

Climate-Smart Agriculture and Forestry (CSAF) Mitigation ND Activities List for FY2024



Highlighted activities have been added to the list in FY2024. *Noted activities are added to the list as "provisional."^[1]

Mitigation Categories	Code	Conservation Practice Standard Name ^[2] ^[3] (practice unit)	Code	Conservation Stewardship Program (CSP) Enhancement Activities
Soil Health	<u>327</u>	Conservation Cover (acres)	None Available	
	<u>328</u>	Conservation Crop Rotation (acres)	<u>E328A</u>	Resource conserving crop rotation
			<u>E328B</u>	Improved resource conserving crop rotation
			<u>E328E</u>	Soil health crop rotation
			<u>E328F</u>	Modifications to improve soil health and increase soil organic matter
			<u>E328N</u>	Intercropping to improve soil health
	<u>329</u>	Residue and Tillage Management, No Till (acres)	<u>E329A</u>	No till to reduce soil erosion
			<u>E329B</u>	No till to reduce tillage induced particulate matter
			<u>E329C</u>	No till to increase plant-available moisture
			<u>E329D</u>	No till system to increase soil health and soil organic matter content
			<u>E329E</u>	No till to reduce energy
	<u>340</u>	Cover Crop (acres)	<u>E340A</u>	Cover crop to reduce soil erosion
			<u>E340B</u>	Intensive cover cropping to increase soil health and soil organic matter content
			<u>E340C</u>	Use of multi-species cover crops to improve soil health and increase soil organic matter
			<u>E340D</u>	Intensive orchard/vineyard floor cover cropping to increase soil health
			<u>E340F</u>	Cover crop to minimize soil compaction
			<u>E340G</u>	Cover crop to reduce water quality degradation by utilizing excess soil nutrients
			<u>E340H</u>	Cover crop to suppress excessive weed pressures and break pest cycles
			<u>E340J</u>	Cover crop to improve moisture use efficiency and reduce salts

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Mitigation Categories	Code	Conservation Practice Standard Name ^[2] ^[3] (practice unit)	Code	Conservation Stewardship Program (CSP) Enhancement Activities
Soil Health	345	Residue and Tillage Management, Reduced Till (acres)	E345A	Reduced tillage to reduce soil erosion
			E345B	Reduced tillage to reduce tillage induced particulate matter
			E345D	Reduced tillage to increase soil health and soil organic matter content
			E345E	Reduced tillage to reduce energy use
	386	Field Border (acres)	E386B	Enhanced field borders to increase carbon storage along the edge(s) of the field
			E386D	Enhanced field borders to increase food for pollinators along the edge(s) of a field
			E386E	Enhanced field borders to increase wildlife food and habitat along the edge(s) of a field
	393	Filter Strips (acres)	E393A	Extend existing filter strip to reduce water quality impacts
412	Grassed Waterways (acres)	E412A	Enhance a grassed waterway	
484	Mulching (acres)	E484A	Mulching to improve soil health	
603	Herbaceous Wind Barriers (feet)	None Available		
Nitrogen Management	590	Nutrient Management (acres)	E590A	Improving nutrient uptake efficiency and reducing risk of nutrient losses
			E590B	Reduce risks of nutrient loss to surface water by utilizing precision agriculture technologies
Livestock Partnership	317	Composting Facility (number)*	None Available	
	313	Waste Storage Facility (number)* • Used to implement compost bedded-pack ^[4]	None Available	
	366	Anaerobic Digester (number)	None Available	
	367	Roofs and Covers (number)* • Used to cover a waste management facility to capture biogas ^[4]	None Available	
	632	Waste Separation Facility (number)*	None Available	

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Mitigation Categories	Code	Conservation Practice Standard Name ^[2] ^[3] (practice unit)	Code	Conservation Stewardship Program (CSP) Enhancement Activities
Grazing and Pasture	<u>314</u>	Brush Management (acres)* <ul style="list-style-type: none"> Used to remove woody invasive vegetation and the removed material will be mechanically treated and left onsite ^[4] 	<u>E314A</u>	Brush management to improve wildlife habitat*
	<u>315</u>	Herbaceous Weed Treatment (acres)* <ul style="list-style-type: none"> Used to release desired deep rooted perennial species ^[4] 	<u>E315A</u>	Herbaceous weed treatment to create desired plant communities consistent with the ecological site*
	<u>338</u>	Prescribed Burning (acres)*	<u>E338A</u>	Strategically planned, patch burning for grazing distribution and wildlife habitat*
	<u>512</u>	Pasture and Hay Planting (acres)	<u>E512A</u>	Cropland conversion to grass-based agriculture to reduce soil erosion
			<u>E512C</u>	Cropland conversion to grass for soil organic matter improvement
			<u>E512D</u>	Forage plantings that help increase organic matter in depleted soils
	<u>528</u>	Prescribed Grazing (acres)	<u>E528H</u>	Prescribed grazing to improve/maintain riparian and watershed function elevated water temperature
			<u>E528I</u>	Grazing management that protects sensitive areas -surface or ground water from nutrients
			<u>E528J</u>	Prescribed grazing on pastureland that improves riparian and watershed function
			<u>E528L</u>	Prescribed grazing that improves or maintains riparian and watershed function-erosion
			<u>E528M</u>	Grazing management that protects sensitive areas from gully erosion
			<u>E528P</u>	Implementing Bale or Swath Grazing to increase organic matter and reduce nutrients in surface water
			<u>E528R</u>	Management intensive rotational grazing
<u>550</u>	Range Planting (acres)	<u>E550B</u>	Range planting for improving forage, browse, or cover for wildlife	

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Mitigation Categories	Code	Conservation Practice Standard Name ^[2] ^[3] (practice unit)	Code	Conservation Stewardship Program (CSP) Enhancement Activities
Agroforestry, Forestry and Wildlife Habitat	<u>342</u>	Critical Area Planting (acres)		None Available
	<u>380</u>	Windbreaks/Shelterbelt Establishment and Renovation (feet)		None Available
	<u>383</u>	Fuel Break (acres)*		None Available
	<u>384</u>	Woody Residue Treatment (acres)*		None Available
	<u>390</u>	Riparian Herbaceous Cover (acres)	<u>E390A</u>	Increase riparian herbaceous cover width for sediment and nutrient reduction
			<u>E390B</u>	Increase riparian herbaceous cover width to enhance wildlife habitat
	<u>391</u>	Riparian Forest Buffer (acres)	<u>E391A</u>	Increase riparian forest buffer width for sediment and nutrient reduction
			<u>E391C</u>	Increase riparian forest buffer width to enhance wildlife habitat
	<u>612</u>	Tree-Shrub Establishment (acres)	<u>E612B</u>	Planting for high carbon sequestration rate
			<u>E612G</u>	Tree/shrub planting for wildlife food
	<u>643</u>	Restoration of Rare or Declining Natural Communities (ac)* <ul style="list-style-type: none"> Used to restore floodplain hydrology^[4] 		None Available
	<u>666</u>	Forest Stand Improvement (acres)*	<u>E666A</u>	Maintaining and improving forest soil quality*
			<u>E666D</u>	Forest management to enhance understory vegetation*
			<u>E666E</u>	Reduce height of the forest understory to limit wildfire risk*
<u>E666H</u>			Increase on-site carbon storage*	
<u>E666L</u>			Forest Stand Improvement to rehabilitate degraded hardwood stands*	

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Mitigation Categories	Code	Conservation Practice Standard Name ^[2] ^[3] (practice unit)	Code	Conservation Stewardship Program (CSP) Enhancement Activities
Energy, Combustion, & Electricity Efficiency	374	Energy Efficient Agricultural Operation (number)*		None Available
	430	Irrigation Pipeline (feet)* • Used to reduce energy use ^[4]		None Available
	441	Irrigation System, Microirrigation (acres)* • Used to reduce energy use ^[4]		None Available
	442	Sprinkler System (acres)* • Used to reduce energy use ^[4]		None Available
	533	Pumping Plant (number)* • Used to reduce energy use ^[4]	E533C	Install VFDs on pumps*
			E533D	Complete pumping plant evaluation for energy savings*
	672	Energy Efficient Building Envelope (number)*		None Available
670	Energy Efficient Lighting System (number)*		None Available	
Wetlands	657	Wetland Restoration (acres)*		None Available

Notes

In addition to the designated CSAF conservation activities listed, conservation practices that facilitate the management or the function of a CSAF activity but may not achieve the desired effects on their own (and may not have a quantifiable benefit), may be planned as applicable in consultation with your local professional conservation planner. Examples: Tree/Shrub Establishment (612) may need facilitating practices such as Tree/Shrub Site Preparation (490) or Access Control (472).

Conservation Crop Rotation (328) may need facilitating practices such as Pest Management Conservation System (595), Cover Crops (340), or Irrigation Water Management (449). Waste Separation Facility (632) may need facilitating practices such as Waste Transfer (634) or Roofs and Covers (367). Prescribed Grazing (528) may need facilitating practices such as Watering Facility (614), Stream Crossing (578), Brush Management (314), Fence (382), or Livestock Shelter Structure (576).

[1] Provisional activities and their associated enhancements are added under the premise that they may provide benefits, and a quantification methodology will be evaluated during the fiscal year. Practices may be removed from the mitigation practice list in a subsequent fiscal year if quantification is not possible. Unless otherwise noted, listed practices have quantifiable carbon sequestration and/or GHG reduction methodologies described in COMET-Planner (comet-planner.com). New practices will be added as science progresses and scientifically defensible quantification methodologies are identified to accompany existing and new NRCS conservation practice standards.

[2] The included Conservation Practice Standard and Conservation Stewardship Program links provide national information. Please consult the NRCS office at your local USDA Service Center for any local and state level criteria. Visit farmers.gov/service-locator to find contact information for your local office.

[3] The following were removed from the list for FY2024: Conservation Practice Standard Upland Wildlife Habitat and Management (Code 645) and Enhancements (E645B) Manage existing shrub thickets to provide adequate shelter for wildlife, (E645C) Edge feathering for wildlife cover, (E328G) Crop rotation on recently converted CRP grass/legume cover for soil organic matter improvement, (E528D) Grazing management for improving quantity and quality of food or cover and shelter for wildlife, and (E528E) Improved grazing management for enhanced plant structure and composition for wildlife. Two enhancements were archived and are no longer available within CSP: (E512E) Forage and biomass planting that produces feedstock for biofuels or energy production and (E512K) Establishing native species into forage base to improve diversity for both livestock and wildlife. Bundles for CSP are no longer listed in this document, refer to program guidance for CSP information on the use of appropriate bundles.

[4] The practice is considered a mitigation activity only when implemented in the specified way. A brief description of the specific implementation is identified and associated narratives for conservation planning purposes are included at the end of the document. When a specific implementation is not specified, any narrative of the practice may be used for planning under the assumption that it will provide mitigation benefits.



NRCs Narrative Crosswalk for Conservation Planners

Code	Conservation Practice Standard	Code	Narrative
313	Waste Storage Structure	01N	Compost Bedded Pack waste storage facility - a livestock agricultural waste storage fabricated structure where manure is composted within the animal housing
314	Brush Management	01N	Remove woody (non-herbaceous and succulent) invasive vegetation to maintain or enhance deep rooted native perennial grass and forb communities, woody material will be mechanically treated/chipped and left onsite to mitigate above ground carbon loss
315	Herbaceous Weed Treatment	01N	Removal of herbaceous weeds to release desired deep rooted perennial grass and forb species
367	Roofs and Covers	01N	Capture Biogas - Place a rigid, semirigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility to capture biogas and reduce odor
430	Irrigation Pipeline	01N	Replacement of an earthen channel that is supplied by pumping water with a closed conduit, resulting in enhanced conveyance efficiency and reduced energy use
441	Irrigation System, Microirrigation	01N	Switching from higher to lower pressure irrigation system, resulting in enhanced application efficiency and reduced energy use
442	Sprinkler System	01N	Utilization of variable rate irrigation (VRI) technology, switching from higher to lower pressure irrigation systems, and sprinkler head renozzling without increasing irrigated acres, resulting in enhanced application efficiency and reduced energy use
449	Irrigation Water Management	01N	Managing water levels in rice fields to include dry down between full flood conditions prior to re-flooding (alternated wetting and drying) to minimize greenhouse gas production in accordance with an irrigation water management plan
533	Pumping Plant	01N	Replacing existing pumps with high-efficiency pump
643	Restoration of Rare or Declining Natural Communities	01N	Restoration of streams and associated floodplains using low-tech structures (such as beaver dam analogs or other stick-and-stone structures) to kick-start natural ecological and hydrologic processes required for maintenance of healthy and functioning streams and associated floodplains

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