Conservation and Carbon Farm Plan: Harley Farms

Harley Farms, located in Pescadero, California, is a 30 acre farm that includes a small goat dairy, berries, artichokes, and apple, quince and pear orchards. Additionally, about one acre is leased to a local vegetable producers. The operation also has a small compost site which is applied to their various garden beds which supply the herbs and flowers for the cheeses, and hosts public tours of the milking and cheesemaking facilities, and other agricultural tourism events.

The landowner's goals are to develop new enterprises on the property, increase profitability and reduce operating costs, and to manage the soil and water resources in a way that increases the farm's resilience and viability for the future. The practices that are recommended through the plan primarily address soil erosion, soil health, and increasing wildlife habitat. The recommended practices have the potential to capture and avoid 72.24 Mg CO_2e annually, or 1,444.8 Mg CO_2e over 20 years. Additionally, the producer is interested in expanding rainwater catchment, installing solar for irrigation pumps, and operational changes to enhance water quality. The CCFP was developed in partnership with the producers and the Natural Resources Conservation Service.

Practice (NRCS practice #)	Co-benefits	Acres	Annual CO_2e capture/ avoided emissions (Mg)
Prescribed Grazing (528) – Pasture	Enhance pasture productivity, climatic resilience, species diversity.	4.95	0.5
Pasture/Range Compost Application (880)	Improved water holding capacity, soil fertility, net primary productivity.	14.98	22.32
Cropland Compost Application (Nutrient management, 590)	Improved water holding capacity, soil fertility, net primary productivity.	8.4	37.18
Riparian Forest Buffer (391)	Stabilize stream banks and channels. Enhance wildlife habitat structure, species diversity. Reduce runoff.	0.83	4.98
Riparian Herbaceous Cover (390)	Increase water storage on floodplains. Reduce erosion and improve stability to stream banks and shorelines. Increase net carbon storage in the biomass and soil.	0.3	0.15
Forage/Biomass planting (512)	Enhance forage cover and species diversity	3.98	.12
Cover Crop (340)	Reduce wind and water erosion, increase soil health, suppress excessive weed pressure, improve soil moisture, minimize soil compaction.	5.33	2.77
Conservation Cover (327)	Improve soil health, suppress excessive weed pressure.	3.1	0.12
Hedgerow (422)	Improve microclimate, stabilize soils, improve water quality, reduce water loss, improve habitat diversity, enhance pollinator habitat, integrated pest management	0.22	1.1
Tree/Shrub Establishment (612)	Maintain or improve desirable plant diversity, productivity, and health by establishing woody plants. Create or improve habitat for desired wildlife species compatible with ecological characteristics of the site.	0.63	3
Total		**42.75**	**72.24**