

Carbon Sequestration

SALC Strategy Goals



What Is Carbon Sequestration?

Carbon sequestration is the process by which carbon is stored in the soil through plant intake, lifecycle, and decomposition. Farming and ranching practices that sequester carbon lock it in the vegetation and soil, offsetting GHG emissions. Per-acre, Butte County has large areas of rangelands. Ranching practices that sequester carbon, such as compost applications or rotational grazing, provide both agricultural and environmental benefits. Rangelands can sequester nearly twice the amount of carbon as forest lands (NRCS).

How Can We Increase Carbon Sequestration?

Butte County SALC Strategy

- ◆ Butte County has identified sustainable agricultural practices that increase carbon sequestration rates and/or protect rangelands, where large amounts of carbon is already sequestered.
- ◆ There are State programs that provide financial incentives to farmers who switch to these sustainable practices.
- ◆ Butte County's SALC Clearinghouse connects ranchers with information about these sustainable practices and their matching incentive programs.
- ◆ Butte County wants to protect and conserve local agricultural lands while supporting farmers and ranchers.

Carbon Offset Market

- ◆ The California Air Resources Board (CARB) has created a program that allows the production and trading of carbon offset credits.
- ◆ Ranchers can trade credits through this program by enrolling in a carbon offset protocol—a program where a rancher implements a sustainable practice on the land and markets the “carbon credits” produced.
- ◆ Carbon offset credits can be sold through the CARB carbon market.
- ◆ This carbon market program helps agricultural producers ‘farm carbon’ by providing a financial incentive for ranching sustainably.

Practices suggested in SALC documents may not be appropriate for all agricultural operations. Interested land owners and managers are encouraged to evaluate the practices described in this brochure to determine whether they are feasible and appropriate for their property and operation.

CALIFORNIA CLIMATE INVESTMENTS
Cap and Trade Dollars at Work

BUTTE COUNTY

Sustainable Agricultural Lands Conservation Strategy

Butte County
DEVELOPMENT SERVICES

What Are Some Benefits of Carbon Sequestration?

Benefits of Carbon Sequestration

- ◆ Improved microbial activity
- ◆ Reduced wind erosion
- ◆ Increased plant diversity
- ◆ Increased forage production and quality
- ◆ Improved soil quality
- ◆ Weed and pest suppression
- ◆ Reduced pathogen runoff
- ◆ Increased soil water-holding capacity and infiltration
- ◆ Reduced soil erosion
- ◆ Improved root infiltration

Grassland Composting

- ◆ The grassland compost protocol, created by the American Carbon Registry, sequesters carbon directly (through composting) and indirectly (through plant growth). 1/2” - 1” of compost is applied to rangelands.
- ◆ Avoiding anaerobic decomposition during the compost process can further reduce GHG emissions.
- ◆ Livestock grazing is allowed in association with this offset, if overgrazing is prevented.
- ◆ For information about grassland composting, see <https://www.buttecounty.net/Portals/10/Docs/SALC/SALC%20Compost%20Additions%20for%20Grazed%20Grasslands%20newnew.pdf>



Image: matteroftrust.org

Grassland Conservation

- ◆ To sequester carbon through this protocol, created by the Climate Action Reserve, grasslands are preserved in their current state for a long period.
- ◆ Livestock grazing is allowed in association with this protocol, if overgrazing is prevented.
- ◆ Compost applications can be added to the grassland for additional benefits.
- ◆ For more information, see <https://www.buttecounty.net/Portals/10/Docs/SALC/SALC%20Grassland%20Conservation%20Protocol%20new.pdf>



Image: Climate Action Reserve

How Can I Participate In Carbon Sequestration Practices?

- ◆ **Grassland Composting:** Visit the American Carbon Registry website to get started <http://americancarbonregistry.org/how-it-works/what-we-do>
- ◆ **Grassland Conservation:** Visit the Climate Action Reserve website to get started <http://www.climateactionreserve.org/how/>

For More Information...

- ◆ **Butte County Sustainable Agricultural Lands Conservation (SALC) Strategy** <https://www.buttecounty.net/dds/Planning/Grants/SALC.aspx>
- ◆ **SALC Mapper** <http://gis.buttecounty.net/public/index.html?viewer=salc>

Butte County Department of Development Services

SALC Strategy

7 County Center Drive
Oroville, CA 95965

Phone: (530) 538-7601

<https://www.buttecounty.net/dds/home.aspx>



BUTTE COUNTY

Sustainable Agricultural Lands Conservation Strategy

