EQIP, CSP, and CLC

Overview

The **Environmental Quality Incentives Program (EQIP)** and the **Conservation Stewardship Program (CSP)** are Natural Resources Conservation Service (NRCS) programs authorized by the Agriculture Act of 2014. The focus of these programs is to improve soil, water, plant, animal, air, and related resources on privately-owned farms, ranches and forest land.

EQIP provides financial, technical, and educational assistance to agricultural producers to help plan and implement practices that address identified resource concerns on agricultural land. Producers can also utilize EQIP for assistance in meeting environmental regulations. Payment rates vary by state and payment is made when activities are complete or when the contract meets NRCS standards.

The first step in the process of receiving EQIP funding is to visit the local NRCS office for assistance in creating a whole farm Conservation Plan. With a Conservation Plan in place, an application for financial assistance can be submitted. The application is reviewed by NRCS to be sure that the applicant is eligible. After eligibility is established, EQIP applications are prioritized using screening and ranking tools that assign point values to national, state, and local priority areas. High priority applications will be ranked and funded first, followed by medium and low, as funding allows. If the application is selected for funding, a contract is signed and the conservation practices are implemented.

Photo - Cover Crops, Rick Cruse

60 percent of overall EQIP funding is ear-marked for "livestock-related practices". The USDA considers all practices implemented by livestock producers to be livestock-related practices.

EQIP is voluntary and contracts can last up to ten years.

CSP rewards producers by providing an annual payment for improving, maintaining, and managing existing conservation activities as well as for undertaking additional conservation activities.

The process of applying for funding involves working through the Conservation Measurement Tool (CMT) with a NRCS staff member. The tool determines the farmer's baseline conservation performance. If the baseline score is too low to be eligible for funding under CSP, EQIP funding can be utilized to bring the farm up to the required level. If the score is high enough and the farmer qualifies for CSP, the next step is to apply. Based on current conservation performance, and future conservation activities, the farmer receives environmental benefit payment points. Payment rate is multiplied by environmental points and number of acres. NRCS selects the highest scoring applications, based on current performance and future plans, until all acres allotted to that particular state, for a given year, are allocated. Approximately twice as many farmers apply as get approved for funding. Maximum annual payment per farm is $40,000.

CSP is a voluntary program, contracts last five years and can be renewed.

Continuous Living Cover (CLC) refers to the concept of keeping plant cover on the land all year long. Green Lands Blue Waters promotes five CLC strategies: agroforestry, cover crops, perennial forage, perennial grains, and biomass (http://greenlandsbluewaters.net/strategies/clc).

RCCRs

Because of the many benefits provided by Resource-Conserving Crop Rotations (RCCRs), the Farm Bill offers a "supplemental payment" for their adoption and improvement under CSP. RCCRs can include perennial grass, a legume, a legume-grass mixture, or a small grain grown in combination with a grass or legume that is used as a green manure. This payment is a CSP supplemental payment option and is therefore above and beyond the CSP per acre payment rate.

Photo – Alfalfa Harvest, bug_g_mebracid

This chapter was created to explore different ways Farm Bill funding might support continuous living cover strategies and systems.

Conservation Activities – The Toolbox for Increasing Continuous Living Cover

Both EQIP and CSP utilize NRCS conservation activities to meet conservation goals. EQIP uses a set of conservation activities referred to as conservation practices. CSP utilizes the same conservation practices as well as additional activities called enhancements. As of 2015, NRCS lists 35 conservation practices and 119 enhancements. **Table 1** shows a subset of NRCS conservation practices and **Table 2** shows a subset of NRCS enhancements, selected because they have the potential to support CLC strategies in the Upper Mississippi River Basin states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The tables provide an overview of the actual or potential relationship between conservation activities and CLC strategies.

Table 1: NRCS conservation practices to be used with EQIP and/or CSP and the CLC strategies that might be supported by each in the Upper Mississippi River Basin.

Practice Number	Practice Name	CLC strategies				
		Forage	Biomass	Perennial Grains	Agro-forestry	Cover Crops
311	Alley Cropping	X	X	X	X	X
327	Conservation Cover				X	
328	Conservation Crop Rotation	X	X	X		X
332	Contour Buffer Strips	X	X	X		
331	Contour Orchard & Other Perennial Crops	X	X	X	X	
340	Cover Crop					X
342	Critical Area Planting	X	X	X	X	
589c	Cross-Wind Trap Strips	X	X	X		
647	Early Successional Habitat Development/ Management	X			X	
386	Field Border	X	X	X	X	
393	Filter Strip	X		X		
512	Forage and Biomass Planting	X	X	X		
511	Forage Harvest Management	X	X	X		
412	Grassed Waterway	X	X	X		
422	Hedgerow Planting				X	
603	Herbaceous Wind Barriers	X	X	X		
595	Integrated Pest Management	X	X	X	X	X
379	Multi-Story Cropping		X	X	X	X
528	Prescribed Grazing	X		X		X
550	Range Planting	X		X		X
391	Riparian Forest Buffer				X	
390	Riparian Herbaceous Cover	X	X	X		
381	Silvopasture Establishment	X		X	X	
580	Streambank & Shoreline Protection	X	X	X	X	
612	Tree & Shrub Establishment	X	X		X	
490	Tree & Shrub Site Preparation			X	X	
645	Upland Wildlife Habitat Management	X		X	X	
739	Vegetated Subsurface Drain Outlet	X	X	X		
601	Vegetative Barriers		X			
380	Windbreak/Shelterbelt Establishment	X			X	
650	Windbreak/Shelterbelt Renovation	X			X	

Table 2: NRCS enhancements to be used with CSP and the CLC strategies that might be supported by each in the Upper Mississippi River Basin.

Activity Code	Enhancement Name	CLC Strategies				
		Forage	Biomass	Perennial Grains	Agro-forestry	Cover Crops
ANM21	Prairie Restoration for Grazing and Wildlife Habitat	X				
ANM29	On-Farm Forage Based Grazing System	X		X		
ANM32	Extend Existing Filter Strips or Riparian Herbaceous Cover for Water Quality Protection and Wildlife Habitat	X	X	X		
ANM35	Enhance Wildlife Habitat on Expired Grass/legume Covered CRP Acres or Acres with Similar Perennial Vegetated Cover Managed as Hayland	X				
ANM37	Prescriptive Grazing Management System for Grazing Lands	X		X		
ANM39	Extending Riparian Forest Buffers for Water Quality Protection and Wildlife Habitat	X			X	
ANM40	Extending Existing Field Borders for Water Quality Protection and Wildlife Habitat		X	X	X	
ANM41	Multi-Species Native Perennials and Native Self-Seeding Annuals for Biomass/wildlife Habitat	X	X			
CCR98	Improved Resource Conservation Crop Rotation	X	X	X		
CCR99	Resource-Conserving Crop Rotation	X		X		
ENR11	Improving Energy Feedstock Production Using Alley Cropping Systems with Short Rotation Woody Crops		X		X	
ENR12	Use of Legume Cover Crops as a Nitrogen Source					X
PLT06	Renovation of a Windbreak, Shelterbelt or Hedgerow for Wildlife Habitat				X	
PLT15	Establish Pollinator and/or Beneficial Insect Habitat	X				
PLT16	Intensive Rotational Grazing	X		X	X	

PLT20	High Residue Cover Crop or Mixtures of High Residue Cover Crops for Weed Suppression and Soil Health					X
SQL04	Use of Cover Crop Mixes					X
SQL05	Use of Deep Rooted Crops to Breakup Soil Compaction	X	X	X		
SQL09	Conversion of Cropped Land to Grass-Based Agriculture	X	X	X		
SQL10	Crop Management System where Crop Land Acres were Recently Converted from CRP Grass/legume Cover or Similar Perennial Vegetation					X
SQL11	Cover Cropping in Orchards, Vineyards and Other Woody Perennial Horticultural Crops					X
SQL12	Intensive Cover Cropping in Annual Crops					X
SQL14	Integrate Grazing into Crop and Forest Systems	X		X	X	
SQL16	High Species Diversity Grazing Lands	X				
SQL18	Soil Health Crop Rotation	X	X	X		X
WQL10	Plant a Cover Crop that will Scavenge Residual Nitrogen					X
WQL26	Reduce the Concentration of Nutrients Imported on Farm	X		X		

CSP offers the opportunity to increase ranking points and payments by allowing the farmer to choose "bundles" of enhancements. Bundles are groups of enhancements that are implemented together. Choosing a bundle increases ranking points and payments more than if enhancements are chosen individually from the available list of options.

CSP Bundle Example: Pasture Enhancement Bundle BPA10 (improves forage utilization) combines the following enhancements:

ANM25-	Stockpiling of forages to extend the grazing season
ANM29-	On-farm forage based grazing system
ANM64-	Managing livestock parturition to coincide with forage availability
PLT16-	Intensive rotational grazing
WQL07-	Split nitrogen applications 50% after the crops/pasture emerge/green-up

For a more in-depth description of these practices and enhancements as they relate to CLC,

please see **Table 5** and **Table 6** at the end of this chapter.

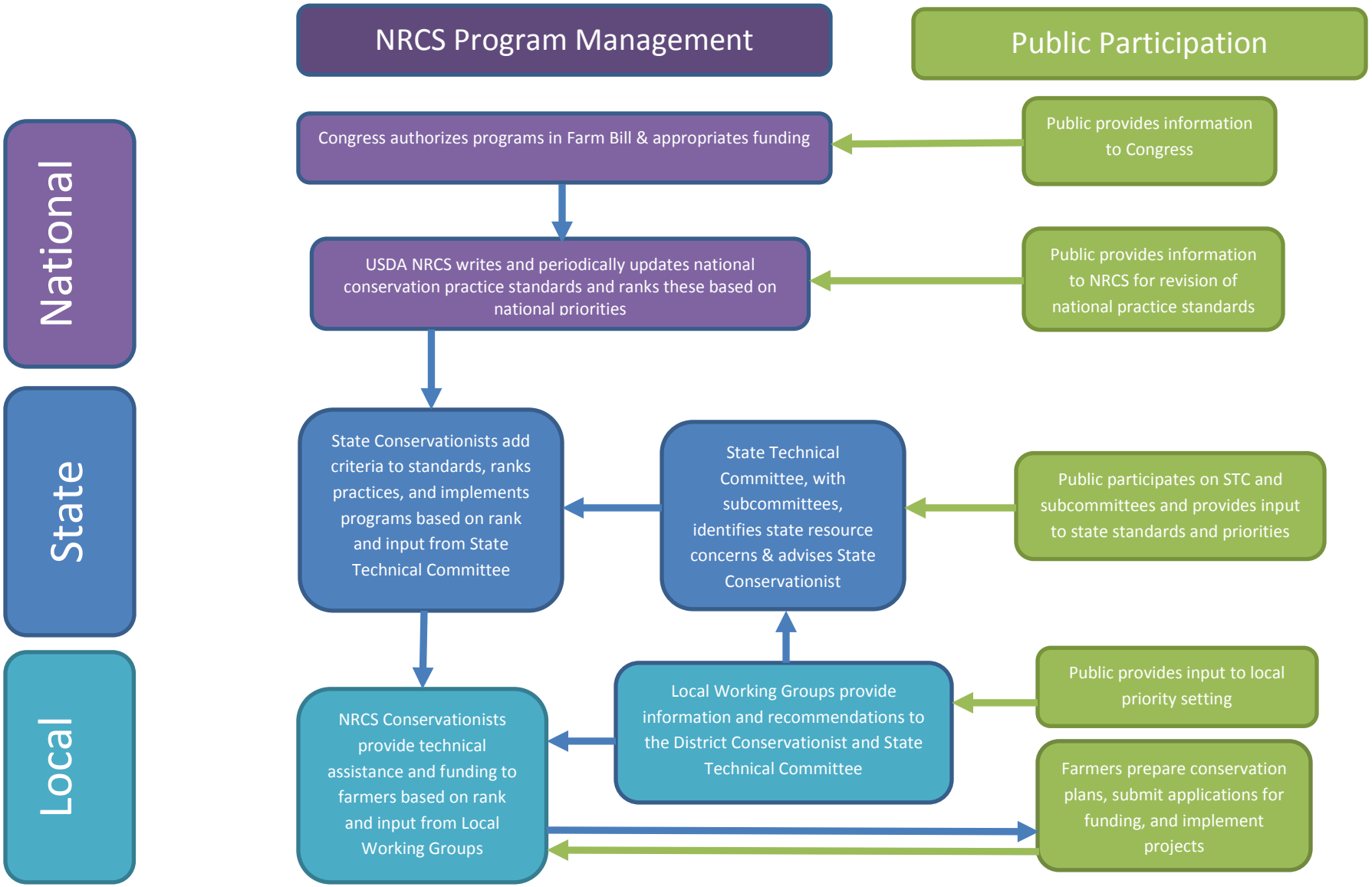
How Conservation Activities are Prioritized to Address Local Concerns

Each individual state chooses which conservation activities it will fund based on local concerns. Groups at the county and state level assist the State Conservationist in deciding which conservation activities will be funded. The State Technical Committee (STC) directly advises the State Conservationist to assist in making technical decisions. The STC listens to recommendations on the county level from Local Work Groups (LWGs). This way the State Conservationist can guide national programs that address needs on a local level (United States Department of Agriculture Natural Resource Conservation Service, 2006).

In addition to representatives from Federal and State agencies, STC and LWG membership includes "individuals with conservation expertise, agricultural producers, nonprofit organizations, persons knowledgeable about conservation techniques and programs, and representatives from agribusiness" (United States Department of Agriculture Natural Resource Conservation Service, 2006). The meetings are open to the public. Citizens are welcome to voice concerns and offer input regarding conservation as it applies to agriculture.

Figure 1 summarizes how EQIP practices and priorities are formed and implemented from the national level down to the local level.

Figure1. How the Environmental Quality Incentives Program (EQIP) is Prioritized and Approved



Prairie STRIPS - One of Many Examples of How NRCS Programs Might Fund On-Farm Conservation

In light of the concerns associated with erosion and runoff, Iowa State University and several partners formed STRIPS (Science-based Trials of Row-crops Integrated with Prairie Strips). The STRIPS project has been collecting data on the benefits of adding perennial native plants to conventional row-crop settings. The research provides hard data that shows how converting just 10% of a crop field to perennial natives, can reduce the loss of topsoil by 90% (Helmers et al., 2012).

The assistance that the STRIPS project provides is informational only and does not provide funding.

Several of the NRCS EQIP and CSP funded activities, presented in this document, allow for and fund the types of placement of perennial species on the landscape that the STRIPS project has shown to be so beneficial. In most cases, when native plants are allowed under a conservation activity, the payment rate is higher for natives than for non-natives to cover the higher cost of implementing natives. Additionally, some of the conservation activities allow for the harvest of the native perennials placed on the field. Native prairie plants can be grazed, hayed, and harvested for forage or energy biomass.

Tables 3 & **4** show NRCS activities that relate to prairie strips.

By strategically placing these conservation activities on the field and incorporating native perennials, multiple benefits can be realized. The benefits include habitat for wildlife, pollinators and beneficial insects, improved soil health and fertility, reduced loss of topsoil and nutrients, better resilience during heavy rain and drought, and improved water quality as well as potential income from harvest. These conservation activities will take up a portion of the farmer's land, but the benefits reach beyond the borders of the farm now and for future generations.

For more information on STRIPS project see the "Placement of Continuous Living Cover" chapter of this manual, the STRIPS publications included in the appendix of this manual, or visit http://www.nrem.iastate.edu/research/STRIPs/

Table 3. List of NRCS conservation *practices* that relate to prairie strips.	
Activity Code	Practice Name
311	Alley Cropping
332	Contour Buffer Strips
342	Critical Area Planting
589c	Cross-Wind Trap Strips
647	Early Successional Habitat
386	Field Border
393	Filter Strip
412	Grassed Waterway
603	Herbaceous Wind Barriers
595	Integrated Pest Management
390	Riparian Herbaceous Cover
645	Upland Wildlife Habitat
601	Vegetative Barriers

Table 4. List of NRCS *enhancements* that relate to prairie strips.	
Activity Code	Enhancement Name
ANM21	Prairie Restoration for Grazing and Wildlife Habitat
ANM32	Extend Existing Filter Strips or Riparian Herbaceous Cover for Water Quality Protection and Wildlife Habitat
ANM35	Enhance Wildlife Habitat on Expired Grass/legume Covered CRP Acres or Acres with Similar Perennial Vegetated Cover Managed as Hayland
ANM40	Extending Existing Field Borders for Water Quality Protection and Wildlife Habitat
ANM41	Multi-Species Native Perennials and Native Self-Seeding Annuals for Biomass/wildlife Habitat
PLT15	Establish Pollinator and/or Beneficial Insect Habitat
SQL09	Conversion of Cropped Land to Grass-Based Agriculture

Table 5. Descriptions of Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) practices† and their potential relevance to Continuous Living Cover (CLC) strategies in the US Midwest§.	
EQIP PRACTICE AND COMMONLY ASSOCIATED PRACTICES‡	PRACTICE DESCRIPTION¶ AND APPLICATION TO CLC
311 Alley Cropping Commonly Associated Practices ▪ 612 Tree and Shrub Establishment ▪ 384 Woody Residue Treatment	Alley cropping is a practice that could support multiple CLC strategies. By definition, alley cropping is the planting of a vegetative crop in areas between rows of a woody species. Because of the woody species rows, alley cropping automatically has an agroforestry component. The areas between the woody species rows could be planted to a perennial forage crop, a biomass crop, or a perennial grain. If annual row crops or small grains are planted between the woody rows, then cover crops could be used along with those annual crops. Therefore, alley cropping is a practice with potential to support CLC in each of the five CLC categories. Alley cropping will also support "stacking" of CLC strategies.
327 Conservation Cover Commonly Associated Practices ▪ 314 Brush Management ▪ 342 Critical Area Planting ▪ 612 Tree and Shrub Establishment ▪ 645 Upland Wildlife Habitat Management	Conservation Cover was developed to protect soil and water resources on lands that require permanent cover. While the NRCS states that it is not to be used for forage production, the Practice Standards do mention that "Periodic removal of some products such as high value trees, medicinal herbs, nuts, and fruits is permitted…" and therefore supports CLC in an agroforestry system. Conservation Cover has the potential to be used to support CLC for the planting of perennial forages, however it is unclear whether NRCS allows haying or grazing and it therefore may not apply to CLC.
328 Conservation Crop Rotation Commonly Associated Practices ▪ 330 Contour Farming ▪ 340 Cover Crops ▪ 329 Residue and Tillage Management, No Till ▪ 345 Residue and Tillage Management, Reduced Till ▪ 600 Terraces	Conservation Crop Rotation is defined by the NRCS as "a planned sequence of crops grown on the same ground over a period of time." This conservation practice supports the use of CLC strategies cover crops, pasture & forage, biomass as well as perennial grains.
332 Contour Buffer Strips Commonly Associated Practices ▪ 412 Grassed Waterway ▪ 595 Integrated Pest Management ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till	Contour Buffer Strips uses herbaceous vegetative cover to prevent erosion and improve water infiltration on hillslopes. This practice has the potential to be used as a forage crop with some restrictions on time of harvest. Additional CLC strategies include biomass and perennial grain production.

340 Cover Crop Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till ▪ 590 Nutrient Management ▪ 595 Integrated Pest Management	Cover Crops are grown during times of the year when no cash crop is being grown. The benefits of growing cover crops are many, including improved soil health and water infiltration. Some cover crops can be harvested for sale or provide forage for livestock.
342 Critical Area Planting Commonly Associated Practices ▪ 484 Mulching ▪ 590 Nutrient Management ▪ 315 Herbaceous Weed Control	Critical Area Planting deals with the seeding and establishment of permanent vegetation in highly erodible areas, or areas where establishing vegetation is difficult. Areas of steep slope and/or rough terrain qualify for this practice. An agroforestry crop that is hand-picked, such as fruits or nuts or grazing by sheep or goats may be opportunities to integrate a harvestable crop along with this practice.
589c Cross-Wind Trap Strips Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 340 Cover Crop ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till ▪ 645 Upland Wildlife Habitat Management ▪ 315 Herbaceous Weed Control	Cross Wind Trap Strips are herbaceous strips planted perpendicular to the prevailing winds to prevent wind erosion and protect growing crops. Potential CLC strategies to be used with Cross Wind Trap Strips include biomass, pasture & forage, and perennial grains.
647 Early Successional Habitat Development/Management Commonly Associated Practices ▪ 386 Field Borders ▪ 511 Forage Harvest Management ▪ 460 Land Clearing ▪ 595 Integrated Pest Management ▪ 612 Tree/Shrub Establishment ▪ 645 Upland Wildlife Habitat Management	The purpose of the Early Successional Habitat Development/Management practice is to create and maintain wildlife habitat and/or natural communities. Grazing can be used as a management strategy and there is potential to use this practice in an agroforestry setting.

386 Field Border Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till ▪ 647 Early Successional Habitat Development/Management ▪ 645 Upland Wildlife Habitat Management ▪ 644 Wetland Wildlife Habitat Management	Field Borders provide many ecosystem services and can be profitable as well. Plant field borders to prevent wind and water erosion, protect soil and water quality. Harvest perennial grains, biomass, and/or forage.
393 Filter Strip Commonly Associated Practices ▪ 590 Nutrient Management ▪ 595 Integrated pest management ▪ 633 Waste Recycling ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till	Filter Strips are planted to remove contaminants from overland flow. The strip should be permanent, herbaceous vegetation. It is not clear whether perennial grains for harvest are allowable. In some cases the strips can be grazed.
512 Forage and Biomass Planting Commonly Associated Practices ▪ 511 Forage and Biomass Harvest ▪ 315 Herbaceous Weed Control ▪ 590 Nutrient Management ▪ 528 Prescribed Grazing ▪ 645 Upland Wildlife Habitat Management	Forage and Biomass Planting is a multi-purpose practice. Reduce erosion while increasing livestock health and/or produce feedstock for biofuel or energy production. CLC strategies supported are biomass, pasture & forage, and perennial grains.
511 Forage Harvest Management Commonly Associated Practices ▪ 528 Prescribed Grazing ▪ 590 Nutrient Management ▪ 633 Waste Utilization	Forage Harvest Management includes timely cutting and removal of forages and biomass from the field as hay, greenchop, or insilage with the goal of optimizing the desired forage stand, plant community, and stand life. This practice can support CLC farming through the management of forages, biomass, and perennial grains.
412 Grassed Waterway Commonly Associated Practices ▪ 600 Terrace ▪ 362 Diversion ▪ 342 Critical Area Planting ▪ …"and other erosion control practices"	A Grassed Waterway is a shaped or graded channel that is established with suitable vegetation to convey surface water at a non-erosive velocity. Prescribed grazing can be practiced on the waterways. Perennial grains and biomass crops are potentially suitable vegetation for grassed waterways, but it is unclear whether or not harvest is allowable.

422 Hedgerow Planting Commonly Associated Practices ▪ 612 Tree/Shrub Establishment ▪ 645 Upland Wildlife Habitat Management	Hedgerow Planting has many purposes including, but not limited to: living fences, barriers to noise and dust, and wildlife/pollinator habitat. The CLC practice that can be supported here is agroforestry if a harvestable fruit or nut crop is planted.
603 Herbaceous Wind Barriers Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 340 Cover Crop ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till ▪ 645 Upland Wildlife Habitat Management ▪ 315 Herbaceous Weed Control	Herbaceous Wind Barriers are strips of herbaceous plants planted across prevailing winds. The purpose is to reduce wind erosion, protect crops, and to control snow deposition to increase plant-available moisture. Potential CLC strategies include perennial grain, pasture & forage, and biomass.
595 Integrated Pest Management Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 590 Nutrient Management ▪ 327 Conservation Cover ▪ 340 Cover Crop	Integrated Pest Management uses practices that prevent, avoid, monitor, and suppress pests. Some of these practices support CLC farming such as using cover crops, agroforestry, biomass production, pasture & forage, and perennial grains.
379 Multi-Story Cropping Commonly Associated Practices ▪ 666 Forest Stand Improvement ▪ 612 Tree/Shrub Establishment ▪ 660 Tree/Shrub Pruning ▪ 490 Tree/Shrub Site Preparation ▪ 472 Access Control	Multistory cropping requires the development and implementation of a forest management plan that incorporates the growth, management and harvest of non-timber forest products (e.g., foliage, mushrooms, berries, roots, nuts, etc.) while maintaining the option to manage the timber crop as a long-term economic investment. This practice does not apply to land that is grazed. Possible CLC strategies include agroforestry, biomass production, perennial grains, and cover crops.
528 Prescribed Grazing Commonly Associated Practices ▪ 314 Brush Management ▪ 512 Forage and Biomass Planting ▪ 550 Range Planting ▪ 382 Fence	Prescribed Grazing can be implemented to meet financial as well as conservation objectives. Prescribed grazing could be applied using cover crops, pasture & forage, and perennial grain CLC strategies.
550 Range Planting Commonly Associated Practices ▪ 314 Brush Management ▪ 548 Grazing Land Mechanical Treatment ▪ 338 Prescribed Burning ▪ 528 Prescribed Grazing	Range planting is establishment of adapted perennial vegetation on grazing land. This practice applies to rangeland, native or naturalized pasture, grazed forest, or other suitable land areas where the principle method of vegetation management is grazing. Applicable CLC strategies include perennial grain, grazing & forage, and possibly agroforestry.

391 Riparian Forest Buffer Commonly Associated Practices ▪ 390 Riparian Herbaceous Cover ▪ 395 Stream Habitat Improvement and Management ▪ 580 Streambank and Shoreline Protection ▪ 612 Tree/Shrub Establishment	A Riparian Forest Buffer is an area predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies. Plant trees suitable for timber, fruit, or nut crops to add income. CLC practice agroforestry applies here and possibly biomass production.
390 Riparian Herbaceous Cover Commonly Associated Practices ▪ 327 Conservation Cover ▪ 382 Fence ▪ 472 Use Exclusion ▪ 644 Wetland Wildlife Habitat Management ▪ 528 Prescribed Grazing ▪ 580 Stream bank and Shoreline Protection ▪ 578 Stream Crossing ▪ 614 Watering Facility	Riparian Herbaceous Cover consists of grasses, sedges, rushes, ferns, legumes, and forbs tolerant of intermittent flooding or saturated soils, established or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats. Perennial grains and biomass crops could be planted as CLC strategies. Additionally, the area can be grazed with limitations.
381 Silvopasture Establishment Commonly Associated Practices ▪ 666 Forest Stand Improvement ▪ 612 Tree/Shrub Establishment ▪ 660 Tree/Shrub Pruning ▪ 512 Forage and Biomass Planting ▪ 528 Prescribed Grazing	Silvopasture establishment involves establishing a combination of trees or shrubs, and compatible forages on the same acreage. Agroforestry, pasture & forage, and perennial grains could all be stacked as CLC farming under this practice.
612 Tree & Shrub Establishment Commonly Associated Practices ▪ 660 Tree/Shrub Pruning ▪ 595 Integrated Pest management ▪ 666 Forest Stand Improvement ▪ 590 Nutrient Management ▪ 472 Access Control	Tree and Shrub Establishment is establishing woody plants by planting or seeding. One could apply this practice in an agroforestry setting, woody biomass production, or pasture & forage (silvopasture).
490 Tree & Shrub Site Preparation Commonly Associated Practices ▪ 612 Tree/Shrub Establishment ▪ 384 Woody Residue Treatment ▪ 645 Upland Wildlife Habitat Management ▪ 380 Windbreak/Shelterbelt Establishment	Tree/shrub site preparation involves the treatment of areas to improve site conditions for establishing trees and/or shrubs. This practice could be used in conjunction with Tree & Shrub Establishment (612) and would therefore apply to the same CLC strategies: agroforestry, biomass, and pasture & forage (silvopasture).

645 Upland Wildlife Habitat Management Commonly Associated Practices ▪ 614 Watering Facility ▪ 643 Restoration, Management of Rare or Declining Habitats ▪ 472 Use Exclusion ▪ …"and many more"	Upland wildlife habitat management offers guidance on establishing and managing upland habitats and connectivity within the landscape for wildlife. A farmer could put together a plan that includes woody-species corridors for wildlife movement, perennial forage areas, vegetative strips harvestable as biomass after the nesting season, and could also use cover cropping as part of a plan to create a season-long food supply for wildlife.
739 Vegetated Subsurface Drain Outlet Commonly Associated Practices ▪ 554 Drainage Water Management ▪ 590 Nutrient Management ▪ 340 Cover Crop	A Vegetated Subsurface Drain Outlet diverts drainage outlets to distribute the drainage discharge. The purpose is to reduce nitrate loading and to restore or maintain soil saturation levels. These structures must be covered with permanent vegetation such as perennial grain, biomass crop, or native prairie plants. This area can be harvested as forage, biomass, perennial grain, or grazed with some limitations. These structures support CLC strategies pasture & forage, biomass, and perennial grains.
601 Vegetative Barriers Commonly Associated Practices ▪ 595 Integrated Pest Management ▪ 590 Nutrient Management ▪ 328 Crop Rotation ▪ 329 Residue and Tillage management, No-Till ▪ 345 Residue and Tillage Management, Reduced Till	A vegetative barrier is a permanent strip of stiff, dense vegetation established along the general contour of slopes or across concentrated flow areas. Due to the types of vegetation required for this practice, it is not suitable for grazing or woody plants. However, a non-woody biomass crop might be a good option for this practice.
380 Windbreak/Shelterbelt Establishment Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 340 Cover Crop ▪ 344 Residue Management ▪ 490 Tree/Shrub Site Preparation ▪ 612 Tree/Shrub Establishment ▪ 660 Tree/Shrub Pruning ▪ 645 Upland Wildlife Management	Windbreaks or shelterbelts are single to multiple rows of trees and possibly shrubs planted in a linear fashion. Use this practice to protect grazing livestock and/or consider using species that provide additional income such as fruit and nut trees and shrubs. In this way, windbreaks and shelterbelts support the agroforestry and silvopasture components of CLC.
650 Windbreak/Shelterbelt Renovation Commonly Associated Practices ▪ 328 Conservation Crop Rotation ▪ 340 Cover Crop ▪ 344 Residue Management ▪ 490 Tree/Shrub Site Preparation ▪ 612 Tree/Shrub Establishment ▪ 660 Tree/Shrub Pruning ▪ 645 Upland Wildlife Management	When renovating windbreaks or shelterbelts, incorporate species that diversify and create added income such as fruit and nut species of shrubs or trees. Like Windbreak/Shelterbelt Establishment (380) this practice can support agroforestry and silvopasture CLC strategies.

†NRCS headquarters has a comprehensive list of approved conservation practices. Each state chooses which practices it will fund based on state conservation priorities.
http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/

‡ Associated practices were found on the NRCS "Info Sheet/Practice Overview" documents for each EQIP practice. Documents can be found here:
http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/references/?cid=nrcs143_026849

§ CLC is the practice of integrating summer row crops, winter annual crops, and perennial crops with the goal of keeping farm fields covered and rooted in place continuously throughout the year.
http://greenlandsbluewaters.net/

¶ More information and details regarding NRCS conservation practices can be found in the Conservation Standards on the NRCS web site.
http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/references/?cid=nrcs143_026849

("Conservation Practices" | NRCS)
("Field Office Technical Guide (FOTG)" | NRCS)

Table 6. Descriptions of Natural Resource Conservation Service (NRCS) conservation ***enhancements***† and their potential relevance to Continuous Living Cover (CLC)‡ strategies in the US Midwest.

ACTIVITY CODE	NRCS ENHANCEMENT NAME	ENHANCEMENT DESCRIPTION AND APPLICATION TO CLC
ANM21	Prairie Restoration for Grazing and Wildlife Habitat	This enhancement includes the implementation of a grazing management plan and therefore applies to permanent pasture. Potential for use with STRIPS.
ANM29	On-Farm Forage Based Grazing System	Applies to the implementation and management of a perennial-based pasture system.
ANM32	Extend Existing Filter Strips or Riparian Herbaceous Cover for Water Quality Protection and Wildlife Habitat	Applies to the extension/widening of existing perennial buffers. Grazing is allowed with this enhancement if a grazing management plan is in effect.
ANM35	Enhance Wildlife Habitat on Expired Grass/legume Covered CRP Acres or Acres with Similar Perennial Vegetated Cover Managed as Hayland	This enhancement applies to perennial grass/legume hayland managed for both wildlife and forage production.
ANM37	Prescriptive Grazing Management System for Grazing Lands	For the implementation of a prescriptive grazing management system. Also applies to silvopasture.
ANM39	Extending Riparian Forest Buffers for Water Quality Protection and Wildlife Habitat	Applies to the widening of existing forest buffers only. May be grazed if a grazing management plan is in place.

ANM40	Extending Existing Field Borders for Water Quality Protection and Wildlife Habitat	This enhancement applies to the extension or widening of existing field borders using perennial forbs and/or shrubs. Vegetation can be harvested for bio-energy.
ANM41	Multi-Species Native Perennials and Native Self-Seeding Annuals for Biomass/wildlife Habitat	This enhancement consists of establishing native perennial and native self-seeding annual vegetation for biomass production and wildlife habitat. The biomass may be harvested for renewable energy or forage, grazed, or left in place.
CCR98	Improved Resource Conservation Crop Rotation	This enhancement applies to existing resource-conserving crop rotation. Improvements include adding a growing year for perennial crops, a perennial crop substituted for a row crop, and changing a perennial legume to a perennial grass or grass/legume.
CCR99	Resource-Conserving Crop Rotation	Applicable crops include perennial grass, legume as forage or green manure, legume-grass mixture, and other mixtures. This is a potential fit for pasture/forage systems.
ENR11	Improving Energy Feedstock Production Using Alley Cropping Systems with Short Rotation Woody Crops	Short rotations woody crops grown for energy feedstock directly support the CLC strategies of biomass and agroforestry.
ENR12	Use of Legume Cover Crops as a Nitrogen Source	This enhancement directly supports the CLC strategy of using cover crops to keep living plants on the land when row crops are not currently growing.
PLT06	Renovation of a Windbreak, Shelterbelt or Hedgerow for Wildlife Habitat	Harvest of wood products is allowed under this enhancement that supports renovation of existing windbreaks, shelterbelts, or hedgerows. This enhancement has the potential to support the CLC strategy of agroforestry.
PLT15	Establish Pollinator and/or Beneficial Insect Habitat	Haying and grazing may be used as maintenance practices with some restrictions therefore this enhancement has the potential to support forage/grazing.
PLT16	Intensive Rotational Grazing	This enhancement is for the harvest efficiency of grazing livestock to increase forage harvest, and to improve forage quality and livestock health. It directly supports perennial forage/grazing systems.
PLT20	High Residue Cover Crop or Mixtures of High Residue Cover Crops for Weed Suppression and Soil Health	By utilizing biomass from a cover crop or cover crop mixture as a living or killed mulch to suppress weed seed germination and to add carbon to the terrestrial carbon pool, this enhancement supports the CLC strategy of cover crops.
SQL04	Use of Cover Crop Mixes	This enhancement is for the use of cover crop mixes that contain two (2) or more different species of cover crops or cultivars of a single species.
SQL05	Use of Deep Rooted Crops to Breakup Soil Compaction	Deep rooted crops that are supported by this enhancement include perennials and annuals that have the potential to align with CLC strategies forage and perennial grains.

SQL09	Conversion of Cropped Land to Grass-Based Agriculture	Grass-based agriculture aligns with CLC practices forage, biomass, and perennial grains.
SQL10	Crop Management System where Crop Land Acres were Recently Converted from CRP Grass/legume Cover or Similar Perennial Vegetation	This enhancement supports the use of high residue cover crops to stabilize or increase carbon sinks in croplands recently converted from perennial vegetation to annually planted crops. The CLC strategy of cover crops has the potential to be supported by this enhancement.
SQL11	Cover Cropping in Orchards, Vineyards and Other Woody Perennial Horticultural Crops	This enhancement has the potential to support the CLC strategy of cover crops in an agroforestry operation.
SQL12	Intensive Cover Cropping in Annual Crops	This enhancement directly supports the CLC strategy of using cover crops. Under this particular enhancement, the cover crop is not to be harvested or grazed.
SQL14	Integrate Grazing into Crop and Forest Systems	Because this enhancement supports grazing in crop as well as forest systems, it potentially aligns with forage, perennial grain, and agroforestry CLC strategies.
SQL16	High Species Diversity Grazing Lands	With this enhancement, warm-season perennial grazing lands will be overseeded with a multi-species diverse mixture of annual grasses, clovers, and broadleaf species. This has the potential to support the forage CLC strategy.
SQL18	Soil Health Crop Rotation	This enhancement supports the implementation of a crop rotation that addresses the four principle components of a soil health: adds diversity to the cropping system; maintains residue throughout the year; keeps a living root; and minimizes soil chemical, physical and biological disturbance. There is potential for this enhancement to align with CLC strategies, perennial grain, forage, and biomass. This enhancement does not apply to permanent hayland, orchards, or vineyards.
WQL10	Plant a Cover Crop that will Scavenge Residual Nitrogen	This enhancement has the potential to support the CLC strategy of cover crops when crops with at least a “very good” rating for scavenging nitrogen as documented in “*Managing Cover Crops Profitably, 3rd Edition*” (Sarrantonio, 1998), Chart 2 Performance & Roles, pg. 67, are planted.
WQL26	Reduce the Concentration of Nutrients Imported on Farm	By growing the majority of feed for livestock on the farm and properly accounting for the nutrients in the manure when applying it to crop land, better nutrient cycling is achieved. Nutrients are not concentrated on the farm and a more sustainable operation is possible. This enhancement has to potential to support CLC strategies forage and perennial grain.

	† More information and details regarding NRCS enhancements can be found in the Enhancement Activity Job Sheets on the NRCS web site. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/csp/?cid=nrcseprd421806 ‡ CLC is the practice of integrating summer row crops, winter annual crops, and perennial crops with the goal of keeping farm fields covered and rooted in place continuously throughout the year. http://greenlandsbluewaters.net/

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