

Compost Application to Grassland (CDFA)

Payment Rate: \$50/ton

Application of compost on grazed rangelands. This practice is currently under development by the USDA NRCS

Co-benefits

- Improves forage production
- Increases soil organic carbon levels
- Improves soil water infiltration and water holding capacity
- Utilizes manures or organic by-products as a plant nutrient source
- Improves nutrient holding capacity of soils
- Protects air quality by reducing odors, nitrogen emissions (ammonia, oxides of nitrogen), and the formation of atmospheric particulates
- Improves the physical, chemical, and biological condition of soil



Photo by Marin RCD

From CDFA HSP Incentives Guidelines: Implementation of Compost Application practices must meet the requirements below:

- Compost Application Rates eligible for funding are provided in the table below.

Crop Type	Compost Type	Tons/Acre*
Annual Crops	Higher N (C:N ≤ 11)	3 – 5
	Lower N (C:N > 11)	6 – 8
Tree / Perennial	Higher N (C:N ≤ 11)	2 – 4
	Lower N (C:N > 11)	6 – 8
Rangeland	Lower N (C:N > 11)	6 – 8

*Compost application rates eligible for funding through this program were developed under the guidance of the [Environmental Farming Act – Science Advisory Panel \(EFA-SAP\)](#) and are published in a white paper report titled "Compost Application Rates for California Croplands and Rangelands for a CDFA Healthy Soils Incentives Program" (abbreviated as [Compost Application White Paper](#)) by CDFA.

Sources of compost eligible for funding must meet the following requirements.

- *If compost is purchased:*
 - a. *Compost must be produced by a facility permitted or otherwise authorized by state and local authorities that can demonstrate compliance with all state regulations. STA (US Composting Council's Seal of Testing Assurance Program) or CDFA-OIM (Organic Input Material) Program certified compost is recommended. Applicants may look up certified composting facilities at the CalRecycle SWIS/Site Search website [here](#).*
 - b. *A report of laboratory analysis on compost C:N ratio is required.*

- *If compost is produced on-farm:*
 - a. *Plant and animal materials must be composted through the processes outlined below and a farm log must be maintained to document the process.*
 - ***In-vessel or Static Aerated Pile System:*** *Maintain a temperature between 131°F and 170°F for 3 days;*
 - ***Windrow Composting:*** *Maintain a temperature between 131°F and 170°F for 15 days. The materials must be turned a minimum of five times.*
 - b. *C:N ratio of the compost to be applied must be verified through laboratory testing before application. Type of material(s) used for composting must be documented.*
 - c. *Compost used in this practice must be produced at the agricultural operation that the project is located on. Externally sourced compost must be purchased from a certified facility.*

Compost used in this practice cannot be vermicompost.

>Example Compost Application Project Description

XX Ranch is a family farm that grazes XX beef steer on XX acres in Marin County. The proposed project is a three-year compost application of XX tons/acre to XX acres of grazed rangelands in 2020, before the fall rains. These three compost applications are anticipated to: improve our on-ranch forage production, increase our soil organic carbon levels, improve our soil water infiltration and water holding capacity, improve our soil nutrient holding capacity, and sequester carbon by increasing the photosynthetic capacity of forbs and grasses on our ranch. We will evaluate project success with soil samples sent to the lab, herd health, and forage yield. This project will be in collaboration with XXX (MRCD/MALT/NRCS), which provides planning, design, implementation and monitoring assistance to landowners.

>Example Compost Application Cost Estimate

Compost Application	# of Units	Type of Unit	Cost Per Unit	Total
Compost Material	260	Yards (1/2 Ton) - Clean Green Organic Compost	\$23.5/yd + tax	\$6,605.30
Compost Application	1	Day	\$1,300.00	\$1,300.00
Compost Loading	1	Day	\$200.00	\$200.00
Compost Transport	2	truckloads (estimate)	\$1,200.00	\$2,400.00
Staff Project Management	15	Hours	\$27.00	\$405.00
Discount (In Exchange for Manure)	1	Discount	\$2,500.00	\$2,500.00
TOTAL				\$13,410.30

>Example Compost Design

3. If compost needs to be purchased (see HSP requirements in guidelines, also pasted above), a list of compost facilities is included in Step 3:Project Design

Compost Application Example Project Timeline

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Collect soil samples (at same time over multiple years)												
Source compost												
Compost delivery												
Apply compost										Appy before rain (about one full day of spreading per 25 acres)		