

Natural Resources Conservation Service (NRCS)

October 2021 SD-FS-CIS FY2021-CAFO

Conservation Implementation Strategy Project

Concentrated Animal Feeding Operation (CAFO) Initiative



This Project At-A-Glance

Partners

Clark County Conservation District

Hamlin County Conservation District

South Dakota Soil Health Coalition

Clark Hamlin Cattlemen's Assoc.

Funding for this project is provided by the EQIP Program and partners with financial and in-kind contributions.

Priority Area within Clark and Hamlin County



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The Conservation Implementation Strategy (CIS) is a new phased-in approach to deliver conservation programs to farmers and ranchers across South Dakota. Funding for CIS comes through the Environmental Quality Incentives Program (EQIP) and the Agricultural Conservation Easement Program (ACEP). Funding and support from other agencies and groups can be leveraged and coordinated to focus on mutual issues of the highest priority.

Background

Concentrated Animal Feeding Operations (CAFOs) are a means to decrease the footprint required to raise and maintain animals, thereby increasing the total production per acre. This increase requires a higher quantity of feed and forage per year, a significant portion of which must be grown, harvested, and imported from surrounding farms. The increase in animal units per acre also results in an increase in manure locally, which must be properly stored and spread. The combination of increased manure production with local decreases in crop diversity and surface residue can quickly create resource concerns in the areas directly surrounding CAFO facilities.

Goals

The CAFO Initiative Project seeks to on local water and air quality. work with CAFOs and producers located within six miles of permitted CAFOs within the priority area (which will encompass the most likely area where manure will be applied and feeds & forages will be removed), to target and counteract

the increases in fallow periods, organic matter depletion, erosion, runoff, and nutrient loss/leaching due to changes in local crop systems directly surrounding CAFO operations.

Desired Outcomes

In cooperation with the CAFO Initiative, producers will complete a conservation system designed to reduce fallow periods and erosion, and increase nutrient cycling and organic matter, on their land base. First and foremost, they will plant winter annual cover crops following small grain or silage harvest and complete nutrient management activities. Along with additional practices, this will increase soil health and have positive impacts

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Resource Concern(s):

- ⇒ Soil Quality Limitations: Aggregate instability, Organic matter depletion, Compaction, Concentration of Salts or Other Chemicals, Soil organism habitat loss or degradation
- ⇒ Degraded Plant Condition: Plant Productivity and Health
- \Rightarrow Wind and Water Erosion: Sheet and Rill Erosion, Wind Erosion
- ⇒ Concentrated Erosion: Classic Gully Erosion, Ephemeral Gully Erosion
- ⇒ Storage and Handling of Pollutants: Nutrients transported in groundwater, Nutrients transported in surface water
- ⇒ Field Sediment, Nutrient and Pathogen Loss: Nutrients transported to groundwater/surface water, Pathogens and chemicals from manure, biosolids, or compost applications transported to groundwater/surface water, Sediment transported to surface water

Core Practices	Supporting Practices
Cover Crop (340)	Pasture and Hay Planting (512) Range Planting (550)
Nutrient Management (590)	Filter Strip (393)
Conservation Crop Rotation (328)*	Field Border (386)
Residue and Tillage Management, No-Till (329)*	Conservation Cover (327)
Residue and Tillage Management, Reduced- Till (345)*	Grassed Waterway (412)
Integrated Pest Management (595)*	Riparian Forest Buffer (391)
	Riparian Herbaceous Cover (390)
	Windbreak and Shelterbelt Establishment (380)
	Denitrifying Bioreactor (605)

*Note: Secondary Core Practices are only eligible on acreage where 340 and 590 are completed.

Time Table of Project:

- December 3, 2021 Application Date for CAFO Initiative
- Early Spring 2022 Funding Decisions Made for 2022
- Summer 2022 Outreach for 2023