



CSP – Landscape Conservation Initiative FY 2017

Ogallala Aquifer Initiative (OAI)

The CSP OAI option encourages agricultural producers to address priority resource concerns, such as water quantity issues in the OAI, in a comprehensive manner by undertaking additional conservation activities; and improving, maintaining, and managing existing conservation activities.



OAI – Screening Questions

Applicant Name: _____ County: _____

Application Number: (optional) _____ Field Office: _____

Evaluator Name: _____ Date: _____

1. Is any of the land in your operation in a Priority Area of the Ogallala Aquifer Initiative? Priority Areas only include those areas identified as an approved Focus Area in Colorado, Nebraska, and Texas; and in Wyoming. (see map of approved Focus Areas established or continued as of 2016) Yes ___ or No ___
2. Do you irrigate land in your operation? Yes ___ or No ___
3. Are you willing to adopt at least one “Core” enhancement or at least one “Bundle” identified for the Initiative? Yes ___ or No ___

Indicate your selection below:

Core Enhancement

- _____ E329114Z - No till to increase plant-available moisture: irrigation water.
- _____ E345114Z - Reduced tillage to increase plant-available moisture: irrigation water.
- _____ E449114Z1 - Advanced IWM-Soil moisture is monitored, recorded and used in decision making.
- _____ E449114Z2 - Advanced IWM-Weather is monitored, recorded and used in decision making. Actual evapotranspiration is calculated and used in forecasting future irrigation;
- _____ E449144Z – Irrigation pumping plan evaluation – Rehabilitate/replace/reconfigure all pumps that have the potential to perform 10% more efficiently as identified in the pump test.

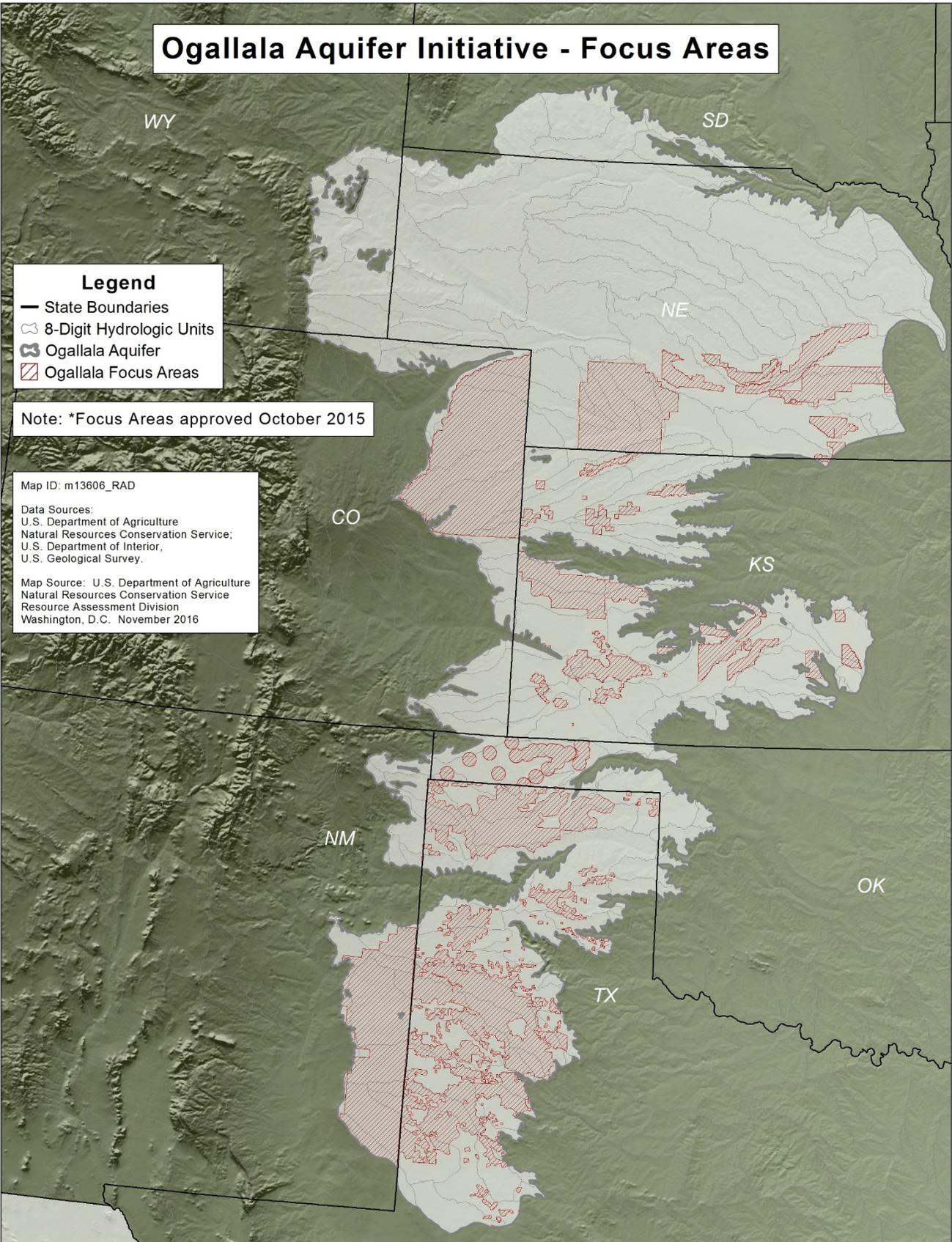
Bundles – (To address Insufficient Water, Water Quality and Soil Quality)

- _____ **Ogallala Bundle#1 - B000OGL1** – includes
 - E329114Z and E449114Z2, plus E449144Z; and
 - E340106Z2 or E340118Z or E340119Z; and
 - E590118X or E590118Z or E590119Z.
- _____ **Ogallala Bundle#2 - B000OGL2** – includes
 - E345114Z and E449114Z2, E449114Z; and
 - E340106Z2 or E340118Z or E340119Z; and
 - E590118X or E590118Z or E590119Z.

*A minimum of 50% of the enhancements, in a bundle, must be new to the operation.

If you answered “Yes” to each question above, you are an eligible candidate for the CSP-OAI Pilot.

Ogallala Aquifer Initiative - Focus Areas



Legend

- State Boundaries
- ☁ 8-Digit Hydrologic Units
- ☁ Ogallala Aquifer
- ▨ Ogallala Focus Areas

Note: *Focus Areas approved October 2015

Map ID: m13606_RAD

Data Sources:
U.S. Department of Agriculture
Natural Resources Conservation Service;
U.S. Department of Interior,
U.S. Geological Survey.

Map Source: U.S. Department of Agriculture
Natural Resources Conservation Service
Resource Assessment Division
Washington, D.C. November 2016

B000OGL1	Ogallala Bundle#1	Addresses insufficient water, water quality degradation, and inefficient energy use plus an option on soil quality degradation
<i>Code</i>	<i>Enhancement Name</i>	<i>Description</i>
DO ALL ENHANCEMENTS IN THIS GROUP		
E329114Z	No till to increase plant-available moisture: irrigation water	Establish a no till system to increase plant-available moisture. Each crop in the crop rotation shall have a Soil Tillage Intensity Rating (STIR) of no greater than 20. The current NRCS wind and water erosion prediction technologies must be used to document STIR calculations. Maintain a minimum 60 percent surface residue cover throughout the year to reduce evaporation from the soil surface.
E449114Z2	Advanced IWM--Weather is monitored, recorded and used in decision making. Actual evapotranspiration is calculated and used in forecasting future irrigation.	Advanced irrigation water management using on-site weather measurements to calculate real-time evapotranspiration and forecast future water use by plants. Record keeping is such that a daily water balance is calculated and future irrigations forecast.
E449144Z	Complete pumping plant evaluation for all pumps on a farm.	Rehabilitate/replace/reconfigure all pumps that have the potential to perform 10% more efficiently as identified in the pump test.
PICK ONE FROM THIS GROUP		
E340106Z2	Use of multi-species cover crops to improve soil health and increase soil organic matter	Implement a multi-species cover crop to add diversity and increase biomass production to improve soil health and increased soil organic matter. Cover crop mix must include a minimum of 4 different species. The cover crop mix will increase diversity of the crop rotation by including crop types currently missing, e.g. Cool Season Grass (CSG), Cool Season Broadleaves (CSB), Warm Season Grasses (WSG), Warm Season Broadleaves (WSB).
E340118Z	Cover crop to reduce water quality degradation by utilizing excess soil nutrients-surface water	Establish a cover crop mix to take up excess soil nutrients. Select cover crop species for their ability to effectively utilize nutrients. Terminate the cover crop as late as practical to maximize plant biomass production and nutrient uptake. Cover crop shall not be harvested, grazed, or burned.
E340119Z	Cover crop to reduce water quality degradation by utilizing excess soil nutrients-ground water	Establish a cover crop mix to take up excess soil nutrients. Select cover crop species for their ability to effectively utilize nutrients. Terminate the cover crop as late as practical to maximize plant biomass production and nutrient uptake. Cover crop shall not be harvested, grazed, or burned.
PICK ONE FROM THIS GROUP		
E590118X	Reduce risks of nutrient losses to surface water by utilizing precision agriculture technologies to plan and apply nutrients	Utilize precision application technology and techniques to reduce risk of nutrients in surface water by reducing total amount of applied and reducing the potential for delivery of nutrients into water bodies. Precision agriculture technology is utilized to plan and apply nutrients to improve nutrient use efficiency and reduce risk of nutrient losses.
E590118Z	Improving nutrient uptake efficiency and reducing risk of nutrient losses to surface water	Nutrient management encompasses managing the amount, source, placement, and timing of the application of plant nutrients and soil amendments. Nutrients are currently being applied on the farm based on the 4R nutrient stewardship principles. Enhanced nutrient use efficiency strategies or technologies are utilized to improve nutrient use efficiency and reduce risk of nutrient losses.
E590119Z	Improving nutrient uptake efficiency and reducing risk of nutrient losses to groundwater	Nutrient management encompasses managing the amount, source, placement, and timing of the application of plant nutrients and soil amendments. Nutrients are currently being applied on the farm based on the 4R nutrient stewardship principles. Enhanced nutrient use efficiency strategies or technologies are utilized to improve nutrient use efficiency and reduce risk of nutrient losses.

A minimum of 50% of the enhancements must be new to the operation.

B000OGL2	Ogallala Bundle#2	Addresses insufficient water, water quality degradation, and inefficient energy use plus an option on soil quality degradation
<i>Code</i>	<i>Enhancement Name</i>	<i>Description</i>
DO ALL ENHANCEMENTS IN THIS GROUP		
E345114Z	Reduced tillage to increase plant-available moisture: irrigation water	Establish a reduced till system to increase plant-available moisture. Each crop in the crop rotation shall have a Soil Tillage Intensity Rating (STIR) of no greater than 80. The current NRCS wind and water erosion prediction technologies must be used to document STIR calculations. Maintain a minimum 60 percent surface residue cover throughout the year to reduce evaporation from the soil surface.
E449114Z2	Advanced IWM--Weather is monitored, recorded and used in decision making. Actual evapotranspiration is calculated and used in forecasting future irrigation.	Advanced irrigation water management using on-site weather measurements to calculate real-time evapotranspiration and forecast future water use by plants. Record keeping is such that a daily water balance is calculated and future irrigations forecast.
E449144Z	Complete pumping plant evaluation for all pumps on a farm.	Rehabilitate/replace/reconfigure all pumps that have the potential to perform 10% more efficiently as identified in the pump test.
PICK ONE FROM THIS GROUP		
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E340118Z	Cover crop to reduce water quality degradation by utilizing excess soil nutrients-surface water	Establish a cover crop mix to take up excess soil nutrients. Select cover crop species for their ability to effectively utilize nutrients. Terminate the cover crop as late as practical to maximize plant biomass production and nutrient uptake. Cover crop shall not be harvested, grazed, or burned.
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