



DATE: January 12, 2016
TO: Programs & Administration Committee
FROM: Pat Cabrera, Administrative Services Director
BY: Kelly Schoonmaker, Program Manager
SUBJECT: Marin Carbon Project

SUMMARY

The Marin Carbon Project has conducted research demonstrating the ability of a one-time application of compost to increase carbon sequestration in rangeland soils, while also improving forage production and quality, and increasing soil water holding capacity. At the January 12 Programs & Administration Committee meeting, staff will provide an overview of the Marin Carbon Project research and its implications for statewide compost markets.

DISCUSSION

The Marin Carbon Project is a group of agricultural institutions and farms in Marin County, university researchers, public agencies, and nonprofit organizations seeking to understand and demonstrate the potential of enhanced carbon sequestration in agricultural and rangelands soils. In 2008, in partnership with UC Berkeley and UC Cooperative Extension, the Marin Carbon Project applied one-half inch of compost to two rangeland sites. Over five years, researchers collected and analyzed data. They found that compost increased soil water holding capacity, improved forage production 40-70%, and increased soil carbon sequestration 25-70%. The one-time application of compost increased soil carbon sequestration on average 1 metric ton of carbon per hectare per year over 3 years, predicted to last for 30 years. At that rate, compost applied to half the rangelands in California would offset 42M metric tons of CO₂e, an amount equivalent to the annual GHG emissions from energy use for commercial and residential sectors in California. The work of the Marin Carbon Project has influenced the state policy and led to the creation of a new GHG reduction credit protocol that uses compost to store atmospheric carbon in rangelands.

RECOMMENDATION

This item is for information only.