



To: Jason Weller, Chief, Natural Resources Conservation Service

From: National Sustainable Agriculture Coalition, National Farmers Union

RE: Establishing a Climate Change Mitigation Bundle within the Conservation Stewardship Program

Date: April 7, 2016

We respectfully request NRCS establish climate change mitigation related bundles within the Conservation Stewardship Program (CSP) for use in the next sign-up period.

CSP provides producers with the opportunity to enhance support for the practices and systems with the greatest climate adaptation and mitigation potential, encouraging the transition away from production systems with negative climate effects and less ability to cope with the pressure imposed by increasingly extreme and unpredictable weather events.

The upcoming CSP overhaul presents a unique opportunity to ensure that CSP appropriately rewards and recognizes the enormous potential of its combined conservation activities to increase carbon sequestration, reduce overall greenhouse gas emissions, and improve resilience to a changing climate. And as we are approaching the one-year anniversary announcement of USDA's climate change building blocks work, we think it an appropriate time to put forward a climate change focus for this important conservation program.

NRCS has already taken important steps to support producers in climate change adaptation as well as mitigation, recognizing the key ways through which agricultural and forestry activities can contribute to the reduction in atmospheric greenhouse gases (GHG) – sequestration, emissions reductions, and fossil fuel substitution. Existing CSP enhancements address all three of these climate change mitigation opportunities, and given the increased climate pressures that producers are up against, we urge NRCS to recognize and reward producers for their climate mitigation efforts.

We understand that the upcoming CSP overhaul will more closely link CSP enhancements to conservation practice standards. We applaud NRCS for ensuring that CSP participants are going above and beyond in their stewardship efforts, and we believe the new linkage between practices and enhancements presents a unique opportunity to recognize CSP's climate potential. Given that NRCS has already linked many conservation practice standards to USDA's Building Blocks for Climate Smart Agriculture and Forestry Strategy, it follows that the strengthening of the connection between CSP and conservation practice standards offers a prime opportunity to highlight CSP's contribution to climate change mitigation through new climate bundles.

As part of the upcoming CSP overhaul, we propose that NRCS create two climate change mitigation bundles, to be introduced as part of the 2017 signup period:

- 1. Climate Change Mitigation Cropland; and
- 2. Climate Change Mitigation Grasslands

We request that each bundle include five enhancements that a producer would select to implement. A producer would select enhancements from the three categories of enhancements (Carbon Sequestration, Emissions Reductions, and Fossil Fuel Substitution), which NRCS has identified as key strategies through which agriculture can contribute to the reduction in atmospheric greenhouse gases.

Given the wide geographic variations in climate, rainfall, soil, and topography, the climate change mitigation bundles would need to be region specific and tailored to the particular needs and conditions of each operation. The bundles should therefore provide flexibility, with a variety of enhancements available under each category, to ensure that the producer can select the suite of enhancements that are best suited to climate change mitigation efforts on their operation.

Recognizing the critical role of soil health to mitigate climate change, a producer would have to select at least one of their five enhancements from the Carbon Sequestration category. The second enhancement would be selected from one of the two other categories (Emissions Reduction or Fossil Fuel Substitution), and then the remaining three enhancements could be selected from any of the three categories. In the case of rangeland, there are no existing enhancements available in the Fossil Fuel Substitution category, so for rangeland the rancher would need to pick at least one from Carbon Sequestration and at least one from Emissions Reduction.

As with other bundles, all activities in the bundle must be implemented at some point during the contract period, and payments would be calibrated for the year of implementation for new adoptions. We propose that if an applicant is already implementing some of the activities, they need only add the implementation of the remaining enhancements to be eligible for the bundle.

The lists below are based on current enhancements. We recognize that names and numbers may change as part of the overhaul, though hope that all or nearly all of these enhancements will remain as options for 2017 and beyond.

Proposed Bundles

Climate Change Mitigation Cropland Bundle (select at least 5 total enhancements)

<u>Carbon Sequestration (select at least 1 Carbon Sequestration enhancement)</u>

- CCR99 Resource Conserving Crop Rotation
- CCR98 Improved Resource Conserving Crop Rotation
- SQL04 Use of cover crop mixes
- SQL09 Conversion of cropped land to grass-based agriculture
- SQL10 Crop management system where crop land acres were recently converted from CRP grass/legume cover or similar perennial vegetation
- SQL11 Cover crop in orchards, vineyards, or other woody perennial
- SQL12 Intensive cover cropping
- SQL18 Soil health crop rotation
- SQL05 Use of deep-rooted crops to break up soil compaction
- WQL22 On farm composting of farm organic waste
- PLT20 High residue cover crop or mixtures for weed suppression and soil health
- SOE05 Intensive no-till (organic or non-organic systems)
- PLT06 Renovation of a windbreak shelterbelt or hedgerow

- ANM39 Extending riparian forest buffers
- PLT18 Increasing on farm food production edible woody buffers

Emissions Reductions (select at least 1 Emissions Reduction OR 1 Fossil Fuel Substitution enhancement)

- AIR03 Replace burning of prunings, removals, and other crop residues with non-burning alternatives
- AIR10 Discontinue burning crop residue
- ENR12 Use of legume cover crops as a nitrogen source
- SQL15 Utilize soil health nutrient tool to assess soil nutrient pools
- WQL10 Cover crop to scavenge residual N
- WQL20 Transition to organic cropping system
- WQL25 Split applications of nitrogen based on a PSNT
- WQL26 Reduce the concentration of nutrients imported on farm
- WQL29 High level IPM to reduce pesticide environmental risk
- WQL30 IPM for Organic farming
- WQL32 Apply enhanced efficiency fertilizer products
- WQL33 Use of non-chemical methods to kill cover crops
- WQT13 Intermittent flooding of rice fields

Fossil Fuel Substitution (select at least 1 Emissions Reduction OR 1 Fossil Fuel Substitution enhancement)

- ENR01 Fuel use reduction for field operations
- ENR10 Using Nitrogen provided by legumes, animal manure and compost to supply 90 to 100 percent of the nitrogen needs
- ENR11 Improving energy feedstock production using alley cropping systems with short rotation woody crops
- WQT08 Decreased irrigation water quantity or conversion to non-irrigated production
- WQT09 High level irrigation water management

Climate Change Mitigation Grassland Bundle (select at least 5 total enhancements)

<u>Carbon Sequestration (select at least 1 Carbon Sequestration enhancement)</u>

- PLT16 Management-intensive rotational grazing
- PLT18 Increasing on farm food production edible woody buffers (Pasture only)
- SQL04 Use of cover crop mixes (Pasture only)
- SQL16 High species diversity grazing lands
- ANM03 Incorporate native grasses and/or legumes to 15% or more of herbage dry matter productivity (Pasture only)
- ANM21 Prairie restoration for grazing and wildlife habitat
- ANM29 On farm forage based grazing system
- ANM37 Prescriptive grazing management system for grazing lands
- ANM39 Extending riparian forest buffers
- SQL09 Conversion of cropped land to grass-based agriculture
- SQL18 Soil health for pasture and range (we encourage the creation of a pasture and range equivalent to SQL18)
- SQL19 Management for rangeland soil health (Range only)
- WQL22 On farm composting of farm organic waste (Pasture only)

Emissions Reductions (select at least 1 Emissions Reduction OR 1 Fossil Fuel Substitution enhancement)

- WQL18 Nonchemical pest management for livestock
- WQL19 Transition to organic grazing system
- WQL26 Reduce the concentration of nutrients imported on farm (Pasture only)
- WQL29 High level IPM to reduce pesticide environmental risk
- WQL30 IPM for Organic farming
- WQL32 Apply enhanced efficiency fertilizer products (Pasture only)
- ANM25- Stockpiling of forage to extend the grazing season (eliminating hay cutting reduces fuel use)
- ANM64 Managing livestock parturition to coincide with forage availability (saves energy associated with hay production and harvest)

Fossil Fuel Substitution (select at least 1 Emissions Reduction OR 1 Fossil Fuel Substitution enhancement)

- ENR10 Using Nitrogen provided by legumes, animal manure and compost to supply 90 to 100 percent of the nitrogen needs (Pasture only)
- ENR11 Improving energy feedstock production using alley cropping systems with short rotation woody crops (Pasture only)
- WQT08 Decreased irrigation water quantity or conversion to non-irrigated production (Pasture only)
- WQT09 High level irrigation water management (Pasture only)

Additional Considerations

- Given the importance of climate change impacts on agricultural productivity and the environment, and given the advanced nature of the core carbon sequestration/ soil health enhancements we are proposing, we suggest that you provide as much of a bundle bonus as possible with respect to ranking and payment points.
- Producers who select CCR99 or CCR98 as part of the Climate Change Mitigation Cropland Bundle would received a combined total payment of the supplemental payment for CCR99/CCR98 and the additional payments from other activities.
- As with other bundles, all activities in the bundle must be implemented at some point during the contract period. We suggest that the carbon sequestration enhancement a producer selects must be in place by the second year.
- For the cropland bundle, applicants should be allowed to choose how many acres of their total operation they want to implement the bundle on, though of course their ranking and payment points will reflect those specified acres and not the balance of the operation. For the grassland bundle, because some of the core practices require implementation on all acres, producer choice would be limited to only those enhancements that allow implementation on a portion of the operation.
- The soil health crop rotation (SQL18) was introduced last year and presents an opportunity for producers to increase soil carbon on their land. We encourage NRCS to actively promote this underutilized enhancement to producers, highlighting its high environmental benefit index and payment for producers. Additionally, we encourage NRCS to create an

equivalent soil health enhancement for grazing, to be made available and offered separately and also through the Climate Change Mitigation Grasslands Bundle.

- We understand that as a part of the overhaul, NRCS is reviewing and revising the scores and payments associated with CSP enhancements. As part of this evaluation, we urge the agency to ensure that the scores for enhancements included in the climate change mitigation bundles properly reflect their potential to support carbon sequestration, emissions reductions, and fossil fuel substitution. In many cases, this may require an increase in score to reflect their climate change mitigation potential. There are several enhancements, such as SQL08 and SQL17, that should be revised to include points for their ability to reduce greenhouse gases (including through carbon sequestration) and conserve energy. Additionally, we continue to urge the Agency to increase the supplemental payment rate for resource conserving crop rotations to \$20 per acre.
- Finally, we would also recommend that the proposed climate change mitigation bundles be heavily publicized and cross-referenced in all of the agency's climate change materials, including the Building Blocks.

Like NRCS, we at NSAC and NFU believe that supporting the nation's farmers and ranchers in climate change mitigation efforts is one of the most important conservation efforts ever untaken in this Nation; the long-term positive impacts are incalculable. Farmers and ranchers not only have an enormous opportunity to contribute to the reduction in greenhouse gases, but they are also directly impacted by the consequences of climate change throughout the country. The need to expand NRCS programs that support their mitigation and adaptation efforts is more pressing than ever. We believe the 2017 CSP overhaul presents a unique opportunity to introduce climate change mitigation bundles – their inclusion will go a long way toward making these vital enhancements a commonplace occurrence.

If you have any questions or need further information, please be in touch.

Sincerely,

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