

Energy Enhancement Activity – ENR01- Fuel use reduction for field operations



Enhancement Description

This enhancement is for fuel savings of 20% or more achieved by a reduction in field operations when compared to existing management system.

Land Use Applicability

Cropland

Benefits

In addition to saving money the advantages of fossil fuel conservation include reducing air pollutants such as greenhouse gas emissions, and decreasing our reliance on foreign oil.

Criteria for Fuel Use Reduction for Field Operations

- Implementation of this enhancement requires that the participant reduce their field operations to achieve fuel savings of 20% or greater over their present baseline use.
- Reduced trips across the field, and reduced tillage intensity are documented by using RUSLE2 to compare the planned tillage operations with present baseline tillage operations.

Documentation Requirements for Fuel Use Reduction for Field Operations

- The present baseline fuel consumption for all field operations is calculated using RUSLE2 at the time of sign-up. This baseline is compared with fuel consumption for the planned reduced field operations, also calculated with RUSLE2. The estimated reduction in fuel use between the present and the planned must be greater than or equal to 20%.
- Documentation of the fields where field operations have changed.

References

- Crop Budgets - Nebraska Cooperative Extension EC04-872-S (Revised 2004)
- Energy Efficiency Programs in Agriculture: Design, Success, and Lessons Learned, Elizabeth Brown, R. Neal Elliot, and Steven Nadel, January 2005, Report Number IE051, American Council for an Energy-Efficient Economy.

ALABAMA SUPPLEMENT TO ENHANCEMENT ENG01 FUEL USE REDUCTION FOR FIELD OPERATION

The reduction of fuel in field operations not only will save the producer money but will reduce air pollutants such as greenhouse gas emissions, and decrease our reliance on foreign oil. This enhancement requires producers to reduce field operations resulting in fuel saving of 20% or more over their existing management system as calculated with RUSLE2. This enhancement can only be applied on cropland. Refer to the national enhancement for more information.

Documentation Requirements:

1. A map showing fields where the enhancement is applied.
2. The present baseline fuel consumption for all field operation is calculated using RUSLE2 at the time of sign-up. Attached the detailed output (NRCS RUSLE2 Worksheet, SCI, STIR, & FUEL Use Summary) and management (NRCS RUSLE2 Management Record).
3. The planted reduced fuel system for all field operation is also calculated using RUSLE2. The estimated reduction in fuel use between the present and planted must be greater than or equal to 20%. Attached the detailed output (NRCS RUSLE2 Worksheet, SCI, STIR, & FUEL Use Summary) and management (NRCS RUSLE2 Management Record).

ALABAMA SUPPLEMENTAL INFORMATION FOR THIS ENHANCEMENT

ENR01 - Fuel Use Reduction for Field Operations

Documentation Form

Tract Number(s):		County:	
Field Number(s):			
Crop Rotation:			
Length in years:			
Crop(s) Planted:			
Description of baseline management operations from Rusle2 (attach detailed printout):			
Equiv diesel use for baseline (gal/ac)			
Description of planned management operations from Rusle2 (attach detailed printout):			
Equiv diesel use for planned system (gal/ac)			
Percent fuel use reduction [(baseline-planned)/baseline]*100			

The documentation submitted accurately represents the implementation of this enhancement. Attached the detailed output (NRCS RUSLE2 Worksheet, SCI, STIR, & FUEL Use Summary) and management (NRCS RUSLE2 Management Record) for both the baseline and planted systems.

SIGNATURE: _____