United States Department of Agriculture
Natural Resources Conservation Service

2013 Ranking Period 1

# 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 reliance on foreign oil.

**Conditions Where Enhancement Applies**
This enhancement applies to all crop land use acres.

**Criteria**
1. 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.
2. 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. The RUSLE2 user must ensure the energy data in RUSLE2 is current.

**Adoption Requirements**
This enhancement is considered adopted when the present baseline fuel consumption for all field operations is calculated using RUSLE2, at the time of application, and the comparison of the baseline to the planned reduced field operations, also calculated with RUSLE2, is $\geq$ 20%.

**Documentation Requirements**
Documentation of the fields where field operations have changed

**References**
Klein, R.N. and R.K. Wilson. 2012. Crop Budgets Nebraska – 2012. Extension University of Nebraska. Lincoln, NE. EC872 (Revised January 2012). http://www.ianrpubs.unl.edu/epublic/live/ec872/build/ec872.pdf

Brown, E., R.N. Elliot and S. Nadel. 2005. Energy Efficiency Programs in Agriculture: Design, Success, and Lessons Learned. American Council for an Energy-Efficient Economy. Report Number IE051.