."

Most Alameda county cattlemen run a cow-calf type outfit, though some buy feeder calves and stick to a "stocker" form of ranching. In either case, stock ponds are proving a big help, especially for those storing water for both winter and summer use. All water dams, of course, need to be built larger.

Dams are needed in winter, you say? Yes sir, because on steep rangelands runoff from heavy rains is rapid and live streams don't last very long.

Along with new ponds, come miles of better roads. These range "freeways" shorten the travel time for cattle in reaching greenlands and make for more uniform use of feed.

Water stored in ponds, though of variable size when compared to big lakes, helps in its way to store off floods in normal and high stream runoff seasons.

It's estimated that the 200 small dams in use in the county store about 1,500 acre feet of water or enough to cover a three and one-half acre foot deep.

Ponds also provide ranchers and the Alameda County Fire Patrol with water for restraining grass fires.

And pond owners aren't overlooking the recreational values of their reservoirs. Fishing is good in 80 of them.

HOW TO DO IT

Let's say you want to build a pond.

First thing to do, says Carls, is to pick a suitable site for your dam.

He explains, "By a suitable site, I mean a place where there's soil material for building water. A clay loam is best because it compacts well and doesn't leak."

"You'll want to find out, too, if your dam will store enough water. Supposing 400 cattle are going to use the water supply for eight months. At the rate of 50 gallons of water per cow per day, you would need a pond storing 800,000 gallons, or about three acre feet."

WATER LOSS

"But hold on, figure on a water loss of at least 25 to 40 per cent from evaporation and percolation. That means your dam will have to store more water—around 4 to 5 acre feet."

"Next you'll need to know how much runoff you can count on in the slopes near the pond site. A 40 to 60 acre drainage is about right for a five acre pond. We'll work out the drainage needed from either topographic maps or aerial photos."

"Size of the pond's spillway can be determined from information gathered from tests carried out under similar conditions. Specs allow for maximum runoff expected in the worst peak storm known."

KEYWAY

Technicians take a close look at the "keyway" or cut-off trench which is dug across the ground center of the dam site before construction begins. This is done to stop up possible leaks under the completed dam.

Soil to be used in the dam is also checked to see if it con-



This stock dam on E. A. Webb's range land south of Livermore was one of the first built with the technical assistance of the Eastern Alameda County Soil Conservation District. Dozens of dams like this have been built throughout the Livermore hills, to turn the arid hills into better range and to help in flood control.



Clayton Ranch, 2024

Cattle are essential to pond management

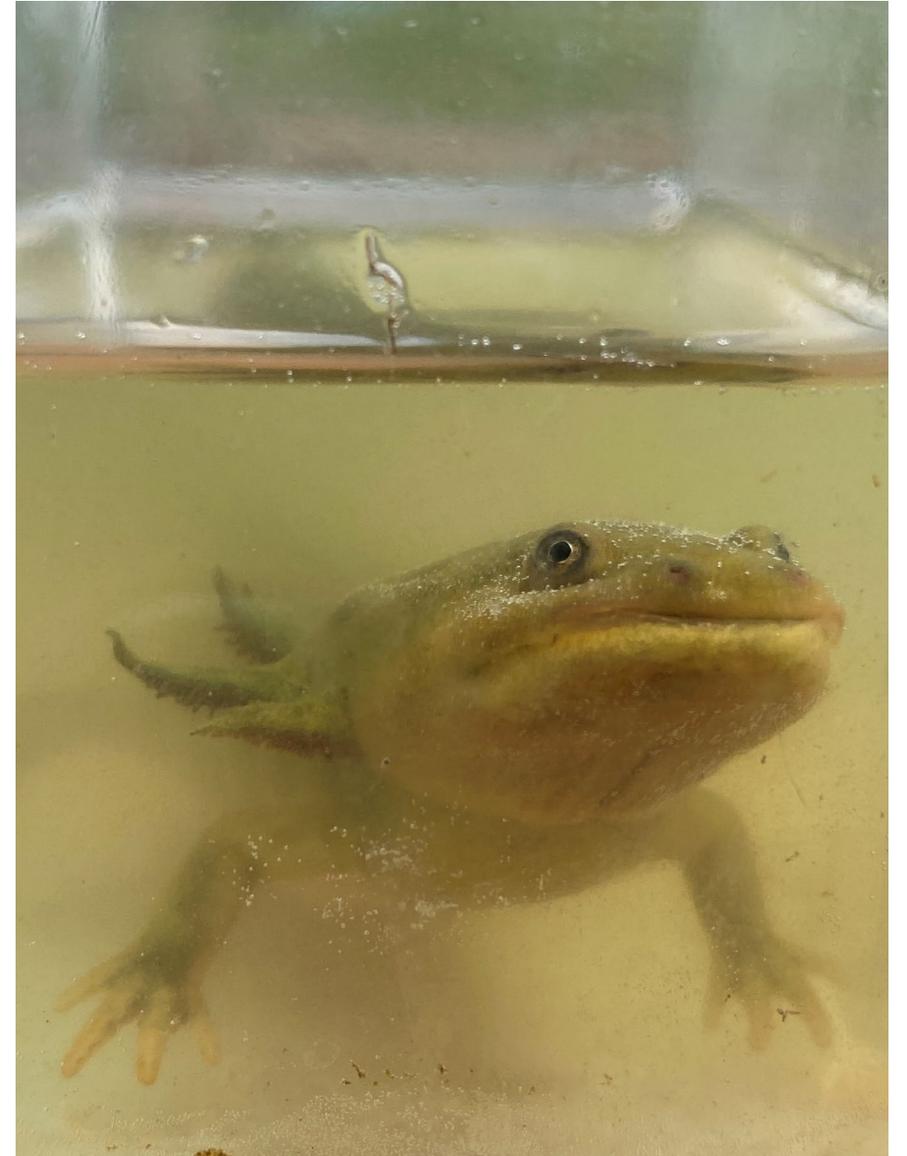


Diablo Foothills, 2022

- Breeding sites for the amphibians
- Turbidity
- Open pond water, little aquatic vegetation
- Food (invertebrates)
- Seasonality
- Upland habitat



Black Diamond Mines, 2022









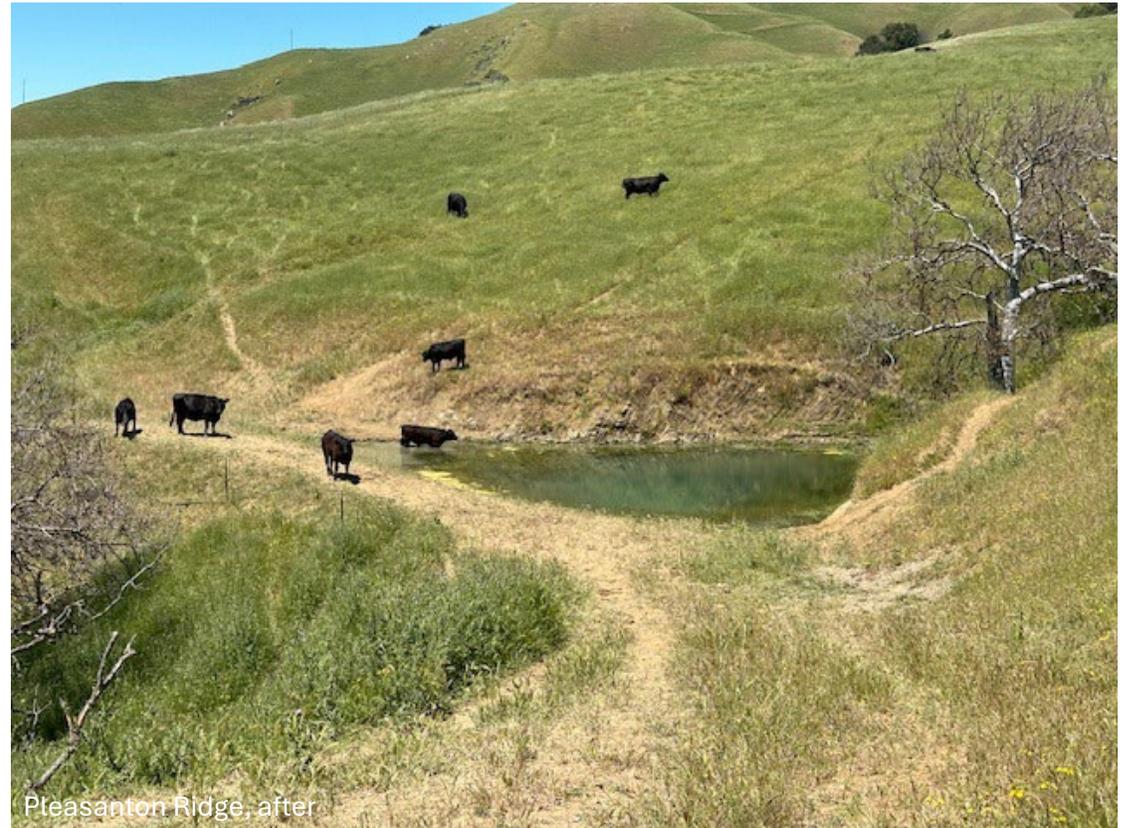
Contra Loma, 2023



Vasco Hills, 2023



Pleasanton Ridge, before

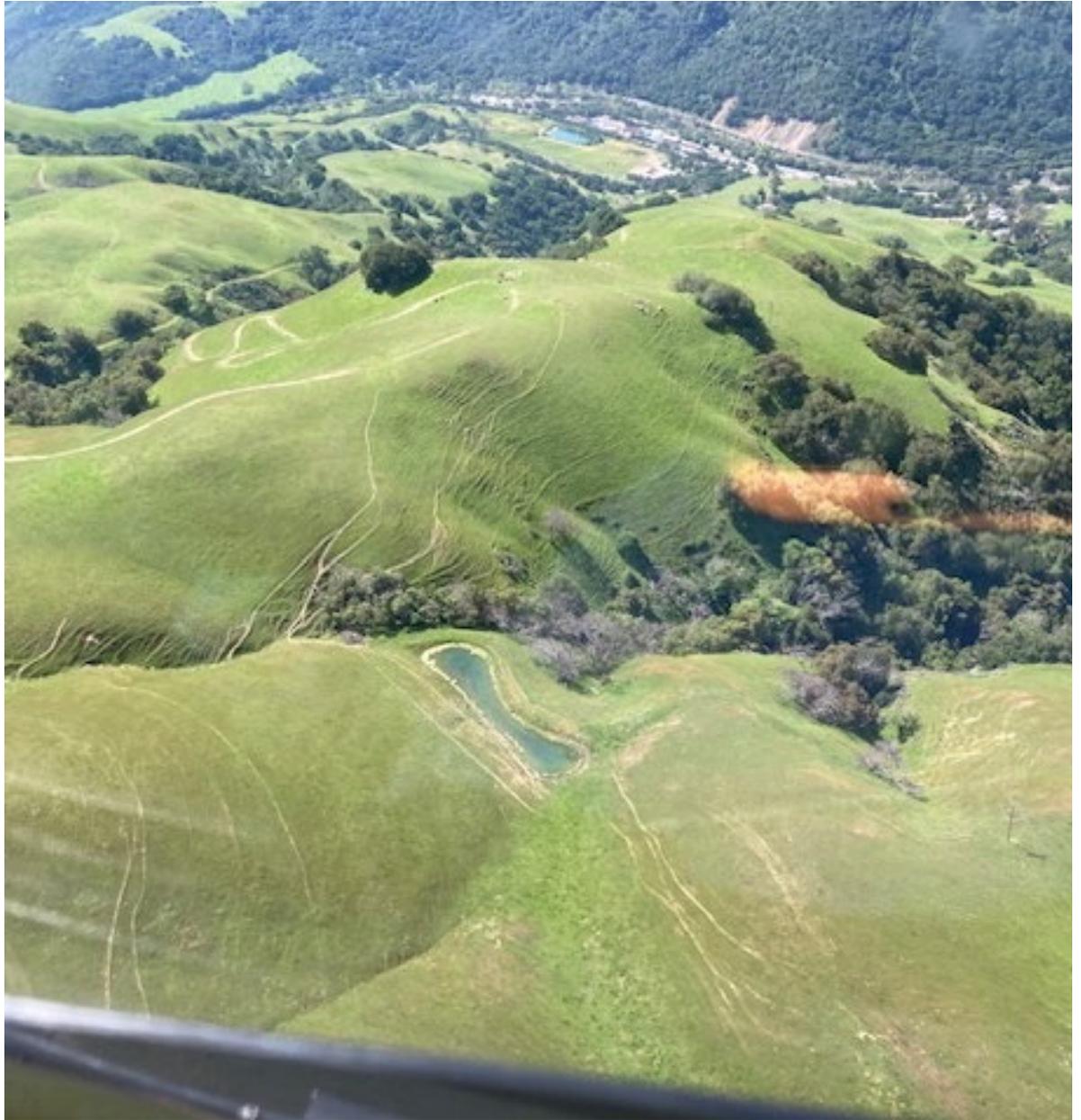


Pleasanton Ridge, after





Pleasanton Ridge, 2023



3-year Average Pond Restoration Costs

Agency Contribution	Natural Resources Conservation Service (NRCS)	Resource Conservation District (RCD)	East Bay Regional Park District	Total Cost	Percent of Park District 's Cost
2021 - 3 pond projects	\$101,790	\$56,644	\$69,500	\$227,934	30%
2022 - 5 pond projects	\$136,130	\$25,520	\$78,050	\$239,701	33%
2023 - 3 pond projects	\$146,829	\$70,843	\$40,014	\$257,686	16%
2024 - 5 pond projects, estimated	\$64,484	\$30,842	\$123,174	\$218,500	56%
2025 – 6 pond projects, estimated	\$102,981	\$30,842	0	\$133,823	0%
Total Cost	\$552,214	\$214,691	\$310,738	\$1,077,644	29%

*Permitting, agency staff hours for planning, coordinating and construction, and rancher time are not included in these costs

We need dedicated funding for our pond restoration program

