

RANGELAND AND SOIL CARBON OPPORTUNITIES IN CONTRA COSTA COUNTY

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Agenda

Introductions/ Networking

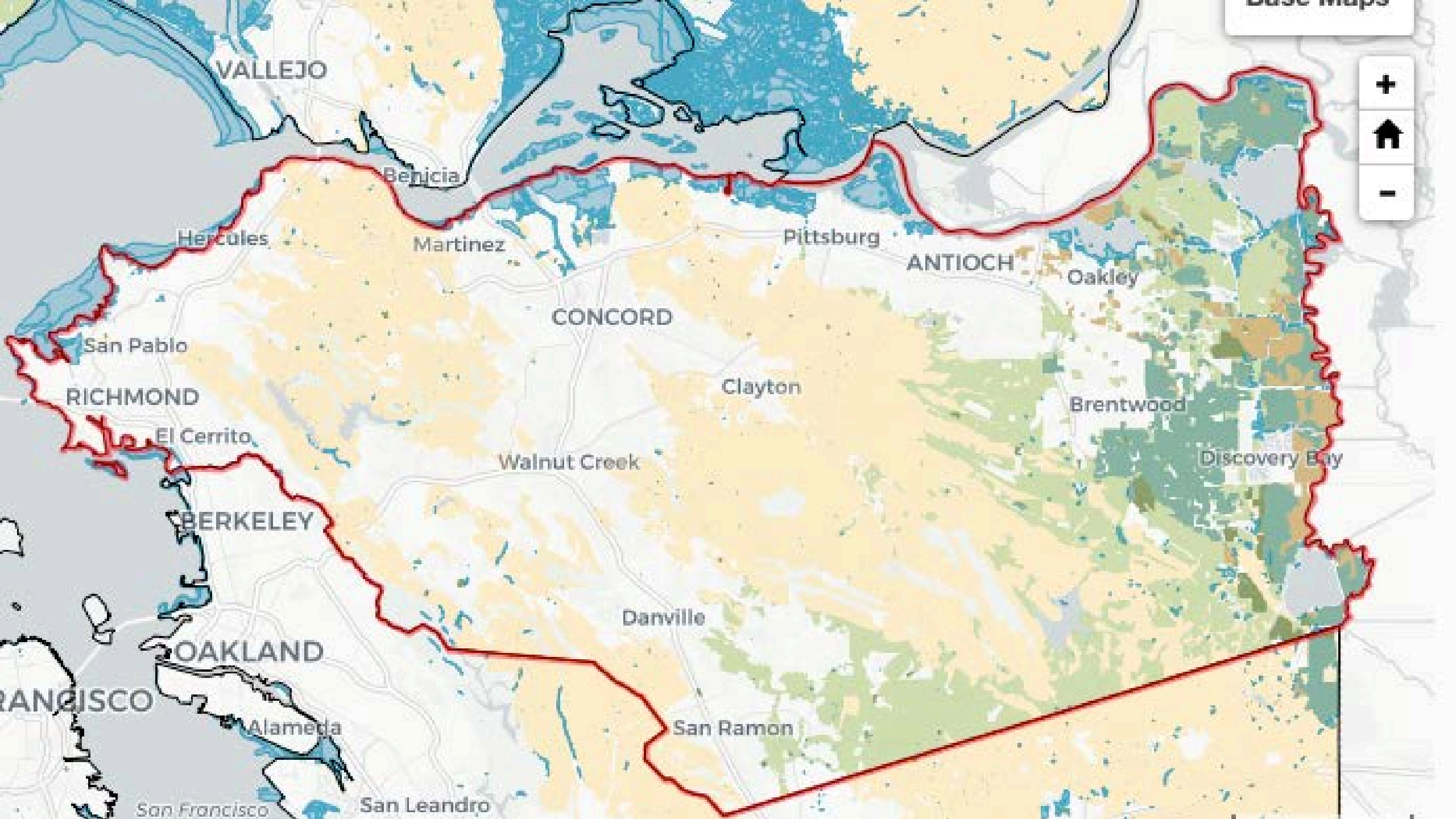
Contra Costa County SALC Project - Jody London, Sustainability Coordinator
Contra Costa County

Rangeland and Soil Carbon in Contra Costa County- Sheila Barry, UCCE
Livestock and Natural Resources Advisor

Soil Carbon Practices on Rangelands- Jeff Creque, Carbon Cycle Network
Discussion and Survey of Practices and Potential for Rangeland
Owners/Managers in Contra Costa County

https://ucanr.co1.qualtrics.com/jfe/form/SV_73TKY8H47XBokom

by June 15, 2022.



VALLEJO

Benicia

Hercules

Martinez

Pittsburg

ANTIOCH

Oakley

CONCORD

San Pablo

Clayton

Brentwood

RICHMOND

El Cerrito

Walnut Creek

Discovery Bay

BERKELEY

Danville

SAN FRANCISCO

OAKLAND

San Ramon

Alameda

San Francisco

San Leandro

Base maps



Contra Costa County Working Lands

- ▶ 481,400 acres
 - ▶ Grazing land 157,642 acres (33% of the county)
 - ▶ 3000 acres of vernal pools
 - ▶ Important habitat for Alameda whipsnake, CA Red legged-frog, Contra Costa goldfields, Longhorn fairy shrimp, Vernal pool fairy shrimp, Santa Cruz tarplant, soft bird's beak
 - ▶ Important Farmland 97,073 acres

Contra Costa County Carbon Stocks

- ▶ Above ground live carbon 5.6 m metric tons of CO₂ equivalent
 - ▶ Soil carbon storage 33.6 m metric tons of CO₂
 - ▶ Urban forest carbon storage 5.4 m metric tons of CO₂
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- ▶ Avoiding disturbance (keeping carbon stored) would have greenhouse gas emissions reduction benefits equivalent to getting 2.8 million passenger cars off the roads for one year, or equivalent to planting at 342 million seedlings and letting them grow for 10 years.

CDFA Healthy Soils Program

▶ Grazing Land Practices

- ▶ Compost Application - \$900/acre- 6 tons compost/acre- 5 metric tons/ac CO2 reduction
- ▶ - \$1200/acre- 8 tons compost/acre - 5 metric tons/ac CO2 reduction
- ▶ Prescribed Grazing - \$3,156/ 200 acres- 40% forage removal - 1 metric ton/200 ac CO2 reduction
- ▶ Range Planting - \$577.74/acre- native seed broadcast - 0.34 metric ton/ac CO2 reduction
- ▶ - \$173.60/acre- non-native seed broadcast- 0.34 metric ton/ac CO2 reduction

CDFA Healthy Soils Program

▶ Tree and shrub Planting

- ▶ Hedgerow planting - \$10.32/linear foot - row of woody plants - 8.2 metric tons of CO₂/ac reduced
- ▶ Windbreak/shelterbelt - \$2.40/linear foot- row of woody plants - 8.2 metric tons of CO₂/ac reduced

- ▶ Riparian forest buffer - \$5,941/acre - small container hand planted - 1.77 metric tons of CO₂/ ac reduced
- ▶ Tree/shrub establishment - \$1,024/acre - hand planting and browse protection for conversion - 18.89 metric tons of CO₂/ac
- ▶ Silvopasture - \$213.02/acre - tree/shrub planting - 0.66 metric tons of CO₂/ac reduced