Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Whole Farm Greenhouse Gas Accounting-Comet Farm

Type of Project: Technical Assistance
Project Discipline: Natural
Funding Agency: NRCS
Other Partners/Cooperators: Colorado State University
Effective Dates: 9/30/2008 – 8/31/2009
Funding Amount: $262,995

Investigators and Agency Representative:

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Project Abstract:
With growing interest in exploiting agriculture's potential to contribute to greenhouse gases (GHG) mitigation and the rapidly evolving policy in the US (and internationally), there is a need for a next-generation of GHG accounting tools. Needs for such tools include enterprise level voluntary reporting of emissions and emission reduction under 1605B, farmer evaluation of management alternatives and the self-auditing of energy use and greenhouse gas emissions, participation in private voluntary market opportunities, potential use in new cap-and-trade markets. For these purposes a more integrated, enterprise-level accounting system that can perform full greenhouse gas accounting for all significant GHG sources and sinks is needed, We propose to build off of the success of the COMET-VR system to develop and integrated tool (COMET-Farm)to estimate all significant GHG and sinks for a farm-enterprise. The Major source categories that need to be added to the current capabilities of COMET-VR which address field-level C sequestration and GHG emissions are a Livestock module and an expanded Energy module. In addition, additional enhancements and continued maintenance requirements of the present COET-VR system will continue, Farm-level GHG accounting – wrap the present COMET within a whole farm enterprise framework consisting of Filed, Livestock and Energy Modules. Uses interface would have an initial data entry mode to compile information on all farm activities, (i.e., specification of individual fields, livestock variables, options for energy use.

Outcomes with completion dates: Final Report is due 8/31/2009

Keywords: Greenhouse gases (GHG), agriculture, GHG accounting tools, COMET-VR, COMET-Farm, NRCS, Colorado State University