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 (FI) 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 CP 382, Fence. Clearing of brush and trees is not necessary.	ac	$16.85	$17.14

Limitations:

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.

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
Chemical, Aerial Applied	ac	$20.92	$25.11
Apply brush management on rangeland, grazed forest, or pasture through the use of broadcast aerial application of material with low cost chemical(s) to reduce or remove undesirable deciduous species (brush) in uplands and other areas not in or directly adjacent to streams, ponds, or wetlands. Typical unit is 160 acres.			
Chemical, Foliar Spot Treatment	ac	$30.64	$36.77
Apply foliar chemical brush management techniques (aerial fixed-wing or ground rig) on isolated upland areas within an 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-acre isolated area (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 using the most effective, low-cost chemical(s).			
Chemical - Ground Applied	ac	$20.09	$24.11
Apply brush management on rangeland, grazed forest, or pasture through the use of broadcast application of material using low cost chemical(s) to reduce or remove undesirable deciduous species (brush) in uplands and other areas not in or directly adjacent to streams, ponds, or wetlands. Typical unit is 160 acres.			
Chemical, Individual Plant Treatment	ac	$26.69	$32.02
This scenario is for the implementation of brush management on range, pasture or native pasture using individual plant treatment (IPT). The typical method of control is application of herbicides (basal or foliar location) on selected individual plants.			

Mechanical and Chemical, Low Infestation	ac	$37.01	$44.42
Removal of woody vegetation on gently sloping to moderately deep to deep soils. The practice requires the felling of trees and brush using a 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 levels (1-5% canopy depending upon species) based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.			
Mechanical and Chemical, Medium Infestation	ac	$94.01	$112.81
Removal of woody vegetation on gently sloping terrain with moderately deep to deep soils. The practice requires the felling and piling of trees and brush using a 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 levels (averaging 6-15% canopy depending upon species) based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.			
Mechanical and Chemical, Heavy Infestation	ac	$242.01	$290.41
Removal of woody vegetation on gently sloping terrain with moderately deep to deep soils. The practice requires the felling and piling of trees and brush using a 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 levels (averaging greater than 15% canopy depending upon species) based on ecological site potential as determined by state-specific criteria. Typical unit is 10 acres.			
Mechanical, Hand tools	ac	$37.50	$45.00
Using hand tools, such as axes, shovels, hoes, nippers, brush pullers, and chainsaws to remove or cut off woody plants at or below the root collar. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have stands of woody and non-herbaceous species that are in the early phases of invasions. Typical unit is 80 acres.			
Split-method event series	ac	$135.38	$162.46
The practice entails the control of woody vegetation by treating it up to three times during the multi-year treatment period in order to improve ecological site condition. The brush can be treated with the same method or by a combination of methods. Woody vegetation needs to be treated at least twice in order to fully control it. Generally, herbicide volumes are reduced as the last treatment will kill resprouting stems or those which survived the first treatment or newly sprouted seedlings. Brush density has exceeded desired levels based on ecological site potential.			

Limitations:

1. 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.
2. Where there is a concern with resprouting 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.

Documentation:

Form KS-ECS-314, Brush Management.

Maintenance:

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

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
Native and Introduced Vegetation - Moderate Grading	ac	$465.26	$558.32
Establishment of permanent vegetation (native and introduced) 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.			
Native or Introduced Grass/legume mix-heavy grading (Organic and Non-organic)	ac	$761.44	$913.73
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.			
Vegetation-normal tillage (Organic and Non-Organic)	ac	$175.10	$210.13
Establishment of permanent vegetation (Native and Introduced) on a site (both organic and non-organic) that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include seedbed preparation with typical tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.			

Limitations:

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.

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	ft	$1.30	$1.56
Installation of a fence will allow for implementation of a grazing management plan that allows for an adequate rest and recovery period, protection of sensitive area, improved water quality, and reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate. The fence is typically 4 strands over 3/4 of a mile (3,960 feet).			
Barbed Wire, Multi-strand with Fence Markers	ft	$1.39	$1.67
Installation of a fence will allow for implementation of a grazing management plan that allows for an adequate rest and recovery period, protection of sensitive areas, improved water quality, and reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate. The fence is typically 4 strands with wildlife markers, over 3/4 of a mile (3,960 feet).			
Barbed Wire, Multi-strand with fence markers, difficult terrain	ft	$1.62	$1.95
Installation of a fence will allow for implementation of a grazing management plan that provides adequate rest and recovery periods, protection of sensitive areas, improved water quality, and reduction of noxious and invasive weeds. Constructed using fencing materials rather than a pre-manufactured gate. The fence is typically 4 strands with wildlife markers installed on rugged land or where site conditions require longer time to install the fence than the typical scenario. Some of the sites that may be considered as difficult terrain are steep slopes, badlands, or rocky soils.			
Barbed Wire, Multi-strand, difficult terrain	ft	$1.53	$1.83
Installation of a fence will allow for implementation of a grazing management plan that provides adequate rest and recovery periods, protection of sensitive areas, improved water quality, and 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 than the typical scenario.			
Electric, high tensile with energizer	ft	$0.78	$0.93
Installation of a fence will allow for implementation of a grazing management plan that allows for an adequate rest and recovery period, protection of sensitive areas, improved water quality, and reduction of noxious and invasive weeds. Includes 3 strands of high-tensile wire with energizer.			
Electric, high tensile with energizer and fence markers	ft	$0.88	$1.05
Installation of a fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive areas, improved water quality, and reduction of noxious and invasive weeds. Includes 3 strands of high-tensile wire with energizer and wildlife markers.			

Protective Fence A barrier (fence) installed on an NRCS-constructed waste storage system site per an approved engineering design. Permanently installed fence built to (1) keep humans away from waste ponds and lagoons, (2) protect sensitive areas (riparian areas, wetlands, springs, etc.) from heavy livestock pressure, or (3) protect newly-installed conservation practices vulnerable to livestock damage. Heavy-grade fence materials and close post spacing are required.	ft	$1.43	$1.72
Woven Wire Installation of a fence will allow for implementation of a grazing management plan that promotes adequate rest and recovery periods, protection of sensitive areas, improved water quality, and 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	$1.62	$1.95
Woven Wire, with fence markers Installation of a fence will allow for implementation of a grazing management plan that promotes an adequate rest and recovery period, protection of sensitive areas, improved water quality, and 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 and wildlife markers.	ft	$1.72	$2.07

Limitations:

1. For relocation of an 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.

Documentation:

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

Maintenance:

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

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 tail water

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
Filter Strip, Introduced species	ac	$131.71	$158.05
A strip or area of herbaceous vegetation that removes contaminants from overland flow. Practice includes seedbed prep and planting of introduced species.			
Filter Strip, Native species	ac	$125.52	$150.63
A strip or area of herbaceous vegetation that removes contaminants from overland flow. Practice includes seedbed prep and planting of native species.			

Limitations:

Documentation:

Form KS-ECS-393, Filter Strip - 393

Maintenance:

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

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
Constructed, Tillage	ft	$0.08	$0.10
Use of medium equipment such as small dozers to blade, disk, plow, etc. to create a 30-foot wide bare-soil firebreak on slopes less than 15% around a 40-acre field.			
Constructed, tree clearing	ft	$0.55	$0.66
Installation of a short vegetative firebreak a minimum width of 50' on the upwind side of unit and 100' on the downwind side of unit around an entire 160-acre field/farm using mechanical trees shears, chainsaws, and bush hog mowers. Vegetation is reduced in height but not down to bare mineral soil. Generally water control devices such as water bars are not needed due to either the lack of steep terrain or the temporary nature of the firebreak. Typical slopes are between 5% and 45%.			
Mowing	ft	$0.03	$0.04
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 to either the lack of steep terrain or the temporary nature of the firebreak.			
Vegetated, permanent, grass	ft	$0.07	$0.09
Establishing 2 acres (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 mower 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 and mowing.			

Limitations:

Documentation:

Form KS-ECS-4, Grass Seeding.

Maintenance:

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

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
Bermuda Grass Establishment-Sprigging with fertilizer	ac	$128.08	$153.70
Sprigging new grasses 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 includes fertilizer, sprigs, equipment, and labor for seedbed preparation, tillage, sprigging, and spreading.			
Bermuda Grass Establishment-Sprigging with fertilizer and lime	ac	$166.59	$199.91
Sprigging new grasses 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 includes fertilizer, sprigs, equipment, and labor for seedbed preparation, tillage, sprigging, and spreading.			
Introduced Perennial Grasses with lime application	ac	$87.05	$104.46
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding.			
Introduced Perennial Grasses-Legume	ac	$40.29	$48.35
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding.			
Introduced Perennial Grasses-Legume, foregone income	ac	$64.60	$72.66
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn; foregone income included.			

Introduced Perennial Grasses-Legumes on irrigated cropland	ac	$55.93	$67.11
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding.			
Introduced Perennial Grasses-Legumes on irrigated cropland, forgone income	ac	$88.34	$99.53
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn; foregone income included.			
Native Perennial Grasses, 1 species	ac	$76.45	$91.73
Suitable species are established to improve forage quality and quantity and reduce soil erosion on cropland, hay land, pasture, and/or biomass production. Used for either conventional or no-till seeding of perennial native warm season grasses for pasture, hay land, and wildlife openings.			
Native Perennial Grasses, 1 species, forgone income	ac	$100.76	$116.05
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn; foregone income included.			
Native Perennial Grasses, multi species	ac	$186.02	$223.22
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding.			
Native Perennial Grasses, multi species, forgone income	ac	$210.33	$247.54
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 includes seed, equipment, and labor for seedbed preparation, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn; foregone income included.			
Introduced Perennial & Native Grass Mix	ac	$58.37	$70.04
Establish or reseed adapted introduced grasses and at least one native species 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 grasses for pasture, hay land, and wildlife openings. Native grass species, which have a significantly greater cost than introduced species, comprise one third of the grass mixture. This practice may be utilized for organic or regular production. This scenario includes seed, equipment, and labor for seedbed preparation, tillage, and seeding.			

Introduced Perennial & Native Grass Mix, foregone income	ac	$82.68	$94.35
Establish or reseed adapted introduced grasses and at least one native species 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 grasses for pasture, hay land, and wildlife openings. Native grass species, which have a significantly greater cost than introduced species, comprise one third of the grass mixture. This practice may be utilized for organic or regular production. This scenario includes seed, equipment, and labor for seedbed preparation, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn; foregone income included.			
PP Interseed Legumes	ac	$168.15	$201.78
Interseed legumes and/or forbs into an existing grass stand for the purpose of increasing plant diversity, soil quality and fertility, plant health, and enhancing the quality of forage. Scenario is appropriate for conventional production. Payment includes seed, seeding, and fertilizer for interseeding establishment.			

Limitations:

Documentation:

Form KS-ECS-4, Grass Seeding.

Maintenance:

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

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 to reduce 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 recreational 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
Competition Control, Mechanical, Light Equipment Using light equipment such as a tractor with bush hog mower to control vegetation that is competing with desirable trees and species or to reduce the stocking level of a stand of desirable trees.	ac	$28.63	$34.35
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.	ac	$389.28	$467.14
Creating Patch Clearcuts Creating 2-acre patches in over-mature and/or degraded stands using hand tools such as chainsaws.	ac	$160.29	$192.35
Precommercial 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	$206.11	$247.34
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	$741.11	$889.33
Timber Stand Improvement, Chemical, Aerial Using aerially-applied chemicals to release desirable trees from competing and/or overtopping vegetation.	ac	$64.22	$77.07
Timber Stand Improvement, Chemical, Ground Using ground-applied chemicals to release young desirable trees from competing and/or overtopping vegetation.	ac	$33.46	$40.16
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	$260.51	$312.61

Limitations:

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.

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
Biological, Insects	ac	$3.57	$4.28
Management of herbaceous plant species through the use of biological control agents (insects) on undesired, noxious, or invasive herbaceous species. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have stands of herbaceous weed species that exceed the desirable ecological site condition or that are identified as noxious or invasive. This scenario is an alternative for traditional or organic producers.			
Chemical, Aerial	ac	$19.12	$22.95
The scenario entails the eradication of vegetation by use of weed treatment using airplane or helicopter to apply chemicals, in order to eliminate noxious weeds, promote forage productivity, and improve ecological condition.			
Chemical, Ground	ac	$19.54	$23.45
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.			
Chemical, Tree Establishment - Banding	ac	$32.19	$38.63
Tree establishment in which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve the health and vigor of the stand. 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. In order to receive payment, the landowner, at a minimum, must utilize and maintain IPM principles using scouting, biological, and/or low risk pesticides.			
Chemical, Tree Establishment - Post-emergent Herbicide	ac	$40.13	$48.15
Tree establishment in which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve the health and vigor of the stand. 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. In order to receive payment, the landowner, at a minimum, must utilize and maintain IPM principles using scouting, biological, and/or low risk pesticides.			

Mechanical	ac	$11.50	$13.80
Removal of light infestations of herbaceous weeds on gently sloping terrain with moderately deep to deep soils. The practice entails the removal of herbaceous weeds by the use of a mower, bush hog, disc, or other light equipment in order to reduce fuel load and improve the ecological site condition. Weeds have exceeded desired levels based on ecological site potential. For organic and non-organic farms.			
Mechanical, Tree Establishment	ac	$151.56	$181.87
Land unit on which weed control would be beneficial 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, to eliminate undesirable weeds, promote stand establishment, and improve ecological condition and wildlife habitat.			
split-method and event series	ac	$111.60	$133.92
The scenario entails the control of herbaceous vegetation by treating it up to three times during the multi-year treatment period in order to improve ecological site condition. The vegetation can be treated with the same method or by a combination of methods. Vegetation needs to be treated at least twice in order to fully control it. Generally, herbicide volumes are reduced as the last treatment will kill resprouting stems or those which survived the first treatment or newly sprouted seedlings. Density has exceeded desired levels based on ecological site potential.			

Limitations:

1. 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.
2. 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.

Documentation:

Form KS-ECS-315, Herbaceous Weed Control.

Maintenance:

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

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
Advanced IPM for Field Crops 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	$24.76	$29.71
Basic IPM for Field Crops 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 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 risks 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	$16.70	$20.04
Basic IPM for Fruit and Vegetable Production A basic IPM plan with LGU-approved pest monitoring techniques and pest thresholds (where available) is applied in large scale small fruit/vegetable crops 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 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	$88.82	$106.59
IPM for Small Farms 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 with either risk prevention 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	$542.39	$650.86

Risk Prevention IPM	ac	$110.09	$132.10

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:

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.

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
Erosion Control Blanket	sq ft	$0.15	$0.19
Installation of erosion control blanket on critical areas with steep slopes, grassed waterways, or diversions. Blanket is typically made of coconut coir, wood fiber, or straw, and is typically covered on both sides with polypropylene netting. Used to help control erosion and establish vegetative cover.			
Hydro-mulching	ac	$1,602.73	$1,923.27
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 hydroseeding methods. Used to help control erosion and establish vegetative cover.			
Natural Material - Straw	ac	$340.00	$408.00
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 is applied and anchored with light tillage equipment, treader, knifed in, etc.			
Tree and Shrub - Rolls	ft	$0.47	$0.57
Barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Typically used to retain soil moisture, control soil temperature, and minimize erosion by providing cover during the installation of conservation practices. Two 300-foot tree rows will use barrier fabric to conserve moisture. Rate is per linear foot (300' roll x 2 = 600') and 3 staples/pins per tree.			
Tree and Shrub - Squares	Ea	$1.87	$2.24
Barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Typically used to retain moisture during the installation of conservation practices. Rate is per tree/shrub and assumes 1 square yard of barrier fabric and 5 staples/tree.			

Limitations:

Documentation:

KS-ECS-23, Vegetative Management.

Maintenance:

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

Prescribed Burning

Code: 338

Reporting Unit: Acre

Definition:

Controlled fire applied to a predetermined area.

Purpose:

- Control undesirable vegetation
- Prepare sites for harvesting, planting, or seeding
- Control plant disease
- Reduce wildfire hazards
- Improve wildlife habitat
- Improve plant production quantity and/or quality
- Remove slash and debris
- Enhance seed and seedling production
- Facilitate distribution of grazing and browsing animals
- Restore and maintain ecological sites

Conditions Where Practice Applies:

This practice applies on all lands as appropriate.

Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Herbaceous Fuel, Small Acreage	ac	$16.11	$19.33
Applying a prescribed burn according to a designed burn plan and CP 338, Prescribed Burning. 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 less than 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 the cost of the burn (refer to CP 394, Firebreak, and cost scenarios).			
Herbaceous Fuel - Standard	ac	$6.11	$7.33
Applying a prescribed burn according to a designed burn plan and CP 338, Prescribed Burning. This scenario is based on the following conditions: where the terrain of the majority of the area to be burned is less than 15% slopes with herbaceous and/or low volatile herbaceous fuels 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 CP 394, Firebreak, and cost scenarios).			
Site Preparation	ac	$36.17	$43.40
Treating areas to encourage natural seeding or to permit reforestation by planting or direct seeding. Burning is utilized to eliminate existing competition and debris, reduce forest fuel, and to prepare the site for planting or seeding. Burning a cutover site helps prepare the site for replanting. Burn should expose a portion of bare soil for planting. Objectives of a site preparation burn may dictate timing and burn intensity.			
Level Terrain, Herbaceous Fuel Non-Volatile	ac	$6.49	$7.79
This scenario is based on a burn area of less than 320 acres and applies under the following conditions: where the terrain of the majority of the area to be burned < 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 Firebreak (394) standard and cost scenarios.)			

Level Terrain, Volatile or woody fuels	ac	$8.90	$10.68
This scenario is based on a burn area of less than 320 acres and applies under the following conditions: where the terrain of the majority of the area to be burned < 15% slopes with herbaceous and low volatile woody fuel with high volatile woody fuels less than 4ft tall. 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 Firebreak (394) standard and cost scenarios.)			
Steep Terrain, Herbaceous Fuel	ac	$11.72	$14.07
This scenario is based on a burn area 320 acres and applies under the following conditions: where the terrain of the majority of the area to be burned > 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 Firebreak (394) standard and cost scenarios.)			
Steep Terrain, Volatile or Woody fuels	ac	$14.56	$17.48
This scenario is based on a burn area of 320 acres and applies under the following conditions: where the terrain of the majority of the area to be burned > 15% slopes with herbaceous and low volatile woody fuel with high volatile woody fuels greater than 4 feet tall, but fire is still a ground fire carried by fine fuel. 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 Firebreak (394) standard and cost scenarios.)			

Limitations:

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.

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 -Wildlife or Pollinator	ac	$80.17	$96.20
Establishment of a mixture of predominantly native adapted perennial species on a rangeland unit to improve wildlife habitat, benefit pollinators and beneficial insects, improve forage condition, and/or reduce erosion. Seed mix of predominantly native species is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken) or pollinators (e.g., inclusion of 5-10 forb species) based on range conditions and availability of seed. For pollinator habitat, consideration is given to selecting plants that bloom sequentially throughout the growing season where feasible. Planting by preparing a seedbed with moderate to heavy tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or broadcasting.			
Native, Heavy Prep	ac	$198.62	$238.34
Establishment of a mixture of native adapted perennial species on a grazed land 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 by preparing a seedbed with moderate to heavy tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.			
Native, Heavy Prep (FI)	ac	$222.93	$262.65
Establishment of a mixture of native adapted perennial species on a grazed land 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 by preparing a seedbed with moderate to heavy tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.			
Native, Standard Prep	ac	$186.02	$223.22
Establishment of a mixture of native adapted perennial species on a grazed land 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 by preparing a seedbed with light to moderate tillage and seeding with a no-till drill, range drill, or by broadcasting.			

Native, Standard Prep (FI) Establishment of a mixture of native adapted perennial species on a grazed land 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 by preparing a seedbed with light to moderate tillage and seeding with a no-till drill, range drill, or by broadcasting.	ac	$210.33	$247.54
Native, Wildlife, or Pollinator (FI) Establishment of a mixture of predominantly native adapted perennial species on a grazed land unit to improve habitat for pollinators, beneficial insects, and wildlife species. Seed mix of predominantly native species is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken) or pollinators (i.e., 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 when hives are in the area. Planting by preparing a seedbed with moderate to heavy tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or by broadcasting. Includes foregone income.	ac	$252.36	$297.97
Non Native, Heavy Prep (FI) Establishment of a mixture of predominantly non-native adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of predominantly non-native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with moderate to heave tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.	ac	$95.57	$109.82
Non Native, Standard Prep (FI) Establishment of a mixture of predominantly non-native adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of predominantly non-native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with a light to moderate tillage and seeding with a no-till drill, range drill, or by broadcasting.	ac	$82.97	$94.71
Non Native, Wildlife, or Pollinator (FI) Establishment of a mixture of adapted perennial species on a grazed land unit to improve habitat for pollinators, beneficial insects, and wildlife species. Seed mix of predominantly non-native species is chosen to specifically benefit wildlife (e.g., big game species, sage grouse, lesser prairie-chicken) 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 when hives are in the area. Planting by preparing a seedbed with moderate to heavy tillage (e.g., ripping and heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.	ac	$170.59	$196.93

Limitations:

Documentation:

Form KS-ECS-4, Grass Seeding.

Maintenance:

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

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
Bare-root, machine planted (FI)	ac	$1,094.03	$1,250.65
Establish a buffer of trees and/or shrubs into a suitably prepared site to restore riparian plant communities and provide other 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 bareroot 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 each row: shrubs will be 6', evergreen tree spacing will be 12', and deciduous tree spacing will be 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. Includes foregone income.			
Direct Seeding (FI)	ac	$714.75	$796.86
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 3,000 feet long. The planting will consist of trees or shrubs planted through direct seeding. Planting rate will be approximately 3,000 seeds per acre. Includes foregone income.			
Small container, machine planted (FI)	ac	$1,767.20	$2,058.46
Establish a buffer of trees and/or shrubs into a suitably prepared site to restore riparian plant communities and other 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-rows: shrub spacing will be 6', evergreen tree spacing will be 12', and deciduous tree spacing will be 15'. Tree rows will be 15' apart. Tree row is a total length of 3,000'. Tree shelters will be placed on hardwoods and evergreens. Includes foregone income.			

Limitations:

Documentation:

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

Maintenance:

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

Riparian Herbaceous Cover

Code: 390

Reporting Unit: Acre

Definition:

Grasses, grass-like plants, and forbs that are tolerant of intermittent flooding or saturated soils and that are established or managed in the transitional zone between terrestrial and aquatic habitats. This scenario applies to work not covered under CPs 550, Range Planting; 512, Forage and Biomass Planting; 342, Critical Area Planting; 393, Filter Strip; 643, Restoration and Management of Rare and Declining Habitats; 580, Streambank and Shoreline Protection; 635, Vegetated Treatment Area; 659, Wetland Enhancement; or 657, Wetland Restoration.

Purpose:

To provide the following functions:

- Provision of food, shelter, shading substrate, access to adjacent habitats, nursery habitat, and pathways for movement by resident and nonresident aquatic, semi-aquatic, and terrestrial organisms
- Improve and protect water quality by reducing the amount of sediment and other pollutants, such as pesticides, organic materials, and nutrients in surface runoff as well as nutrients and chemicals in shallow ground water flow
- Help stabilize streambank and shorelines
- Increase net carbon storage in the biomass and soil

Conditions Where Practice Applies:

Areas adjacent to perennial and intermittent watercourses or water bodies where the natural plant community is dominated by herbaceous vegetation that is tolerant of periodic flooding or saturated soils. For seasonal or ephemeral watercourses and water bodies, this zone extends to the center of the channel or basin.

Where the riparian area has been altered and the potential natural plant community has changed or converted to cropland, pastureland, rangeland, or other commercial/agricultural uses.

Where channel and streambank stability is adequate to support this practice.

Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
Native Species	ac	$99.51	$119.41
Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of native grasses, legumes, and/or forbs tolerant to the site conditions will be planted by broadcast and/or no-till or range drill seeding methods as necessary to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community, CP 315, Herbaceous Weed Control, should be used. Seedbed preparation may require light tillage (disking). When pollinator habitat is a consideration, include 5-10 adapted forb species that bloom sequentially throughout the growing season where feasible.			
Native Species with foregone income	ac	$115.72	$135.62
Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of native grasses, legumes, and/or forbs tolerant to the site conditions will be planted, by broadcast and/or no-till or range drill seeding methods as necessary, to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community, CP 315, Herbaceous Weed Control, should be used. Seedbed preparation may require light tillage (disking). When pollinator habitat is a consideration, include 5-10 adapted forb species that bloom sequentially throughout the growing season where feasible. All grazing will be deferred during plant establishment which will consist of a minimum of one year, and in many cases longer. Typically there is no haying, and the only clipping during establishment will be for removal of weeds.			

Native Species, Pollinator Planting	ac	$382.00	$458.40
Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of native grasses, legumes, and/or forbs tolerant to the site conditions, including 5-10 adapted forb species that bloom sequentially throughout the growing season, that will be planted by broadcast and/or no-till or range drill seeding methods as necessary to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community, CP 315, Herbaceous Weed Control, should be used. Seedbed preparation may require light tillage (disking).			
Native Species, Pollinator Planting, Forgone Income	ac	$398.21	$474.61
Where the establishment of a diverse riparian herbaceous plant community is desired, an adapted mix of native grasses, legumes, and/or forbs tolerant to the site conditions, including 5-10 adapted form species that bloom sequentially throughout the growing season, that will be planted by broadcast and/or no-till or range drill seeding methods as necessary to accomplish the intended purpose(s). Where chemical control of undesirable vegetation, including invasives, is required to reduce competition for the desired plant community, CP 315, Herbaceous Weed Control, should be used. Seedbed preparation may require light tillage (disking). All grazing will be deferred during plant establishment which will consist of a minimum of one year, and in many cases longer. Typically there is no haying, and the only clipping during establishment will be for removal of weeds.			

Limitations:

Documentation:

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

Maintenance:

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

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; or 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 CPS for specialized tree/shrub establishment situations; 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
High Density planting This practice applies to forestlands that are being actively managed. Tree seedlings are planted after the site has been prepared for seedling establishment and growth. Forest site productivity is high or very high and dense planting is planned. Larger containerized seedlings are planted. Terrain conditions allow for mechanical tree planting.	ac	$369.35	$443.22
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 under planting, or the previously planted seedling tree stocking level is below desirable conditions. Wildlife habitat is degraded by loss of forest conditions.	Ea	$0.75	$0.89
Individual tree - hand planting w/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 under planting, 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	$4.04	$4.85
Trees, Machine planted - no tubes This practice involves planting 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 (1-0) are planted.	Ea	$2.10	$2.52
Trees, Machine planted with tubes for animal protection This practice involves planting 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 (1-0) are planted.	Ea	$7.16	$8.59

Trees, Machine planted with tubes for animal protection, supplemental water for establishment	Ea	$11.68	$14.01
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. 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 (1-0) are planted.			
Trees, Machine planted, no tubes, supplemental water for establishment	Ea	$6.62	$7.94
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. 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 (1-0) are planted.			

Limitations:

Documentation:

Kansas Forestry Tech Note KS-9

Maintenance:

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

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-Fire Hazard	ac	$77.69	$93.22
Pruning trees of branches in a forest stand where wildfires are considered a high or very high hazard. Hand tools and power tools are used to cut branches from trees.			
Pruning-Wildlife	ac	$54.52	$65.43
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, and in forested areas. Usually done with a chainsaw or handsaw to open the canopy and remove dead branches to increase airflow and sunlight penetration.			

Limitations:

Documentation:

Form KS-ECS-23, Vegetative Management.

Maintenance:

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

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
Chemical - Ground Application	ac	$149.73	$179.68
This scenario involves the use of various herbicides applied using ground-based machinery (and some hack-n-squirt treatment of select trees) in order to 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.			
Mechanical - Light	ac	$55.23	$66.27
This scenario involves the use of light/moderate machinery to clear above-ground vegetation and to also rip/cut/lift underground root systems in order to improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, agricultural fields or forestlands that have been harvested.			
Mechanical, Heavy	ac	$238.82	$286.59
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.			
Mechanical, Medium	ac	$211.94	$254.33
This practice involves the use of light/moderate machinery and chemical application to clear above ground 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, or recently harvested forestlands.			
WindBreak - Site Preparation	ac	$181.70	$218.04
This practice involves the use of various chemical/tillage methods to allow for the planting of a windbreak. Site preparation includes chemically killing vegetation prior to mechanical site preparation that includes appropriate methods to allow for planting of the site which may include one or all of the following: ripping, disking, and harrowing. Typical sites include open land such as old fields, pastures, rangelands and agricultural fields.			

Limitations:

Documentation:

Kansas Forestry Tech Note KS-9

Maintenance:

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

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
Hand Planted, Bare Root	Ea	$1.39	$1.66
A single 600-foot row of bare root shrubs, conifers, hardwoods, or combination for wind protection, wildlife habitat, or snow management. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart. The scenario will include 1/3 shrubs, 1/3 hardwoods, and 1/3 conifers based on feet of trees.			
Hand Planted, Bare Root, supplemental water for establishment	Ea	$6.18	$7.42
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. Single 600-foot row of bareroot shrubs, conifers, hardwoods, or combination for wind protection, wildlife habitat, or snow management. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart. The scenario will include 1/3 shrubs, 1/3 hardwoods, and 1/3 conifers based on feet of trees.			
Hand Planted, Potted	Ea	$2.86	$3.43
A single 600-foot row of potted shrubs, conifers, hardwoods, or combination for wind protection, wildlife habitat, or snow management. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart. The scenario will include 1/3 shrubs, 1/3 hardwoods, and 1/3 conifers based on feet of trees.			
Hand Planted, Potted, supplemental water for establishment	Ea	$7.65	$9.18
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. Single 600-foot row of potted shrubs, conifers, hardwoods, or combination for wind protection, wildlife habitat, or snow management. Shrubs will be planted with a spacing of 4 to 6 feet and hardwoods/conifers 8 to 12 feet apart. The scenario will include 1/3 shrubs, 1/3 hardwoods, and 1/3 conifers based on feet of trees.			

Trees, machine planted	ft	$0.22	$0.23
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 are 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 so tree protection is not needed.			
Trees, machine planted, supplemental water for establishment	ft	$0.67	$0.80
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. The planting consists 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 are 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 so tree protection is not needed.			
Trees, machine planted, wildlife protection	ft	$0.60	$0.72
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 are 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.			
Trees, machine planted, wildlife protection, supplemental water for establishment	ft	$1.07	$1.28
Tree planting in an area where supplemental water is needed for successful establishment. Generally these areas would be considered arid or drought-stricken, but other factors may contribute to requiring supplemental water. Planting consists 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 are 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.			

Limitations:

Documentation:

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

Maintenance:

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