

# Access Control

Code: 472

Reporting Unit: Acre

**Definition:**

The temporary or permanent exclusion of animals, people, vehicles, and/or equipment from an area.

**Purpose:**

Achieve and maintain desired resource conditions by monitoring and managing the intensity of use by animals, people, vehicles, and/or equipment in coordination with the application schedule of practices, measures, and activities specified in the conservation plan.

**Conditions Where Practice Applies:**

This practice applies on pasture and grazed range only.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Animal exclusion from sensitive areas	Ac	\$12.03	\$14.43
<p>Exclude animals from an area in order to address identified resource concerns. This is for facilitating exclusion of animals to protect or enhance natural resource values and/or to allow for fuel loads to accumulate to address other resource issues. Control will be by permanent or temporary electric fencing. Any need for permanent fencing will be planned and installed using practice 382—Fence. Clearing of brush and trees is not necessary. Resource concerns include wildlife habitat degradation, undesirable plant productivity and health, and/or excessive sediment in surface waters.</p>			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current U.S. Fish and Wildlife Service (USFWS) Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting CPs if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Annually conduct a review and certify practice compliance on the conservation plan or assistance notes.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Animal exclusion from sensitive areas	X	X	X	X	X		X	X				X		X	X	X	X				

## Access Road

Code: 560

Reporting Unit: Feet

**Definition:**

A travel-way for equipment and vehicles constructed as part of a conservation plan.

**Purpose:**

To provide a fixed route for vehicular travel for resource activities involving the management of timber, livestock, agriculture, wildlife habitat, and other conservation enterprises while protecting the soil, water, air, fish, wildlife, and other adjacent natural resources.

**Conditions Where Practice Applies:**

Where access is needed from a private or public road or highway to a land use enterprise or conservation measure, or where travel ways are needed in a planned land use area. Access roads range from seasonal use roads, designed for low speed and rough driving conditions, to all-weather roads heavily used by the public and designed with safety as a high priority. Some roads are only constructed for a single purpose; i.e., control of forest fires, logging and forest management activities, access to remote recreation areas, or access for maintenance of facilities.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
New 6-inch gravel road without geotextile, embankment < 2.5 feet  Construction of an earth road with compacted gravel surface and an average embankment height of less than 2.5 feet. The installation includes excavation, shaping, grading, and all equipment, labor and incidental materials necessary as required by the design. Payment will be for the linear feet (LnFt) of road constructed.	LnFt	\$6.89	\$8.27
New 6-inch gravel road without geotextile, embankment ≥ 2.5 feet  Construction of an earth road with compacted gravel surface and an average embankment height of 2.5 feet or more. The installation includes excavation, shaping, grading, and all equipment, labor and incidental materials necessary as required by the design. Payment will be for the linear feet (LnFt) of road constructed.	LnFt	\$11.59	\$13.90

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- Financial assistance is available from the access point to the conservation measure.

**Documentation:**

Field notes associated with measurement of road length. Completed table of quantities on as-built plan for waste system.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
New 6-inch gravel road without geotextile, embankment < 2.5 feet			X					X						X		X						
New 6-inch gravel road without geotextile, embankment ≥ 2.5 feet			X					X						X		X						

# Agricultural Energy Management Plan, Headquarters

Code: 122

Reporting Unit: Number

**Definition:**

An Agricultural Energy Management Plan contains the strategy by which the producer will explore and address on-farm energy problems and opportunities.

**Purpose:**

The energy audit is to be tailored to the individual farm and should cover the primary energy users such as irrigation pumping, heating and cooling of livestock production facilities, manure collection and transfer, grain drying, and similar common on-farm activities.

**Conditions Where Practice Applies:**

This practice applies to headquarters of farming or forestry operations where energy use may be reduced through more efficient systems or other methods.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Livestock Small, < 70 AU plus 1 non-livestock enterprise One non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with a small livestock operation with < 70 AU (the livestock operation may have mixed animal types).	Number	\$2,043.88	\$2,452.65
Livestock Small, < 70 AU plus 2 non-livestock enterprises Two non-livestock enterprises as defined in the ASABE S612 on-farm energy audit standard in combination with a small livestock operation with < 70 AU (the livestock operation may have mixed animal types).	Number	\$2,874.93	\$3,449.92
Livestock Small, < 70 AU plus 3 non-livestock enterprises Three non-livestock enterprises as defined in the ASABE S612 on-farm energy audit standard in combination with a small livestock operation with < 70 AU (the livestock operation may have mixed animal types).	Number	\$3,705.98	\$4,447.18
Livestock Medium, 70-300 AU plus 1 non-livestock enterprise One non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with a medium livestock operation with 70-300 AU (the livestock operation may have mixed animal types).	Number	\$2,417.85	\$2,901.42
Livestock Medium, 70-300 AU plus 2 non-livestock enterprises Two non-livestock enterprises as defined in the ASABE S612 on-farm energy audit standard in combination with a medium livestock operation with 70-300 AU (the livestock operation may have mixed animal types).	Number	\$3,248.91	\$3,898.69
Livestock Medium, 70-300 AU plus 3 non-livestock enterprises Three non-livestock enterprises as defined in the ASABE S612 on-farm energy audit standard in combination with a medium livestock operation with 70-300 AU (the livestock operation may have mixed animal types).	Number	\$4,079.96	\$4,895.95
Livestock Large, 301-2,500 AU plus 1 non-livestock enterprise One non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with a large livestock operation with 301-2,500 AU (the livestock operation may have mixed animal types).	Number	\$2,781.31	\$3,337.57
Livestock Large, 301-2,500 AU plus 2 non-livestock enterprises Two non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with a large livestock operation with 301-2,500 AU (the livestock operation may have mixed animal types).	Number	\$3,612.36	\$4,334.83

Livestock Large, 301-2,500 AU plus 3 non-livestock enterprises Three non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with a large livestock operation with 301-2,500 AU (the livestock operation may have mixed animal types).	Number	\$4,443.41	\$5,332.10
Livestock Extra Large, > 2,500 AU plus 1 non-livestock enterprise One non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with an extra large livestock operation with > 2,500 AU (the livestock operation may have mixed animal types).	Number	\$3,355.36	\$4,026.43
Livestock Extra Large, > 2,500 AU plus 2 non-livestock enterprises Two non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with an extra large livestock operation with > 2,500 AU (the livestock operation may have mixed animal types).	Number	\$4,186.41	\$5,023.70
Livestock Extra Large, > 2,500 AU plus 3 non-livestock enterprises Three non-livestock enterprise as defined in the ASABE S612 on-farm energy audit standard in combination with an extra large livestock operation with > 2,500 AU (the livestock operation may have mixed animal types).	Number	\$5,017.47	\$6,020.96
Livestock Small, < 70 AU Typical livestock operation has < 70 AU.	Number	\$1,212.82	\$1,455.39
Livestock Medium, 70-300 AU Typical livestock operation has 70-300 AU.	Number	\$1,586.80	\$1,904.16
Livestock Large, 301-2,500 AU Typical livestock operation has 301-2,500 AU.	Number	\$1,950.26	\$2,340.31
Livestock Extra Large, > 2,500 AU Typical livestock operation has > 2,500 AU.	Number	\$2,524.31	\$3,029.17
Non-Livestock, single enterprise Typical single enterprise non-livestock operation with one enterprise as defined in the ASABE S612 on-farm energy audit standard.	Number	\$2,016.73	\$2,420.07
Non-Livestock, two enterprises Typical non-livestock operation with two enterprises as defined in the ASABE S612 on-farm energy audit standard.	Number	\$2,565.77	\$3,078.92
Non-Livestock, three enterprises Typical non-livestock operation with three enterprises as defined in the ASABE S612 on-farm energy audit standard.	Number	\$3,462.20	\$4,154.64

**Limitations:**

1. This practice must be performed by a certified Technical Service Provider (TSP) to be eligible for financial assistance.
2. The application must address all of the producer's major activities associated with the headquarters-type farm enterprise(s). Examples include but are not limited to lighting, grain dryers, refrigeration, or water heating.

**Documentation:**

Energy audit conducted by a TSP meeting American Society of Agricultural and Biological Engineers (ASABE) S612.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Livestock Small, < 70 AU plus 1 non-livestock enterprise											X											
Livestock Small, < 70 AU plus 2 non-livestock enterprises											X											
Livestock Small, < 70 AU plus 3 non-livestock enterprises											X											
Livestock Medium, 70-300 AU plus 1 non-livestock enterprise											X											
Livestock Medium, 70-300 AU plus 2 non-livestock enterprises											X											
Livestock Medium, 70-300 AU plus 3 non-livestock enterprises											X											
Livestock Large, 301-2,500 AU plus 1 non-livestock enterprise											X											
Livestock Large, 301-2,500 AU plus 2 non-livestock enterprises											X											
Livestock Large, 301-2,500 AU plus 3 non-livestock enterprises											X											
Livestock Extra Large, > 2,500 AU plus 1 non-livestock enterprise											X											
Livestock Extra Large, > 2,500 AU plus 2 non-livestock enterprises											X											
Livestock Extra Large, > 2,500 AU plus 3 non-livestock enterprises											X											
Livestock Small, < 70 AU											X											
Livestock Medium, 70-300 AU											X											
Livestock Large, 301-2,500 AU											X											
Livestock Extra Large, > 2,500 AU											X											
Non-Livestock, single enterprise											X											
Non-Livestock, two enterprises											X											
Non-Livestock, three enterprises											X											

# Agricultural Energy Management Plan, Landscape

Code: 124

Reporting Unit: Number

**Definition:**

An Agricultural Energy Management Plan (AgEMP) contains the strategy by which the producer will explore and address on-farm energy problems and opportunities.

**Purpose:**

NRCS Landscape (cropland, pastureland, forestland, etc.) AgEMP is an energy audit that is designed to (1) estimate energy use associated with current farming/ranching operations and (2) identify energy savings associated with alternative management activities.

**Conditions Where Practice Applies:**

This practice applies to farming or forestry operations, such as mobile power plants or pumping plants, where energy use may be reduced through more efficient systems, equipment upgrades, or other methods.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Irrigated Small, < 50 acres Typical irrigated small cropping system with < 50 acres.	Number	\$2,030.55	\$2,436.66
Irrigated Medium, 50-499 acres Typical irrigated medium cropping operation with 50-499 acres.	Number	\$2,698.53	\$3,238.23
Irrigated Large, 500-5,000 acres Typical irrigated large cropping operation with 500-5,000 acres.	Number	\$3,481.14	\$4,177.36
Irrigated Extra Large, > 5,000 acres Typical irrigated extra large cropping operation with > 5,000 acres.	Number	\$3,909.01	\$4,690.81
Non-Irrigated Small, < 50 acres Typical non-irrigated small cropping system with < 50 acres.	Number	\$1,308.57	\$1,570.29
Non-Irrigated Medium, 50-499 acres Typical non-irrigated medium cropping operation with 50-499 acres.	Number	\$1,661.94	\$1,994.33
Non-Irrigated Large, 500-5,000 acres Typical non-irrigated large cropping operation with 50-5,000 acres.	Number	\$2,025.61	\$2,430.74
Non-Irrigated Extra Large, > 5,000 acres Typical non-irrigated extra large cropping operation with > 5,000 acres.	Number	\$2,629.50	\$3,155.40

**Limitations:**

1. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Energy audit meeting ASABE S612 conducted by a TSP.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Irrigated Small, < 50 acres											X											
Irrigated Medium, 50-499 acres											X											
Irrigated Large, 500-5,000 acres											X											
Irrigated Extra Large, > 5,000 acres											X											
Non-Irrigated Small, < 50 acres											X											
Non-Irrigated Medium, 50-499 acres											X											
Non-Irrigated Large, 500-5,000 acres											X											
Non-Irrigated Extra Large, >5,000 acres											X											

# Anaerobic Digester

Code: 366

Reporting Unit: Number

**Definition:**

A component of a waste management system that provides biological treatment in the absence of oxygen.

**Purpose:**

For the treatment of manure and other byproducts of animal agricultural operations for one or more of the following reasons:

- Capture biogas for energy production
- Manage odors
- Reduce the net effect of greenhouse gas emissions
- Reduce pathogens

**Conditions Where Practice Applies:**

This practice applies where:

Biogas production and capture are components of a planned animal waste and byproduct(s) management system.

Sufficient and suitable organic feedstocks are readily available.

Existing facilities can be modified to the requirements of this standard or for new construction.

The operator has the interest and skills to monitor and maintain processes or contracts with a consultant to provide these services.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Small Plug Flow, &lt; 1,000 AU</p> <p>A plug-flow anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for less than 1,000 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.</p>	AU	\$516.68	\$620.01
<p>Medium Plug Flow, 1,000-2,000 AU</p> <p>A plug-flow anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for 1,000-2,000 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.</p>	AU	\$367.79	\$441.34
<p>Large Plug Flow, &gt; 2,000 AU</p> <p>A plug-flow anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for more than 2,000 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.</p>	AU	\$245.67	\$294.81
<p>Small Complete Mix, &lt; 1,000 AU</p> <p>A complete-mix anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for less than 1,000 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.</p>	AU	\$520.34	\$624.40
<p>Medium Complete Mix, 1,000-2,500 AU</p> <p>A complete-mix anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for 1,000-2,500 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.</p>	AU	\$499.09	\$598.91

Large Complete Mix, > 2,500 AU	AU	\$340.24	\$408.29
A complete-mix anaerobic digester consisting of a pre-fabricated, glass-fused metal tank; cast-in-place concrete; or similar storage tank designed for more than 2,500 animal units. It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.			
Covered Lagoon/Holding Pond	AU	\$78.59	\$94.31
A piping and collection system for biogas, and controls for operating a digester system for a covered lagoon/holding pond. (Does not include the earthen storage facility or the associated cover.) It provides biological treatment of the waste in the absence of oxygen. The measurement for payment will be the number of animal units (1,000 lb animal equivalents) used for design.			

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Completed table of quantities on as-built plan showing designed or approved storage volume. Form KS-ENG-16, Waste Management Inspection Report.

**Maintenance:**

Practice will be maintained for a lifespan of 25 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Small Plug Flow, < 1,000 AU			X													X					
Medium Plug Flow, 1,000-2,000 AU			X													X					
Large Plug Flow, > 2,000 AU			X													X					
Small Complete Mix, < 1,000 AU			X													X					
Medium Complete Mix, 1,000-2,500 AU			X													X					
Large Complete Mix, > 2,500 AU			X													X					
Covered Lagoon/Holding Pond			X													X					

# Animal Mortality Facility

Code: 316

Reporting Unit: Number

**Definition:**

An on-farm facility for the treatment or disposal of livestock and poultry carcasses.

**Purpose:**

This practice may be applied as part of a conservation management system to support one or more of the following purposes:

Decrease nonpoint source pollution of surface and groundwater resources

Reduce the impact of odors that result from improperly handled animal mortality

Decrease the likelihood of the spread of disease or other pathogens that result from the interaction of animal mortality and predators

Provide contingencies for normal and catastrophic mortality events

**Conditions Where Practice Applies:**

This practice applies where animal carcass treatment or disposal must be considered as a component of a waste management system for livestock or poultry operations. It applies where on-farm carcass treatment and disposal are permitted by federal, state, and local laws, rules, and regulations. It also applies where a waste management system plan as described in the National Engineering Handbook (NEH), Part 651, Agriculture Waste Management Field Handbook (AWMFH), has been developed that accounts for the end use of the product from the mortality facility. This practice includes disposal of both normal and catastrophic animal mortality; however, it does not apply to catastrophic mortality resulting from disease.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Incineration, < 50 Cu ft chamber A facility consisting of a concrete base and manufactured Type IV incinerator designed to handle 350 lb of average daily mortality for the species and size of the operation. The facility shall use high temperature (> 1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. The volume for payment will be the actual chamber size obtained from manufacturer's product literature.	CuFt	\$188.82	\$226.58
Incineration, 50-100 Cu ft chamber A facility consisting of a concrete base and manufactured Type IV incinerator designed to handle 350 to 850 lb of average daily mortality for the species and size of the operation. The facility shall use high temperature (> 1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. The volume for payment will be the actual chamber size obtained from manufacturer's product literature.	CuFt	\$172.17	\$206.60
Incineration, > 100 Cu ft chamber A facility consisting of a concrete base and manufactured Type IV incinerator designed to handle a single mortality of 1,200-1,500 lb. The facility shall use high temperature (> 1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. The volume for payment will be the actual chamber size obtained from manufacturer's product literature.	CuFt	\$91.62	\$109.94
Invessel Rotary Drum, < 700 Cu ft A facility consisting of a concrete base and horizontal rotary drum designed to compost 250-600 lb of average daily mortality. The volume for payment will be the interior volume of the rotary drum in cubic feet as per manufacturer's product literature.	CuFt	\$61.95	\$74.34
Invessel Rotary Drum, ≥ 700 Cu ft A facility consisting of a concrete base and horizontal rotary drum designed to compost 600-1,000 lb of average daily mortality. The volume for payment will be the interior volume of the rotary drum in cubic feet as per manufacturer's product literature.	CuFt	\$48.69	\$58.43

Static Pile, earthen pad A facility consisting of an impervious earthen pad to compost animal mortalities in a static windrow or single pile. The area for payment will be the square feet of the earthen pad.	SqFt	\$0.36	\$0.44
Static Pile, concrete pad A facility consisting of a concrete pad to compost animal mortality in a static windrow or single pile. The area for payment will be the square feet of the concrete pad.	SqFt	\$2.41	\$2.90
Static Pile, wood bin(s) A facility consisting of a concrete slab and wood walls that form two or more bins and alleys. The area for payment will be the square feet of the structure including bins and alleys, but not including approach slabs.	SqFt	\$9.83	\$11.79
Static Pile, concrete bin(s) A facility consisting of a concrete slab and walls that form two or more bins and alleys. The area for payment will be the square feet of the structure including bins and alleys, but not including approach slabs.	SqFt	\$11.54	\$13.85
Catastrophic Mortality Burial A facility consisting of the on-site burial of animal mortalities resulting from catastrophic events not related to disease. An earthen pit is excavated to contain the mortalities, and earth cover is placed over the mortalities to provide protection from predators to minimize pathogen survival or spreading. Payment will be based on the number of animal units (1,000 lb animal equivalents) used for design.	AU	\$59.03	\$70.84

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Completed table of quantities on as-built plan showing designed or approved area or number installed and Form KS-ENG-16, Waste Management Inspection Report.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Incineration, < 50 Cu ft chamber			X									X				X					
Incineration, 50-100 Cu ft			X									X				X					
Incineration, > 100 Cu ft chamber			X									X				X					
Invessel Rotary Drum, < 700 Cu ft			X									X				X					
Invessel Rotary Drum, ≥ 700 Cu ft			X									X				X					
Static Pile, earthen pad			X									X				X					
Static Pile, concrete pad			X									X				X					
Static Pile, wood bin(s)			X									X				X					
Static Pile, concrete bin(s)			X									X				X					
Catastrophic Mortality Burial			X									X				X					

# Animal Trails and Walkways

Code: 575

Reporting Unit: Feet

**Definition:**

Established lanes or travel ways that facilitate animal movement.

**Purpose:**

Provide or improve access to forage, water, working/handling facilities, and/or shelter; improve grazing efficiency and distribution, and/or; protect ecologically sensitive, erosive, and/or potentially erosive sites.

**Conditions Where Practice Applies:**

On lands where control of animal movement is needed to facilitate access, improve grazing, prevent erosion, and/or protect ecologically sensitive areas.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Earthfill Walkway, 4 Ft high or less  Construction of an earth lane or travel way and an average embankment height not exceeding 4 feet. The installation includes excavation, shaping, grading, and all equipment, labor and incidental materials necessary as required by the design. Payment will be for the linear feet (LnFt) of walkway constructed.	LnFt	\$8.17	\$9.80
Earthfill Walkway, Higher than 4 Ft  Construction of an earth lane or travel way and an average embankment height exceeding 4 feet. The installation includes excavation, shaping, grading, and all equipment, labor and incidental materials necessary as required by the design. Payment will be for the linear feet (LnFt) of walkway constructed.	LnFt	\$18.26	\$21.91

**Limitations:**

**Documentation:**

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Earthfill Walkway, 4 Ft high or less	■		■		■		■		■		■		■		■		■		■		■
Earthfill Walkway, Higher than 4 Ft.			■		■		■		■		■		■		■		■		■		■

# Brush Management

Code: 314

Reporting Unit: Acre

**Definition:**

Removal, reduction, or manipulation of non-herbaceous plants

**Purpose:**

This practice may be applied to accomplish one or more of the following purposes:

- Restore natural plant community balance
- Create the desired plant community
- Reduce competition for space, moisture, and sunlight between desired and unwanted plants
- Manage noxious woody plants
- Restore desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality, and enhance stream flow
- Maintain or enhance wildlife habitat including that associated with threatened and endangered species
- Improve forage accessibility, quality, and quantity for livestock
- Protect life and property from wildfire hazards
- Improve visibility and access for handling livestock

**Conditions Where Practice Applies:**

On all lands except active cropland where the removal, reduction, or manipulation of woody (non-herbaceous or succulent) plants is desired. This practice will not be used for removal of woody vegetation by prescribed fire (use CP 338, Prescribed Burning) or removal of woody vegetation to facilitate a land use change (use CP 460, Land Clearing).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Mechanical and Chemical, low infestation  Removal of woody vegetation on gentle sloping soils and moderately deep to deep soils. The practice requires the felling of trees and brush by the use of mechanical cutter, chopper or other light equipment and applying herbicide to cut stump resprouting tree/brush species, as necessary, in order to improve ecological site conditions. Brush density has met or exceeded low or light infestation (1-5% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.	Ac	\$46.94	\$56.33
Mechanical and Chemical, medium infestation  Removal of woody vegetation on gentle sloping soils and moderately deep to deep soils. The practice requires the felling and piling of trees and brush by the use of mechanical cutter, chopper or other light equipment and applying herbicide to cut stump resprouting tree/brush species, as necessary, in order to improve ecological site conditions. Brush density has met or exceeded medium or moderate infestation (averaging 5-10% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.	Ac	\$118.50	\$142.20
Mechanical and Chemical, heavy infestation  Removal of woody vegetation on gentle sloping soils and moderately deep to deep soils. The practice requires the felling and piling of trees and brush by the use of mechanical cutter, chopper or other light equipment and applying herbicide to cut stump resprouting tree/brush species, as necessary, in order to improve ecological site conditions. Brush density has met or exceeded heavy or high infestation (averaging > 10% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 10 acres.	Ac	\$305.21	\$366.26

Chemical, uplands	Ac	\$21.50	\$25.80
<p>This practice is for the implementation of brush management on range, pasture or native pasture reduce undesirable brush in uplands and other areas not in or directly adjacent to streams, ponds, or wetlands. The typical method of control uses aerial or broadcast application of herbicides on to control undesirable plants. Entire unit has infestation levels exceeding state identified levels.</p>			
Chemical, riparian	Ac	\$117.96	\$141.55
<p>Apply chemical brush management techniques on isolated riparian area within a 80 acre planning unit which is directly adjacent to a stream (may include ponds or wetlands) associated with rangeland (may include grazed forest, pasture, or other land uses) to control undesirable deciduous species in order to improve ecological/range site conditions. Treatment is applied to a 2 acres isolated area adjacent to a stream which uses broadcast/aerial specialized herbicide(s) application on the entire 2 acres to reduce or remove trees and/or brush which are not appropriate for the site(s).</p>			
Chemical, foliar spot treatment	Ac	\$31.83	\$38.20
<p>Apply foliar chemical brush management techniques (aerial fixed wing or ground rig) on isolated upland areas within a 80 acre planning unit (not directly adjacent to streams, ponds or wetlands) associated with rangeland (may include grazed forest, pasture, or other land uses) to control undesirable deciduous species in order to improve ecological/range site conditions. Treatment is applied to a 10 acres isolated areas (not adjacent to a stream, wetland or pond) using broadcast/aerial herbicide(s) application on the entire 10 acres to reduce or remove trees and/or brush which are not appropriate for the site(s). Foliar application of material is using most effective low cost chemical(s).</p>			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Broadcast and aerial treatment will be eligible only where mechanical or spot treatments are not practical. If broadcast or aerial treatment is planned, justification will be documented in the producer's case file.
3. Where there is a concern with resprouting of locust tree (and those species identified in CP 314, Brush Management, tables 1 and 2) the number of chemical broadcast treatments are to be determined by the planner but shall not exceed two treatments to be eligible for financial assistance.
4. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
5. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-314, Brush Management.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPQI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Mechanical and Chemical, low infestation		X			X		X					X		X		X					
Mechanical and Chemical, medium infestation		X			X		X					X		X		X					
Mechanical and Chemical, heavy infestation		X			X		X					X		X		X					
Chemical, uplands		X			X		X							X		X					
Chemical, riparian		X			X		X							X		X					
Chemical, foliar spot treatment		X			X		X							X		X					

# Combustion System Improvement

Code: 372

Reporting Unit: Number

**Definition:**

Installing, replacing, or retrofitting agricultural combustion systems and/or related components or devices for air quality and energy efficiency improvement.

**Purpose:**

To improve air quality by addressing the air quality resource concerns for particulate matter and ozone precursors by mitigating actual or potential emissions of oxides of nitrogen and/or fine particulate matter.

To improve the energy efficiency of agricultural combustion systems.

**Conditions Where Practice Applies:**

This practice applies to any agricultural operation that operates an agricultural combustion system—including stationary, portable, mobile, and self-propelled equipment. The combustion system must be used primarily for agricultural and/or forestry activities.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Internal Combustion Engine Repower, < 50 bhp  Older diesel engine replaced with new diesel engine repower (< 50 bhp). The existing diesel engine may be stationary or portable operating an irrigation pump or an auxiliary engine providing mechanical function for agricultural/forestry equipment.	Ea	\$2,804.01	\$4,206.02
Internal Combustion Engine Repower, 50-99 bhp  Older diesel engine replaced with new diesel engine repower (50-99 bhp). The existing diesel engine may be stationary or portable operating an irrigation pump or an auxiliary engine providing mechanical function for agricultural/forestry equipment.	Ea	\$7,040.15	\$10,560.22
Internal Combustion Engine Repower, 100-199 bhp  Older diesel engine replaced with new diesel engine repower (100-199 bhp). The existing diesel engine may be stationary or portable operating an irrigation pump or an auxiliary engine providing mechanical function for agricultural/forestry equipment.	Ea	\$14,584.02	\$21,876.03
Internal Combustion Engine Repower, ≥ 200 bhp  Older diesel engine replaced with new diesel engine repower (≥ 200 bhp). The existing diesel engine may be stationary or portable operating an irrigation pump or an auxiliary engine providing mechanical function for agricultural/forestry equipment.	Ea	\$28,353.52	\$42,530.28
Electric Motor in-lieu of Internal Combustion Engine, < 12 HP  Replace an existing IC engine operating an irrigation well with a new electric motor (< 12 HP). An existing IC engine is stationary or portable (does not propel a vehicle and is not an auxiliary IC engine on a vehicle). This replacement provides the greatest emission reduction by eliminating Nox, VOC, and PM emissions from the source.	Ea	\$672.96	\$1,009.43
Electric Motor in-lieu of Internal Combustion Engine, 12-74 HP  Replace an existing IC engine operating an irrigation well with a new electric motor (12-74 HP). An existing IC engine is stationary or portable (does not propel a vehicle and is not an auxiliary IC engine on a vehicle). This replacement provides the greatest emission reduction by eliminating Nox, VOC, and PM emissions from the source.	Ea	\$2,998.43	\$4,497.64

Electric Motor in-lieu of Internal Combustion Engine, 75-149 HP	Ea	\$3,759.95	\$5,639.92
<p>Replace an existing IC engine operating an irrigation well with a new electric motor (75-149 HP). An existing IC engine is stationary or portable (does not propel a vehicle and is not an auxiliary IC engine on a vehicle). This replacement provides the greatest emission reduction by eliminating Nox, VOC, and PM emissions from the source.</p>			
Electric Motor in-lieu of Internal Combustion Engine, 150-299 HP	Ea	\$11,323.74	\$16,985.61
<p>Replace an existing IC engine operating an irrigation well with a new electric motor (150-299 HP). An existing IC engine is stationary or portable (does not propel a vehicle and is not an auxiliary IC engine on a vehicle). This replacement provides the greatest emission reduction by eliminating Nox, VOC, and PM emissions from the source.</p>			
Electric Motor in-lieu of Internal Combustion Engine, ≥ 300 HP	Ea	\$22,692.80	\$34,039.20
<p>Replace an existing IC engine operating an irrigation well with a new electric motor (≥ 300 HP). An existing IC engine is stationary or portable (does not propel a vehicle and is not an auxiliary IC engine on a vehicle). This replacement provides the greatest emission reduction by eliminating Nox, VOC, and PM emissions from the source.</p>			
Power Unit Modification	HP	\$29.13	\$43.69
<p>Modification of an existing power unit (retrofitting or rebuilding) on an irrigation pumping plant that results in energy efficiency increase and meets the requirements in CPS 533–Pumping Plant. The increase in energy efficiency for the modified unit must be supported by an energy analysis.</p>			

**Limitations:**

**Documentation:**

Energy analysis document and KS-ENG-10, Job Sheet, showing installed items and quantities. Documentation must be provided that the existing engine has been disabled or provide receipt from recycling center.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Internal Combustion Engine Repower, < 50 bhp																						
Internal Combustion Engine Repower, 50-99 bhp																						
Internal Combustion Engine Repower, 100-199 bhp																						
Internal Combustion Engine Repower, ≥ 200 bhp																						
Electric Motor in-lieu of Internal Combustion Engine, < 12 HP																						
Electric Motor in-lieu of Internal Combustion Engine, 12-74 HP																						
Electric Motor in-lieu of Internal Combustion Engine, 75-149 HP																						
Electric Motor in-lieu of Internal Combustion Engine, 150-299 HP																						
Electric Motor in-lieu of Internal Combustion Engine, ≥ 300 HP																						
Power Unit Modification																						

# Composting Facility

Code: 317

Reporting Unit: Number

## Definition:

A facility to process raw manure or other raw organic by-products into biologically stable organic material.

## Purpose:

To reduce the pollution potential of organic agricultural wastes to surface and ground water.

## Conditions Where Practice Applies:

This practice applies where organic waste material is generated by agricultural production or processing; a composting facility is a component of a planned agricultural waste management system; a composting facility can be constructed, operated, and maintained without polluting air and/or water resources; there is a need to improve air quality by reducing the emissions of odorous gases; and the facility is operated as a component of an agricultural management system.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Composter, structure facility with concrete floor and walls A composting facility consisting of a reinforced concrete floor and walls constructed of reinforced concrete or modular block for composting manure and bedding. The area for payment will be the square feet of floor area of the facility including walls but not approach slabs.	SqFt	\$8.51	\$10.21
Composter, structure facility with concrete floor and wood walls A composting facility consisting of a reinforced concrete floor and walls constructed of treated lumber for composting manure and bedding. The area for payment will be the square feet of floor area of the facility including walls but not approach slabs.	SqFt	\$8.24	\$9.89
Composter, open lot, earth floor A composting facility consisting of a compacted and leveled area for composting manure and bedding. The area for payment will be the square feet of area utilized as a composting facility.	SqFt	\$0.27	\$0.33

## Limitations:

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- Practice must be part of a Nutrient Management Plan that is developed prior to payment. For imported waste, the payment is limited to the storage needed for the contracted waste.

## Documentation:

Completed table of quantities on as-built plan showing designed or approved area. Form KS-ENG-16, Waste Management System Inspection Report.

## Maintenance:

Practice will be maintained for a lifespan of 15 years following installation.

## Program Eligibility:

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPIC	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Composter, structure facility with concrete floor and walls			X		X							X				X					
Composter, structure facility with concrete floor and wood walls			X		X							X				X					
Composter, open lot, earth floor			X		X							X				X					

# Comprehensive Nutrient Management Plan

Code: 102

Reporting Unit: Number

**Definition:**

A resource management system that addresses the resource concerns associated with a manure management system and all the land where the manure will be applied.

**Purpose:**

To assist owners/operators in taking voluntary actions to minimize potential pollutants from animal confinement facilities and land application of manure and organic by-products.

**Conditions Where Practice Applies:**

Animal containment facilities and land application of manure and organic by-products.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Non-Dairy Operation < 300 AU with land application  A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a small non-dairy Animal Feeding Operation (AFO) of less than 300 animal units (AU)—primarily swine, poultry, and beef AFOs. The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.	Number	\$5,923.07	\$7,107.69

<p>Dairy Operation &lt; 300 AU with land application</p> <p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a small Dairy Animal Feeding Operation (AFO) of less than 300 animal units (AU). The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.</p>	Number	\$7,440.42	\$8,928.50
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<p>Non-Dairy Operation 300-699 AU with land application</p> <p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a medium non-dairy Animal Feeding Operation (AFO) of 300-699 animal units (AU)--primarily swine, poultry, and beef AFOs. The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.</p>	Number	\$7,534.54	\$9,041.45
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Dairy Operation 300-699 AU with land application	Number	\$8,413.42	\$10,096.10
<p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a medium Dairy Animal Feeding Operation (AFO) of 300-699 animal units (AU). The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.</p>			

Non-Dairy Operation ≥ 700 AU with land application	Number	\$9,011.30	\$10,813.56
<p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a large non-dairy Animal Feeding Operation (AFO) of greater than or equal to 700 animal units (AU)—primarily swine, poultry, and beef AFOs. The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.</p>			

<p>Dairy Operation ≥ 700 AU with land application</p> <p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a large Dairy Animal Feeding Operation (AFO) of greater than or equal to 700 animal units (AU). The producer may export (material transferred to another owner with written documentation of the transfer) modest amounts of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The producer has an animal production area, farms cropland, and applies most nutrients. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Land application components of the plan must include all lands under the control of the AFO owner or operator where waste materials are being applied. Planned practices on the production area and land application areas must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner/operator's production objectives.</p>	<p>Number      \$9,272.28      \$11,126.74</p>
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<p>Livestock Operation &lt; 300 AU without land application</p> <p>A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a small Animal Feeding Operation (AFO) of less than 300 animal units (AU). The producer exports (material transferred to another owner with written documentation of the transfer) nearly all of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas owned or controlled by the AFO owner/operator. In this scenario, the primary focus will be addressing resource concerns present on the production area, including manure/wastewater handling and storage, and documentation of manure generation by the AFO, and its export. Production area components of the plan must include animal confinement facilities, feeding and lounging areas, animal mortality facilities, and manure containment and storage facilities. Planned practices on the production area must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner's/operator's production objectives</p>	<p>Number      \$5,675.05      \$6,810.06</p>
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Livestock Operation > 300 AU without land application

Number

\$7,017.86

\$8,421.43

A Comprehensive Nutrient Management Plan (CNMP) will be developed to address resource concerns on a medium to large Animal Feeding Operation (AFO) of greater than or equal to 300 animal units (AU). The producer exports (material transferred to another owner with written documentation of the transfer) nearly all of the manure or organic products from the farm. For operations where manure is both applied to land the AFO owner/operator controls and exported offsite, guidance to determine appropriate CNMP CAP scenario selection shall be provided by NRCS at the state level. The CNMP is a conservation plan that addresses resource concerns on the AFO production area and land application areas owned or controlled by the AFO owner/operator. In this scenario, the primary focus will be addressing resource concerns present on the production area, including manure/wastewater handling and storage, and documentation of manure generation by the AFO, and its export. Production area components of the plan must include animal confinement facilities, feeding and lounging lots, animal mortality facilities, and manure containment and storage facilities. Planned practices on the production area must result in meeting NRCS quality criteria for water quality and soil erosion. Any applicable air emission and negative air quality impacts occurring as a result of planned CNMP activities, or existing on-farm activities must be mitigated in the CNMP if feasible. The CNMP meets the AFO owner's/operator's production objectives.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Completed Comprehensive Nutrient Management Plan (CNMP).

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Non-Dairy Operation < 300 AU with land application			X		X	X		X								X					
Dairy Operation < 300 AU with land application			X		X	X		X								X					
Non-Dairy Operation 300-699 AU with land application			X		X	X		X								X					
Dairy Operation 300-699 AU with land application			X		X	X		X								X					
Non-Dairy Operation ≥ 700 AU with land application			X		X	X		X								X					
Dairy Operation ≥ 700 AU with land application			X		X	X		X								X					
Livestock Operation < 300 AU without land application			X		X	X		X								X					
Livestock Operation > 300 AU without land application			X		X	X		X								X					

# Conservation Crop Rotation

Code: 328

Reporting Unit: Acre

**Definition:**

Growing crops in a recurring sequence on the same field.

**Purpose:**

This practice may be applied as part of a conservation management system to support one or more of the following:

- Reduce sheet and rill erosion
- Reduce soil erosion from wind
- Maintain or improve soil organic matter content
- Manage the balance of plant nutrients
- Improve water use efficiency
- Manage saline seeps
- Manage plant pests (weeds, insects, and diseases)
- Provide food for domestic livestock
- Provide food and cover for wildlife

**Conditions Where Practice Applies:**

This practice applies to all land where crops are grown, except this standard does not apply to pastureland, hayland, or other land uses where crops are grown occasionally only to facilitate renovation or re-establishment of perennial vegetation.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Standard Rotation</p> <p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 160-acre cropland farm. No foregone income included as the newly added crop will not reduce net crop return in the rotation. Cost represents typical situations for conventional (non-organic) producers. A minimum of one additional crop will be added to an existing crop rotation.</p>	Ac	\$10.33	\$12.40
<p>Standard Rotation, high value crop</p> <p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 160-acre dryland cropland farm where the predominance of crops in existing rotation are high value crops (e.g., corn or soybeans). Foregone income included due to lost crop yield and income by adding an additional lesser value crop into the existing rotation. Cost represents typical situations for conventional (non-organic) producers. A minimum of one additional lesser value crop (e.g., wheat, sorghum, sunflowers) will be added to an existing higher value crop rotation (e.g. soybeans and corn).</p>	Ac	\$35.75	\$42.90
<p>Irrigated to Dryland Rotation</p> <p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 120-acre cropland farm. There is foregone income involved with this conversion from irrigated to dryland farming due to lower yields without irrigation. Cost represents typical situations for conventional (non-organic) producers converting from irrigated cropping to dryland farming. Typical crops grown under irrigation will include one small grain (e.g., wheat) and one row crop (e.g., corn) in rotation.</p>	Ac	\$198.63	\$238.35
<p>Organic Rotation</p> <p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 160-acre cropland farm. Foregone income included. Cost represents typical situations for conventional (non-organic) producers. A minimum of one additional crop (e.g., wheat) will be added to an existing two row-crop rotation.</p>	Ac	\$32.31	\$38.77

Organic Transition Rotation	Ac	\$68.28	\$81.94
<p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement an organic conservation crop rotation on a typical 160-acre cropland farm where traditionally produced crops had previously been grown. Foregone income is included as there is no increase or improvement in organic crops premiums until the new system is certified organic. Cost represents a typical situation for transition from traditional to organic production system.</p>			
Irrigation to Dryland Rotation, high value crop	Ac	\$209.29	\$251.15
<p>This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 120-acre irrigated cropland farm. Foregone income is included with the conversion from irrigated to dryland farming due to lower yields and net return. Cost represents typical situations for conventional (non-organic) producers converting from irrigated cropping to dryland farming. Typical crops grown under irrigation will include a predominance of high value row crop(s) (e.g., corn and/or soybeans). The new rotation will include the introduction of a small grain into rotation to reduce the rotation's water use requirements.</p>			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Irrigated to dryland scenarios are eligible only where 100 percent of the water right is being converted to non-irrigated cropland. Only irrigated acres being converted to non-irrigated are eligible for payment.
3. This practice will be implemented a minimum of three (3) years. Payment will be made upon annual implementation of the practice.
4. Payment will not exceed \$30,000 per contract for this practice except where irrigated cropland is being converted to dryland cropland.

**Documentation:**

Producer self-certification permitted.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Standard Rotation			X	X	X	X		X	X	X	X				X	X				X	X
Standard Rotation, high value crop			X	X	X	X		X	X	X	X				X	X				X	X
Irrigated to Dryland Rotation			X	X	X	X		X	X	X	X				X					X	X
Organic Rotation												X									
Organic Transition Rotation												X									
Irrigation to Dryland Rotation, high value crop			X	X	X	X		X	X	X	X				X					X	X

# Conservation Plan Supporting Organic Transition

Code: 138

Reporting Unit: Number

**Definition:**

A transition to a Organic System Plan (OSP) is a conservation activity plan documenting decisions by producers who agree to implement a system of conservation practices which assist the producer to transition from conventional farming or ranching system to a organic production system.

**Purpose:**

The plan may be used by producers to help support their efforts to become a certified operation, but this plan may not be used as a replacement for an OSP as required by the National Organic Program.

**Conditions Where Practice Applies:**

This practice is eligible on cropland, forestland, pasture, and range.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Conservation Plan Supporting Organic Transition CAP Agricultural operation where producer will transition from conventional to organic to meet USDA National Organic Program requirements.	Number	\$1,632.52	\$1,959.02
Conservation Plan Supporting Organic Transition CAP, no local TSP Agricultural operation where producer will transition from conventional to organic to meet USDA National Organic Program requirements. No qualified TSP within 300 miles.	Number	\$2,548.32	\$3,057.98

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance. Nonlocal is to be used when no TSP is available within 300 miles.

**Documentation:**

Complete hardcopy of the client's plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Conservation Plan Supporting Organic Transition CAP	■	■	■	■	■	■	■	■	■	■	■	X	■	■	■	■	■	■	■	■	■
Conservation Plan Supporting Organic Transition CAP, no local TSP	■	■	■	■	■	■	■	■	■	■	■	X	■	■	■	■	■	■	■	■	■

# Conservation Plan Supporting Transition to Dryland Plan

Code: 134

Reporting Unit: Number

**Definition:**

Dryland systems are those which describe production techniques under limited precipitation and usually severe resource concern constraints. The resource constraints include soil erosion by both wind and water, periods of water stress of significant duration, and limited production inputs. A transition from irrigated to dryland farming and ranching conservation activity plan is a conservation system that focuses on crop yield sustainability and water conservation/water harvesting techniques

**Purpose:**

Meet NRCS quality criteria for soil quality, water quality and quantity, and other identified resource concerns.

**Conditions Where Practice Applies:**

Producers may choose to transition from irrigated to dryland farming and/or ranching for reasons that include, but are not limited to:

- a. Reducing water use
- b. Protecting threatened or endangered species
- c. Restoring flow to streams and improving fisheries
- d. Improving irrigation water management on other land not in dryland system
- e. Protecting or securing present water rights
- f. Continuing farming/ranching in drought conditions or if water rights are reduced or lost

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Conservation Plan Supporting Transition CAP	Number	\$1,194.53	\$1,433.43
Typical operation is 100 acres of irrigated corn, soybeans, wheat or other grain crops. Cropland fields are typically less than 1% slope and irrigated using a sprinkler system.			

**Limitations:**

1. This practice must be performed by a certified TSP to be eligible for financial assistance.
2. This practice is only eligible under EQIP Water Enhancement Project Areas (WEPA).

**Documentation:**

Complete copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Conservation Plan Supporting Transition CAP	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
								X	X										X		X

# Constructed Wetland

Code: 656

Reporting Unit: Acre

## Definition:

An artificial ecosystem with hydrophytic vegetation for water treatment.

## Purpose:

For treatment of wastewater and contaminated runoff from agricultural processing, livestock, and aquaculture facilities, or for improving the quality of storm water runoff or other water flows lacking specific water quality discharge criteria.

## Conditions Where Practice Applies:

Constructed wetlands for the purpose of wastewater treatment apply where a constructed wetland is a component of an agricultural wastewater management system. Constructed wetlands for the purpose of water quality improvement apply where wetland effluent is not required to meet specific water quality discharge criteria. This standard should not be used in lieu of NRCS CPs 657, Wetland Restoration; 658, Wetland Creation; or 659, Wetland Enhancement, when the main purpose is to restore, create, or enhance wetland functions other than wastewater treatment or water quality improvement.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Medium, 0.5 acre or less Installation of a constructed wetland, not exceeding 0.5 acre in size, to filter the wastewater from a confined animal operation. The installation includes the earthwork; native and/or organic wetland vegetation establishment; and soil, water, and plant tissue sampling as required by the operation plan. The area for payment will be the acres of wetland constructed as designed.	Ac	\$7,654.73	\$11,482.09
Large, more than 0.5 to 1.0 acre Installation of a large constructed wetland, greater than 0.5 acres in size, to filter the wastewater from a confined animal operation. The installation includes the earthwork; native and/or organic wetland vegetation establishment; and soil, water, and plant tissue sampling as required by the operation plan. The area for payment will be the acres of wetland constructed as designed.	Ac	\$5,441.13	\$8,161.69
Large, more than 1.0 acre Installation of a large constructed wetland, greater than 1.0 acre in size, to filter the runoff from cropland. The installation includes the earthwork and native and/or organic wetland vegetation establishment. The area for payment will be the acres of wetland constructed as designed.	Ac	\$4,287.15	\$6,430.72

## Limitations:

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

## Documentation:

The area used in design of wetland and completed table of quantities on as-built plan.

## Maintenance:

Practice will be maintained for a lifespan of 15 years following installation.

## Program Eligibility:

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Medium, 0.5 acre or less			X	X	X			X								X					
Large, more than 0.5 to 1.0 acre			X	X	X			X								X					
Large, more than 1.0 acre			X	X	X			X								X					

# Contour Buffer Strips

Code: 332

Reporting Unit: Acre

**Definition:**

Narrow strips of permanent, herbaceous, vegetative cover established across and down the slope with wider cropped strips.

**Purpose:**

- To reduce sheet and rill erosion
- To reduce transport of sediment and other water-borne contaminants downslope, on-site or off-site
- To enhance upland wildlife habitat

**Conditions Where Practice Applies:**

This practice applies on cropland.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Cool Season</p> <p>Narrow strips of permanent, cool season herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to cropland. Practice includes seedbed preparation and planting of herbaceous species. The area of the field border is taken out of production.</p>	Ac	\$155.69	\$186.83
<p>Cool Season with Nutrients</p> <p>Narrow strips of permanent, cool season herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to cropland. Practice includes seedbed preparation and planting of herbaceous species with nutrient admendments added for establishment. The area of the field border is taken out of production.</p>	Ac	\$179.84	\$215.81
<p>Organic Herbaceous</p> <p>Narrow strips of permanent, herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to cropland. Practice includes mechanical seedbed preparation, organic soil amendmets, and planting of organic herbaceous species on organic cropland. The area of the field border is taken out of production.</p>	Ac	\$233.51	\$280.21
<p>Warm Season</p> <p>Narrow strips of permanent, warm season herbaceous vegetative cover established around the hill slope and alternated down the slope with wider cropped strips in between that are farmed on the contour. This practice applies to cropland. Practice includes seedbed preparation and planting of herbaceous species. The area of the field border is taken out of production.</p>	Ac	\$275.23	\$330.27

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both

**Documentation:**

Form KS-ECS-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of five years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Cool Season				X	X			X	X	X						X					
Cool Season with Nutrients				X	X			X	X	X						X					
Organic Herbaceous												X									
Warm Season				X	X			X	X	X						X					

## Cover Crop

Code: 340

Reporting Unit: Acre

**Definition:**

Grasses, legumes, forbs, or other herbaceous plants established for seasonal cover and conservation purposes.

**Purpose:**

- Reduce erosion from wind and water
- Sequester carbon in plant biomass and soils to increase soil organic matter content
- Capture and recycle excess nutrients in the soil profile
- Promote biological nitrogen fixation
- Increase biodiversity
- Weed suppression
- Provide supplemental forage
- Soil moisture management
- Reduce particulate emissions into the atmosphere

**Conditions Where Practice Applies:**

On all lands requiring vegetative cover for natural resource protection.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Cover Crop, single species  Typically a cool season small grain such as rye or wheat, or warm season annual grass (sorghum) will be planted as a cover crop following harvest of a row crop or small grain, and will be followed by a row crop or herbaceous cover that will utilize the residue as a mulch. This scenario assumes that seed will be planted with a no-till drill. The cover crop should be allowed to generate as much biomass as possible without delaying planting of the following crop. If the cover crop overwinters it will be terminated using an approved chemical or mechanical method following NRCS cover crop termination guidelines.	Ac	\$58.87	\$70.64
Cover Crop, multiple species  Typically a small grain or small grain-legume mix (may also use forage sorghum, radishes, turnips, buckwheat, etc.) will be planted as a cover crop following harvest of a row crop or small grain and will be followed by a row crop or herbaceous cover that will utilize the residue as a mulch. This scenario assumes that seed will be planted with a no-till drill. The cover crop should be allowed to generate as much biomass as possible without delaying planting of the following crop. If the cover crop overwinters it will be terminated using an approved chemical or mechanical method following NRCS cover crop termination guidelines.	Ac	\$73.37	\$88.05
Legume, N fixation  A legume will be planted as a cover crop following harvest of a row crop or small grain, and will be followed by a crop that will utilize the fixed nitrogen. This scenario assumes that seed will be planted with a no-till drill. Legume seeds must be inoculated with the proper inoculant prior to planting. The cover crop should be allowed to reach early to mid-bloom before it is terminated using an approved chemical or mechanical method in order to maximize nitrogen fixation. The legume will promote biological nitrogen fixation and reduce energy use by reducing the need for commercial nitrogen fertilizer in following crops.	Ac	\$58.87	\$70.64

**Organic Cover Crop**

Ac

\$87.89

\$105.47

Typically a small grain or small grain-legume mix (may also use forage sorghum, radishes, turnips, buckwheat, etc.) will be planted as a cover crop following harvest of an organically grown crop, and will be followed by an organically grown crop that will utilize the residue as a mulch. This scenario assumes that seed will be planted with a no-till drill. The cover crop should be allowed to generate as much biomass as possible without delaying planting of the following crop. If the cover crop overwinters it will be terminated using a mechanical kill method (mowing, rolling, undercutting, etc.) prior to planting the subsequent crop. This scenario **REQUIRES** use of Certified Organic Seed. Non-organically produced, untreated seeds may be used when an equivalent organically produced variety is not available.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
4. Payment will not exceed \$30,000 per contract for this practice.
5. When this practice is used as cover between cash crops in a rotation, payments are limited to a maximum of three (3) separate payments during the term of the contract; however, when the practice is used to support establishment of permanent vegetative cover, payments are limited to one (1) payment during the term of the contract.

**Documentation:**

Form KS-ECS-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Cover Crop, single species		X	X	X	X	X	X	X	X	X	X			X	X	X				X		
Cover Crop, multiple species		X	X	X	X	X	X	X	X	X	X			X	X	X				X		
Legume, N fixation		X	X	X	X	X	X	X	X	X	X				X	X				X		
Organic Cover Crop												X										

## Critical Area Planting

Code: 342

Reporting Unit: Acre

**Definition:**

Establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal practices.

**Purpose:**

Stabilize areas with existing or expected high rates of soil erosion by water. Stabilize areas with existing or expected high rates of soil erosion by wind. Rehabilitate and revegetate degraded sites that cannot be stabilized through normal farming practices. Stabilize other highly erosive areas, such as sand dunes and riparian areas.

**Conditions Where Practice Applies:**

This practice applies to highly disturbed areas such as active or abandoned mined lands, urban conservation sites, road construction areas, conservation practice construction sites; areas needing stabilization before or after natural disasters such as floods, hurricanes, tornados, and wildfires; and other areas degraded by human activities or natural events.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Grass/Introduced, light tillage Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include seedbed preparation with light tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.	Ac	\$181.68	\$218.02
Native Seeding, light tillage Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include seedbed preparation with light tillage implements, native grass seed, and fertilizer and lime with application.	Ac	\$195.29	\$234.34
Grass/Introduced Mix, moderate grading Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of small gullies, seedbed preparation with typical tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.	Ac	\$652.89	\$783.47
Native Seeding, moderate grading Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of small gullies, seedbed preparation with typical tillage implements, native grass seed, companion crop, and fertilizer and lime with application.	Ac	\$666.49	\$799.79
Grass/Introduced Mix, heavy grading Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of moderate to severe gullies, seedbed preparation with typical tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.	Ac	\$930.06	\$1,116.07
Native Seeding, heavy grading Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of moderate to severe gullies, seedbed preparation with typical tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.	Ac	\$943.66	\$1,132.40

Live Woody Cuttings	Ac	\$11,162.50	\$13,395.00
Establishment of permanent woody vegetation by hand planting live stakes on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include harvesting, preparation, transport, storage, and hand planting with light hand tillage implements. There is no cost included for the woody materials which would be harvested from local native stands.			
Bareroot Seedlings	Ac	\$4,648.12	\$5,577.75
Establishment of permanent woody vegetation by hand planting bareroot tree or shrub seedlings on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs includes purchase of the plant stock, transport, storage, and hand planting with light hand tillage implements.			
Organic, moderate grading	Ac	\$665.59	\$798.71
Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of small gullies, seedbed preparation with typical tillage implements, native grass seed, companion crop, and fertilizer and lime with application.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both
2. WQN: This practice is not eligible on irrigated cropland.
3. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-4, Grass Seeding or Form KS-ECS-5, Tree/Shrub Planting.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Grass/Introduced, light tillage		X	X	X	X	X	X	X	X	X		X	X	X		X						
Native Seeding, light tillage		X	X	X	X	X	X	X	X	X		X	X	X		X						
Grass/Introduced Mix, moderate grading		X	X	X	X	X	X	X	X	X		X	X	X		X						
Native Seeding, moderate grading		X	X	X	X	X	X	X	X	X		X	X	X		X						
Grass/Introduced Mix, heavy grading		X	X	X	X	X	X	X	X	X		X	X	X		X						
Native Seeding, heavy grading		X	X	X	X	X	X	X	X	X		X	X	X		X						
Live Woody Cuttings		X	X	X	X	X	X	X	X	X		X	X			X						
Bareroot Seedlings		X	X	X	X	X	X	X	X	X		X	X			X						
Organic, moderate grading												X										

# Dike

Code: 356

Reporting Unit: Feet

**Definition:**

A barrier constructed of earth or manufactured materials.

**Purpose:**

To protect people and property from floods. To control water level in connection with crop production; fish and wildlife management; or wetland maintenance, improvement, restoration, or construction.

**Conditions Where Practice Applies:**

All sites that are subject to damage by flooding or inundation and where it is desired to reduce the hazard to people and to reduce damage to land and property. Sites where water level control is desired. The Dike CP does not apply to sites where the NRCS CPs 378, Pond; 638, Water and Sediment Control Basin; 362, Diversion; or 600, Terrace, are appropriate. Dikes used to reduce flooding are normally constructed adjacent and/or parallel to a stream, river, wetland or water body and are not constructed across the stream, river, or water body. Dikes used to control water levels usually have small interior drainage areas in relation to the surface area of the regulated water level.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Wetland Dike Construction of an earthen embankment to control water level for wetlands or shallow water development. The volume for payment will be the cubic yards of earthfill in the embankment.	CuYd	\$2.41	\$3.62

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-4, Earthwork Computation Sheet or Storage Terrace Worksheet.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Wetland Dike		X		X	X			X								X					

# Diversion

Code: 362

Reporting Unit: Feet

**Definition:**

A channel constructed across the slope generally with a supporting ridge on the lower side.

**Purpose:**

- This practice may be applied as part of a resource management system to support one or more of the following purposes:
- Break up concentrations of water on long slopes, on undulating land surfaces, and on land that is generally considered too flat or irregular for terracing.
- Divert water away from farmsteads, agricultural waste systems, and other improvements.
- Collect or direct water for water-spreading or water-harvesting systems.
- Increase or decrease the drainage area above ponds.
- Protect terrace systems by diverting water from the top terrace where topography, land use, or land ownership prevents terracing the land above.
- Intercept surface and shallow subsurface flow.
- Reduce runoff damages from upland runoff.
- Reduce erosion and runoff on urban or developing areas and at construction or mining sites.
- Divert water away from active gullies or critically eroding areas.
- Supplement water management on conservation cropping or stripcropping systems.

**Conditions Where Practice Applies:**

This practice applies to all cropland and other land uses where surface runoff water control and or management is needed. It also applies where soils and topography are such that the diversion can be constructed and a suitable outlet is available or can be provided.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Diversion	CuYd	\$1.66	\$2.49
<p>A diversion installed with a ridge and channel to divert runoff away from farmsteads, gullies, critical erosion areas, construction areas, animal feeding operations, or other sensitive areas. The volume for payment is the cubic yards of excavation in the installed diversion. For installations documented with Form KS-ENG-8, the cubic yards of excavation for each diversion may be computed by multiplying the cubic yards of earthfill by the cut-fill ratio.</p>			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQN: This practice is not eligible on irrigated cropland.

**Documentation:**

Forms KS-ENG-8, Diversion - 362 (Gradient) and KS-ENG-36, Diversion - 362 (Level); checkout notes; completed table of quantities on as-built plans

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Diversion	X	X	X	X	X			X	X	X		X	X		X						

# Drainage Water Management Plan

Code: 130

Reporting Unit: Number

**Definition:**

The objective of a Drainage Water Management Plan (DWMP) is to control soil water table elevations and the timing of water discharges from subsurface or surface agricultural drainage systems.

**Purpose:**

- Improve water quality.
- Improve the soil environment for vegetative growth.
- Reduce the rate of oxidation of organic soils.
- Prevent wind erosion.
- Enable seasonal shallow flooding or surface watercourse flows for fish and wildlife habitat.

**Conditions Where Practice Applies:**

This practice applies to crop landuse only.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
DWMP, tile map available  A DWMP will be developed on a relatively flat crop field with a patterned drainage system, where a map of the tile system is available. The DWMP will document soil, topographic, and drainage system maps of the site, and identify the number and location of water control structures that are needed to implement drainage water management according to Field Office Technical Guide standards. The DWMP will also provide guidelines for management of the water control structures to achieve desired resource outcomes.	Number	\$1,691.41	\$2,029.69
DWMP requiring Professional Engineer, tile map available  A DWMP will be developed on a relatively flat crop field with a patterned drainage system, where a map of the tile system is available. For this plan, the services of a Licensed Professional Engineer are required to meet state regulations. The DWMP will document soil, topographic, and drainage system maps of the site, and identify the number and location of water control structures that are needed to implement drainage water management according to Field Office Technical Guide standards. The DWMP will also provide guidelines for management of the water control structures to achieve desired resource outcomes.	Number	\$1,812.20	\$2,174.64
DWMP, no tile map available  A DWMP will be developed on a relatively flat crop field with a patterned drainage system, where no map of the tile system is available. The DWMP will document soil, topographic, and drainage system maps of the site, and identify the number and location of water control structures that are needed to implement drainage water management according to Field Office Technical Guide standards. The DWMP will also provide guidelines for management of the water control structures to achieve desired resource outcomes.	Number	\$2,124.61	\$2,549.53
DWMP requiring Professional Engineer, no tile map available  A DWMP will be developed on a relatively flat crop field with a patterned drainage system, where no map of the tile system is available. For this plan, the services of a Licensed Professional Engineer are required to meet state regulations. The DWMP will document soil, topographic, and drainage system maps of the site, and identify the number and location of water control structures that are needed to implement drainage water management according to Field Office Technical Guide standards. The DWMP will also provide guidelines for management of the water control structures to achieve desired resource outcomes.	Number	\$2,245.40	\$2,694.48

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Completed copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
DWMP, tile map available								X								X					
DWMP requiring Professional Engineer, tile map available								X								X					
DWMP, no tile map available								X								X					
DWMP requiring Professional Engineer, no tile map available								X								X					

# Farmstead Energy Improvement

Code: 374

Reporting Unit: Number

**Definition:**

Development and implementation of improvements to reduce or improve the energy efficiency of on-farm energy use.

**Purpose:**

This practice may be applied as part of a conservation management system to reduce energy use.

**Conditions Where Practice Applies:**

The practice applies to non-residential structures and energy using systems where reducing energy use is the identified goal.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Lighting, CFL Installation of dimmable CFLs to replace incandescent lamps on a one-for-one basis. CFL requirements: minimum 8 Watt, 4,100 Kelvin, dimmable, grow-out bulb; industrial grade; suitably protected from dirt accumulation or as recommended by the energy audit. The number for payment will be the number of bulbs replaced.	Ea	\$8.42	\$12.62
Lighting, LED Installation of dimmable LEDs to replace incandescent lamps on a one-for-one basis. LED requirements: minimum 6 Watt, 3,700 Kelvin, dimmable, grow-out bulb; industrial grade; suitably protected from dirt accumulation or as recommended by the energy audit. The number for payment will be the number of bulbs replaced.	Ea	\$10.78	\$16.16
Lighting, linear fluorescent Replacement of existing lighting with high-efficiency T8 fluorescent lamps and associated materials for installation of replacement fixtures. The number for payment will be the number of fixtures installed.	Ea	\$159.19	\$238.79
Ventilation, exhaust Replacement of a conventional exhaust fan with a high volume, low speed, efficient exhaust fan. Fans being installed should be models previously tested by BESS Lab or the AMCA and be in the top 20 percentile of fans tested. The number for payment will be the number of fans installed as recommended by the energy audit.	Ea	\$646.68	\$970.02
Ventilation, horizontal air circulation Installation of a system of fans to create a horizontal air circulation pattern. Fan performance meets energy audit efficiency criteria as tested by AMCA or BESS Lab. The number for payment will be the number of fans installed as recommended by the energy audit.	Ea	\$98.39	\$147.59
Plate Cooler The installation of an all stainless steel, dual-pass plate cooler, type 316 stainless steel to pre-cool milk prior to entering the bulk tank. The number for payment will be the number of plate coolers installed as recommended by the energy audit.	Ea	\$3,150.76	\$4,726.15
Scroll Compressor Install a new scroll compressor, associated controls, wiring, and materials to retrofit an existing refrigeration system. The number of HP for payment will be the recommended HP rating of the new compressor from the energy audit.	HP	\$1,299.61	\$1,949.42

Variable Speed Drive > 5 HP	HP	\$112.07	\$168.11
<p>The installation of a VSD and appurtances, such as hook-ups, control panels, wiring, control blocks, filters, switches, pads, etc. attached to an electric motor used to drive a ventilation fan, irrigation pump, vacuum pump, or similar equipment involved with agricultural production. The number of HP for payment is the existing motor size on which the VSD is added as recommended by the energy audit.</p>			
Automatic Controller System	Ea	\$678.09	\$1,017.14
<p>Installation of an automatic control system on an existing manually controlled agricultural system. Typical components may include any of the following: wiring, sensors, data logger, logic controller, communication link, software, switches, and relay. The number for payment will be the number of systems installed as recommended by the energy audit.</p>			
Motor Upgrade > 100 HP	HP	\$73.22	\$109.82
<p>Replacement of an existing electric motor used to drive a ventilation fan, irrigation pumps, vacuum pump, or similar equipment involved with agricultural production with a new, high-efficiency motor. The motor size is larger than 100 HP. The number of HP for payment will be the HP of the new motor as recommended by the energy audit.</p>			
Motor Upgrade 10-100 HP	HP	\$58.83	\$88.25
<p>The typical scenario consists of replacing an existing electric motor used to drive a ventilation fan, irrigation pumps, vacuum pump, or similar equipment involved with agricultural production with a new, high-efficiency motor. The motor size is equal to or larger than 10 and less than or equal to 100 HP. The number of HP for payment will be the HP of the new motor as recommended by the energy audit.</p>			
Motor Upgrade > 1 and < 10 HP	HP	\$82.18	\$123.27
<p>The typical scenario consists of replacing an existing electric motor used to drive a ventilation fan, irrigation pumps, vacuum pump, or similar equipment involved with agricultural production with a new, high-efficiency motor. The motor size is larger than 1 and less than 10 HP. The number of HP for payment will be the HP of the new motor as recommended by the energy audit.</p>			
Motor Upgrade ≤ 1 HP	kBTU	\$273.76	\$410.63
<p>The typical scenario consists of replacing an existing electric motor used to drive a ventilation fan, irrigation pumps, vacuum pump, or similar equipment involved with agricultural production with a new, high-efficiency motor. The motor size is less than or equal to 1 HP. The number of HP for payment will be the HP of the new motor as recommended by the energy audit.</p>			
Heating, radiant tube	Ea	\$708.95	\$1,063.42
<p>Replacement of inefficient heating systems with radiant tube heaters and miscellaneous items to complete the installation as recommended by the energy audit. The number for payment will be the number of radiant tube heaters installed.</p>			
Heating, building	kBTU/Hr	\$4.42	\$6.63
<p>Replacement of inefficient heating systems with new, high-efficiency heaters or climate control systems as recommended by the energy audit. The number for payment will be the rating of the new or existing system divided by 1,000 to get kBTU/hr.</p>			
Attic Insulation	SqFt	\$0.33	\$0.50
<p>Installation of a minimum 4-in depth of new or additional insulation in attic or ceiling as recommended by the energy audit. The area for payment will be the square feet of area where the insulation is installed.</p>			

Wall Insulation	SqFt	\$0.81	\$1.21
Installation of new or additional insulation in sidewalls and endwalls as recommended by the energy audit. The area for payment will be the square feet of area where the insulation is installed.			
Sealant	Ft	\$0.70	\$1.05
Application of sealant to effectively close gaps in buildings at footer plates, eaves, ridge caps, and gable ends as recommended by the energy audit. The footage for payment will be the linear feet of gaps sealed by a professional contractor using approved materials.			
Greenhouse Screens	SqFt	\$0.91	\$1.37
Installation of a mechanical energy screen system consisting of a drive motor, support cables, controls, and shade material on a greenhouse as recommended by the energy audit. The area for payment will be the square feet of energy screen installed as recommended.			
Grain Dryer	Bu/Hr	\$43.41	\$65.12
Installation/replacement of a more efficient, continuous grain dryer as recommended by the energy audit. The number for payment will be the rated capacity of the dryer in bushels per hour as recommended by the energy audit.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Energy audit and recommendations, Form KS-ENG-10, Job Sheet, showing quantities installed.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5		
Lighting, CFL											X												
Lighting, LED											X												
Lighting, linear fluorescent											X												
Ventilation, exhaust											X												
Ventilation, horizontal air circulation											X												
Plate Cooler											X												
Scroll Compressor											X												
Variable Speed Drive > 5 HP											X												
Automatic Controller System											X												
Motor Upgrade > 100 HP											X												
Motor Upgrade 10-100 HP											X												
Motor Upgrade > 1 and < 10 HP											X												
Motor Upgrade ≤ 1 HP											X												
Heating, radiant tube											X												
Heating, building											X												
Attic Insulation											X												
Wall Insulation											X												
Sealant											X												
Greenhouse Screens											X												
Grain Dryer											X												

# Fence

Code: 382

Reporting Unit: Feet

**Definition:**

A constructed barrier to animals or people.

**Purpose:**

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

**Conditions Where Practice Applies:**

This practice may be applied on any area where management of animal or human movement is needed.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Barbed Wire, multi-strand Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate.	Ft	\$0.90	\$1.09
Barbed Wire, multi-strand with fence markers Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate.	Ft	\$0.97	\$1.17
Barbed Wire, multi-strand, difficult terrain Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate. Installed on rugged land or where site conditions require longer time to install the fence.	Ft	\$1.23	\$1.47
Barbed Wire, Multi-strand with fence markers, difficult terrain Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate. Installed on rugged land or where site conditions require longer time to install the fence.	Ft	\$1.30	\$1.56
Woven Wire Installation of fence will allow for implementation of a grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Woven wire is typically used in applications with sheep, goats, hogs, wildlife exclusion, shelterbelt/tree protection, etc. Constructed using fencing materials rather than a pre-manufactured gate. Includes 32" woven wire with 2 strands of barbed wire.	Ft	\$1.22	\$1.47
Electric, high tensil with energizer Installation of fence will allow for implementation of a grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Includes 3 strands of high-tensil wire with energizer.	Ft	\$0.55	\$0.66
Electric, high tensil with energizer and fence markers Installation of fence will allow for implementation of a grazing management that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, reduction of noxious and invasive weeds. Includes 3 strands of high-tensil wire with energizer.	Ft	\$0.62	\$0.74

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Financial assistance for perimeter/boundary fence is only eligible for expired or expiring Conservation Reserve Program (CRP) fields where upland gamebird habitat and/or degraded plant condition—undesireable plant productivity and health is being addressed. Prior to beginning design on any perimeter/boundary fence scheduled for financial assistance, a participant shall provide assurances of legal property line locations AND agreements with adjoining landowners. At a minimum, this may include a notarized agreement with adjoining landowners regarding location and maintenance; notarized agreement with township, county, or state in the case of road right of ways; and/or legal survey. Expenses for legal surveys and agreements are the responsibility of the participant. Failure to provide needed documentation of location and agreement with adjoining landowners may result in contract termination.
3. For relocation of an animal feeding operation (AFO), the amount of fence planned for financial assistance will not exceed the amount of fence in the AFO being closed out. Financial assistance is not available for fencing of new or expanding facilities except when needed to support core practices to treat the resource concern.
4. For fence marker component for existing fence see CP 645, Upland Wildlife Habitat Management.
5. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
6. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
7. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ECS-382, Fence - 382, and producer self-certification.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Barbed Wire, multi-strand	X	X	X	X	X		X	X				X		X		X	X				
Barbed Wire, multi-strand with fence markers	X	X	X	X	X		X	X				X		X		X	X				
Barbed Wire, multi-strand, difficult terrain	X	X	X	X	X		X	X				X		X		X	X				
Barbed Wire, Multi-strand with fence markers, difficult terrain	X	X	X	X	X		X	X				X		X		X	X				
Woven Wire	X	X	X	X	X		X	X				X				X	X				
Electric, high tensil with energizer	X	X	X	X	X		X	X				X		X		X	X				
Electric, high tensil with energizer and fence markers	X	X	X	X	X		X	X				X		X		X	X				

# Field Border

Code: 386

Reporting Unit: Acre

**Definition:**

A strip of permanent vegetation established at the edge or around the perimeter of a field.

**Purpose:**

This practice may be applied to accomplish one or more of the following:

- Reduce erosion from wind and water
- Protect soil and water quality
- Manage pest populations
- Provide wildlife food and cover
- Increase carbon storage
- Improve air quality

**Conditions Where Practice Applies:**

This practice is applied at the edge or around the perimeter of fields. Its use can support or connect other buffer practices within and between fields. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Herbaceous, standard  A strip of permanent herbaceous vegetation (native warm-season) established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes chemical seedbed preparation and planting of grass. The area of the field border is taken out of production.	Ac	\$294.63	\$353.56
Herbaceous, standard with nutrients  A strip of permanent herbaceous vegetation (warm- and/or cool-season) established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes chemical seedbed preparation, addition of soil amendments, and planting grass. The area of the field border is taken out of production.	Ac	\$317.01	\$380.42
Herbaceous, pollinator  A strip of permanent herbaceous vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes chemical seedbed prep and planting of pollinator friendly herbaceous species. The area of the field border is taken out of production. Seed mix of species is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken, others) or pollinators (e.g., inclusion of 5-10 forb species) based on range conditions. For pollinator habitat: Consideration is given to selecting plants that bloom sequentially throughout the growing season where feasible. For honeybee foraging habitat, species are selected which will be in bloom during the season of year when hives are in the area.	Ac	\$230.70	\$276.84

Herbaceous, pollinator, native	Ac	\$322.76	\$387.31
<p>A strip of permanent herbaceous vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes chemical seedbed prep and planting of pollinator friendly herbaceous species. The area of the field border is taken out of production. Seed mix of predominantly native species is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken, others) or pollinators (e.g., inclusion of 5-10 forb species). For pollinator habitat: Consideration is given to selecting plants that bloom sequentially throughout the growing season where feasible. For honeybee foraging habitat, species are selected which will be in bloom during the season of year when hives are in the area.</p>			
Herbaceous with shrubs	Ac	\$439.94	\$527.93
<p>A strip of permanent vegetation and shrubs established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes chemical and/or mechanical seedbed preparation and planting of herbaceous and woody species. The area of the field border is taken out of production.</p>			
Herbaceous, organic	Ac	\$383.48	\$460.17
<p>A strip of permanent vegetation established at the edge or around the perimeter of a field. This practice may also apply to recreation land or other land uses where agronomic crops including forages are grown. Practice includes mechanical seedbed preparation and planting of organic herbaceous species (where available). The area of the field border is taken out of production.</p>			

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ECS-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Herbaceous, standard		X		X	X	X		X								X					
Herbaceous, standard with nutrients		X		X	X	X		X								X					
Herbaceous, pollinator		X		X	X	X		X								X					
Herbaceous, pollinator, native		X		X	X	X		X								X					
Herbaceous with shrubs		X		X	X	X		X								X					
Herbaceous, organic												X									

## Filter Strip

Code: 393

Reporting Unit: Acre

**Definition:**

A strip or area of herbaceous vegetation that removes contaminants from overland flow.

**Purpose:**

Reduce suspended solids and associated contaminants in runoff. Reduce dissolved contaminant loadings in runoff. Reduce suspended solids and associated contaminants in irrigation tailwater.

**Conditions Where Practice Applies:**

Filter strips are established where environmentally sensitive areas need to be protected from sediment, other suspended solids, and dissolved contaminants in runoff.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Native A strip or area of native herbaceous vegetation situated between cropland, grazing land, or disturbed land and sensitive areas. Practice includes chemical seedbed preparation and planting of native species. The area of the filter strip is taken out of production.	Ac	\$209.35	\$251.23
Introduced A strip or area of herbaceous vegetation situated between cropland, grazing land, or disturbed land and sensitive areas. Practice includes chemical seedbed preparation, soil admendment (nutrients), and planting of approved species. The area of the filter strip is taken out of production.	Ac	\$200.25	\$240.30
Native with Shaping A strip or area of native herbaceous vegetation situated between cropland, grazing land, or disturbed land and sensitive areas. Practice includes chemical seedbed preparation, land shaping/smoothing with producer equipment, and planting of native species. The area of the filter strip is taken out of production.	Ac	\$259.93	\$311.92
Introduced with Shaping A strip or area of introduced herbaceous vegetation situated between cropland, grazing land, or disturbed land and sensitive areas. Practice includes chemical seedbed preparation, land shaping with producer owned equipment, soil amendmets (nutrients), and planting of approved species. The area of the filter strip is taken out of production.	Ac	\$250.83	\$301.00

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ECS-393, Filter Strip - 393

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Native		X	X	X	X	X		X	X	X		X				X					
Introduced		X	X	X	X	X		X	X	X		X				X					
Native with Shaping		X	X	X	X	X		X	X	X		X				X					
Introduced with Shaping		X	X	X	X	X		X	X	X		X				X					

# Firebreak

Code: 394

Reporting Unit: Feet

**Definition:**

A permanent or temporary strip of bare or vegetated land planned to retard fire.

**Purpose:**

Reduce the spread of wildfire. Contain prescribed burns.

**Conditions Where Practice Applies:**

This practice applies on all land uses where protection from wildfire is needed or prescribed burning is applied.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Vegetated, permanent, grass Establishing a 2 acre strip (30-foot wide strip approximately 1/2 mile in length) of permanent vegetation that will serve as a green firebreak. Scenario includes clearing the site, preparing the seedbed, seeding (typically cool-season grasses and/or legumes), and applying needed soil amendments. Clearing will be achieved with the use of a bush hog or similar equipment. Seedbed preparation and vegetation establishment will be accomplished with farm equipment. Soil amendments will be applied according to local FOTG guidance. This scenario does not include follow-up maintenance operations such as weed control, mowing, etc.	LnFt	\$0.07	\$0.08
Mowing Installation of a short vegetative firebreak a minimum width of 30' around a 40-acre field/farm using a bush-hog mower. Generally water control devices such as water bars are not needed due either to the lack of steep terrain or the temporary nature of the firebreak.	LnFt	\$0.03	\$0.04
Constructed, tillage Use of medium equipment such as small dozers to blade, disk, plow, etc. to create a 30' wide bare-soil firebreak on slopes less than 15% around a 40-acre field.	LnFt	\$0.03	\$0.04

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ENG-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of five years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Vegetated, permanent, grass		X			X		X							X								
Mowing		X			X		X							X								
Constructed, tillage		X			X		X							X								

# Fish and Wildlife Habitat Plan

Code: 142

Reporting Unit: Number

**Definition:**

A fish and wildlife habitat plan is a site-specific plan developed for a client who is ready to plan and implement decisions with consideration for fish and wildlife habitat and other biological resources.

**Purpose:**

Meets NRCS quality criteria for fish and wildlife habitat and other identified resource concerns.

**Conditions Where Practice Applies:**

This practice applies to land uses where wildlife and wildlife habitat concerns exist.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Fish and Wildlife Habitat Management CAP Various on-farm land uses.	Number	\$2,224.53	\$2,669.44

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Completed copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Fish and Wildlife Habitat Management CAP	X	X			X		X	X														

## Forage and Biomass Planting

Code: 512

Reporting Unit: Acre

**Definition:**

Establishing adapted and/or compatible species, varieties, or cultivars of herbaceous species suitable for pasture, hay, or biomass production.

**Purpose:**

- Improve or maintain livestock nutrition and/or health.
- Provide or increase forage supply and demand during periods of low-forage production.
- Reduce soil erosion and improve soil and water quality.
- Produce feedstock for biofuel or energy production.

**Conditions Where Practice Applies:**

This practice applies to all lands suitable to the establishment of annual, biennial, or perennial species for forage or biomass production. This practice does not apply to the establishment of annually planted and harvested food, fiber, or oilseed crops.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Native Perennial Grasses, 1 species Establish or reseed adapted perennial native warm-season grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial native warm-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.	Ac	\$72.63	\$87.16
Native Perennial Grasses, 1 species, forgone income Establish or reseed adapted perennial native warm-season grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial native warm-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.	Ac	\$181.64	\$217.97
Native Perennial Grasses, multiple species Establish or reseed adapted perennial native warm-season grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial native warm-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.	Ac	\$177.32	\$212.78
Native Perennial Grasses, multiple species, forgone income Establish or reseed adapted perennial native warm-season grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial native warm-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.	Ac	\$286.32	\$343.59

Introduced Perennial Grasses, legume	Ac	\$38.08	\$45.70
<p>Establish or reseed adapted perennial introduced grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.</p>			
Introduced Perennial Grasses, legume, foregone income	Ac	\$147.09	\$176.51
<p>Establish or reseed adapted perennial introduced grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.</p>			
Introduced Perennial Grasses with lime application	Ac	\$92.09	\$110.51
<p>Establish or reseed adapted perennial introduced grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced grasses for pasture, hay land, and wildlife openings. Includes a lime application. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.</p>			
Bermuda Grass Establishment, sprigging with fertilizer	Ac	\$140.71	\$168.86
<p>Sprigging new grasses with sprigging application for the purpose of providing forage, increasing plant diversity, soil quality and fertility, and plant health. This practice may be utilized for organic or regular production. This scenario assumes fertilizer, sprigs, equipment and labor for seed bed preparation, tillage, sprigging, and spreading.</p>			
Bermuda Grass Establishment, sprigging with fertilizer and lime	Ac	\$186.83	\$224.20
<p>Sprigging new grasses with sprigging application for the purpose of providing forage, increasing plant diversity, soil quality and fertility, and plant health. This practice may be utilized for organic or regular production. This scenario assumes fertilizer, sprigs, equipment and labor for seed bed preparation, tillage, sprigging, and spreading.</p>			
Introduced Perennial Grasses, legume on irrigated cropland	Ac	\$53.03	\$63.63
<p>Establish or reseed adapted perennial introduced grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.</p>			
Introduced Perennial Grasses, legume on irrigated cropland, foregone income	Ac	\$351.48	\$421.77
<p>Establish or reseed adapted perennial introduced grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.</p>			

Organic	Ac	\$79.66	\$95.59
<p>Establish or reseed adapted organic perennial cool-season grasses or cool-season grass and legumes mix to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial cool-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding.</p>			

Organic, forgone income	Ac	\$205.02	\$246.02
<p>Establish or reseed adapted organic perennial cool-season grasses or cool-season grass and legumes mix to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial cool-season grasses for pasture, hay land, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes seed, equipment and labor for seed bed preparation, tillage, seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.</p>			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of five years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Native Perennial Grasses, 1 species		X	X	X	X		X	X	X	X				X	X	X				X	X
Native Perennial Grasses, 1 species, forgone income		X	X	X	X		X	X	X	X				X	X	X				X	X
Native Perennial Grasses, multiple species		X	X	X	X		X	X	X	X				X	X	X				X	X
Native Perennial Grasses, multiple species, forgone income		X	X	X	X		X	X	X	X				X	X	X				X	X
Introduced Perennial Grasses, legume		X	X	X	X		X	X	X	X				X	X	X				X	X
Introduced Perennial Grasses, legume, forgone income		X	X	X	X		X	X	X	X				X	X	X				X	X
Introduced Perennial Grasses with lime application		X	X	X	X		X	X	X	X				X	X	X				X	X
Bermuda Grass Establishment, sprigging with fertilizer		X	X	X	X		X	X	X	X					X	X				X	X
Bermuda Grass Establishment, sprigging with fertilizer and lime		X	X	X	X		X	X	X	X					X	X				X	X
Introduced Perennial Grasses, legume on irrigated cropland		X	X	X	X		X	X	X	X					X	X				X	X
Introduced Perennial Grasses, legume on irrigated cropland, forgone income		X	X	X	X		X	X	X	X					X	X				X	X
Organic											X										
Organic, forgone income											X										

# Forage Harvest Management

Code: 511

Reporting Unit: Acre

**Definition:**

The timely cutting and removal of forages from the field as hay, green-chop, or ensilage.

**Purpose:**

- Optimize yield and quality of forage at the desired levels.
- Promote vigorous plant regrowth.
- Maintain stand life.
- Manage for the desired species composition.
- Use forage plant biomass as a soil nutrient uptake tool.
- Control insects, diseases, and weeds.
- Maintain and/or improve wildlife habitat.

**Conditions Where Practice Applies:**

This practice applies to all land uses where machine-harvested forage crops are grown.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Improved Forage Quality Improved cultural practices and recordkeeping result in better forage quality and better livestock performance.	Ac	\$3.17	\$4.75
Conversion to Non-irrigated The timely cutting and removal of forages such as hay, green chop, or ensilage on land that is converted from irrigated cropland to non-irrigated grassland on 100% of the irrigated cropland acres. Improved cultural practices and recordkeeping result in better forage quality and better livestock performance.	Ac	\$3.17	\$4.75

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the 2011 USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
4. Payment will not exceed \$30,000 per contract for this practice except where irrigated cropland is being converted to dryland cropland.

**Documentation:**

Form KS-ECS-23, Vegetative Management, or Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Improved Forage Quality		X			X				X	X		X		X		X				X	X
Conversion to Non-irrigated		X			X				X	X		X		X						X	X

# Forest Management Plan

Code: 106

Reporting Unit: Number

**Definition:**

A forest management plan is a site-specific plan developed for a client, which addresses one or more resource concerns on land where forestry-related conservation activities or practices will be planned and applied.

**Purpose:**

Meet NRCS quality criteria for the identified resource concern(s).

**Conditions Where Practice Applies:**

This practice is eligible on cropland, forestland, pasture, and range where forestry practices are desired.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Forest Management Plan, ≤ 20 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 1-20 acres in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$1,071.89	\$1,286.26
Forest Management Plan, 21-100 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 21-100 acres in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$1,353.96	\$1,624.75
Forest Management Plan, 101-250 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 101-250 acres in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$2,425.84	\$2,911.01
Forest Management Plan, 251-500 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 251-500 acres in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$3,497.73	\$4,197.28
Forest Management Plan, 501-1,000 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 501-1,000 acres in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$4,061.88	\$4,874.26
Forest Management Plan, > 1,000 acres Non-Industrial Private Forest Land typically unmanaged or limited management activities. Typical site is approximately 1,001 acres or greater in size and consists of existing uneven-aged mixed species stands of harvestable trees.	Number	\$5,077.35	\$6,092.82

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Completed copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Forest Management Plan, ≤ 20 acres	X																					
Forest Management Plan, 21-100 acres	X																					
Forest Management Plan, 101-250 acres	X																					
Forest Management Plan, 251-500 acres	X																					
Forest Management Plan, 501-1,000 acres	X																					
Forest Management Plan, > 1,000 acres	X																					

# Forest Stand Improvement

Code: 666

Reporting Unit: Acre

**Definition:**

The manipulation of species composition, stand structure, and stocking by cutting or killing selected trees and understory vegetation.

**Purpose:**

- Increase the quantity and quality of forest products by manipulating stand density and structure.
- Harvest forest products.
- Initiate forest stand regeneration.
- Reduce wildfire hazard.
- Improve forest health reducing the potential of damage from pests and moisture stress.
- Restore natural plant communities.
- Achieve or maintain a desired native understory plant community for special forest products, grazing, and browsing.
- Improve aesthetic and recreation values.
- Improve wildlife habitat.
- Alter water yield.
- Increase carbon storage in selected trees.

**Conditions Where Practice Applies:**

All forest land. This CP is not applicable for CPs 311, Alley Cropping; 380, Windbreak/Shelterbelt Establishment; and 650, Windbreak/Shelterbelt Renovation.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Pre-commercial Thinning, hand tools Adjusting the stocking of a young, non-merchantable stand of trees. The operation is supervised by a consultant forester and is carried out using hand tools such as chainsaws.	Ac	\$217.40	\$260.88
Timber Stand Improvement, single stem treatment Altering the composition and stocking of a stand of trees by means of individual stem treatment. The trees to be retained are marked by a consultant forester.	Ac	\$252.35	\$302.82
Timber Stand Improvement, chemical, ground Using ground applied chemicals to release young desirable trees from competing and/or overtopping vegetation.	Ac	\$36.90	\$44.28
Timber Stand Improvement, chemical, aerial Using aerially applied chemicals to release desirable trees from competing and/or overtopping vegetation.	Ac	\$65.88	\$79.05
Competition Control, mechanical, light equipment Using light equipment such as a tractor with brush hog to control vegetation that is competing with desirable trees and species or to reduce the stocking level of a stand of desirable trees.	Ac	\$27.68	\$33.22
Competition Control, mechanical, heavy equipment Using equipment such as a masticator or mulcher to control vegetation that is competing with desirable trees and species or to reduce the stocking level of a stand of desirable trees. The trees to be retained will be marked by a consultant forester.	Ac	\$483.05	\$579.66
Creating Patch Clearcuts Creating 2-acre patches in over-mature and/or degraded stands using hand tools such as chainsaws.	Ac	\$170.84	\$205.01
Thinning for Wildlife and Forest Health A combination of hand and chemical treatments used to open the canopy of a stand to improve the wildlife habitat and tree health.	Ac	\$713.22	\$855.87

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ECS-23, Vegetative Management or KS-ECS-5, Tree/Shrub Planting.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Pre-commercial Thinning, hand tools	X				X		X										X				
Timber Stand Improvement, single stem treatment	X				X		X										X				
Timber Stand Improvement, chemical, ground	X				X		X										X				
Timber Stand Improvement, chemical, aerial	X				X		X										X				
Competition Control, mechanical, light equipment	X				X		X										X				
Competition Control, mechanical, heavy equipment	X				X		X										X				
Creating Patch Clearcuts	X				X		X										X				
Thinning for Wildlife and Forest Health	X				X		X										X				

# Grade Stabilization Structure

Code: 410

Reporting Unit: Number

**Definition:**

A structure used to control the grade and head cutting in natural or artificial channels.

**Purpose:**

This standard applies to all types of grade stabilization structures, including a combination of earth embankments and principal spillways and full-flow or detention-type structures. This standard also applies to channel side-inlet structures installed to lower the water from a field elevation, a surface drain, or a waterway to a deeper outlet channel. It does not apply to structures designed to control the rate of flow or to regulate the water level in CP 587, Structure for Water Control. The purpose of this standard is to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advance of gullies, and to enhance environmental quality and reduce pollution hazards.

**Conditions Where Practice Applies:**

In areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Special attention shall be given to maintaining or improving habitat for fish and wildlife where applicable.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Embankment, no principal spillway A grade stabilization structure consisting of an embankment dam without a principal spillway pipe, a low-flow tube of 6 inches or less, and other appurtenances. The volume for payment will be the cubic yards of embankment, which includes the earthfill in the cutoff trench.	CuYd	\$2.26	\$3.39
Embankment, pipe < 24 inches A grade stabilization structure consisting of an embankment, principal spillway pipe with diameter smaller than 24", drop inlet, and other appurtenances. The volume for payment will be the cubic yards of embankment, which includes the earthfill in the cutoff trench.	CuYd	\$2.59	\$3.88
Embankment, pipe ≥ 24 inches A grade stabilization structure consisting of an embankment, principal spillway pipe with a diameter 24" or greater, drop inlet, and other appurtenances. The volume for payment will be the cubic yards of embankment, which includes the earthfill in the cutoff trench.	CuYd	\$2.36	\$3.53
Concrete Box Drop Installation of a concrete box drop or concrete terrace outlet structure including all associated items using standard approved designs. The volume for payment will be the cubic yards of concrete installed in the structure not including aprons or curbs.	CuYd	\$421.98	\$632.98
Sheet Pile Weir Drop Installation of a structure composed of sheet pile to form a drop structure. The area for payment is the square feet of surface area of the installed sheet piling.	SqFt	\$25.44	\$38.16
Gabion Rock Drop Structures Installation of a chute or drop structure formed by gabion mattresses or baskets. The volume for payment will be the cubic yards of rock used in the baskets or mattresses installed and includes all bedding and all other materials.	CuYd	\$83.15	\$124.72
Concrete Block Chute Installation using small concrete masonry units to form a chute or drop structure. The area for payment is the square feet of surface area of the installed blocks and includes earthwork, geotextile, and bedding. For small blocks, the area is calculated using the surface area of a single block times the number of blocks.	SqFt	\$3.07	\$4.61

Modular Concrete Block Drop	CuYd	\$78.33	\$117.49
Installation using large modular concrete blocks to form a chute or drop structure. The area for payment is the cubic yards of the installed blocks and includes earthwork, geotextile, and bedding. The volume is calculated using the volume of a single block (using nominal block dimensions) times the number of blocks.			
Rock Chute	CuYd	\$30.26	\$45.39
Installation of a chute structure constructed of rock riprap with a geotextile base. The volume for payment will be the cubic yards of rock installed and includes all bedding and other materials.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQN: This practice is not eligible on irrigated cropland.
3. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Forms KS-ENG-41, Grade Stabilization Structure - 410 (Concrete Terrace Outlet Structure); KS-ENG-443(JS), Concrete Block Lined Chute; KS-ENG-445, Reinforced Concrete Box Drop Spillway; KS-ENG-400, Pond Cover Sheet; PreCast Concrete Block Field Sheet; and completed table of quantities on as-built plan for gabion structures.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Embankment, no principal spillway		X	X	X	X			X	X	X		X		X		X					
Embankment, pipe < 24 inches		X	X	X	X			X	X	X		X		X		X					
Embankment, pipe ≥ 24 inches		X	X	X	X			X	X	X		X		X		X					
Concrete Box Drop		X	X	X	X			X	X	X		X		X		X					
Sheet Pile Weir Drop		X	X	X	X			X	X	X		X		X		X					
Gabion Rock Drop Structures		X	X	X	X			X	X	X		X		X		X					
Concrete Block Chute		X	X	X	X			X	X	X		X		X		X					
Modular Concrete Block Drop		X	X	X	X			X	X	X		X		X		X					
Rock Chute		X	X	X	X			X	X	X		X		X		X					

# Grassed Waterway

Code: 412

Reporting Unit: Acre

**Definition:**

A natural or constructed channel that is shaped or graded to required dimensions and established with suitable vegetation.

**Purpose:**

This practice may be applied as part of a conservation management system to support one or more of the following purposes:

- To convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding
- To reduce gully erosion
- To protect/improve water quality

**Conditions Where Practice Applies:**

In areas where added water conveyance capacity and vegetative protection are needed to control erosion resulting from concentrated runoff and where such control can be achieved by using this practice alone or combined with other conservation practices.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Waterway, < 25 SqFt  Shaping and/or grading of a grassed waterway to the design dimensions for waterways with an average cross section area less than 25 square feet. For cross section area guidance, see the following Table 1. The area for payment will be the acres of waterway shaped and includes topsoil stockpile and placement.	Ac	\$1,293.03	\$1,724.04
Waterway, 25-50 SqFt  Shaping and/or grading of a grassed waterway to the design dimensions for waterways with an average cross section area of 25 to 50 square feet. For cross section area guidance, see the following Table 1. The area for payment will be the acres of waterway shaped and includes topsoil stockpile and placement.	Ac	\$1,432.27	\$1,953.10
Waterway, 51-100 SqFt  Shaping and/or grading of a grassed waterway to the design dimensions for waterways with an average cross section area of 51 to 100 square feet. For cross section area guidance, see the following Table 1. The area for payment will be the acres of waterway shaped and includes topsoil stockpile and placement.	Ac	\$1,587.49	\$2,222.49
Waterway, > 100 SqFt  Shaping and/or grading of a grassed waterway to the design dimensions for waterways with an average cross section area greater than 100 square feet. For cross section area guidance, see the following Table 1. The area for payment will be the acres of waterway shaped and includes topsoil stockpile and placement.	Ac	\$1,748.91	\$2,623.36
Grassed Waterway with Checks  Shaping and/or grading of a grassed waterway to the design dimensions and installation of fabric or stone checks to reduce maintenance during vegetative establishment. The area for payment will be the acres of waterway shaped and includes topsoil stockpile and placement, materials for checks, and installation of checks.	Ac	\$1,936.48	\$2,581.97

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQN: This practice is not eligible on irrigated cropland.

**Documentation:**

Forms KS-ENG-39a, 412 (Trapezoidal) Check Out; KS-ENG-40a, Grassed Waterway (Parabolic) Check Out; completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Waterway, < 25 Sq ft			X	X	X			X	X	X		X	X			X					
Waterway, 25-50 Sq ft			X	X	X			X	X	X		X	X			X					
Waterway, 51-100 Sq ft			X	X	X			X	X	X		X	X			X					
Waterway, > 100 Sq ft			X	X	X			X	X	X		X	X			X					
Grassed Waterway with Checks			X	X	X			X	X	X		X	X			X					

# Grazing Management Plan

Code: 110

Reporting Unit: Number

**Definition:**

A grazing management plan is a site-specific conservation plan developed for a client which addresses one or more resource concerns on land where grazing-related activities or practices will be planned and applied.

**Purpose:**

Meet NRCS quality criteria for soil erosion control, water quality, fish and wildlife, rangeland/pasture/grazed woodland health and productivity, and other identified resource concerns.

Will be developed following the principle provided in Chapter 11 of the National Range and Pasture Handbook.

**Conditions Where Practice Applies:**

This practice applies to grazed range and pasture only.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Grazing Management Plan, < 100 Acres Small agricultural operation with less than 100 acres grazed land.	Number	\$736.44	\$883.73
Grazing Management Plan, 100-1,499 Acres Small agricultural operation with 100-1,499 acres grazed land.	Number	\$1,933.16	\$2,319.79
Grazing Management Plan, 1,500-5,000 Acres Small agricultural operation with 1,500-5,000 acres grazed land.	Number	\$3,221.93	\$3,866.31
Grazing Management Plan, > 5,000 Acres Small agricultural operation with more than 5,000 acres grazed land.	Number	\$4,142.48	\$4,970.97

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Completed copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Grazing Management Plan, < 100 Acres		X			X		X	X														
Grazing Management Plan, 100-1,499 Acres		X			X		X	X														
Grazing Management Plan, 1,500-5,000 Acres		X			X		X	X														
Grazing Management Plan, > 5,000 Acres		X			X		X	X														

# Heavy Use Area Protection

Code: 561

Reporting Unit: Acre

**Definition:**

The stabilization of areas frequently and intensively used by people, animals, or vehicles by establishing vegetative cover, surfacing with suitable materials, and/or installing needed structures.

**Purpose:**

- Improve or protect riparian areas.
- Reduce soil erosion.
- Improve water quantity and quality.
- Improve air quality.
- Improve aesthetics.
- Reduce livestock stress and mortality.

**Conditions Where Practice Applies:**

This practice applies to urban, agricultural, recreational, or other frequently and intensively used areas requiring treatment to address one or more resource concerns.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Reinforced concrete with sand or gravel foundation Installation of reinforced concrete on a sand or gravel base to protect areas that are frequently and intensively used by people, animals, or vehicles. The installation includes all materials, equipment, and labor to install the protection. The volume for payment will be cubic yards of concrete installed as required by the design.	CuYd	\$165.90	\$199.08
Rock/Gravel on geotextile Installation of rock and/or gravel on a geotextile fabric to protect areas that are frequently and intensively used by people, animals, or vehicles. The installation includes all materials, equipment, and labor to install the protection. The volume for payment will be the cubic yards of rock and/or gravel applied.	CuYd	\$29.22	\$35.07
Rock/Gravel Installation of rock and/or gravel to protect areas that are frequently and intensively used by people, animals, or vehicles. The installation includes all materials, equipment, and labor to install the protection. The volume for payment will be the cubic yards of rock and/or gravel applied.	CuYd	\$12.30	\$14.76

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Practice is eligible for the purpose of providing suitable livestock entry points to water bodies. Permanent fencing is required in this practice to exclude livestock access from unsuitable entry points to the water body.
3. CP 614, Watering Facility, includes aprons around tanks and CP 561, Heavy Use Protection Area, will not be scheduled as a complementary practice.

**Documentation:**

Form KS-ENG-10, Job Sheet; completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Reinforced concrete with sand or gravel foundation		X	X	X	X		X					X				X					
Rock/Gravel on geotextile		X	X	X	X		X					X				X					
Rock/Gravel		X	X	X	X		X					X				X					

# Herbaceous Weed Control

Code: 315

Reporting Unit: Acre

**Definition:**

The removal or control of herbaceous weeds including invasive, noxious, and prohibited plants.

**Purpose:**

- Enhance accessibility, quantity, and quality of forage and/or browse.
- Restore or release native or create desired plant communities and wildlife habitats consistent with the ecological site.
- Protect soils and control erosion.
- Reduce fine-fuels fire hazard and improve air quality.

**Conditions Where Practice Applies:**

This practice applies to all lands except active cropland where removal, reduction, or manipulation of herbaceous vegetation is desired. This practice does not apply to removal of herbaceous vegetation by prescribed fire (use CP 338, Prescribed Burning) or removal of herbaceous vegetation to facilitate a land use change (use CP 460, Land Clearing).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Chemical, ground  Land unit on which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve forage conditions for domestic livestock or wildlife. The practice entails the eradication of vegetation by use of weed treatment using ground equipment to apply chemicals in order to eliminate noxious weeds, promote forage productivity, and improve ecological condition.	Ac	\$18.07	\$21.68
Chemical, wetland  Using ground rigs and hand-held equipment treat herbaceous plants in wetland and riparian areas. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have herbaceous weed species that are in the early phases of invasions. Typical unit is 10 acres.	Ac	\$20.32	\$24.38
Mechanical  Removal of herbaceous weeds of light infestations on gentle sloping to moderately deep to deep soils. The practice entails the removal of herbaceous weeds by the use of mower, brush hog, disc, or other light equipment in order to reduce fuel loading and improve ecological site condition. Weeds have exceeded desired levels based on ecological site potential. For organic and non-organic farms.	Ac	\$11.21	\$13.45
Mechanical, tree establishment  Land unit on which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve stand establishment of herbaceous or deciduous plantings. The practice entails the eradication of vegetation by use of weed treatment through tillage in order to eliminate undesirable weeds, promote stand establishment, improve ecological condition, and improve wildlife habitat.	Ac	\$150.27	\$180.32
Chemical, tree establishment, banding  Tree establishment in which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve health and vigor of trees. The practice entails the management of undesirable plants (including invasive and non-invasive species) with a post-emergent selective herbicide for the establishment of a tree planting on four acres. Broadcast or spot treatment application of a narrow band of herbicide (2-4 feet wide) along the tree row or around individual trees is an example of banding herbicides to control weeds. In order to receive payment, landowner at a minimum must utilize and maintain Integrated Pest Management (IPM) principles using scouting, biological, and/or low risk pesticides.	Ac	\$24.74	\$29.68

Chemical, tree establishment, post-emergent herbicide

Ac

\$38.34

\$46.01

Tree establishment in which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve health and vigor of trees. The practice entails the management of undesirable plants (including invasive and non-invasive species) with a post-emergent selective herbicide for the establishment of a tree planting on four acres. Broadcast or spot treatment application of a narrow band of herbicide (2-4 feet wide) along the tree row or around individual trees is an example of banding herbicides to control weeds. In order to receive payment, landowner at a minimum must utilize and maintain Integrated Pest Management (IPM) principles using scouting, biological, and/or low risk pesticides.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Broadcast and aerial treatment will be eligible only where mechanical or spot treatments are not practical. If broadcast or aerial treatment is needed, justification will be documented in the producer's case file.
3. Where the resprouting of Sericea Lespedeza is a concern, two chemical broadcast treatments shall be scheduled, one in the first year and another in the third year. Only two treatments are eligible for financial assistance for the lifespan of the practice. Practice will be maintained for the lifespan following the last treatment.
4. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
5. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-315, Herbaceous Weed Control.

**Maintenance:**

Practice will be maintained for a lifespan of five years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Chemical, ground	X	X			X		X	X						X		X	X					
Chemical, wetland	X	X			X		X	X						X		X	X					
Mechanical	X	X			X		X	X				X		X		X	X					
Mechanical, tree establishment	X	X			X		X	X				X				X	X					
Chemical, tree establishment, banding	X	X			X		X	X								X	X	X				
Chemical, tree establishment, post-emergent herbicide	X	X			X		X	X								X	X	X				

# Integrated Pest Management

Code: 595

Reporting Unit: Acre

**Definition:**

A site-specific combination of pest prevention, pest avoidance, pest monitoring, and pest suppression strategies.

**Purpose:**

Prevent or mitigate off-site pesticide risks to water quality from leaching, solution runoff, and adsorbed runoff losses.

Prevent or mitigate off-site pesticide risks to soil, water, air, plants, animals, and humans from drift and volatilization losses.

Prevent or mitigate on-site pesticide risks to pollinators and other beneficial species through direct contact.

Prevent or mitigate cultural, mechanical, and biological pest suppression risks to soil, water, air, plants, animals, and humans.

**Conditions Where Practice Applies:**

This practice is only eligible on cropland.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Basic IPM Field, one resource concern A basic IPM plan with LGU-approved pest monitoring techniques and pest thresholds (where available) is applied in Large Scale Field/Forage Crops to address one identified resource concern (e.g., Water Quality—Impacts to Human Drinking Water) with either risk prevention (e.g., planned pesticides have no risk to the identified resource concern) or risk mitigation (e.g., planned pesticides have appropriate mitigation planned from Agronomy Technical Note 5 for “Intermediate,” “High,” or “Extra High” WIN-PST Final Hazard Ratings).	Ac	\$11.89	\$14.27
Advanced Field, all resource concerns A comprehensive IPM plan with LGU-approved pest prevention, avoidance and monitoring techniques and pest thresholds (where available) is applied in Large Scale Field/Forage Crops to address all identified resource concerns with either risk prevention (e.g., planned pesticides have no risk to the identified resource concerns) or risk mitigation (e.g., planned pesticides have appropriate mitigation planned from Agronomy Technical Note 5 for “Intermediate,” “High,” or “Extra High” WIN-PST Final Hazard Ratings).	Ac	\$23.79	\$28.54
Basic IPM Orchard, one resource concern A basic IPM plan with LGU-approved pest monitoring techniques and pest thresholds (where available) is applied in Large Scale Orchard/Specialty Crops to address one identified resource concern (e.g., Water Quality—Impacts to Human Drinking Water) with either risk prevention (e.g., planned pesticides have no risk to the identified resource concern) or risk mitigation (e.g., planned pesticides have appropriate mitigation planned from Agronomy Technical Note 5 for “Intermediate,” “High,” or “Extra High” WIN-PST Final Hazard Ratings).	Ac	\$84.98	\$101.97
IPM Small Farm, multiple resource concerns A basic IPM plan with LGU-approved pest monitoring techniques and pest thresholds (where available) is applied in Small Farm/Diversified Systems (e.g., CSA, organic) to address multiple identified resource concerns (e.g., Water Quality—Impacts to Human Drinking Water and Pollinator Impacts) with either risk prevention (e.g., planned pesticides have no risk to the identified resource concerns) or risk mitigation (e.g., planned pesticides have appropriate mitigation planned from Agronomy Technical Note 5 for “Intermediate,” “High,” or “Extra High” WIN-PST Final Hazard Ratings). This scenario attempts to capture the higher cost/acre of planning and implementing IPM techniques on smaller acreages with very diverse cropping systems.	Ea	\$518.40	\$622.08

A comprehensive IPM plan based primarily on LGU-approved pest prevention and avoidance techniques is applied to prevent negative impacts on all identified resource concerns. LGU-approved pest monitoring techniques and pest thresholds may also be included, but suppression techniques cannot pose any hazards to identified resource concerns. This type of system is very difficult to achieve, but may be most commonly achieved in Organic Systems that already rely heavily on prevention and avoidance techniques.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Payment will not exceed \$30,000 per contract for this practice.

**Documentation:**

Form KS-ECS-595, Pest Management, or Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Basic IPM Field, one resource concern				X	X	X		X	X						X	X				X	X
Advanced Field, all resource concerns				X	X	X		X	X						X	X				X	X
Basic IPM Orchard, one resource concern				X	X	X		X	X						X	X				X	X
IPM Small Farm, multiple resource concerns				X	X	X		X	X			X			X	X				X	X
Risk Prevention IPM, all resource concerns				X	X	X		X	X			X			X	X				X	X

# Integrated Pest Management Plan

Code: 114

Reporting Unit: Number

**Definition:**

IPM Plan is an ecosystem-based strategy that is a sustainable approach to manage pests using a combination of techniques such as chemical tools, biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Methods of chemical applications are selected in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

**Purpose:**

Meets NRCS quality criteria for soil erosion, water quality, air quality, and plant quality.  
Complies with federal, state, tribal, and local laws, regulations and permit requirements.  
Addresses operator’s objectives.

**Conditions Where Practice Applies:**

Producers choose to implement an IPM Plan for reasons that include, but are not limited to:  
Managing pests effectively and economically.  
Minimizing the risk associated with pest suppression.  
Producing quality commodities.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
IPM CAP Small/Specialty, < 50 acres  Various on-farm land uses where pests are managed on smaller operations, including organic and specialty crop operations where more complicated pest management evaluations and solutions may be necessary. Current pest control activities cause environmental concerns with water quality and/or erosion.	Number	\$1,471.88	\$1,766.25
IPM CAP Medium, 51-250 acres  Various on-farm land uses where pests are managed on a moderately-sized farm where IPM Plan is to be applied. Current pest control activities cause environmental concerns with water quality and/or erosion.	Number	\$1,884.00	\$2,260.80
IPM CAP Large, > 250 acres  Various on-farm land uses where pests are managed on a larger farm where IPM Plan strategies are to be applied. Current pest control activities cause environmental concerns with water quality and/or erosion.	Number	\$2,943.75	\$3,532.50

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Complete hardcopy of the client’s plan (MsWord copy of the “Plan Template”) with appropriate practice specifications (or jobsheets) for the planned practices and mitigations.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
IPM CAP Small/Specialty, < 50 acres			X	X	X	X		X	X	X												
IPM CAP Medium, 51-250 acres			X	X	X	X		X	X	X												
IPM CAP Large, > 250 acres			X	X	X	X		X	X	X												

# Irrigation Pipeline

Code: 430

Reporting Unit: Feet

**Definition:**

A pipeline and appurtenances installed in an irrigation system.

**Purpose:**

To prevent erosion or loss of water quality or damage to the land, to make possible proper management of irrigation water, and to reduce water conveyance losses.

**Conditions Where Practice Applies:**

Pipelines shall be part of an irrigation water distribution or conveyance system designed to facilitate farm soil and water conservation use and management. All areas served by pipelines shall be suitable for irrigation with available water supplies. Pipelines shall be placed only in soils where bedding and backfill requirements can be met.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
PVC, by the pound Installation of any size buried PVC plastic pipe for irrigation water supply. The weight for payment will be the total weight of the installed pipe based on the supplier's literature for pipe weight per linear foot. The payment rate includes the cost for all valves, connections, and other appurtenances.	Lb	\$1.76	\$2.64
PVC, 8-inch by the foot Installation of an 8-inch diameter buried PVC pipeline for irrigation water supply. The length for payment will be the linear feet of pipeline installed and includes all valves, connections, and other appurtenances.	LnFt	\$3.98	\$5.97
PVC, 10-inch by the foot Installation of a 10-inch diameter buried PVC pipeline for irrigation water supply. The length for payment will be the linear feet of pipeline installed and includes all valves, connections, and other appurtenances.	LnFt	\$5.41	\$8.12

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-23, Irrigation Pipeline - Code 430.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
PVC, by the pound	X		X	X	X	X	X	X	X						X	X			X		
PVC, 8-inch by the foot	X		X	X	X	X	X	X	X						X	X			X		
PVC, 10-inch by the foot	X		X	X	X	X	X	X	X						X	X			X		

# Irrigation System, Microirrigation

Code: 441

Reporting Unit: Acre

**Definition:**

An irrigation system for frequent application of small quantities of water on or below the soil surface as drops, tiny streams, or miniature spray through emitters or applicators placed along a water delivery line.

**Purpose:**

This practice may be applied as part of a conservation management system to support one or more of the following purposes:

- To efficiently and uniformly apply irrigation water and maintain soil moisture for plant growth.
- To prevent contamination of ground and surface water by efficiently and uniformly applying chemicals.
- To establish desired vegetation.

**Conditions Where Practice Applies:**

On sites where soils and topography are suitable for irrigation of proposed crops and an adequate supply of suitable quality water is available for the intended purpose(s). Microirrigation is suited to vineyards, orchards, field crops, windbreaks, gardens, greenhouse crops, and residential and commercial landscape systems. Microirrigation is also suited to steep slopes where other methods would cause excessive erosion and areas where other application devices interfere with cultural operations. Microirrigation is suited for use in providing irrigation water in limited amounts to establish desired vegetation such as windbreaks, living snow fences, riparian forest buffers, and wildlife plantings. This practice standard applies to systems with design discharge less than 60 gal/hr at each individual lateral discharge point. CP 442, Irrigation System, Sprinkler, applies to systems with design discharge of 60 gal/hr or greater at each individual lateral discharge point.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Subsurface Drip Irrigation  Installation of a SDI system on land previously irrigated by surface or sprinkler irrigation systems. The area for payment will be the acres of cropland irrigated by the SDI system and includes the subsurface tape or tubing, filters, supply manifolds, flush manifolds, regulators, valves, and other appurtenances. It does not include the irrigation water supply line.	Ac	\$1,780.10	\$2,136.12
Surface PE, with emitters, trees and shrubs  Installation of a micro-irrigation system, utilizing surface PE tubing with emitters to provide irrigation for trees and shrubs. The area for payment will be the number of trees and shrubs watered. The payment does not include payment for the irrigation supply line, pump, power source, or water source (well or reservoir).	Ea	\$6.33	\$7.60
Surface PE, with emitters, high tunnel  Installation of a micro-irrigation system, utilizing surface PE tubing with emitters to provide irrigation for a high tunnel structure. The area for payment will be the total area inside the high tunnel system. The payment does not include payment for the irrigation supply line pump, power source, or water source (well or reservoir).	SqFt	\$0.56	\$0.67

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Surface PE with emitters - Component eligible for payment for use with tree and shrub plantings associated with the NRCS FOTG CPs 380, Windbreak/Shelterbelt Establishment; 391, Riparian Forest Buffer; 612, Tree/Shrub Establishment; or 650, Windbreak/Shelterbelt Renovation. If used for windbreaks it must meet the two out of five years irrigation history requirement.
3. Subsurface drip irrigation systems are subject to a \$650 per acre payment rate cap.

**Documentation:**

Forms KS-ENG-205, Irrigation System, Microirrigation-441 (Subsurface Drip Irrigation [SDI]); KS-ENG-207, Irrigation System, Microirrigation-441 (Tree, Shrub, and Vegetable Irrigation).

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Subsurface Drip Irrigation	X		X	X	X	X	X	X	X			X	X		X	X		X	X			
Surface PE, with emitters, trees and shrubs	X		X	X	X	X	X	X	X			X	X		X	X		X	X			
Surface PE, with emitters, high tunnel	X		X	X	X	X	X	X	X			X	X		X	X						

# Irrigation Water Management

Code: 449

Reporting Unit: Acre

**Definition:**

The process of determining and controlling the volume, frequency, and application rate of irrigation water in a planned, efficient manner.

**Purpose:**

- Manage soil moisture to promote desired crop response.
- Optimize use of available water supplies.
- Minimize irrigation-induced soil erosion.
- Decrease non-point source pollution of surface and groundwater resources.
- Manage salts in the crop root zone.
- Manage air, soil, or plant micro-climate.
- Proper and safe chemigation or fertigation.
- Improve air quality by managing soil moisture to reduce particulate matter movement.

**Conditions Where Practice Applies:**

This practice is applicable to all irrigated lands. An irrigation system adapted for site conditions (soil, slope, crop grown, climate, water quantity and quality, etc.) must be available and capable of applying water to meet the intended purpose(s).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Basic  Implementation of a low intensity irrigation water management system such as irrigation scheduling. Producers use a checkbook method to determine water application times and amounts. Soil moisture is determined by the feel method, volumes of irrigation water are based on energy or water district bills, records are kept on paper copies, and calculations are made by hand. Typical water and energy savings range from 5-10%. The area for payment is the irrigated land using irrigation scheduling. When signing up under the On-Farm Energy Initiative, energy savings must be documented with an energy audit.	Ac	\$3.59	\$4.30
Intermediate, 1st year  Installation of soil moisture sensors that provide continuous soil moisture data to provide the producer with accurate soil moisture information during the growing season. Irrigation scheduling is based on actual soil moisture monitoring rather than a checkbook method. The number for payment will be the number of moisture sensor sets installed. Each set consists of 3-4 sensors installed at different depths at a single location in the field. It includes payment for the data logger and other appurtenances.	Ea	\$988.64	\$1,186.36
Intermediate, subsequent years  Irrigation scheduling based on data from soil moisture sensors after the monitoring equipment has been purchased or is already available. Typical water and energy savings range from 10-20%. The area for payment is the irrigated land using irrigation scheduling. When signing up under the On-Farm Energy Initiative, energy savings must be documented with an energy audit.	Ac	\$3.99	\$4.79

Implementation of a high intensity irrigation water management system for producers using a water budget method with advanced methods of determining irrigation water applied, estimated crop evapotranspiration, continuous soil moisture data, and crop temperature stress monitoring. Typically soil moisture is determined by automated soil moisture monitoring stations equipped with telemetry data, irrigation amounts are recorded from a flow meter near the pump, and telemetry data is automatically sent to a computer with irrigation software. Typical water and energy savings are greater than 20%. The area for payment is the irrigated land using irrigation water management. When signing up under the On-Farm Energy Initiative, energy savings must be documented with an energy audit.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice will be implemented a minimum of three (3) years. Payment will be made upon annual implementation of the practice. For Intermediate scenario: "IWM, Intermediate 1st year" is to be used in year one, and "IWM, Intermediate Subsequent Years" for years two and three.
3. Payment will not exceed \$30,000 per contract for this practice.

**Documentation:**

Forms KS-ENG-390, Irrigation Water Management - 449; KS-ENG-201, Irrigation System, Sprinkler - 442 (Center Pivot); KS-ENG-394, Irrigation Water Management - 449, Planned Crop and Water Requirement; KS-ENG-396, Irrigation Water Management - 449, Irrigation System and Management Rating Tool (I\_SMRT); pumping plant evaluation and recommendations; energy audit and recommendations.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPPI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Basic									X		X	X			X	X			X	X	
Intermediate, 1st year									X		X	X			X	X			X	X	
Intermediate, subsequent years									X		X	X			X	X			X	X	
Advanced									X		X	X			X	X			X	X	

# Irrigation Water Management Plan

Code: 118

Reporting Unit: Number

**Definition:**

The objective of an Irrigation Water Management (IWM) Plan is to provide the producer a guide for the proper management and application of irrigation water resources.

**Purpose:**

- Promote desired crop response.
- Optimize the use of available water supplies.
- Improve water quality by reducing irrigation sources of surface and ground water contamination.
- Minimize irrigation induced soil erosion.
- Improve soil environment for vegetative growth.
- Manage salts in the root zone.
- Improve air quality by reducing movement of particulate matter.
- Provide appropriate and safe fertigation and chemigation.
- Reduce energy consumption.

**Conditions Where Practice Applies:**

This planning practice applies to areas where irrigation water management will improve water, reduce water consumed, or reduce energy used in irrigation practices.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Irrigation Water Management CAP Agricultural operations supported with existing irrigation systems.	Number	\$2,113.91	\$2,536.70

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

Forms KS-ENG-390, Irrigation Water Management - 449; KS-ENG-394, Irrigation Water Management - 449, Planned Crop and Water Requirement; KS-ENG-396, Irrigation Water Management - 449, Irrigation System and Management Rating Tool (I\_SMRT).

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Irrigation Water Management CAP	█	█	█	█	█	█	█	█	X	█	█	█	█	█	█	X	█	█	█	█	█

# Land Smoothing

Code: 466

Reporting Unit: Acre

**Definition:**

Removing irregularities on the land surface.

**Purpose:**

To improve surface drainage, provide for more uniform cultivation, and improve equipment operation and efficiency.

**Conditions Where Practice Applies:**

This practice applies on areas where depressions, mounds, old terraces, turn rows, and other surface irregularities interfere with the application of needed soil and water conservation and management practices. It is limited to areas having adequate soil depth or where topsoil can be salvaged and replaced.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Minor Shaping Removal of surface irregularities such as filling gullies to permit the installation of a conservation practice. The area for payment will be the acres of gully filling or land smoothing required.	Ac	\$181.04	\$271.57
Field Shaping Removal of old terraces to permit the installation of a conservation practice. The length for payment will be the length of current terraces removed.	Ft	\$0.21	\$0.32

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- This practice does not apply to the regular maintenance on irrigated land or on land that has been modified using CP 462, Precision Land Forming, or CP 464, Irrigation Land Leveling.

**Documentation:**

Form KS-ENG-10, Job Sheet; Plan map showing area of field being smoothed or linear feet of terraces being removed.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Minor Shaping		X	X	X	X			X								X						
Field Shaping		X	X	X	X			X								X						

# Lined Waterway or Outlet

Code: 468

Reporting Unit: Feet

**Definition:**

A waterway or outlet having an erosion-resistant lining of concrete, stone, synthetic turf reinforcement fabric, or other permanent material.

**Purpose:**

This practice may be applied as part of a resource management system to support one or more of the following purposes:  
 Provide for safe conveyance of runoff from conservation structures or other water concentrations without causing erosion or flooding.  
 Stabilize existing and prevent future gully erosions.  
 Protect and improve water quality.

**Conditions Where Practice Applies:**

This practice is applicable on cropland.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Turf Reinforced Matting Installation of a permanent turf reinforcement mat in the flow area of a waterway. The area for payment will be the square yards of area covered by the installed mat and the payment includes the excavation required to shape the waterway.	SqFt	\$0.63	\$0.75
Rock Lined, 12 inches Installation of a well-graded, 12-inch thick rock riprap lining in the flow area of a waterway. The area for payment will be the area covered by the installed rock, including the bedding material, and also includes the excavation required to shape the waterway.	SqFt	\$2.05	\$2.46
Rock Lined, 24 inches Installation of a well-graded, 24-inch thick rock riprap lining in the flow area of a waterway. The area for payment will be the area covered by the installed rock, including the bedding material, and also includes the excavation required to shape the waterway.	SqFt	\$4.54	\$5.44
Concrete Installation of a concrete lining in the flow portion of a waterway. The area for payment will be the area covered by the installed concrete. The payment includes the excavation required to shape the waterway and a clean sand or gravel subgrade.	SqFt	\$2.72	\$3.26
Articulated Concrete Block Installation of articulated concrete block lining in the flow portion of a waterway. The area for payment will be the area covered by the installed concrete blocks. The payment includes the excavation required to shape the waterway, geotextile, and a clean sand or gravel subgrade.	SqFt	\$5.19	\$6.23
Splash Pad Installation of a vegetated splash pad at pipe outlets into streams. The area for payment will be the area covered by the installed splash pad. The splash pad may be constructed of various materials including riprap, gravel, transition mats, or turf reinforcement mats.	SqFt	\$4.18	\$5.02

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-10, Job Sheet; KS-ENG-39a, 412 Grassed Waterway (Trapezoidal) Checkout; KS-ENG-40a, 412 Grassed Waterway (Parabolic) Checkout; Complete table of quantities on as-built plans

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Turf Reinforced Matting			X	X	X			X								X						
Rock Lined, 12 inches			X	X	X			X								X						
Rock Lined, 24 inches			X	X	X			X								X						
Concrete			X	X	X			X								X						
Articulated Concrete Block			X	X	X			X								X						
Splash Pad			X	X	X			X								X						

# Livestock Pipeline

Code: 516

Reporting Unit: Feet

**Definition:**

Pipeline having an inside diameter of 8 inches or less.

**Purpose:**

To convey water from a source of supply to points of use for livestock, wildlife, or recreation.

**Conditions Where Practice Applies:**

Where it is desirable or necessary to convey water in a closed conduit from one point to another.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Small Diameter, ≤ 2 inch (KS/NE) Installation of a buried pipeline with a diameter of 2 inches or less installed at a depth that will protect the pipeline from freezing. The payment includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. The pipeline may be constructed of any approved material such as PE, PVC, or similar pipe meeting the design pressure requirements. The length for payment will be the measured length of the installed pipeline.	Ft	\$1.63	\$2.30
Large Diameter, 2.5-8 inch Installation of a buried pipeline with a diameter greater than 2 inches and less than or equal to 8 inches installed at a depth that will protect the pipeline from freezing. The payment includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. The pipeline may be constructed of any approved material such as PE, PVC, or similar pipe meeting the design pressure requirements. The length for payment will be the measured length of the installed pipeline.	Ft	\$2.44	\$3.46
Small Diameter, backhoe Installation of a 4-inch diameter or smaller pipeline installed in rocky conditions or as a water supply line from an embankment pond. Trencher installation is not possible due to site conditions. The payment includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. The pipeline may be constructed of any approved material such as PE, PVC, or similar pipe meeting the design pressure requirements. The length for payment will be the measured length of the installed pipeline.	Ft	\$3.00	\$4.26
Boring, ≤ 3 inch diameter Installation of a buried pipeline with a diameter less than or equal to 3 inches installed by boring through road bed or under streams. The payment includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. The pipeline may be constructed of any approved material such as PE, PVC, or similar pipe meeting the design pressure requirements. The length for payment will be the measured length of the installed pipeline by boring.	LnFt	\$29.61	\$41.95

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
5. For relocation of an animal feeding operation (AFO), the amount of pipeline planned will not exceed the amount in the AFO being closed out. Financial assistance is not available for pipeline for new or expanding AFO.

**Documentation:**

Forms KS-ENG-24, Pipeline - 516 (Livestock); Completed table of quantities on as-built plan; KS-ENG-408, Water Supply Line; KS-ENG-418, Siphon Supply Line.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Small Diameter, ≤ 2 inch (KS/NE)		X	X	X	X		X	X				X		X	X	X	X					
Large Diameter, 2.5-8 inch		X	X	X	X		X	X				X		X	X	X	X					
Small Diameter, backhoe		X	X	X	X		X	X				X		X	X	X	X					
Boring, ≤ 3 inch diameter		X	X	X	X		X	X				X		X	X	X	X					

# Mulching

Code: 484

Reporting Unit: Acre

## Definition:

Applying plant residues or other suitable materials produced offsite to the land surface.

## Purpose:

- Conserve soil moisture.
- Moderate soil temperature.
- Provide erosion control.
- Suppress weed growth.
- Facilitate the establishment of vegetative cover.
- Improve soil condition.
- Reduce airborne particulates.

## Conditions Where Practice Applies:

This practice applies to all lands where mulches are needed. This practice may be used alone or in combination with other practices.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Natural Material, straw Application of straw mulch or other state-approved natural material to reduce erosion and facilitate the establishment of vegetative cover. Mulch provides full coverage and is typically used with critical area planting. Two tons per acre of straw applied and anchored with light tillage equipment, treader, knifed in, etc.	Ac	\$324.51	\$389.41
Erosion Control Blanket Installation of erosion control blanket on critical areas with steep slopes, grassed waterways, or diversions. Blanket is typically made of coconut coir, wood fiber, straw and is typically covered on both sides with polypropylene netting. Used to help control erosion and establish vegetative cover.	SqFt	\$0.14	\$0.17
Tree and Shrub, squares Weed barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Typically used to prevent weed competition during the installation of conservation practices. Rate is per tree/shrub and assumes 1 square yard of weed barrier fabric and 5 staples/tree.	Ea	\$1.68	\$2.02
Tree and Shrub, rolls Weed barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Typically used to prevent weed competition during the installation of conservation practices. Two 300-foot tree rows will use weed barrier to reduce weed competition and conserve moisture. Rate is per square feet (300' roll x 6' wide = 1,800 square feet) and 3 staples/pins per tree.	SqFt	\$0.19	\$0.22
Hydro-mulching Installation of mulch through hydraulic methods on critical areas with steep slopes, grassed waterways, or diversions. The mulch is comprised of wood cellulose fiber pulp and may include seed, fertilizer, and other approved materials. Mulch is typically applied at a rate of 1,500 pounds per acre as a slurry by using hydroseed methods. Used to help control erosion and establish vegetative cover.	Ac	\$638.93	\$766.72
Natural Materials, large area Application of straw mulch or other state-approved natural material to reduce erosion and facilitate the establishment of vegetative cover on large areas including salt-affected soils. Mulch provides full coverage and is typically used with critical area planting. Two tons per acre of straw applied through mechanical methods.	Ac	\$256.88	\$308.26

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

KS-ECS-23, Vegetative Management.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Natural Material, straw	X	X	X	X	X	X	X	X	X	X		X				X	X	X				
Erosion Control Blanket	X	X	X	X	X	X	X	X	X	X		X				X	X	X				
Tree and Shrub, squares	X	X	X	X	X	X	X	X	X	X		X				X	X	X				
Tree and Shrub, rolls	X	X	X	X	X	X	X	X	X	X		X				X	X	X				
Hydro-mulching	X	X	X	X	X	X	X	X	X	X		X				X	X	X				
Natural Materials, large area	X	X	X	X	X	X	X	X	X	X		X				X	X	X				

# Nutrient Management

Code: 590

Reporting Unit: Acre

**Definition:**

Managing the right amount of plant nutrients and soil amendments applied at the right rate at the right time and with the right placement (known as the 4 R's of nutrient management).

**Purpose:**

- To budget and supply nutrients for plant production.
- To properly utilize manure or organic byproducts as a plant nutrient source.
- To minimize agricultural nonpoint source pollution of surface and groundwater resources.
- To protect air quality by reducing nitrogen emissions (ammonia and Nox compounds) and the formation of atmospheric particulates.
- To maintain or improve the physical, chemical, and biological condition of soil.

**Conditions Where Practice Applies:**

This practice applies to all lands where plant nutrients and soil amendments are applied.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Basic</p> <p>This scenario describes the implementation of a basic nutrient management system on <math>\geq 40</math> acres of cropland or hay land where there is no manure application. Implementation will result in the proper rate, source, method of placement, and timing of nutrients. Payment for implementation is to defray the costs of soil testing, analysis, and consultant services that provide nutrient recommendations based on LGU recommendations or crop removal rates and an associated nutrient budget, and recordkeeping. Records demonstrating implementation of the 4 R's of the NM criteria will be required.</p>	Ac	\$3.78	\$4.54
<p>Basic Organic</p> <p>The planned NM system for organic production will meet the current 590 standard. Implementation will result in the proper rate, source, method of placement, and timing of nutrients. Payment for implementation is to defray the costs of soil testing, manure and/or compost analysis, training attendance, and consultant services that provide nutrient recommendations. Records demonstrating implementation of the 4 R's of NM standard will be required. This scenario is designed to encourage organic producers to effectively use organic fertilizers, manure, and/or compost appropriately improving soil quality and minimizing runoff of nutrients from fields to surface waters. The basis for nutrient applications will be recommendations based on soil and manure analyses.</p>	Ac	\$10.83	\$13.00
<p>Basic with Manure</p> <p>This scenario describes the implementation of a basic nutrient management system on planning units 40 acres or larger of cropland or hay land where there is manure or compost application in addition to commercial fertilizer applications. Implementation will result in the proper rate, source, method of placement, and timing of nutrients while minimizing off-site degradation or the excessive built up of N and P. Payment for implementation is to defray the costs of soil testing, manure testing, analysis, proper implementation, and consultant services that provide nutrient recommendations based on LGU recommendations or crop removal rates and an associated nutrient budget, and recordkeeping. Risk assessments including PI (phosphorus index) and NI (nitrogen index) will be completed with applications of manure completed based on risk results. Records demonstrating implementation of the 4 R's of the NM plan will be required along with copies of risk assessments. The producer will attend one extension crop school or nutrient management workshop or similar activity annually to stay current on crop-specific nutrient management.</p>	Ac	\$10.01	\$12.02

Enhanced

Ac

\$18.37

\$22.04

This scenario takes a conventional cropping system where either no nutrient management or only a basic nutrient management is being practiced. An enhanced nutrient management system includes split applications and multiple nutrient concentration tests (other than only soil tests) and methods that more concisely enable scheduling of appropriate fertilizer applications. Nutrients are transported to surface waters through runoff or wind erosion in quantities that degrade water quality and limit use of intended purposes. Inefficient energy utilization occurs due to traditional methods and forms of fertilizer applications.

Advanced Precision

Ac

\$27.16

\$32.59

This scenario describes the implementation of an advanced precision nutrient management system on cropland. Payment for implementation is to defray the costs of soil testing, analysis, consultant services, skilled labor, and specialized nutrient application that provide proper nutrient recommendations based on LGU recommendations or crop removal rates and an associated nutrient budget, recordkeeping, and monitoring on a precision level that includes split applications, NDVI sensing, and aerial imaging. Records demonstrating implementation of the 4 R's of the NM plan will be required. This scenario goes beyond the basic precision system by using technologies that improve efficiency and effectiveness of nutrient management by using specialized precision techniques and tools (variable rate applicators, NDVI, aerial photography, yield monitoring). Precision NM techniques ensure that the right rate, proper timing, and proper placement of nutrients minimize nonpoint source pollution and provide proper amounts of nutrients to the crop where it is needed and not applying where it is not needed.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Practice will be implemented a minimum of three (3) years. Payment will be made upon annual implementation of the practice.
3. Payment will not exceed \$30,000 per contract for this practice.

**Documentation:**

Form KS-ECS-590, Nutrient Management - 590, or Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPPI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Basic			X	X	X	X		X							X	X				X	X
Basic Organic												X									
Basic with Manure			X	X	X	X		X							X	X				X	X
Enhanced			X	X	X	X		X							X	X				X	X
Advanced Precision			X	X	X	X		X							X	X				X	X

# Nutrient Management Plan

Code: 104

Reporting Unit: Number

**Definition:**

Nutrient management plans are documents of record of how nutrients will be managed for plant production. These plans are prepared in collaboration with producer and/or landowner and are designed to help the producer with implementation and maintenance activities associated with the plan.

**Purpose:**

Reduce runoff and control soil erosion from the field.

**Conditions Where Practice Applies:**

Nutrient management plans shall meet the technical criteria for the CP 590, Nutrient Management, and address the use and management of all nutrients applied on cropland, hay land, or pastureland (animal manure, wastewater, commercial fertilizers, crop residues, legume credits, irrigation water, or organic by-products).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Nutrient Management CAP, ≤ 100 acres Various on-farm land uses where natural or artificial amendments are applied.	Number	\$1,665.53	\$1,998.63
Nutrient Management CAP, 101-300 acres Various on-farm land uses where organic or inorganic amendments are applied.	Number	\$1,982.36	\$2,378.83
Nutrient Management CAP, > 300 acres Various on-farm land uses where organic or inorganic amendments are applied.	Number	\$2,397.89	\$2,877.47

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- This practice must be performed by a certified TSP to be eligible for financial assistance.

**Documentation:**

A hard copy of the Nutrient Management Plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Nutrient Management CAP, ≤ 100 acres			X	X	X	X		X								X					
Nutrient Management CAP, 101-300 acres			X	X	X	X		X								X					
Nutrient Management CAP, > 300 acres			X	X	X	X		X								X					

# Obstruction Removal

Code: 500

Reporting Unit: Acre

**Definition:**

Removal and disposal of unwanted, unsightly, or hazardous buildings, structures, vegetation, landscape features, and other materials.

**Purpose:**

To safely remove and dispose of unwanted obstructions and materials in order to apply conservation practices or facilitate planned use of abandoned mine lands, farms, ranches, construction sites, and recreation areas.

**Conditions Where Practice Applies:**

On land where existing obstructions interfere with planned use and development.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Removal and disposal of fence, landscape Removal and disposal of existing fence by demolition, excavation, or other means in order to apply conservation practices or facilitate planned use to reduce hazards to wildlife, especially prairie-chicken dispersion and mortality. The length for payment will be the linear feet of fence removed.	LnFt	\$0.83	\$1.00
Removal and disposal of power lines and poles Removal and disposal of power lines and poles through demolition, excavation or other means required in order to apply conservation practices. The length for payment will be the linear feet of power line removed.	LnFt	\$2.48	\$2.98
Removal and disposal of steel and or concrete structures Removal and disposal of large steel and/or concrete structures by demolition, excavation, or other means in order to apply conservation practices or facilitate planned use to reduce hazards to wildlife, especially prairie-chicken dispersion and mortality. The area for payment will be the square feet of area occupied by the structure prior to removal and disposal.	SqFt	\$9.02	\$10.82
Removal and disposal of wood structures Removal and disposal of wood structures by demolition, excavation, or other similar means in order to apply conservation practices or facilitate planned use to reduce hazards to wildlife, especially prairie-chicken dispersion and mortality. The area for payment will be the square feet of area occupied by the structure prior to removal and disposal.	SqFt	\$4.72	\$5.66
Removal and disposal of individual landscape structures Removal and disposal of individual landscape structures (windmills, large trees, etc.) by demolition, excavation, or other means in order to apply conservation practices or facilitate planned use to reduce hazards to wildlife, especially prairie-chicken dispersion and mortality. The area for payment will be the square feet of area occupied by the structure prior to removal and disposal.	SqFt	\$4.36	\$5.23
Removal and disposal of brush and trees, ≤ 6-inch diameter Remove and dispose of brush and trees predominantly ≤ 6 inches DBH by demolition, excavation, or other means required for removal in order to apply conservation practices. The area for payment will be the acres of brush and trees removed.	Ac	\$836.86	\$1,004.23
Removal and disposal of brush and trees, > 6-inch diameter Remove and dispose of brush and trees predominantly > 6 inches DBH by demolition, excavation, or other means required for removal in order to apply conservation practices. The area for payment will be the acres of brush and trees removed.	Ac	\$1,519.76	\$1,823.71

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice is for the removal of fences that are no longer serving their intended purpose and are beyond their life expectancy OR abandoned pump jacks, windmills, or oil/saltwater storage batteries that are either in flight paths from nesting cover to leks or brood-rearing cover or that cause non-use of habitat by prairie-chickens or other wildlife.
3. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Table of quantities or Form KS-ENG-10, Job Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Removal and disposal of fence, feedlot														X								
Removal and disposal of fence, landscape							X							X								
Removal and disposal of power lines and poles							X							X								
Removal and disposal of steel and or concrete structures							X							X								
Removal and disposal of wood structures							X							X								
Removal and disposal of individual landscape structures							X							X								
Removal and disposal of brush and trees, ≤ 6-inch diameter							X							X								
Removal and disposal of brush and trees, > 6-inch diameter							X							X								

# Pollinator Habitat Enhancement Plan

Code: 146

Reporting Unit: Number

**Definition:**

A pollinator habitat enhancement plan is a site-specific conservation plan developed for a client that addresses the improvement, restoration, enhancement, or expansion of flower-rich habitat that supports native and/or managed pollinators.

**Purpose:**

Meet NRCS quality criteria for soil erosion control, water quality, soil quality, plant condition, fish and wildlife, rangeland/pasture/grazed woodland health and productivity, and other identified resource concerns.

**Conditions Where Practice Applies:**

This practice applies to land uses where pollinator and pollinator habitat resource concerns exist.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Pollinator Habitat Enhancement Plan CAP Various on-farm land uses.	Number	\$2,224.53	\$2,669.44
Pollinator Habitat Enhancement Plan CAP, no local TSP Various on-farm land uses, no qualified TSP within 300 miles.	Number	\$3,230.86	\$3,877.04

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice must be performed by a certified TSP to be eligible for financial assistance. Nonlocal is to be used when no TSP is available within 300 miles.

**Documentation:**

Completed copy of the plan.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Pollinator Habitat Enhancement Plan CAP	X	X	X	X	X	X	X	X	X	X											
Pollinator Habitat Enhancement Plan CAP, no local TSP	X	X	X	X	X	X	X	X	X	X											

# Pond

Code: 378

Reporting Unit: Number

## Definition:

A water impoundment made by constructing an embankment or by excavating a pit or dugout. In this standard, ponds constructed by the first method are referred to as embankment ponds, and those constructed by the second method are referred to as excavated ponds. Ponds constructed by both the excavation and the embankment methods are classified as embankment ponds if the depth of water impounded against the embankment at the auxiliary spillway elevation is three feet or more.

## Purpose:

To provide water for livestock, fish, and wildlife; recreation; fire control; and other related uses and to maintain or improve water quality.

## Conditions Where Practice Applies:

This standard establishes the minimum acceptable quality for the design and construction of low-hazard ponds where failure of the dam will not result in loss of life; damage to homes, commercial or industrial buildings, main highways, or railroads; or in interruption of the use or service of public utilities. The product of the storage times the effective height of the dam is less than 3000. Storage is the volume, in acre-feet, in the reservoir below the elevation of the crest of the auxiliary spillway. The effective height of the dam is the difference in elevation, in feet, between the auxiliary spillway crest and the lowest point in the cross section taken along the centerline of the dam. If there is no auxiliary spillway, the top of the dam is the upper limit. The effective height of the dam is 35 feet or less.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Excavated Pond A small excavated pond where the excavated material is placed in a spoil pile, not in a designed embankment. The volume for payment is the cubic yards of excavation in the pond.	CuYd	\$1.90	\$2.28
Excavated Pond with Embankment A small excavated pond with the excavated material placed in a designed embankment. The payment covers all earthfill, trickle tube, and other items required by the design. The volume for payment will be the cubic yards of excavation in the pond.	CuYd	\$2.33	\$2.80
Embankment Pond without Pipe A small embankment pond that does not require a principal spillway. The volume for payment will be the cubic yards of earthfill in the embankment, including the earthfill in the cutoff trench. The payment covers all excavation, trickle tube, and other items required by the design.	CuYd	\$2.14	\$2.56
Embankment Pond with Pipe An embankment pond that requires a principal spillway as part of the design. The volume for payment will be the cubic yards of earthfill in the embankment, including the earthfill in the cutoff trench. The payment covers all excavation, pipe, and other items required by the design.	CuYd	\$2.87	\$3.45

## Limitations:

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. CP 378, Pond, is subject to a \$6,000/no. payment cap.
3. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.

- 4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
- 5. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Forms KS-ENG-3, Pond (Water Supply); KS- ENG-4, Earthwork Computation Sheet; KS-ENG-4a, Fill; KS- ENG-4b, Fill (Stakeout); KS-ENG-4c, Cut; KS-ENG-6, Pond - 378 (Excavated Pond or Pit); KS-ENG-15, Earth Dam Inspection Report; KS-ENG-400, Pond Cover Sheet; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Excavated Pond		X	X	X	X		X	X				X		X		X						
Excavated Pond with Embankment		X	X	X	X		X	X				X		X		X						
Embankment Pond without Pipe		X	X	X	X		X	X				X		X		X						
Embankment Pond with Pipe		X	X	X	X		X	X				X		X		X						

# Pond Sealing or Lining, Bentonite Treatment

Code: 521C

Reporting Unit: Number

**Definition:**

A liner for a pond or waste impoundment consisting of a compacted soil-bentonite mixture.

**Purpose:**

To reduce seepage losses from ponds or waste impoundments for water conservation and environmental protection.

**Conditions Where Practice Applies:**

This practice applies where:

Soils are suitable for treatment with bentonite.

Ponds or waste impoundments require treatment to reduce seepage rates and to impede the migration of contaminants to within acceptable limits.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Bentonite Treatment, covered  Installation of a compacted soil liner, treated with bentonite and adequate additional moisture as required, to reduce seepage from ponds or waste storage impoundment structures. The payment includes incorporation of the bentonite with the soil under proper moisture conditions, compaction to the designed liner thickness, and placement of soil cover over the treated liner. The volume for payment will be the cubic yards of installed liner and cover.	CuYd	\$17.88	\$21.45

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Bentonite Treatment, covered		X	X	X	X		X	X														

# Pond Sealing or Lining, Compacted Clay Treatment

Code: 521D

Reporting Unit: Number

**Definition:**

A liner for a pond or waste storage impoundment constructed using compacted soil without soil amendments.

**Purpose:**

To reduce seepage losses from ponds or waste storage impoundments constructed for water conservation and environmental protection.

**Conditions Where Practice Applies:**

This practice applies where:

Soils at the site would exhibit seepage rates in excess of acceptable limits or would allow an unacceptable migration of contaminants from the impoundment.

An adequate quantity of soil suitable for constructing a clay liner without amendments is available at an economical haul distance.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Use On-site Material  Installation of a compacted soil liner, using on-site clay materials and adequate additional moisture as required. This payment rate is for ponds or waste storage impoundment structures that do not require a liner cover, such as poultry litter storage areas. The payment includes compaction under proper moisture conditions to the designed liner thickness. The volume for payment will be the cubic yards of installed liner.	CuYd	\$3.67	\$5.51
Use On-site Material with Soil Cover  Installation of a compacted soil liner, using on-site clay materials and adequate additional moisture as required, to reduce seepage from ponds or waste storage impoundment structures. The payment includes compaction under proper moisture conditions to the designed liner thickness and placement of soil cover over the compacted liner. The volume for payment will be the cubic yards of installed liner and cover.	CuYd	\$2.97	\$4.46

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ENG-10, Job Sheet, Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Use On-site Material	X	X	X	X	X	X	X	X														
Use On-site Material with Soil Cover	X	X	X	X	X	X	X	X														

# Pond Sealing or Lining, Flexible Membrane

Code: 521A

Reporting Unit: Number

**Definition:**

A manufactured hydraulic barrier consisting of a functionally continuous layer of synthetic or partially synthetic, flexible material.

**Purpose:**

To restrict, impede, and control seepage of contaminants from water and waste impoundment structures for water conservation and environmental protection.

**Conditions Where Practice Applies:**

On ponds and water storage structures that require treatment to control seepage rates within acceptable limits.  
 On earthen waste storage lagoons and other waste impoundment structures that require treatment to control seepage of contaminants from the storage structure.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Flexible Membrane, covered without liner drainage or venting  Installation of a flexible geosynthetic membrane liner to reduce seepage from ponds or waste storage impoundment structures. The area for payment will be the square feet of area covered by the installed liner and includes subgrade preparation and compaction, liner placement, and soil cover material.	SqYd	\$7.23	\$8.67
Flexible Membrane, covered with liner drainage or venting  Installation of a flexible geosynthetic membrane liner to reduce seepage from ponds or waste storage impoundment structures. The payment includes subgrade preparation and compaction, liner placement, soil cover material, and liner drainage or venting. The area for payment will be the square feet of area covered by the installed liner.	SqYd	\$8.65	\$10.38

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Flexible Membrane, covered without liner drainage or venting	█	█	X	X	X	█	█	X	█	█	█	█	█	█	█	█	█	█	█	█	█
Flexible Membrane, covered with liner drainage or venting	█	█	X	X	X	█	█	X	█	█	█	█	█	█	█	█	█	█	█	█	█

# Pond Sealing or Lining, Soil Dispersant Treatment

Code: 521B

Reporting Unit: Number

**Definition:**

A liner for a pond or waste impoundment consisting of a compacted soil-dispersant mixture.

**Purpose:**

To reduce seepage losses from ponds or waste impoundments for water conservation and environmental protection.

**Conditions Where Practice Applies:**

This practice applies where:

Soils are suitable for treatment with dispersants.

Ponds or waste impoundments require treatment to reduce seepage rates and to impede the migration of contaminants to within acceptable limits.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Soil Dispersant, covered  Installation of a compacted soil liner, treated with a soil dispersant and adequate additional moisture as required, to reduce seepage from ponds or waste storage impoundment structures. The payment includes incorporation of the dispersant with the soil liner under proper moisture conditions, compaction to the designed liner thickness, and placement of soil cover over the treated liner. The volume for payment will be the cubic yards of installed liner and cover.	CuYd	\$5.35	\$6.42

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Soil Dispersant, covered	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

# Prescribed Burning

Code: 338

Reporting Unit: Acre

**Definition:**

Applying controlled fire to a predetermined area.

**Purpose:**

- To control undesirable vegetation.
- To prepare sites for harvesting, planting, or seeding.
- To control plant disease.
- To reduce wildfire hazards.
- To improve wildlife habitat.
- To improve plant production quantity and/or quality.
- To remove slash and debris.
- To enhance seed and seedling production.
- To facilitate distribution of grazing and browsing animals.
- To restore and maintain ecological sites.

**Conditions Where Practice Applies:**

On rangeland, forestland, native pasture, pastureland, wildlife land, hay land, and other lands as appropriate.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Herbaceous Fuel, small acreage Applying a prescribed burn according to designed burn plan and 338–Prescribed Burning standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, facilitate grazing distribution and maintain ecological processes. This scenario is based on a burn area of less than 160 acres and applies under the following conditions: where the terrain of the majority of the area to be burned is < 15% slopes with herbaceous and/or low volatile woody fuel with no high volatile fuels. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to 394–Firebreak standard and cost scenarios.)	Ac	\$14.59	\$17.51
Herbaceous Fuel, standard Applying a prescribed burn according to designed burn plan and 338–Prescribed Burning standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, facilitate grazing distribution and maintain ecological processes. This scenario is based on the following conditions: where the terrain of the majority of the area to be burned is < 15% slopes with herbaceous and/or low volatile herbaceous fuel with limited high volatile fuels. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to 394–Firebreak standard and cost scenarios.)	Ac	\$6.68	\$8.01

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-338, Prescribed Burn, or Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Herbaceous Fuel, small acreage		X			X		X					X		X		X						
Herbaceous Fuel, standard		X			X		X					X		X		X						

# Prescribed Grazing

Code: 528

Reporting Unit: Acre

## Definition:

Managing the harvest of vegetation with grazing animals.

## Purpose:

This practice may be applied as part of a conservation management system to achieve one or more of the following:

- Improve or maintain desired species composition and vigor of plant communities.
- Improve or maintain quantity and quality of forage for grazing and browsing animals' health and productivity.
- Improve or maintain surface and/or subsurface water quality and quantity.
- Improve or maintain riparian and watershed function.
- Reduce accelerated soil erosion and maintain or improve soil condition.
- Improve or maintain the quantity and quality of food and/or cover available for wildlife.
- Promote economic stability through grazing sustainability.

## Conditions Where Practice Applies:

This practice applies to all lands where grazing animals are managed except cropland.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Conversion, non-irrigated Design and implementation of a grazing system on newly established grazinglands, which were previously irrigated cropland, that will enhance pasture condition and ecosystem function as well as optimize efficiency and economic return through monitoring (photo points, stubble height after grazing, etc.) and record keeping.	Ac	\$18.26	\$21.91
Range, 30-73% rest Design and implementation of a grazing system that will enhance pasture condition and ecosystem function by providing rest to the pastures during the growing season (30-73% rest) as well as optimize efficiency and economic return through monitoring (trend, composition, production, etc.) and record keeping.	Ac	\$8.44	\$10.12
Range, > 73% rest Design and implementation of a grazing system that will enhance pasture condition and ecosystem function by providing maximum rest to the pastures during the growing season (greater than 73% rest) as well as optimize efficiency and economic return through monitoring (trend, composition, production, etc.) and record keeping.	Ac	\$10.57	\$12.69
Habitat Management, grouse Development and implementation of a grazing schedule that will create, restore, and/or enhance habitat components for grouse species including Lesser prairie-chicken and Sage grouse (identified wildlife species of concern).	Ac	\$9.86	\$11.83
Livestock Deferment Defer livestock grazing for a 12-month period to allow for regrowth and recovery to occur on 40-acres, grazed-range unit where a plant or animal resource concerns exists. Complete livestock exclusion is required during the specified time period. Deferment may be necessary on whole units or portions of units as determined by appropriate assessment.	Ac	\$12.03	\$14.43

## Limitations:

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice except Livestock Deferment, which may be implemented one or more years to address resource concerns.

3. WLH: Habitat Management, Grouse—See Range Technical Note 9 for habitat type description and wildlife plan development requirements. Zone 1—Development of nesting and brood rearing habitat primarily for Greater Prairie-Chicken, north of a line from the south border of Greeley, Wichita, Scott, Lane, Ness, Rush, Barton, Rice, and McPherson Counties; west of a line from the east border of McPherson, Saline, Ottawa, Cloud, and Republic Counties. Zone 2—Development of nesting and brood rearing habitat primarily for Lesser Prairie-Chicken, south of a line from the north border of Hamilton, Finney, Hodgeman, Pawnee, Stafford, Reno, and Harvey Counties; west of a line from the east border of Harvey, Sedgwick, and Sumner Counties. Zone 3—Development of nesting habitat primarily for Greater Prairie-Chicken, east of a line from the west border of Washington, Clay, Dickinson Marion, Butler, and Cowley Counties.
4. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
5. LPCI: This is a required core practice that must included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed must include a core practice that is either planned within the contract period (a contract item) or already applied. Payment will not exceed \$50,000 per contract for this practice.
6. WEPA: For GMD5, Conversion Non-Irrigated scenario applies to acres under end gun that are converted to non-irrigated.
7. Payment will not exceed \$30,000 per contract for this practice except in the LPCI or where irrigated cropland is being converted to dryland cropland.
8. Livestock Deferment scenario requires two (2) years of 528—Prescribed Grazing after implementation.

**Documentation:**

Form KS-ECS-528, Prescribed Burn, or Producer Self Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Conversion, non-irrigated	X	X	X	X	X		X	X	X	X		X		X	X	X				X	X
Range, 30-73% rest	X	X	X	X	X		X	X	X	X		X		X	X	X				X	X
Range, > 73% rest	X	X	X	X	X		X	X	X	X		X		X	X	X				X	X
Habitat Management, grouse	X	X	X	X	X		X	X	X	X		X		X	X	X				X	X
Livestock Deferment	X	X	X	X	X		X	X	X	X		X		X	X	X				X	X

# Pumping Plant

Code: 533

Reporting Unit: Number

**Definition:**

A facility that delivers water at a designed pressure and flow rate. Includes the required pump(s), associated power unit(s), plumbing, and appurtenances and may include on-site fuel or energy source(s) and protective structures.

**Purpose:**

This practice may be applied as part of a resource management system to achieve one or more of the following purposes:

- Delivery of water for irrigation, watering facilities, wetlands, or fire protection
- Removal of excessive subsurface or surface water
- Provide efficient use of water on irrigated land
- Transfer of animal waste as part of a manure transfer system
- Improve air quality
- Reduce energy use

**Conditions Where Practice Applies:**

This practice applies where conservation objectives require the addition of energy to pressurize and transfer water to maintain critical water levels in soils, wetlands, or reservoirs; transfer wastewater; or remove surface runoff or groundwater.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Irrigation, modify pump  Modification and/or replacement of vertical turbine pumps in existing active wells when done in conjunction with an irrigation conversion practice to ensure energy and water savings are realized. A pump test or similar energy analysis must be performed if sufficient performance data of the existing pump cannot be provided. The payment includes all materials, equipment, and labor to test and repair the inner column of the pump assembly and rebowling. The number for payment is each pump modified.	Ea	\$6,879.23	\$10,318.85
Irrigation, variable frequency drive  Installation of a variable frequency drive (VFD) or variable speed drive (VSD) to an existing irrigation system that results in energy or water savings. An energy analysis that includes a pump test is required. The payment includes all materials and installation of the drive and the energy analysis. The number for payment will be each VFD or VSD installed.	Ea	\$5,565.72	\$8,348.58
Livestock, manure transfer  Installation of a waste transfer pump and accessories to move manure from storage location to manure distribution site/equipment. The payment includes all materials and installation. The number for payment will be each pump installed.	Ea	\$7,759.19	\$11,638.79
Livestock, with pressure tank (HP)  Installation of a submersible electric-powered pump in a well or structure as part of a water delivery system that includes a pressure tank to control pressures. Installation includes drop pipe, pump, pressure tank, and all necessary materials and appurtenances. The HP for payment will be the minimum power of the pump required by the design.	HP	\$1,645.54	\$2,468.31
Livestock, without pressure tank (HP)  Installation of a submersible electric-powered pump in a well or structure as part of a water delivery system that does not include a pressure tank to control pressures. Installation includes drop pipe, pump, and all necessary materials and appurtenances. The HP for payment will be the minimum power of the pump required by the design.	HP	\$671.65	\$1,007.47

Windmill-Powered Pump	Ea	\$3,313.65	\$4,970.47
Installation of a windmill and pump system to supply a reliable water source for livestock and/or wildlife. The installation includes the tower, concrete footings, wheel blade unit, sucker rod, down pipe, gear box, pump, plumbing, well head protection concrete pad, and all other necessary materials and appurtenances. The number for payment will be each windmill and pump system installed.			
Solar-Powered Pump, 0.5 HP	Ea	\$1,603.52	\$2,405.28
Installation of a submersible solar-powered pump less than 0.80 HP in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all necessary materials and appurtenances. The number for payment will be each pump installed.			
Solar-Powered Pump, 1 HP	Ea	\$2,656.79	\$3,985.19
Installation of a submersible solar-powered pump greater than 0.80 and less than 1.60 HP in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all necessary materials and appurtenances. The number for payment will be each pump installed.			
Solar-Powered Pump, 2 HP	Ea	\$4,874.78	\$7,312.17
Installation of a submersible solar-powered pump greater than 1.6 HP in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all necessary materials and appurtenances. The number for payment will be each pump installed.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Practice is eligible for a pump for livestock waste transfer or a solar pump to be used for the purpose of pumping water from a water body in order to remove livestock from the water body (e.g., pond or stream). Practice is also eligible on new wells.
3. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
5. Only new windmills are eligible for financial assistance.
7. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plans; Pumping plant evaluation and recommendations.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Irrigation, modify pump		X	X	X	X		X	X			X				X		X				
Irrigation, variable frequency drive		X	X	X	X		X	X			X				X		X				
Livestock, manure transfer		X	X	X	X		X	X			X						X				
Livestock, with pressure tank (HP)		X	X	X	X		X	X			X			X	X		X				
Livestock, without pressure tank (HP)		X	X	X	X		X	X			X			X	X		X				
Windmill-Powered Pump		X	X	X	X		X	X			X			X	X		X				
Solar-Powered Pump, 0.5 HP		X	X	X	X		X	X			X			X	X		X				
Solar-Powered Pump, 1 HP		X	X	X	X		X	X			X			X	X		X				
Solar-Powered Pump, 2 HP		X	X	X	X		X	X			X			X	X		X				

## Range Planting

Code: 550

Reporting Unit: Acre

**Definition:**

Establishment of adapted perennial vegetation such as grasses, forbs, legumes, shrubs, and trees.

**Purpose:**

- Restore a plant community similar to its historic climax or the desired plant community.
- Provide or improve forages for livestock.
- Provide or improve forage, browse, or cover for wildlife.
- Reduce erosion by wind and/or water.
- Improve water quality and quantity.
- Increase carbon sequestration.

**Conditions Where Practice Applies:**

On rangeland, native or naturalized pasture, grazed forest, or other suitable location where the principal method of vegetation management will be with herbivores. This practice shall be applied where desirable vegetation is below the acceptable level for natural reseeding to occur, or where the potential for enhancement of the vegetation by grazing management is unsatisfactory.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Native, standard prep  Establishment of a mixture of native adapted perennial species on a rangeland unit to improve forage condition, improve wildlife habitat, and/or reduce erosion. Seed mix of native species is chosen based on range conditions and availability of seed. Planting is by preparing a seedbed with a light to moderate tillage and seeding with a no-till drill, range drill, or broadcasting.	Ac	\$100.28	\$120.34
Native, heavy prep  Establishment of a mixture of native adapted perennial species on a rangeland unit to improve forage condition, improve wildlife habitat, and/or reduce erosion. Seed mix of native species is chosen based on range conditions and availability of seed. Planting is by preparing a seedbed with moderate to heavy tillage (ripping and heavy disk) and seeding with a no-till drill, range drill, or broadcasting.	Ac	\$112.11	\$134.53
Native, wildlife or pollinator  Establishment of a mixture of predominantly native adapted perennial species on a rangeland unit to improve wildlife habitat, benefit pollinators and beneficial insects. Seed mix of predominantly native species (inclusion of 5-10 forb species) is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken, others) or pollinators based on range conditions. For pollinator habitat: Consideration is given to selecting plants that bloom sequentially throughout the growing season where feasible. For honeybee foraging habitat, species are selected which will be in bloom during the season of year when hives on in the area. Planting is by preparing a seedbed with moderate to heavy tillage (ripping and heavy disk) and seeding with a no-till drill, range drill, or broadcasting.	Ac	\$306.87	\$368.24
Saline  Establish and maintain permanent herbaceous vegetation on saline/sodic sites. Grass seeding on 20 acres of saline/sodic affected soils. This practice designed for saline seep with recharge or discharge area and saline/sodic soils. Seed mix of predominantly non-native species is chosen based on site conditions and availability of seed. Planting is by preparing a seedbed with moderate to heavy tillage (ripping and heavy disk) and seeding with a no-till drill, range drill, or broadcasting.	Ac	\$157.07	\$188.49

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ECS-4, Grass Seeding.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Native, standard prep		X	X	X	X		X	X		X		X		X	X	X				X	X
Native, heavy prep		X	X	X	X		X	X		X		X		X	X	X				X	X
Native, wildlife or pollinator		X	X	X	X		X	X		X		X		X	X	X				X	X
Saline		X	X	X	X		X	X		X		X		X	X	X				X	X

# Residue and Tillage Management, Mulch Till

Code: 345

Reporting Unit: Acre

**Definition:**

Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round while limiting the soil-disturbing activities used to grow crops in systems where the entire field surface is tilled prior to planting.

**Purpose:**

- Reduce sheet and rill erosion.
- Reduce wind erosion.
- Reduce soil particulate emissions.
- Maintain or improve soil condition.
- Increase plant-available moisture.
- Provide food and escape cover for wildlife.

**Conditions Where Practice Applies:**

This practice applies to all cropland and other land where crops are planted.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Mulch Till, basic	Ac	\$9.55	\$14.32

This practice includes tillage methods commonly referred to as mulch tillage or chiseling and disking. It applies to stubble mulching on summer-fallowed land, to tillage for annually planted crops and to tillage for planted crops and to tillage for planting perennial crops. All residue shall be uniformly distributed on the surface over the entire field and not burned or removed throughout the critical wind erosion period. These periods of intensive tillage have led to excessive soil loss, often above the Soil Loss Tolerance (T), due to the loss of critical crop or weed residue. The RUSLE2 model will be used to review the farming operation and determine if enough residue is being retained, throughout the rotation, to keep soil loss below T. The producer will then remove operations, or select alternate operations, to reduce erosion below T.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice.
3. WQN: This practice is eligible only if the producer is reducing current water use by a minimum of 35%.
4. Payment will not exceed \$30,000 per contract for this practice.

**Documentation:**

Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Mulch Till, basic				X	X			X	X		X	X			X	X				X		X

# Residue and Tillage Management, No-Till/Strip Till/Direct Seed

Code: 329

Reporting Unit: Acre

## Definition:

Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round while limiting soil disturbing activities to only those necessary to place nutrients, condition residue, and plant crops.

## Purpose:

- Reduce sheet and rill erosion.
- Reduce wind erosion.
- Improve soil organic matter content.
- Reduce CO<sub>2</sub> losses from the soil.
- Reduce soil particulate emissions.
- Increase plant-available moisture.
- Provide food and escape cover for wildlife.

## Conditions Where Practice Applies:

This practice applies to all cropland and other land where crops are planted. This practice includes planting methods commonly referred to as no-till, strip till, direct seed, zero till, slot till, or zone till. Approved implements are no-till and strip-till planters, certain low soil disturbance drills and air seeders, strip-type fertilizer and manure injectors and applicators, in-row chisels, and similar implements that only disturb strips and slots. All others are considered to be full-width or capable of full disturbance and, therefore, not compatible.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
No-Till/Strip Till This practice typically involves conversion from a clean-tilled (conventional tilled) system to no-till or strip-till (conservation tilled) system on 100 acres of cropland. The no-till/strip-till system includes chemical weed control (rather than cultivation) and may also include a period of chemical fallow. System is applicable in both irrigated and non-irrigated fields.	Ac	\$9.55	\$14.32
Organic No-Till/Strip Till This practice typically involves conversion from a clean or mulch tilled (conventional tilled) system to no-till or strip-till (conservation tilled) system on 20 acres of organic cropland. The organic no-till/strip-till system relies on mulching/residue management, organic-approved chemical weed control, or alternative methods of weed control such as hand weeding, flaming, etc. (rather than traditional cultivation). System is applicable in both irrigated and non-irrigated fields.	Ac	\$9.55	\$14.32

## Limitations:

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice.
3. WQN: This practice is eligible only if the producer is reducing current water use by a minimum of 35%.
4. Payment will not exceed \$30,000 per contract for this practice.

## Documentation:

Producer Self-Certification Guidance Sheet.

## Maintenance:

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
No-Till/Strip Till			X	X	X	X		X	X		X				X	X				X	X
Organic No-Till/Strip Till												X									

# Residue and Tillage Management, Ridge Till

Code: 346

Reporting Unit: Acre

**Definition:**

Managing the amount, orientation, and distribution of crop and other plant residues on the soil surface year-round, while growing crops on pre-formed ridges alternated with furrows protected by crop residue.

**Purpose:**

- Reduce sheet and rill erosion.
- Reduce wind erosion.
- Maintain or improve soil condition.
- Reduce soil particulate emissions.
- Manage snow to increase plant-available moisture.
- Modify cool wet site conditions.
- Provide food and escape cover for wildlife.

**Conditions Where Practice Applies:**

This practice applies to all cropland and other land where crops are planted.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Ridge Till	Ac	\$10.72	\$16.07
Adopting the change from full-width heavy tillage to ridge till. This change requires a change in management and equipment.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice.
3. WQN: This practice is eligible only if the producer is reducing current water use by a minimum of 35%.
4. Payment will not exceed \$30,000 per contract for this practice.

**Documentation:**

Producer Self-Certification Guidance Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Ridge Till				X	X	X		X	X		X	X			X	X				X	X

# Restoration and Management of Declining Habitats

Code: 643

Reporting Unit: Acre

**Definition:**

Restoring, conserving, and managing unique or diminishing native terrestrial and aquatic ecosystems.

**Purpose:**

To return aquatic or terrestrial ecosystems to their original or usable and functioning condition and to improve biodiversity by providing and maintaining habitat for fish and wildlife species associated with the ecosystem.

**Conditions Where Practice Applies:**

Sites or areas that once supported or currently support a unique, dwindling, or imperiled native plant and animal community.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Wildlife Structures, Fence Markers  This scenario is for the installation of wildlife structures on all land uses where the targeted species has been identified as Rare and Declining. Structures are of low intensity and low complexity, when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. This scenario includes fence markers. The typical size range for this scenario is 1 mile of fence. This scenario would be applied on any land use where habitats are utilized by species identified as rare & declining.	LnFt	\$0.07	\$0.09
Wildlife Structures, Fence Markers includes foregone income component  This scenario is for the installation of wildlife structures on all land uses where the targeted species has been identified as Rare and Declining. Structures are of low intensity and low complexity, when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. This scenario includes fence markers. The typical size range for this scenario is 1 mile of fence. This scenario would be applied on any land use where habitats are utilized by species identified as rare & declining. Intensity is the number of structures to be installed per acre. Foregone income on approximately 1/4 of the acres.	LnFt	\$0.10	\$0.12
Wildlife Structures, Watering Facility Escape Ramp  This scenario is for the installation of wildlife structures on all land uses where the targeted species has been identified as Rare and Declining. Structures are of low intensity and low complexity, when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. This scenario includes escape ramps. The typical size range for this scenario is 4 watering facilities retrofitted to include an escape ramp (2 ramps per tank.). This scenario would be applied on any land use where habitats are utilized by species identified as rare & declining to reduce mortality by drowning in tanks.	Ea	\$26.81	\$32.17
Wildlife Enhancement, Livestock exclusion  Livestock excluded from wildlife areas for habitat development/enhancement. Typical size is 640 acres.	Ac	\$14.97	\$14.98

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.

3. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Forms KS-ECS-4, Grass Seeding; KS-ECS-5, Tree/Shrub Planting; KS-ECS-13, Windbreak and Wildlife Planting Follow-up.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Wildlife Structures, Fence Markers														X		X						
Wildlife Structures, Fence Markers includes foregone income component														X		X						
Wildlife Structures, Watering Facility Escape Ramp														X		X						
Wildlife Enhancement, Livestock exclusion														X		X						

# Riparian Forest Buffer

Code: 391

Reporting Unit: Acre

## Definition:

An area of predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.

## Purpose:

Create shade to lower or maintain water temperatures to improve habitat for aquatic organisms.

Create or improve riparian habitat and provide a source of detritus and large woody debris.

Reduce excess amounts of sediment, organic material, nutrients, and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow.

Reduce pesticide drift entering the water body.

Restore riparian plant communities.

Increase carbon storage in plant biomass and soils.

## Conditions Where Practice Applies:

Riparian forest buffers are applied on areas adjacent to permanent or intermittent streams, lakes, ponds, and wetlands.

They are not applied to stabilize streambanks or shorelines.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Direct Seeding Establish a buffer of trees and/or shrubs to restore riparian plant communities and associated benefits. The buffer will be located adjacent to and up-gradient from a watercourse or water body extending a minimum of 35 feet wide and 3000 feet long. The planting will consist of trees or shrubs planted through direct seeding. Planting rate will be approximately 3,000 seeds per acre.	Ac	\$584.90	\$701.88
Bareroot, machine planted Establish a buffer of trees and/or shrubs into a suitably prepared site to restore riparian plant communities and associated benefits. The buffer will be located adjacent to and up-gradient from a watercourse or water body extending a minimum of 35 feet wide. The planting will consist of machine planted bare-root shrubs, evergreen, and deciduous trees in rows. Area will be planted using 3 rows and will use each of the woody plant types. Spacing between plants in-row - shrubs will be 6' , evergreen tree spacing will be 12', and deciduous tree spacing at 15'. Tree rows will be 15' apart. A total tree row length of 3,000'. Tree shelters will be placed on the hardwoods and evergreens.	Ac	\$1,053.53	\$1,264.24
Small Container, machine planted Establish a buffer of trees and/or shrubs into a suitably prepared site to restore riparian plant communities and associated benefits. The buffer will be located adjacent to and up-gradient from a watercourse or water body extending a minimum of 35 feet wide. The planting will consist of machine planted containerized shrubs, evergreen, and deciduous trees in rows. Area will be planted using 3 rows. Spacing between plants in-row - shrubs will be 6' , evergreen tree spacing will be 12', and deciduous tree spacing at 15'. Tree rows will be 15' apart. Tree row is a total length of 3000'. Tree shelters will be placed on the hardwoods and evergreens.	Ac	\$1,622.27	\$1,946.72

## Limitations:

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

## Documentation:

Form KS-ECS-5, Tree/Shrub Planting.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Direct Seeding	X		X	X	X			X				X				X	X				
Bareroot, machine planted	X		X	X	X			X				X				X	X				
Small Container, machine planted	X		X	X	X			X				X				X	X				

# Roof Runoff Structure

Code: 558

Reporting Unit: Number

**Definition:**

Structures that collect, control, and transport precipitation from roofs.

**Purpose:**

To improve water quality, reduce soil erosion, increase infiltration, protect structures, and/or increase water quantity.

**Conditions Where Practice Applies:**

- Where roof runoff from precipitation needs to be:
  - Diverted away from structures or contaminated areas.
  - Collected, controlled, and transported to a stable outlet.
  - Collected and used for other purposes such as irrigation or animal watering facility.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Roof Gutter  Installation of rain gutters on a rigid roof or cover to collect, control, and transport clean water runoff away from the waste stream. The installation includes gutters, downspouts, and installation hardware as required by the design. The length for payment will be the linear feet of roof where gutters are installed.	LnFt	\$3.24	\$3.89

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Roof Gutter			X													X					

# Roofs and Covers

Code: 367

Reporting Unit: Number

## Definition:

A rigid, semi-rigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility.

## Purpose:

To cover a waste facility for water quality improvement, air quality improvement, and capture of biogas for energy production.

## Conditions Where Practice Applies:

This practice applies where:

Exclusion of precipitation from an outdoor animal management area, waste storage facility, or waste treatment facility will improve management of an existing or planned animal waste handling system or eliminate a pollution concern.

Capture and controlled release of emissions from an existing or planned animal waste management, storage, or treatment system will improve air quality and/or reduce the net effect of greenhouse gas emissions.

Bio-treatment of emissions from an existing or planned waste storage or treatment facility will improve air quality and/or reduce the net effect of greenhouse gas emissions.

Biogas production and capture for energy are components of an existing or planned waste management system.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Hoop Structure Roof A flexible membrane or fabric-like roof placed on steel truss, hoop-like supports, and supporting foundation. The area for payment will be the square feet of the covered area.	SqFt	\$4.52	\$5.42
Timber or Steel Sheet Roof A timber-framed structure without enclosing sidewalls with a timber or steel "sheet" roof and supporting foundation. The area for payment will be the square feet of the covered area.	SqFt	\$5.28	\$6.34
Flexible Membrane Cover Only A fabricated rigid, semi-rigid, or flexible membrane over a waste storage or treatment facility. The membrane will cover the entire surface of a waste storage or treatment facility (e.g., waste treatment lagoon or anaerobic digester). Cover will exclude precipitation and/or capture biogas for controlled release for flaring or anaerobic digestion. The area for payment will be the square feet of the covered area and does not include the flare to convert methane to carbon dioxide.	SqFt	\$4.50	\$5.40
Flex Membrane with Flare A fabricated rigid, semi-rigid, or flexible membrane over a waste storage or treatment facility. The membrane will cover the entire surface of a waste storage or treatment facility (e.g., waste treatment lagoon or anaerobic digester). Cover will exclude precipitation and/or capture biogas for controlled release for flaring or anaerobic digestion. The area for payment will be the square feet of the covered area and includes the flare to convert methane to carbon dioxide.	SqFt	\$4.67	\$5.60

## Limitations:

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

## Documentation:

Completed table of quantities on as-built plan.

## Maintenance:

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Hoop Structure Roof			X		X											X					
Timber or Steel Sheet Roof			X		X											X					
Flexible Membrane Cover Only			X		X											X					
Flex Membrane with Flare			X		X											X					

# Seasonal High Tunnel System for Crops

Code: 798

Reporting Unit: Square Feet

**Definition:**

A seasonal polyethylene-covered structure that is used to cover crops to extend the growing season in an environmentally safe manner.

**Purpose:**

- Improve plant quality.
- Improve soil quality.
- Reduce nutrient and pesticide transport.
- Improve air quality through reduced transportation inputs.
- Reduce energy use through local consumption.

**Conditions Where Practice Applies:**

This practice applies to cropland where the growing season extension is needed because of climate conditions and where crops can be grown in the natural soil profile. Permanently raised beds may be installed to improve soil condition, fertility, and agri-ability access, but does not apply to crops not grown in the natural soil profile (i.e., tables/benches, portable pots). The practice does not include greenhouses or low tunnel.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Contiguous US	SqFt	\$2.77	\$3.32
Installation of a structure to extend the growing season for specialty crops. The structure must be a manufactured kit and be installed to the manufacturer's specifications. The area for payment will be the square feet of area covered by the high tunnel.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. This practice is eligible for financial assistance for up to 2,178 SqFt per agricultural operation for the duration of the interim practice pilot, which has been extended through fiscal year 2014. An agricultural operation is defined as a parcel or parcels of land, whether contiguous or noncontiguous, constituting a cohesive management unit for agricultural purposes.

**Documentation:**

Seasonal High Tunnel Jobsheet.

**Maintenance:**

Practice will be maintained for a lifespan of four years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCT	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Contiguous US												X	X									

# Sediment Basin

Code: 350

Reporting Unit: Number

**Definition:**

A basin constructed to collect and store debris or sediment.

**Purpose:**

- To preserve the capacity of reservoirs, wetlands, ditches, canals, diversions, waterways, and streams.
- To prevent undesirable deposition on bottom lands and developed areas.
- To trap sediment originating from construction sites or other disturbed areas.
- To reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel, stone, agricultural waste solids, and other detritus.

**Conditions Where Practice Applies:**

This practice applies where physical conditions or land ownership preclude treatment of a sediment source by the installation of erosion-control measures to keep soil and other material in place or where a sediment basin offers the most practical solution to the problem.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Excavated Basin  A sediment basin constructed by a combination of excavation and earthfill to capture sediment and slowly release water. The sediment basin impounds 3 or less feet of water against any embankment or spoil. The volume for payment will be the excavated volume of the constructed basin.	CuYd	\$3.32	\$3.98
Embankment Basin  A sediment basin constructed with a low hazard class earthen embankment to capture sediment and slowly release water. The sediment basin is created by a compacted earth embankment and impounds more than 3 feet of water against the embankment. The volume for payment will be the embankment volume of the constructed basin.	CuYd	\$2.84	\$3.40

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-10, Job Sheet; KS-ENG-452, Sediment Basin Details; Completed table of quantities on as-built plan; KS-ENG-4a, Earthwork Computation Sheet- Fill.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Excavated Basin				X	X			X								X					
Embankment Basin				X	X			X								X					

# Spring Development

Code: 574

Reporting Unit: Number

**Definition:**

Collection of water from springs or seeps to provide water for a conservation need.

**Purpose:**

Improve the quantity and/or quality of water for livestock, wildlife, or other agricultural uses.

**Conditions Where Practice Applies:**

In areas where a spring or seep will provide a dependable supply of suitable water for the planned use.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Spring, ≤ 50-foot collection Installation of a spring development with less than 50 feet of collection pipe. The installation includes all excavation, gravel backfill, collector pipe, delivery pipe, storage facility (spring box) if required, and all other materials as required by the design. The number for payment will be each spring development installed.	Ea	\$1,637.76	\$2,456.64
Spring, > 50-foot collection Installation of a spring development with 50 or more feet of collection pipe. The installation includes all excavation, gravel backfill, collector pipe, delivery pipe, storage facility (spring box) if required, and all other materials as required by the design. The number for payment will be each spring development installed.	Ea	\$2,507.87	\$3,761.80

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
- LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ENG-10, Job Sheet; Spring Development Job Sheet.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Spring, ≤ 50-foot collection		X	X	X	X		X	X				X		X		X						
Spring, > 50-foot collection		X	X	X	X		X	X				X		X		X						

# Sprinkler System

Code: 442

Reporting Unit: Acre

**Definition:**

An irrigation system in which all necessary equipment and facilities are installed for efficiently applying water by means of nozzles operated under pressure.

**Purpose:**

- This practice may be applied as part of a conservation management system to achieve one or more of the following:
- Efficiently and uniformly apply irrigation water to maintain adequate soil water for the desired level of plant growth and production without causing excessive water loss, erosion, or water quality impairment.
  - Climate control and/or modification.
  - Applying chemicals, nutrients, and/or waste water.
  - Leaching for control or reclamation of saline or sodic soils.
  - Reduction in particulate matter emissions to improve air quality.

**Conditions Where Practice Applies:**

The sprinkler method of water application is suited to most crops, irrigable lands, and climatic conditions where irrigated agriculture is feasible. Areas must be suitable for irrigation or sprinkler water application and have an adequate supply of suitable quality water available for the intended purpose(s). This practice applies to the planning and design of the overall water application through sprinkler discharge systems. This practice pertains to the planning and functional design of all sprinkler components except for special structures, such as permanently installed main and lateral pipelines or pumping plants. Other components shall meet appropriate NRCS CPSs. This practice does not include criteria for minor micro-sprinkler systems, which are covered by CP 441, Irrigation System, Microirrigation.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Gravity to Pivot Conversion  Installation of a low pressure center pivot system on cropland previously irrigated using a surface irrigation system, a big gun system, or other low efficiency system. The length for payment will be the total length of the center pivot system installed.	LnFt	\$54.43	\$65.31
Linear Move System  Installation of a low pressure linear move system on cropland previously irrigated using a surface irrigation system, a big gun system, or other low efficiency system. The length for payment will be the total length of the linear move system installed.	LnFt	\$69.31	\$83.17

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. No end gun or similar appurtenance will be present or used on any system receiving financial assistance.
3. CP 442, Irrigation System, Sprinkler is subject to \$650 per acre payment rate cap (acres to be irrigated by the system installed with financial assistance).

**Documentation:**

Form KS-ENG-201, Irrigation System, Sprinkler 442 (Pivot).

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Gravity to Pivot Conversion									X			X			X	X			X		
Linear Move System									X			X			X	X			X		

# Stream Crossing

Code: 578

Reporting Unit: Number

**Definition:**

A stabilized area or structure constructed across a stream to provide a travel way for people, livestock, equipment, or vehicles.

**Purpose:**

Improve water quality by reducing sediment, nutrient, organic, and inorganic loading of the stream.  
 Reduce streambank and streambed erosion.  
 Provide crossing for access to another land unit.

**Conditions Where Practice Applies:**

This practice applies to all land uses where an intermittent or perennial watercourse exists and a ford, bridge, or culvert-type crossing is desired for livestock, people, and/or equipment.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Bridge  Installation of a bridge to allow stream flows to cross under an access road or animal trail. The installation includes dewatering, acquiring and installing abutments, girders, decking with necessary hardware, backfilling abutments, armoring with geotextile and riprap, and all other materials as required by the design. The area for payment will be the square feet of bridge deck installed as designed.	SqFt	\$20.26	\$30.38
Culvert Installation  Installation of a new culvert to allow stream flows to cross under an access road or animal trail. The installation includes dewatering, site preparation and removing any old crossing, acquiring and installing culvert pipe with gravel bedding and fill (compacted), building headwalls, and all other materials as required by the design. The unit for payment will be diameter inch feet (DiaInFt) which is the diameter of the culvert in inches multiplied by the length of the culvert in feet. (Example: 24" diameter culvert that is 50' long equals 1,200 diameter inch feet; 24" x 50' = 1,200 DiaInFt.)	DiaInFt	\$1.28	\$1.92
Hard Armored, rock low-water crossing  Installation of a hardened or low water stream crossing using rock or concrete rubble riprap. The installation includes site preparation, dewatering, acquiring and installing gravel, geotextile, rock riprap, concrete rubble, fine sand, and all materials required by the design. The area for payment will be the square feet of surface area of the crossing installed as designed.	SqFt	\$1.94	\$2.92
Hard Armored, concrete low-water crossing  Installation of a hardened or low water stream crossing using cast-in-place concrete or preformed concrete slabs. The installation includes site preparation, dewatering, acquiring and installing concrete, and all materials required by the design. The area for payment will be the square feet of concrete surface area of the crossing installed as designed.	SqFt	\$3.44	\$5.16

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Bridge		X	X	X	X			X				X				X	X				
Culvert Installation		X	X	X	X			X				X				X	X				
Hard Armored, rock low-water crossing		X	X	X	X			X				X				X	X				
Hard Armored, concrete low-water crossing		X	X	X	X			X				X				X	X				

# Streambank and Shoreline Protection

Code: 580

Reporting Unit: Feet

**Definition:**

Treatment(s) used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.

**Purpose:**

To prevent the loss of land or damage to land uses or facilities adjacent to the banks of streams or constructed channels, shoreline of lakes, reservoirs, or estuaries including the protection of known historical, archeological, and traditional cultural properties.

To maintain the flow capacity of streams or channels.

Reduce the off-site or downstream effects of sediment resulting from bank erosion.

To improve or enhance the stream corridor for fish and wildlife habitat, aesthetics, recreation.

**Conditions Where Practice Applies:**

This practice applies to streambanks of natural or constructed channels and shorelines of lakes and reservoirs where they are susceptible to erosion. This standard does not apply to erosion problems on areas of complexity not normally within the scope of NRCS authority or expertise.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Shaping Protection of streambanks by shaping of banks to a suitable slope, planting of vegetation, and installation of an erosion control blanket to stabilize and protect against scour and erosion. The length for payment will be the linear feet of streambank protected by shaping and vegetation.	LnFt	\$7.07	\$8.48
Bioengineered Protection of streambanks using plant materials (junipers, cedars, willow poles, facines, brush mattresses, etc.) and vegetative measures to stabilize and protect the streambank against scour and erosion. The protection also includes any bank shaping required prior to installation of the plant materials and installation of an erosion control blanket as part of the vegetation measures. The length for payment will be the linear feet of streambank protected by bioengineering methods.	LnFt	\$18.87	\$22.65
Rock Riprap Protection of streambanks using rock or concrete rubble at the toe or in rock vanes and weirs to stabilize and protect against scour and erosion. The protection includes shaping the bank, acquiring and installing the rock or concrete rubble, geotextile, erosion control blanket, and all materials required by the design. The volume for payment will be the cubic yards of rock or concrete rubble installed as designed.	CuYd	\$49.13	\$58.95
Gabion Protection of streambanks using gabion baskets or mattresses filled with suitable material to stabilize and protect streambanks or excavated channels against scour and erosion. The protection includes shaping the bank, acquiring and installing the geotextile and gabions, revegetation of the disturbed area, and all other materials as required by the design. The length for payment will be the linear feet of streambank or shoreline protected by the gabions.	LnFt	\$361.18	\$433.42

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Shaping																X						
Bioengineered																X						
Rock Riprap																X						
Gabion																X						

# Structure for Water Control

Code: 587

Reporting Unit: Number

## Definition:

A structure in a water management system that conveys water, controls the direction or rate of flow, maintains a desired water surface elevation, or measures water.

## Purpose:

The practice may be applied as a management component of a water management system to control the stage, discharge, distribution, delivery, or direction of water flow.

## Conditions Where Practice Applies:

This practice applies wherever a permanent structure is needed as an integral part of a water control system to serve one or more of the following functions:

Convey water from one elevation to a lower elevation within, to, or from a water conveyance system such as a ditch, channel, canal, or pipeline designed to operate under open channel conditions. (Typical structures: drops, chutes, turnouts, surface water inlets, head gates, pump boxes, and stilling basins.)

Control the elevation of water in drainage or irrigation ditches. (Typical structures: checks, flashboard risers, and check dams.)

Control the division or measurement of irrigation water. (Typical structures: division boxes and water measurement devices.)

Keep trash, debris, or weed seeds from entering pipelines. (Typical structure: debris screen.)

Control the direction of channel flow resulting from tides and high water or back-flow from flooding. (Typical structures: tide and water management gates.)

Control the water table level, remove surface, or subsurface water from adjoining land, flood land for frost protection, or manage water levels for wildlife or recreation. (Typical structures: water level control structures, flashboard risers, pipe drop inlets, and box inlets.)

Convey water over, under or along a ditch, canal, road, railroad, or other barriers. (Typical structures: bridges, culverts, flumes, inverted siphons, and long span pipes.)

Modify water flow to provide habitat for fish, wildlife, and other aquatic animals. (Typical structures: chutes, cold water release structures, and flashboard risers.)

Provide silt management in ditches or canals. (Typical structure: sluice.)

Supplement a resource management system on land where organic waste or commercial fertilizer is applied.

Create, restore, or enhance wetland hydrology.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
<b>Commercial Inline Flashboard Riser</b> Installation of an inline water control structure where the water surface elevation is controlled by addition or removal of slats or "stoplogs." The installation includes the structure, inlet and outlet pipes, bar guard, excavation, backfill, and all materials required by the design. The unit for payment will be the inch feet (InFt) of the installation which is the stoplog weir length in inches multiplied by the inlet and outlet length in feet. (Example: Structure width is 16" and inlet and outlet pipe combined length is 80'; 16" x 80' = 1,280 InFt)	DialnFt	\$1.54	\$2.31
<b>Culvert, &lt; 30 inches HDPE</b> Installation of a new high density polyethylene (HDPE) culvert less than 30 inches in diameter to convey water under roads or other barriers. The installation includes site preparation, acquiring and installing culvert pipe with gravel bedding and fill (compacted), riprap protection of side slopes, and all materials required by the design. The unit for payment will be diameter inch feet (DialnFt) which is the diameter of the culvert in inches multiplied by the length of the culvert in feet. (Example: Culvert diameter is 24" and culvert length is 50'; 24" x 50' = 1,200 DialnFt)	DialnFt	\$1.67	\$2.51

Culvert, < 30 inches CMP	DialnFt	\$1.93	\$2.90
Installation of a new corrugated metal pipe (CMP) culvert less than 30 inches in diameter to convey water under roads or other barriers. The installation includes site preparation, acquiring and installing culvert pipe with gravel bedding and fill (compacted), riprap protection of side slopes, and all materials required by the design. The unit for payment will be diameter inch feet (DialnFt) which is the diameter of the culvert in inches multiplied by the length of the culvert in feet. (Example: Culvert diameter is 24" and culvert length is 50'; 24" x 50' = 1,200 DialnFt)			
Slide Gate, flood dike	Ft	\$23.51	\$35.27
Installation of slide gate valve (screw activated) and corresponding pipe through an embankment to provide a means to control water levels upstream of the embankment. The installation includes site preparation, acquiring and installing the pipe and gate valve, and all materials required by the design. The length for payment will be the linear feet of pipe installed.			
Rock Check	Ea	\$490.64	\$735.95
Installation of a small weir structure constructed with rock riprap or concrete rubble in active minor gullies located near the upper end of a watershed. The installation includes excavation, acquiring and installing the rock or concrete rubble, and all materials required by the design. The number for payment will be each structure installed as designed.			
Earth Check	Ea	\$342.52	\$513.78
Installation of a small earthfill embankment constructed in active minor gullies located near the upper end of a watershed. The installation includes excavation, earthfill, turf reinforcement mat, and all materials required by the design. The number for payment will be each structure installed as designed.			

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. For a new livestock waste facility, this practice must be associated with CP 656, Constructed Wetland or CP 560, Access Road.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPPI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Commercial Inline Flashboard Riser		X	X	X	X			X	X			X			X	X						
Culvert, < 30 inches HDPE		X	X	X	X			X	X			X			X	X						
Culvert, < 30 inches CMP		X	X	X	X			X	X			X			X	X						
Slide Gate, flood dike		X	X	X	X			X	X			X			X	X						
Rock Check		X	X	X	X			X	X			X			X	X						
Earth Check		X	X	X	X			X	X			X			X	X						

## Subsurface Drain

Code: 606

Reporting Unit: Feet

**Definition:**

A conduit, such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water.

**Purpose:**

Improve the soil environment for vegetative growth, reduce erosion, and improve water quality by:

1. Regulating water table and ground water flows
2. Intercepting and preventing water movement into a wet area
3. Relieving artesian pressures
4. Removing surface runoff
5. Leaching of saline and sodic soils
6. Serving as an outlet for other subsurface drains
7. Regulating subirrigated areas or waste disposal areas

Collect ground water for beneficial uses.

Remove water from heavy use areas, such as around buildings, roads, and play areas, and accomplish other physical improvements related to water removal.

Regulate water to control health hazards caused by pests such as flukes, flies, or mosquitoes.

**Conditions Where Practice Applies:**

This standard applies to areas having a high water table where the benefits of lowering the water table or controlling ground water or surface runoff justify installing such a system. This standard applies to areas suitable for the intended use after installation of required drainage and other conservation practices. The soil shall have enough depth and permeability to permit installation of an effective and economically feasible system. In areas where an outlet is available, either by gravity flow or by pumping, the outlet shall be adequate for the quantity and quality of effluent to be discharged.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Corrugated Plastic Pipe (CPP), single-wall, ≤ 6 inch Installation of a buried 6-inch diameter or smaller perforated pipe with soil-tight couplings in a cropland field to collect drainage water. The length for payment will be the linear feet of pipe installed.	Ft	\$2.69	\$3.23
Enveloped Corrugated Plastic Pipe (CPP), single-wall, ≤ 6 inch Installation of a foundation drain system with a 6-inch diameter or smaller perforated pipe adjacent to a concrete wall or waste storage pond. The installation includes the pipe, drainfill, excavation, and all materials required by the design. The length for payment will be the linear feet of pipe installed in the drain.	LnFt	\$3.32	\$3.99
Corrugated Plastic Pipe (CPP), single-wall, ≥ 8 inch Installation of a buried 8-inch diameter or larger perforated single wall pipe with soil-tight couplings in a cropland field to collect drainage water. The length for payment will be the linear feet of pipe installed.	LnFt	\$4.35	\$5.22
Corrugated Plastic Pipe (CPP), twin-wall, ≥ 8 inch Installation of a buried 8-inch diameter or larger perforated dual wall pipe with soil-tight couplings in a cropland field to collect drainage water. The length for payment will be the linear feet of pipe installed.	LnFt	\$10.11	\$12.14

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-10, Job Sheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPPI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Corrugated Plastic Pipe (CPP), single-wall, ≤ 6 inch			X	X	X			X					X									
Enveloped Corrugated Plastic Pipe (CPP), single-wall, ≤ 6 inch			X	X	X			X					X									
Corrugated Plastic Pipe (CPP), single-wall, ≥ 8 inch			X	X	X			X					X									
Corrugated Plastic Pipe (CPP), twin-wall, ≥ 8 inch			X	X	X			X					X									

# Terrace

Code: 600

Reporting Unit: Feet

**Definition:**

An earth embankment, or a combination ridge and channel, constructed across the field slope.

**Purpose:**

This practice is applied as part of a resource management system for one or more of the following purposes:

- Reduce erosion by reducing slope length.
- Retain runoff for moisture conservation.

**Conditions Where Practice Applies:**

This practice applies where soil erosion caused by water and excessive slope length is a problem, excess runoff is a problem, there is a need to conserve water, the soils and topography are such that terraces can be constructed and farmed with reasonable effort, and a suitable outlet can be provided.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Flat Channel or Storage Installation of a level storage terrace system with flat channels 30 or more feet wide, a parallel terrace system, or a storage terrace system with underground outlets. The length for payment will be the linear feet of terraces installed.	Ft	\$1.41	\$1.95
New Broad Base, up to 1.8 feet Installation of a gradient terrace system or a level terrace system with channels less than 30-feet wide using a broadbase cross section. The length for payment will be the linear feet of terraces installed.	Ft	\$1.15	\$1.59
New Broad Base, use of existing terrace alignment This scenario should be used in conjunction with scenario "New Broad Base, up to 1.8 feet". This rate may be used for the construction of a new terrace—without prior land smoothing—where the new alignment will coincide with an existing terrace alignment. The length for payment will be the linear feet of terraces installed. The scenario "New Broad Base, up to 1.8 feet" should apply to other terraces in the new system that do not coincide with an existing terrace alignment.	Ft	\$1.00	\$1.41
Grass Back Installation of a terrace system with relatively flat front slopes and steep back slopes that may be planted to permanent vegetation on average slopes greater than 8%. The length for payment will be the linear feet of terraces installed.	Ft	\$2.05	\$2.84

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. WQN: This practice is not eligible on irrigated cropland.

**Documentation:**

Form KS-ENG-1, Terrace - 600; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Flat Channel or Storage			X	X	X			X	X	X		X				X					
New Broad Base, up to 1.8 feet			X	X	X			X	X	X		X				X					
Broad Base, rebuild			X	X	X			X	X	X		X				X					
Grass Back			X	X	X			X	X	X		X				X					

## Tree/Shrub Establishment

Code: 612

Reporting Unit: Acre

**Definition:**

Establishing woody plants by planting seedlings or cuttings, direct seeding, or natural regeneration.

**Purpose:**

Establish woody plants for: forest products such as timber, pulpwood, and energy biomass; wildlife habitat; long-term erosion control and improvement of water quality; treating waste; storing carbon in biomass; energy conservation; improving or restoring natural diversity; enhancing aesthetics.

**Conditions Where Practice Applies:**

Tree/shrub establishment can be applied on any appropriately prepared site where woody plants can be grown. Use other practice standards for specialized tree/shrub establishment situations, e.g., CPs 391, Riparian Forest Buffer; 311, Alley Cropping; 380, Windbreak/Shelterbelt Establishment; 342, Critical Area Planting; 422, Hedgerow Planting.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Individual Tree, hand planting Tree seedlings will be hand planted in the forested area where few or no forest trees are growing, the existing stand of trees needs underplanting, or the previously planted seedling tree stocking level is below desirable conditions. Wildlife habitat is degraded by loss of forest conditions.	Ea	\$0.73	\$0.88
Individual Tree, hand planting with browse protection Tree seedlings will be hand planted in the forested area where few or no forest trees are growing, the existing stand of trees needs underplanting, or the previously planted seedling tree stocking level is below desirable conditions. Seedlings are protected from wildlife browsing. Wildlife habitat is degraded by loss of forest conditions.	Ea	\$3.94	\$4.72
Trees, machine planted with tubes for animal protection This practice involves planting of tree seedlings after the site has been prepared for seedling growth and establishment. The productivity of the site is good and will handle a medium density planting rate. Typical scenario will consist of 1,000 feet of trees with tubes for animal protection. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (e.g., 1-0: one-year seedling) are planted.	Ea	\$7.09	\$8.51
Trees, machine planted, no tubes This practice involves planting of tree seedlings after the site has been prepared for seedling growth and establishment. The productivity of the site is good and will handle a medium density planting rate. Typical scenario will consist of 1,000 feet of trees. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (e.g., 1-0: one-year seedling) are planted.	Ea	\$2.20	\$2.64
Hardwood Planting, 1 gallon pots Hardwood seedlings (potted) to be planted to reestablish an upland hardwood forest. Planting will be by hand. The resource setting is an area that historically was an upland hardwood forest.	Ac	\$589.68	\$707.61
Hardwood Establishment, direct seeding Native seed (acorns, nuts, etc.) from native tree species are directly planted in the soil. The direct seeding is done with a broadcast seeder so the seeding rates have been increased. Site preparation is completed (disking to eliminate competing vegetation). The native seed are collected/purchased locally so as to get trees known to be adapted to local conditions.	Ac	\$91.14	\$109.37

Shrub Planting	Ea	\$0.67	\$0.80
Shrubs are planted to provide a more diverse habitat. Plantings are in either uplands or bottomlands. The site lacks ground level habitat structure and diversity for wildlife.			
Shrub Thicket	Ea	\$1.49	\$1.79
Shrubs are planted to provide a more diverse habitat. Plantings are in either uplands or bottomlands. The site lacks ground level habitat structure and diversity for wildlife.			

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Kansas Forestry Tech Note KS-9

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Individual Tree, hand planting	X		X	X	X	X	X	X				X				X	X				
Individual Tree, hand planting with browse protection	X		X	X	X	X	X	X				X				X	X				
Trees, machine planted with tubes for animal protection	X		X	X	X	X	X	X				X				X	X				
Trees, machine planted, no tubes	X		X	X	X	X	X	X				X				X	X				
Hardwood Planting, 1 gallon pots	X		X	X	X	X	X	X				X				X	X				
Hardwood Establishment, direct seeding	X		X	X	X	X	X	X				X				X	X				
Shrub Planting	X		X	X	X	X	X	X				X		X		X	X				
Shrub Thicket	X		X	X	X	X	X	X				X		X		X	X				

# Tree/Shrub Pruning

Code: 660

Reporting Unit: Acre

**Definition:**

The removal of all or part of selected branches, leaders, or roots from trees and shrubs.

**Purpose:**

- Improve the appearance of trees or shrubs; e.g., ornamental plants and Christmas trees.
- Improve the quality of wood products.
- Improve the production of plant products; e.g., nuts, fruits, boughs, and tips.
- Reduce fire and/or safety hazards.
- Improve the growth and vigor of understory plants.
- Adjust the foliage and branching density or rooting length for other specific intents, such as wind and snow control, noise abatement, access control, visual screens, and managing competition.
- Improve health and vigor of woody plants; e.g., disease, insect, and injury management.

**Conditions Where Practice Applies:**

This practice applies on any area with trees or shrubs.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Pruning, wildlife  Pruning of hard/soft mast trees and shrubs to stimulate increased fruit/nut production for wildlife food. Primarily done around old agricultural fields, in old orchards, in forested areas. Is usually done with a chainsaw or handsaw to open the canopy and remove dead branches to increase airflow and sunlight penetration.	Ac	\$52.95	\$63.54

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ECS-23, Vegetative Management.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Pruning, wildlife	X																X	X			

## Tree/Shrub Site Preparation

Code: 490

Reporting Unit: Acre

**Definition:**

Treatment of areas to improve site conditions for establishing trees and/or shrubs.

**Purpose:**

Encourage natural regeneration of desirable woody plants.  
Permit artificial establishment of woody plants.

**Conditions Where Practice Applies:**

On all lands needing treatment to establish trees and/or shrubs.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Mechanical, heavy  This practice involves the use of heavy machinery and chemical to treat an area in order to improve site conditions for establishing trees and/or shrubs. Typical sites include trees and brush cover that is not appropriate to the site or providing the desired condition for the landowner. Chemical application is needed to treat resprouting and smaller trees.	Ac	\$265.97	\$319.16
Mechanical, medium  This practice involves the use of light/moderate machinery and chemical application to clear aboveground vegetation and to also rip/cut/lift underground root systems in order to improve site conditions for establishing trees and/or shrubs. Chemical application is needed to treat resprouting and smaller trees. Typical sites include abandoned fields, pastures, rangelands, agricultural fields, or forestlands that have been harvested.	Ac	\$206.34	\$247.61
Windbreak, mechanical only  This practice involves the use of various mechanical equipment in order to prepare a site for tree row planting and remove undesirable vegetation and improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields, or forestland that was recently harvested.	Ac	\$197.23	\$236.67
Windbreak, chemical and mechanical  This practice involves the use of various mechanical equipment and chemical treatment in order to prepare a site for tree row planting and remove undesirable vegetation and improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields, or forestland that was recently harvested.	Ac	\$219.36	\$263.23
Hand Site Preparation  This practice typically involves grubbing all vegetation from the area prior to the establishment of trees and/or shrubs. Typical sites include land such as old fields, pastures, rangelands, agricultural fields, or abandoned forests that are mostly grass or weed covered.	Ac	\$226.02	\$271.22
Windbreak, chemical only  This practice involves the use of chemical treatment in order to prepare a site for tree row planting and remove undesirable vegetation and improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields, or forestland that was recently harvested.	Ac	\$57.34	\$68.81

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Kansas Forestry Tech Note KS-9

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Mechanical, heavy	X		X	X	X	X	X	X									X	X				
Mechanical, medium	X		X	X	X	X	X	X									X	X				
Windbreak, mechanical only	X		X	X	X	X	X	X									X	X				
Windbreak, chemical and mechanical	X		X	X	X	X	X	X									X	X				
Hand Site Preparation	X		X	X	X	X	X	X									X	X				
Windbreak, chemical only	X		X	X	X	X	X	X									X	X				

## Underground Outlet

Code: 620

Reporting Unit: Feet

**Definition:**

A conduit or system of conduits installed beneath the surface of the ground to convey surface water to a suitable outlet.

**Purpose:**

To carry water to a suitable outlet from terraces, water and sediment control basins, diversions, waterways, surface drains, or other similar practices without causing damage by erosion or flooding.

**Conditions Where Practice Applies:**

This practice applies where disposal of surface water is necessary; an outlet is needed for a terrace, diversion, water and sediment control basin, or similar practice but a surface outlet is impractical because of stability problems, topography, climatic conditions, land use, or equipment traffic, and the site is suitable for an underground outlet.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
4-6 inch Pipe with Riser Installation of 4" to 6" diameter plastic pipe as the underground outlet for a terrace system. The installation includes excavation, backfill, inlet, outlets, connections, rodent guard, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$3.62	\$5.12
≤ 6 inch Single-Wall PE with Riser Installation of single wall PE or similar pipe, 4" to 6" diameter, as the underground outlet for a terrace system. The installation includes excavation, backfill, inlet, outlets, connections, rodent guard, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$2.50	\$3.54
8-10 inch Pipe with Riser Installation of 8" to 10" diameter plastic pipe as the underground outlet for a terrace system. The installation includes excavation, backfill, inlet, outlets, connections, rodent guard, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$8.12	\$11.51
6-10 inch Pipe with Canopy Installation of 6" to 10" diameter pressure type pipe with a canopy inlet as the underground outlet for a single terrace, diversion, or WASCOB. The installation includes excavation, backfill, outlets, connections, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$11.14	\$15.78
12-18 inch Pipe with Riser Installation of 12" to 18" diameter plastic pipe as the underground outlet for a terrace system. The installation includes excavation, backfill, inlet, outlets, connections, rodent guard, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$8.56	\$12.13
12-18 inch Pipe with Canopy Installation of 12" to 18" diameter pressure type pipe with a canopy inlet as the underground outlet for a single terrace, diversion, or WASCOB. The installation includes excavation, backfill, outlets, connections, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$20.75	\$29.40
> 18 inch Pipe with Riser Installation of plastic or corrugated metal pipe, larger than 18" in diameter, as the underground outlet for a terrace system, diversion, or WASCOB. The installation includes excavation, backfill, inlet, outlets, connections, rodent guard, and all materials and labor. The length for payment will be the linear feet of pipe installed.	Ft	\$21.82	\$30.92

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ENG-19, Underground Outlet - 620, Storage Terrace Worksheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
4-6 inch Pipe with Riser		X	X	X	X			X					X			X						
≤ 6 inch Single-Wall PE with Riser		X	X	X	X			X					X			X						
8-10 inch Pipe with Riser		X	X	X	X			X					X			X						
6-10 inch Pipe with Canopy		X	X	X	X			X					X			X						
12-18 inch Pipe with Riser		X	X	X	X			X					X			X						
12-18 inch Pipe with Canopy		X	X	X	X			X					X			X						
> 18 inch Pipe with Riser		X	X	X	X			X					X			X						

# Upland Wildlife Habitat Management

Code: 645

Reporting Unit: Acre

**Definition:**

Provide and manage upland habitats and connectivity within the landscape for wildlife.

**Purpose:**

Treating upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, food in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle.

**Conditions Where Practice Applies:**

Land where the decision maker has identified an objective for conserving a wild animal species, guild, suite, or ecosystem.  
Land within the range of targeted wildlife species and capable of supporting the desired habitat.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Wildlife Structures, ramp  This scenario is for the installation of wildlife structures on all land uses where the targeted species has been identified as rare and declining. Structures are of low intensity and low complexity, when habitat assessment indicates inadequate habitat for fish or wildlife-habitat degradation. This scenario includes escape ramps. The typical size range for this scenario is 4 watering facilities retrofitted to include an escape ramp (2 ramps per tank). This scenario would be applied on any land use where habitats are used by species identified as rare and declining to reduce mortality by drowning in tanks.	Ea	\$25.03	\$30.04
Wildlife Structures, fence  This scenario is for the installation of wildlife structures on all land uses where the targeted species has been identified as rare and declining. Structures are of low intensity and low complexity, when habitat assessment indicates inadequate habitat for fish or wildlife-habitat degradation. This scenario include fence markers. The typical size range for this scenario is 1 mile of fence. This scenario would be applied on any land use where habitats are used by species identified as rare and declining to reduce mortality by fence collision.	Ft	\$0.07	\$0.09
Greater Prairie-Chicken, habitat development  Field size is 640 acres. Each acre in the treatment unit will be burned only once in three years. Each acre in treatment unit will be burned once within the three year period. This is a monitoring for GPC habitat conditions not a burning scenario. Habitat conditions will be monitored 4 times a year and vegetative data will be collected using percent ground cover within a 30-foot radius plot located at 10 locations.	Ac	\$8.25	\$9.90
Wildlife Habitat Enhancement  Exclusion of livestock on 640 acres of rangeland for the enhancement of habitat for wildlife.	Ac	\$14.97	\$14.98

Setting is any land use with the potential to provide habitat for species of plants and animals identified as rare and declining and the habitat potential is not currently being captured. The identified habitat limiting factors can be restored, enhanced or created, with the application of this practice alone, or in combination with other supporting and facilitating practices. Monitoring will be used to determine if the conservation system meets or exceeds the minimum quality criteria for the targeted wildlife. Management will be implemented based on the findings of the habitat assessment and monitoring. Habitat management and monitoring needed to treat the resource concerns requires no training, no qualitative data assessment, no water quality monitoring, and is low in complexity and intensity. Examples of prescribed monitoring include but are not limited to: photo points taken, documentation of use by livestock, regeneration/breeding success, completing an annual management records log, documenting wildlife sightings, documenting location and species of invasive plants, and condition of vegetative and structural treatments. No decision or treatment associated with this practice or facilitating practices will require income foregone. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan.

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. GPC Habitat Development and Wildlife Habitat Enhancement: Practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice on all acres.
3. GPC Habitat Development scenario requires all acres to be burned in the treatment unit only one out of three years. The payment is eligible from a north-south line from Washington County to Cowley County and all counties east thereof. Burning shall not occur between May 1 and July 31.
4. Wildlife Structures: These scenarios are for adding to existing structures. Refer to CPs 382, Fence, and 614, Watering Facilities, for the inclusion of these in new structures.
5. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
6. LPCI: This is a required core practice that must included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may be included if they facilitate the implementation of core practices and are planned within the contract period or already applied on the land.
7. Payment will not exceed \$30,000 per contract for this practice.
8. "Wildlife Habitat Enhancement" scenario may only be included in a system with a grazing management plan.

**Documentation:**

Form KS-ECS-23, Vegetative Management.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Wildlife Structures, ramp					X		X	X						X	X							
Wildlife Structures, fence					X		X	X						X	X							
Greater Prairie-Chicken, habitat development					X		X	X														
Wildlife Habitat Enhancement					X		X	X						X	X							
Forgone Income					X		X	X						X	X							

# Vegetative Treatment Area

Code: 635

Reporting Unit: Acre

**Definition:**

An area of permanent vegetation used for agricultural wastewater treatment.

**Purpose:**

To improve water quality by reducing loading of nutrients, organics, pathogens, and other contaminants associated with livestock, poultry, and other agricultural operations.

**Conditions Where Practice Applies:**

Where a vegetated treatment area can be constructed, operated, and maintained to treat contaminated runoff from such areas as feedlots, compost areas, barnyards, and other livestock holding areas, or to treat process wastewater from agricultural operations.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Concrete Curb, no flow spreader devices Installation of a vegetated treatment area (VTA) using a concrete curb as the distribution device and no spreaders in the VTA. The installation includes the land grading, concrete curb, and all materials and labor. The area for payment is the acres of shaped area in the VTA.	Ac	\$1,436.88	\$2,155.32
Gated Pipe, no flow spreader devices Installation of a VTA using a gated pipe as the distribution device and no spreaders in the VTA. The installation includes the land grading, gated pipe, and all materials and labor. The area for payment is the acres of shaped area in the VTA.	Ac	\$1,053.99	\$1,580.98
Minor Shaping Installation of a vegetated filter strip without any distribution device. The area for payment will be the acres of vegetated filter strip.	Ac	\$703.42	\$1,055.13

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Concrete Curb, no flow spreader devices			X													X					
Gated Pipe, no flow spreader devices			X													X					
Minor Shaping			X													X					

# Waste Facility Closure

Code: 360

Reporting Unit: Number

**Definition:**

The decommissioning of facilities and/or the rehabilitation of contaminated soil, in an environmentally safe manner, where agricultural waste has been handled, treated, and/or stored and is no longer used for the intended purpose.

**Purpose:**

Protect the quality of surface water and groundwater resources. Eliminate a safety hazard for humans and livestock. Safeguard the public health.

**Conditions Where Practice Applies:**

This practice applies to agricultural waste impoundments that are no longer needed as a part of a waste management system and are to be permanently closed or converted. Where these impoundments are to be converted to fresh water storage and the original impoundment was not constructed to NRCS standards, this practice will only apply where the investigation, as required in National Engineering Manual, Section 501.23, shows structural integrity.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Decommissioning of concrete waste storage structure Decommission or close an inactive or abandoned concrete storage facility by demolition of the concrete, removal of the concrete, and filling the storage area with earthfill as required. The volume for payment will be the cubic feet of storage in the existing structure.	CuFt	\$0.14	\$0.17
Earthen waste impoundment closure Close an inactive or abandoned waste storage pond or impoundment by removing accumulated sludge and filling the pond to surrounding ground levels. This activity includes both excavated and embankment ponds as the existing facility. The volume for payment will be the cubic feet of storage in the existing structure after the sludge is removed.	CuFt	\$0.08	\$0.10
Liquid waste impoundment conversion to fresh water storage Convert an existing waste storage pond or impoundment to a fresh water pond by removing accumulated sludge and soil materials. This activity includes both excavated and embankment ponds as the existing facility. The volume for payment will be the cubic feet of storage in the existing structure after the sludge is removed.	CuFt	\$0.04	\$0.05

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Field notes and calculations showing approved volumes, completed table of quantities on as-built plan, and soils test for nitrates.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCT	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Decommissioning of concrete waste storage structure			X					X								X					
Earthen waste impoundment closure			X					X								X					
Liquid waste impoundment conversion to fresh water storage			X					X								X					

# Waste Separation Facility

Code: 632

Reporting Unit: Number

**Definition:**

A filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream.

**Purpose:**

To partition solids, liquids, and their associated nutrients as part of a conservation management system to:

- Improve or protect air quality.
- Improve or protect water quality.
- Improve or protect animal health.
- Meet management objectives.

**Conditions Where Practice Applies:**

This practice applies where solid/liquid separation will:

Remove solids from the liquid waste stream as a primary treatment process and allow further treatment processes to be applied such as composting and anaerobic digestion.

Allow partly digested feed to be separated from the liquid waste stream so that it can be used as a feed supplement or for bedding.

Reduce problems associated with solids accumulation in liquid storage facilities.

Reduce solids in stored liquids so liquids can be recycled for other uses (i.e., flush water).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Mechanical Separator Installation of a mechanical separator to remove solids from the liquid-waste stream. The installation includes site preparation, base, and all materials and labor to install the system as designed. The number for payment will be each system installed.	Ea	\$16,088.63	\$24,132.95
Earthen Settling Structure with pipe outlet Installation of an earthen settling basin to separate solids from the liquid stream from waste producing areas. The volume for payment will be the cubic feet of storage in the facility at the design storage level without freeboard.	CuFt	\$0.12	\$0.18
Concrete Settling Structure with picket screen outlet Installation of a concrete settling basin or sump, with appurtenances, to separate solids from the liquid stream from waste producing areas. The volume for payment will be the cubic feet of storage in the facility at the design storage level without freeboard.	CuFt	\$1.29	\$1.94
Concrete Sand Settling Lane Installation of a concrete lane with curbs, with appurtenances, to separate solids, mainly sand, from the liquid stream from a confinement facility. The area for payment will be the square feet of area in the facility.	SqFt	\$2.44	\$3.67

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-10, Job Sheet; KS-ENG-452, Sediment Basin Details; Completed table of quantities on as-built plan; KS-ENG-4a, Earthwork Computation Sheet - Fill; Storage Terrace Spreadsheet.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Mechanical Separator			X													X						
Earthen Settling Structure with pipe outlet			X													X						
Concrete Settling Structure with picket screen outlet			X													X						
Concrete Sand Settling Lane			X													X						

# Waste Storage Facility

Code: 313

Reporting Unit: Number

**Definition:**

A waste storage impoundment made by constructing an embankment and/or excavating a pit or dugout, or by fabricating a structure.

**Purpose:**

To temporarily store wastes such as manure, wastewater, and contaminated runoff as a storage function component of an agricultural waste management system.

**Conditions Where Practice Applies:**

- Where the storage facility is a component of a planned agricultural waste management system.
- Where temporary storage is needed for organic wastes generated by agricultural production or processing.
- Where the storage facility can be constructed, operated, and maintained without polluting air or water resources.
- Where site conditions are suitable for construction of the facility.
- To facilities utilizing embankments with an effective height of 35 feet or less where damage resulting from failure would be limited to damage of farm buildings, agricultural land, or township and country roads.
- To fabricated structures including tanks, stacking facilities, pond appurtenances, and roof structures.
- This practice does not apply to storage of human domestic sewage or wastewater.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Embankment Storage Pond A waste storage pond constructed by a combination of excavation and earthfill with more than 3 feet of fill in the embankment. The volume for payment of this structure will be the cubic feet of storage in the pond at the design storage level without freeboard.	CuFt	\$0.06	\$0.07
Excavated Storage Pond A waste storage pond constructed by excavating a pond with a small berm around the pond, normally 3 feet or less high. The volume for payment will be the cubic feet of storage in the pond at the design storage level without freeboard.	CuFt	\$0.11	\$0.13
Buried Concrete Tank, 5,000-14,999 Cu ft of storage A liquid storage facility consisting of a cast-in-place concrete tank that has a design storage volume less than 15,000 cubic feet that is totally or partially buried. The tank can have an open top or be under an animal facility with a top cover of either slats or solid concrete lid/floor. The volume for payment is based on the design volume and does not include freeboard.	CuFt	\$2.02	\$2.42
Buried Concrete Tank, 15,000-110,000 Cu ft of storage A liquid storage facility consisting of a cast-in-place concrete tank that has a design storage volume from 15,000 to less than 110,000 cubic feet that is totally or partially buried. The tank can have an open top or be under an animal facility with a top cover of either slats or solid concrete lid/floor. The volume for payment will be the design volume and does not include freeboard.	CuFt	\$0.92	\$1.10
Buried Concrete Tank, > 110,000 Cu ft of storage A liquid storage facility consisting of a cast-in-place concrete tank that has a design storage volume of 110,000 cubic feet or greater. The tank can have an open top or be under an animal facility with a top cover of either slats or solid concrete lid/floor. The volume for payment will be the design volume and does not include freeboard.	CuFt	\$0.83	\$0.99
Steel or Concrete Above Ground Storage Structure A liquid storage facility consisting of an above-ground circular glass-lined steel or concrete structure. The volume for payment will be the design volume and does not include freeboard.	CuFt	\$1.83	\$2.20

Bedded Pack, concrete floor and concrete walls	SqFt	\$5.75	\$6.90
A solid storage facility to store manure and bedding. It also includes a composted bedded pack facility. The facility has a reinforced concrete floor with walls constructed of reinforced concrete or modular blocks. The area for payment will be the total floor area of the structure including the wall area. It also includes picket fence if required by the design.			
Bedded Pack, concrete floor and wood walls	SqFt	\$4.21	\$5.05
A solid storage facility to store manure and bedding. It also includes a composted bedded pack facility. The facility has a reinforced concrete floor with walls constructed of pressure-treated wood. The area for payment will be the total floor area of the structure including the wall area. It also includes picket fence if required by the design.			
Dry Stack, concrete floor and wood walls	SqFt	\$4.11	\$4.93
A solid storage facility to store manure and bedding. The facility has a reinforced concrete floor with walls constructed of pressure-treated wood. The area for payment will be the total floor area of the structure including the wall area. It also includes picket fence if required by the design.			
Dry Stack, concrete floor and no walls	SqFt	\$3.11	\$3.73
A solid storage facility to store manure and bedding. The facility has a reinforced concrete floor without side walls. The area for payment will be the total floor area of the structure including the wall area. It also includes picket fence if required by the design.			

#### Limitations:

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

2. New waste storage facilities are ineligible for financial assistance.

##### Definitions:

New is defined as: The ag commodity that is to be produced on the land unit(s) has not previously been produced on this land unit(s). Therefore, there is not an existing resource concern and is considered a change in system.

Relocation is defined as: Moving an entire operation to a new location due to the inability to address an identified resource concern at the current location.

Per Title 440 Conservation Programs Manual, Section 515.92 A (2): "A comprehensive nutrient management plan (CNMP) must be developed and provided to NRCS prior to beginning the installation of any waste storage activities. Payment must not be issued until the CNMP has been provided to NRCS."

Expansion is defined as: Any increase in size (drainage area) of an animal waste facility is considered an expansion. The expansion must follow all state and federal requirements (CNMP, permits, etc.).

#### Documentation:

Completed table of quantities on as-built plan; Form KS-ENG-16, Waste Management System Inspection Report.

#### Maintenance:

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Embankment Storage Pond			X													X					
Excavated Storage Pond			X													X					
Buried Concrete Tank, 5,000-14,999 Cu ft of storage			X													X					
Buried Concrete Tank, 15,000-110,000 Cu ft of storage			X													X					
Buried Concrete Tank, > 110,000 Cu ft of storage			X													X					
Steel or Concrete Above Ground Storage Structure			X													X					
Bedded Pack, concrete floor and concrete walls			X													X					
Bedded Pack, concrete floor and wood walls			X													X					
Dry Stack, concrete floor and wood walls			X													X					
Dry Stack, concrete floor and no walls			X													X					

# Waste Transfer

Code: 634

Reporting Unit: Number

**Definition:**

A system using structures, conduits, or equipment to convey byproducts (wastes) from agricultural operations to points of usage.

**Purpose:**

To transfer agricultural material associated with production, processing, and/or harvesting through a hopper or reception pit, a pump (if applicable), a conduit, and/or hauling equipment to a storage/treatment facility, a loading area, and/or agricultural land for final utilization as a resource.

**Conditions Where Practice Applies:**

The transfer component is a part of a planned waste management or comprehensive nutrient management system. Material generated by livestock production or agricultural product processing and a conveyance system is necessary to transfer the byproducts from the source to a storage/treatment facility and/or a loading area, and/or from storage/treatment to an area for utilization. This includes hauling nutrients from one geographical area with excess nutrients to a geographical area that can utilize the nutrients in an acceptable manner. This practice does not include land application or other use of manure. Criteria for land application of manure are included in NRCS CPs 590, Nutrient Management, or 633, Waste Recycling.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Concrete Channel Installation of a concrete chute from a basin to a storage pond. The installation includes all required excavation, backfill, steel reinforcement, a wood picket structure, and all materials and labor. The area for payment will be the square feet of area covered by the concrete chute.	SqFt	\$4.73	\$7.09
Gravity Flow, ≤ 18-inch diameter conduit Installation of an 18" diameter or smaller pipe using gravity flow conditions to convey water containing animal wastes. The pipe length is typically less than 100' and the installation includes excavation, backfill, inlet structure, outlet structure, and all materials and labor. The length for payment will be the linear feet of installed pipe.	Ft	\$12.11	\$18.17
Gravity Flow, > 18-inch diameter conduit Installation of a pipe larger than 18" in diameter using gravity flow conditions to convey water containing animal wastes. The pipe length is typically less than 100' and the installation includes excavation, backfill, inlet structure, outlet structure, and all materials and labor. The length for payment will be the linear feet of installed pipe.	Ft	\$20.36	\$30.53
Pressure Flow, ≤ 6-inch diameter conduit Installation of high pressure (160 psi) pipe, 6" diameter, with gaskets to transfer wastes from a waste storage pond to an irrigation or distribution system. The pipes may also be used to transfer wastes within the waste treatment system. The installation includes excavation, backfill, fittings, and all materials and labor. The length for payment will be the linear feet of installed pipe.	Ft	\$5.87	\$8.80
Pressure Flow, 8-inch diameter conduit Installation of high pressure (160 psi) pipe, 8" diameter, with gaskets to transfer wastes from a waste storage pond to an irrigation or distribution system. The pipes may also be used to transfer wastes within the waste treatment system. The installation includes excavation, backfill, fittings, and all materials and labor. The length for payment will be the linear feet of installed pipe.	Ft	\$8.24	\$12.36

Pressure Flow, 10-inch diameter conduit	Ft	\$11.07	\$16.61
Installation of high pressure pipe, 10" diameter, with gaskets to transfer wastes from a waste storage pond to an irrigation or distribution system. The pipes may also be used to transfer wastes within the waste treatment system. The installation includes excavation, backfill, fittings, and all materials and labor. The length for payment will be the linear feet of installed pipe.			
Pressure Flow, ≥ 12-inch diameter conduit	Ft	\$16.47	\$24.70
Installation of high pressure pipe, 12" diameter or larger, with gaskets to transfer wastes from a waste storage pond to an irrigation or distribution system. The pipes may also be used to transfer wastes within the waste treatment system. The installation includes excavation, backfill, fittings, and all materials and labor. The length for payment will be the linear feet of installed pipe.			

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- This practice is subject to a \$35,000 per number payment cap.

**Documentation:**

Completed table of quantities on as-built plan; Forms KS-ENG-23, Irrigation Pipeline - Code 430, Storage Terrace Worksheet; KS-ENG-19, Underground Outlet - 620; KS-ENG-449a, Concrete Chute Inlet Structure (Plan View).

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Concrete Channel			X													X						
Gravity Flow, ≤ 18-inch diameter conduit			X													X						
Gravity Flow, > 18-inch diameter conduit			X													X						
Pressure Flow, ≤ 6-inch diameter conduit			X													X						
Pressure Flow, 8-inch diameter conduit			X													X						
Pressure Flow, 10-inch diameter conduit			X													X						
Pressure Flow, ≥ 12-inch diameter conduit			X													X						

# Waste Treatment

Code: 629

Reporting Unit: Number

**Definition:**

The mechanical, chemical, or biological treatment of agricultural waste.

**Purpose:**

- To use mechanical, chemical, or biological treatment facilities and/or processes as part of an agricultural waste management system.
- To improve ground and surface water quality by reducing the nutrient content, organic strength, and/or pathogen levels of agricultural waste.
- To improve air quality by reducing odors and gaseous emissions.
- To produce value-added by-products.
- To facilitate desirable waste handling, storage, or land application alternatives.

**Conditions Where Practice Applies:**

This practice applies where the form and characteristics of agricultural waste make it difficult to manage so as to prevent it from becoming a nuisance or hazard or where changing the form or composition provides additional utilization alternatives, and where conventional waste management alternatives are deemed ineffective. More specifically:  
 Liquids and solids need to be separated for further processing or for effective transport and subsequent utilization.  
 Raw agricultural waste contains excess nutrients for land application based on crop utilization requirements or nutrient ratios need to be modified to be more consistent with crop utilization requirements.  
 There is a need to reduce the potential for leaching or runoff of nutrients.  
 Odors and/or gaseous emissions from livestock production facilities and waste storage/treatment system components must be reduced.  
 Value-added by-products can be produced to offset treatment costs.  
 Reduction of pathogens is required.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Phosphorus Reduction System  Installation of a mechanical system to remove phosphorus from the waste stream as part of a CNMP. The installation includes site preparation, base, and all materials and labor to install the system as designed. Payment will be based on the waste stream design flow rate in gallons per minute treated by the installed system.	Gal/Min	\$462.25	\$554.70

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Phosphorus Reduction System			X													X					

# Waste Treatment Lagoon

Code: 359

Reporting Unit: Number

**Definition:**

A waste treatment impoundment made by constructing an embankment and/or excavating a pit or dugout.

**Purpose:**

To biologically treat waste, such as manure and wastewater, and thereby reduce pollution potential by serving as a treatment component of a waste management system.

**Conditions Where Practice Applies:**

Where the lagoon is a component of a planned agricultural waste management system.

Where treatment is needed for organic wastes generated by agricultural production or processing.

On any site where the lagoon can be constructed, operated, and maintained without polluting air or water resources.

To lagoons utilizing embankments with an effective height of 35 feet or less where damage resulting from failure would be limited to damage of farm buildings, agricultural land, or township and country roads.

This standard does not apply to treatment of untreated human waste.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Embankment Lagoon <small>A waste lagoon constructed by a combination of excavation and earthfill with more than 3 feet of fill in the embankment. The volume for payment will be the cubic feet of storage at the design storage level without freeboard.</small>	CuFt	\$0.07	\$0.09
Excavated Lagoon <small>A waste lagoon constructed by excavating a lagoon with a small berm around the lagoon, normally 3 feet or less high. The volume for payment will be the cubic feet of storage at the design storage level without freeboard.</small>	CuFt	\$0.10	\$0.12

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Operation plan for waste treatment lagoon must identify the operating levels, waste loading requirements, and treatment period for proper operation.

**Documentation:**

Completed table of quantities on as-built plan; Form KS-ENG-16, Waster Management System Inspection Report.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Embankment Lagoon			X													X					
Excavated Lagoon			X													X					

# Water and Sediment Control Basin

Code: 638

Reporting Unit: Number

**Definition:**

An earth embankment or a combination ridge and channel constructed across the slope of minor watercourses to form a sediment trap and water detention basin with a stable outlet.

**Purpose:**

A water and sediment control basin may be established to:

- Improve farmability of sloping land.
- Reduce watercourse and gully erosion.
- Trap sediment.
- Reduce and manage onsite and downstream runoff.
- Improve downstream water quality.

**Conditions Where Practice Applies:**

This practice applies to sites where:

1. The topography precludes installing and farming terraces with reasonable effort.
2. Watercourse or gully erosion is a problem.
3. Sheet and rill erosion is controlled by other conservation practices.
4. Runoff and sediment damage land and improvements.
5. Soil and site conditions are suitable.
6. Adequate outlets can be provided.

Water and sediment control basins shall not be used in place of terraces and other conservation measures. Where the ridge and/or channel extends beyond the detention basin or level embankment, use CP 600, Terrace, or 362, Diversion, as appropriate.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Water and Sediment Control Basin, base  Installation of a WASCOB constructed to capture sediment and slowly release water. The embankment or ridge is typically 4' or less high. The volume for payment will be the cubic yards of earthfill in the embankment or ridge.	CuYd	\$2.12	\$3.18
Water and Sediment Control Basin, topsoil  Installation of a WASCOB constructed to capture sediment and slowly release water. The embankment or ridge is typically greater than 4' high and topsoil is stockpiled and placed on the embankment during construction. The volume for payment will be the cubic yards of earthfill in the embankment or ridge.	CuYd	\$2.28	\$3.41

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-4a, Earthwork Computation Sheet - Fill; KS-ENG-15, Earth Dam Inspection Report; Storage Terrace Spreadsheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 10 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Water and Sediment Control Basin, base		X	X	X	X			X				X				X					
Water and Sediment Control Basin, topsoil		X	X	X	X			X				X				X					

# Water Well

Code: 642

Reporting Unit: Number

**Definition:**

A hole drilled, dug, driven, bored, jetted, or otherwise constructed to an aquifer.

**Purpose:**

Provide water for livestock, wildlife, irrigation, human, and other uses.  
 Provide for general water needs of farming/ranching operations.  
 Facilitate proper use of vegetation on rangeland, pastures, and wildlife areas.

**Conditions Where Practice Applies:**

This practice applies on all land uses where the underground supply of water is sufficient in quantity and quality for the intended purpose. This practice applies only to production wells. Specifically excluded are any types of wells installed solely for monitoring or observation purposes, injection wells, and piezometers. The standard does not apply to pumps installed in wells; aboveground installations such as pumping plants, pipelines, and tanks; or temporary test wells. For decommissioning of wells, refer to CP 351, Well Decommissioning.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Well Point Installation of a shallow well without drilling. Typical construction is a well screen, pipe, and couplings driven or water jetted to a depth of 20 feet or less into a shallow water-bearing formation. The length for payment will be the linear feet of screen and pipe installed.	Ft	\$35.11	\$52.67
Shallow Well, ≤ 100 feet Installation of a drilled well with a minimum 5-inch diameter casing and well head protection. The depth to a known water supply is 100' or less. The length for payment will be the depth of the completed well in feet.	Ft	\$23.04	\$34.56
Well, single 4-6 inch PVC casing Installation of a drilled well with well head protection. The depth to a known water supply is typically greater than 100' to 300'. The length for payment will be the depth of the completed well in feet.	Ft	\$15.21	\$22.81
Deep Well, steel or copper Installation of a drilled well with a minimum 5-inch diameter casing and well head protection. The depth to a known water supply is greater than 300' and metal casing is required. The length for payment will be the depth of the completed well in feet.	Ft	\$14.32	\$21.48

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
2. Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
3. WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.
4. LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.

**Documentation:**

Form KS-ENG-10, Job Sheet; KDHE Form WWC-5 (Water Well Record).

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Well Point		X	X	X	X		X	X				X		X		X						
Shallow Well, ≤ 100 feet		X	X	X	X		X	X				X		X		X						
Well, single 4-6 inch PVC casing		X	X	X	X		X	X				X		X		X						
Deep Well, steel or copper		X	X	X	X		X	X				X		X		X						

# Water Well Decommissioning

Code: 351

Reporting Unit: Number

**Definition:**

The sealing and permanent closure of a water well no longer in use.

**Purpose:**

- Prevent entry of animals, debris, or other foreign substances into well or well bore hole.
- Eliminate the physical hazard of an open hole to people, animals, and farm machinery.
- Prevent entry of contaminated surface water into well and migration of contaminants into unsaturated (vadose) zone or saturated zone.
- Prevent commingling of chemically or physically different ground waters between separate water bearing zones.
- Eliminate possibility of well being used for any other purpose.
- Conserve yield and hydrostatic head of aquifers.
- Restore, as far as feasible, hydrogeologic conditions that existed before well was constructed.

**Conditions Where Practice Applies:**

This practice applies to any drilled, dug, driven, bored, or otherwise constructed vertical water well determined to have no further beneficial use. This practice does not apply to water wells that were used for waste disposal or if evidence of contamination exists. This practice does not apply to wells that contain contamination levels that exceed state or federal water quality standards. Treatment of contamination is required before a well is decommissioned.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Shallow, > 15-inch diameter Decommissioning or permanently closing an inactive, abandoned, or unusable dug well greater than 15" in diameter. The measurement for payment will be the well depth in feet.	Ft	\$25.36	\$30.43
Shallow, ≤ 15-inch diameter Decommissioning or permanently closing an inactive, abandoned, or unusable drilled well with a 15" or smaller diameter casing and a well depth less than 300 feet. The unit cost is based on the well depth in feet.	Ft	\$5.34	\$6.41
Drilled, ≤ 300 feet Decommissioning or permanently closing an inactive, abandoned, or unusable drilled well with a 15" or smaller diameter casing and a well depth not exceeding 300 feet. The unit cost is based on the well depth in feet.	Ft	\$11.72	\$14.07
Drilled, > 300 feet Decommissioning or permanently closing an inactive, abandoned, or unusable drilled well with a 15" or smaller diameter casing and a well depth greater than 300 feet. The unit cost is based on the well depth in feet.	LnFt	\$10.32	\$12.38

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

KS-ENG-10, Job Sheet; Well Decommissioning Worksheet; Completed table of quantities on as-built plan.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Shallow, > 15-inch diameter			X	X	X			X	X	X				X	X	X				X	
Shallow, ≤ 15-inch diameter			X	X	X			X	X	X				X	X	X				X	
Drilled, ≤ 300 feet			X	X	X			X	X	X				X	X	X				X	
Drilled, > 300 feet			X	X	X			X	X	X				X	X	X				X	

## Watering Facility

Code: 614

Reporting Unit: Number

**Definition:**

A permanent or portable device to provide an adequate amount and quality of drinking water for livestock and or wildlife.

**Purpose:**

To provide access to drinking water for livestock and/or wildlife in order to meet daily water requirements and improve animal distribution.

**Conditions Where Practice Applies:**

This practice applies to all land uses where there is a need for new or improved watering facilities for livestock and/or wildlife.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Steel Tank</p> <p>Installation of a galvanized steel water tank set on gravel or compacted earth base with a gravel apron. The installation includes leveling of site, protection of entry by cattle and other larger animals, a wildlife escape ramp, and all required materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.</p>	Gal	\$1.17	\$1.41
<p>Rubber, fiberglass on earth</p> <p>Installation of a rubber equipment tire with concrete plug or fiberglass water tank placed on a gravel or compacted earth foundation with a gravel apron. The installation includes preparation of site, protection of entry by cattle and other larger animals, wildlife escape ramp, and all required materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.</p>	Gal	\$1.16	\$1.39
<p>Rubber, fiberglass on concrete</p> <p>Installation of a rubber equipment tire with concrete plug or fiberglass water tank placed on a concrete foundation with a concrete or gravel apron. The installation includes preparation of site, protection of entry by cattle and other larger animals, wildlife escape ramp, and all required materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.</p>	Gal	\$1.32	\$1.58
<p>Steel Rim, bottomless</p> <p>Installation of a galvanized-steel rim installed with a flexible membrane or bentonite-treated earth base with a gravel apron. The installation includes preparation of site, protection of entry by cattle and other larger animals, wildlife escape ramp, and all materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.</p>	Gal	\$0.27	\$0.32
<p>Steel Rim, concrete base</p> <p>Installation of a galvanized-steel rim installed in a reinforced concrete base and apron. The installation includes preparation of site, protection of entry by cattle and other larger animals, wildlife escape ramp, and all materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.</p>	Gal	\$0.86	\$1.03
<p>Water Fountain</p> <p>Installation of a commercially available water fountain for livestock set on a concrete base and apron or installed in the ground as recommended by the manufacturer. The installation includes preparation of site, plumbing, and all materials, appurtenances, and labor. The number for payment will be each water fountain installed.</p>	Ea	\$1,242.41	\$1,490.90

Pre-Cast Concrete	Gal	\$2.62	\$3.15
Installation of a precast concrete tank placed on a gravel or compacted earth base with a gravel apron. The installation includes preparation of site, protection of entry by cattle and other larger animals, wildlife escape ramp, and all materials, appurtenances, and labor. The volume for payment will be the design volume in gallons of the installation.			
Belowground Storage Tank	Gal	\$1.19	\$1.43
Installation of a large steel, concrete, or fiberglass tank installed on a gravel base or underground. The installation reduces pipe size and pressure requirements of the associated pipeline and includes preparation of site and all materials, appurtenances, and labor. The volume for payment will be the design volume of the installed tank.			

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.
- Wildlife escape ramps are required (refer to practice standard and specifications).
- This practice includes aprons around tanks and CP 561, Heavy Use Protection Area, will not be scheduled as a complementary practice.
- Follow the current USFWS Conference Report Conservation Measures for all offered acres located in the Lesser Prairie-Chicken Action Area.
- LPCI: This is a support practice that may be included in the conservation plan. To meet the requirements of the current USFWS Conference Report, conservation plans developed may include supporting conservation practices if they facilitate the implementation of core practices and are planned within the contract period or are already applied on the land under contract.
- For relocation of an animal feeding operation (AFO), the number of watering facilities planned will not exceed the number in the AFO being closed out. Financial assistance is not available for watering facilities for new or expanding AFO.
- WQL: Eligible only on cropland planted to permanent vegetation meeting CP 512 or 550 standards and specifications.

**Documentation:**

Forms KS-ENG-25, Watering Facility - 614; KS-ENG-429, Reinforced Concrete Storage Tank (Rectangular); KS-ENG-430, Reinforces Concrete Storage Tank (Circular); KS-ENG-10, Jobsheet.

**Maintenance:**

Practice will be maintained for a lifespan of 20 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Steel Tank		X	X	X	X		X	X				X		X	X	X	X				
Rubber, fiberglass on earth		X	X	X	X		X	X				X		X	X	X	X				
Rubber, fiberglass on concrete		X	X	X	X		X	X				X		X	X	X	X				
Steel Rim, bottomless		X	X	X	X		X	X				X		X	X	X	X				
Steel Rim, concrete base		X	X	X	X		X	X				X		X	X	X	X				
Water Fountain		X	X	X	X		X	X				X		X	X	X	X				
Pre-Cast Concrete		X	X	X	X		X	X				X		X	X	X	X				
Belowground Storage Tank		X	X	X	X		X	X				X		X	X	X	X				

# Wetland Creation

Code: 658

Reporting Unit: Acre

**Definition:**

The creation of a wetland on a site that was historically non-wetland.

**Purpose:**

To create wetland functions and values.

**Conditions Where Practice Applies:**

This practice applies to sites where no natural wetland occurred historically and contains soils that are not hydric.

This practice does not apply to:

A constructed wetland intended to treat point and nonpoint sources of water pollution.

Wetland enhancement intended to rehabilitate a degraded wetland where specific functions and/or values are enhanced beyond original conditions.

Wetland restoration intended to rehabilitate a degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to approximate original wetland conditions.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Wetland Creation, excavation Creation of a new wetland area by excavating an area below existing ground level at a location where surface runoff may be intercepted and ponded by excavation. The area of excavation must be supported by a water budget analysis. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$1.77	\$2.13
Excavation at Saturated Site Creation of a new wetland area by excavating an area below existing ground level at a location where a shallow water table may be exposed by excavation. The area of excavation must be supported by a soils investigation. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$3.42	\$4.11
Excavation and Embankment Creation of a new wetland area by excavating a depression and building a dike to intercept runoff. The area created must be supported by a water budget analysis. The volume for payment will be the total volume of earth moved, as computed by the design.	CuYd	\$3.21	\$3.85

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-4a, Earthwork Computation Sheet - Fill; KS-ENG-4c, Earthwork Computation Sheet - Cut; Completed table of quantities on as-built Plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Wetland Creation, excavation				X	X			X	X	X					X	X					
Excavation at Saturated Site				X	X			X	X	X					X	X					
Excavation and Embankment				X	X			X	X	X					X	X					

# Wetland Enhancement

Code: 659

Reporting Unit: Acre

**Definition:**

The rehabilitation or re-establishment of a degraded wetland and/or the modification of an existing wetland, which augments specific site conditions for specific species or purposes, possibly at the expense of other functions and other species.

**Purpose:**

To provide specific wetland conditions to favor specific wetland functions and targeted species by hydrologic enhancement (depth duration and season of inundation, and/or duration and season of soil saturation) or vegetative enhancement (including the removal of undesired species, and/or seeding or planting of desired species).

**Conditions Where Practice Applies:**

This practice applies on any degraded or nondegraded existing wetland where the objective is specifically to enhance selected wetland functions. This practice does not apply to the following where the intention is to:

Treat point and nonpoint sources of water pollution (CP 656, Constructed Wetland).

Rehabilitate a degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to original conditions (CP 657, Wetland Restoration).

Create a wetland on a site that historically was not a wetland (CP 658, Wetland Creation).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Excavation  Enhancement of a degraded depressional or riverine wetland by removal of sediment or strategic excavation to enhance the function of the wetland. The enhancement must be supported by a functional analysis to support the sediment removal or excavation. The wetland is in an area of climatic conditions where it is typically dry for extended portions of the year. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$1.64	\$1.96
Excavation on Saturated Site  Enhancement of a degraded depressional or riverine wetland by removal of sediment or strategic excavation to enhance the function of the wetland. The enhancement must be supported by a functional analysis to support the sediment removal or excavation. The wetland is in an area of climatic conditions where it is normally saturated all year long. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$3.29	\$3.94
Depression Sediment Removal and Ditch Plug  Enhancement of a degraded depressional or riverine wetland by removal of sediment and/or filling of small drainage ditches to enhance the function of the wetland. The enhancement must be supported by a functional analysis to support the sediment removal or earthfill. The volume for payment will be the total volume of earth moved, as computed by the design.	CuYd	\$1.67	\$2.01

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-4a, Earthwork Computation Sheet - Fill; KS-ENG-4c, Earthwork Computation Sheet - Cut; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Excavation				X	X			X	X	X					X	X					
Excavation on Saturated Site				X	X			X	X	X					X	X					
Depression Sediment Removal and Ditch Plug				X	X			X	X	X					X	X					

# Wetland Restoration

Code: 657

Reporting Unit: Acre

**Definition:**

The rehabilitation of a degraded wetland or the reestablishment of a wetland so that soils, hydrology, vegetative community, and habitat are a close approximation of the original natural condition that existed prior to modification to the extent practicable.

**Purpose:**

- To restore wetland function, value, habitat, diversity, and capacity to a close approximation of the pre-disturbance by:
  - Restoring hydric soil.
  - Restoring hydrology (depth duration and season of inundation, and/or duration and season of soil saturation).
  - Restoring native vegetation (including the removal of undesired species, and/or seeding or planting of desired species).

**Conditions Where Practice Applies:**

- This practice applies only to natural wetland sites with hydric soils, or problem soils that are hydric, which have been subject to hydrologic or vegetative degradation, or to sites where hydric soils are covered by fill, sediment, or other deposits. This practice is applicable only where the natural hydrologic conditions, including the hydro-periods, can be approximated by modifying drainage and/or by artificial flooding of a duration and frequency similar to the original, natural conditions. This practice does not apply:
  - To treat point and nonpoint sources of water pollution (CP 656, Constructed Wetland).
  - To modify an existing wetland where specific attributes are heightened by management objectives, and/or returning a degraded wetland back to a wetland but to a different type than what previously existed on the site (CP 659, Wetland Enhancement).
  - To creating a wetland on a site location which historically was not a wetland (CP 658, Wetland Creation).

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Fill-in Dugout Restoration of a converted depressional wetland to its original condition by filling a dugout used to drain the wetland. The volume for payment is the total volume of the earthfill, as computed by the design.	CuYd	\$1.82	\$2.73
Depression Sediment Removal Restoration of a converted depressional wetland by removing sediment from all or a portion of the wetland. The wetland is in an area of climatic conditions where it is typically dry for extended portions of the year. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$2.12	\$3.18
Sediment Removal, saturated site Restoration of a converted depressional wetland by removing sediment from all or a portion of the wetland. The wetland is in an area of climatic conditions where it is normally saturated all year long. The volume for payment will be the total volume of excavation, as computed by the design.	CuYd	\$2.28	\$3.42
Ditchplug, lateral restoration Restoration of a converted depressional or riverine wetland by filling small ditches or subsurface drains used to drain the wetland. The typical ditch is less than 10' wide and 2' deep. The volume for payment will be the total volume of earthfill, as computed by the design.	CuYd	\$4.14	\$6.20
Embankment, fill height ≤ 4 feet Restoration of a converted depressional or riverine wetland feet by filling a single large drainage ditch that was excavated to drain the wetland. The embankment to fill the ditch is typically less than 4' high and 100' in length. The volume for payment will be the total volume of earthfill, as computed by the design.	CuYd	\$3.08	\$4.62

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Forms KS-ENG-4a, Earthwork Computation Sheet - Fill; KS-ENG-4c, Earthwork Computation Sheet - Cut; Completed table of quantities on as-built plans.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPDI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5
Fill-in Dugout				X	X			X	X	X					X	X					
Depression Sediment Removal				X	X			X	X	X					X	X					
Sediment Removal, saturated site				X	X			X	X	X					X	X					
Ditchplug, lateral restoration				X	X			X	X	X					X	X					
Embankment, fill height ≤ 4 feet				X	X			X	X	X					X	X					

# Wetland Wildlife Habitat Management

Code: 644

Reporting Unit: Acre

**Definition:**

Retaining, developing, or managing wetland habitat for wetland wildlife.

**Purpose:**

To maintain, develop, or improve wetland habitat for waterfowl, shorebirds, fur-bearers, or other wetland dependent or associated flora and fauna.

**Conditions Where Practice Applies:**

On or adjacent to wetlands, rivers, lakes, and other water bodies where wetland associated wildlife habitat can be managed. This practice applies to natural wetlands and/or water bodies as well as wetlands that may have been previously restored as in CP 657, Wetland Restoration; enhanced as in CP 659, Wetland Enhancement; and created as in CP 658, Wetland Creation.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
<p>Establish Vegetation, mats and plugs</p> <p>This scenario covers all wetland habitats not covered under 643. Involves hauling in material (mats and plugs obtained from off site) with a unique soil texture, seedbank, and vegetative reproductive potential. Haul/fill is used as macrotopographic development of unique texture and seedbank that will provide the soil medium (texture) to increase plant richness and diversity in an otherwise monotypic soil/landscape/plant community. This scenario is used when habitat assessment indicates inadequate habitat for fish or wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where wetland habitats are utilized by targeted species. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, and develop wildlife habitat as part of a habitat management system. This scenario is used to increase species diversity and richness. Monitoring of site by a biologist post installation will be required to determine management strategies for wetland dependent species. Establishment of vegetation will require methods including the use of seed-bearing topsoil, transplanted vegetation mats and plugs, and other appropriate methods used to cover and treat in patches, 10-25% of each wetland acre. Fertilization will NOT be required.</p>	Ac	\$163.68	\$196.42
<p>Wildlife Structures of Medium Intensity with Medium Complexity</p> <p>Water level manipulation will require the use of Water Control Structures (587) and hand labor implementation techniques on constructed wetlands. The setting is all land uses, but typically is on lands used for the production of crops and/or fish and wildlife where the slope gradient is less than two percent and soils that are not excessively drained. The State-approved habitat evaluation or appraisal found that a limiting factor for wetland wildlife is the absence of sufficient cover and food in the area. The manipulation of existing cover will be accomplished through managing water levels to provide a diverse vegetation mosaic within and adjacent to the existing wetland addressing inadequate habitat for wetland wildlife. Stop log structure is installed separately under CP 587, Structure for Water Control.</p>	Ac	\$50.73	\$60.88

**Limitations:**

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

2. Vegetation management will be completed annually to provide optimum food and structure for migratory birds. This practice will include mechanical disturbances to create desirable migratory bird habitat within the flooded areas ONLY. Disking will be completed on at least 25% of the flooded or saturated areas AND will be completed no fewer than 2 times in 3 years. Disking will be completed January 1 through April 1 and/or July 15 through August 15 OR after drawdowns are complete and before reflooding begins for wetland with water control structures. Disking will be completed to a depth appropriate to achieve the desired response.
3. CP 644, Wetland Wildlife Habitat Management, and CP 645, Upland Wildlife Habitat Management, will not be paid for on the same acres in the same year.
4. This practice is not eligible on grazed range.
5. Practice will be implemented a minimum of 3 years. Payment will be made upon annual implementation of the practice.
6. Water level manipulations will be used ONLY after installation of CP 587, Structure for Water Control, in a constructed, enhanced, or restored wetland/shallow water area. Drawdowns will be completed in one of the three seasons annually: Early—March 15 through May 1; Mid-season—May 1 through July 15; or Late—after July 15. Water levels should (1) be reduced slowly to increase annual vegetation diversity and (2) have no more than 25% of the flooded area remaining saturated/flooded after drawdown is complete. Reflooding shall begin no later than August 15 and be completed gradually with all boards/stop logs installed by November 15 of that year.

**Documentation:**

Form KS-ECS-23, Vegetative Management.

**Maintenance:**

Practice will be maintained for a lifespan of one year following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCL	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Establish Vegetation, mats and plugs				X	X			X	X	X						X						
Wildlife Structures of Medium Intensity with Medium Complexity				X	X			X	X	X						X						

# Windbreak/Shelterbelt Establishment

Code: 380

Reporting Unit: Feet

## Definition:

Windbreaks or shelterbelts are single or multiple rows of trees or shrubs in linear configurations.

## Purpose:

- Reduce soil erosion from wind.
- Protect plants from wind-related damage.
- Alter the microenvironment for enhancing plant growth.
- Manage snow deposition.
- Provide shelter for structures, animals, and people.
- Enhance wildlife habitat.
- Provide noise and visual screens.
- Improve air quality by reducing and intercepting air-borne particulate matter, chemicals, and odors.
- Delineate property and field boundaries.
- Improve irrigation efficiency.
- Increase carbon storage in biomass and soils.

## Conditions Where Practice Applies:

Apply this practice on any areas where linear plantings of woody plants are desired and suited for controlling wind, noise, and visual resources. Use other tree/shrub practices when wind, noise, and visual problems are not concerns.

## Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Shrubs, hand planted Single 500 foot row of shrubs for wind protection, wildlife habitat, or snow management. Shrubs planted by hand 4 feet apart. This practice is typically applied to crop, pasture, or range lands.	Ea	\$1.10	\$1.32
Trees, hand planted Single 500 foot row of either hardwood or conifer tree seedlings for wind protection, wildlife habitat, or snow management. Trees planted by hand 10 feet apart. This practice is typically applied to crop, pasture, or range lands.	Ea	\$1.99	\$2.39
1 Row Windbreak, trees, hand planted, balled and burlap < 18 inches Single 500 foot row of balled and burlap (or container) tree/conifer seedlings for wind protection, wildlife habitat, or snow management. Trees planted by hand 10 feet apart. The trees are less than 18" with approximately 350 per acre. This practice is typically applied to crop, pasture, or range lands.	Ft	\$0.36	\$0.43
1 Row Windbreak, trees, hand planted, balled and burlap > 18 inches Single 500 foot row of balled and burlap (or container) tree/conifer seedlings for wind protection, wildlife habitat, or snow management. Trees planted by hand 10 feet apart. The trees are greater than 18" with approximately 350 per acre. This practice is typically applied to crop, pasture, or range lands.	Ft	\$0.48	\$0.58
Trees, machine planted Tree planting consisting of 2,500 feet of trees for wind protection, energy conservation, wildlife habitat, air quality, snow management, or to provide a visual screen. The planting may consist of shrubs, hardwood trees, conifers, or a combination. Trees and shrubs planted with a tree planting machine. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart in the row with rows 16 feet apart. The scenario will include 1/4 shrubs, 1/2 hardwoods, and 1/4 conifers based on feet of trees. Herbivores (deer, rabbits, etc.) are NOT expected to browse tree seedlings, tree protection is not needed. This practice is typically applied to crop, pasture, or range lands.	Ft	\$0.20	\$0.24

Trees, machine planted, wildlife protection

Ft

\$0.59

\$0.71

Tree planting consisting of 2,500 feet of trees for wind protection, energy conservation, wildlife habitat, air quality, snow management or to provide a visual screen. The planting may consist of shrubs, hardwood trees, conifers, or a combination. Trees and shrubs planted with a tree planting machine. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart in the row with rows 16 feet apart. The scenario will include 1/4 shrubs, 1/2 hardwoods, and 1/4 conifers based on feet of trees. Herbivore (deer, rabbits, etc.) damage is likely, so each tree must be protected with a rigid tube tree shelter. This practice is typically applied to crop, pasture, or range lands.

**Limitations:**

- Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

**Documentation:**

Form KS-ECS-5, Vegetative Management.

**Maintenance:**

Practice will be maintained for a lifespan of 15 years following installation.

**Program Eligibility:**

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Shrubs, hand planted	X		X	X	X	X		X			X	X				X						
Trees, hand planted	X		X	X	X	X		X			X	X				X						
1 Row Windbreak, trees, hand planted, balled and burlap < 18 inches	X		X	X	X	X		X			X	X				X						
1 Row Windbreak, trees, hand planted, balled and burlap > 18 inches	X		X	X	X	X		X			X	X				X						
Trees, machine planted	X		X	X	X	X		X			X	X				X						
Trees, machine planted, wildlife protection	X		X	X	X	X		X			X	X				X						

# Windbreak/Shelterbelt Renovation

Code: 650

Reporting Unit: Feet

**Definition:**

Replacing, releasing, and/or removing selected trees and shrubs or rows within an existing windbreak or shelterbelt, adding rows to the windbreak or shelterbelt, or removing selected tree and shrub branches.

**Purpose:**

Restoring or enhancing the original planned function of existing windbreaks or shelterbelts.

**Conditions Where Practice Applies:**

In any windbreak or shelterbelt that is no longer functioning properly for the intended purpose. Extending the length of an existing windbreak is handled under CP 380, Windbreak/Shelterbelt Establishment. For normal and periodic pruning, refer to CP 660, Tree/Shrub Pruning.

**Payment Schedule:**

Activity Description	Payment Unit	Payment Rate	
		General	HU
Thinning Thinning of selected trees and understory vegetation in a windbreak/shelterbelt is needed to ensure that species composition and stand structure continue to serve their intended purpose. Typical scenario is 1,000 feet.	LnFt	\$0.29	\$0.35
Removal, < 8 inches DBH with skidsteer Windbreak renovation requires the removal of degraded or inappropriate trees or shrubs within a windbreak. This may include removal of entire rows, including stumps or roots, or selected trees/shrubs in order to prepare for the necessary planting of a replacement row within the windbreak, improve the health of the remaining rows, and/or allow for supplemental planting to expand the windbreak.	LnFt	\$0.71	\$0.85
Removal, > 8 inches DBH with dozer Windbreak renovation requires the removal of degraded or inappropriate trees or shrubs within a windbreak. This may include removal of entire rows, including stumps or roots, or selected trees/shrubs in order to prepare for the necessary planting of a replacement row within the windbreak, improve the health of the remaining rows, and/or allow for supplemental planting to expand the windbreak.	LnFt	\$1.98	\$2.38
Supplemental Planting, container Parts of the windbreak being renovated have died. Supplemental plantings of containerized trees/shrubs will improve the effectiveness and longevity of the windbreak.	Ac	\$505.85	\$607.02
Supplemental Planting, bareroot Parts of the windbreak being renovated have died. Supplemental plantings of bare root trees/shrubs will improve the effectiveness and longevity of the windbreak.	Ac	\$434.42	\$521.31
Supplemental Planting, machine Parts of the windbreak being renovated have died. Supplemental plantings of bare root trees/shrubs will improve the effectiveness and longevity of the windbreak. Trees and shrubs planted with a tree-planting machine. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart in the row with rows 16 feet apart. The scenario will include 1/3 shrubs, 1/3 hardwoods, and 1/3 conifers.	Ft	\$0.20	\$0.23
Coppicing, < 50% of the windbreak Coppicing of selected trees and understory vegetation in a windbreak/shelterbelt is needed to ensure that species composition and stand structure continue to serve their intended purpose.	LnFt	\$0.68	\$0.81

Coppicing of selected trees and understory vegetation in a windbreak/shelterbelt is needed to ensure that species composition and stand structure continue to serve their intended purpose.

### Limitations:

1. Limited Resource Farmers/Ranchers, Beginning Farmers/Ranchers, or Socially Disadvantaged Farmers/Ranchers may apply under the ranking category specific to their resource concern or the ranking category specifically for their historically underserved group but not both.

### Documentation:

Form KS-ECS-5, Vegetative Management.

### Maintenance:

Practice will be maintained for a lifespan of 15 years following installation.

### Program Eligibility:

	FLH	GLH	LSW	SFR	TRI	SH	WLH	WQL	WQN	QRA	NOFEI	OI	NSHTI	LPCI	Ogallala	NWQI	CCPI-B	CCPI-S	GMD 2	GMD 3	GMD 5	
Thinning	X		X	X	X	X		X				X				X		X				
Removal, < 8 inches DBH with skidsteer	X		X	X	X	X		X				X				X		X				
Removal, > 8 inches DBH with dozer	X		X	X	X	X		X				X				X		X				
Supplemental Planting, container	X		X	X	X	X		X				X				X		X				
Supplemental Planting, bareroot	X		X	X	X	X		X				X				X		X				
Supplemental Planting, machine	X		X	X	X	X		X				X				X		X				
Coppicing, < 50% of the windbreak	X		X	X	X	X		X				X				X		X				
Coppicing, > 50% of the windbreak	X		X	X	X	X		X				X				X		X				

## List of Acronyms

Ac—Acre

AFO—Animal Feeding Operation

AgEMP—Agricultural Energy Management Plan

AMCA—Air Movement and Control Association

ASABE—American Society of Agricultural and Biological Engineers

AU—Animal Unit

AWMFH—Agricultural Water Management Field Handbook

BESS—Bio Environmental and Structural Systems

BHP—brake horsepower

BTU—British thermal unit

CAP—Conservation Activity Plan

CFL—compact fluorescent lamp

CCPI-B—Cooperative Conservation Partnership Initiative-Central Great Plains Forested  
Riparian Buffers

CCPI-S Cooperative Conservation Partnership Initiative-Central Great Plains Shelterbelt  
Renovation

CMP—corrugated metal pipe

CNMP—Comprehensive Nutrient Management Plan

CP—conservation practice

CPS—conservation practice standard

CRP—Conservation Reserve Program

CuFt—Cubic Feet

CuYd—Cubic Yard

DBH—diameter at breast height

DRI—Drought Recovery Initiative

DWMP—Drainage Water Management Plan

DWR—Division of Water Resources

eFOTG—electronic Field Office Technical Guide

EQIP—Environmental Quality Incentives Program

FLH—Forestland Health

FMP—Forest Management Plan

Ft—Feet

GLH—Grazing Land Health

GMD—Groundwater Management District

GPC—Greater Prairie-Chicken

HAF—Horizontal Airflow

HDPE—high density polyethylene

HP—horsepower

HU—historically underserved

IC—internal combustion

IPM—Integrated Pest Management

I\_SMRT—Irrigation System and Management Rating Tool

IWM—Irrigation Water Management

KDHE—Kansas Department of Health and Environment

KWO—Kansas Water Office

LGU—land grant university

LED—Light-emitting diode

LnFt—Linear Feet

LPC—Lesser Prairie-Chicken

LPCI—Lesser Prairie-Chicken Initiative

LSW—Livestock Waste

N—Nitrogen

NDVI—Normalized Difference Vegetative Index

NEH—National Engineering Handbook

NM—Nutrient Management

No—Number

NOFEI—National On-Farm Energy Initiative

NOx—Nitrogen Oxide

NRCS—Natural Resources Conservation Service

NSHTI—National Seasonal High Tunnel Initiative

NWQI—National Water Quality Initiative

OAI—Ogallala Aquifer Initiative

OI—Organic Initiative

OSP—Organic System Plan

P—Phosphorus

PE—Polyethylene

PM—Particulate Matter

PVC—Polyvinyl Chloride

QRA—Quick Response Areas

RUSLE—Revised Universal Soil Loss Equation

SDI—Subsurface Drip Irrigation

SFR—Sedimentation Above Federal Reservoirs

SH—Soil Health

SqFt—Square Feet

SqYd—Square Yard

SSR—Stream System Restoration

TRI—Tribal

TSP—Technical Service Provider

USFWS—U.S. Fish and Wildlife Service

VSD—Variable Speed Drive

VOC—Volatile Organic Compounds

WASCOB—Water and Sediment Control Basin

WEPA—Water Enhancement Project Areas

WLH—Wildlife Habitat

WQDP—Water Quantity and Drought Pilot

WQL—Water Quality

WQN—Water Quantity