

Planning Guidance Document

**Nebraska Practice Payment Schedule
for EQIP FY 2017**



December 1, 2016

FY2017 Practice Payment Schedule for EQIP

December 2016

Code	Practice	Page
472	Access Control	14
560	Access Road	16
371	Air Filtration and Scrubbing	18
366	Anaerobic Digester	19
316	Animal Mortality Facility	22
396	Aquatic Organism Passage	28
314	Brush Management	31
672	Building Envelope Improvement	35
584	Channel Bed Stabilization	37
372	Combustion System Improvement	39
317	Composting Facility	42
327	Conservation Cover	44
328	Conservation Crop Rotation	47
656	Constructed Wetland	49
332	Contour Buffer Strips	51
330	Contour Farming	53
331	Contour Orchard and Other Perennial Crops	54
340	Cover Crop	55
342	Critical Area Planting	57
589C	Cross Wind Trap Strips	59
348	Dam Diversion	60
356	Dike	61
362	Diversion	63
554	Drainage Water Management	64
432	Dry Hydrant	65
647	Early Successional Habitat Development and Management	66
374	Farmstead Energy Improvement	68
382	Fence	72
386	Field Border	76
393	Filter Strip	78

394	Firebreak	80
399	Fishpond Management	82
512	Forage and Biomass Planting	84
511	Forage Harvest Management	89
666	Forest Stand Improvement	91
383	Fuel Break	94
410	Grade Stabilization Structure	96
412	Grassed Waterway	101
355	Groundwater Testing	103
561	Heavy Use Area Protection	105
422	Hedgerow Planting	107
315	Herbaceous Weed Control	109
603	Herbaceous Wind Barriers	112
325	High Tunnel System	113
595	Integrated Pest Management	114
320	Irrigation Canal or Lateral	118
464	Irrigation Land Leveling	119
430	Irrigation Pipeline	120
436	Irrigation Reservoir	122
441	Irrigation System, Microirrigation	124
443	Irrigation System, Surface and Subsurface	126
449	Irrigation Water Management	128
670	Lighting System Improvement	131
468	Lined Waterway or Outlet	132
516	Livestock Pipeline	135
484	Mulching	138
590	Nutrient Management	140
500	Obstruction Removal	144
582	Open Channel	147
378	Pond	148
521C	Pond Sealing or Lining, Bentonite Sealant	151
521D	Pond Sealing or Lining, Compacted Clay Treatment	152
521A	Pond Sealing or Lining, Flexible Membrane	154
521B	Pond Sealing or Lining, Soil Dispersant	156

338	Prescribed Burning	157
528	Prescribed Grazing	159
533	Pumping Plant	163
550	Range Planting	169
329	Residue and Tillage Management, No Till	173
643	Restoration and Management of Rare and Declining Habitats	175
391	Riparian Forest Buffer	176
390	Riparian Herbaceous Cover	178
558	Roof Runoff Structure	180
367	Roofs and Covers	181
350	Sediment Basin	183
646	Shallow Water Development and Management	185
574	Spring Development	187
442	Sprinkler System	188
578	Stream Crossing	191
395	Stream Habitat Improvement and Management	194
580	Streambank and Shoreline Protection	197
585	Stripcropping	199
587	Structure for Water Control	200
649	Structures for Wildlife	204
606	Subsurface Drain	207
600	Terrace	210
575	Trails and Walkways	214
612	Tree/Shrub Establishment	215
660	Tree/Shrub Pruning	219
490	Tree/Shrub Site Preparation	220
620	Underground Outlet	222
645	Upland Wildlife Habitat Management	226
635	Vegetated Treatment Area	228
601	Vegetative Barrier	232
360	Waste Facility Closure	233
633	Waste Recycling	235
632	Waste Separation Facility	237
313	Waste Storage Facility	239

634	Waste Transfer	245
629	Waste Treatment	250
359	Waste Treatment Lagoon	252
638	Water and Sediment Control Basin	254
642	Water Well	255
614	Watering Facility	258
640	Waterspreading	262
351	Well Decommissioning	263
658	Wetland Creation	265
659	Wetland Enhancement	267
657	Wetland Restoration	269
644	Wetland Wildlife Habitat Management	271
380	Windbreak/Shelterbelt Establishment	273
650	Windbreak/Shelterbelt Renovation	277

Code	Conservation Activity Plan	Page
102	Comprehensive Nutrient Management Plan (CNMP)	279
104	Nutrient Management Plan (NMP)	281
106	Forest Management Plan	282
108	Feed Management Plan	283
110	Grazing Management Plan	284
112	Prescribed Burn Plan	285
114	Integrated Pest Management Plan (IPM)	287
118	Irrigation Water Management Plan (IWMP)	288
128	Agriculture Energy Management Plan (AgEMP)	289
130	Drainage Water Management Plan (DWMP)	291

138	Conservation Plan Supporting Organic Transition (CPSOT)	292
142	Fish and Wildlife Habitat Plan	293
146	Pollinator Habitat Plan	294
154	IPM Herbicide Resistant Weed Conservation Plan	295

General Criteria

***NOTE: Payment schedule prices listed in this document are for planning purposes only, ProTracts is the official Cost List**

- A.** Participants are only eligible for management practice payments if they need and agree to the criteria outlined for the specific management practice payment.
- B.** A very limited number of payment caps will be in place for certain management practices in 2016.
- 1)** **Practice 340 Cover Crop, is limited to \$7,000/yr. and \$8,750/yr. HU per participant**, per year, regardless of the number of contracts held. For example, the maximum total of contract obligations for 340 for a single participant in a program year is limited to \$21,000 and \$26,250 for HU participant – for a contract that includes three years of payments for implementation of 340.
 - 2)** **Practice 329 Residue Management - No Till, is limited to \$5000/yr. and \$6250/yr. HU per participant**, per year, regardless of the number of contracts held. For example, the maximum total of contract obligations for 329 for a single participant in a program year is limited to \$15,000 and \$18,750 for HU participant – for a contract that includes three years of payments for implementation of 329.
- C.** Participants are not eligible for management practice payments on practice measures for which they previously received payments or on practice measures that they have previously applied, unless there is an increased level of management/treatment or additional resource concern(s) treated. This management practice payment limitation applies across all USDA programs (a no-till payment in CSP would nullify the ability for payment in EQIP) and is not field specific. A field specific example could be where a no-tiller takes on different ground where the practice was never used; this new ground does not qualify him for no-till payments unless the practice results in a higher level of management and/or treatment of a different type of resource concern(s). The only exceptions are for transition to organic management practice payments, nutrient management, irrigation water management, and conversion of irrigated to non-irrigated land use-payments (NOTE: These management practice exceptions must be applied for three consecutive years. Irrigation water management is a required contract practice in conjunction with contracts for irrigation system improvements and nutrient management is a required contract practice for contracts in conjunction contracts to implement structural measures associated with animal feeding operations).
- D.** Forgone Income for conversion of Cropland to Permanent Cover
- 1)** Several conservation practices contain a scenario for the establishment of the cover type as well as forgone income to address the reduced revenue from those acres where crops will no longer be produced. It is permissible to use that scenario on areas with a crop history in recent years. Those scenarios should not be used in subsequent years on the same acres since the cost of establishment for the cover is included in the total.
 - 2)** It is acceptable to use another conservation practice to pay for monitoring and management plus forgone income up to two years following the initial year. The most suitable option would be 645 – Upland Wildlife Habitat Management “Wildlife Habitat Enhancement – Former Cropland (FI)” since it only includes values for monitoring/management and forgone income for cropland. Evidence of monitoring and management is required to certify for payment. Examples of monitoring/management are noted in the scenario description. For example, it may include monitoring by conducting an annual quail call survey and management as leaving cover undisturbed throughout the entire calendar year.
- E.** Forgone Income for Enhancement of Grazing Land or Hayland to More Diverse Permanent Cover
- 1)** Several conservation practices contain a scenario for the enhancement of the cover as well as forgone income to address the reduced revenue from those acres where grazing or haying will not occur while the seeded species become established. It is permissible to use that scenario on areas with a history of grazing or haying in recent years. Those scenarios should not be used in subsequent years on the same acres since the cost of establishment for the cover is included in the total.

- 2) It is acceptable to use another conservation practice to pay for monitoring and management plus forgone income up to two years following the initial year. The most suitable option would be 645 – Upland Wildlife Habitat Management “Monitoring, Management, Forgone Income” since it only includes values for monitoring/management and forgone income for grazing/haying. Evidence of monitoring and management is required to certify for payment. Examples of monitoring/management are noted in the scenario description. For example, it may include monitoring by conducting an annual quail call survey and management as leaving cover undisturbed throughout the entire calendar year.

F. Management practice payment practices must be applied for three consecutive years. EXCEPTIONS:

- 1) Residue Management, No-Till/Strip Till (ac) - If the existing crop rotation includes crops that were previously no-tilled some of the crop years, that part of the rotation is not eligible for management practice payments. For these rotations, management practice payments are eligible for the part of the rotation that was not no-till and will apply to the first three eligible years or the maximum allowed acres the first three years.
- 2) Access Control (ac) [deferment for providing fine fuel for burning] - Management practice payment is applicable only for the year immediately prior to prescribed burning. Payment may be applied for two years prior to the burn in cases where inadequate fuel can be obtained in one year to accomplish an objective of killing Eastern red cedar either due to size of trees or growing conditions of the site or year.
- 3) Access Control (ac) following: Severe Drought, Wildfire, Prescribed Burn, Brush Management, or New Range Seeding or Interseeding [Management practice payment is applicable only for the year when deferment occurs following one of the identified events.]
- 4) Upland Wildlife Habitat Management (ac) [monitoring and management plus forgone income for cropland or grazing land/hayland] – Payment can only occur for two years if it follows another conservation practice that paid for establishment/enhancement and included forgone income.
- 5) Cover Crop (ac) single species and multi species can be one, two, or three years in duration.
- 6) Cover Crop (ac) when used in conjunction with the construction of conservation practices or to establish cover for seeding perennial vegetation will be limited to 1 yr.
- 7) Cover Crop (ac) when planned and applied as a component of a complete conservation system to address resource concerns related to soil health will be eligible for up to a maximum of five separate payments during the term of a single contract on the same land unit. To qualify for the extended payments for cover crops the following criteria must be met:
 - a) Sheet and rill erosion and/or wind erosion must be controlled to T or less and all ephemeral and/or classic gullies must be controlled.
 - b) The Soil Conditioning Index, for the planned conservation system, must be greater than zero and must be greater than the current system.
 - c) Plant diversity –
 - 1) Crop rotation must include a cool season crop at least once during the EQIP contract.
 - 2) Crops and cover crops grown in the system must include species from all 4 functional groups: cool season grass, cool season broadleaf, warm season grass, and warm season broadleaf.
 - d) Crops and cover crops planned must provide a living root in the soil at least 10 months out of the year.
 - e) Cover crops must be grown for 5 consecutive years on the same acres. Depending on the crop rotation this may result in contracts that are longer than 5 years.
 - f) If the EQIP applicant has grown cover crops previously on the proposed contract area, the conservation planner must identify what is significantly different in the new planned system and why an additional 5 years of cover crops are needed to achieve the soil health objectives.
 - g) The Area Resource Conservationist will review the conservation plan to ensure it addresses the applicable soil health resource concerns and the criteria listed above, prior to obligation of the contract.

- 8)** Cover Crop (ac) when planned for primary purposes of addressing soil erosion control or water quality, or when the producer is unwilling to complete all of the requirements for allowing 5 years of cover crops, are limited to one contract item per year for practice 340, per contract, for up to 3 years (e.g., No more than 3 CIN's for 340 per contract and no more than 3 payments for 340 per treatment unit). Can include multiple fields and up to the \$7,000 / \$8,750 HU payment cap per item.
- G.** Management practice payments are certified for payment after crops are harvested, after cover crops are seeded according to the standard and specifications to meet the planned objective, after irrigation season, or after grazing is completed and required documentation is provided by the participant that the practice has been applied as required.
- H.** Conversion of irrigated to non-irrigated land uses are offered at the same rates for permanent conversion and temporary conversion. Permanent conversion requires a filed perpetual deed of conservation easement ("conservation easement") by the appropriate NRD or other partner agency. The conservation easement shall specify the permanent surrender of the right to irrigate the contract acreage.
- I.** For irrigation water management related management practice payment practices, participants must agree to provide documentation of irrigation history for two of the last five years when requested by NRCS. Sources of documentation may include: NRD's, Irrigation Districts, Farm Service Agency, Nebraska Department of Natural Resources, County Courthouse, etc. Any increase in irrigated land must be incidental (not to exceed five percent) and required to facilitate the replacement irrigation system. Incidental acres must be included within the contracted acres associated with the travel path of the system. Acre trading for purpose of eligibility is not permitted. These practices require net water savings based on the water savings calculator. A minimum of three years of either intermediate or advanced Irrigation Water Management (449) and flow measurement devices are required on all irrigated acres served by the installed practices. Applications unwilling to implement intermediate or advanced irrigation water management shall be considered low priority.
- J.** Re-enrollment of land that was in EQIP the last four years to convert irrigated cropland to non-irrigated cropland will be allowed under certain conditions in certain locations. Re-enrollment for contracts where non-irrigated land was the result of end gun removal is not allowed. Land eligibility and irrigation history documentation requirements are as follows:
- 1)** To determine if land has been irrigated for two of the last five years prior to application for water conservation and irrigated related practices the following documentation will be included with the application. Option (a) will be used for re-enrollments and any one or a combination of (b) (c) (d) or (e) will be used to document irrigated history for land not previously enrolled.
 - a)** Land is "considered irrigated" if the land has been enrolled in an EQIP contract for the purpose of converting from irrigated land to non-irrigated land uses during four of the previous five years prior to application for a new contract. A copy of the expired NRCS-CPA-1202, plan map clearly outlining the previous contract acres, copies of all NRCS-CPA-1245 forms that approved payment for the non-irrigated land, and the NRCS-CPA-1155/1156 for the land included in the previous contract will be provided as documentation to support the non-irrigated land use. The option for a new contract meeting these conditions is limited to one time only based on the previous contract acres.
 - b)** Provide a copy of the irrigated acre certification form from the local Natural Resources District along with additional documentation such as a landowner/operator certification that the land was physically irrigated during two of the last five years prior to application for assistance.
 - c)** Land use certification records from FSA, as well as, additional documentation such as a landowner/operator certification that the land was physically irrigated during two of the last five years prior to application for assistance.

- d) Irrigated acre certification records from the Nebraska Department of Natural Resources, as well as, additional documentation such as a landowner/operator certification that the land was physically irrigated during two of the last five years prior to application for assistance.
- e) Other remote sensing data sources as approved by the State Conservationist

K. Fence (382) is an ineligible practice if the primary purpose is to:

- 1) Separate ownership or exclude domestic livestock from transportation networks or residential, commercial, or industrial areas.
- 2) Exclude pests, including invasive or noninvasive, native or nonnative, species such as deer, feral hogs, wild animals, predators, rodents, or other animals, or other organisms from cropland.
 - a) **EXCEPTION:** Boundary fence (property line fence) or perimeter fence **is eligible:**
 - (1) On expired or expiring Conservation Reserve Program (CRP) land to establish a grazing operation; however, practices may not be implemented until the CRP contract has expired.
 - (2) On land to protect, restore, or enhance an environmentally sensitive area, such as a riparian area or wetland. Requires Biologists concurrence.
 - (3) On land to facilitate a change in production systems as follows.
 - (a) Changes in Production System
 - (i) Practices that facilitate a beneficial cost-effective change in production system (i.e., change in agricultural land use) provided that all of the following criteria are met:
 - 1. The change in production system results in a higher level of conservation benefit, such as a lower intensity land use.
 - 2. The producer will implement a management practice that supports the change in production system.
 - 3. The practices are necessary to address a natural resource concern that is associated with the new production system.
 - 4. Cost-effectiveness can be documented.
 - 5. Change is considered to be long term and not temporary in nature.

Example – Producer is transitioning highly erodible cropland to grazed pasture. The operation currently does not support or maintain livestock, but transitioning to grazed pasture will address erosion related resource concerns and result in a higher level of conservation benefit. Program support is allowed to implement fencing (CP 382), watering facility (CP 614), prescribed grazing (CP 528) and other facilitating practices that are necessary to establish the new production system and address the resource concern.

L. General Criteria for Animal Feeding Operations (AFOs) and Livestock Operations:

- 1) **AFOs and Livestock Operations –New and Expanding Operations.** Financial assistance may be provided if the following *basic program requirements* are met (440-515-I-D):
 - a) Project or practice is not exclusively for production-related purpose.
 - b) Participant is an agricultural producer. (See 440-515.51 Producer Eligibility).
 - c) Land associated with EQIP contract is eligible.
 - d) Project will address natural resource concerns and result in a conservation benefit.
 - e) Approved land-based conservation practices will *cost-effectively* address resource concern.

- 2) **New AFOs and livestock operations**- EQIP financial assistance **may not** be used to implement practices (including CAP102) needed to establish a new AFO or livestock operation.
- a) **EXCEPTION:** A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with the existing facility cannot be adequately addressed at the existing location (i.e., relocation of AFO). The original facility must be completely removed to ensure that it does not pose ongoing resource concerns.

If a situation exists where one can justify continued use of the land unit where the facility is removed, and you don't want to violate the requirement for "removal," you can provide justification and request a waiver of this policy to allow an alternative complete removal.

- 3) **Expanding AFOs and livestock operations** - EQIP financial assistance may be used to implement practices needed to expand an existing established AFO or livestock operation in order to address existing and new resource concerns that will be associated with the expanded production activities. Expansion *is not* limited to land that is contiguous with the existing operation. For example, expansion of an existing operation to a noncontiguous location is permitted, regardless of the distance between the old and new location.

The expansion must be for the same type of livestock at the existing established AFO, i.e., if the AFO is feeding cattle, then the expansion must be for cattle feeding also. Expanding from a cattle feeding operation to include a swine unit would be considered "new" and not eligible.

The objectives for the expansion must meet basic program requirements (Section I-1) with emphasis on addressing a resource concern and resulting in a conservational benefit.

- 4) **Low priority EQIP applications associated with waste storage and/or treatment facilities:**
- a) An EQIP-Ready (preliminary CNMP) is not submitted at time of application or prior to EQIP ranking.
- b) The applicant does not own or lease (control of) adequate land application sites for nutrient management of the manure produced at the AFO or livestock operation.
- c) The applicant intends to sell or give away the manure being produced at the AFO or livestock operation rather than utilizing the nutrients on owned/controlled cropland sites during the contract period (see submitted preliminary CNMP).
- d) A NAQSAT baseline report has not been completed for AFOs or livestock operations of 300 animal units or greater by December 31, 2015. (see 3b below)

- 5) **Waste Storage and/or Treatment Facilities.** Participants applying for and receiving EQIP funding for waste storage and/or treatment facilities must:

- a) Develop an EQIP Ready (preliminary) Comprehensive Nutrient Management Plan (CNMP) prior to application ranking. The applicant must demonstrate an adequate land base for manure and/or wastewater nutrient application and insure that nutrients are managed according to NRCS standards where the manure will be applied. *The application sites must be eligible and in the client's control, either by ownership or leased.*
- b) For AFOs and livestock operations 300 animal units and greater: Submit the following two reports generated from the National Air Quality Site Assessment Tool (NAQSAT):
- (1) Operation baseline report prior to December 31, 2015.
- (2) Planned changes report prior to or with final approved CNMP.
- c) Develop and provide a copy of the NRCS-approved CNMP prior to implementation of any waste storage and handling or nutrient management activities (440-515-I.C (4) Feb. 2015). *The application sites must be eligible and in the client's control, either by ownership or leased.*
- d) Implement all practices in the CNMP is required by the end of the contract period, regardless of financial assistance provided (440-515-I.C (4) (ii) Feb. 2015).
- e) Demonstrate compliance with Nutrient Management (Code 590) for three years after the completion of the waste storage and/or treatment facility - as outlined in the approved CNMP.

- (1) Code 590 must be listed EQIP contract and be applied for a minimum of three years. It is strongly encouraged that the 590 scenario for “Basic, Combined Manure -Fertilizer” be used. (This scenario allows for application of manure and commercial fertilizer or commercial fertilizer alone, which may help eliminate contract modifications in years that only commercial fertilizer is applied.)
 - (a) The contract must include an *estimated crop land base acres* for managing available manure nutrients in accordance with 590. The estimated crop land base acres are determined using the UNL Manure Nutrient and Land Requirement Estimator (UNL Land Estimator); Manure Management Planner – Purdue University (MMP); or other UNL approved software, spreadsheets, etc.). The final CNMPs for FY2016 must indicated planned manure events annually to fields listed in the CNMPs. Not all fields may be utilized for manure application; weather conditions, feed rations, pen management, etc., will cause variations in manure production and manure removal.
 - (2) To fulfill contract obligations for 590, at a minimum, the participant must apply manure to the *estimated crop land base acres* once over the three-year contract period.
 - (a) So if 1000 acres is the estimated crop land base acres for Feedlot A based on the UNL estimator, the operation needs to apply manure to approximately 1000 acres in any one year, or any two years or over the contact period of three years.
 - (b) If the operation does not apply manure to 90 percent of the estimated land base acres and can justify what acres they applied on based on operation records (solids removal, liquid storage volumes and pumping records), the operation has fulfilled the contract obligations for 590.
- f) Demonstrate compliance with Irrigation Water Management (Code 449) – Basic scenario for a minimum of three years after the completion of the manure storage and/or treatment facility on only those acres where effluent, wastewater, or runoff is applied through irrigation equipment (i.e., pivot, gated pipe, volume gun, etc.).
- (1) As applicable, the EQIP contract must include Code 449 for a minimum of three years on only those acres where effluent, wastewater, or runoff is applied via irrigation equipment.
 - (2) NOTE: IWM is not required on crop land if manure (solids, slurry, liquids) is applied via application hauling/injection equipment, such as solid spreaders, slurry tankers, injection system using a tow line, etc.

6) Definitions associated with AFOs and waste storage and/or treatment structures:

- a) *Animal Feeding Operation (AFO)* means an agricultural operation where animals are kept and raised in confined situations. AFOs congregate animals, feed, manure, dead animals, and production operations on a small area of land. Feed is brought to the animals rather than the animals grazing or otherwise. An AFO is a lot or facility when both of the following conditions are met:
 - (1) Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.
 - (2) Crops, vegetation, forage, growth, or postharvest residues are not sustained in the normal growing season over any portion of the lot or facility.
- b) *Animal Waste Storage or Treatment Facility* means a structural conservation practice, implemented on an AFO consistent with the requirements of a CNMP and Field Office Technical Guide (FOTG), which is used for storing, treating, or handling animal waste or byproducts, such as animal mortality.
 - (1) Facilities would include, but not limited to: vegetative treatment area (635), waste storage structure (313), waste separation facility (632), waste transfer (634), waste treatment (629), waste treatment lagoon (359), animal mortality facility (316), composting facility (317), roof runoff structure (558), roof and covers (367), sediment basins (350), etc.
- c) *Comprehensive Nutrient Management Plan (CNMP)* is a component plan of a conservation plan that includes structural practices, management activities, and land management practices for an AFO associated with crop or livestock production that collectively ensures that the purposes of crop or livestock production and preservation of natural resources (especially soil erosion and water and air quality as related to nutrient impacts) are compatible (see GM 190, 405 CNMP, Subparts A-C).
- d) *EQIP-Ready CNMP* is defined as a preliminary CNMP that demonstrates the participant has adequate land

application sites (under participant's control) to apply the estimated manure nutrients excreted/stored at the AFO based on 590 requirements. An EQIP-Ready CNMP contains preliminary information the production site; land treatment sites; and nutrient management. A preliminary CNMP does not include engineering designs or layouts of the planned waste storage or treatment facilities.

- e) *Estimated Crop Land Base Acres* are the estimated acres (based on site-specific crops and realistic yields) necessary for managing the manure nutrients excreted (based on livestock type and size minus storage and application losses) as determined by approved software/spreadsheets and include but not limited to UNL Manure Nutrient and Land Requirement Estimator; Manure Management Planner – Purdue University (MMP) or other.
- f) *Existing established* AFO or livestock operation is defined *is currently or has been* in operation within the past 10 years as documented (i.e., federal, state and county agencies, etc.). The operation has produced meat, eggs, fiber or other livestock-related marketable products and consists of physical facilities installed in the tract included on this EQIP application.
- g) *Expansion* is defined as any increase in size (drainage area, non-contributing drainage, or animal units) that subsequently create a need to increase capacity of an animal waste storage or treatment facility.
- h) *Livestock Operation* includes all domesticated animals used to produce meat, milk, eggs, fiber or other livestock-related marketable products.
- i) *New AFO* or livestock operation is defined as the agricultural commodity that is to be produced on the land unit(s) where it has not previously been produced. Therefore, an existing resource concern is not present.
- j) *Relocation (AFO)* is defined as moving an entire AFO to a new location due to the inability to address an identified resource concern(s) at the current location.

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 all land uses.

Scenario 1: Animal Exclusion from Sensitive Areas, Foregone Income

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 the Fence practice (382). 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$28.05	\$28.35

Criteria:

1. Access Control [deferment for building fine fuel for prescribed burning]
 - a. This is a one year management practice payment. Full deferment will be required from March 1st until after prescribed burning is completed in the following year. An additional year of deferment (up to two years total) can be used at the discretion of the conservation planner for instances where the objective is to kill Eastern red cedar and one year of deferment will not supply adequate fuel based on the size of the trees or the growing conditions of the site or year.
 - b. Eligible land – Grassland that is grazed on an annual basis by livestock.
 - c. A grazing plan must be developed to ensure that there is proper grazing following the completion of the prescribed burn. The planner needs to address the resource concern and determine that deferment followed by burning will adequately address the resource concern. Supporting documentation may include job sheet, photos, stem counts, etc.
 - d. Payment will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.
2. Access Control - new seeding or interseeding deferment - restrict use of the new grass seeding (Range Planting (550), Forage and Biomass Planting (512), or Conservation Cover (327)) for the establishment of the new seeding.
 - a. Native species seedings or interseedings eligible for up to two growing seasons – inclusive of the dormant season between the two growing seasons.
 - b. Introduced species eligible for one year management practice payment only. Full deferment will be required

through growing season in the following year.

3. If Brush Management (314) is planned, access control may be applied if livestock are excluded from the treatment area for one full growing season following treatment.
4. Access Control [grazing land impacted from drought or burns (either wildfire or prescribed)]
 - a. One year management practice payment only. Full deferment will be required throughout the entire growing season in the year following the burn or drought.
 - b. Eligible land – Grassland that is grazed on an annual basis by livestock has been impacted by drought or a burn (wildfire or prescribed). There must be adequate grass present so that follow-up reseeding will not be necessary.
 - c. A grazing plan must be developed to ensure that there is proper grazing following the completion of the rest. The planner needs to address the resource concern on grassland and determine that deferment will adequately address the resource concern. Supporting documentation may include NE-ECS-528 job sheet (found in the Nebraska Prescribed Grazing Design Tool, photos, and monitoring worksheets.
 - d. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.

Payment Documentation:

NE-ECS-64 Actual Grazing Use to be completed by producer indicating non-use. NE-ECS-414 will be completed by the individual certifying the practice. Both forms are found in the Nebraska Prescribed Design Grazing tool.

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.

Scenario 1: New 6 Inch Gravel Road without Geotextile, Less than 2.5 Feet

Newly Constructed gravel road with min. 6 inch thick compacted gravel surface on relatively level ground. A properly constructed, well defined access road will address resource concerns related with compaction, emissions of fugitive dust, and excessive sediment in surface water. It also improves the plant productivity, vigor and health and substantially reduces the chance of wild fire hazards. Short term air quality deterioration may result if proper dust control measures are not implemented during the practice installation. Costs include excavation, shaping, grading, and all equipment, labor and incidental materials necessary to install the practice.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.44	\$8.16

Scenario 2: New 6 Inch Gravel Road with Geotextile, Less than 2.5 Feet

Newly Constructed gravel road with min. 6 inch thick compacted gravel surface over woven geotextile fabric on relatively level ground and weak bearing capacity soils. A properly constructed, well defined access road will address resource concerns related with compaction, emissions of fugitive dust, and excessive sediment in surface water. It also improves the plant productivity, vigor and health and substantially reduces the chance of wild fire hazards. Short term air quality deterioration may result if proper dust control measures are not implemented during the practice installation. Costs include excavation, shaping, grading, and all equipment, labor and incidental materials necessary to install the practice.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8.09	\$12.13

Scenario 3: New 6 Inch Gravel Road without Geotextile, 2.5 Feet or Higher

Newly Constructed gravel road with min. 6 inch thick compacted gravel surface on relatively level ground. A properly constructed, well defined access road will address resource concerns related with compaction, emissions of fugitive dust, and excessive sediment in surface water. It also improves the plant productivity, vigor and health and substantially reduces the chance of wild fire hazards. Short term air quality deterioration may result if proper dust control measures

are not implemented during the practice installation. Costs include excavation, shaping, grading, and all equipment, labor and incidental materials necessary to install the practice.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8.69	\$13.03

Scenario 4: New 6 Inch Gravel Road with Geotextile, 2.5 Feet or Higher

Newly Constructed gravel road with min. 6 inch thick compacted gravel surface over woven geotextile fabric on relatively level ground and weak bearing capacity soils. A properly constructed, well defined access road will address resource concerns related with compaction, emissions of fugitive dust, and excessive sediment in surface water. It also improves the plant productivity, vigor and health and substantially reduces the chance of wild fire hazards. Short term air quality deterioration may result if proper dust control measures are not implemented during the practice installation. Costs include excavation, shaping, grading, and all equipment, labor and incidental materials necessary to install the practice.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.49	\$17.23

Air Filtration and Scrubbing

Code: 371

Reporting Unit: Number

Definition:

A device or system for reducing emissions of air contaminants from a structure via interception and/or collection.

Purpose:

To control gaseous and particulate air emissions from ventilated structures by inertial collection, filtration, electrostatic collection, adsorption, scrubbing, and/or bioremoval. Specifically, this practice standard can be used to reduce emissions of the following air contaminants that contribute to air quality resource concerns:

- Direct emissions of particulate matter
- Volatile organic compounds (VOCs)
- Ammonia
- Odorous sulfur compounds
- Methane

Conditions Where Practice Applies:

This practice applies to any agricultural operation that includes a naturally or mechanically ventilated structure from which the air contaminants identified in the Purpose section above may be emitted.

Scenario 3: Biofilter-Traditional Horizontal

Porous filter media is utilized to filter the exhaust from animal confinement facilities to allow microbial activity to reduce objectionable odors. The typical installation is a horizontal media bed supported by a treated lumber substructure to allow airflow from multiple fans to be directed beneath and then up through the media. Vertical biofilters may also be utilized. The filter media is a combination of wood chips to maintain porosity and compost to provide the microorganisms for the air filtering activity. A typical mix ratio would be 80% wood chips and 20% compost. Ventilation system component alterations that may be required to facilitate the biofilter application are not included in the cost computation. Payment includes materials, equipment, and labor costs for installing the biofilter. A stabilized area around the biofilter is not included and must be addressed through the associated practice of Heavy Use Area Protection (561), if needed.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$16.76	\$25.14

Criteria

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 to:

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

Scenario 1: Small Plug Flow < 1000 AU

A plug flow anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for a plug flow digester with less than 1,000 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$989.77	\$1,187.73

Scenario 2: Medium Plug Flow 1000-2000 AU

A plug flow anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for plug flow digesters with livestock operations between 1,000 and 2,000 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$771.93	\$926.32

Scenario 3: Large Plug Flow > 2000 AU

A plug flow anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for plug flow digesters with more than 2,000 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$655.57	\$786.68

Scenario 4: Small Complete Mix < 1000 AU

A complete mix anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for complete mix systems with less than 1,000 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$538.20	\$645.84

Scenario 5: Medium Complete Mix 1000-2500 AU

A complete mix anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for complete mix systems between 1,000 and 2,500 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$516.22	\$619.47

Scenario 6: Large Complete Mix > 2500 AU

A complete mix anaerobic digester can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for complete mix systems with more than 2,500 animal units. Selection of digester type will be based on effluent consistency. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$351.92	\$422.30

Scenario 7: Covered Lagoon –Holding Pond

A covered lagoon can be part of a waste management system. It provides biological treatment of the waste in the absence of oxygen. This process for manure and other by-products of animal agricultural operations will manage odors, reduce the net effect of greenhouse gas emissions, and/or reduce pathogens. This scenario is for all livestock operation sizes. The waste holding/treatment area is covered by waste treatment lagoon (359) or waste storage facility (313) and the cover is addressed under roofs and covers (367). Selection of digester type will be based on effluent consistency. Costs for this scenario are only for system controls, gas collection, and flaring system. Energy generation is not included with this scenario.

Payment Unit: Animal Unit

Payment Schedule:

EQIP-General	EQIP-General-HU
\$54.19	\$81.29

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 supports one or more of the following purposes:

- Reduce impacts to surface and groundwater resources;
- Reduce the impact of odors;
- Decrease the spread of pathogens.

Conditions Where Practice Applies:

This practice applies to livestock and poultry operations where animal carcass treatment or disposal is needed. This practice includes disposal of both routine and catastrophic animal mortality; however, it may not apply to catastrophic mortality resulting from disease. In cases of disease related catastrophic mortality, this standard is applicable only when directed by the appropriate state or federal authority (typically the state veterinarian or USDA APHIS) to use the methods in this standard.

Scenario 1: Incineration < 50 CF Chamber

This scenario consists of installing a manufactured Type IV incinerator designed to handle 350 lbs of average daily mortality for the species and size of the operation. System shall use high temperature (>1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. After determining average daily mortality in lbs, select smallest incinerator that meets capacity. Payment made per unit of actual chamber size obtained from manufacturers' product literature. This option is not typically least-cost. In most states a roofed static compost pile with concrete floor and bins would be considered least cost. Therefore consider reducing payment rate as per State Conservationist discretion. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors will also be addressed, however, in non-attainment areas, certain states may require a higher level of processing such as gasification or other approved methods.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$141.56	\$212.34

Scenario 2: Incineration 50-100 CF Chamber

This scenario consists of installing a manufactured Type IV incinerator designed to handle 350 to 850 lbs of average daily mortality for the species and size of the operation. Typically very large poultry or medium sized swine operations. System shall use high temperature (>1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. After determining average daily mortality in lbs, select smallest incinerator that meets capacity. Payment made per unit of actual chamber size obtained from manufacturers' product literature. This option is not typically least-cost. In most states a roofed static pile with concrete floor and bins would be considered least cost. Therefore consider reducing payment rate as per State Conservationist discretion. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors are reduced, however, in non-attainment areas, certain states may require a higher level of processing such as gasification or other approved methods.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$127.68	\$191.52

Scenario 3: Incineration, more than 100 CF Chamber

This scenario consists of installing a manufactured Type IV incinerator designed to handle a single 1,200 to 1,500 mortality. Typically a single dairy cow or multiple heifers or swine. System shall use high temperature (>1,300 degrees F) incineration with a secondary combustion or afterburner chamber prior to flue discharge. Select smallest incinerator that has a bin capacity to handle largest individual mortality. Payment made per unit of actual chamber size obtained from manufacturers' product literature. This option uses a very small footprint, however, it costs 15-20 gallons of diesel fuel per fill. The usage needs to be significant. At 500 cows with replacements, this option would offset a 4,000 SF concrete pad with another 8,000 to 12,000 SF of grassed area. Cost for that option would be for an area of 4,000 ft² @\$4.50 or \$18,000 vs. \$24,000. This option for small dairy operations would not typically be least-cost. In most states either a roofed or unroofed static pile with concrete floor and walls would be considered least cost. Unless regulations require this or severe site limitations exist, consider reducing payment rate as per State Conservationist discretion. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors will also be addressed, however, in non-attainment areas, certain states may require a higher level of processing such as gasification or other approved methods.

Payment Unit: Cubic Foot**Payment Schedule:**

EQIP-General	EQIP-General-HU
\$67.36	\$101.04

Scenario 4: In vessel Rotary Drum, less than 700 CF

This scenario consists of installing a horizontal rotary drum to compost smaller poultry and swine facility mortality. It can handle between 250 and 600 lbs per day of mortality plus equal or higher volumes of carbon material (i.e., wood chips). A secondary composting storage area is required to finish materials. Payment quantity based on interior volume of rotary composter in cubic feet of smallest drum that can process daily mortality as per manufacturers' recommendations. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Scenario is needed where the producer has a limited footprint for the installed practice.

Payment Unit: Cubic Foot**Payment Schedule:**

EQIP-General	EQIP-General-HU
\$50.57	\$75.85

Scenario 5: In vessel Rotary Drum, greater than or equal to 700 CF

This scenario consists of installing a horizontal rotary drum to compost larger poultry and swine facility mortality. It can handle between 600 and 1,000 lbs per day of mortality plus equal or higher volumes of carbon material (i.e., wood chips). A secondary composting storage area is required to finish materials. Payment quantity based on interior volume of rotary composter in cubic feet of smallest drum that can process daily mortality as per manufacturers' recommendations. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Scenario is needed where the producer has a limited footprint for the installed practice.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$27.34	\$41.01

Scenario 6: Static pile, Earthen Pad

This scenario consists of installing an impervious earthen pad to compost large animal mortalities, typically dairy cow mortality, in a static windrow or single pile. Additional carbon based bulking material is added to facilitate aeration and provide a proper C:N ratio. Piles turned at least once to go into another heat cycle prior to land application. Access is infrequent. This option may not be desirable for sites with limited area, karst topography, and not isolated from of public view. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors will also be addressed.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.21	\$0.32

Scenario 7: Static Pile, Earthen Pad with Hydrant

This scenario consists of installing an impervious earthen pad to compost large animal mortalities, typically dairy cow mortality, in a static windrow or single pile. Additional carbon based bulking material is added to facilitate aeration and provide a proper C:N ratio. Piles turned at least once to go into another heat cycle prior to land application. Water is added to maintain moisture content. Access is infrequent. This option may not be desirable for sites with limited area, karst topography, and not isolated from of public view. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors will also be addressed.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.28	\$0.42

Scenario 8: Static Pile, Concrete Pad

This scenario consists of installing a concrete pad over permeable soils, karst topography, frequently accessed sites or sites with regulatory requirements. Typically associated with large dairy (1,000 cows plus heifers) or beef animal mortality with an average daily mortality of 175 lbs/day. Area sized to compost animal mortality as a static pile or windrow with equipment around materials. Sufficient carbon based bulking material added to allow natural aeration and a proper C:N ratio. Piles typically turned at least once to go into another heat cycle prior to final disposal, typically land application. Site to be located out of drainage areas, off-site water diverted and any runoff to spread out into a grassed area or vegetated treatment area as per regulations.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.28	\$3.42

Scenario 9: Static Pile, Concrete Pad with Hydrant

This scenario consists of installing a concrete pad over permeable soils, karst topography, frequently accessed sites or sites with regulatory requirements. Typically associated with large dairy (1,000 cows plus heifers) or beef animal mortality with an average daily mortality of 175 lbs/day. Area sized to compost animal mortality as a static pile or windrow with equipment around materials. Sufficient carbon based bulking material added to allow natural aeration and a proper C:N ratio. Water is added to maintain moisture content. Piles typically turned at least once to go into another heat cycle prior to final disposal, typically land application. Site to be located out of drainage areas, off-site water diverted and any runoff to spread out into a grassed area or vegetated treatment area as per regulations.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.36	\$3.55

Scenario 10: Static Pile, Wood Bin(s)

This scenario consists of installing a group of small bins along one side and a long narrow bin on the backside of a concrete pad to compost poultry or small swine mortality in static pile(s) that have sufficient bulking material to allow natural aeration. Piles are turned to go through a second heat cycle prior to final land application. The roofed portion of the facility is addressed with Roofs and Covers (367). Size of facility based on daily mortality and sizing procedures accepted in particular state. Organic sites will require more frequent replacement of lumber.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.46	\$11.20

Scenario 11: Static Pile, Wood Bin(s) with Hydrant

This scenario consists of installing a group of small bins along one side and a long narrow bin on the backside of a concrete pad to compost poultry or small swine mortality in static pile(s) that have sufficient bulking material to allow natural aeration. Piles are turned to go through a second heat cycle prior to final land application. Water is added to maintain moisture content. The roofed portion of the facility is addressed with Roofs and Covers (367). Size of facility based on daily mortality and sizing procedures accepted in particular state. Organic sites will require more frequent replacement of lumber.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8.15	\$12.23

Scenario 12: Static Pile, Concrete Bin(s)

This scenario consists of installing a two or more of concrete bins, open on one end on a concrete pad to compost larger quantities of poultry or mature swine mortality in static pile(s) that have sufficient bulking material to allow natural aeration. Piles are turned to go through a second heat cycle prior to final land application. The roofed portion of the facility is addressed in Cover and Roofs (367). Size of facility based on daily mortality and sizing procedures accepted in particular state. Scenarios are needed to meet permit differences between states and sizes of operations (some states in the region do not approve wood walls).

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.40	\$15.61

Scenario 13: Static Pile, Concrete Bin(s) with Hydrant

This scenario consists of installing a two or more of concrete bins, open on one end on a concrete pad to compost larger quantities of poultry or mature swine mortality in static pile(s) that have sufficient bulking material to allow natural aeration. Piles are turned to go through a second heat cycle prior to final land application. Water is added to maintain moisture content. The roofed portion of the facility is addressed in Cover and Roofs (367). Size of facility based on daily mortality and sizing procedures accepted in particular state. Scenarios are needed to meet permit differences between states and sizes of operations (some states in the region do not approve wood walls).

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.92	\$16.38

Scenario 24: Extra Large Animal – Daily Death Loss

This scenario consists of installing a concrete pad for static pile composting of normal mortality from operations with extra large animals, typically over 300 lb. (Dairy, Beef, etc.). Area is sized to accommodate compost piles or windrows, with area provided for access by equipment to turn piles as needed. Sufficient carbon based bulking material is added to allow natural aeration and a proper C:N ratio. Piles are typically turned at least once to enter another heat cycle prior to final utilization, typically land application. Site to be located out of drainage areas, off-site water diverted and any runoff to spread out into a grassed area or vegetated treatment area as per regulations. Any roofed portion of the facility will be addressed with Roofs and Covers (367). Any approach areas will be addressed with Heavy Use Area Protection (561)

Payment Unit: Pounds Per Day

Payment Schedule:

EQIP-General	EQIP-General-HU
\$179.61	215.53

Scenario 25: Small Animal – Daily Death Loss

Animal mortality is being done in a manner that prevents non-point source pollution of excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Proper operation results in little to no odors and protection from predators to minimize pathogen survival or spreading. An overall plan covers normal and catastrophic mortality events. Selected method for carcass treatment and disposal meet or are permitted by federal, state, and local laws, rules, regulation.

The typical mortality facility is based on a concrete wall static bin composting facility with the primary and secondary bins, of equal volume. A typical broiler operation produces a total of 240,000 (6 turns of 40,000) chickens per year. Average bird weight is 4 pounds with an average mortality rate of 5%. The average daily mortality is 130 lb/day. Total compost facility volume is 6,400 CF. A total of 12 bins (5 primary + 5 secondary + 2 management/bulk storage) at 10' wide x 12' deep x 6' high. Bin walls and floors will be reinforced concrete. Cost includes: site preparation, installation of 6" of gravel, installing concrete slab (6") and walls (6"). Piles are turned to go through a second heat cycle in the secondary bins prior to final land application.

Payment Unit: Pounds Per Day

Payment Schedule:

EQIP-General	EQIP-General-HU
\$115.76	\$138.91

Scenario 26: Medium to Large Animal – Daily Death Loss

This scenario will address animal mortalities for medium animal types, typically from 10 to 50 pounds average weight (i.e. turkeys and nursery pigs) and large animal types (typically from 50 to 300 average weight (i.e. grower/finishing pigs, sheep, and goats). It was developed for various types of animal mortality facilities as listed below (which is not an exhaustive list):

- Static Bin: Consisting of a group of small bins (concrete or wood walls) on a concrete pad to compost mortality in static pile(s) that have sufficient bulking material to allow natural aeration. Piles are turned to go through a second heat cycle prior to final land application.
- In-vessel Rotary Drum. A commercially manufactured horizontal rotary drum to compost animal mortalities mixed with a carbon material (i.e. sawdust or wood chips). A secondary composting storage area is required to finish materials.
- In-vessel Grinding Batch. A commercially manufactured grinding batch composter with a minimum capacity of 1,000 lbs per batch. A secondary composting storage area is required to finish materials.
- Forced Air Composting Bins: Consisting of a group of small bins with an aeration and leachate collection system.

(This scenario does not address incinerators.)

The least cost scenario is based on a static bin system with concrete walls. The roofed portion of the facility is addressed with Roofs and Covers (367). Approach apron is addressed with Heavy Use Area Protection (561). Size of facility is based on daily mortality and sizing procedures accepted in particular state. The purpose of the practice is to address resource concerns related to water quality degradation due to excessive nutrients, organics, and pathogens being transported into surface and groundwater resources. Air quality impacts due to odors will also be addressed. Organic sites will require more frequent replacement of lumber (if used).

Payment Unit: Pounds Per Day

Payment Schedule:

EQIP-General	EQIP-General-HU
\$96.66	\$116.00

Criteria:

1. Storage capacity is based on total live AUs in the facility, not the number of dead animals expected.
2. Structure with Concrete Walls
 - a. Includes alternative animal mortality facility types, such as in-vessel composters, freezers, incinerators, etc.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Aquatic Organism Passage

Code: 396

Reporting Unit: Mile

Definition:

Modification or removal of barriers that restrict or impede movement of aquatic organisms.

Purpose:

Improve or provide passage for aquatic organisms.

Conditions Where Practice Applies:

All aquatic habitats where barriers impede passage of aquatic organisms

Scenario 1: Blockage Removal

Removal of passage barriers, including small relict earthen diversions (remnant formations, e.g., splash dams), failing or undersized culverts, and sediment or large woody material (>10cm diameter and 2m length) from mass wasting or major flood events. Instream material associated with the previously mentioned circumstances or structures prevents aquatic organism passage by the creation of channel-spanning blockages, or areas of shallow depth, high velocities, or extensive changes in water surface elevation. In addition, these features may encourage abrupt channel changes that endanger adjacent capital infrastructure or transportation corridors. Excessive streambank erosion by flows deflected around or impounded behind these features may impair water quality by introducing fine sediment out of phase with the natural hydrography and the life history requirements of native aquatic species.

Removal is done with an assortment of equipment, including tracked excavators outfitted with buckets with 'thumbs', bull dozers, skid steers, front-end loaders, and dump trucks. The channel and adjacent floodplain are restored to pre-blockage conditions to the fullest extent practicable. Removed materials are trucked away and disposed of or recycled offsite, unless native streambed material found in the blockage can be used in site reclamation. Large woody material, if present, is used for instream reclamation, replaced in the channel downstream of the blockage, or trucked offsite for disposal or stockpiling for future projects. Disturbed areas are revegetated with a mix of site-adapted species. Scenario does not include additional measures needed in the active channel and floodplain.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$14.79	\$22.18

Scenario 2: Nature-Like Fishway

Nature-like fishways, also known as roughened channels, rock ramps, or bypass channels, are constructed features that provide passage around an instream barrier or in place of a removed barrier. Fishway design is based on simulating or mimicking adjacent stream characteristics, using natural materials, and providing suitable passage conditions over a range of flows for a wide variety of fish species and other aquatic organisms. Nature-like fishways provide enhanced passage conditions compared to concrete or aluminum (Alaskan Steeppass) ladders, and are not as susceptible to debris-related operational issues. When used to bypass an instream barrier, they require a larger footprint than instream structures, and may also require control structures to regulate flow through the fishway or address tailwater fluctuations affecting the fishway entrance (downstream end).

Fishway design includes an assessment of adjacent stream characteristics, including channel geometry, slope, sediment texture and composition, and major geomorphic units that govern channel plan, pattern and profile. In the case of a fishway that bypasses an instream barrier, the design is tailored to these elements, the elevation required to ascend the barrier, and the known range of flow variation or operations. For fishways constructed in the place of a removed barrier, the design may be a hybrid approach that meets the same criteria, although in a smaller instream footprint.

Nature-like fishways are constructed with an assortment of equipment used for excavation, placing material, and delivering and removing material. Construction elements generally include an assortment of rock used to create riffles,

cascades, or riffle-pool sequences with between 6 to 12 inches of water surface elevation drop between adjacent structures. Large woody material is used to create channel structural elements in some settings, when available and where approved by oversight agencies. Removed materials are trucked away and disposed or recycled off-site, unless excavated native streambed material can be used in fishway construction. Large woody material or removed trees, if present, are used for fishway construction trucked offsite for disposal, or trucked offsite for stockpiling for future projects. Disturbed areas are revegetated with a mix of site-adapted species, and access control and signage are provided. Scenario does not include additional measures needed in the active channel and floodplain or at an existing dam necessary to control flow associated with nature-like fishway.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$19,468.70	\$29,203.05

Scenario 3: CMP Culvert

A corrugated metal (galvanized steel or aluminum) pipe culvert (CMP) of any shape (round, elliptical, or squash) used at a road-stream crossing to provide aquatic organism passage (AOP) and promote stream ecological and geomorphic function. CMPs used for AOP are sized according to geomorphic analyses, not just an estimate of runoff and streamflow at the site from the contributing watershed. In addition, CMPs used for AOP are filled with a mixture of rock and gravel sized to emulate site stream conditions and geomorphic units in the channel. The simulated streambed material is continuous throughout the culvert barrel, and blended with the intact streambed at the culvert inlet and outlet. The first estimate of culvert size--diameter or span--is obtained by analyzing bankfull channel width on a reach of stream not affected by an existing road crossing or other conditions that alter self-formed conditions. In the case of a culvert replacement, bankfull investigations are begun at least 10-20 estimated bankfull channel widths above the existing stream crossing. Culvert diameter or span is then increased according to channel bed composition and texture, bank characteristics, channel alignment at the crossing section, and other parameters that may affect channel dynamics and stability.

Once the CMP diameter or span is determined, culvert length will be determined by roadway geometry and loading requirements, and site stream conditions. Concrete headwalls and/or wingwalls may be necessary in shorter installations and/or where fill/roadway cover is limited or the stream alignment is not perpendicular to the road axis. Culvert wall thickness and corrugations are determined by road loading requirements. Stream geomorphic characteristics, including the reach longitudinal profile, channel cross-sectional shape, substrate composition and arrangement, and bank shape and composition are determined.

CMPs are installed with an assortment of equipment used for excavation, placing material, and delivering and removing material. Construction elements generally include an assortment of rock used to create riffles, cascades, or riffle-pool sequences with between 6 to 12 inches of water surface elevation drop between adjacent structures. Stream dewatering and diversion around the work site is often required, and temporary road closure or re-routing may also be required. Channel bed material within the culvert barrel varies according to prevailing stream characteristics at the crossing site. The culvert is placed within the roadway on a subexcavated compacted bed, set at a slope that matches the design longitudinal profile, and backfilled with a bed mixture that mimics adjacent stream characteristics with special attention to channel pattern. Backfill depths are typically at least 20% of the culvert diameter or rise, but may deviate based on the shape of the culvert used, channel dimensions, substrate size, and the site longitudinal profile. Special equipment such as motorized wheelbarrows may be necessary to backfill smaller CMPs. Once the simulated streambed in the culvert barrel is complete, the roadway is replaced and any necessary armoring and revegetating material is placed at the culvert inlet and outlet where it intersects the road fill prism. Other actions include construction staking and signage, soil erosion and pollution control, removal and disposal of the old culvert, and topsoil conservation for site reclamation. Disturbed areas are revegetated with a mix of site-adapted species. Scenario does not include additional measures needed to address channel incision, bank stability, and other factors associated with the presence of the stream crossing.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4,009.51	\$6,014.26

Scenario 4: Low Water Crossing

Structure installed on low volume or on unimproved roads at watercourse crossings. Primary use is to allow livestock and equipment access to other parcels of land or operational units. Low-water crossings provide safe and stable stream crossings that do not negatively impact water and ecological quality while remaining stable across a wide range of flows. Variations exist, but a common application consists of an improved or hardened ford located above a hydraulic control (e.g., bedrock outcropping, riffle, or step composed of coarse substrates). Properly designed and installed low water crossings provide aquatic organism passage (AOP), promote stream ecological and geomorphic function, remain stable over time, and can pass sediment and woody debris.

Conservation planning and interaction with the landowner is vital to determine if existing crossings can be consolidated into fewer, more reliable locations. Characterizing a site according to its watershed position and geomorphic function will aid design decisions. Optimal AOP conditions are usually realized when the backfill is composed of a mixture that mimics bed material as evaluated from a reference reach adjacent to the crossing preferably at least 10-20 estimated bankfull channel widths above an existing crossing to avoid effects that alter channel geometry or bedform composition and spacing.

Low water crossings are installed with an assortment of equipment used for excavation, placing material, and delivering and removing material. Low water crossings provide the best mix of function and longevity when they are designed and built to conform to existing channel geometry and slope, constructed to match the shape of the existing channel, and oriented to cross the stream at a 90 degree angle. Crossing width, measured along the downstream axis, should not exceed 2 times the bankfull width. Low water crossings are commonly constructed by over excavating the crossing section 6-12 inches below the existing streambed and backfilling the void with well-graded rock back to natural bed elevation. Geotextile lining may be required in some settings. Rock size and gradation is the smallest mix needed to remain stable under prevailing flow conditions larger rock can endanger livestock and turbulence impairs passage. Sand or soil may be added into the mix to seal the section to ensure that the stream doesn't percolate into the crossing substrate. Smaller material increases bed diversity, chokes voids between bigger stones, and helps preserve passage quality. Rocks smaller than 2 inches at the finished surface may become lodged in livestock hooves. The road/trail surface of the crossing should be extended to an elevation that exceeds the known high water level on each side of the crossing. The downstream edge of the crossing should not produce a sharp drop in water surface to preserve AOP quality and discourage sediment deposition and debris accumulation. Other actions include construction staking and signage, soil erosion and pollution control, removal and disposal of the old culvert, and topsoil conservation for site reclamation. Disturbed areas are revegetated with a mix of site-adapted species. Scenario does not include additional measures needed to address channel incision, bank stability, and other factors associated with the presence of the stream crossing. Stream corridor fencing should be considered to control livestock access and preserve water and riparian quality.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$94.64	\$141.96

Criteria:

Use of this practice and any of the associated scenarios for the purpose of correcting an existing aquatic organism passage issue should be reviewed by State Wildlife Biologist before being planned and implemented. This will allow for proper use of the most appropriate scenario to accomplish the objective and to meet the needs of the targeted species.

Brush Management

Code: 314

Reporting Unit: Acre

Definition:

The management or removal of woody (nonherbaceous or succulent) plants including those that are invasive and noxious.

Purpose:

- Create the desired plant community consistent with the ecological site;
- Restore or release desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality, or enhance stream flow;
- Maintain, modify, or enhance fish and wildlife habitat;
- Improve forage accessibility, quality, and quantity for livestock and wildlife; and
- Manage fuel loads to achieve desired conditions.

Conditions Where Practice Applies:

On all lands except active cropland where the removal, reduction, or manipulation of woody (non-herbaceous) plants is desired.

This practice will not be used for removal of woody vegetation by prescribed fire (use Conservation Practice Standard (CPS) Prescribed Burning (338)).

Scenario 3: Mechanical and Chemical, Low Infestation

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 (1-5% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$36.56	\$43.88

Scenario 38: Mechanical and Chemical, Medium Infestation

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 medium or moderate infestation (averaging 6-15% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 80 acres.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$92.82	\$111.38

Scenario 5: Mechanical and Chemical, Heavy Infestation

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 (averaging >10% canopy depending upon species) levels based on ecological site potential as determined by state specific criteria. Typical unit is 10 acres.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$191.02	\$270.61

Scenario 6: Chemical, Uplands

This practice is for the implementation of brush management on range, pasture or native pasture to 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 to control undesirable plants. Entire unit has infestation levels exceeding state identified levels; entire unit is treated with broadcast application.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$14.13	\$21.19

Scenario 7: Chemical - Riparian

Apply chemical brush management techniques on an isolated riparian area within an 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 landuses) to control undesirable deciduous species in order to improve ecological/range site condition. 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).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$76.24	\$114.36

Scenario 8: Chemical, Foliar Spot Treatment

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 landuses) to control undesirable deciduous species in order to improve ecological/range site conditions. Treatment is applied to 10 acre 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 using the most effective, low cost chemical(s).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.17	\$30.25

Scenario 276: Mechanical, Hand Tools

Removal of brush using hand tools such as axes, shovels, hoes, rippers, brush pullers and including chainsaws to remove or cut off woody plants at or below the root collar. Typical area is moderate rolling to gently sloping and consists of moderately deep to deep soils that have strands of woody and non-herbaceous species that are in the early phases of invasion. Typical unit is 80 acres.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$25.22	\$37.84

Scenario 287: Split-method Event Series

Control of woody vegetation by treating it up to three times during the multi-year treatment period in order to improve the ecological site condition. The brush can be treated with the same method or by a combination of two 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 the ecological site potential.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$88.10	\$132.15

Criteria:

Use the following criteria to determine which scenario applies:

1. Determine whether the applicable practice is Brush Management (314) or Forest Stand Improvement (666) and apply according to the purpose(s) in the respective standard(s).
2. When using Mechanical and Chemical Scenarios, refer to the treatment levels listed in NE-314-DP and Nebraska Range and Pasture Technical Note 17 to determine which scenario - Mechanical and Chemical, Low, Medium or Heavy (High) Infestation levels is appropriate for the site.
3. On Uplands, O&M levels of brush are not eligible for payment. This includes areas that are less than 5 acres, areas with canopy cover of less than 5 percent or stem density of less than 25 stems per acre and/or areas where the average tree height is less than two feet.
4. Payment for multiple chemical primary treatments can be utilized when necessary for proper control of brush.
5. The Chemical – Uplands Scenario is appropriate to use for herbicide treatments on uplands when brush exceeds the amounts listed in the Ecological Site Description for the site. Payment is prohibited in at-risk plant communities (for example: sand sage prairie) when the chemical and/or application method will adversely impact desirable, native forb species present on the site.
6. Payment for Access Control (472) is allowed if livestock will be excluded from the treatment area or pasture for the full growing season following treatment.
7. Payment for prescribed burning may also be provided either before or after brush removal when appropriate.

Additional guidance for determining the acres to be treated and selecting the appropriate scenario.

1. Brush management is the appropriate practice when invasive or encroaching woody species are present, practical to remove and needed to maintain or restore grassland or savannah cover. If forest is the desired cover is desired, see Forest Stand Improvement (666) to determine whether Forest Stand Improvement is the appropriate practice.
2. The field(s) may be divided into brush management treatment areas and non-treatment areas.
3. Contiguous brush management treatment areas will be designated as a single category (scenario) and will not be split into different payment scenarios. Treatment areas must be five acres in size and can encompass several fields. Small

untreated areas (<5 acres) may be included within the treatment area. Untreated areas larger than 5 acres must be excluded from the treatment acres and the total excluded acres cannot exceed ten percent of the treatment area.

4. An on-site inventory is completed with client to confirm objectives, identify brush treatment areas, areas to be excluded, and desirable species to maintain. Take before photos during field inventory. Use information from the field inventory with photo-interpretation to develop contract estimates and practice designs.
5. Undesirable brush of all sizes must be removed from designated treatment areas except areas that are impractical to treat.
6. Chemical follow-up must be utilized immediately following mechanical brush removal on re-sprouting species such as Siberian Elm, Russian Olive, Salt Cedar and Honey Locust.
7. Desirable species such as Bur Oak, Pines, Cottonwood, and Green Ash shall not be removed unless they are diseased or dying or part of a forest stand improvement practice.
8. Forest Stand Improvement and Brush Management may be planned in the same pasture, but not on the same acres.

Payment Documentation:

Brush management plan (NE-CPA-19), before after treatment photos.

Building Envelope Improvement

Code: 672

Reporting Unit: Feet

Definition:

Modification or retrofit of the building envelope of an existing agricultural structure.

Purpose:

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

Conditions Where Practice Applies:

This practice applies to any agricultural facility which is climate controlled at least part of the time with a completed energy analysis that complies with the guidelines for a Type 2 on-farm energy audit per the American Society of Agricultural and Biological Engineers (ASABE) S612. The audit will have at a minimum addressed the major activities of ventilation, air heating and air cooling that exist in the building.

Scenario 1: Building Envelope - Attic Insulation

Install a minimum R-7 insulation in addition to existing attic or ceiling to reduce heat transfer. Increased insulation reduces seasonal heat loss and heat gain which reduces the respective need for heating and cooling equipment to operate.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.37	\$0.56

Scenario 2: Building Envelope - Wall Insulation

Enclose both sidewalls and endwalls from ceiling to floor in one of two manners: 1) metal exterior, 3.5' fiberglass batts (R-11), vapor barrier, & interior plywood or OSB sheathing, or 2) closed-cell polyurethane foam application (minimum 1' thickness (R-7) of 2.5 lbs/cu.ft. or higher density, (3.0 or higher density preferred) with a form of physical protective barrier on lower 2' (may be 6 lbs/cu.ft. or higher density 1/8' thick foam, or treated lumber). Based on a 40' x 400' poultry house.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.91	\$1.37

Scenario 3: Building Envelope - Sealant

A typical scenario is sealing the gaps between walls, gables, ceiling, etc. in a poultry house or greenhouse. Sealing is performed by a professional contractor, not merely use of spray foam from a can. The unit basis of payment in this scenario is each house based on 60' x 500' poultry house with an assumed need of sealant to seal 2400 linear feet of gap.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.79	\$1.19

Scenario 5: Greenhouse - Insulate Unglazed Walls

A typical scenario is the installation insulation in green house to address energy loss. The insulation can be either of the cellulose or bubble type (or equivalent). The increased insulation reduces seasonal heat loss and heat gain which reduces the respective need for heating and cooling equipment to operate.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.16	\$0.24

Scenario 58: Building Envelope – Greenhouse Screens

The mechanical energy screen system consists of a drive motor, support cables, controls, and shade material, which may be woven, knitted, or nonwoven strips of aluminum fiber, polyethylene, nylon or other synthetic material. The screen provides a means to better control solar heat gain and heat transfer during night or cold weather conditions to reduce energy use. Screens and similar devices may also be used to divide internal areas and allow for differentiated heating, ventilation, or cooling system operation to reduce energy use.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.04	\$1.56

Channel Bed Stabilization

Code: 584

Reporting Unit: Foot

Definition:

Stabilizing the channel of a stream with suitable structures.

Purpose:

Structural work done to control aggradation or degradation in a stream channel. It does not include work done to prevent bank cutting or meander.

Conditions Where Practice Applies:

This practice applies to stream channels undergoing damaging aggradation or degradation that cannot be feasibly controlled by clearing or snagging, by the establishment of vegetative protection, or by the installation of upstream water control facilities, and which require the application of structural measures.

Scenario 1: Bio-Engineering

Stabilize the bottom and slope of a stream channel using bioengineering methods. Bio-engineering methods include live stakes, fascines, plantings, bare root stock, willow waddles, and live stakes. Re-vegetation of exposed surfaces will be completed using 342 - Critical Area Planting. Typical stream has 50 foot bottom width and 6 foot banks. Length of area 100 feet. Planting bank area at a 2x2 grid with live stakes, potted plants, and bare root mix.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.58	\$2.37

Scenario 2: Rock structures

Stabilize the bottom and slope of a stream channel using rock riprap or engineered products that consist primarily of rock or concrete. This includes but not limited to gabions, rock veins, rock weirs, concrete blocks, etc. Typical stream has 50 foot bottom width and 6 foot banks. Length of area 100 feet. Based on degrading channel that needs to be riprapped its entire wetted perimeter.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$36.19	\$54.29

Scenario 3: Wood structures

Stabilize the bottom and slope of a stream channel using engineered structures consisting primarily of wood. This

includes but not limited to toe wood, log weirs, log vanes, root wads, log step pools, etc. Re-vegetation of exposed surfaces will be completed using 342 - Critical Area Planting. Typical stream has 50 foot bottom width and 6 foot banks. Length of area 100 feet. Structures spaced at 50 foot intervals.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,372.59	\$2,058.88

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

Scenario 1: IC Engine Repower, less than 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,189.69	\$4,784.54

Scenario 2: IC 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7,899.01	\$11,848.51

Scenario 3: IC 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$16,582.44	\$24,873.66
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Scenario 4: IC Engine Repower, greater than or equal to 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$32,269.21	\$48,403.81

Scenario 5: Electric Motor in-lieu of IC Engine, less than 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 reductions by eliminating NOx, VOC, and PM emissions from the source.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$802.08	\$1,152.13

Scenario 6: Electric Motor in-lieu of IC 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 reductions by eliminating NOx, VOC, and PM emissions from the source.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,366.45	\$5,049.68

Scenario 7: Electric Motor in-lieu of IC Engine, 75-149 HP

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 reductions by eliminating NOx, VOC, and PM emissions from the source.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4,219.63	\$6,329.44

Scenario 8: Electric Motor in-lieu of IC Engine, 150-299 HP

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 reductions by eliminating NOx, VOC, and PM emissions from the source.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12,723.78	\$19,085.67

Scenario 9: Electric Motor in-lieu of IC Engine, greater than or equal to 300 HP

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 reductions by eliminating NOx, VOC, and PM emissions from the source.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$25,483.15	\$38,224.73

Scenario 10: Power Unit Modification

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.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$67.02	\$100.53

Composting Facility

Code: 317

Reporting Unit: Number

Definition:

A structure or device to contain and facilitate the controlled aerobic decomposition of manure or other organic material by micro-organisms into a biologically stable organic material that is suitable for use as a soil amendment.

Purpose:

To reduce the pollution potential and improve the handling characteristics of organic waste solids; and produce a soil amendment that adds organic matter and beneficial organisms, provides slow-release plant-available nutrients, and improves soil condition.

Conditions Where Practice Applies:

This practice applies where:

- Organic waste material is generated by agricultural production or processing.
- The facility is a component of a planned waste management system;
- The facility can be constructed, operated and maintained without polluting air and/or water resources; and,
- The compost can be applied to the land or marketed to the public.

Scenario 1: Composter, Structure Facility with Concrete Floor and Walls

The composting facility, with concrete floor and walls between bins only, is installed to address water quality concerns and disease vectors resulting from improper waste disposal by providing a dedicated facility for storage and treatment, and by creating a compost product that can be used in multiple ways including land application for enrichment of crop ground. This scenario is applicable when geological, soil, or climate conditions, or space limitations for structure footprint, or other site limitations make this scenario more suitable than a structure with wood bin walls on a concrete floor. All animal mortality composting shall be done using Practice Standard 316 - Animal Mortality Facility.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.76	\$10.13

Scenario 2: Composter, Structure Facility with Concrete Floor and Wood Walls

The composting facility, with concrete floor and treated lumber walls and between bins, is installed to address water quality concerns and disease vectors resulting from improper waste disposal by providing a dedicated facility for storage and treatment, and by creating a compost product that can be used in multiple ways including land application for enrichment of crop ground. This scenario is applicable when geological, soil, or climate conditions, available space for structure footprint, or other site limitations make this scenario more suitable than a structure with concrete bin walls on a concrete floor. All animal mortality composting shall be done using Practice Standard 316 - Animal Mortality Facility.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.47	\$9.71

Scenario 3: Composter, Open Lot, Earth Floor

The composting facility is installed to address water quality concerns and disease vectors resulting from improper waste disposal by providing a dedicated facility for storage and treatment, and by creating a compost product that can be used in multiple ways including land application for enrichment of crop ground. This scenario is applicable when geological, soil, and climate conditions are appropriate for earth floors and are allowed by state and local regulations. All animal mortality composting shall be done using Practice Standard 316 - Animal Mortality Facility.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.19	\$0.28

Criteria:

Composting facility is not to be used for composting animals.

1. EQIP financial assistance may not be used to implement practices to establish a new AFO or livestock operation (including CAP102) per CPM 440 515.52 and 515.81. (see General Criteria I-2)
2. A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with an existing facility cannot be adequately addressed in the original location. The original facility must be completely removed in accordance with Waste Facility Closure (Code 360). (see General Criteria I-2)
 - a. The following statement shall be included in the EQIP contract: "As a condition of EQIP Payment on AFO relocation, the participant agrees to eliminate designated pollution sources at the existing operation. Failure to comply with this provision may result in a recovery of federal payment funds."
3. EQIP financial assistance may be used to implement practices needed for an existing AFO or livestock operation OR to expand an existing established AFO or livestock operation. (see General Criteria I-3)
4. Low priority applications for waste storage and/or treatment facilities will not be ranked that this time. (See General Criteria I-4)
5. Participants applying and receiving EQIP funding for waste storage or treatment facilities must (See General Criteria 1-5 for additional guidance and contract language requirements):
 - a. Develop and provide an EQIP-Ready (preliminary) CNMP at EQIP application or prior to EQIP ranking.
 - b. For operations with 300 animal units and greater, develop and provide a National Air Quality Site Assessment Tool (NAQSAT) report.
 - c. Develop and provide an NRCS-approved CNMP prior to implementation of the waste handling and or storage/treatment facilities and implementation of nutrient management.
 - d. Implement all practices listed in an NRCS-approved CNMP by the end of the contract period, regardless of financial assistance provided.
 - e. Demonstrate compliance with Nutrient Management (590) for three years following the completion of the waste storage structure(s).

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement.

Conservation Cover

Code: 327

Reporting Unit: Acre

Definition:

Establishing and maintaining permanent vegetative cover.

Purpose:

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

- Reduce soil erosion and sedimentation;
- Improve water quality;
- Improve air quality;
- Enhance wildlife habitat and pollinator habitat;
- Improve soil quality;
- Manage plant pests.

Conditions Where Practice Applies:

This practice applies on all lands needing permanent vegetative cover. This practice does not apply to plantings for forage production or to critical area plantings.

Scenario 45: Introduced Species with Forgone Income

This practice applies on conventional or organically managed land needing permanent protective cover. This practice typically involves conversion from an intensive cropping system to permanent native vegetation (scenario includes non-native grass/legume mix). The typical size of the practice is 50 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and reduce air quality impacts.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$260.92	\$293.40

Scenario 46: Native Species with Foregone Income

This practice applies on conventional or organically managed land needing permanent protective cover. This practice typically involves conversion from an intensive cropping system to permanent native vegetation (scenario includes native grass/legume mix). The typical size of the practice is 50 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and reduce air quality impacts.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$335.11	\$362.94

Scenario 47: Pollinator Species with Foregone Income

Permanent vegetation, including a mix of native grasses, legumes, and forbs (mix may also include non-native species), established on land needing permanent vegetative cover that provides habitat for pollinators. Typical practice size is variable depending on site; this scenario uses 1 ac as the typical size. In addition to providing pollinator habitat, this practice scenario may also reduce sheet and rill erosion, improve soil quality, improve water quality, and improve air quality. The practice may also provide wildlife habitat. Practice applicable on cropland, odd areas, corners, etc. Applies to conventional or organic systems.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$504.76	\$623.52

Scenario 48: Introduced Species

Permanent non-native grass vegetation is established on land needing permanent vegetative cover. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and improve air quality. Plants sown for conservation cover may provide cover for beneficial insects and wildlife. This scenario does not apply to plantings for forage production or to critical area plantings. Applies to conventional or organic systems.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$79.15	\$118.72

Scenario 49: Native Species

Permanent native grass vegetation is established on land needing permanent vegetative cover. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and improve air quality. Plants sown for conservation cover may provide cover for beneficial insects and wildlife. This scenario does not apply to plantings for forage production or to critical area plantings. Applies to conventional or organic systems.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$139.13	\$166.96

Scenario 50: Pollinator Species

Permanent vegetation, including a mix of native grasses, legumes, and forbs (mix may also include non-native species), established on any land needing permanent vegetative cover that provides habitat for pollinators. Typical practice size is variable depending on site; this scenario uses 1 ac as the typical size. In addition to providing pollinator habitat, this practice scenario may also reduce sheet, rill, and wind erosion, improve soil quality, improve water quality, and improve air quality. The practice may also provide wildlife habitat. Practice applicable on cropland, odd areas, corners, etc. Applies to conventional or organic systems.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$421.58	\$542.03

Criteria:

1. Annual Pollinator with FI, Crop is intended for the planting of a diverse mixture of annual and biennial plants to benefit

pollinators, including honey bees, on cropland and allowing the site to remain undisturbed through the entire growing season. Consult with the State Wildlife Biologist regarding suitable mixtures to plant. This scenario can be used on the same acres for up to a maximum of three years.

2. Native Mix and those scenarios with FI for Crop and Grass would apply when a standard mix of native grasses and introduced legumes or native forbs is used and the overall diversity is relatively low (i.e. 10 species or less).
3. Pollinator, Moderate and those scenarios with FI for Crop and Grass should only be used when the seed mix meets the definition of native harvest, local ecotype in the 643 – Restoration and Management of Declining Habitat standard.
4. Pollinator, Simple and those scenarios with FI for Crop and Grass applies when a diverse mix of species is used (i.e. greater than 20 native forbs) but consists of those species that are routinely available from commercial vendors.

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 to support one or more of the following:

- Reduce sheet-and-rill or wind erosion;
- Improve soil quality;
- Manage the balance of plant nutrients;
- Supply nitrogen through biological nitrogen fixation to reduce energy use;
- Conserve water;
- Manage plant pests (weeds, insects, and diseases);
- Provide feed for domestic livestock;
- Provide annual crops for bioenergy feedstocks;
- Provide food and cover for wildlife, including pollinator forage, cover, and nesting.

Conditions Where Practice Applies:

This practice applies to all cropland land where annually-planted crops make up at least one-third of the crop sequence (time basis). In Nebraska it is used for the purpose of converting irrigated cropland to dryland cropland or transition cropland from conventional to organic production.

Scenario 64: Basic Rotation (Organic and Non-Organic)

In this region this practice may be part of a conservation management system to: 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrients 5) Improve water use efficiency 6) Manage plant pests (weeds, insects, and diseases) 7) Provide food for domestic livestock and 8) Provide food and cover for wildlife. 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 is included as the newly added crop will not reduce net crop return in the rotation. Costs represent typical situations for conventional (non-organic) producers. A minimum of one additional crop will be added to an existing crop rotation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.24	\$5.09

Scenario 65: Irrigated to Dryland Rotation (Organic and Non-Organic)

In this region this practice may be part of a conservation management system to primarily convert from an irrigated cropping system to dryland farming. In addition to improving water use efficiency the rotation may 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrients 5) Manage plant pests (weeds, insects, and diseases) 6) Provide food for domestic livestock and 7) Provide food and cover for wildlife. 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$148.12	\$148.97

Criteria:

1. Annual payment for three years.
 - a. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.
2. Conservation Crop Rotation [conversion from irrigated cropland to non-irrigated cropland]
 - a. FOTG Practice - Conservation Crop Rotation (ac) (328) is used for management practice payment.
 - b. Eligible land – Cropland that has been irrigated two of the last five years.
 - c. A conservation plan must be developed to ensure that this practice is applied during the contract period.
 - d. Participants may be eligible for other management practice payment practices such as Nutrient Management, Integrated Pest Management, no-till, or Cover Crops on the same land. They are eligible for any needed cost share practices.
 - e. A one-time re-enrollment of land that was in EQIP the last four years will be allowed in order to convert irrigated cropland to non-irrigated cropland. The one-time re-enrollment must immediately follow expiration of the first enrollment. Re-enrollments for contracts where non-irrigated cropland was the result of end gun removal are not allowed for re-enrollment.

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 Conservation Practice Standards, Wetland Restoration (657), Wetland Creation 658, or Wetland Enhancement (659), when the main purpose is to restore, create, or enhance, wetland functions other than wastewater treatment or water quality improvement.

Scenario 1: Medium, 0.5 Acre or Less

This practice scenario includes the basic earthwork and native and/or organic wetland vegetation needed to create a constructed wetland to treat contaminated agricultural runoff for a medium site (i.e. 0.5 ac or less). All other components, such as water control structures, dikes or upstream sediment basins, must be paid for under facilitating practices. Soil, water and tissue sampling are required. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrients and pathogens.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7,876.51	\$11,814.77

Scenario 2: Large, More Than 0.5 to 1.0 Acre

This practice scenario includes the basic earthwork and native and/or organic wetland vegetation needed to create a constructed wetland to treat contaminated agricultural runoff for a large site (i.e. >0.5 ac). All other components, such as water control structures, dikes or upstream sediment basins, must be paid for under facilitating practices. Soil, water and tissue sampling are required. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrients and pathogens.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5,553.36	\$8,330.04

Scenario 3: Large, More Than 1.0 Acre

This practice scenario includes the basic earthwork needed to create a constructed wetland to improve water quality for a large site (i.e. >1.0ac). All other components, such as water control structures, dikes or upstream sediment basins, must be paid for under facilitating practices. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrients.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4,393.65	\$6,590.47

Contour Buffer Strips

Code: 332

Reporting Unit: Acre

Definition:

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope, and alternated down the slope with wider cropped strips that are farmed on the contour.

Purpose:

This practice is applied to achieve one or more of the following:

- Reduce sheet and rill erosion.
- Reduce transport of sediment and other water-borne contaminants downslope
- Increase water infiltration

Conditions Where Practice Applies:

This practice applies on all sloping cropland, including orchards, vineyards and nut crops.

Where the width of the buffer strips will be equal to or exceed the width of the adjoining crop strips, the practice Stripcropping (code 585) applies.

Scenario 56: Introduced Species, Foregone Income (Organic and Non-Organic)

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 seedbed prep and planting of introduced species. The area of the contour grass strip is taken out of production. This applies to both organic and non-organic operations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$227.70	\$244.46

Scenario 57: Native Species, Foregone Income (Organic and Non-Organic)

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 seedbed prep and planting of native species. The area of the contour buffer strip is taken out of production. This applies to both organic and non-organic operations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$228.88	\$245.88

Scenario 59: Wildlife/Pollinator, Foregone Income (Organic and Non-Organic)

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 prep and planting of mainly pollinator friendly species. The area of the contour buffer strip is taken out of production. This applies to both organic and non-organic operations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$338.46	\$377.37

Criteria:

The following criteria should be used to determine which of the payment scenarios applies:

1. Introduced Species is intended for use when the seed mix consists primarily of introduced, cool season grasses plus introduced legumes. Primary objective is to establish permanent cover to address soil and water resource concerns with an additional benefit to wildlife habitat as a secondary objective.
2. Native Species is intended for use when the seed mixture is exclusively native species and has moderate species diversity (5-10 species). Primary objective is soil/water resource concerns with an additional benefit to wildlife habitat as a secondary objective.
3. Wildlife/Pollinator is intended for use when the seed mixture is exclusively native species and has relatively high species diversity (10-20 species or more). Primary objective is wildlife/pollinator habitat and soil/water resource concerns.

Contour Farming

Code: 330

Reporting Unit: Acre

Definition:

Using ridges and furrows formed by tillage, planting and other farming operations to change the direction of runoff from directly downslope to around the hill slope.

Purpose:

This practice is applied to achieve one or more of the following:

- Reduce sheet and rill erosion.
- Reduce transport of sediment, other solids and the contaminants attached to them.
- Increase water infiltration

Conditions Where Practice Applies:

This practice applies on sloping land where annual crops are grown.

Scenario 4: Contour Farming

This practice is installed on the entire field and meets the specifications of the NRCS Contour Farming Practice Standard (Code 330). A survey is completed by trained and certified Federal, State, local personnel or a consultant to determine and "stake" contour row arrangement. Permanent row markers are established to ensure that this practice is maintained for the life of this practice. All field operations including: disking, bedding, planting, and cultivation are performed on the contour which is near perpendicular to the field slope. The farm manager is initially on site to ensure that equipment operator is properly following contour methods. Payment reflects the extra labor and initial supervision costs in laying out and implementing contour farming.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.14	\$6.22

Criteria:

This scenario applies to fields greater than 5 acres in size.

Contour Orchard and Other Perennial Crops

Code: 331

Reporting Unit: Acre

Definition:

Planting orchards, vineyards, or other perennial crops so that all cultural operations are done on or near the contour.

Purpose:

- Reduce sheet and rill soil erosion
- Reduce transport of excessive sediment and other associated contaminants
- Improve water use efficiency with improved infiltration

Conditions Where Practice Applies:

This practice applies on sloping land where orchards, vineyards, or other perennial crops are to be established. For annually planted crops use CPS Code 330, Contour Farming.

Scenario 2: Contour Orchards/Vineyards

This practice is installed on the entire field and meets the specifications of the Contour Orchard and Other Perennial Crops conservation practice standard (Code 331). A survey is completed by trained and certified Federal, State, local personnel or a consultant to determine and 'stake' contour row arrangement prior to planting the perennial crop. All field operations are done on or near the contour. Payment reflects the extra labor and initial supervision costs in implementing and following contour operations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.43	\$18.65

Criteria:

This scenario applies to fields greater than 5 acres.

Cover Crop

Code: 340

Reporting Unit: Acre

Definition:

Crops including grasses, legumes, and forbs for seasonal cover and other conservation purposes.

Purpose:

- Reduce erosion from wind and water.
- Increase soil organic matter content.
- Capture and recycle or redistribute nutrients in the soil profile.
- Promote biological nitrogen fixation and reduce energy use.
- Increase biodiversity.
- Suppress weeds.
- Manage soil moisture.
- Minimize and reduce soil compaction.

Conditions Where Practice Applies:

On all lands requiring vegetative cover for natural resource protection and or improvement. Please note, Cover Crop Scenarios 1 and 2 are subject to payment cap limitations. Each Cover Crop scenarios is limited to \$10,000/yr. and \$12,500/yr. HU, per participant, per year, regardless of the number of contracts held.

Scenario 17: Cover Crop, Basic (Organic and Non-Organic)

Typically a small grain or legume (may also use forage sorghum, radishes, turnips, buckwheat, etc.) will be planted as a cover crop immediately after harvest of a cash crop, and will be followed by a cash crop that will utilize the residue as a mulch. This scenario assumes that seed will be planted with a drill, however aerial or broadcast seeding into the growing crop just prior to harvest is allowed. The cover crop should be allowed to generate as much biomass as possible prior to termination without delaying planting of the following crop. The cover crop will be terminated prior to or just after planting the subsequent crop per the NRCS Cover Crop Termination Guidelines.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$33.02	\$53.65

Scenario 18: Cover Crop Adaptive Management

The practice scenario is for the implementation of cover crops in small replicated plots to allow the producer to learn how to manage cover crops on their operation. Scenario includes implementing replicated strip trials on a field plot to evaluate, identify and implement a particular cover crop management strategy (e.g., cover crop vs no cover crop, multiple species vs, single species, evaluate different termination methods or timings, using a legume vs no legume for nitrogen credits). This will be done following the guidance in the NRCS Technical Note 10 - Adaptive Management.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,744.33	\$2,093.20

Scenario 19: Cover Crop, Multiple Species (Organic and Non-Organic)

Typically a multi-species (three or more species) cover crop mix is seeded immediately after harvest of a cash crop and will be followed by another cash crop and will utilize the residue as a mulch. This scenario assumes that seed will be planted with a drill, however aerial or broadcast seeding into the growing crop just prior to harvest is allowed. The cover crop should be allowed to generate as much biomass as possible prior to termination without delaying planting of the following crop. The cover crop will be terminated prior to or just after planting the subsequent crop per the NRCS Cover Crop Termination Guidelines.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$43.63	\$67.87

Criteria:

1. Cover crops must be planted according to the guidance in the Cover Crop Practice Standard (340) and on the Cover Crop Worksheet (NE-CPA-7). Specifications will be provided on the Cover Crop Worksheet (NE-CPA-7).
2. Cover crops cannot be harvested for grain or forage unless the cover crop is being used to facilitate a grass seeding (See #8 below).
3. Grazing is allowed providing the primary purpose of the cover crop is met. Prescribed grazing (528) must be in the Toolkit plan but at no cost share.
4. Cover crops must be terminated following the guidance in the NRCS Cover Crop Termination Guidelines.
5. Cover crops which winter kill must be planted at least 8 weeks prior to the average date of the first killing frost.
6. Cover crops which over winter must have at least 4 weeks of spring growth before termination.
7. Winter annual cover crops planted following a low residue crop must have a minimum of 6-8" of growth before they are terminated.
8. Cover crops planted to facilitate subsequent grass seeding should use the single species option and can be managed as necessary to accommodate the drilling of the grass seed. For example, haying the cover crop to prevent seed head development and provide suitable stubble height is acceptable.
9. Payments are only applicable to acres being seeded to a cover crop each growing season.
10. Participants may be eligible for other management practice payments on the same land.
11. Practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.
12. Cover Crop, Multiple Species Requires:
 - a. Cover crop mixes must have a minimum of three species selected from at least two of the functional groups (grasses, broadleaf, brassica, legume) and must include a different crop type (i.e., warm season grass, cool season grass, warm season broadleaf, cool season broadleaf) than the previous crop. If the crop following the cover crop is a non-legume consider including a legume in the cover crop mix.
13. Cover Crop Adaptive Management Requires:
 - a. State Agronomist approval.

Critical Area Planting

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;
- Eroded banks of natural channels, banks of newly constructed channels, and lake shorelines;
- Other areas degraded by human activities or natural events.

Scenario 26: Vegetation-Normal Tillage (Organic and Non-Organic)

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$171.55	\$205.85

Scenario 27: Native and Introduced Vegetation – Moderate Grading (Organic and Non-Organic)

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$449.33	\$539.20

Scenario 28: Native Or Introduced Grass/legume mix – Heavy Grading (Organic or Non-Organic)

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$733.13	\$879.76

Criteria:

1. The two scenarios most appropriate for establishment of vegetation on a grassed waterway are Introduced Grass, Light Tillage and Native Grass, Light Tillage with the predominant composition of the grass mixture (introduced vs. native) being the factor to determine which is appropriate.

Cross Wind Trap Strips

Code: 589C

Reporting Unit: Acre

Definition:

Herbaceous cover established in one or more strips typically perpendicular to the most erosive wind events.

Purpose:

- Reduce soil erosion from wind
- Induce wind-borne sediment deposition
- Induce snow deposition
- Protect growing crops from damage by wind-borne soil particles
- Improve air quality by reducing the generation of airborne particulate matter.

Conditions Where Practice Applies:

This practice applies to cropland or other land susceptible to wind erosion.

Scenario 22: Cross Wind Trap Strips, Native Perennials, Forgone Income

This scenario is for the installation of cross wind trap strips with native perennial grasses and/or legumes for one or more of the purposes listed above. Strips will be designed and implemented Cross Wind Trap Strips standard (Code 589C). Appropriate orientation and width of trap strips will be determined using current wind erosion prediction technology. The planned trap strip system will meet appropriate criteria for the resource concern (i.e. stand erect during the design critical period, be placed upwind for snow accumulation or protection of sensitive crops, meet the minimum height criteria, etc.). For this scenario, the strips will consist of native perennial species, generally placed across an entire field. The scenario includes costs associated with the establishment of the trap strips and land taken out of crop production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$332.60	\$359.92

Scenario 23: Cross Wind Trap Strips, Introduced Perennials, Forgone Income

This scenario is for the installation of cross wind trap strips with introduced perennial grasses and/or legumes for one or more of the purposes listed above. Strips will be designed and implemented Cross Wind Trap Strips standard (Code 589C). Appropriate orientation and width of trap strips will be determined using current wind erosion prediction technology. The planned trap strip system will meet appropriate criteria for the resource concern (i.e. stand erect during the design critical period, be placed upwind for snow accumulation or protection of sensitive crops, meet the minimum height criteria, etc.). For this scenario, the strips will consist of introduced perennial species, generally placed across an entire field. The scenario includes costs associated with the establishment of the trap strips and land taken out of crop production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$317.50	\$368.14

Dam Diversion

Code: 348

Reporting Unit: Feet

Definition:

A structure built to divert part of all of the water from a waterway or stream into a different watercourse, an irrigation canal or ditch, or a waterspreading system.

Purpose:

The purpose of a *diversion* dam is:

- To divert part of all of the water from a waterway in such a manner that it can be controlled and applied to a beneficial use, or
- To divert periodic damaging flows from a watercourse to another watercourse having characteristics which reduce the damage potential of the flows.

Conditions Where Practice Applies:

Where a diversion dam is needed as an integral part of an irrigation system or a waterspreading system which has been designed to facilitate the conservation use of soil and water resources.

Where it is desirable to divert water from an unstable watercourse to a stable watercourse.

Where the water supply available is adequate for the purpose for which it is to be diverted.

Where the construction of a dam and the diversion of water are permitted by applicable state statutes and regulations.

Special attention will be given to maintaining or improving habitat for fish and wildlife where applicable.

Scenario 1: Earthfill

An earthen embankment built to divert all or part of the water from a waterway or a stream to provide water in such a manner that it can be controlled and used beneficially for irrigation, waterspreading, livestock water, fire control, municipal or industrial uses, develop renewable energy systems, recreation, or to divert periodic damaging flows from one watercourse to another watercourse thereby reducing the damage potential of the flows. This structure will address the resource concerns of inefficient water use on Irrigated Land, inadequate water for livestock, and inadequate water supply for other beneficial uses.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.52	\$2.28

Dike

Code: 356

Reporting Unit: Foot

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 the control of water level is desired. The Dike Conservation Practice Standard (CPS) does not apply to sites where the Natural Resources Conservation Service (NRCS) CPS Pond (378), Water and Sediment Control Basin (638), Diversion (362), or Terrace (600) is 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.

Scenario 1: Wetland Dike

Construction of a barrier, constructed of an earthen embankment, to control water level. Embankment structure to provide adequate freeboard, allowance for settlement, and foundation and embankment stability. Payment includes stripping prior to fill placement and earthfill for embankment. Associated practices include, but are not limited to: PS327 Conservation Cover, PS656 Constructed Wetland, PS342 Critical Area Planting, PS378 Ponds, PS382 Fence, PS464 Irrigation Land Levelling, PS500 Obstruction Removal, PS528 Prescribed Grazing, PS587 Structure for Water Control, PS620 Underground Outlet, PS645 Upland Wildlife Management, PS658 Wetland Creation, PS659 Wetland Enhancement, PS657 Wetland Restoration, PS644 Wetland Wildlife Habitat Management.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.52	\$4.23

Scenario 2: Protective Dike 6 Feet High or Less

Construction of a barrier 6' or less in height, constructed of an earthen embankment, to control water level. Embankment structure to provide adequate freeboard, allowance for settlement, and foundation and embankment stability. Payment includes stripping prior to fill placement, excavation of a core trench, and earthfill for embankment. Associated practices include, but are not limited to: PS327 Conservation Cover, PS656 Constructed Wetland, PS342 Critical Area Planting, PS378 Ponds, PS382 Fence, PS464 Irrigation Land Levelling, PS500 Obstruction Removal, PS528 Prescribed Grazing, PS587 Structure for Water Control, PS620 Underground Outlet, PS645 Upland Wildlife Management, PS658 Wetland Creation, PS659 Wetland Enhancement, PS657 Wetland Restoration, PS644 Wetland Wildlife Habitat Management.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$14.68	\$22.03

Scenario 3: Protective Dike Greater Than 6 Feet High

Construction of a barrier > 6' in height, constructed of an earthen embankment, to control water level. Embankment structure to provide adequate freeboard, allowance for settlement, and foundation and embankment stability. Payment

includes stripping prior to fill placement, excavation of a core trench, and earthfill for embankment. Associated practices include, but are not limited to: PS327 Conservation Cover, PS656 Constructed Wetland, PS342 Critical Area Planting, PS378 Ponds, PS382 Fence, PS464 Irrigation Land Levelling, PS500 Obstruction Removal, PS528 Prescribed Grazing, PS587 Structure for Water Control, PS620 Underground Outlet, PS645 Upland Wildlife Management, PS658 Wetland Creation, PS659 Wetland Enhancement, PS657 Wetland Restoration, PS644 Wetland Wildlife Habitat Management.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$21.70	\$32.55

Criteria:

Does not include the cost of establishing permanent vegetative cover. Payment should be made through Critical Area Planting (342).

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Diversion

Code: 362

Reporting Unit: Foot

Definition:

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

Purpose:

This practice may be applied 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 storage, water-spreading, or water-harvesting systems.
- 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 strip-cropping systems.

Conditions Where Practice Applies:

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

Scenario 1: Diversion

An earthen channel constructed across long slopes with supporting ridge on lower side, to divert runoff away from farmsteads, gullies, critical erosion areas, construction areas or other sensitive areas. Outlet may be waterway, underground outlet or other suitable outlet. Typical diversion is, 2300 feet long and requires 1 CY excavation per LF. Channel may be level or gradient and ridge may be vegetated or farmed. The quantity of excavation and fill is balanced.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.66	\$2.48

Criteria:

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Drainage Water Management

Code: 554

Reporting Unit: Acre

Definition:

The process of managing water discharges from surface and/or subsurface agricultural drainage systems.

Purpose:

The purpose of this practice is:

- Reduce nutrient, pathogen, and/or pesticide loading from drainage systems into downstream receiving waters
- Improve productivity, health, and vigor of plants
- Reduce oxidation of organic matter in soils
- Reduce wind erosion or particulate matter (dust) emissions
- Provide seasonal wildlife habitat

Conditions Where Practice Applies:

This practice is applicable to agricultural lands with surface or subsurface agricultural drainage systems that are adapted to allow management of drainage discharges.

The practice may not apply where saline or sodic soil conditions require special considerations.

This practice does not apply to the management of irrigation water supplied through a subsurface drainage system. For that purpose, use NRCS Conservation Practice Standard, Irrigation Water Management (449).

Scenario 1: Drainage Water Management (DWM)

This scenario is the process of managing water discharges from surface and/or subsurface agricultural drainage systems by reducing nutrient loading into surface waters. Typical systems consist of a 80 acre field with existing drainage tile lines and installed water control structures. The operator goes to the field in order to adjust water control structures (riser boards). While on site the date and adjustment information is recorded/logged. The number of yearly adjustments is based on 6 trips to a field 5 miles from headquarters. The field time to make and record each adjustment is 0.5 hours per structure (including travel time). The typical field will contain 3 structures to control field water levels.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$46.01	\$69.02

Criteria:

Use of this conservation practice must comply with all wetland conservation requirements associated with Food Security Act.

Payment Documentation:

Dry Hydrant

Code: 432

Reporting Unit: Each

Definition:

A non-pressurized permanent pipe assembly system installed into water source that permits the withdrawal of water by suction.

Purpose:

To provide all weather access to an available water source for fire suppression.

Conditions Where Practice Applies:

Where a dependable source of water is available, where transport vehicles can access the site, and where a source of water is needed for fire suppression.

Scenario 1: PVC

A non-pressurized permanent PVC pipe assembly system installed into an adequate water source with an all-weather access that permits the withdrawal of water by suction for fire suppression. The location must have an adequate volume of water available, where transport vehicles can access the site, and where a source of water is needed for fire suppression. The resource concerns addressed include reduced visibility due to fire and lack of access to water for fire suppression.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,303.24	\$1,954.86

Early Successional Habitat Development and Management

Code: 647

Reporting Unit: Acre

Definition:

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

Purpose:

To provide habitat for species requiring early successional habitat for all or part of their life cycle.

Conditions Where Practice Applies:

On all lands that are suitable for the kinds of desired wildlife and plant species.

Scenario 1: Mowing

This scenario addresses inadequate habitat for fish and wildlife where succession is set back by mowing short, herbaceous vegetation prior to using another treatment, to create early successional habitat (disking, herbicide application, etc.). Mowing can be used to increase structural diversity by creating areas of shorter vegetation preferred by some species or during certain life stages of species. The typical setting for this scenario is at the edge of crop fields, in pastures, at the edge of woodlands or brushy areas, and in odd areas such as pivot corners. Where additional chemical control of weeds, including invasive grasses, is required to reduce competition for the desired plant community, conservation practice 315, herbaceous weed control, should be used. Where the seedbank is inadequate for natural regeneration and seeding is required, use conservation practice 327, Conservation Cover, or 550, Range Planting. Where the need is to create early successional habitat within or at the edge of a woodland or forest use conservation practice 666, forest stand improvement, to remove trees.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.65	\$9.98

Scenario 2: Disking

This practice addresses inadequate wildlife habitat for species requiring early successional habitat. This scenario provides early successional habitat by setting back succession and manipulating species composition by disking vegetation and creating bare ground. The typical setting for this scenario is at the edge of crop fields, in pastures, and in odd areas such as pivot corners. This scenario is applicable nationwide. Where the management of woody plants is required to create or maintain early successional habitat, conservation practice 314, brush management, or 666, forest stand improvement, should be used. Where chemical control of weeds, including invasives, is required to reduce competition for the desired plant community, conservation practice 315, herbaceous weed control, should be used. Where the seedbank is inadequate for natural regeneration and planting is required, use conservation practice 550, range seeding, or 327, Conservation Cover. Where the need is to create early successional habitat within or at the edge of woodland or forest, use conservation practice 666, forest stand improvement, to remove trees.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.14	\$18.21

Scenario 3: Chemical

This practice addresses inadequate wildlife habitat for species requiring early successional habitat. This scenario provides early successional habitat by setting back succession and manipulating species composition by disking vegetation and creating bare ground. The typical setting for this scenario is at the edge of crop fields, in pastures, and in odd areas such as pivot corners. This scenario is applicable nationwide. Where the management of woody plants is required to create or maintain early successional habitat, conservation practice 314, brush management, or 666, forest stand improvement, should be used. Where chemical control of weeds, including invasives, is required to reduce competition for the desired plant community, conservation practice 315, herbaceous weed control, should be used. Where the seedbank is inadequate for natural regeneration and planting is required, use conservation practice 550, range seeding, or 327, Conservation Cover. Where the need is to create early successional habitat within or at the edge of woodland or forest, use conservation practice 666, forest stand improvement, to remove trees.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$13.83	\$20.74

Criteria:

Use the following criteria to determine which scenario applies:

Mowing: Use of the payment scenario for “Mowing” by itself will generally not accomplish the objective of Early Successional Habitat. Therefore, it should only be used to “prepare” a site so that the additional treatment is more effective. (For example, mowing prior to disking; or mowing prior to a herbicide application.)

Disking: Multiple applications (no more than three) of this practice can be applied on the same acres in one year in order to adequately accomplish the objective on sites with dense cover or heavy soils where multiple passes are required to meet the requirements in the 647 Design Procedure.

Chemical: This method can include a variety of herbicide application techniques including burn-down or chemical mowing to full rate application of specific herbicides intended to set-back plant succession to the extent needed to meet the intended purpose.

Interseeding of forbs or legumes following the disking or chemical operation is not included with this scenario. Therefore, include the appropriate conservation practice and payment scenario (i.e., 327 Conservation Cover) where interseeding is desired to enhance the quality of early successional habitat provided.

Payment Documentation:

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.

Scenario 1: Ventilation - Exhaust

Replacement of a conventional exhaust fan with high volume, low speed, efficient exhaust fan. Fans being installed should be models previously tested by BESS Lab or the Air Movement and Control Association and be in top 20 percentile of fans tested. Practice certification will be through receipts and pictures from the applicant. Typical scenario includes the replacement of a 48" fan.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$722.76	\$1,084.14

Scenario 2: Ventilation - HAF

A system of fans are installed to create a horizontal air circulation pattern; the new system promotes efficient heat and moisture distribution. In a typical 10,000 square foot greenhouse, 10 HAF fans are needed. Fan performance meets Energy Audit efficiency criteria as tested by AMCA or BESS Labs.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$107.11	\$160.67

Scenario 3: Plate Cooler-Small

The installation of all stainless steel dual pass plate cooler, type 316 stainless steel. Practice certification will be through receipts and pictures from the applicant.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,582.13	\$3,873.19

Scenario 4: Plate Cooler

The installation of all stainless steel dual pass plate cooler, type 316 stainless steel. Practice certification will be through receipts and pictures from the applicant.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-U
\$3,533.68	\$5,300.52

Scenario 5: Scroll Compressor

Install a new scroll compressor, associated controls, wiring, and materials to retrofit an existing refrigeration system. A new condenser is not included in this typical scenario. Typical scenario includes a new 5 horsepower scroll compressor.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-U
\$433.69	\$650.53

Scenario 7: Automatic Controller System

The typical scenario consists of an automatic control system installed 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$749.67	\$1,124.51

Scenario 8: Motor Upgrade > 100 HP

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 100 horsepower.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$82.56	\$123.84

Scenario 9: Motor Upgrade 10 - 100 HP

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 horsepower.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$66.20	\$99.29

Scenario 10: Motor Upgrade > 1 and < 10 HP

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 horsepower.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$91.37	\$137.05

Scenario 11: Motor Upgrade ≤ 1 HP

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 horsepower.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$301.81	\$452.72

Scenario 12: Heating - Radiant Systems

Replace 'pancake' Brood Heaters in a poultry house with Radiant Tube Heaters, or similar. Replacement will require the materials and labor to remove existing heating system, re-plumb gas lines, cables and wench system to retrofit new radiant tube heaters, and miscellaneous items to complete the installation. Alternate acceptable radiant heating systems can include radiant brooders and quad radiant systems as evidenced by the energy audit. The typical scenario consists of the replacement of 28 brood heaters with 6 radiant tube heaters.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$793.50	\$1,190.25

Scenario 13: Heating (Building)

Replace existing low efficiency heaters with new high efficiency heaters. High-efficiency heating systems include any heating unit with efficiency rating of 80%+ for fuel oil and 90%+ for natural gas and propane. Applications may be air heating/building environment and hydronic (boiler) heating for agricultural operations, including under bench, or root zone heating. An alternative to heater replacement might be the addition of climate control system and electronic temperature controls with +/- 1 degree F differential, to reduce the annual run time.

Payment Unit: 1000 BTU/ Hour

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.42	\$9.64

Scenario 14: Heating - Attic Heat Recovery Vents

Install actuated inlets or automatic latching gravity inlets that draw warmer, drier air from the attic to assist with moisture and heat control when ventilation fans are being operated in poultry houses and swine barns. Other systems to transfer heat, as detailed in ASABE S612-compliant energy audit may also be used. Based on a 40' x 500' poultry house.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$81.96	\$122.94

Scenario 15: Grain Dryer

A replacement continuous dryer rated for an appropriate rated bushel/per hour capacity for the operation that includes a microcomputer-based control system that adjusts the amount of time the crop remains in the dryer in order to achieve a consistent and accurate moisture content in the dried product. Alternate types of replacement dryers which reduce energy use are acceptable as evidenced by the energy audit. The typical operation requires a rated capacity of 860 bushels per hour.

Payment Unit: Bushel per Hour

Payment Schedule:

EQIP-General	EQIP-General-HU
\$49.04	\$73.56

Criteria:

1. ELIGIBILITY: Must be a recommendation of an on-farm energy audit performed by a registered Technical Service Provider (TSP).
2. Energy efficient lighting includes the upgrade to T8 or T5 fluorescent, or LED lighting.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Fence

Code: 382

Reporting Unit: Foot

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.

Scenario 1: Barbed Wire, Multi-strand

Multi-strand, Barbed Wire - Installation of 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, 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 ft).

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.29	\$1.55

Scenario 2: Barbed Wire, Multi-strand with Fence Markers

Multi-strand, Barbed Wire - Installation of 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 ft).

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.39	\$1.67

Scenario 3: Barbed Wire, Multi-strand, Difficult Terrain

Multi-strand, Barbed Wire - Installation of 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.52	\$1.83

Scenario 4: Barbed Wire, Multi-strand with Fence Markers, Difficult Terrain

Multi-strand, Barbed Wire - Installation of 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. Some of the sites that may be considered as difficult terrain are steep slopes, badlands, or rocky soils.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.62	\$1.94

Scenario 5: Woven Wire

Woven - Installation of fence will allow for implementation of a grazing management plan that promotes adequate rest and recovery periods, protection of sensitive areas, 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.62	\$1.94

Scenario 6: Woven Wire, with Fence Markers

Woven - Installation of 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, 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.72	\$2.06

Scenario 7: Electric, High Tensile with Energizer

Electric - Installation of 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, reduction of noxious and invasive weeds. Includes 3 strands of high tensile wire with energizer.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.78	\$0.93

Scenario 8: Electric, High Tensile with Energizer and Fence Markers

Electric - Installation of fence will allow for implementation of grazing management that allows for an adequate rest and recovery period, protection of sensitive areas, improved water quality, reduction of noxious and invasive weeds. Includes 3 strands of high-tensile wire with energizer.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.88	\$1.05

Scenario 9: Protective Fence

A barrier (fence) implemented 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 & lagoons, (2) to protect sensitive areas (riparian areas, wetlands, springs, etc.) from heavy livestock pressure, (3) to protect newly installed conservation practices where vulnerable to livestock damage. Heavy grade fence materials and close post spacing required.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.42	\$1.71

Scenario 10: Confinement

Installation of a confinement fence is needed to addresses resource concerns associated with livestock feeding operations. The fence will provide protection of sensitive areas, improve water quality, and reduce of noxious and invasive weeds. Resource Concerns: Water Quality, Plant Condition.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.00	\$4.80

Scenario 11: Portable Fence

One or two strands of polywire and step-in fiberglass fence posts. Typically used as cross-fencing on the interior of larger paddocks built with permanent perimeter fencing. Installation of portable, temporary, fencing will allow for the implementation of a grazing management system that provides adequate rest and recovery periods, improved water quality, reduction of noxious and invasive weeds, and better management of soil health. Portable fencing allows for more flexibility than standard fencing; this allows the manager to apply adaptive management (managing the grazing based on current conditions rather than a predetermined grazing system).

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.21	\$0.25

Criteria:

Use the following criteria to determine which scenario applies:

1. Barbed Wire – Standard barbed wire fence installed in typical landscapes.
2. Barbed Wire (Difficult Conditions) – Standard barbed wire fence installed in landscapes which requires additional labor to install including steep slopes (>30 degrees), rocky soil types, dense woodlands, or ponded soils all of which are generally inaccessible to vehicles.
3. Woven Wire – Self-explanatory using descriptions noted above.
4. Electric Wire – Self-explanatory using descriptions noted above.
5. Protective – Standard fence installed with a high number of corners and short segments typical of what is used for protection of windbreaks, dams, and other conservation practices.
6. Portable fence for intensive grazing management
 - a. Eligibility determined by the circumference of the largest temporary paddock (if temporary fencing surrounds paddock) or by the longest single reach required multiplied by two (if temporary fencing occurs on only two sides of a paddock).
 - b. Onetime payment for materials. Maintenance and replacement costs are the responsibility of the producer as part of the operation and maintenance for the practice lifespan.
7. Fence Markers – Scenarios with fence markers only apply to new fence being installed that will be fitted with markers to aid in preventing wildlife collisions. Modifications to existing fence may be paid under 649 Structures for Wildlife – Fence Markers, Vinyl Undersill scenario.
8. Confinement – Fences associated with animal feeding operations.

Payment Documentation:

NE-CPA-1 Fence Construction Jobsheet

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 and pollinator habitat;
- Increase carbon storage;
- Improve air quality.

Conditions Where Practice Applies:

This practice is applied 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.

Scenario 31: Native Species with Foregone Income

A strip of permanent vegetation established at the edge or around the perimeter of an agricultural field. Native grasses, legumes and forbs will be established in the field borders to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Native species shall be selected that do not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area. Practice includes seedbed prep and planting of native species. The area of the field border is taken out of production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$287.82	\$306.19

Scenario 32: Introduced Species, Forgone Income

A strip of permanent vegetation established at the edge or around the perimeter of an agricultural field. Introduced grasses and legumes will be established for the field border to the extent needed to meet the resource needs and producer objectives. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Introduced species of grasses, legumes, forbs or shrubs shall be selected that are adapted to site, will not function as a host for diseases of a field crop and have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area. Practice includes seedbed prep and planting of introduced species. The area of the field border is taken out of production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$260.00	\$272.81

Scenario 33: Pollinator Species with Foregone Income

A strip of permanent vegetation established at the edge or around the perimeter of an agricultural field. Pollinator herbaceous plantings will provide species which flower throughout the growing season. This provides a source of nectar for adult pollinators and a diversity of herbaceous material for immature pollinator life stages and for nesting. Minimum field border widths shall be based on NRCS local design criteria specific to the purpose for installing the practice. Species selected shall meet the pollinator habitat requirements of the state and be adapted to site; not function as a host for diseases of a field crop and; have physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area. Practice includes seedbed prep and planting of pollinator friendly herbaceous species. The area of the field border is taken out of production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$330.86	\$357.84

Criteria:

The following criteria should be used to determine which of the payment scenarios applies:

1. Native Species with Forgone Income scenario is to be used when the seed mixture is mostly natives with moderate species diversity (approximately 10 species or less). Primary objective is to establish permanent cover to address soil and water resource concerns with an additional benefit to wildlife habitat as a secondary objective.
2. Introduced Species with Forgone Income scenario is to be used when the seed mixture is predominantly introduced species and contains limited diversity. Primary objective is to establish permanent cover to address soil and water resource concerns with an additional benefit to wildlife habitat as a secondary objective.
3. Pollinator Species with Forgone Income scenario is to be used when the seed mixture contains higher diversity and dominated by native forbs and native grasses. Diversity of these mixtures will typically include 20 or more species and are designed specifically to meet the habitat requirements of target wildlife.

Payment Documentation:

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.

Scenario 25: Native Species with Foregone Income (FI)

A strip or area of herbaceous vegetation situated between cropland and sensitive areas that removes contaminants from overland flow. The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of native species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and seed. Species selected shall be able to withstand partial burial by sediment and be tolerant of herbicides used on the contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$336.09	\$364.11

Scenario 26: Introduced Species with Foregone Income (FI)

A strip or area of herbaceous vegetation situated between cropland and sensitive areas that removes contaminants from overland flow. The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of introduced species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and seed. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$324.50	\$350.20

Criteria:

The following criteria should be used to determine which of the payment scenarios applies:

1. Native Species with Foregone Income scenario is to be used when the seed mixture is mostly natives with moderate species diversity (approximately 10 species or less). Primary objective is to establish permanent cover to address soil and water resource concerns with an additional benefit to wildlife habitat as a secondary objective. Additional diversity may be warranted under some circumstances to meet secondary wildlife habitat objectives.
2. Introduced Species with Foregone Income scenario is to be used when the seed mixture is predominantly introduced

species and contains limited diversity. Primary objective is to establish permanent cover to address soil and water resource concerns with an additional benefit to wildlife habitat as a secondary objective.

Payment Documentation:

Firebreak

Code: 394

Reporting Unit: Foot

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.

Scenario 1: Vegetated, Permanent, Grass

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 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. Resource concerns include Wildfire hazard from excessive biomass accumulation, Soil erosion, and Excessive sediment in surface waters.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.05	\$0.07

Scenario 2: 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. Resource concerns include Wildfire hazard from excessive biomass accumulation, Undesirable plant productivity and health, Inadequate plant structure and composition, and Habitat degradation.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.02	\$0.03

Scenario 3: Constructed, Tillage

Use of medium equipment such as small dozers to blade, disk, plow, etc. to create a 30' wide bare-soil firebreaks on slopes less than 15% around a 40 acre field. Resource concerns include Wildfire hazards from excessive biomass accumulation, Undesirable plant productivity and health, Inadequate plant structure and composition, and Habitat degradation.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.06	\$0.09

Scenario 4: Constructed – Medium Equipment Dozer

Use of equipment such as small dozers to blade bare-soil firebreaks. Resource concerns include Wildfire hazard from excessive biomass accumulation, Undesirable plant productivity and health, Inadequate plant structure and composition, Habitat degradation, Soil erosion, and Excessive sediment in surface waters.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.32	\$0.48

Scenario 5: Constructed – Hand Cleared

Installing a bare-ground firebreak with a width of 8' or more on gently to strongly sloping slopes with hand tools and labor in timbered areas. Resource concerns include Wildfire hazard from excessive biomass accumulation, Undesirable plant productivity and health, Inadequate plant structure and composition, Habitat degradation, Soil erosion, and Excessive sediment in surface waters.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.32	\$0.48

Scenario 6: Constructed – Tree Clearing

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 either to the lack of steep terrain or the temporary nature of the firebreak. Typical slopes are between 5 and 45%. Resource concerns include Wildfire hazard from excessive biomass accumulation, Undesirable plant productivity and health, Inadequate plant structure and composition, and Habitat degradation.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.36	\$0.54

Payment Documentation: Specifications for firebreak and documentation of completion according to NRCS standards and specifications will be recorded in the Prescribed Burn Management Plan (NE-ECS-72).

Fishpond Management

Code: 399

Reporting Unit: Number

Definition:

Managing impounded aquatic habitat and water quality for the production of fish.

Purpose:

- To provide favorable habitat for fish and other aquatic organisms which help sustain the fish population.
- To develop and maintain a desired species composition and ratio.
- To develop and maintain a desired level of production.

Conditions Where Practice Applies:

In warm and cold water ponds, lakes, and reservoirs not managed for commercial aquaculture purposes.

Scenario 1: Invasive Weed Species - Chemical

Chemical application to existing fishpond to remove invasive or undesired vegetation. Target weed species and need for control must be approved by qualified a biologist to ensure an ecological need exists and planned treatment is not for recreational or aesthetic reasons. Typically use Diquat dibromide or other appropriate herbicide. Chemical control will be applied by a certified pesticide applicator per state code. Resource concerns addressed include: Degraded Plant Condition - Excessive plant pest pressure; Degraded Plant Condition - Inadequate structure and composition; Inadequate Habitat for Fish and Wildlife - Habitat degradation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$134.79	\$202.19

Scenario 2: Habitat Structures

Fishpond lacks the diversity of habitat to provide adequate habitat for desired fish species. Creation of habitat structures as recommended by a conservation planner or other individual with appropriate credentials including a qualified biologist. Suggested improvements will determine type of structure needed, number of structures, density and location of structures. Habitat structures are typically submerged or emergent. Structures may include log cribs, rock piles, log and rock cribs, pipe and limber cribs, conifer cribs, PVC-tree structures, gravel spawning beds, catfish cages, concrete blocks stacked and filled with sticks or cuttings or plastic barrels filled with sand and sticks. Resource Concerns addressed include: Inadequate Habitat for Fish and Wildlife - Habitat degradation. Practice installation may also address: Water Quality Degradation - Elevated water temperatures.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$418.14	\$627.21

Scenario 3: Planting Native Vegetation

Native, aquatic vegetation will be established by plugs, tubers, sod mats, soil inoculation, local ecotype seeding or similar methods. Both emergent and submerged vegetation will be established using hand tools or other small equipment as needed. Vegetation will be established to ensure appropriate cover for desired fish species. Plants will be established at a rate, location and density as prescribed by the conservation planner or other natural resource professional. A typical setting will plant between 2-5 aquatic plants per 10 SF. This scenario may include the replacement of non-desired plants

with appropriate native plants. Resource Concerns addressed include: Degraded Plant Condition - Excessive plant pest pressure; Inadequate Habitat for Fish and Wildlife - Habitat degradation. Practice installation may also address: Water Quality Degradation - Elevated water temperatures.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$522.27	\$783.41

Scenario 4: Depth Management

Management of existing fishpond by excavation or placement of material to create deep open water or littoral shelves. Fishpond currently does not provide optimum habitat for desired species. Excavated material will either be relocated within fish pond (i.e. island, jetty, shallow bench, etc.) or sited appropriately so as to not cause any negative environmental effects in adjacent uplands. Changes to depth will be based upon recommendations by a conservation planner or other individual with appropriate credentials, including a qualified biologist. Resource Concerns addressed include: Inadequate Habitat for Fish and Wildlife - Habitat degradation. Practice installation may also address: Water Quality Degradation - Elevated water temperatures. Associated Practice (if required): Critical Area Planting - 342

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,180.80	\$4,771.20

Criteria:

Use of this practice for the purpose of improving fish habitat should be reviewed by State Wildlife Biologist before being planned and implemented. This will allow for proper use of the scenario to accomplish the objective and to meet the needs of the targeted species.

Payment Documentation:

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 during periods of low forage production;
- Reduce soil erosion;
- Improve soil and water quality; and
- Produce feedstock for biofuel or energy production

Conditions Where Practice Applies:

This practice applies on 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.

Scenario 1: 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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$50.37	\$75.55

Scenario 2: 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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$92.32	\$117.50

Scenario 3: Native Perennial Grasses, Multi 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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$123.42	\$185.13

Scenario 4: Native Perennial Grasses, Multi Species, Foregone 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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$165.37	\$227.08

Scenario 5: Introduced Perennial Grasses-Legume

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$26.26	\$39.39

Scenario 6: Introduced Perennial Grasses – Legume, Foregone Income

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$68.21	\$81.35

Scenario 7: Introduced Perennial & Native Grass Mix

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, hayland, 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 prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$38.32	\$57.47

Scenario 8: Introduced Perennial & Native Grass Mix, Foregone Income

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, hayland, 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 prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$80.27	\$99.42

Scenario 9: Introduced Perennial Grasses with Lime Application

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, hayland, 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 prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$56.84	\$85.26

Scenario 12: Introduced Perennial Grasses – Legumes on Irrigated Cropland

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$36.69	\$55.03

Scenario 13: Introduced Perennial Grasses – Legumes on Irrigated Cropland, Forgone Income

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$92.62	\$110.97

Scenario 14: Organic

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$55.16	\$82.74

Scenario 15: Organic, Foregone Income

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, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario includes seed, equipment and labor for seedbed prep, tillage, and seeding. The land being seeded was previously cropland with a typical rotation of wheat and corn.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$97.11	\$124.70

Criteria:

1. Only one type payment for Forage Biomass Planting (512) may be received on the same acres.
2. To be used in managed pastureland situations; for land managed as rangeland, use Range Planting (550).
3. May be applied on land that is either currently cropland or land that is depleted grassland.

Payment Documentation:

NE-CPA-8 – Jobsheet for Grass Seeding

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 re-growth;
- Manage for the desired species composition;
- Use forage plant biomass as a soil nutrient uptake tool;
- Control insects, diseases and weeds; and
- Maintain and/or improve wildlife habitat.

Conditions Where Practice Applies:

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

Scenario 1: Improved Forage Quality

Improved cultural practices and recordkeeping result in better forage quality and better livestock performance.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.77	\$2.65

Scenario 2: Organic Preemptive Harvest

Preemptive harvest of forage crops to prevent damage from insects (such as leafhopper on alfalfa) or other pests results in better forage quality and better livestock performance.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.77	\$2.65

Scenario 3: Per-Annual Crop – Delayed Mowing

In perennial or annual forage crops, the delaying the harvest of the first cutting to promote the reproduction of ground nesting birds. Delaying the harvest of the first cutting will benefit ground nesting birds; research at the University of Vermont showed that breeding success for declining grassland songbirds (e.g. Bobolink) went from 0 on a regularly harvested hay field to 2.8 fledglings per female per year when the first harvest on a hayfield was delayed until August 1st. Bobolinks, Eastern Meadowlarks, and Savannah Sparrows require a nesting period to fledge young that lasts through the end of July in most parts of the eastern US. The delayed harvest results in a decrease in overall forage quality. Farmers could see as much as a 50% reduction in market value due to declines in protein (~50%) and digestibility (~20%), making the forage crop less palatable and lower in relative feed value. The selected fields should be large enough to promote ground nesting birds. After young have fledged the field will be harvested for dry forages.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.77	\$2.65

Scenario 4: Doublecropping – Delayed Harvest and Subsequent Planting

In doublecropped annual forages, delaying the harvest of the first crop will provide feed and shelter for ground nesting birds. Delaying the harvest results in a decrease in overall forage quality. Farmers could see as much as a 50% reduction in market value due to declines in protein (~50%) and digestibility (~20%), making the forage crop less palatable and lower in relative feed value. The selected fields should be large enough to promote ground nesting birds. After the young have fledged the second crop will be planted, approximately one month later than normal. Subsequently, the harvest of the second crop will cause an approximately 20% yield decline. The selected area should be large enough to buffer adults and nestlings from silage chopping in adjacent areas or fields. After young have fledged the field will be chopped and used as grain or silage. This practice is best planned cooperatively with the farmer and appropriate wildlife agencies far enough in advance to reduce disturbance to ground nesting birds. For example, Tricolored Blackbirds need a 35-day window from the time of nest building to fledge young and the silage needs to remain uncut until then.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.77	\$2.65

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.
- Timely harvest forest products.
- Development of renewable energy systems.
- 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:

Scenario 1: 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. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$132.16	\$198.24

Scenario 2: 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. Resource concerns include Undesirable plant productivity and health; Wildlife habitat degradation; Wildfire hazard; and Inadequate structure and composition.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$163.33	\$245.00

Scenario 3: Timber Stand Improvement, Chemical, Ground

Using ground applied chemicals to release young desirable trees from competing and/or overtopping vegetation. Resource concerns include: Undesirable plant productivity and health, and Wildlife habitat degradation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$22.20	\$33.30

Scenario 7: Creating Patch Clearcuts

Creating 2 acre patches in over-mature and/or degraded stands using hand tools such as chainsaws. Resource concerns include: Undesirable plant productivity and health, Inadequate structure and composition, and habitat degradation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$107.98	\$161.98

Scenario 8: 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. Resource concerns include: Inadequate structure and composition, Undesirable plant productivity and health, and Habitat degradation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$471.25	\$706.88

Criteria:

1. Use of forest stand improvement is applicable for payment when invasive or undesirable woody species are present and it is practical to remove them to maintain a forested area with desirable species after treatment. Forest land must have a 25 percent canopy or greater, or the potential to achieve a 25 percent canopy after treatment. The site must also be managed through the proper control of access by livestock, vehicles or other uses to be limited to what is compatible with the forest resource.
2. Creating Patch Clearcuts is only to be used on small areas dominated by undesirable tree and shrub species to create openings which will improve wildlife habitat conditions within larger stands of woodland or forest.
3. Pre-commercial Thinning, Hand Tools is to be used in areas where hand tools or small equipment can readily remove undesirable trees in favor of desired individual trees. It may also apply to sites where only minimal work is needed to accomplish thinning for wildlife and forest health and slash treatment is minimal.
4. Thinning for Health and Wildlife is to be used when extensive mechanical methods are used to remove undesirable species and retain appropriate trees and shrubs. Slash will be treated as described in the plan based on the site conditions and resource objectives.
5. TSI-Chemical, Ground is to be used when individual shrubs or trees (usually sapling or smaller) are intended to be killed by foliar herbicide application with a common example being European buckthorn or saltcedar within a stand of desirable trees and shrub species. Objective is to control invasive woody species to improve the health of the forest and wildlife habitat.
6. TSI-Single Stem Treatment is to be used when individual trees (using sapling or larger) are intended to be killed by herbicide application using cut and frill or similar techniques. Objective is to remove invasive trees species or reduce stocking level to improve health of forest and wildlife habitat.

Payment Documentation:

Forest Stewardship Plan or Forest Management Plan.

Fuel Break

Code: 383

Reporting Unit: Acre

Definition:

A strip or block of land on which the vegetation, debris, and detritus have been reduced and/or modified to control or diminish the risk of the spread of fire crossing the strip or block of land.

Purpose:

Control and reduce the risk of the spread of fire by treating, removing, or modifying vegetation, debris, and detritus.

Conditions Where Practice Applies:

This practice applies on all land where protection from wildfire is needed.

Scenario 1: Fuel Break

Fuel Break installation requires tree thinning, treating woody residue, pruning, and mowing. Thinning treatment and pruning is done by hand, treating woody residue (piling/burning, crushing, or off-site removal) and mowing are mechanized. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$779.00	\$1,168.49

Scenario 2: Fuel Break, Steep Slopes

Fuel Break installation requires tree thinning, treating woody residue, pruning, and brush cutting. Thinning treatment, tree pruning and brush cutting are done by hand, treating woody residue (piling/burning, crushing, or off-site removal) is mechanized and hand treatment. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,173.71	\$1,760.57

Scenario 3: Fuel Break - Masticator

Fuel Break installation requires tree thinning, treating woody residue, pruning, and mowing. Thinning treatment and pruning is done by hand; treating woody residue (piling/burning, crushing, or off-site removal) and mowing are mostly mechanized. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$729.29	\$1,087.93

Scenario 4: Fuel Break, Masticator, Steep Slopes

Fuel Break installation requires tree thinning, treating woody residue, pruning, and brush cutting. Thinning is mechanized and hand cutting, tree pruning and brush cutting are done by hand, treating woody residue (piling/burning, crushing, or off-site removal) is mechanized and some hand treatment. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$997.75	\$1,496.62

Scenario 5: Hand Fuel Break

Fuel Break installation requires tree thinning, treating woody residue, pruning, and mowing. Thinning treatment, pruning, brush cutting and treating woody residue (piling/burning, crushing, or off-site removal), is done by hand. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$858.73	\$1,288.09

Scenario 6: Non Forested Fuel Break

A non forest fuel break occurs outside of forestlands where brush, grass and forbs dominate. Landuses where this scenario will be applied may be range, pasture or wetlands. The fuel break area is mowed/bushhog so standing vegetation is reduced to a low height. Resource concerns are degraded plant condition - wildfire hazard.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$152.60	\$228.91

Payment Documentation:

Forest Stewardship Plan or Forest Management Plan.

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:

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.

Scenario 1: Embankment, No PS

An earthen embankment dam without a principal spillway pipe. A low flow tube of 6 inches or less to reduce saturation of the auxiliary spillway is installed, anti-seep collars or sand diaphragms are not required. To stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a typical amount of earthfill of 2,000 cubic yards, and 80 feet of pipe 6" PVC pipe. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.50	\$3.75

Scenario 2: Embankment, Pipe Less than 24 inches

An earthen embankment dam with a principle spillway pipe less than 24 inches, anti-seep collars or sand diaphragm, and excavated plunge pool basin. Installed to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a typical amount of earthfill of 4000 cubic yards, 90 feet of 18" PVC, pipe with a canopy inlet, and 3 cubic yard sand diaphragm. A non-lined plunge pool protects the outlet channel. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.96	\$4.44

Scenario 3: Embankment, Pipe Greater Than or Equal to 24 Inches

An earthen embankment dam with a principle spillway pipe equal to or greater than 24 inches. Installed to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a typical amount of earthfill of 10,000 cubic yards, corrugated metal drop inlet principle spillway with a 11 ft riser and 100 ft barrel, and 82 Square feet of anti-seep collars. A rock lined plunge pool protects the outlet channel. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.59	\$3.89

Scenario 4: Pipe Drop, Plastic

A pipe drop (i.e., riser and barrel) grade stabilization structure designed and constructed using plastic pipe without anti-seep collars. This is typically an earthen dry dam structure with no permanent storage (water or sediment), however some structures may have some permanent pool / storage but do not have 35 years of sediment life. Payment rate is based upon the riser weir length (Diameter x 3.14) in feet times the length of the pipe barrel in (feet). Installed to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a 2000 CY structure with a 6 ft high 24" (2') PVC riser with a 40 ft long barrel (2' x 3.14 x 40' = 251 SF). Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$25.76	\$38.64

Scenario 5: Pipe Drop, CMP

A pipe drop (i.e., riser and barrel) grade stabilization structure designed and constructed with a metal anti-seep collar. This is typically an earthen dry dam structure with no permanent storage (water or sediment), however some structures may have some permanent pool / storage but do not have 35 years of sediment life. Payment rate is based upon the riser weir length (Diameter x 3.14) in feet times the length of the pipe barrel in (feet). Installed to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a corrugated metal pipe drop structure with a 30", 12' tall riser and a 100' long 24" barrel (Riser Weir length x Barrel Length = 2.5ft x 3.14 x 100ft = 785). Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.08	\$15.13

Scenario 6: Concrete Box Drop

A Straight, semicircular, or Box Drop structure composed of reinforced concrete used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental

quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a wall structure with a drop of 4 ft and weir length of 6 ft wide and is 6 ft deep with 3 ft above the crest. The unit of payment measurement is defined as cubic yards of concrete. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$450.67	\$676.00

Scenario 7: Sheet Pile Weir Drop

A Straight structure composed of sheet pile metal used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a structure with a crest of 30 ft. The unit of payment measurement is defined as the area of sheet piling in square feet. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$27.01	\$40.51

Scenario 8: Gabion Rock Drop Structures

A Straight Drop structure constructed of rock riprap held in place by galvanized wire, such as, gabion baskets, fence panels, or 'sausage' baskets. These structures are used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a gabion wall structure with a drop of 3ft and weir length of 18ft (54 square feet). The unit of payment measurement is defined as volume of rock used in the gabion basket or mat. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$83.73	\$125.60

Scenario 9: Concrete Block Chute

A trapezoidal structure constructed of concrete masonry blocks. These structures are used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a concrete

block structure with a drop of 5 feet and a width of 20 feet on a 10% slope. The unit of payment measurement is defined as the area covered by the concrete blocks in square feet. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.17	\$4.76

Scenario 10: Modular Concrete Block Drop

A drop structure constructed of precast modular blocks, typically 2'x2'x4, 2.5'x2.5'x5', or 2'x2'x6'. These structures are used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a concrete block structure with a drop of 5 feet and a weir width of 12 feet with a stepped slope of 2:1 (H:V), for a total of 67 modular blocks. The unit of payment measurement is defined as the volume of concrete blocks in cubic yards. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$98.42	\$147.63

Scenario 11: Rock Chute

A trapezoidal structure constructed of rock riprap with a geotextile base. These structures are used to stabilize the grade and control erosion in natural or artificial channels, to prevent the formation or advancing of gullies, and to enhance environmental quality and reduce pollution hazards. Applied in areas where the concentration and flow velocity of water require structures to stabilize the grade in channels or to control gully erosion. Cost estimate is based upon a rock chute with a vertical drop of 6.5 feet and a width of 12'. The unit of payment measurement is defined as the volume of rock used in the chute in cubic yards. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$37.07	\$55.60

Scenario 12: Tied Concrete Block Mat

A drop structure placed in a water course constructed of concrete blocks joined by cable or other means to form a flexible mat. These structures are used to stabilize the grade and control erosion in natural or artificial channels, prevent the formation/advancement of gullies, and enhance water quality and reduce pollution hazards. These are generally applied in areas where the concentration and flow velocity of water require structures to stabilize the grade, and vegetation alone will not protect the structure from erosion. The typical structure is 16' wide and removes 5' of grade in the channel with a 4:1 outlet slope. The unit of payment is the area of matting installed and includes inlet and outlet transition areas and

side slopes. All associated earthwork and materials are included in the cost. Required re-vegetation of disturbed areas will use Critical Area Planting (342) or other appropriate seeding practices. Resource concerns addressed: gully erosion, concentrated flow erosion, degraded water quality due to suspended solids.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.00	\$4.51

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Grassed Waterway

Code: 412

Reporting Unit: Acre

Definition:

A shaped or graded channel that is established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet.

Purpose:

- 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.

This practice does not apply where the present watercourse is not seriously eroding.

Scenario 2: Waterway, 25 to 50 sq ft

Typical practice is 1500' long, 12' bottom, 8:1 side slopes, 1.5' depth. A grass waterway that is a shaped or graded channel and is established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet. This practice addresses Concentrated Flow Erosion (Classic Gully & Ephemeral Erosion) and Excessive Sediment in surface waters. Waterway area measured from top of bank to top of bank. Seeding will be completed under the Critical Area Planting (342) Practice Standard with seeding area up to 20% greater than waterway area to account for buffer area along the waterway. Costs include excavation and associated work to construct the overall shape and grade of the waterway. This scenario would apply to Grassed Waterways with a design cross sectional area greater than 25 square feet up to 50 square feet per lineal foot of waterway.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,297.07	\$2,594.13

Scenario 5: Waterway with Side Dikes or Checks

Typical practice is 2000' long, 40' bottom, 6:1 side slopes, 1.6' depth. A grass waterway that is a shaped or graded channel and is established with suitable vegetation to carry surface water at a non-erosive velocity to a stable outlet. Fabric or stone checks are installed every 100 feet along the length of the waterway perpendicular to waterflow and are 2/3 the waterway top width to reduce maintenance and provide temporary protection until vegetation is established. Fabric Checks are installed 18' deep with 12' laid over on the surface. (Alternatively, rock checks or side dikes could be installed). This practice addresses Concentrated Flow Erosion (Classic Gully & Ephemeral Erosion) and Excessive Sediment in surface waters. Waterway area measured from top of bank to top of bank. Seeding will be completed under the Critical Area Planting (342) Practice Standard with seeding area up to 20% greater than waterway area to account for buffer area along the waterway. Costs include excavation and associated work to construct the overall shape and grade of the waterway.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,716.25	\$3,432.51

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Groundwater Testing

Code: 355

Reporting Unit: No.

Definition:

Testing for physical, biological, and chemical characteristics of groundwater in wells or spring developments.

Purpose:

This practice may be applied as part of a conservation management system to determine the quality of a groundwater supply for the following intended uses: irrigation, livestock, fish and wildlife habitat, aquaculture enterprises, or other agricultural uses.

Conditions Where Practice Applies:

This standard applies to water supplies that are used or have potential to be used on farms or ranches.

This practice does not apply to groundwater for human consumption, nor wells for monitoring groundwater hydrology or contamination associated with animal waste storage or treatment installations.

Scenario 1: Basic Water Test

Typical scenario includes the professional testing for nitrates, nitrites, and coliform to confirm well water meets basic water quality standards for consumption by livestock or use in irrigation. Water samples are sent to an EPA or state certified laboratory for testing. This scenario is recommended when water quality is suspected to be acceptable.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$26.62	\$39.92

Scenario 2: Specialty Water Test

Typical scenario includes the professional testing for pesticides, heavy metals, VOC's or other less common substances, in addition to the basic water test items. Tests are intended to confirm well water meets water quality standards for consumption by livestock or use in irrigation. Water samples are sent to an EPA or state certified laboratory for testing. This scenario is recommended when water quality is suspected to be degraded due to a specialized substance.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$111.41	\$167.11

Scenario 3: Full Spectrum Test

Typical scenario includes the professional comprehensive testing for all less common substances, to include: pesticides, heavy metals, VOC's or other less common substances, in addition to the basic water test items. Tests are intended to confirm well water meets water quality standards for consumption by livestock or use in irrigation. Water samples are sent to an EPA or state certified laboratory for testing. This scenario is recommended when water quality is known to be degraded due to a specialized substance but thorough analysis is warranted

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$136.13	\$204.20

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, by surfacing with suitable materials, and/or by installing needed structures.

Purpose:

- To provide a stable, non-eroding surface for areas frequently used by animals, people, or vehicles; and
- To protect and improve water quality

Conditions Where Practice Applies:

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

Scenario 1: Reinforced Concrete with Sand or Gravel Foundation

The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete on a sand or gravel foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns soil erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$156.35	\$234.52

Scenario 2: Rock/Gravel on Geotextile

The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with rock and or gravel on a geotextile fabric foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns of soil erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$21.76	\$32.64

Scenario 3: Rock/Gravel

The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with rock and or gravel to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns of soil erosion and water quality degradation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$9.01	\$13.51
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Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Hedgerow Planting

Code: 422

Reporting Unit: Feet

Definition:

Herbaceous vegetation established in narrow strips perpendicular to the prevailing wind direction.

Purpose:

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

- Reduce soil erosion from wind (in some situations a secondary purpose of water erosion reduction may occur).
- Protect growing crops from damage by wind-borne soil particles.
- Manage snow to increase plant available moisture.
- Provide food and cover for wildlife.

Conditions Where Practice Applies:

This practice applies to cropland, or other land where crops are grown.

This standard includes design information on the location and management of herbaceous wind barriers for their identified uses.

Scenario 1: Bareroot, Machine Plant FI

This scenario is for machine planting of bareroot woody species. Typically installed in or at the edge of cropland or pasture this scenario is used to address Wind Erosion and Inadequate Habitat for Fish and Wildlife resource concerns. Specifically, the establishment of dense vegetation in a linear design can be used to reduce erosion caused by wind and provide for several habitat elements depending on the needs identified in the habitat assessment. Tree rows are spaced 15 feet apart. Depending on design and plant species selection, this scenario can provide: habitat connectivity, food, and cover for wildlife. The 422 standard for wildlife criteria calls for a minimum of two species of native plants. Typical installation involves tillage to prepare the site for planting using Site Preparation (490). Trees and/or shrubs adapted for local climatic and soil conditions are typically planted at 8 foot intervals (this will vary with species selection and density goals). Plant species adapted to the local climatic and soil conditions that address the resource concern will be stated in the specification for the site. There is tremendous overlap between this practice and conservation practice 380 Windbreak/Shelterbelt establishment. The main difference is that conservation practice 380 is exclusively woody plants where practice 422 provides for the use of herbaceous materials. If a fence is needed to facilitate establishment use practice 382, Fence. Seedbed preparation will be completed thru 490, Tree/Shrub Site Preparation.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.41	\$0.57

Scenario 2: Container, Machine Plant FI

This scenario is for machine planting of containerized woody species. Typically installed in or at the edge of cropland or pasture this scenario is used to address Wind Erosion and Inadequate Habitat for Fish and Wildlife resource concerns. Specifically, the establishment of dense vegetation in a linear design can be used to reduce erosion caused by wind and provide for several habitat elements depending on the needs identified in a habitat assessment. Tree rows are spaced 15 feet apart. Depending on design and plant species selection, this scenario can provide: habitat connectivity, food, and cover for wildlife. The 422 standard for wildlife criteria calls for a minimum of two species of native plants. Typical installation involves tillage to prepare the site for planting using Site Preparation (490). Trees and/or shrubs adapted for local climatic and edaphic (pertaining to the soil) conditions are typically planted at 8 foot intervals (this will vary with species selection and density goals). Plant species adapted to the local climatic and edaphic conditions that address the resource concern will be stated in the specification for the site. There is tremendous overlap between this practice and conservation practice 380 Windbreak/Shelterbelt establishment. The main difference is that conservation practice 380 is exclusively woody plants where practice 422 provides for the use of herbaceous materials. If a fence is needed to

facilitate establishment use practice 382, Fence. Seedbed preparation will be completed thru 490, Tree/Shrub Site Preparation.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.48	\$0.68

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/or wildlife habitats by reducing or controlling weed populations.
- Protect soils and control erosion.
- Reduce fine-fuels fire hazard and improve air quality.

Conditions Where Practice Applies:

On 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 Prescribed Burning (338))

Scenario 1: 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$19.35	\$23.22

Scenario 2: Chemical, Wetland

Using ground rigs and hand held equipment to treat herbaceous plants in wetland and riparian areas. Typical area is moderately rolling to gently sloping terrain with moderately deep to deep soils that have herbaceous weed species in the early phases of invasions. Typical unit is 10 acres.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.61	\$12.73

Scenario 3: Mechanical

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, brush 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.29	\$13.55

Scenario 4: Mechanical – Tree Establishment

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, improve ecological condition, and wildlife habitat.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$146.06	\$175.27

Scenario 5: 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 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, or around individual trees, is an example of banding herbicides to control weeds. In order to receive payment, the landowner, at a minimum, must utilize and maintain Integrated Pest Management (IPM) principles including scouting, biological and/or low risk pesticides.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$31.54	\$37.85

Scenario 6: Chemical, Tree Establishment - Post-Emergent Herbicide

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 or around individual trees is an example of banding herbicides to control weeds. In order to receive payment, the landowner, at a minimum, must utilize and maintain Integrated Pest Management (IPM) principles including scouting, biological and/or low risk pesticides.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$39.47	\$47.37

Scenario 7: Biological, Insects

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.57	\$4.28

Criteria:

Use the following criteria to determine which scenario applies:

Chemical, Ground: to be used when a herbaceous plant needs suppressed in an upland setting using herbicide. Common examples include sericia lespedeza and smooth brome. Payment for herbicide applications on “traditional” noxious weeds is not allowed (i.e., musk thistle).

Chemical, Wetland: to be used when a herbaceous plant needs suppressed in a wetland or riparian setting using herbicide resulting in the need for specialized herbicides and where access is more restricted due to site conditions (wet soils, isolated areas, etc.). Common examples include purple loosestrife and phragmites. Payment for herbicide applications on “traditional” noxious weeds as the target species is not allowed (i.e., Canada thistle).

Mechanical: to be used when a mowing treatment is needed to “prepare” the site for another suppression technique such as chemical application or when mowing is needed to control weeds after planting grass or trees. Typically will not be used alone as an adequate method to suppress or eradicate herbaceous weeds except in new grass seedings or tree plantings.

Mechanical, Tree establishment: to be used when tillage (often roto-tilling or multiple passes of plow/disk/harrow) is needed to eradicate grass competition prior to planting trees or shrubs.

Chemical – Tree Establishment - Banding: to be used when a contact herbicide is applied prior to planting trees or shrubs.

Chemical – Tree Establishment – Post-emergent Herbicide: to be used when a selective herbicide is applied on existing trees or shrubs to control weed and/or grass competition.

Biological, Insects: to be used when in done in conjunction with local weed control authority prescription and approval.

Payment Documentation:

NE-CPA-315 – Plan for Herbaceous Weed Control for all scenarios. For Chemical-Trees Broadcast Banding and Chemical-Trees Post Emerge an Integrated Pest Management Plan is required.

Herbaceous Wind Barriers

Code: 603

Reporting Unit: Foot

Definition:

Herbaceous vegetation established in rows or narrow strips in the field across the prevailing wind direction.

Purpose:

- Reduce soil erosion from wind.
- Reduce soil particulate emissions to the air.
- Protect growing crops from damage by wind or wind-borne soil particles
- Enhance snow deposition to increase plant-available moisture.

Conditions Where Practice Applies:

This practice applies to lands where crops or forages are grown.

Scenario 10: Cool Season Annual/Perennial Species (FI)

This scenario describes the implementation of herbaceous barriers to reduce wind velocities and wind-borne particulate matter. In this scenario barriers are composed of annual or perennial vegetation. Plant materials shall be selected for local adaptation and climatic conditions and are resistant to lodging and are non-spreading in their habit. Barriers will be designed as close to perpendicular to prevailing winds as practical. Barrier direction, spacing, and composition needed to achieve the desired purpose shall be designed using the currently approved wind erosion technology.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.06	\$0.07

Criteria:

Payment Documentation:

High Tunnel System

Code: 325

Reporting Unit: Square Foot

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 health and vigor

Conditions Where Practice Applies:

This practice applies where sun or wind intensity may damage crops, or where an extension of the growing season is needed due to climatic conditions. Permanently raised beds may be installed to improve soil condition, fertility, and access, but crops must be grown in the natural soil profile. The practice does not include greenhouses or low tunnel systems that may cover single crop rows.

Scenario 11: Quonset Style High Tunnel

Used for contiguous US states in areas with low or no snowfall. A Quonset-style (round) manufactured frame of tubular steel (30 x 72 ft.) covered with 4-year 6mil plastic. Costs are based on purchase of manufactured kit and landowner installing the structure. Structure must be installed to manufacturer's specifications.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.87	\$3.44

Scenario 12: Gothic Style High Tunnel

Used for contiguous US states in areas with high snowfall. A gothic-style (peaked) manufactured frame of tubular steel (30 x 72 ft.) covered with 4-year 6mil plastic. Costs are based on purchase of manufactured kit and landowner installing the structure. Structure must be installed to manufacturer's specifications.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.73	\$4.48

Criteria:

1. Metal framed type structure at least 6 feet in height with a 6-mil polyethylene cover used to extend the growing season for vegetable and other specialty crops. Crops must be grown in the soil, not in above ground pots.
2. Payment limited to 2,160 square feet per farming operation.
3. Only eligible using pre-manufactured kits. Must be installed to the manufacturer's specifications or guidelines.

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 offsite pesticide risks to water quality from leaching, solution runoff, and adsorbed runoff losses.
- Prevent or mitigate offsite pesticide risks to soil, water, air, plants, animals and humans from drift and volatilization losses.
- Prevent or mitigate onsite 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:

On all lands where pests will be managed.

Scenario 1: Basic IPM for Field Crops

A basic IPM plan with UNL-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 NE Agronomy Technical Note 110 for “Intermediate,” “High” or “Extra High” WIN-PST Final Hazard Ratings).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.22	\$15.33

Scenario 2: Advanced IPM for Field Crops

A comprehensive IPM plan with UNL-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 NE Agronomy Technical Note 110 for “Intermediate,” “High” or “Extra High” WIN-PST Final Hazard Ratings).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$15.15	\$22.73

Scenario 3: Basic IPM for Fruit and Vegetable Production

A basic IPM plan with UNL-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 NE Agronomy Technical Note 110 for “Intermediate,” “High” or “Extra High” WIN-PST Final Hazard Ratings).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$54.28	\$81.43

Scenario 4: Basic IPM for Orchards

A basic IPM plan with UNL-approved pest monitoring techniques and pest thresholds (where available) is applied in Large Scale Orchard/Specialty 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 identified resource concerns) or risk mitigation (e.g. planned pesticides have appropriate mitigation planned from NE Agronomy Technical Note 110 for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$82.84	\$124.26

Scenario 5: IPM for Small Farms

A basic IPM plan with UNL-approved pest monitoring techniques and pest thresholds (where available) is applied in Small Farm/ Diversified Systems (e.g., CSA, organic, etc.) 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 NE Agronomy Technical Note 110 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$331.37	\$497.06

Scenario 6: Risk Prevention IPM

A comprehensive IPM plan based primarily on UNL-approved pest prevention and avoidance techniques is applied to prevent negative impacts on all identified resource concerns. UNL-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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$67.03	\$100.55

Criteria:

1. An Integrated Pest Management plan will be developed and implemented according to FOTG Practice Standard (595) Integrated Pest Management. This would include planned prevention, avoidance, monitoring and suppression techniques,

a risk assessment of the planned suppression techniques, and required pest management mitigation techniques and/or practices.

2. Annual payment for up to three years.
3. A conservation plan must be developed to ensure that this practice is applied during the contract period.
4. Participants may be eligible for other management practice payments on the same land. They are eligible for any needed cost share practices.
5. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.
6. Basic IPM for Field Crops Requires:
 - a. Pest monitoring
 - b. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - c. Risk mitigation for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings
 - d. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Current crop rotation
 - iii. Common pests and the associated economic threshold if available
 - iv. Current pest management strategies including monitoring & suppression techniques
 - v. Risk assessment results
 - vi. Planned mitigation practices and techniques
7. Advanced IPM for Field Crops Requires:
 - a. Pest prevention and avoidance techniques
 - b. Pest monitoring
 - c. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - d. Risk mitigation for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings
 - e. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Current crop rotation
 - iii. Common pests and the associated economic threshold if available
 - iv. Current pest management strategies including prevention, avoidance, monitoring & suppression techniques
 - v. Risk assessment results
 - vi. Planned mitigation practices and techniques
8. Basic IPM for Fruit & Vegetables Requires:
 - a. Pest monitoring
 - b. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - c. Risk mitigation for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings
 - d. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Common pests and the associated economic threshold if available
 - iii. Current pest management strategies including monitoring & suppression techniques
 - iv. Risk assessment results
 - v. Planned mitigation practices and techniques
9. Basic IPM for Orchards Requires:
 - a. Pest monitoring
 - b. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - c. Risk mitigation for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings
 - d. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Common pests and the associated economic threshold if available
 - iii. Current pest management strategies including monitoring & suppression techniques
 - iv. Risk assessment results
 - v. Planned mitigation practices and techniques
10. Basic IPM Small Farm Requires:
 - a. Pest monitoring
 - b. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - c. Risk mitigation for “Intermediate”, “High” or “Extra High” WIN-PST Final Hazard Ratings

- d. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Current crop rotation
 - iii. Common pests and the associated economic threshold if available
 - iv. Current pest management strategies including monitoring & suppression techniques
 - v. Risk assessment results
 - vi. Planned mitigation practices and techniques
- 11. Risk Prevention IPM Requires:
 - a. Pest prevention and avoidance techniques
 - b. Pest monitoring
 - c. Risk assessment of planned suppression techniques (WIN-PST, RUSLE2, WEPS)
 - d. Suppression techniques cannot pose any hazards to identified resource concerns
 - e. A written IPM plan that includes:
 - i. Plan map and soil map of the field(s) where the practice will be applied with sensitive areas identified.
 - ii. Current crop rotation
 - iii. Common pests and the associated economic threshold if available
 - iv. Current pest management strategies including prevention, avoidance, monitoring & suppression techniques
 - v. Risk assessment results

Payment Documentation:

Irrigation Canal or Lateral

Code: 320

Reporting Unit: Feet

Definition:

A permanent channel constructed to convey irrigation water from the source of supply to one or more irrigated areas.

Purpose:

To facilitate the efficient distribution and use of water on irrigated land.

Conditions Where Practice Applies:

- Where a canal or lateral and related structures are needed as an integral part of an irrigation water conveyance system
 - Where water supplies for the area served are sufficient to make irrigation practical for the crops to be grown and the irrigation water application methods to be used
- Conservation Practice Standard Irrigation Field Ditch (388) should be used for on-farm irrigation water conveyance and/or distribution of less than 25 cubic feet per second.

Scenario 1: Irrigation Canal

This scenario is the construction of an Irrigation Canal or Lateral. Typical construction dimensions are 4' wide bottom x 3' deep x 1320' length with a side slope of 2:1.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.11	\$1.66

Irrigation Land Leveling

Code: 464

Reporting Unit: Acre

Definition:

Reshaping the surface of land to be irrigated, to planned lines and grades.

Purpose:

To facilitate the efficient use of water on irrigated land.

Conditions Where Practice Applies:

This standard applies to the leveling of land irrigated by surface or subsurface irrigation systems. The leveling is based on a detailed engineering survey, design, and layout.

Scenario 1: Land Leveling

This is scenario will level a typical 30 acres of irrigated crop land surface to enhance uniform flow of surface water to improve irrigation efficiency using self-propelled scraper equipment and land plane equipment. The typical volume of earth moved is 450 cubic yards per acre.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.37	\$2.05

Irrigation Pipeline

Code: 430

Reporting Unit: Foot

Definition:

A pipeline and appurtenances installed to convey water for storage or application, as part of an irrigation water system.

Purpose:

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

- Conveyance of water from a source of supply to an irrigation system or storage reservoir.
- Reduce energy use.
- Develop renewable energy systems (i.e., in-pipe hydropower).

Conditions Where Practice Applies:

This practice applies to water conveyance and distribution pipelines installed above or below ground.

This practice does not apply to multiple outlet irrigation system components (e.g., surface gated pipes, sprinkler lines, or micro irrigation tubing).

Scenario 1: PVC, by the Pound

Description: Below ground installation of PVC pipeline. Typical practice sizes range from 6-inch to 12-inch. Construct 1,300 feet of 6-inch, pressure rating 80 psi (SDR 51), PVC plastic irrigation pipe (PIP) with appurtenances, installed below ground with a minimum of 2.5 feet of ground cover. The unit is weight of pipe in pounds. 1,300 feet of 6-inch, SDR 51 PVC PIP weighs 1.49 lb/ft, or a total of 1,937 pounds. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, dog-legs (risers), and inline valves. Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

Payment Unit: Pound

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.32	\$2.26

Scenario 3: PVC, 10 Inch, by the Foot

Description: Below ground installation of PVC pipeline. Construct 1,300 feet of 10-inch, pressure rating 80 psi (SDR 51), PVC plastic irrigation pipe (PIP) with appurtenances, installed below ground with a minimum of 2.5 feet of ground cover. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, dog-legs (risers), and inline valves. Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.18	\$7.17

Criteria:

1. Design shall specify pipe size and material requirements. For 8 and 10 inch size requirements regardless of pressure rating, use associated scenarios or by the pound scenario. For all other pipe sizes (example: 6 or 12 inch) use by the pound scenario. It is the DC's option to use either pipe size or pound scenario.
2. Pipe weight shall be calculated using Pipe Weight Calculator Excel spreadsheet found on Water Management Engineering SharePoint found at:
<https://nrsc.sc.egov.usda.gov/st/wntsc/coreteam/engineering/WME/PWC/default.aspx?PageView=Shared>

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

Irrigation Reservoir

Code: 436

Reporting Unit: Acre-Foot

Definition:

An irrigation water storage structure made by constructing a dam, embankment, pit, or tank.

Purpose:

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

- Store water to provide a reliable irrigation water supply or regulate available irrigation flows.
- Improve Water Use Efficiency on irrigated land.
- Provide storage for tail water recovery and reuse.
- Provide irrigation runoff retention time to increase breakdown of chemical contaminants.
- Reduce energy use.
- Develop renewable energy systems (i.e., hydropower).

Conditions Where Practice Applies:

This practice applies to irrigation water storage structures that meet one or more of the following criteria:

- The existing available water supply is insufficient to meet irrigation requirements during all or part of the irrigation season.
- Water is available for storage from surface runoff, stream flow, irrigation canals, or a subsurface source.
- A suitable site is available for construction of a storage reservoir.

This practice applies to planning and functional design of storage capacity, and inflow/outflow capacity requirements for irrigation storage reservoirs. Storage reservoirs shall be planned and located to serve as an integral part of an irrigation system.

This practice applies to reservoirs created by embankment structures or excavated pits to store diverted surface water, groundwater, or irrigation system tail water for later use, or reuse.

The practice also applies to reservoirs created by embankment structures or excavated pits and tanks constructed of concrete, steel, or other suitable materials used to collect and regulate available irrigation water supplies to accomplish the intended purpose.

Scenario 1: Embankment Dam

The reservoir, created by an embankment built across a natural depression, with an 18" diameter principal spillway outlet through the embankment, is controlled by a canal-style gate. Outlet structure is constructed with watertight plastic pipe appropriate for this use, commonly PVC pipe. Outlet can also serve as overflow protection with a 12" diameter standpipe and tee to the 18" pipe. Any watershed runoff will be diverted around reservoir. It will be built with approximately 4,500 cubic yards of on-site material. It will be about 19.9 feet high and 200 feet long and hold approximately 1,000,000 gallons (3 acre-feet). The top of berm will be 10 feet wide and the embankment side slopes will be 2.5 H to 1 V up and down stream.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.54	\$3.82

Scenario 2: Embankment Reservoir Greater Than 30 Acre-Feet

This is a very large embankment reservoir with an 18" diameter drain pipe through the embankment controlled by a canal-type gate. It is designed to accumulate, store, and deliver water by gravity to an open ditch or non-pressurized

pipeline, in excess of 5 cfs. It will have a top width of 12ft and centerline length of embankment of 5,280 feet. Average fill of 10 feet and the side slopes will be no steeper than 3 H to 1 V inside and out. It will be built with approximately 105,000 cubic yards of on-site material. It will have a maximum water depth of 8 feet with 2 feet of freeboard and no auxiliary spillway. Volume is approximately 320 ac-ft (104,500,000 gallons). Critical Area Planting and Mulching is required.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.08	\$3.12

Scenario 3: Excavated Tailwater Pit

This is an excavated pit with a control structure. It is designed to accumulate, store, deliver or regulate water for a surface irrigation system. It will have a bottom width of 20 ft and length of 1,250 feet. The side slopes will be no steeper than 1.5 H to 1 V inside and out. It will be built with approximately 20,000 cubic yards of on-site material. It will have a maximum water depth of 10 feet with 1 feet of freeboard. Volume is approximately 12 ac-ft (3,950,303 gallons).

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.08	\$1.62

Criteria:

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

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 achieve one or more of the following purposes:

- Efficiently and uniformly apply irrigation water and maintain soil moisture for plant growth.
- Prevent contamination of ground and surface water by efficiently and uniformly applying chemicals.
- Establish desired vegetation.
- Reduce energy use.

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.

Micro irrigation 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.

NRCS Conservation Practice Standard, Irrigation System, Sprinkler (442), applies to systems with design discharge of 60 gal/hr. or greater at each individual lateral discharge point.

Scenario 1: SDI (Subsurface Drip Irrigation)

A subsurface drip irrigation system (SDI) with a lateral spacing of 40 inches. This buried drip irrigation system utilizes a thin wall tape with inline emitters at a uniform spacing for the system laterals. The dripperline or tape is normally installed by being plowed in approx. 10-18 inches deep with a chisel shank type plow equipped with tape reels. This type of drip irrigation system utilizes a buried supply manifold with automated zone control valves and a buried flush manifold with manual flush valves. This permanent micro-irrigation system includes an automated filter station, flow meter (functional used meter is usually available for an existing well, so meter cost is excluded), backflow prevention device, automated control box or timer, the thin wall dripperline or tape for laterals, both a supply and a flushing manifold and numerous types of water control valves. This is an all-inclusive system starting with the filter station including all required system components out to the flush valves. The water supply line from the water source to the filter station is an irrigation pipeline (430) and is not included as part of this system.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$563.56	\$1,033.19

Scenario 2: Surface PE, with Emitters, Trees and Shrubs

A micro-irrigation system, utilizing surface PE tubing (can be placed on trellis or above ground) with emitters to provide irrigation for an orchard, vineyard, windbreak, or other specialty crop grown in a grid pattern. The typical system is a

permanent system, installed on a 3 row 1000' windbreak on the ground surface (total of 3000' lf). The windbreak has a plant spacing of 8 feet between trees. This system utilizes emitters at each tree or plant as the water application device, amounting to 375 emitters for this system. This system typically includes a filter system, PE tubing, HDPE or PVC manifolds, emitters, etc. This practice applies to systems designed to discharge < 60 gal/hr at each individual lateral discharge point. Does not include Pump, Power source, Water source (well or reservoir).

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.04	\$1.90

Scenario 3: Surface PE, with Emitters, High Tunnel

A micro-irrigation system, utilizing surface PE tubing (can be placed on trellis or above ground) with emitters to provide irrigation in a seasonal high tunnel used for various vegetables or specialty crops grown in a grid pattern. The typical system is a permanent system, installed in a 30 ft by 72 ft high tunnel, with crop rows spaced at 12" to 18" with narrow alley walkways every other row. This system utilizes emitters at or near each plant as the water application device. This system typically includes a filter system, PE tubing, HDPE or PVC manifolds, emitters, etc. This practice applies to systems designed to discharge < 60 gal/hr at each individual lateral discharge point. Does not include Pump, Power source, Water source (well or reservoir).

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.20	\$0.37

Criteria:

1. The water supply line from the water source to the filter station is an irrigation pipeline (430) and is not included in the payment rate.
2. Payment includes all system components, starting with the filter station, out to the flush valves.
3. Irrigation Water Management 449 is required for the first three years of this practice.
4. All components of the system must meet NRCS standards and specifications.
5. Eligible land – Cropland that has been irrigated 2 of the last 5 years. NOTE: tree and shrub scenario has to meet this 2 of 5 year irrigated requirement

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

Irrigation System, Surface and Subsurface

Code: 443

Reporting Unit: Acre

Definition:

A system in which all necessary earthwork, multi-outlet pipelines, and water-control structures have been installed for distribution of water by surface means, such as furrows, borders, and contour levees, or by subsurface means through water table control.

Purpose:

- Efficiently convey and distribute irrigation water to the surface point of application without causing excessive water loss, erosion, or water quality impairment.
- Efficiently convey and distribute irrigation water to the subsurface point of application without causing excessive water loss or water quality impairment.
- Apply chemicals and/or nutrients as part of a surface irrigation system in a manner which protects water quality.
- Reduce Energy Use.

Conditions Where Practice Applies:

Areas must be suitable for irrigation and water supplies must be adequate in quantity and quality to make irrigation practical for planned crops to be grown and application methods to be used.

Scenario 1: Surge Valve & Controller

This scenario would typically include installation and utilization of a 10-inch surge valve with automated controller (including all appurtenances) and installation labor needed to convert from a conventional surface irrigated system to a surge irrigation system. Typical field size is 80 acres. The surge valve will be used with PVC Gated Pipe or PE Gated Tubing to convey and distribute irrigation water to alternating irrigation sets in a timed surge cycle that results in reduced a surging irrigation application. The surging action increases rate of advance along set length, reduces deep percolation at upper end of field, increases uniformity of application along row length, and on lower intake soils can significantly reduce runoff losses. The result is improved irrigation efficiency, reduced leaching and erosion losses, and conserved energy. This scenario does not include gated pipe or associated practices.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,109.47	\$1,664.20

Scenario 2: Aluminum Gated Pipe

Installation of surface Aluminum gated pipe to efficiently convey and distribute irrigation water in irrigation furrows, borders, or contour levees. A typical scenario would include 1,320 feet of 10-inch Aluminum gated pipe, with 40 inch gate spacing used to irrigate 60 acres. Appurtenances include: gates, couplings, fittings, in-line valves, pressure relief valves, and air vent valves. Does not include flow meters, or a permanent inlet structure with or without filtration.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$97.14	\$145.71

Scenario 3: Polyvinyl Chloride (PVC) Gated Pipe

Installation of surface PVC gated pipe to efficiently convey and distribute irrigation water in irrigation furrows, borders, or contour levees. A typical scenario would include 1,320 feet of 10-inch PVC gated pipe, with 40 inch gate spacing used to

irrigate 60 acres. Appurtenances include: gates, couplings, fittings, in-line valves, pressure relief valves, and air vent valves. Does not include flow meters, or a permanent inlet structure with or without filtration.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$56.25	\$84.38

Criteria:

1. Controller must automatically control irrigation cycles.
2. Irrigation Water Management 449 is required for the first three years of this practice.
3. Structure for Water Control 587, flow meter should be added in conjunction with this practice.
4. Eligible land – Cropland that has been irrigated 2 of the last 5 years.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

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.
- Reduce energy use.

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).

Scenario 2: IWM, Intermediate Technique, 1st Year

This practice includes the installation of electrical soil moisture sensors such as capacitance or resistance sensors that are monitored to determine soil moisture. This scenario includes purchasing soil moisture sensors, installation equipment (probe or auger), and a data logger to log continuous soil moisture data that can be downloaded to a personal computer and associated graphing software. This scenario is intended to be used as a one-time payment for the first year in multiple year IWM contracts. Typical Scenario involves installation of sensors at a single location in a 125 acre field of sprinkler irrigated cropland. Producer periodically monitors soil moisture sensors during the growing season.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$773.52	\$1,160.27

Scenario 3: IWM, Intermediate Technique, Subsequent Years

This practice includes the installation of electrical soil moisture sensors such as capacitance or resistance sensors that are monitored to determine soil moisture. This scenario includes the installation of soil moisture sensors and a data logger(s) to log continuous soil moisture data that can be downloaded to a personal computer and associated graphing software. This scenario is intended to be used as a subsequent payment for multiple year IWM contracts after the monitoring equipment was purchased or is already available. Typical Scenario involves installation of sensors at a single location in a 125 acre field of sprinkler irrigated cropland. Producer periodically monitors soil moisture sensors during the growing season.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$3.25	\$4.60
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Scenario 4: IWM, Advanced Technique

A high intensity irrigation water management system for producers using a checkbook method with advanced methods of determining irrigation water applied, and estimating crop evapotranspiration, monitoring field soil moisture, or monitoring crop temperature stress. Typical methods include flow measurement, daily record keeping, and use of real-time evapotranspiration estimates (such as those provided dedicated weather stations) and/or soil moisture sensors with automated data logging to monitor field soil moisture content and/or crop temperature. For this scenario, 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. Telemetry data is automatically sent to a computer with irrigation software. Irrigator also receives real time data via mobile phone applications. Some data such as total water applied may be entered into computer software manually.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,464.77	\$2,075.09

Criteria:

1. IWM Basic –for center pivots, payment is based on irrigated acres under the mainline of the pivot not to include the area irrigated by an end gun.
 - a. Documentation of management requirements must be maintained each year. This includes a completed NE-ENG-80 or equivalent. Minimum documentation includes crop grown, flow meter readings for each irrigation (beginning and end of system operation cycle), soil moisture condition prior to irrigation, and rainfall amounts.

2. IWM, Intermediate 1st Year–for center pivots, payment is based on irrigated acres under the mainline of the pivot not to include the area irrigated by an end gun.
 - a. Must be applied in first year of the 449 IWM contract, the subsequent years in the contract must have the IWM, Intermediate Subsequent Years scenario applied.
 - b. Allows for the purchase of electrical soil moisture sensors (capacitance, resistance, etc.) that are monitored continuously with a data logger or other automatic monitoring equipment, and installation equipment such as a soil probe. A hand-held sensor reader does not qualify as automatic monitoring equipment. This does not include Tensiometer type sensors.
 - c. At least three sensors shall be installed at each monitoring site to a depth of three feet with one sensor representing each foot of depth.
 - d. Documentation of management requirements must be maintained each year. This includes a completed NE-ENG-80 or equivalent. Minimum documentation includes crop grown, flow meter readings for each irrigation (beginning and end of system operation cycle), sensor data representing soil moisture level (when feasible, graphical data is preferred), and rainfall amounts.
 - e. Contract will include one payment per irrigation system. For example if contract includes two pivots the contract will include two payments. This payment includes record keeping for year one.

3. IWM, Subsequent Years – for center pivots, payment is based on irrigated acres under the mainline of the pivot not to include the area irrigated by an end gun.
 - a. Documentation of management requirements must be maintained each year. This includes a completed NE-ENG-80 or equivalent. Minimum documentation includes crop grown, flow meter readings for each irrigation (beginning and end of system operation cycle), sensor data representing soil moisture level (when feasible, graphical data is preferred), and rainfall amounts.
 - b. Contract will include payment on a per acre basis for years two and three.

4. IWM, Advanced – for center pivots, payment is based on irrigated acres under the mainline of the pivot not to include the area irrigated by an end gun.
 - a. Allows for the purchase or lease of remote soil moisture sensors, including annual subscription fees.
 - b. Lease must include installation, removal, and management assistance from vendor.

- c. If purchased, the vender must provide installation, removal and management assistance for three years (or life of contract).
- d. Documentation of management requirements must be maintained each year. Sensor data showing soil moisture graphs throughout growing season and flow meter readings for each irrigation (beginning and end of system operation cycle).
- e. Contract will include one payment per irrigation system each year for three years.
5. If an EQIP schedule of operations include a waste storage and/or treatment facilities and apply effluent, washwater, wastewater or runoff water via irrigation equipment (i.e., pivot, gravity, volume gun, etc.), the participant must demonstrate compliance with Irrigation Water Management (449) – Basic Scenario on only those acres where effluent is applied by irrigation equipment for a minimum of three years in accordance with an NRCS approved CNMP after completion and implementation of the waste storage and/or treatment structure. (General Criteria I-5)
 - a. NOTE: IWM is not required on crop land if manure (solids, slurry, liquids) is applied via applications hauling/injection equipment, such as solid spreaders, slurry tankers, injection system using a tow line, etc.
6. Eligible land – Cropland that has been irrigated two of the last five years.
7. Implementation required for three years.
8. A conservation plan must be developed to ensure that this practice is applied during the contract period.
9. Participants may be eligible for other management practice payments on the same land. They are eligible for any needed cost share practices.
10. This practice includes measurement of irrigation water applications, rainfall during the growing season, and periodic measurement of soil moisture. This along with crop water use (ET) will be used for decision making to schedule irrigation water application according to the Irrigation Water Management (449) standard requirements.
11. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

1. A completed record keeping worksheet (i.e.: NE-ENG-80, 79A or equivalent)
2. Field notes relating to the implementation and operation of the IWM plan

Lighting System Improvement

Code: 670

Reporting Unit: No.

Definition:

Standard being developed.

Purpose:

Conditions Where Practice Applies:

Scenario 2: Lighting – Replace Existing Lamp with LED Lamp

To install dimmable LEDs to replace incandescent lamps on a one-for-one basis. Light fixtures do not have to be replaced. A typical poultry house has 48 fixtures. LED requirements: minimum 6 Watt, 3700 Kelvin, dimmable, grow-out bulb; industrial grade; suitably protected from dirt accumulation. In high humidity environments or areas subject to wash down, gasketed or weatherproof housings are required to prevent corrosion and premature failure.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.00	\$17.99

Scenario 3: Lighting - Linear Fluorescent

The lighting system consists of a four-foot, three-lamp fixture with a single electronic ballast. The high-efficiency lighting system uses high-efficiency T8 or T5 fluorescent lamps. Associated materials for installation of replacement fixtures are included. Appropriate disposal of existing lamps, ballasts and other materials is required.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$177.43	\$266.15

Scenario 5: Automatic Controller System

The typical scenario consists of an automatic control system installed 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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$140.38	\$210.58

Lined Waterway or Outlet

Code: 468

Reporting Unit: Foot

Definition:

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

Purpose:

- Provide for safe conveyance of runoff from conservation structures or other water concentrations without causing erosion or flooding
- Stabilize existing and prevent future gully erosion
- Protect and improve water quality

Conditions Where Practice Applies:

- Concentrated flows, steep grades, saturated soils, prolonged base flows, seepage, or piping is such that an erosion resistant liner is needed to control erosion
- Use by people or animals precludes vegetation as suitable cover.
- Space limitations require higher velocities to safely pass design flows.
- Soils are highly erosive or other soil or climatic conditions preclude the use of vegetation only for erosion control

Scenario 1: Turf Reinforced Matting, Moderate Stress

Install approximately 46' long trapezoidal (or similar parabolic shape) waterway, with 20' wide bottom, 1.1' depth, and 4:1 side slopes, lined with Turf Reinforced Matting (TRM). The profile includes a 4' long level approach apron, a 32' long section at 12.5% grade (4' drop), and a 10' long level exit apron depressed 1' below outlet channel grade. Ideally, all TRM is placed on an excavated surface, typically immediately upstream of a headcut. Excess excavation is spread in the immediate area. TRM is installed on the bottom and side slopes of the waterway to prevent scour and aid in waterway establishment. Costs include excavation to channel grade, earthfill in transverse approach berm and side berms, earthwork to blend aprons to existing ground, spreading of excess material, and furnishing and installing TRM. TRM is installed by laborers. Required TRM has a moderate allowable stress of less than 12 pounds per square foot in the fully vegetated condition. Unit cost for TRM is assumed to include a surcharge for anchorage and overlap, typically 1' at upstream end, 0.5' at downstream end, side terminations, and 0.5' overlaps; such associated additional quantities are generally not part of the measured quantity for payment.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.88	\$1.32

Scenario 2: Turf Reinforced Matting, High Stress

Install approximately 54' long trapezoidal (or similar parabolic shape) waterway, with 30' wide bottom, 1.3' depth, and 4:1 side slopes, lined with Turf Reinforced Matting (TRM). The profile includes a 4' long level approach apron, a 40' long section at 12.5% grade (5' drop), and a 10' long level exit apron depressed 1' below outlet channel grade. Ideally, all TRM is placed on an excavated surface, typically immediately upstream of a headcut. Excess excavation is spread in the immediate area. TRM is installed on the bottom and side slopes of the waterway to prevent scour and aid in waterway establishment. Costs include excavation to channel grade, earthfill in transverse approach berm and side berms, earthwork to blend aprons to existing ground, spreading of excess material, and furnishing and installing TRM. TRM is installed by laborers. Required TRM has a relatively high allowable stress of at least 12 pounds per square foot in the fully vegetated condition. Unit cost for TRM is assumed to include a surcharge for anchorage and overlap, typically 1' at upstream end, 0.5' at downstream end, side terminations, and 0.5' overlaps; such associated additional quantities are generally not part of the measured quantity for payment.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.18	\$1.78

Scenario 3: Rock Lined, 12 in

Install 300' long by 15' wide by 1.5' deep with 2:1 side slopes trapezoidal or parabolic shaped waterway lined with 12" thick riprap (D100 = 9', Velocity ~ 8 ft/sec). 1/2 the channel is excavated, before excavation for riprap. Excess excavation is spoiled in the immediate area. Riprap is installed over 100% of the width of the waterway to prevent scour. Cost include excavation, spoiling of excess material, geotextile underlayment and installing 9" Rock Riprap. Lined waterway width is measured from top of bank to top of bank. $(9'+3.35'+3.35') \times 300' = 4710$ Square Feet

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.66	\$2.50

Scenario 4: Rock Lined, 24 in

Install 300' long by 15' wide by 1.5' deep with 2:1 side slopes trapezoidal or parabolic shaped waterway lined with 24" thick riprap (D100 = 18', Velocity ~ 11 ft/sec). 1/2 the channel is excavated, before excavation for riprap. Excess excavation is spoiled in the immediate area. Riprap is installed over 100% of the width of the waterway to prevent scour. Cost include excavation, spoiling of excess material, geotextile underlayment and installing 18" Rock Riprap. Lined waterway width is measured from top of bank to top of bank. $(9'+3.35'+3.35') \times 300' = 4710$ Square Feet

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.69	\$5.54

Scenario 5: Concrete

Install 300' long by 15' wide by 1.5' deep with 2:1 side slopes trapezoidal or parabolic shaped waterway lined with concrete. 1/2 the channel is excavated, before excavation for concrete and subgrade material. Excess excavation is spoiled in the immediate area. Concrete is installed over 100% of the width of the waterway to prevent scour. Cost include excavation, spoiling of excess material, 6" of clean sand or gravel subgrade, and 5" reinforced concrete slab. Lined waterway width is measured from top of bank to top of bank. $(9'+3.35'+3.35') \times 300' = 4710$ Square Feet

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.55	\$3.82

Scenario 6: Articulated Concrete Block

Install 300' long by 15' wide (at top) by 1.5' deep with 2:1 side slopes trapezoidal or parabolic shaped waterway lined with articulated concrete block (ACB). 1/2 the channel is excavated, before excavation for ACB and subgrade material. Excess excavation is spoiled in the immediate area. Articulated concrete block is installed over 100% of the width of the waterway to prevent scour. Cost include excavation, spoiling of excess material, 3" of clean sand or gravel subgrade, and 6" height articulated concrete block. Lined waterway width is measured from top of bank to top of bank. $(9'+3.35'+3.35') \times 300' = 4710$ Square Feet

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.57	\$5.36

Scenario 7: Splash Pad

Install a 10'x10', 1' thick rock riprap pad at outlet into streams. Excess excavation is spoiled in the immediate area. Costs include 12" and smaller rock riprap installed. It does not include the cost of the required vegetation. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.30	\$4.95

Payment Documentation:

Livestock Pipeline

Code: 516

Reporting Unit: Foot

Definition:

Pipeline having an inside diameter of eight inches or less.

Purpose:

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

- Convey water from a source of supply to points of use for livestock, wildlife, or recreation;
- Reduce energy use;
- Develop renewable energy systems (i.e., in-pipe hydropower).

Conditions Where Practice Applies:

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

Scenario 1: Shallow or Above Ground Pipeline, Any Diameter

The 1,320 feet of 1 1/4" PE pipe installed above ground or at a 12" depth to supply water for domestic animals. Installation includes all appurtenances and labor. Appurtenances include: couplings, fittings, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.16	\$1.74

Scenario 2: Standard Installation, 2 inch Dia. or Less (KS/NE)

The 1,500 foot 1 1/4" PE pipeline installed at a depth of 48" will meet the needs of domestic animals. This type of installation is only appropriate in the warmer climate of the northern plains region (KS & NE). This item includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. Appurtenances include: fittings, anchors, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.30	\$1.89

Scenario 4: Standard Installation, Greater than 2 inch Dia.

The 5,000 feet of 3" PVC pipeline installed at a depth of 72" will meet the needs of domestic animals. This type of installation is appropriate in the northern plains region. This item includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. Appurtenances include: couplings, fittings, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$1.91	\$2.87
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Scenario 5: Backhoe, 2 inch Dia. or Less

The 2,640 feet 2" PVC pipeline installed at a depth of 60" in rocky conditions to meet the needs of domestic animals. Trencher installation is not possible due to site conditions. This item includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. Appurtenances include: couplings, fittings, expansion joints, anchors, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.42	\$3.63

Scenario 6: Backhoe, Greater than 2 inch Dia.

The 2,640 feet 3" PVC pipeline installed at a depth of 60" in rocky conditions to meet the needs of domestic animals. Trencher installation is not possible due to site conditions. This item includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. Appurtenances include: couplings, fittings, expansion joints, anchors, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.07	\$4.60

Scenario 7: Boring, any Diameter

The 200 feet of 2" PVC pipeline installed by boring through road bed or under streams to meet the needs of domestic animals. Typical trencher or plowing installation is not possible due to site disturbance or environmental concerns. This item includes installation, all materials, appurtenances, and labor required to construct and install the pipeline. Appurtenances include: couplings, fittings, expansion joints, anchors, thrust blocks, gate valves, air release valves, drain valve, and pressure relief valve, and are included in the cost of pipe material. Revegetation is not included.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$29.32	\$43.97

Scenario 8: Rural Water Connection Equipment

The rural water connection includes the 4' manhole, meter, 500' of pipe, valves, and necessary installation for connecting from a rural water pipeline to a livestock distribution pipeline. This item includes installation, all materials, appurtenances, and labor required to construct and install the meter pit. This item does not include the hook-up fees to the rural water system.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,216.34	\$3,859.61

Criteria:

Rural water Connection is used in situations where water will not be supplied by a drilled well (new or existing).
Appropriate pipeline scenario will need to be used for pipeline, in addition.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Mulching

Code: 484

Reporting Unit: Acre

Definition:

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

Purpose:

- Conserve soil moisture;
- Reduce energy use associated with irrigation;
- Moderate soil temperature;
- Provide erosion control;
- Suppress weed growth;
- Facilitate the establishment of vegetative cover;
- Improve soil quality;
- 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.

Scenario 1: 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 (2) tons per acre of straw applied and anchored with light tillage equipment, treader, knifed in, etc.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$225.43	\$338.15

Scenario 2: 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, or straw, and is typically covered on both sides with polypropylene netting. Used to help control erosion and establish vegetative cover.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.10	\$0.16

Scenario 3: Tree and Shrub - Squares

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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.79	\$2.14

Scenario 4: Tree and Shrub - Rolls

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.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.47	\$0.57

Scenario 5: 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 1500 pounds per acre as a slurry by using hydroseeding methods. Used to help control erosion and establish vegetative cover.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,029.75	\$1,544.62

Scenario 6: 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 (2) tons per acre of straw applied through mechanical methods.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$185.84	\$278.76

Payment Documentation

Nutrient Management

Code: 590

Reporting Unit: Acre

Definition:

Managing the amount, source, placement, form, and timing of the application of plant nutrients and soil amendments.

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 ground water 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.

Scenario 268: Basic NM (Organic and Non-Organic)

This scenario describes the implementation of a basic nutrient management system on 40 or more acres of cropland or hayland where there is no manure application. Scenario is applicable on non-organic and organic land. The planned NM system will meet the current Nutrient Management standard (590) and when applicable will also meet NOP regulations. A nutrient budget will be developed for each field based on soil test analysis and University of Nebraska recommendations or crop removal rates. Soil testing will also be completed according to university recommendations. Implementation will result in the proper rate, source, method of placement, and timing of nutrient application. Payment for implementation is to defray the costs of soil testing, analysis, implementation of the nutrient management plan, and recordkeeping. Records demonstrating implementation of the 4 Rights' of the NM criteria (Right Source of Nutrients, Right Time of Application, Right Rate, and Right Method of Application) will be required. These will include current soil test values, type of fertilizer applied, date and method of application, application rates, and crop yields.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.50	\$2.26

Scenario 269: Basic NM with Manure Injection or Incorporation (Organic and Non-Organic)

This scenario describes the implementation of a basic nutrient management system on 40 or more acres of cropland or hayland where all applied nutrient sources (nitrogen, phosphorus, and potassium) are either incorporated using tillage at least 3-4 inches deep or injected into the soil at least 3-6 inches deep (Exceptions for incorporation or injection include: established close grown crops such as wheat or perennial crops such as hay or pasture). This scenario is applicable on non-organic and organic land for all nutrient sources (manure, compost, commercial fertilizers, and organic sources of nutrients). Micro-nutrients may be surface applied. The planned NM system will meet the current Nutrient Management standard (590) and when applicable will also meet NOP regulations. A nutrient budget will be developed for each field based on soil test analysis and University of Nebraska recommendations or crop removal rates. Soil and manure testing will also be completed according to university recommendations. Implementation will result in the proper rate, source, method of placement (incorporation or injection), and timing of nutrient application. Payment for implementation is to defray the costs of soil testing, manure analysis, incorporation or injection of all nutrients, implementation of the nutrient management plan, and recordkeeping. Records demonstrating implementation of the 4 Rights' of the NM criteria (Right Source of Nutrients, Right Time of Application, Right Rate, and Right Method of Application) will be required. These will include current soil test values, manure analyses, type of fertilizer applied, date and method of application, application rates, and crop yields. Soil loss is controlled to the soil loss tolerance criteria or less for the predominant highly erodible soil map unit.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.77	\$16.15

Scenario 270: Small Farm NM (Organic and Non-Organic)

This scenario is for the implementation of a basic nutrient management system on small, often diversified farm systems typically between 0.5-10 acres where manure and/or compost may be utilized either alone or in conjunction with commercial fertilizer. Scenario is applicable on non-organic and organic land. The planned NM system will meet the current Nutrient Management standard (590) and when applicable will also meet NOP regulations. Implementation will result in the proper rate, source, method of placement, and timing of nutrient application. A nutrient budget will be developed for each field, crop block, or crop rotation within a block/field based on soil test analysis, manure and/or compost analysis, and University of Nebraska recommendations or crop removal rates. Soil, manure and compost testing will also be completed according to university recommendations. Payment for implementation is to defray the costs of soil testing, manure and/or compost analysis, implementation of the nutrient management plan, and recordkeeping. Records demonstrating implementation of the 4 Rights’ of the NM criteria (Right Source of Nutrients, Right Time of Application, Right Rate, and Right Method of Application) will be required. These will include current soil test values, manure and/or compost analyses, type of fertilizer applied, date and method of application, application rates, and crop yields.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$76.76	\$115.13

Scenario 271: Basic NM with Manure and/or Compost (Organic and Non-Organic)

This scenario describes the implementation of a basic nutrient management system on 40 or more acres of cropland or hayland where manure and/or compost is utilized either alone or in conjunction with commercial fertilizer. Scenario is applicable on non-organic and organic land. The planned NM system will meet the current Nutrient Management standard (590) and when applicable will also meet NOP regulations. A nutrient budget will be developed for each field based on soil test analysis and University of Nebraska recommendations or crop removal rates. Soil, manure and compost testing will also be completed according to university recommendations. Implementation will result in the proper rate, source, method of placement, and timing of nutrient application. Payment for implementation is to defray the costs of soil testing, manure and/or compost analysis, and implementation of the nutrient management plan and recordkeeping. Records demonstrating implementation of the 4 R's of NM will be required. These will include current soil test values, manure and/or compost analyses, type of fertilizer applied, date and method of application, application rates, and crop yields.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.68	\$4.02

Scenario 272: Enhanced Nutrient Management (Nitrification/Urease Inhibitors, variable rate, etc.)

This scenario is for the implementation of an enhanced nutrient management (NM) system on 40 or more acres of cropland or hayland where either no NM or only a very basic level of NM is being practiced and improves it to address air quality (reduce emissions for N fertilizer) and/or minimize agricultural nonpoint source pollution of surface and groundwater. The planned NM system will meet the current Nutrient Management standard (590) and when applicable will also meet NOP regulations. An enhanced NM system includes such items as split applications, variable rate applications, use of nitrification or urease inhibitors, slow release fertilizers, additional nutrient tests including PSNT (pre-side dress nitrate test), CSNT (corn stalk nitrate test), in-season plant tissue tests, chlorophyll meters, and/or spectral analysis to further refine nutrient applications. A nutrient budget is developed for each field or management zone based

on soil test analysis and University of Nebraska recommendations or crop removal rates. Soil and plant tissue testing will also be completed according to university recommendations. Payment for implementation is to defray the costs of soil testing, any additional costs associated with implementation of the enhanced NM system such as additional testing and analysis, nitrification or urease inhibitors, variable rate application, etc., and recordkeeping. Records demonstrating implementation of the 4 Rights of nutrient management (Right Source of Nutrients, Right Time of Application, Right Rate, and Right Method of Application) will be required. These will include current soil test values, type of fertilizer applied, date and method of application, application rates, and crop yields as well as results of the supplemental nutrient tests or documentation of the practice or practices applied to improve nutrient use efficiency.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$14.95	\$22.43

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.

Scenario 1: Removal and Disposal of Fence, Feedlot

Remove and disposal of all existing fences around a livestock feeding/waste facility by demolition, excavation or other means required for removal. Dispose of all fence materials from the site so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all materials by removal to an approved landfill, wood chipping and land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Fence removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.66	\$2.49

Scenario 2: Removal and Disposal of Fence, Landscape

Remove and disposal of all existing fences by demolition, excavation or other means required for removal. Dispose of all fence materials from the site so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all materials by removal to an approved landfill, wood chipping and land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of the unwanted fence obstruction in order to apply conservation practices such as Upland Wildlife Habitat Management (645) or facilitate the planned land use. Fence removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment and reduce hazards to wildlife.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.49	\$0.74

Scenario 3: Removal and Disposal of Power Lines and Poles

Remove and disposal of power lines and poles thru demolition, excavation or other means required for removal. Dispose of all power lines and poles so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all power lines and poles by removal to an approved location, or reuse location. Remove and dispose all power lines and poles in order to apply conservation practices or facilitate the planned land use. Rocks and or boulders will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.58	\$2.37

Scenario 4: Removal and Disposal of Steel and or Concrete Structures

Remove and disposal of large steel and or concrete structures by demolition, excavation or other means required for removal. Dispose of all steel and or concrete structures so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all steel and or concrete structures by removal to an approved location, or reuse location. Remove and dispose all steel and or concrete structures in order to apply conservation practices or facilitate the planned land use. Steel and or concrete structure removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.12	\$9.18

Scenario 5: Removal and Disposal of Wood Structures

Remove and disposal of wood structures (including large isolated trees) by demolition, excavation or other similar means required for removal. Dispose of all wood structures so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all wood structures by removal to an approved location, landfill, or reuse location. Remove and dispose all wood structures in order to apply conservation practices or facilitate the planned land use. Wood structure removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.20	\$4.79

Scenario 6: Removal and Disposal of Individual Landscape Structures

Remove and disposal of individual landscape structures (windmills, large trees, etc.) by demolition, excavation or other means required for removal. Dispose of all landscape structures so that it does not impede wildlife movement and/or subsequent work or cause onsite or offsite damage. Dispose of all associated materials by removal to an approved location, or reuse location. Remove and dispose all materials in order to apply conservation practices or facilitate the planned land use. Landscape structure removal will address the resource concerns of wildlife collision or avoidance at the landscape level.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.84	\$4.26

Scenario 7: Removal and Disposal of Brush and Trees Less than or Equal to 6 inch Diameter

Remove and dispose of brush and trees predominantly <= 6 inches in diameter by demolition, excavation or other means required for removal. Dispose of all brush and trees so that it does not impede subsequent work or cause onsite or offsite

damage. Dispose of all brush and trees by removal to an approved landfill, wood chipping and or land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of brush and trees in order to apply conservation practices or facilitate the planned land use. Brush and tree removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$535.84	\$803.75

Scenario 8: Removal and Disposal of Brush and Trees Greater than 6 inch Diameter

Remove and dispose of brush and trees predominantly > 6 inches in diameter by demolition, excavation or other means required for removal. Dispose of all brush and trees so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all brush and trees by removal to an approved landfill, wood chipping and or land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of brush and trees in order to apply conservation practices or facilitate the planned land use. Brush and tree removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,001.69	\$1,502.54

Open Channel

Code: 582

Reporting Unit: Number

Definition:

An open channel is a natural or artificial channel in which water flows with a free surface.

Purpose:

Construct, improve, or restore an open channel to convey water required for flood prevention, drainage, wildlife habitat protection or enhancement, or other authorized water management purpose.

Conditions Where Practice Applies:

This standard applies to the construction of open channels or modifications of existing streams or ditches with drainage areas exceeding one (1) mi² (1.6 km²). This standard does not apply to Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPSs) Codes 362, Diversions; 412, Grassed Waterways; 388, Irrigation Field Ditches; 607, Surface Drain, Field Ditch; or 320, Irrigation Canal or Lateral.

Scenario 1: Excavate and Fill

This scenario is the construction or improvement of a channel in which water flows with a free surface. Typical construction dimensions are 3-4' deep x 30' wide bottom x 2000' length with a side slope of 6:1. The practice is used for the restoration of a natural or artificial channel to improve the process and ecological function in a degraded and eroding stream. Excavation and earth fill is required. Conditions are difficult. Difficult conditions include: a location that requires a significant drive off the main road, soils with large rock or difficult clay to excavate, and/or other aspects that create difficulty in excavation compared to similar work in the area. Construction may include vegetation and/or a lightly armored bank toe. This scenario assists in addressing the resource concerns: streambank erosion, sediment deposition, excessive flooding or ponding.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.19	\$1.79

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 3,000. 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.

Scenario 1: Excavated Pond

A low-hazard water impoundment structure on agricultural lands to maintain or improve water quality and to provide water for livestock, fish and wildlife, recreation, fire control, developing renewable energy systems and other related uses. Pond is created solely by excavation and impounds less than 3 feet against the embankment or spoil. Excavated material is spoiled, not placed in a designed embankment. Earthen spillway is constructed as needed. The resource concerns addressed include inadequate livestock water, excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.28	\$1.92

Scenario 2: Excavated Pond with Embankment

A low-hazard water impoundment structure on agricultural lands to maintain or improve water quality and to provide water for livestock, fish and wildlife, recreation, fire control, developing renewable energy systems, and other related uses. Pond is created by excavation and impounds more than 3 feet against the embankment or spoil. Excavated material is placed in a designed embankment. Earthen spillway is constructed as needed, a trickle tube (pipe) is installed. The resource concerns addressed include inadequate livestock water, excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.60	\$2.40

Scenario 3: Embankment Pond, No Principal Spillway

An earthen embankment dam without a principal spillway pipe. A low flow tube of 6 inches or less to reduce saturation of the auxiliary spillway is installed, anti-seep collars or sand diaphragms are not required. A low-hazard water impoundment structure on agricultural land to maintain or improve water quality and to provide water for livestock, fish and wildlife, recreation, fire control, developing renewable energy systems and other related uses. An earthen embankment will be constructed with a principle spillway conduit and earthen auxiliary spillway, as designed. The resource concerns addressed include inadequate livestock water, excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition. Cost estimate is based upon a typical amount of earthfill of 2,000 cubic yards, and 80 feet of pipe 6' PVC pipe. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.49	\$3.74

Scenario 4: Embankment Pond with Less than 24 inch Pipe

An earthen embankment dam with a principle spillway pipe less than 24 inches, anti-seep collars or sand diaphragm, and excavated plunge pool basin. A low-hazard water impoundment structure on agricultural land to maintain or improve water quality and to provide water for livestock, fish and wildlife, recreation, fire control, developing renewable energy systems and other related uses. An earthen embankment will be constructed with a principle spillway conduit and earthen auxiliary spillway, as designed. The resource concerns addressed include inadequate livestock water, excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition. Cost estimate is based upon a typical amount of earthfill of 4000 cubic yards, 90 feet of 18' PVC, pipe with a canopy inlet, and 3 cubic yard sand diaphragm. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.96	\$4.44

Scenario 5: Embankment Pond with Greater than or Equal to 24 inch Pipe

An earthen embankment dam with a principle spillway pipe greater than or equal to 24 inches, anti-seep collars or sand diaphragm, and excavated plunge pool basin. A low-hazard water impoundment structure on agricultural land to maintain or improve water quality and to provide water for livestock, fish and wildlife, recreation, fire control, developing renewable energy systems and other related uses. An earthen embankment will be constructed with a principle spillway conduit and earthen auxiliary spillway, as designed. The resource concerns addressed include inadequate livestock water, excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition. Cost estimate is based upon a typical amount of earthfill of 10,000 cubic yards, corrugated metal drop inlet principle spillway with a 11 ft riser and 100 ft barrel, and 82 Square feet of anti-seep collars. Disturbed areas are protected with permanent vegetative cover. Addresses resource concerns such as soil erosion-concentrated flow erosion and water quality degradation.

Payment Unit: Cubic yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.59	\$3.89

Criteria:

Payment units for excavated pond is the volume of excavated earthwork.

Payment units for Embankment Ponds include all earthfill, including backfill of stripping, cutoff trench, pipe trench etc., as well as fill placed above the original ground surface.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Pond Sealing or Lining, Bentonite Sealant

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

Scenario 1: Bentonite Treatment - Uncovered

Construction of a compacted soil liner, treated with bentonite, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes incorporation of the bentonite with the soil under proper moisture conditions, compaction to the designed liner thickness. Practice implementation may require filter compatibility with the subgrade (graded filter or geotextile).

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$38.07	\$57.10

Scenario 2: Bentonite Treatment - Covered

Construction of a compacted soil liner, treated with bentonite, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation 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. Practice implementation may require filter compatibility with the subgrade (graded filter or geotextile).

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.02	\$30.03

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 impoundments for water conservation and environmental protection.

Conditions Where Practice Applies:

In-place 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.

Scenario 1: Material Haul Less than 1 Mile

Construction of a compacted soil liner, treated with compacted clay, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes compaction of the soil liner under proper moisture conditions to the designed liner thickness, and soil cover to protect the finished liner. Material haul < 1 mile.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.48	\$13.77

Scenario 2: Material Haul, Greater than 1 Mile

Construction of a compacted soil liner, treated with compacted clay, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes compaction of the soil liner under proper moisture conditions to the designed liner thickness, and protection of the finished liner. Material haul > 1 mile.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.51	\$15.02

Scenario 3: Use On-site Material

Construction of a compacted soil liner, using materials available on-site, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes compaction of the subgrade and soil liner under proper moisture conditions to the designed liner thickness using materials available at the construction site.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.64	\$6.77

Scenario 4: Use On-site Material with Soil Cover

Construction of a compacted soil liner, treated with compacted clay, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes compaction of the soil liner under proper moisture conditions to the designed liner thickness, and soil cover to protect the finished liner using materials available at the construction site.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.57	\$5.49

Criteria:

Payment unit includes that portion of the designed liner as well as the required protective soil cover.

Payment Documentation:

Test results taken during construction to confirm adequate moisture/density.

Appropriate post construction test results to confirm adherence to state laws and regulations.

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.

Scenario 1: Flexible Membrane - Uncovered Without Liner Drainage or Venting

Installation of a flexible geosynthetic membrane liner, uncovered, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes a geotextile or soil cushion to protect the liner from subgrade damage.

Payment Unit: Square Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.62	\$6.93

Scenario 2: Flexible Membrane - Uncovered with Liner Drainage or Venting

Installation of a flexible geosynthetic membrane liner, uncovered, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes a geotextile or soil cushion to protect the liner from subgrade damage, and liner drainage or venting.

Payment Unit: Square Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.67	\$8.50

Scenario 3: 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. Practice implementation includes 1 foot of soil cover for liner protection, and a geotextile or soil cushion to protect liner from subgrade damage.

Payment Unit: Square Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.32	\$7.97

Scenario 4: 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. Practice implementation includes 1 foot of soil cover for liner protection, a geotextile or soil cushion to protect liner from subgrade damage, and liner drainage or venting.

Payment Unit: Square Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.36	\$9.55

Criteria:

Payment units include that portion of the liner that is exposed. It does not include liner material placed in anchor trenches.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Pond Sealing or Lining, Soil Dispersant

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

Scenario 1: Soil Dispersant - Uncovered

Construction of a compacted soil liner, treated with a soil dispersant, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation includes incorporation of the dispersant with the soil liner under proper moisture conditions and compaction to the designed liner thickness. Practice implementation may require filter compatibility with the subgrade (graded filter or geotextile).

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.26	\$6.39

Scenario 2: Soil Dispersant - Covered

Construction of a compacted soil liner, treated with a soil dispersant, to reduce seepage from ponds or waste storage impoundment structures. Practice implementation 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. Practice implementation may require filter compatibility with the subgrade (graded filter or geotextile).

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.50	\$5.25

Criteria:

The payment units include the designed liner as well as the required protective soil cover.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Prescribed Burning

Code: 338

Reporting Unit: Acre

Definition:

Applying controlled fire 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.

Scenario 1: Herbaceous Fuel, Small Acreage

Applying a prescribed burn according to a designed burn plan and NRCS Prescribed Burning (338) 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 <160 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 the cost of the burn. Refer to Firebreak (394) standard and cost scenarios).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$15.86	\$19.03

Scenario 2: Herbaceous Fuel - Standard

Applying a prescribed burn according to a designed burn plan and NRCS Prescribed Burning (338) 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 <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 Firebreak (394) standard and cost scenarios).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.01	\$7.21

Scenario 3: Site Preparation

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$34.42	\$41.31

Scenario 4: Level Terrain, Volatile Fuel (Wood) Less than 4 Feet High <640 Acres

Applying a prescribed burn according to a designed burn plan and NRCS Prescribed Burning (338) 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 <640 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 fuels, with high volatile woody fuels <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).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8.33	\$10.00

Scenario 5: Steep Terrain, Volatile Fuels (Wood) Greater than 4 Feet High

Applying a prescribed burn according to a designed burn plan and NRCS Prescribed Burning (338) 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 640 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 >4ft 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).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.02	\$14.42

Criteria:

1. A written burn plan must be reviewed and approved by a certified individual. Specifications for applying this practice shall be prepared for each site and recorded. All necessary permits must be obtained before implementation of the practice.
2. Eligible Land - Grassland, wildlife land or forestland. On grasslands, there must be adequate grass present so that follow-up reseeding will not be necessary.
3. Site Preparation scenario is appropriate on forested sites to prepare the site for planting and/or seeding or following implementation of Conservation Practice 666 – Forest Stand Improvement to either eliminate competition and debris on the forest floor to promote natural regeneration.

Prescribed Grazing

Code: 528

Reporting Unit: Acre

Definition:

Managing the harvest of vegetation with grazing and/or browsing animals.

Purpose:

This practice may be applied as a 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.
- Manage fine fuel loads to achieve desired conditions.

Conditions Where Practice Applies:

This practice applies to all lands where grazing and/or browsing animals are managed.

Scenario 1: Small Ranch Unit

Design and implementation of a grazing system on small pasture less than 320 acres that will enhance rangeland health and ecosystem function as well as optimize efficiency and economic return through monitoring (ex: photo points, stubble height after grazing, etc.) and record keeping. Beginning ranchers implementing an initial grazing system on small ranchettes.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$17.18	\$25.76

Scenario 2: Range, 3 – 6 Pastures

Design and implementation of a grazing system using a minimum of 3, and not more than 6, pastures in rotation that will enhance rangeland health and ecosystem function as well as optimize efficiency and economic return through monitoring (ex: trend, composition, production, etc.), and record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.44	\$5.15

Scenario 3: Range, 7 or More Pastures

Design and implementation of a grazing system, using a minimum of 7 pastures in rotation, that will enhance rangeland health and ecosystem function, as well as optimize efficiency and economic return through monitoring (ex: trend, composition, production, etc.), and record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.70	\$7.05

Scenario 4: Conversion Non – Irrigated (FI)

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 (ex: photo points, stubble height after grazing, etc.) and record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$14.46	\$19.94

Scenario 5: 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 (ex: trend, composition, production, etc.), record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.46	\$8.19

Scenario 6: Range, Greater than 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 (ex: trend, composition, production, etc.), record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.94	\$10.41

Scenario 7: Habitat Mgt., 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).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$6.43	\$9.64
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Scenario 8: Livestock Deferment (FI)

Defer livestock grazing for a 12 month period to allow for regrowth and recovery to occur on a 40 acre 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$27.56	\$28.05

Scenario 9: Pasture Standard

Design and implementation of a grazing system that will enhance pasture condition and ecosystem function as well as optimize efficiency and economic return through monitoring (ex: photo points, stubble height after grazing, etc.) and record keeping.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.71	\$8.56

Scenario 10: Cover Crop/Aftermath

Design and implementation of a grazing system using multiple fields of cover crops or cover crops in combination with crop aftermath. Use of these crop fields will provide additional forage and relieve pressure on rangeland fields, thereby enhancing rangeland health and ecosystem function as well as optimizing efficiency and economic return through monitoring (ex: trend, composition, production, etc.), and record keeping. This grazing will typically occur in the fall. If the grazing occurs on cover crop that is being used as part of pollinator system the field cannot be grazed until after the honey bees are moved from the area which is usually early September.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.87	\$5.81

Criteria

Land Eligibility:

To be eligible for this payment:

- The current or planned land use is rangeland or pastureland with the exception of the cover crop/aftermath scenario.
- Conservation practices that facilitate a planned grazing system must be installed through the EQIP contract with the following exceptions: Conversion, non-irrigated, cover crop/aftermath and livestock deferment scenarios.
- Facilitating practices include fence, livestock well, pipeline and /or livestock watering facility.
- A management plan is being implemented. This includes conversion from cropland to range or pastureland, incorporation of grazing cover crops into the crop rotation, a change from season long continuous management to a planned grazing system or incorporation of 12-month deferment into the grazing system.

Additional Criteria:

- a. Small Ranch Unit – Beginning ranchers implementing an initial grazing system on small operations (<320 acres).
- b. Range, 3-6 pastures – Grazing system implemented consists of 3-6 pastures grazed multiple times during the growing season in a planned rotation.
- c. Range, 7 or more pastures – Grazing system implemented consists of 7 or more pastures grazed multiple times during the growing season in a planned in a rotation.
- d. Range, 30-73% rest – Grazing system implemented results in 30-73% deferment and are grazed once during the growing season (April 1 – October 31).
- e. Range, > 73% rest – Grazing system implemented results in more than 73 percent deferment and pastures are grazed once during the growing season (April 1 – October 31).
- f. Habitat management, Grouse – Grazing management system implemented which results in enhanced habitat for sharptail grouse or greater prairie chicken. Grazing plan will be designed in conjunction with a wildlife habitat plan developed by Wildlife Biologist.
- g. Livestock Deferment – 12 month grazing deferment (rest) will be incorporated into the rotation. A minimum of 20% of the acres will be deferred each year and a different pasture will be deferred each year. Only the acres being deferred each year are eligible for payment and the different acres will be deferred each year.
 - a. If the land is currently managed as season-long continuous use, the acres not being deferred are eligible for the appropriate grazing system payment.
 - b. Use the scenario when the deferment is an annual activity in the grazing system. When deferment is an occasional practice for recovery after drought, wildfire or prescribed burn or before a prescribed burn to accumulate fuel, use CPS 472 – Access Control.
- h. Pasture Standard – Additional practices (interseeding, nutrient management, pest management) may be needed to produce an increase in pasture condition score.

A prescribed grazing plan will be developed in accordance with the Prescribed Grazing (528) practice and the 528-Design Procedures on all management practice payment acres.

Payment Documentation:

An annual status review on the management practice payment acres will be conducted by NRCS with the producer to assess progress toward the resources objectives. The producer will provide documentation regarding class, number, average weights of livestock, dates each pasture was grazed on NE-ECS-64 (found in Nebraska Prescribed Grazing Design Tool) or equivalent and photos of key areas in each pasture receiving the management practice payment.

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, 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
- Improvement of 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.

Scenario 1: Irrigation, Modify Pump

This scenario includes the modification and/or replacement of vertical turbine pumps in new or existing active wells when done in conjunction with an irrigation conversion practice to ensure energy and water savings are realized. This includes an inventory of existing pump data and performing a pump test if sufficient performance data of the existing pump cannot be provided. This scenario includes all materials, equipment and labor to test and repair the inner column of the pump assembly and rebowling.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10,406.44	\$15,609.67

Scenario 2: Irrigation, Submersible or Booster

This scenario includes the installation of a submersible pump and motor in a new or existing active well, or from surface water source, when done in conjunction with an irrigation conversion practice to ensure energy and water savings are realized. This scenario also includes the installation of an electric-powered centrifugal pump serving multiple pump systems for pressurizing a medium-sized (600 gpm and 50 psi) sprinkler system.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,462.27	\$5,193.40

Scenario 3: Irrigation, Variable Frequency Drive

This is an installation of electrical and electronic components designed to vary the frequency of the voltage to vary the speed of an electric motor in an irrigation system. This directly affects pressure and flowrate. This would give the operator the flexibility to operate several systems separately or at the same time.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$9,423.02	\$11,307.62

Scenario 4: Irrigation, Surface Water

This scenario includes the installation of an electric motor and pump with surface water (such as an irrigation canal) as the water source. This is done in conjunction with an irrigation conversion practice to ensure energy and water savings are realized. This scenario includes all materials, equipment and labor to install the pump and motor, including intake screens.

Payment Unit: Brake Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5,516.84	\$8,275.26

Scenario 5: Livestock, Manure Transfer

Pump and accessories to move manure from storage location to manure distribution site/equipment. Part of a animal waste management system.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8,057.27	\$12,085.91

Scenario 6: Livestock, with Pressure Tank, Equal to 0.5 HP

A submersible electric-powered pump, equal to or less than 0.5 HP is installed in a well or structure. It is used to provide water for livestock as part of a prescribed grazing system. Submersible pump installed to deliver stockwater from a well or waterbody to a watering facility. Installation includes drop pipe, pump, and all necessary appurtenances and includes a pressure tank.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,524.05	\$2,286.07

Scenario 7: Livestock, With Pressure Tank Low HP

A submersible electric-powered pump, greater than 0.5 HP and less than 2 HP is installed in a well or structure. It is used to provide water for livestock as part of a prescribed grazing system. Submersible pump installed to deliver stockwater from a well or waterbody to a watering facility. Installation includes drop pipe, pump, and all necessary appurtenances and includes a pressure tank.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,129.37	\$3,194.05

Scenario 8: Livestock, With Pressure Tank High HP

Typically this is a system that requires a 1.5 - 2 HP submersible electric-powered pump installed in a well or structure. It is used for watering livestock as part of a prescribed grazing system. Submersible pump installed to deliver stockwater from a well or waterbody to a watering facility. Installation includes drop pipe, pump, and all necessary appurtenances and includes a pressure tank.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$975.44	\$1,463.16

Scenario 9: Livestock, Without Pressure Tank HP

A 1 HP submersible electric-powered pump is installed in a well or structure. It is used for watering livestock as part of a prescribed grazing system. Submersible pump installed to deliver stockwater from a well or waterbody to a watering facility. Installation includes drop pipe, pump, and all necessary appurtenances. Installation without pressure tank is typically used during warm seasons.

Payment Unit: Horsepower

Payment Schedule:

EQIP-General	EQIP-General-HU
\$697.02	\$1,045.53

Scenario 10: Windmill – Powered Pump

A windmill is installed in order to supply a reliable water source for livestock and/or wildlife. The windmill includes the tower, concrete footings, wheel blade unit, sucker rod, down pipe, gear box, pump, plumbing, and well head protection concrete pad. The typical scenario will be a windmill system with an 8 ft diameter mill and 27-foot tower which is pumping from a 100-foot well. As a result of installing this windmill, resource concerns of inadequate stock water, plant establishment, growth, productivity, health, and vigor, and water quantity can be addressed.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,516.89	\$5,275.34

Scenario 11: Solar-Powered Pump, 0.5 HP

The typical scenario assumes installation of a submersible solar-powered pump in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all appurtenances. Grazing - Livestock exclusion from surface water will result in improved surface water quality and reduced erosion. Irrigation - energy consumption will be reduced and the increased pressure and flow rates will improve irrigation efficiency.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,997.13	\$4,495.70

Scenario 12: Solar-Powered Pump, 1 HP

The typical scenario assumes installation of a submersible solar-powered pump in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all appurtenances. Grazing - Livestock exclusion from surface water will result in improved surface water quality and reduced erosion. Irrigation - energy consumption will be reduced and the increased pressure and flow rates will improve irrigation efficiency.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5,205.77	\$7,808.66

Scenario 13: Solar-Powered Pump, 2 HP

The typical scenario assumes installation of a submersible solar-powered pump in a well or a live stream. The installation includes the pump, wiring, drop pipe, solar panels, mounts, inverter, and all appurtenances. Grazing - Livestock exclusion from surface water will result in improved surface water quality and reduced erosion. Irrigation - energy consumption will be reduced and the increased pressure and flow rates will improve irrigation efficiency.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$9,582.53	\$14,373.79

Scenario 14: Livestock, Variable Frequency Drive

This is an installation of electrical and electronic components designed to vary the frequency of the voltage to vary the speed of an electric motor in a livestock watering system to provide a constant pressure and flow rate. This would give the operator the flexibility to operate several systems separately or at the same time.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4,738.56	\$7,107.84

Scenario 15: Wind Turbine - Powered Pump, 1.5 HP

The typical scenario assumes installation of a submersible pump powered by a wind turbine in a well or a live stream. The installation includes the pump, wiring, drop pipe, wind turbine, mounts, inverter, and all appurtenances. Grazing - Livestock exclusion from surface water will result in improved surface water quality and reduced erosion. Irrigation - energy consumption will be reduced and the increased pressure and flow rates will improve irrigation efficiency.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,795.12	\$2,692.69

Criteria:

1. Irrigation, Modify Pump – rebowling shall be done in conjunction with practice 442 or 441 to provide required operating pressure to efficiently operate the irrigation system. Limit one per irrigation system.

- a. A pump test or verification of pump bowls including a pump curve is required to verify that current pump will not provide sufficient or excessive pressure for the new system.
2. Irrigation, Submersible or Booster – should be used when a vertical turbine pump will not be providing the required pressure to operate the system. Limit one per irrigation system.
 - a. Horsepower of the motor will determine payment total.
3. Variable Frequency Drive – eligible when a corner arm will be used on a pivot, or variable flow rates or pressures will be required from the irrigation system.
 - a. Horsepower of the motor will determine payment total.
4. Irrigation, Surface Water – eligible when primary source of water will be canal or ditch. Includes pump and motor to deliver required flow rate and pressure to irrigation system.
 - a. Horsepower of the motor will determine payment total.
5. Pumping Plant [new livestock wells]
 - a. FOTG Practice – Pumping Plant (no) (533) Practice Schedule Payment Rate.
 - b. Includes installation of windmill and appurtenances, an electric pump and appurtenances, or a solar panel with appurtenances for supply of water for a planned grazing system.
 - c. Applies to new planned grazing systems only.
 - d. This is not a payment for above ground or underground electrical supply lines.
 - e. Installation of pumping plant into an irrigation well which is being converted to a livestock well is not eligible for payment.
 - f. Pumping plants cannot be installed into existing livestock wells
6. Pumping Plant [Irrigation wells]
 - a. FOTG Practice – Pumping Plant (no) (533) Practice Schedule Payment Rate.
 - b. Single payment for existing irrigation well(s)/appurtenances modification or new irrigation well(s)/appurtenances installation to supply the required water pressure and volume as part of an irrigation system efficiency improvement (for 441 and 442 only).
 - c. Irrigation well must serve acres previously irrigated using a groundwater well.
 - d. A groundwater well must be the primary source of water.
 - e. Management practice payments may be earned upon completion of various combinations of the work described below and upon receipt of billing documentation for such materials and services (Note – the EQIP practice payment schedule management practice payment amount is not based on the cost for motors, power units, drive-trains, electrical service or upgrades, generators, gear heads, chemigation valves, foundations, etc.):
 - A. Pumping Plant Modification for Existing Well:
 - i. Pump test.*
 - ii. Removal of gear head/electrical components.
 - iii. Removal (pulling) column/pump.
 - iv. Column reconditioning.
 - v. Bowl assembly removal, bowl assembly replacement, bowl assembly reconditioning, and/or bowl additions to existing assembly.
 - vi. Installation of reconditioned or new bowl assembly and column.
 - vii. Reinstallation of gear head/electrical components.
 - viii. Installation of Booster Pump and appurtenances to existing well(s).
 - ix. Test Pump following modifications.
 - x. Impeller, Gear Ratio (pulley), and/or Motor RPM adjustments.*
7. Pumping Plant Installation for a New Well:

- a. Installation of bowl assembly, column, and pump.
- b. Installation of gear head and electrical components.
- c. Installation of Booster Pump and appurtenances to well(s).
- d. Test Pump following modifications.
- e. Impeller, Gear Ratio (pulley), and or motor RPM adjustments.

* Performance of a pump test followed by no modification to an existing well or installation of a new well or followed only by Impeller, Gear Ratio, and/or Motor RPM adjustment does not qualify for the management practice payment.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

Range Planting

Code: 550

Reporting Unit: Acre

Definition:

Establishment of adapted perennial or self-sustaining vegetation such as grasses, forbs, legumes, shrubs, and trees.

Purpose:

- Restore a plant community similar to the Ecological Site Description (ESD) reference state for the site 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.

Scenario 1: Native, Standard Prep

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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$123.42	\$185.13

Scenario 2: 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$165.37	\$227.08

Scenario 3: Native, Heavy Prep

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 (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$131.51	\$197.26

Scenario 4: Native, Heavy 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 MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$173.46	\$239.22

Scenario 5: 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 (ex: 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 when hives are in the area. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$193.09	\$268.65

Scenario 6: 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 NATIVE SPECIES IS CHOSEN TO SPECIFICALLY BENEFIT WILDLIFE (ex: 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 when hives are in the area. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$154.02	\$197.46
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Scenario 9: Saline FI

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 by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or broadcasting.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$211.46	\$234.76

Criteria:

Use the following criteria to determine which scenario applies:

1. Native Standard Prep – to be used for a typical native planting of grasses and native forbs for the purpose of grazing or wildlife habitat where species composition will generally range from 5 to 25 species. Use this scenario when no seedbed preparation is required prior to drilling the seed (i.e., seeding into clean crop stubble or site prep was paid through a different practice – 315, 338, etc.).
2. Native Heavy Prep – to be used for a typical native planting of grasses and native forbs for the purpose of grazing or wildlife habitat where the species composition will generally range from 5 to 25 species. Use this scenario when one or more site preparation techniques (i.e., tillage) are used prior to drilling the seed and are not being paid through another practice. Consider use of other payment scenarios under other conservation practice standards when needed to properly complete site prep. For example, use 315 Chemical Upland if an additional herbicide application is required to adequately suppress existing vegetation prior to seeding.
3. Native Wildlife or Pollinator – to be used only when the planting is diverse (greater than 20 species of forbs) and includes exclusively native grasses and forbs. If local ecotype, native seed is included in the mixture, consult State Wildlife Biologist to address necessary seed testing and composition requirements prior to planning and implementation. For greater flexibility in design regarding the grass to forb ratio, the use of Conservation Practice Standard 327 Conservation Cover is appropriate.
4. Saline – to be used only in saline or sodic areas.

When the planting has a wildlife habitat purpose and the seed mixture is designed accordingly, include the appropriate conservation practice standard into the Conservation Plan to address the technical requirements. Examples include 645 Upland Wildlife Habitat Management for general wildlife seedings and pollinator plantings or 643 Restoration and Management of Declining Habitats for prairie restorations.

Payment Documentation:

CPA-8 Job Sheet for Grass Seeding

Residue and Tillage Management, No Till

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/rill erosion.
- Reduce wind erosion.
- Improve soil organic matter content.
- Reduce CO₂ losses from the soil.
- Reduce energy use.
- 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.

Scenario 9: 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. This involves managing the amount, orientation and distribution of crop and other plant residue on the soil surface year round while limiting soil-disturbing activities used to grow and harvest crops. The practice is used to reduce sheet and rill erosion, reduce wind erosion, improve soil quality, reduce CO₂ losses from the soil, reduce energy use, increase plant available moisture and provide food and escape cover for wildlife. The no-till/strip-till system includes chemical weed control (rather than cultivation) and may also include a period of no-till fallow. System is applicable for both irrigated and non-irrigated systems as well as organic and non-organic operations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$9.80	\$14.70

Criteria:

1. Implementation required for three years.
2. Documentation of management requirements must be maintained for each year.
3. Eligible land – on cropland where entire crop rotation will be continuous no-till with significant changes from the current system. No tillage of any kind, including row crop cultivation, will be allowed. Strip tillage systems are not eligible for management practice payments. If the existing crop rotation includes no-till crops, that part of the crop rotation is not eligible for management practice payments. For these rotations only the crops that were not previously no-tilled are eligible for payment for up to three years.
4. Producers who are currently applying no-till on other fields are ineligible.
5. A conservation plan must be developed to ensure that this practice is applied during the contract period.
6. Participants may be eligible for other management practice payments on the same land. They are eligible for any needed cost share practices.

7. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.

Payment Documentation:

Restoration and Management of Rare and 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 that previously or currently support the rare or declining habitat targeted for restoration or management.

Scenario 2: Monitoring and Management, with Foregone Income

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 planning 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 livestock utilization, 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. Treatment associated with this practice or facilitating practices will require foregone income. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan. Includes foregone income.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$29.99	\$30.40

Criteria:

This conservation practice and scenario for Monitoring and Management, with Foregone Income is intended for use only when an area that is commonly used for livestock grazing or haying of forage is left idle for an entire calendar year to provide a specific purpose. For example, a rare or endangered plant is allowed to flower and produce seed. Consult with the State Wildlife Biologist to determine if this scenario is applicable for the intended purpose and that proper steps are taken to document the monitoring and management to be applied.

Payment Documentation:

Riparian Forest Buffer

Code: 391

Reporting Unit: Acre

Definition:

An area 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 stream banks or shorelines.

Scenario 1: Direct Seeding FI

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 3000 seeds per acre. Resource concerns to be addressed are Soil Erosion - excessive bank erosion; Water Quality - excess sediment and organics in surface waters and elevated water temperature; Degraded Plant Condition - inadequate structure and composition; and Inadequate Habitat for Fish and Wildlife - habitat degradation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$711.59	\$793.07

Scenario 2: Bare-Root, Machine Planted FI

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 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 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 3000'. Tree shelters will be placed on the hardwoods and evergreens.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,090.34	\$1,246.23

Scenario 3: Small Container, Machine Planted FI

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 3000'. Tree shelters will be placed on hardwoods and evergreens.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,761.41	\$2,051.51

Criteria:

The payment scenario for “Small Container, Machine Plant” is intended to address situations where small “potted” stock are used including hardwoods grown using the “root prune method” to increase root mass and subsequent survival. If a significant percentage >33% of the stock is small container stock, use this scenario.

For forest buffers with an inordinate high density of trees and shrubs per acre, consider making payment using the 612 Tree/Shrub Establishment payment scenarios where payment is provided by tree rather than by acre. In that instance, include the 391 Riparian Forest Buffer in the CPO as non-cost share to address the technical requirements of the standard.

Payment Documentation:

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.

Purpose:

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

- Provide or improve food and cover for fish, wildlife; and livestock;
- Improve and maintain water quality;
- Establish and maintain habitat corridors;
- Increase water storage on floodplains;
- Reduce erosion and improve stability to stream banks and shorelines;
- Increase net carbon storage in the biomass and soil;
- Enhance pollen, nectar, and nesting habitat for pollinators;
- Restore, improve, or maintain the desired plant communities;
- Dissipate stream energy and trap sediment;
- Enhance stream bank protection as part of stream bank soil bioengineering practices.

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 stream bank stability is adequate to support this practice.

Scenario 1: Native Species

This scenario addresses inadequate herbaceous plant community function or diversity within the specific transitional zone between terrestrial and aquatic habitats in rangeland, pasture, cropland, and forest where natural seeding methods and/or management is unlikely to improve the plant community within a reasonable time period. This scenario applies to work not covered under NRCS Conservation Practice Range Planting (550), Forage and Biomass Planting (512), Critical Area Planting (342), Filter Strip (393), Restoration and Management of Rare and Declining Habitats (643), Streambank and Shoreline Protection (580), Vegetated Treatment Area (635), Wetland Enhancement (659), or Wetland Restoration (657). The typical setting for this scenario is usually a narrow strip between the aquatic and terrestrial habitats subject to intermittent flooding and saturated soils where the existing plant community has been disturbed, destroyed, or the species diversity is unable to provide proper function and/or adequate habitat. 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, the Herbaceous Weed Control (315) practice 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$98.74	\$118.49

Scenario 2: Native Species with Foregone Income

This scenario addresses inadequate herbaceous plant community function or diversity within the specific transitional zone between terrestrial and aquatic habitats in rangeland, pasture, cropland, and forest where natural seeding methods and/or management is unlikely to improve the plant community within a reasonable time period. This scenario applies to work not covered under NRCS Conservation Practice Range Planting (550), Forage and Biomass Planting (512), Critical Area Planting (342), Filter Strip (393), Restoration and Management of Rare and Declining Habitats (643), Streambank and Shoreline Protection (580), Vegetated Treatment Area (635), Wetland Enhancement (659), or Wetland Restoration (657). The typical setting for this scenario is a narrow strip between the aquatic and terrestrial habitats, subject to intermittent flooding and saturated soils, where the existing plant community has been disturbed, destroyed, or the species diversity is unable to provide proper function and/or adequate habitat. 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, the Herbaceous Weed Control (315) practice 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$126.71	\$146.45

Criteria:

The following criteria should be used to determine which of the payment scenarios applies:

1. Native Species is to be used when for a typical conversion of non-native or undesired vegetation to a seed mixture is primarily native grasses and includes introduced legumes and/or native forbs.
2. Native Species with Foregone Income includes the above circumstance along with forgone income for a site that was routinely grazed prior to the conversion to a more desirable vegetation.

Payment Documentation:

Roof Runoff Structure

Code: 558

Reporting Unit: Number

Definition:

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

Purpose:

This practice may be applied as a part of a resource management system to improve water quality, reduce soil erosion, increase infiltration, protect structures, or increase water quantity

Conditions Where Practice Applies:

This practice applies where Roof runoff structures are a component of an overall resource management system; roof runoff needs to be diverted away from structures or contaminated areas; there is a need to collect, control, and transport runoff from roofs to a stable outlet; or roof runoff is collected and used for other purposes.

Scenario 1: Roof Gutter

A roof runoff structure, consisting of gutter(s), downspout(s), and appropriate outlet facilities on a 200 feet long building by 10 feet tall side walls. Used to keep roof clean water runoff uncontaminated and provide a stable outlet to ground surface. Facilitates waste management and protects environment by minimizing clean water additions to waste systems and addresses water quality concerns.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.24	\$3.35

Payment Documentation:

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 provide a roof or cover for:

- Water quality improvement;
- Diversion of clean water from animal management areas (i.e., barnyard, feedlot, or exercise area) and/or waste storage facilities;
- Capture of biogas for energy production;
- reducing net effect of greenhouse gas emissions;
- Air quality improvement and odor reduction.

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.

Scenario 1: Hoop Structure – Roof

A flexible membrane or fabric-like roof placed on a steel truss hoop-like supports and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.90	\$4.35

Scenario 2: Timber or Steel Sheet – Roof

A timber framed structure without enclosing sidewalls with a timber or steel 'sheet' roof and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.27	6.40

Scenario 3: 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. This scenario does not include the flare to convert methane to carbon dioxide.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.53	0.79

Scenario 4: 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. This scenario includes the flare to convert methane to carbon dioxide.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.40	\$2.11

Criteria:

Roofs and covers must be included as a separate item for use with covered waste storage, animal mortality, or composting facilities.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Sediment Basin

Code: 350

Reporting Unit: Number

Definition:

A basin constructed with an engineered outlet, formed by an embankment or excavation or a combination of the two.

Purpose:

To capture and detain sediment laden runoff, or other debris for a sufficient length of time to allow it to settle out in the basin

Conditions Where Practice Applies:

This practice applies to construction sites and lands disturbed by natural disasters:

- Where physical conditions or land ownership does not allow treatment of a sediment source by the installation of erosion-control measures.
- Where a sediment basin offers the most practical solution.
- Where failure of the basin will not result in loss of life, damage to homes, commercial or industrial buildings, main highways or railroads; or in the use of public utilities.
- The product of the storage times the effective height of the dam is less than 3,000. 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 35 feet or less. 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.

Scenario 1: Excavated Basin

A basin constructed by excavation in an existing drainage way on agricultural, urban, or construction sites for the purpose of trapping sediment to preserve the capacity of reservoirs, ditches, canals, diversions, waterways and streams and to prevent undesirable deposition on bottom lands and other developed lands. The sediment basin is created by excavation and impounds less than 3 feet against any embankment or spoil. Excavated material is spoiled, not placed in a designed embankment. Earthen spillway is constructed as needed. Resource concerns addressed include excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition. Surface water causes the sediment (and potentially pesticides and nutrients) to be transported into the riparian areas and water bodies downstream. The typical sediment basin has a drainage area of 5 acres.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.22	\$3.34

Scenario 2: Embankment Basin

A sediment basin constructed with a low hazard class earthen embankment in an existing drainage way on agricultural, urban, or construction sites for the purpose of trapping sediment to preserve the capacity of reservoirs, ditches, canals, diversions, waterways and streams and to prevent undesirable deposition on bottom lands and other developed lands. The sediment basin is created by a compacted earth embankment and impounds more than 3 feet of water against the embankment. Resource concerns addressed include excessive suspended sediment and turbidity in surface water, damage from sediment deposition, and reduced capacity of conveyances by sediment deposition. Surface water causes the sediment (and potentially pesticides and nutrients) to be transported into the riparian areas and water bodies downstream. The typical sediment basin has a drainage area of 5 acres.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.89	\$2.84

Criteria:

Payment units include the appropriate volume of Excavation or Earthfill required to install the practice.

Payment Documentation:

Shallow Water Development and Management

Code: 646

Reporting Unit: Acre

Definition:

The inundation of lands to provide habitat for fish and/or wildlife.

Purpose:

To provide habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians and other species that require shallow water for at least a part of their life cycle. **Conditions Where Practice Applies:**

On lands where water can be impounded or regulated by diking, excavating, ditching, and/or flooding.

On floodplain areas that provide refuge habitats for native fish during high flow periods.

This practice does not apply to:

- Watering Facility (614) intended to provide watering places for wildlife;
- Wetland Restoration (657) intended to rehabilitate a degraded wetland where the soils, hydrology, vegetation community, and biological habitat are returned to a close approximation of the original conditions;
- Wetland Enhancement (659) intended for modification of an existing wetland where specific attributes are targeted by management objectives, possibly at the expense of other attributes, or the rehabilitation of a degraded wetland where the result is a wetland that is different than what previously existed on the site;
- Constructed Wetland (656) intended to treat point and non-point sources of water pollution;
- Wetland Creation (658) for creating a wetland on a site which historically was not a wetland; or
- Fish Pond Management (399).

Scenario 1: Shallow Water Management, Low Level

This scenario addresses inadequate habitat for fish and wildlife on marginal cropland or hayland, pasture or rangeland. The resource concern is addressed by providing shallow water habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water or exposed mud flats for at least part of their life cycle. Sites are flooded up to a depth of 18' with an average depth of 9'. Water is provided by natural flooding and/or precipitation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$51.70	\$77.55

Scenario 2: Shallow Water Management, High Level

This scenario addresses inadequate habitat for fish and wildlife on marginal cropland or hayland, pasture or rangeland. The resource concern is addressed by providing shallow water habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water or exposed mud flats for at least part of their life cycle. Sites are flooded up to a depth of 18' with an average depth of 9'. Monitoring and adaptive management accomplished with water control structures is used to meet very specific conditions needed to address previously identified degraded plant conditions or inadequate habitat for fish and/or wildlife. This high-level management is applied to lands used for crop, pasture, hay, forests or wildlife lands where target flora and fauna have been identified as a primary concern. Loss of some level of crop, forage, hay or forest products may occur depending on site specific conditions.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$124.81	\$187.22

Criteria:

Use of this practice and any of the associated scenarios for the purpose of managing water levels in a wetland to provide wildlife habitat should be reviewed by State Wildlife Biologist before being planned and implemented. This will allow for proper use of the most appropriate scenario to accomplish the objective and to meet the needs of the targeted species.

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.

Scenario 1: Spring, Up to 50 Foot Collection

Develop a water source from a natural spring or seep (i.e., spring development) to provide water for livestock and/or wildlife needs. This typical scenario includes excavating and exposing the water source at the spring/seep (typically on a hillside), constructing a water collection structure by installing a 30 ft long, 4 inch diameter HDPE perforated pipe enclosed in a sand/gravel envelope overlaid by 3 ft wide filter fabric (30 ft long) and behind a two layer vinyl cutoff wall (4 ft height x 30 ft long) to retain water. Water is directed (via 50 ft long, 4 inch PVC) to a spring box (48 inch diameter x 6 ft long CMP) that is located below the cutoff wall. The spring box is equipped with a watertight lid and two outlets. One outlet serves as overflow pipe to account for occasions where inflow exceeds outflow. The collection system is commonly composed of a single or a network of perforated 4 inch diameter drainage pipe placed in an excavated collection trench that runs across the slope. The second outflow pipe from the spring box is directed to buried large storage (not included) or to a watering facility (not included) for use.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,659.62	\$2,489.43

Scenario 2: Spring, Greater than 50 Foot Collection

Develop a water source from a natural spring or seep (i.e., spring development) to provide water for livestock and/or wildlife needs. This typical scenario includes excavating and exposing the water source at the spring/seep (typically on a hillside), constructing a water collection structure by installing a 90 ft long, 4 inch diameter HDPE perforated pipe enclosed in a sand/gravel envelope overlaid by 3 ft wide filter fabric (90 ft long) and behind a two layer vinyl cutoff wall (4 ft height x 90 ft long) to retain water. Water is directed (via 100 ft long, 4 inch PVC) to a spring box (48 inch diameter x 8 ft long CMP) that is located below the cutoff wall and away from the spring collection area. The spring box is equipped with a watertight lid and two outlets. One outlet serves as overflow pipe to account for occasions where inflow exceeds outflow. The collection system is commonly composed of a single or a network of perforated 4 inch diameter drainage pipe placed in an excavated collection trench that runs across the slope. The second outflow pipe from the spring box is directed to buried large storage (not included), or to a watering facility (not included) for use.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,553.75	\$3,830.63

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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:

- 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.
- Reduce energy use.

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).

Scenario 1: Gravity to Pivot Conversion

Installation of a low pressure center pivot system.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$26.51	\$45.45

Scenario 2: Linear Move System

This practice includes converting from a gravity irrigated system to a linear irrigation system (lateral move).

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$39.64	\$64.42

Scenario 3: System Renovation, Renozzle with Drops

Center Pivot and Linear Move sprinkler systems are used in large crop fields with fairly regular field borders and flat topography. The scenario involves changing nozzles on center pivot or lateral move irrigation systems to low-pressure systems to improve efficiency of water use and reduce energy use. This scenario is intended for cropland areas where the objective is water or energy conservation. A typical scenario assumes a 1300 LF span, renozzled with low-pressure nozzles.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$17.02	\$27.66

Scenario 4: Gravity to Pivot Conversion with VRI (available only in special VRI Initiative)

Upgrading existing irrigation system with a more uniform and efficient (vendor provided and installed modular system) Center Pivot system for the purpose of protecting water quality and utilizing water effectively. Integrating variable application technology onto a center pivot system for precision zone placement of water along the length of the system for water savings. A variable application over the field based either 1) EM mapping and a grid system, 2) previous year(s) harvest yield maps or 3) soil properties, or combination of each. This scenario is a new system to replace an existing gravity system, with the proper components, nozzles, and pressure regulating devices, along with other needed components for installation of a VRI system for more effective utilization of water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$36.54	\$59.38

Scenario 5: VRI System Retrofit Zone (available only in special VRI Initiative)

Integrating variable application technology onto a center pivot system for precision zone placement of water along the length of the system for water savings. A variable application over the field based either 1) EM mapping and a grid system, 2) previous year(s) harvest yield maps or 3) soil properties, or combination of each. This scenario is to renovate a previously irrigation system with proper modular components and pressure regulating devices, with GPS for field location and new control panel to update existing panel, along with other needed components to install a VRI system for more effective utilization of water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.74	\$12.57

Scenario 6: VRI System Retrofit Speed (available only in special VRI Initiative)

Integrating variable application technology onto a center pivot system for precision zone placement of water along the length of the system for water savings. A variable application over the field based either 1) EM mapping and a grid system, 2) previous year(s) harvest yield maps or 3) soil properties, or combination of each. This scenario is to renovate a previously irrigation system with proper modular components and pressure regulating devices, with GPS for field location and new control panel to update existing panel, along with other needed components to install a VRI system for more effective utilization of water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.33	\$2.16

Scenario 32: System Renovation, Renozzle without Drops

Center Pivot and Linear Move sprinkler systems are used in large crop fields with fairly regular field borders and flat

topography. The scenario involves changing nozzles on center pivot or lateral move irrigation systems to low-pressure systems to improve efficiency of water use and reduce energy use. The pumping plant must be evaluated to assure that it is compatible with the irrigation system. Pumping Plant (533) can be used to complete pump modifications are required, use. This scenario is intended for cropland areas where the objective is water or energy conservation. A typical scenario assumes a 1300 LF span, renozzled with low-pressure nozzles and pressure regulators on top of the system.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.30	\$1.94

Criteria:

1. All scenarios – does not include the well, pumping plant, or flow meter costs.
2. Irrigation Water Management 449 is required for the first three years of this practice.
3. Structure for Water Control 587, flow meter should be added in conjunction with this practice.
4. System Renovation, Renozzle – to be eligible, pivot must have impact sprinklers installed on top of mainline, and operating pressures at base of pivot point must equal or exceed 80 psi.
5. All components of the system must meet NRCS standards and specifications.
6. Eligible land – Cropland that has been irrigated 2 of the last 5 years.
7. Scenarios 4, 5 and 6 are **not** available in general EQIP or the Ogallala Aquifer Initiative. They are limited to special statewide VRI initiatives only

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

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 stream bank 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.

Scenario 1: Bridge

Install a bridge to allow stream flows to cross under access road or animal trail. Bridge opening determined by sizing for storm event dictated in standard. Scenario includes dewatering, abutments, girders, decking. Work consists of site preparation, dewatering, acquiring and installing abutments, girders, decking with necessary hardware, backfilling abutments, and armoring with geotextile and riprap. Riprap and geotextile are used to stabilize and protect abutments as needed. Scenario based on cast in place concrete abutments, steel girders, and timber deck. Travel surface shall be wooden deck surface. If a different travel surface is needed, refer to another appropriate standard for the surfacing. Span is less than 14 feet. Load is H-20. Width is 14 feet including curbs. Abutments are ≤ 6 feet. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$21.39	\$32.08

Scenario 2: Culvert Installation

Install a new culvert. Work includes dewatering, site preparation and removing any old crossing, acquiring and installing culvert pipe with gravel bedding and fill (compacted), and building headwalls. If a different travel surface is needed, refer to another appropriate standard for the surfacing. 48 inch Culvert installation with > 75 cy of fill needed and > 2 yds rock riprap for headwalls. Pipe is 50 feet long. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic. Use (587) Structure for Water Control instead, for ditch cross culverts and other intermittent flows.

Payment Unit: Diameter Inch Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.45	\$2.18

Scenario 3: Low Water Crossing, Rock Armor

Stabilize the bottom and slope of a stream channel using rock riprap. This scenario includes site preparation, dewatering, acquiring and installing gravel or geotextile with rock riprap on channel bottom and approaches. Final travel surface shall be rock. If a different travel surface is needed, refer to another appropriate standard for the surfacing. Typical stream has 75 foot bottom width and approaches. Width is 12 feet for a total area as 900 square feet. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.24	\$3.35

Scenario 4: Low Water Crossing, Concrete Slab

Stabilize the bottom and slope of a stream channel using concrete in place. This scenario includes site preparation, dewatering, acquiring and installing cast in place concrete on channel bottom and approaches. Final travel surface shall be concrete. If a different travel surface is needed, refer to another appropriate standard for the surfacing. Typical stream has 50 foot bottom width and 8 foot approach on each side. Width is 12 feet for a total area of 792 square feet. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.75	\$5.62

Scenario 5: Low Water Crossing, Concrete Block

Stabilize the bottom and slope of a stream channel using articulated concrete block mats. This scenario includes site preparation, dewatering, acquiring and installing articulated concrete block mats on channel bottom and approaches. Final travel surface shall be concrete blocks. If a different travel surface is needed, refer to another appropriate standard for the surfacing. Typical stream has 50 foot bottom width and 8 foot approach on each side. Width is 12 feet for a total area of 792 square feet. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.83	\$5.74

Scenario 6: Low Water Crossing, Geocell

Stabilize the bottom and slope of a stream channel using geocell mats filled with rock, typically suited for a 'low energy' channel. This scenario includes site preparation, dewatering, acquiring and installing geocell mats on channel bottom and approaches. Final travel surface shall be a rock aggregate covering above the geocell. If a different travel surface is needed, refer to another appropriate standard for the surfacing. Typical stream has 50 foot bottom width and 8 foot approach on each side. Width is 12 feet for a total area of 792 square feet. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$2.62	\$3.93
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Criteria:

Payment is based on linear feet of the crossing from stream bank to stream bank with no regard to the width of the crossing.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Stream Habitat Improvement and Management

Code: 395

Reporting Unit: Acre

Definition:

Maintain, improve or restore physical, chemical and biological functions of a stream, and its associated riparian zone, necessary for meeting the life history requirements of desired aquatic species.

Purpose:

Provide suitable habitat for desired fish and other aquatic species.

- Provide stream channel and associated riparian conditions that maintain stream corridor ecological processes and hydrological connections of diverse stream habitat types important to aquatic species. **Conditions Where Practice**

Applies:

All streams and their adjoining backwaters, floodplains, associated wetlands, and riparian areas where geomorphic conditions or habitat deficiencies limit reproduction, growth, survival and diversity of aquatic species.

Scenario 1: Riparian Zone Improvement – Forested

This scenario describes fish and wildlife habitat improvement and/or management actions focused on the community structure and function of forested riparian zone plant communities. The planned activity meets the 395 standard and facilitating practice standards, especially Codes 390 and 391, utilized in combination to satisfy all requirements specific to habitats needed for the stream and riparian species for which the practice is being implemented. Implementation will improve instream and riparian habitat complexity, water quality, hiding and resting cover, and/or increase food availability for desired riparian and stream species. Because species and habitats differ dramatically within and across regions and/or MLRAs, up to 12 riparian plant community-specific scenarios may be required across the US.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4,308.92	\$6,463.38

Scenario 2: Instream Wood Placement

This scenario involves placement of large wood (logs, root wads, log structures) into a stream channel in order to improve aquatic habitat that currently does not meet planning criteria for stream species habitat. A stream assessment (i.e. Stream Visual Assessment Protocol) should be conducted in order to document habitat components lacking for aquatic species (i.e. large wood, pools). A project design for wood placement will be based on an assessment of the target stream reach characteristics and those of a suitable reference reach. These characteristics include channel geometry, channel slope, stream bottom substrate size and composition, and the geomorphic setting influencing the channel form, pattern and profile. Large wood and root wads placed into the stream will mimic genus, age, and size of mature trees found in intact, reference riparian areas in the MLRA where the project is located. Large wood/trees with root wads intact should be placed in streams to create pool habitat according to NRCS engineering specifications and with close review & approval of a fish habitat biologist. Boulders placed to provide ballast shall only be used if the geomorphic setting and project design demand this component. The planned activity will meet the current 395 standard, and facilitating practice standards utilized, including timing of work windows required for protected aquatic and riparian species, and protecting/restoring vegetation and substrates of/to areas impacted by heavy equipment. Implementation will result in the improvement of instream habitat complexity, hiding and resting cover, and/or increased food availability for fish and other stream species. Payment for implementation is to defray the costs of project implementation. Monitoring records, demonstrating implementation of this scenario addressing resource concerns for stream species of concern, are required.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$9,884.53	\$14,826.80
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Scenario 3: Instream Rock Placement

This scenario describes the implementation of a stream habitat improvement and management project that places rock structures, individual boulders or boulder clusters in or adjacent to the stream channel as habitat components. A project design for boulder placement will be based on assessment of the target stream reach characteristics and those of a suitable reference reach. These characteristics include channel geometry, channel slope, stream bottom substrate size and composition, and the geomorphic setting influencing the channel form, pattern and profile. Large rocks/boulders placed in the stream channel will mimic geologic material sizes typically present in the watershed or observed in intact, reference stream reaches in the MLRA where the project is located. Boulders should be placed in streams to create pool habitat and hydraulic complexity according to NRCS engineering specifications and with close review & approval of a fish habitat biologist onsite during implementation of the project design. Spawning gravel placement should be placed to restore spawning area substrates potentially disturbed by rock placement. The planned activity will meet the current 395 standard, and facilitating practice standards utilized. Implementation will result in the improvement of instream habitat complexity, hiding and resting cover, spawning habitat, and/or increased food availability for fish and other stream species. Payment for implementation is to defray the costs of stream habitat assessment, and project implementation. Records, demonstrating implementation of this scenario addressing resource concerns for stream species of concern, are required.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6,334.60	\$9,501.91

Scenario 4: Rock and Wood Structures

This scenario describes the implementation of a stream habitat improvement and management project where practices are focused on instream habitat improvement with a combination of rock AND wood structures. This scenario involves placement of large wood and rock structures into a stream channel in order to improve aquatic habitat that currently does not meet planning criteria for stream species habitat. A stream assessment (i.e., Stream Visual Assessment Protocol) should be conducted in order to document habitat components (such as large wood, pools) are not currently present in the stream or are limited for aquatic species. A project design for placement of habitat structures (boulders, boulder clusters, wood, wood structures) will be based on an assessment of (a) the target stream reach characteristics and (b) those of a suitable reference reach. These characteristics include channel geometry, channel slope, stream bottom substrate size and composition, and the geomorphic setting influencing the channel form, pattern and profile. Large rocks/boulders placed in the stream channel will mimic geologic material sizes typically present in the watershed or observed in intact, reference stream reaches in the MLRA where the project is located. Rock boulder sizes should also reflect the geomorphic setting of the stream reach. Large wood placed into the stream under this scenario should be similar in species, age, and size (diameter) as trees found in the surrounding riparian area, to the extent possible. Wood, boulders and/or boulder clusters will be placed in the stream to create pool habitat and hydraulic complexity according to NRCS engineering specifications and with close review & approval of a fish habitat biologist onsite during the planning and implementation of the project. This scenario involves restoring one acre of stream. The planned activity will meet the current 395 standard, and facilitating practice standards utilized. Implementation will result in the improvement of instream habitat complexity, hiding and resting cover, and/or increased food availability for fish and other stream species. Payment for implementation is to defray the costs of project implementation. Records demonstrating implementation of this scenario addressing resource concerns for stream species of concern will be required.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$16,022.63	\$24,033.94
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Scenario 5: Fish Barrier

This scenario describes the implementation of a stream habitat improvement and management project where practices are focused on the stream channel. The planned activity will meet the current 395 standard, and facilitating practice standards utilized. Implementation will result in protecting native aquatic fauna in the reach from competition or harassment from non-native fish. This action may also increase food availability for fish and other stream species located above the constructed barrier. Payment for implementation is to defray the costs of stream habitat assessment above the barrier, and project implementation. Records demonstrating that the implementation of this scenario will address resource concerns for aquatic and riparian species of concern will be required.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,088.36	\$4,632.54

Criteria:

Use of this practice and any of the associated scenarios for the purpose of improving habitat in streams should be reviewed by State Wildlife Biologist before being planned and implemented. This will allow for proper use of the most appropriate scenario to accomplish the objective and to meet the needs of the targeted species.

Streambank and Shoreline Protection

Code: 580

Reporting Unit: Foot

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 offsite 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 stream banks of natural or constructed channels and shorelines of lakes, reservoirs, or estuaries where they are susceptible to erosion. It does not apply to erosion problems on main ocean fronts, beaches or similar areas of complexity.

Scenario 1: Shaping

The purpose of this practice is to maintain, improve, or restore physical, chemical, and biological functions of a stream to provide diverse aquatic communities to improve habitat for desired aquatic species. Payment cost include shaping bank; a 6-foot high bank at 3(H):1(V) slope for 1000 linear feet (0.46 acres) is used for estimation purposes. In order to ensure plant community establishment and integrity, a vegetative management plan shall be prepared in accordance with Conservation Practice Standard (CPS) 342, Critical Area Planting.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.95	\$5.93

Scenario 2: Bioengineered

Protection of streambanks consisting of a bioengineered technique comprised of non-structural measures such as earth revetments and benches with vegetative measures to stabilize and protect the streambank against scour and erosion. Soil bioengineering is a system of living plant materials used as structural components. Adapted types of woody vegetation (shrubs and trees) are initially installed in specified configurations that offer immediate soil protection and reinforcement. In addition, soil bioengineering systems create resistance to sliding or shear displacement in a streambank as they develop roots or fibrous inclusions. Environmental benefits derived from woody vegetation include diverse and productive riparian habitats, shade, organic additions to the stream, cover for fish, and improvements in aesthetic value and water quality. Under certain conditions, soil bioengineering installations work well in conjunction with structures to provide more permanent protection and healthy function, enhance aesthetics, and create a more environmentally acceptable product. Soil bioengineering systems normally use unrooted plant parts in the form of cut branches and rooted plants. For streambanks, living systems include brushmattresses, live stakes, joint plantings, vegetated geogrids, branchpacking, and live fascines.

The purpose of this practice is to maintain, improve, or restore physical, chemical, and biological functions of a stream to provide diverse aquatic communities to improve habitat for desired aquatic species. Payment cost include shaping bank, livestake, rootwads and revetments: a 6-foot high bank at 3(H):1(V) slope for 1000 linear feet (0.46 acres) is used for estimation purposes. In order to ensure plant community establishment and integrity, a vegetative management plan shall be prepared and paid in accordance with Conservation Practice Standard (CPS) 342, Critical Area Planting.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.39	\$18.58

Scenario 3: Rock Riprap

The purpose of this practice is to maintain, improve, or restore physical, chemical, and biological functions of a stream to provide diverse aquatic communities to improve habitat for desired aquatic species. Payment cost include shaping bank, geotextile, and rock rip rap; a 6-foot high bank at 3(H):1(V) slope for 1000 linear feet (0.46 acres) is used for estimation purposes. The rock toe will be 3' thick and 5' high. The bank above the riprap will be graded to a stable slope and revegetated. In order to ensure plant community establishment and integrity, a vegetative management plan shall be prepared and paid in accordance with Conservation Practice Standard (CPS) 342, Critical Area Planting.

Payment Unit: Cubic Yard**Payment Schedule:**

EQIP-General	EQIP-General-HU
\$39.23	\$58.84

Scenario 4: Gabion

The purpose of this practice is to maintain, improve, or restore physical, chemical, and biological functions of a stream to provide diverse aquatic communities to improve habitat for desired aquatic species. Payment cost include shaping bank, geotextile, and rock gabions; a 12-foot high bank for 48 linear feet is used for estimation purposes. The gabions will be 3' thick and 3' long stacked 12' high. The bank around the gabion will be graded to a stable slope and revegetated. In order to ensure plant community establishment and integrity, a vegetative management plan shall be prepared and paid in accordance with Conservation Practice Standard (CPS) 342, Critical Area Planting.

Payment Unit: Linear Foot**Payment Schedule:**

EQIP-General	EQIP-General-HU
\$241.97	\$362.95

Criteria:

Use of this conservation practice standard and associated scenarios should include consultation with State Wildlife Biologist in order to ensure that resulting stream function will support obtaining a 404 permit from U.S. Army Corps of Engineers.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Stripcropping

Code: 585

Reporting Unit: Acre

Definition:

Growing planned rotations of row crops, forages, small grains, or fallow in a systematic arrangement of equal width strips across a field.

Purpose:

- Reduce soil erosion from water and transport of sediment and other water-borne contaminants
- Reduce soil erosion from wind
- Protect growing crops from damage by wind-borne soil particles

Conditions Where Practice Applies:

This practice applies on any land where crops are grown.

Scenario 4: Stripcropping – wind and water erosion

This scenario describes the implementation of a stripcropping system that is designed specifically for the control of wind/water erosion or minimizing the transport of windblown particles or sediments or other water borne contaminants originating from runoff on cropland. Implementation will result in alternating strips of erosion susceptible crops with erosion resistant crops that are oriented as close to perpendicular to prevailing winds/water flows as possible. The designed system will reduce erosion/sediment/contaminants to desired objectives. Payment for implementation is to defray the costs of designing the system, installing the strips on the landscape appropriately, and integrating a crop rotation that includes water erosion resistant species.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.77	\$1.15

Payment Documentation:

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.
- 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.
- Modify water flow to provide habitat for fish, wildlife and other aquatic animals. Typical structures: chutes, cold water release structures and flashboard risers.
- Create, restore or enhance wetland hydrology.

Scenario 1: Inlet Flashboard Riser, Metal

A Flashboard Riser fabricated of metal used in a water management system that maintains a desired water surface elevation, controls the direction or rate of flow, or conveys water to address the resource concerns: Inadequate Water - Inefficient use of Irrigation Water and Inadequate habitat for Fish and Wildlife. The water surface elevation is controlled by addition or removal of slats or "stoplogs." This scenario is applicable to variable crest weir structures where the elevation is controlled at the inlet (Half-Rounds). Payment rate is based upon the Flashboard Weir Length in inches multiplied by the outlet length in feet (Inch-Foot). Cost estimate is based on a "Half-Round" flashboard riser shop fabricated using a longitudinal cut 36" Corrugated Metal Pipe, a 50' long - 30" CMP outlet passing through an embankment. Earthwork is included in the associated practice.

Payment Unit: Diameter Inch-Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.34	\$2.00

Scenario 2: Inline Flashboard Riser, Metal

A Flashboard Riser fabricated of metal and used in a water management system that maintains a desired water surface elevation, controls the direction or rate of flow, or conveys water to address the resource concerns: Inadequate Water - Inefficient use of Irrigation Water and Inadequate habitat for fish and wildlife. The water surface elevation is controlled by addition or removal of slats or "stoplogs." This scenario is applicable to variable crest weir structures where the elevation is controlled at the embankment. Payment rate is based upon the Flashboard Weir Length in inches multiplied by the outlet length in feet (Inch-Foot). Cost estimate is based on a 36" corrugated metal flashboard riser shop fabricated

with flashboard channels at the midpoint, and a 50' long - 30" CMP outlet passing through an embankment. Earthwork is included in the associated practice.

Payment Unit: Diameter Inch-Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.57	\$2.36

Scenario 3: Commercial Inline Flashboard Riser

An Inline Water Control Structure (WCS) composed of plastic that maintains a desired water surface elevation, controls the direction or rate of flow, or conveys water to address the resource concern: Inadequate habitat for Fish and Wildlife. The water surface elevation is controlled by addition or removal of slats or "stoplogs." This scenario is applicable to variable crest weir structures where the elevation is controlled at point along a pipe extending through an embankment, providing ease of access to the structure and provide better protection against beaver activity. There are commercially available models composed of plastic that are commonly used when the width of the weir is 24" or less. Payment rate is based upon the Flashboard Weir Length in inches multiplied by the outlet length in feet (Inch-Foot). Cost estimate is based on a using such a commercial product. The typical scenario is an inline structure with a width of 24" and height of six feet. The pipe is 70' of 18" PVC (inlet and outlet combined). Earthwork is included in the associated practice.

Payment Unit: Diameter Inch-Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.68	\$2.52

Scenario 4: Culvert < 30 Inches HDPE

Install a new HDPE culvert under 30 inches in diameter to convey water under roads or other barriers. A typical scenario would be a 24 inch diameter pipe, 40 feet in length. Work includes site preparation, acquiring and installing culvert pipe with gravel bedding and fill (compacted), and riprap protection of side slopes. Use (396) Aquatic Organism Passage when the primary intent is biological concerns, not hydrologic. Use (578) Stream Crossing for culverts ≥ 30 inches or perennial flow. Earthwork is included in the associated practice.

Payment Unit: Diameter Inch-Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.95	\$2.93

Scenario 5: Culvert < 30 Inches CMP

Install a new Corrugated Metal Pipe (CMP) culvert under 30 inches in diameter to convey water under roads or other barriers. A typical scenario would be a 24 inch diameter pipe, 40 feet in length. Work includes site preparation, acquiring and installing culvert pipe with gravel bedding and fill (compacted), and riprap protection of side slopes. Use (396) Aquatic Organism Passage when the primary intent is biological concerns, not hydrologic. Use (578) Stream Crossing instead for culverts ≥ 30 inches or perennial flow. Earthwork is included in the associated practice.

Payment Unit: Diameter Inch-Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$2.22	\$3.33
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Scenario 6: Slide Gate – Flood Dike

This scenario includes installation of 15" CMP with a 15" slide gate (screw activated) through a flood control dike. Pipe is typically 48 feet long. During normal conditions the pipe provides un-restricted drainage from areas protected by the dike. During high water events on the downstream side of the dike, the gate can be closed to prevent flood water from backing into the protected area above the dike.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$25.22	\$37.82

Scenario 7: Flow Meter with Mechanical Index

Permanently installed water flow meter with mechanical, cumulative volume and rate index. Meters can be any flow measurement device that meets CPS 433, (i.e., meters: turbine, propeller, acoustic, magnetic, venturi, orifice, etc.) with or without straightening vanes.

Payment Unit: Inch

Payment Schedule:

EQIP-General	EQIP-General-HU
\$96.14	\$144.20

Scenario 9: Flow Meter with Electronic Index & Telemetry

Permanently installed water flow meter with an electronic flow rate and volume index and data telemetry transmission system. Meters can be any flow measurement device that meets CPS 433, (i.e., meters: turbine, propeller, acoustic, magnetic, venturi, orifice, etc.) with or without straightening vanes. Meter nominal diameter for insert type turbine meters will be installation pipe size. Typical installation would include installation of a 10 inch magnetic flow meter, with electronic index output and telemetry data transfer system for monitoring irrigation system flow rate.

Payment Unit: Inch

Payment Schedule:

EQIP-General	EQIP-General-HU
\$263.23	\$394.85

Scenario 10: Rock Check

This is a structure constructed with rock placed in existing, recently formed and active minor gullies located near the upper end of a watershed. Multiple structures are generally required, with downstream structures placed to force tail water at an upstream structure. The furthest upstream structure is located to control existing head cutting. Resource concerns addressed included gully erosion and water quality.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$532.92	\$799.38

Scenario 11: Earth Check

This is a structure constructed with compacted earth placed in existing, recently formed and active, minor gullies located near the upper end of a watershed. Multiple structures are generally required, with downstream structures placed to force tail water at an upstream structure. The furthest upstream structure is located to control existing head cutting. Resource concerns addressed included gully erosion and water quality.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$332.45	\$498.68

Scenario 12: Buried Automatic Valve

A buried inline water control valve constructed of plastic that maintains a desired water surface, controls the direction or rate of flow, or conveys water to address resource concerns. The water surface elevation is automatically controlled. Cost estimate is based on using a commercially available product.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$458.54	\$687.81

Criteria:

1. Inlet Flashboard Riser, Metal and Commercial Inline Flashboard Riser – payment is calculated by multiplying flashboard weir length (in) x barrel length (ft.).
2. Culvert <30 inches HDPE and Culvert <30 inches CMP – payment is calculated by multiplying pipe diameter (in) x pipe length (ft.).
3. Flow Meter with Mechanical Index and Flow Meter with Electronic Index & Telemetry – payment is calculated by diameter of pipe at location of installation.
 - a. Each well serving an irrigation system is eligible for a flow meter installation.
 - b. Only one flow meter with telemetry per system is eligible for cost share.
 - c. IWM (449) is required for 3 years.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or TSP certification statement. The person exercising Engineering JAA or the TSP will also ensure that the minimum practice documentation as listed in the Nebraska Practice Documentation Requirements (PDR) (or Statement of Work if PDR is not available) is prepared and available to the district conservationist prior to application for practice payments. The Final EQIP Payment Unit and Technical Service Payment Unit Worksheet or equivalent should be prepared to identify the appropriate practice payment units and quantities to avoid any confusion in the payment application process.

Structures for Wildlife

Code: 649

Reporting Unit: (No.)

Definition:

A structure installed to replace or modify a missing or deficient wildlife habitat component.

Purpose:

To provide structures, in proper amounts, locations and seasons to:

- Enhance or sustain non-domesticated wildlife; or
- Modify existing structures that pose a hazard to wildlife.

Conditions Where Practice Applies:

This practice applies to all lands where planting or managing vegetation fails to meet the short-term needs of the species or guild under consideration. And in addition, where a State-approved wildlife habitat assessment identifies the need to:

- Provide loafing, escape, nesting, rearing, roosting, perching and/or basking habitat, Examples are nesting islands, nesting boxes, roosting boxes, rock piles, perching structures and brush piles.
- Modify existing structures to minimize the risks of injury or mortality to wildlife. Examples are the need to:
 - i. Retrofit an existing fence with fence markers,
 - ii. Modify an existing fence by removing wire or adding wildlife-friendly wire at appropriate spacing, or
 - iii. Modify an existing watering facility by installing escape ramps or removing obstacles that impede safe access to water.

Do not use this practice to:

- Install new structures or modify existing structures for the control of nuisance animal species.
- Install new structures or modify existing structures for the benefit of captive, feral, or domesticated animals.

Scenario 1: Nesting Box, Small no Pole

A structure is provided to support the nesting and rearing of smaller targeted species, such as bees and birds, and is directly mounted to a tree, building or other structure. Addresses resource concern for wildlife of inadequate cover/shelter.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.32	\$30.48

Scenario 2: Nesting Box, Small, with Wood Pole

Constructing a nest box and mounting on a pole. A structure is provided to support the nesting and rearing of targeted species, such as pollinators and birds. Trees, buildings or other structures are not available. These structures are designed to meet targeted species biology and life history needs. Addresses Resource Concern: Inadequate Cover/Shelter.

Payment Unit: Number

Payment Schedule:

EQIP-General	EQIP-General-HU
\$30.34	\$45.51

Scenario 3: Nesting Box, Large

A structure is provided to support the nesting and rearing of larger targeted species such as waterfowl, bats and barn owls, and is directly mounted to a tree, building or other structure. These structures are designed to meet targeted species biology and life history needs. Addresses Resource Concern: Inadequate Cover/Shelter.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$41.04	\$61.56

Scenario 4: Nesting Box or Rapture Perch, Large, with Pole

Constructing a nest box or raptor perch on a steel pole with a predator guard, where needed. A structure is provided to support the nesting and rearing of larger targeted species such as woodducks, bats, and barn owls, or to provide needed perches or nesting structures for raptors. Addresses Resource Concern: Inadequate Cover/Shelter.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$121.59	\$182.39

Scenario 5: Escape Ramp

Retrofit an existing watering trough/tank with an appropriately designed and installed wildlife escape ramp to reduce wildlife mortality and maintain water quality within the watering facility. The typical size range for this scenario is 4 watering facilities retrofitted to include an escape ramp (2 ramps per tank).

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$18.52	\$27.78

Scenario 6: Fence Markers, Vinyl Undersill

Existing fences are retrofitted with vinyl markers that increase wire visibility and reduce mortality due to collision for wildlife species of concern. Markers are installed on the top and third wires according to state standards. Scenario is typically implemented along fences in potential high risk areas (red areas in SGI Fence Collision Risk Model) or where a known problem exists. The typical size range for this scenario is 1 mile of fence.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$0.07	\$0.10
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Scenario 7: Brush Pile - Small

Small brush piles are created to provide shrubby/woody escape cover for wildlife. Pushing or cutting select small trees and placement in selected locations to provide wildlife cover. Typical scenario of 10' x 20' area for structure covered by interlocking limbs of trees less than 12 inches in diameter.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$16.58	\$24.87

Scenario 8: Brush Pile - Large

Downed tree structures are created to provide shrubby/woody escape cover for wildlife. Existing sod will be killed prior to placement of tree structures. Felling of select trees and placement in selected locations to provide wildlife cover. Typical scenario of 30' x 50' area for structure covered by interlocking limbs of trees at least 12" in diameter.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$64.90	\$97.35

Criteria:

The scenarios for Escape Ramp and Fence Markers may be used without the requirements listed below.

Use of this practice and any of the other associated scenarios for the purpose of improving wildlife habitat should include the development of a wildlife habitat management plan using job sheet NE-CPA-14 which identifies the target species and the appropriate size and number of structures.

Prior to the use of scenarios for nesting boxes, documentation should be completed that shows the existing habitat or the planned habitat condition meets the needs for the target wildlife species and identifies a deficiency for nesting habitat. Consult with the State Wildlife Biologist as needed.

Subsurface Drain

Code: 606

Reporting Unit: Foot

Definition:

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

Purpose:

A subsurface drain may serve one or more of the following purposes:

1. Improve the soil environment for vegetative growth by regulating the water table and ground water flow.
2. Intercept and prevent water movement into a wet area.
3. Relieve artesian pressures.
4. Remove surface runoff.
5. Facilitate leaching of saline and alkali soils.
6. Serve as an outlet for other subsurface drains.
7. Provide ground water regulation and control for sub-irrigated areas or waste disposal areas.
8. Collect ground water for beneficial uses.
9. Remove water from around buildings, roads, airports, play fields, and other physical improvements.
10. Provide water regulation to control health hazards caused by flies, mosquitoes, etc.

Conditions Where Practice Applies:

Subsurface drains are used in areas having high water table where benefits of lowering or controlling ground water or surface runoff justify the installation of such a system.

All lands to be drained shall be 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. The drainability and treatment of saline and alkali soils shall be considered where this is a problem.

An outlet for the drainage system shall be provided, either by gravity flow or by pumping. The outlet shall be adequate for the quantity and quality of effluent to be disposed of with consideration of possible damages above or below the point of discharge that might involve legal actions under Nebraska state laws.

NRCS Policy and Procedures Regarding Technical Assistance for Drainage of Wetlands will be followed.

Scenario 1: Corrugated Plastic Pipe (CPP), Single-Wall, Less than or Equal to 6 Inch

Below ground installation of perforated HDPE (Corrugated Plastic Pipe) pipeline, using a drainage plow. HDPE (CPP) Single-Wall is manufactured in sizes (nominal diameter) from 3-inch to 24-inch; typical practice sizes range from 3-inch to 12-inch; and typical scenario size is 5-inch. Construct 2,000 feet of 5-inch, Single-Wall, perforated HDPE Corrugated Plastic Pipe (CPP), installed below ground to a minimum depth 5 feet. The typical number of mainline connections for 2,000 feet of subsurface drainline is a total of 3 each. Consideration must be given to Section 404 of Clean Water Act and Food Security Act regarding wetlands.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.72	\$2.58

Scenario 2: Enveloped Corrugated Plastic Pipe (CPP), Single-Wall, Less than or Equal to 6 Inch

Below ground installation of perforated HDPE (Corrugated Plastic Pipe) pipeline with Sand-Gravel envelope, using a drainage trencher. HDPE (CPP) Single-Wall is manufactured in sizes (nominal diameter) from 3-inch to 24-inch; typical practice sizes range from 3-inch to 12-inch; and typical scenario size is 5-inch. Construct 2,000 feet of 5-inch, Single-Wall, perforated HDPE Corrugated Plastic Pipe (CPP), installed below ground to a minimum depth of 5 feet, and surrounded with a sand-gravel envelope. The typical volume sand-gravel for 2,000 feet of 12" wide x 12" high envelope is 64 cubic yards. The typical number of mainline connections for 2,000 feet of subsurface drainline is a total of 3 each. Consideration must be given to Section 404 of Clean Water Act and Food Security Act regarding wetlands.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.12	\$3.18

Scenario 3: Corrugated Plastic Pipe (CPP), Single-Wall, Greater than or Equal to 8 Inch

Below ground installation of HDPE (Corrugated Plastic Pipe) pipeline, using a drainage plow. HDPE (CPP) Single-Wall is manufactured in sizes (nominal diameter) from 3-inch to 24-inch; typical practice sizes range from 3-inch to 12-inch; and typical scenario size is 10-inch. Construct 1,000 feet of 10-inch, Single-Wall, HDPE Corrugated Plastic Pipe (CPP), installed below ground to a minimum depth 5 feet. Consideration must be given to Section 404 of Clean Water Act and Food Security Act regarding wetlands.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.64	\$3.96

Scenario 4: Corrugated Plastic Pipe (CPP), Twin-Wall, Greater than or Equal to 8 Inch

Below ground installation of HDPE (Corrugated Plastic Pipe) pipeline, using a drainage plow. HDPE (CPP) Twin-Wall is manufactured in sizes (nominal diameter) from 4-inch to 60-inch; typical practice sizes range from 8-inch to 15-inch; and typical scenario size is 12-inch. Construct 1,000 feet of 12-inch, Twin-Wall, HDPE Corrugated Plastic Pipe (CPP), installed below ground to a minimum depth 5 feet. Consideration must be given to Section 404 of Clean Water Act and Food Security Act regarding wetlands.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.42	\$9.62

Scenario 5: Secondary Main Retrofit for DWM

An agricultural field has existing patterned tile system installed at 75 foot spacings. The field is 75 acres in size: 2475' x 1320', with a single main line at the low end of the field (2475'). The laterals are installed perpendicular to the topographic contours. The field has 3.5 feet of fall in the 1/4 mile length of the laterals, so a secondary main will be needed to allow drainage water management to be implemented on the higher half of the field.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.76	\$5.63

Criteria:

Use of this conservation practice must comply with all wetland protection criteria in the General Manual as noted on the NE-CPA-52 as well as wetland conservation requirements associated with Food Security Act.

Terrace

Code: 600

Reporting Unit: Foot

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;
- A suitable outlet can be provided.

Scenario 1: Storage - Level or Flat Channel

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths, and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a flat channel (level) terrace storing runoff with a length of 6,000 feet and side slopes of 8:1 or greater in a field with slopes from 2% to 8% constructed in loam soils or similar with regard to workability. A stable outlet is provided in the form of a Grassed Waterway, Underground Outlet or through soil infiltration. Costs include all equipment and forces necessary to excavate, shape, and compact terrace.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.07	\$1.61

Scenario 2: Non-Storage - Broadbase

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a broadbased terrace having 6:1 upstream and 6:1 downstream slopes measuring 2,600 feet in a field with slopes from 2% to 4% constructed in loam soils or similar with regard to workability. Channel and embankment slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, Underground Outlet or through soil infiltration. Costs include all equipment and forces necessary to excavate, shape, and compact terrace.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.70	\$1.13

Scenario 3: Storage - Broadbase

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a broadbased terrace having 5:1 upstream and 5:1 downstream slopes measuring 4,700 feet in a field with slopes from 2% to 8% constructed in loam soils or similar with regard to workability. Channel and embankment slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, Underground Outlet or through soil infiltration. Costs include all equipment and forces necessary to excavate, shape, and compact terrace.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.31	\$2.12

Scenario 4: Broadbase, Rebuild

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a broadbased terrace having 5:1 upstream and 5:1 downstream slopes measuring 4,700 feet in a field with slopes from 2% to 8% constructed in loam soils or similar with regard to workability. This scenario pertains to the rebuilding of Broad Base Terraces in a field that has previously been terraced and the terrace system has exceeded the design life and requires restoration. Channel and embankment slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, Underground Outlet or through soil infiltration. Costs include all equipment and forces necessary to excavate, shape, and compact terrace.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.66	\$1.07

Scenario 5: Non-Storage - Grass Back

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a system of terraces (2,500 feet in length) that have one relatively flat (6:1) front slope and one steep (2:1) back slope constructed in a field with slopes steeper than 10% installed in loam soils or similar soils with regard to workability. The steep slope is established to permanent vegetation with the flatter slope farmed. The terrace is typically constructed at a gradient and is not designed to temporarily store water. Costs include all equipment and forces necessary to excavate, shape, and compact terrace. Seeding is not included

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.65	\$2.48

Scenario 6: Storage - Grass Back

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a system of terraces (2,500 feet in length) that have one relatively flat (6:1) front slope and one steep (2:1) back slope constructed in a field with slopes steeper than 10% installed in loam soils or similar soils with regard to workability. The steep slope is established to permanent vegetation with the flatter slope farmed. Either all, or a portion of the terrace, is constructed to temporarily store water, which is then released with an underground outlet or by other means. Costs include all equipment and forces necessary to excavate, shape, and compact terrace. Seeding is not included.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.27	\$3.41

Scenario 7: Non-Storage - Narrow Base

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a system of narrow base terraces with 2:1 slopes and 4,500' length in a field with slopes exceeding 8% constructed in loam soils or similar in regards to workability. The terrace is typically constructed at a gradient and is not designed to temporarily store water. Costs include all equipment and forces necessary to excavate, shape, and compact terrace. Permanent vegetation is established. Seeding is not included.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.22	\$1.99

Scenario 8: Storage - Narrow Base

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. The typical installation is a system of narrow base terraces with 2:1 slopes and 4,500' length in a field with slopes exceeding 10% constructed in loam soils or similar in regards to workability. Either all, or a portion of the terrace, is constructed to temporarily store water, which is then released with an underground outlet or by other means. Costs include all equipment and forces necessary to excavate, shape, and compact terrace. Permanent vegetation is established. Seeding is not included.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.32	\$2.14

Scenario 9: Narrow Base, Rebuild

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. This scenario pertains to the rebuilding of Narrow Base Terraces in a field that has previously been terraced and the terrace system has exceeded the design life and requires restoration. The typical installation is a system of narrow base terraces with 2:1 slopes, 4,500' length, and 2.5' height in a field with slopes from 6 to 12% constructed in loam soils or similar in regards to workability. A stable outlet is provided in the form of a Grassed Waterway, Underground Outlet or through soil infiltration. Costs include all equipment and forces necessary to excavate, shape, and compact terrace. Permanent vegetation is established. Seeding is not included.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.53	\$0.86

Criteria:

Payment for outlet structure should be through Grassed Waterway (412) or Underground Outlet (620).

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Trails and Walkways

Code: 575

Reporting Unit: Foot

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.

Scenario 1: Earthfill Walkway, 4 Feet High or Less

Layout and construct a lane or travel way of earthfill four feet high or less. Walkway will facilitate animal movement, to 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 and address soil erosion and water quality resource concerns. Costs include Earthfill, shaping, grading, and all equipment, labor and incidental materials necessary to install the practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.40	\$8.09

Scenario 2: Earthfill Walkway, Higher than 4 Feet

Layout and construct a lane or travel way of earthfill greater than four feet high. Walkway will facilitate animal movement, to 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 and address soil erosion and water quality resource concerns. Costs include Earthfill, shaping, grading, and all equipment, labor and incidental materials necessary to install the practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.07	\$18.10

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, etc.
- wildlife habitat
- long-term erosion control and improvement of water quality
- treating waste
- storing carbon in biomass
- reduce energy use
- develop renewable energy systems
- 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.

Utilize other practice standards for specialized tree/shrub establishment situations, e.g., [Riparian Forest Buffer \(391\)](#), [Windbreak/Shelterbelt Establishment \(380\)](#)

Scenario 2: 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 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. The resource concerns addressed include degraded plant condition: inadequate structure and composition and inadequate wildlife & fish habitat.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.05	\$4.86

Scenario 3: 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 1000 feet of trees with tubes for animal protection. The resource concerns addressed are degraded plant condition: undesirable plant productivity and health, inadequate structure and composition, and degraded wildlife habitat. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (1-0) are planted.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.14	\$8.57

Scenario 4: 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 1000 feet of trees. The resource concerns addressed are degraded plant condition: undesirable plant productivity and health, inadequate structure and composition, and degraded wildlife habitat. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (1-0) are planted.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.09	\$2.50

Scenario 5: Trees, Machine Planted with Tubes for Animal Protection, Supplemental Water for Establishment

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 1000 feet of trees with tubes for animal protection. The resource concerns addressed are degraded plant condition: undesirable plant productivity and health, inadequate structure and composition, and degraded wildlife habitat. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (1-0) are planted.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.67	\$14.01

Scenario 6: Trees, Machine Planted, No Tubes, Supplemental Water for Establishment

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 1000 feet of trees. The resource concerns addressed are degraded plant condition: undesirable plant productivity and health, inadequate structure and composition, and degraded wildlife habitat. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (1-0) are planted.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.61	\$7.94

Scenario 7: 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. Resource concerns are degraded plant condition: undesirable productivity and health, inadequate structure and composition, and inadequate habitat for fish and wildlife.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$587.38	\$704.85

Scenario 8: Hardwood Establishment - Direct Seeding

Native seeds (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 seeds are collected/purchased locally to ensure trees are known to be adapted to local conditions. Resource concerns are degraded plant condition, and inadequate habitat for fish and wildlife.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$266.44	\$399.66

Scenario 49: Trees, Machine Planted, Wildlife Protection, Weed Barrier

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 1000 feet of trees with tubes for animal protection. The resource concerns addressed are degraded plant condition: undesirable plant productivity and health, inadequate structure and composition, and degraded wildlife habitat. Terrain is moderately sloping and will be planted with a mechanical tree planter. Smaller size seedlings (1-0) are planted. Fabric installed to reduce competition from weeds and grass.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.23	\$10.84

Criteria:

All weed barrier fabric will be paid under the 484 Mulching conservation practice to better match with associated costs. Micro-irrigation for drip irrigation systems must be paid under the appropriate scenario in 612 Tree/Shrub Establishment on lands that have not been recently irrigated for production purposes since the 441 Irrigation System, Microirrigation requirements mandate that the land must have been irrigated 2 of the past 5 years.

1. Individual Tree – Hand Planting with Browse Protection – This scenario is to be used for bareroot tree seedling plantings that have browse protection or “tubes” installed regardless of whether they are machine or hand planted.
2. Trees, Machine Planted - No Tubes – This scenario is to be used for seedling tree plantings regardless of the method (machine vs. hand) or configuration (linear vs. thicket) and also whether they are bareroot or small “potted” stock in cones capable of being planted using a standard machine.
3. Trees, Machine Planted, No Tubes, Supplemental Water for Establishment – This scenario is to be used for seedling tree

plantings that have drip irrigation installed on each tree using an emitter. This scenario applies to trees with drip irrigation regardless of whether browse protection is used or not and regardless of the installation method (machine vs. hand planted).

4. Hardwood Planting 1 Gallon Pots – This scenario is to be used only for those portions of a tree planting where larger potted stock (1 gallon or larger) are used to improve survival of certain tree species and can include hardwood or coniferous species. Payment is made on a per acre basis which can be determined in a linear planting by multiplying the length of the row by the width (using half the distance to the adjacent row on each side). This may be appropriate when attempting to establish species such as oaks, pines, etc. where needed to meet the objective of the planting and survival of seedling trees of those species is limited.
5. Hardwood Establishment - Direct Seeding – This scenario may be used for hardwood plantings as noted and also for small shrub thickets using seeds from shrub species (i.e., American plum).

Payment Documentation:

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, and 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.

Scenario 1: Pruning - Fire Hazard

Pruning trees of branches in a forest stand where wildfires are considered a high and very high hazard. Hand tools and power tools are used to cut branches from trees. Resource concerns include Degraded plant condition-Wildfire hazard and Undesirable plant productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$51.61	\$77.42

Scenario 2: 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, 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. Resource concerns are inadequate habitat for fish and wildlife - habitat degradation and plant condition- undesirable plant productivity and health.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$36.38	\$54.57

Criteria:

Payment Documentation:

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.

Scenario 1: 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$154.69	\$232.03

Scenario 2: Mechanical, Medium

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 forestlands that have been harvested.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$137.18	\$205.77

Scenario 3: 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, or forestland that was recently harvested.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$44.47	\$66.71

Scenario 4: Windbreak, Chemical and Mechanical

This practice involves the use of various mechanical equipment and chemical treatments, order to prepare a site for tree

row planting, remove undesirable vegetation, and improve site conditions for establishing trees and/or shrubs. Typical sites include abandoned fields, pastures, rangelands, or forestland that was recently harvested.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$215.02	\$258.02

Scenario 6: 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, or forestland that was recently harvested.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$38.31	\$57.47

Criteria:

In some instances, use of Tree/Shrub Site Preparation scenarios overlap with those related to tree establishment under (315) Herbaceous Weed Control. They should generally not be used together for the same purpose in the same year.

1. Mechanical, Heavy is to be used where significant mechanical site preparation is needed (such as roto-till or plow and multiple disk operations) AND where additional work is needed such as some debris removal of fence, dead tree trunks, and other items is needed to prepare the site for planting.
2. Mechanical, Medium is to be used where significant mechanical site preparation is needed (such as roto-till or plow and multiple disk operations). This scenario is generally interchangeable with the Mechanical, Tree listed under 315 Herbaceous Weed Control.
3. Windbreak, Chemical Only is to be used when a contact herbicide is to be applied prior to planting. This scenario is generally interchangeable with the Chemical, Tree – Band listed under 315 Herbaceous Weed Control.
4. Windbreak, Mechanical is to be used when only minimal mechanical site preparation is needed prior to planting. This most often occurs in a cropland setting where a simple disking operation (1-2 times) is adequate to prepare the site or a combination of shredding and disking is used.

Payment Documentation:

Underground Outlet

Code: 620

Reporting Unit: Foot

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;
- The site is suitable for an underground outlet.

Scenario 1: PVC or DW 2 to 3 Inlets

Install 300 feet of 6" & 8" PVC or Dual Wall HDPE to convey stormwater from other conservation practices. Typical scenario is an underground outlet to serve 3 terraces spaced at 125'. 250' of pipe will be 6" with 100' of 8" to reach a suitable outlet. Pipe will be placed in a trench 48" deep and 12" wide. Costs include 6" & 8" PVC pipe, 8" Perforated PVC Riser Inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.17	\$5.15

Scenario 2: PVC or DW 4 to 5 Inlets

Install 550 feet of 6", 8", & 10" PVC or Dual Wall HDPE to convey stormwater from other conservation practices. Typical scenario is an underground outlet to serve 5 terraces spaced at 125'. 250' of pipe will be 6", 250' will be 8", and 50' will be 10" to reach a suitable outlet. Pipe will be placed in a trench 48" deep and 12" wide. Costs include 6", 8", & 10" PVC pipe, 2 - 6", and 3 - 8", Perforated PVC Riser Inlets, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.61	\$5.87

Scenario 3: PVC or DW 6+ Inlets

Install 800 feet of 6", 8", 10", & 15" PVC or Dual Wall HDPE to convey stormwater from other conservation practices. Typical scenario is an underground outlet to serve 7 terraces spaced at 125'. 250' of pipe will be 6", 250' will be 8", 250' will be 10", and 50' will be 15" to reach a suitable outlet. Pipe will be placed in a trench 48" deep and 12" - 24" wide. Costs include 6", 8", 10", & 15" PVC pipe, 2 - 6", 3 - 8", and 2 10" Perforated PVC Riser Inlets, labor to install pipe, trench

excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.76	\$6.12

Scenario 4: 4 Inch - 6 Inch PVC or DW with Riser

Install 400 feet of 4" & 6" approved plastic pipe (PVC or Dual Wall HDPE) to convey stormwater from one location to a suitable and stable outlet in high pressure flow conditions, situations needing greater capacity or where rodent damage may be a concern. Trench excavation is 48" deep and 12" wide for 4" pipe, and 18-24" wide for 6" pipe. Costs include 6" PVC pipe, 6" Perforated PVC Riser Inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.32	\$4.98

Scenario 5: Corrugated Wall 1 - 4 Inlets

Install 425 feet of 6" Single Wall Corrugate Plastic Tubing to convey stormwater from other conservation practices. Typical scenario is an underground outlet to serve 4 terraces spaced at 125'. 125' of pipe will be 6" SW CPT for top two terraces with 300' of 8" DW CPT for bottom two terraces and to reach a suitable outlet. Pipe will be placed in a trench 48" deep and 12" wide. Costs include pipe, 2 - 6" & 2 - 8" Perforated PVC Riser Inlets, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.48	\$3.72

Scenario 6: 6 Inch or Smaller Single Wall PE with Riser

Install 400 feet of 4" & 6" approved plastic pipe to convey stormwater from one location to a suitable and stable outlet in non-pressure flow conditions. Trench excavation is 48" deep and 12" wide. Costs include 4" and 6" HDPE corrugated single wall plastic tubing, 6" Perforated PVC Riser Inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.10	\$3.15

Scenario 7: 8 Inch - 10 Inch PVC or DW with Riser

Install 400 feet of 8" and 10" approved plastic pipe (PVC or Dual Wall HDPE) to convey stormwater from one location to a suitable and stable outlet in non-pressure flow conditions and when multiple practices drain into it. Trench Excavation is 48" deep and 24" wide. Typical costs include 8" and 10" PVC pipe, 10" riser inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.78	\$11.67

Scenario 9: 12 Inch - 18 Inch PVC or DW with Riser

Install 400 feet of 12" and 18" approved plastic pipe (PVC or Dual Wall HDPE) to convey stormwater from one location to a suitable and stable outlet in non-pressure flow conditions and when multiple practices drain into it. Trench Excavation is 58" deep and 28" wide. Costs include 12" and 18" HDPE pipe, 10" Perforated PVC Riser Inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.80	\$17.70

Scenario 10: 12 Inch - 18 Inch PVD or DW with Canopy

Install 80 feet of 12" approved plastic pipe (PVC or Dual Wall HDPE) to convey stormwater from one location to a suitable and stable outlet in pressure flow conditions and when draining single practices. Trench Excavation is 48" deep and 24" wide. Costs include 12" PVC pipe, 12" canopy or hooded inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$15.32	\$22.97

Scenario 11: Over 18 Inch PVC or DW w/ Riser

Install 60 feet of greater than 18" approved plastic (PVC or Dual Wall HDPE) or CMP pipe to convey stormwater from one location to a suitable and stable outlet in non-pressure flow conditions and when multiple practices drain into it. Trench Excavation is 58" deep and 28" wide. Costs include 24" HDPE dual wall pipe, 36" dual wall HDPE pipe riser inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.67	\$31.00

Scenario 57: 6 Inch - 10 Inch PVC or DW w Canopy

Install 80 feet of 8" approved plastic pipe (PVC or Dual Wall HDPE) to convey stormwater from one location to a suitable and stable outlet in pressure flow conditions and when draining single practices. Trench Excavation is 48" deep and 24" wide. Typical costs include 8" PVC pipe, 8" canopy or hooded inlet, labor to install pipe, trench excavation, trench backfill, and rodent guard. This practice is often installed in conjunction with terraces, diversions, sediment control basins, waterways or similar practices.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$9.97	\$14.95

Criteria:

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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.

Scenario 1: Monitoring, Management – Foregone Income

Setting is grazingland 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 planning criteria for the targeted wildlife species. 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, use documentation 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.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$29.81	\$30.18

Scenario 2: 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 at 10 locations.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$7.96	\$9.55

Scenario 3: Wildlife Habitat Enhancement – Foregone Income

Exclusion of livestock on 640 acres of rangeland for the enhancement of habitat for wildlife.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$28.06	\$28.07

Scenario 4: Wildlife Habitat Enhancement - Former Cropland – Foregone Income

Setting is cropland 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 planning 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, livestock utilization records, 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. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan. Includes foregone income. Setting is cropland that will be managed to benefit rare and declining habitats through deferral or seeding to permanent or annual vegetation.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$165.25	\$165.36

Criteria:

- 1) Greater Prairie Chicken Habitat Development should only be used on contract acres where a habitat assessment has been made for greater prairie chickens or sharp-tailed grouse and monitoring will occur throughout the year to document whether targeted habitat conditions are being met and any associated wildlife response. This includes structural measurements of nesting habitat and April surveys of prairie grouse on breeding display grounds (leks). Parameters will be outlined on a NE-CPA-14 Wildlife Development and Management Plan.
- 2) Monitoring, Management, Foregone Income is to be used on lands with a recent history of being grazed by livestock or hayed for forage which have been enhanced using another conservation practice (i.e., 327 Conservation Cover) and require additional years (up to two) of deferment from grazing or haying to allow the cover to establish. No grazing or haying will be conducted during the years in which payment is made. Additionally, documentation of monitoring and management must be provided by the producer to certify for payment. Typically, this may include photo points of the undisturbed cover near the end of the growing season and a wildlife survey (i.e., quail call survey, brood count, etc.).
- 3) Wildlife Habitat Enhancement – Former Cropland (FI) is to be used on lands with a recent history of being cropped which have been converted to permanent cover using another conservation practice (i.e., 327 Conservation Cover) and require additional years (up to two) to allow the cover to establish. No grazing or haying will be conducted during the years in which payment is made. Additionally, documentation of monitoring and management must be provided by the producer to certify for payment. Typically, this may include photo points of the undisturbed cover near the end of the growing season and a wildlife survey (i.e., quail call survey, brood count, etc.).
- 4) Wildlife Habitat Enhancement (FI) is to be used on grazing lands or hayland which are to be deferred to benefit wildlife habitat conditions (i.e., nesting cover) and are not suitable for payment under Access Control due to limitations associated with those criteria. Documentation of target species, purpose, location, and timing must exist on a NE-CPA-14 Wildlife Development and Management Plan.

Payment Documentation:

Vegetated 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 (VTA) 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.

Scenario 1: Concrete Curb with or without Flow Spreaders

This is a permanent herbaceous vegetative area or channel installed down slope from a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected and released with a controlled gravity outflow into the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,035.88	\$3,053.82

Scenario 2: Concrete Curb with Major Shaping

This is a permanent herbaceous vegetative area or channel installed down slope from a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected and released with a controlled gravity outflow into the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5,827.45	\$8,741.17

Scenario 3: Gated Pipe, with or without Flow Spreaders

This is a permanent herbaceous vegetative area or channel installed down slope from a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected and released with a controlled outflow into the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,156.10	\$1,734.15

Scenario 4: Gated Pipe with Major Shaping

This is a permanent herbaceous vegetative area or channel installed down slope from a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected and released with a controlled outflow into the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5,713.45	\$8,570.17

Scenario 5: Sprinkler, Solid Set Distribution

This is a permanent herbaceous vegetative area located adjacent to a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected at the production area and pumped to mechanically distribute wastewater onto the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3,310.03	\$4,965.04

Scenario 6: Sprinkler, Mobile Pods

This is a permanent herbaceous vegetative area located adjacent to a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected at the production area and pumped to mechanically distribute wastewater onto the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1,776.03	\$2,664.05

Scenario 7: Sprinkler, Center Pivot

This is a permanent herbaceous vegetative area located adjacent to a livestock production area. Wastewater (runoff or milking parlor wastewater) is properly collected at the production area and pumped to mechanically distribute wastewater onto the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2,221.37	\$3,332.05

Scenario 8: Minor Shaping

This is a permanent herbaceous vegetative area or channel installed down slope from a livestock production area or diversion. Wastewater (runoff or milking parlor wastewater) is properly collected and released with a controlled outflow into the VTA. The VTA vegetation is harvested to remove nutrients on a regular basis. This practice addresses water quality degradation due to uncontrolled nutrient rich wastewater that can flow into surface waters or leach into ground water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$693.92	\$1,040.89

Criteria / Clarifications

1. EQIP financial assistance may not be used to implement practices to establish a new AFO or livestock operation (including CAP102) per CPM 440 515.52 and 515.81. (see General Criteria I-2)
2. A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with an existing facility cannot be adequately addressed in the original location. The original facility must be completely removed in accordance with Waste Facility Closure (Code 360). (see General Criteria I-2)
 - a. The following statement shall be included in the EQIP contract: "As a condition of EQIP Payment on AFO relocation, the participant agrees to eliminate designated pollution sources at the existing operation. Failure to comply with this provision may result in a recovery of federal payment funds."
3. EQIP financial assistance may be used to implement practices needed for an existing AFO or livestock operation OR to expand an existing established AFO or livestock operation (see General Criteria I-3).
4. Low priority applications for waste storage and/or treatment facilities will not be ranked at this time. (See General Criteria I-4)
5. Participants applying and receiving EQIP funding for waste storage or treatment facilities must (See General Criteria I, 1-5 for additional guidance and contract language requirements):
 - a. Develop and provide an EQIP-Ready (preliminary) CNMP at EQIP application or prior to EQIP ranking.
 - b. For operations with 300 animal units and greater, develop and provide a National Air Quality Site Assessment Tool (NAQSAT) report.
 - c. Develop and provide an NRCS-approved CNMP prior to implementation of the waste handling and or storage/treatment facilities and implementation of nutrient management.
 - d. Implement all practices listed in an NRCS-approved CNMP by the end of the contract period, regardless of financial assistance provided.
 - e. Demonstrate compliance with Nutrient Management (590) for three years following the completion of the waste storage structure(s).
 - f. As applicable, demonstrate compliance with Irrigation Water Management (449) for land applications sites where effluent, runoff, or wastewater is applied via irrigation equipment. (i.e., sprinkler, volume gun, gravity flow, etc.)
6. Eligibility for all waste storage facilities:
 - a. Animals at an operation that already utilize a waste storage facility that meets the Waste Storage Facility (313) standard are not eligible for an EQIP application. All other animals at operations, or parts of operations, are eligible.
7. Limitations for Earthen storage facility.
8. Limitations for Concrete storage facility:
 - a. Storage facility constructed of concrete does not include the barn or production facility, only the waste storage and handling structures.
 - b. Not a concrete stacking pad. See "Earthen holding pond w/concrete stacking pad."
9. Limitations for Concrete/earthen storage facility:
 - a. A Concrete/Earthen holding pond with earthen side slopes and concrete lined floor. The concrete must cover 100 percent of the pond floor.
10. Limitations for Earthen holding pond with concrete stacking pad:

- a. This is a facility that will utilize an earthen holding pond and a concrete stacking pad for storage of waste material and runoff. Stacking pads can be a component of a Waste Storage Facility (313) and are included within this activity.
11. Limitations for Clay lined floor for bedded pack roofed structure or Concrete floor for bedded pack roofed structure:
 - a. This is not an operation or a part of an operation that is only partially covered by a roof and utilizes a runoff holding pond. See the following activities: Earthen storage facility, Concrete storage facility, Concrete/earthen storage facility, or Earthen holding pond with concrete stacking pad.
 - b. This payment includes any containment structures and/or vegetated treatment areas that are built for stacking pad runoff.
12. Limitations for Clay lined floor for bedded pack roofed structure:
 - a. A barn that will utilize a clay lined floor in the bedded pack portion of the barn.
13. Limitations for Concrete floor for bedded pack roofed structure:
 - a. A barn that will utilize a concrete floor in the entire bedded pack portion of the barn.
14. All bedded pack scenarios apply only to that portion of the facility that is at the ground surface. CPS Roofs and Covers shall be used as appropriate.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Vegetative Barrier

Code: 601

Reporting Unit: Feet

Definition:

Permanent strips of stiff, dense vegetation established along the general contour of slopes or across concentrated flow areas.

Purpose:

- Reduce sheet and rill erosion.
- Reduce ephemeral gully erosion.
- Manage water flow.
- Stabilize steep slopes.
- Trap sediment.

Conditions Where Practice Applies:

This practice applies to all land uses where sheet and rill and/or concentrated flow erosion are resource concerns.

This practice is not well-suited to soils that are shallow to rock or other restrictive layers and where tillage is used on the cropped strips. The “benching” process that occurs on slopes where barriers are installed (tillage erosion moves soil from the upper part of the cropped strip, which then accumulates in the lower part of the cropped strip) can expose soil material unfavorable for crop growth.

Scenario 15: Seeded Barrier

Permanent strips of stiff, dense vegetation are established by seeding along the general contour of the slope that effectively settles a significant amount of sediment above the leading edge of the vegetative barrier.

Payment Unit: 100 Linear Feet

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.01	\$0.01

Scenario 2: Vegetative Planting

Permanent strips of stiff, dense vegetation are established along the general contour of the slope using sprigs, plugs or other methods of vegetative propagation that effectively settles a significant amount of sediment above the leading edge of the vegetative barrier.

Payment Unit: 100 Linear Feet

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.72	\$6.86

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.
- Mitigate air emissions.
- Eliminate a safety hazard for humans and livestock.
- Safeguard the public health.

Conditions Where Practice Applies:

This practice applies to agricultural waste facilities or livestock production sites that are no longer needed as a part of a waste management system and are to be permanently closed or converted for another use. These facilities include liquid/dry waste storage facilities, confined animal housing, feedlots, livestock yards, or composting facilities. This practice applies where impoundments that are to be converted to fresh water storage meet current Natural Resources Conservation Service (NRCS) conservation practice standards (CPSs). Where structures that include agricultural waste storage, such as confined animal housing, are to be decommissioned, this practice will apply to the removal of the waste and rehabilitation of soil within the facility. This practice applies to remediation of soil contaminated by agricultural wastes that have been stored onsite. It does not apply to sites contaminated by materials that require the issuance of a hazardous waste permit, such as fuel or pesticides.

Scenario 1: Decommissioning of Concrete Waste Storage Structure

This practice scenario includes the decommissioning of a concrete storage and/or treatment structure or impoundment. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrient and pathogens in ground and/or surface waters and air quality impacts from greenhouse gases, particulate matter and associated precursors, and objectionable odors. This practice scenario does not include payment for the removal and land application of the manure, wastewater, slurry and/or sludge; however, all manure wastes shall be removed and properly land applied in accordance with Nutrient Management (590) prior to decommissioning of the structure.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.09	\$0.14

Scenario 2: Earthen Waste Impoundment Closure

This practice scenario includes the decommissioning of an earthen storage and/or treatment structure or impoundment (embankment or excavated type) include any basins intended for sediment removal. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrient and pathogens in ground and/or surface waters and air quality impacts from greenhouse gases, particulate matter and associated precursors, and objectionable odors. This practice scenario does not include payment for the removal and land application of the manure, wastewater, slurry and/or sludge; however, all manure wastes shall be removed and properly land applied in accordance with Nutrient Management (590) prior to decommissioning of the structure.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.05	\$0.08

Scenario 3: Liquid Waste Impoundment Conversion to Fresh Water Storage

This practice scenario includes the conversion of an earthen storage and/or treatment structure or impoundment (embankment or excavated type) to fresh water storage. The purpose of the practice is to address resource concerns related to water quality degradation due to excess nutrient and pathogens in ground and/or surface waters and air quality impacts from greenhouse gases, particulate matter and associated precursors, and objectionable odors. This practice scenario does not include payment for the removal and land application of the manure, wastewater, slurry and/or sludge; however, all manure wastes shall be removed and properly land applied in accordance with Nutrient Management (590) prior to decommissioning of the structure.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.03	\$0.04

Criteria:

1. Liquid Waste Storage Closure shall include the closure of an earthen or fabricated liquid waste storage facility. Payment for seeding should be made through Critical Area Planting (342).
2. Full Open Feedlot Reclamation shall include removal of all fences, feed bunks, feed bunk pads, and waterers. It shall also include removal of the manure and soil surface and feedlot leveling/shaping. It shall also include seeding of permanent vegetative cover. Payment for seeding should be made through Critical Area Planting (342).
3. Partial Open Feedlot Reclamation shall include removal of the manure and soil surface and feedlot leveling/shaping. It shall also include seeding of permanent vegetative cover. Payment for seeding should be made through Critical Area Planting (342).

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Waste Recycling

Code: 633

Reporting Unit: Acre

Definition:

Using agricultural wastes such as manure and wastewater or other organic residues.

Purpose:

- Protect water quality
- Protect air quality
- Provide fertility for crop, forage, fiber production and forest products
- Improve or maintain soil structure
- Provide a source of energy

Conditions Where Practice Applies:

This practice applies where agricultural wastes including animal manure and contaminated water from livestock and poultry operations; solids and wastewater from municipal treatment plants; and agricultural processing residues are generated, and/or utilized.

Scenario 1: Export Ag Waste By-Products, Recycled for Use Off-Farm

Changes to the operation and farm have decreased total crop nutrient needs. By-products produced at the farm are accumulating in such a manner that the water, soil and/or air quality are potential resource concerns. The operation needs a temporary alternative to address the excess level of on-farm by-products while modifications are planned for the nutrient and/or waste management plans. Exporting by-products to area farmers can lower excess on-farm stockpiles, better distribute and recycle nutrients, and improve soil health.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$211.75	\$317.62

Scenario 2: Import Non-Ag Waste By-Products for On-Farm Use

Traditional bedding materials for free stall barns, monoslope barns and hoop buildings can be expensive and difficult to find. Non-agricultural by-products, such as shredded newspapers, shredded office paper, saw dust, wood shavings, gypsum, etc., are alternatives to standard bedding material. Farms seek to lower energy cost by reducing their use of transportation fuels and are interested in utilizing locally available material. By-products blended with manure are a good fertilizer source and soil amendment for cropland with poor soil health.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.68	\$1.01

Scenario 3: Import Non-Ag Waste By-Products for Compost with Manure for On-farm Use

Area farmers are looking for sources of low cost soil amendments and nutrients for cropland with poor soil health. Dumping food waste (from restaurants, grocery stores, food manufacturers, and institutions such as hospitals, schools prisons), non-agricultural by-products (winery stalks/sludge and butcher shop waste) and municipal greens (grass clipping and leaves) into landfills can be costly and uses landfill space. Area livestock operations may be looking for ways to export solid manure or convert manure into a compost that can be easily transported. Composting food waste, non-agricultural products, municipal greens with manure and a carbon source can result in product that is beneficial to cropland with poor

soil health issues. Nutrient sampling, analysis and recordkeeping is required. Additional nutrients are accounted for in the nutrient management plan.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.12	\$1.68

Scenario 4: Import Non-Agricultural By-Products, Land-Applied

The municipal green waste contains material such as lawn clippings and leaves. Communities form dump sites for green waste for its members. Farmers can combine municipal green waste with manure and apply the blended mixture to cropland to recycle nutrients and improve soil health. Nutrient sampling, analysis and recordkeeping is required. Additional nutrients are accounted for in the nutrient management plan.

Payment Unit: Ton

Payment Schedule:

EQIP-General	EQIP-General-HU
\$8.70	\$13.05

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).

Scenario 1: Mechanical Separator

A small mechanical separation facility to partition solids, liquids, and/or associated nutrients from animal waste streams. The partitioning of the previously mentioned components facilitates the protection of air and water quality, protects animal health, and improves the management of an animal waste management system. Mechanical separators may include, but are not limited to: static inclined screens, vibratory screens, rotating screens, centrifuges, screw or roller presses, or other systems.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$16,910.56	\$25,365.84

Scenario 2: Earthen Settling Structure with Picket Screen Outlet

An earthen structure, such as a basin or a terrace or dike like structure, used to capture and separate a portion of the solids from a liquid stream from a feedlot or confinement facility. A concrete pad should be installed on the bottom of the basin and around outlet structures to facilitate cleanout. Removes a portion of the solids to facilitate waste handling and to address water quality concerns.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.16	\$0.23

Scenario 3: Earthen Settling Structure with Pipe Outlet

An earthen structure, such as a basin or a terrace or dike like structure, used to capture and separate a portion of the solids from a liquid stream from a feedlot or confinement facility. A concrete pad should be installed on the bottom of the basin and around outlet structures to facilitate cleanout. Removes as portion of the solids to facilitate waste handling and to address water quality concerns.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.13	\$0.20

Scenario 5: Concrete Settling Structure with Picket Screen Outlet

A concrete structure, such as a basin with concrete walls and floor, used to capture and separate a portion of the solids from a liquid stream from a feedlot or confinement facility. Removes as portion of the solids to facilitate waste handling and to address water quality concerns.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.47	\$2.21

Scenario 6: Concrete Sand Settling Lane

A concrete structure, a concrete lane with curbs, used to capture and separate a portion of the solids, mainly sand, from a liquid stream from a confinement facility. Removes as portion of the solids to facilitate waste handling and to address water quality concerns.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.55	\$5.33

Criteria:

Sediment Basin with concrete bottom - sediment basin with earthen side slopes and fully or partially concrete lined floor. The concrete must cover a minimum of 33 percent of the sediment basin floor.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 (AWMS).

Conditions Where Practice Applies:

Where the storage facility is a component of a planned AWMS. 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 fabricate structures including tanks, stacking facilities, pond appurtenances, and roof structures. This practice does not apply to storage of human domestic sewage or wastewater.

Scenario 1: Embankment Storage Pond

An earthen waste impoundment constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario has a design storage volume of more than 865,400 ft³. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation. Earthen storage liners are addressed with another standard. Vehicular and equipment access is addressed in Heavy Use Area Protection (561). Adequately protect liner at agitation and access points. The impoundment will have constructed berms greater than 3' high.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.04	\$0.06

Scenario 2: Excavated Storage Pond

An earthen waste impoundment constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario has a design storage volume of more than 382,000 ft³. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation. Earthen storage liners are addressed with another standard. Vehicular and equipment access is addressed in Heavy Use Area Protection (561). Adequately protect liner at agitation and access points. The impoundment will have constructed berms less than 3' high.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.07	\$0.11

Scenario 3: Buried Concrete Tank, Less than 14,999 c.f. of Storage

This scenario consists of installing a concrete tank that has a design storage volume from 5,000 to 14,999 CF that is totally or partially buried and has an open top. The tank can also be under an animal facility with the top cover of either slats or solid concrete lid/floor. Design volume does not include freeboard.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.55	\$2.33

Scenario 4: Buried Concrete Tank, Between 15,000 to 110,000 c.f. of Storage

This scenario consists of installing a concrete tank that has a design storage volume from 15,000 to 110,000 CF that is totally or partially buried and has an open top. The tank can also be under an animal facility with the top cover of either slats or solid concrete lid/floor. Design volume does not include freeboard.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.07	\$1.60

Scenario 5: Buried Concrete Tank, Greater than 110,000 c.f. of Storage

This scenario consists of installing a concrete tank that has a design storage volume of 110,000 or more CF. Tank is totally or partially buried and has an open top. Tank can also be under an animal facility with the top cover using slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.96	\$1.45

Scenario 6: Steel or Concrete Above Ground Storage Structure

An above ground circular glass lined steel or concrete structure constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This typical scenario has a design storage volume of 66,000 ft³. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.30	\$1.96

Scenario 7: Bedded Pack – Concrete Floor and Concrete Walls

A composted bedded pack facility is constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario is intended for situations where consistency of manure or geological conditions prohibit the use of earthen floors. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation. Concrete walls required to

withstand the heavy equipment that the producer operates.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.76	\$7.14

Scenario 8: Bedded Pack, Concrete Floor and Wood Walls

A composted bedded pack facility is constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario is intended for situations where consistency of manure or geological conditions prohibit the use of earthen floors. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation. Scenario is needed to meet design limitations (i.e., small footprint, availability, varying regulations, etc.)

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.49	\$5.24

Scenario 9: Bedded Pack – Earth Floor and Wood Walls

This scenario consists of a dry stack facility with compacted earthen floor with wooden walls, posts and a concrete curb. This scenario is intended for dryer material such as poultry litter. The purpose of this practice is to properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.23	\$1.84

Scenario 10: Bedded Pack – Earth Floor and Concrete Walls

This scenario consists of a dry stack facility (covered) with compacted earthen floor with concrete walls. This scenario is intended to provide storage for manure and agricultural by-products that is protected from the environment and can be either inside the animal housing area or a separate facility for separated solids. The purpose of this practice is to properly store manure and other agricultural by-products until they can be removed from the site for proper utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water. Compacted earth floors required to meet state guidelines for seepage should be installed with CPS 521-D, Pond Sealing or Lining - Compacted Clay Treatment.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.38	\$3.56

Scenario 11: Bedded Pack - Earth Floor with Concrete Walls and Concrete Apron

This scenario consists of a dry stack facility (covered) with compacted earthen floor with concrete walls. This scenario is intended to provide storage for manure and agricultural by-products that is protected from the environment and can be either inside the animal housing area or a separate facility for separated solids. The purpose of this practice is to properly store manure and other agricultural by-products until they can be removed from the site for proper utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water. Compacted earth floors required to meet state guidelines for seepage should be installed with CPS 521-D, Pond Sealing or Lining - Compacted Clay Treatment. Concrete floor will be constructed behind the feedbunk in the area with largest manure accumulation, and also to provide an adequate base where equipment will be frequently removing manure.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.14	\$4.70

Scenario 12: Dry Stack – Concrete Floor and Wood Walls

This scenario consists of a dry stack facility with reinforced concrete Floor with pressure treated wood walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. The purpose of this practice is to temporarily, properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.42	\$5.13

Scenario 13: Dry Stack – Concrete Floor and No Walls

This scenario consists of a dry stack facility with reinforced concrete floor without side walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. The purpose of this practice is to properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.85	\$4.27

Scenario 14: Dry Stack – Concrete Floor and Concrete Walls

This scenario consists of a dry stack facility with reinforced concrete floor with side walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. The purpose of this practice is to properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. Concrete walls required to withstand the heavy equipment that the producer operates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.02	\$6.03

Criteria:

1. EQIP financial assistance may not be used to implement practices to establish a new AFO or livestock operation (including CAP102) per CPM 440 515.52 and 515.81. (see General Criteria I-2)
2. A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with an existing facility cannot be adequately addressed in the original location. The original facility must be completely removed in accordance with Waste Facility Closure (Code 360). (see General Criteria I-2)
 - a. The following statement shall be included in the EQIP contract: "As a condition of EQIP Payment on AFO relocation, the participant agrees to eliminate designated pollution sources at the existing operation. Failure to comply with this provision may result in a recovery of federal payment funds."
3. EQIP financial assistance may be used to implement practices needed for an existing AFO or livestock operation OR to expand an existing established AFO or livestock operation (see General Criteria I-3).
4. Low priority applications for waste storage and/or treatment facilities will not be ranked at this time. (See General Criteria I-4)
5. Participants applying and receiving EQIP funding for waste storage or treatment facilities must (See General Criteria I, 1-5 for additional guidance and contract language requirements):
 - a. Develop and provide an EQIP-Ready (preliminary) CNMP at EQIP application or prior to EQIP ranking.
 - b. For operations with 300 animal units and greater, develop and provide a National Air Quality Site Assessment Tool (NAQSAT) reports.
 - c. Develop and provide an NRCS-approved CNMP prior to implementation of the waste handling and or storage/treatment facilities and implementation of nutrient management.
 - d. Implement all practices listed in an NRCS-approved CNMP by the end of the contract period, regardless of financial assistance provided.
 - e. Demonstrate compliance with Nutrient Management (590) for three years following the completion of the waste storage structure(s).
 - f. As applicable, demonstrate compliance with Irrigation Water Management (449) for land applications sites where effluent, runoff, or wastewater is applied via irrigation equipment (i.e., sprinkler, volume gun, gravity flow, etc.). NOTE: Does not include fields receiving manure (solids, slurry or liquids) applied by application equipment such as spreaders, tankers, tow-line injection systems, etc.
6. Eligibility for all waste storage facilities:
 - a. Animals at an operation that already utilize a waste storage facility that meets the Waste Storage Facility (313) standard are not eligible for an EQIP application. All other animals at operations, or parts of operations, are eligible.
 - b. Payment is limited to 180 days of storage. Planned storage above the minimum required volume is not eligible for funding.
 - c. AFOs expanding animal units with no need for additional days of storage for the operation are not eligible for funding.
7. Limitations for Earthen storage facility.
8. Limitations for Concrete storage facility:
 - a. Storage facility constructed of concrete does not include the barn or production facility, only the waste storage and handling structures.
 - b. Not a concrete stacking pad. See "Earthen holding pond w/concrete stacking pad."
9. Limitations for Concrete/earthen storage facility:
 - a. A Concrete/Earthen holding pond with earthen side slopes and concrete lined floor. The concrete must cover 100 percent of the pond floor.
10. Limitations for Earthen holding pond with concrete stacking pad:
 - a. This is a facility that will utilize an earthen holding pond and a concrete stacking pad for storage of waste material and runoff. Stacking pads can be a component of a Waste Storage Facility (313) and are included within this activity.
11. Limitations for Clay lined floor for bedded pack roofed structure or Concrete floor for bedded pack roofed structure.

- a. This is not an operation or a part of an operation that is only partially covered by a roof and utilizes a runoff holding pond. See the following activities: Earthen storage facility, Concrete storage facility, Concrete/earthen storage facility, or Earthen holding pond with concrete stacking pad.
 - b. This payment includes any containment structures and/or vegetated treatment areas that are built for stacking pad runoff.
12. Limitations for Clay lined floor for bedded pack roofed structure:
 - a. A barn that will utilize a clay lined floor in the bedded pack portion of the barn.
 13. Limitations for Concrete floor for bedded pack roofed structure:
 - a. A barn that will utilize a concrete floor in the entire bedded pack portion of the barn.
 14. All bedded pack scenarios apply only to that portion of the facility that is at the ground surface. CPS Roofs and Covers shall be used as appropriate.
 15. Payment is authorized for participants receiving EQIP funding for waste storage or treatment facilities provided the conditions in General Criteria I are met.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 Nebraska Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPS) Nutrient Management (590) or Waste Utilization (633).

Scenario 1: Concrete Channel

Installation of a concrete channel that consists of a slab with curb and footing on each side of the slab for the entire length of the channel to enable the facility manager to direct liquid waste to an existing collection basin and/or waste storage facility.

Water quality concerns will be addressed by preventing liquid waste from entering surface waters, and to facilitate timely land application of manure and wastewater at agronomic rates according to the CNMP. This scenario addresses the potential for surface water and groundwater quality degradation.

Payment Unit: Square Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.54	\$8.31

Scenario 2: Gravity flow, Less than or Equal to 18 Inch Diameter Conduit

Gravity flow conduit is typically a large diameter water tight sanitary sewer pipe used to transfer manure by gravity from one location to another. The gravity transfer system typically consists of an existing inlet structure or hopper with attachment to a smooth interior large diameter pipe. The pipe conveys the slurry waste liquid between the waste collection point and a manure storage or waste treatment structure. Adequate head on the pipe flow or change in elevation must be available for the gravity system to function and should be evaluated by the design engineer. This practice includes the pipe attachment to an existing inlet structure and all other fittings, trench excavation and backfill, labor and equipment for installation.

This conduit is part of a manure transfer system for a planned waste management or comprehensive nutrient management plan. This scenario addresses the transport of liquid waste to a waste storage or treatment facility to prevent a water quality resource concern of excessive nutrients/organics and harmful levels of pathogens in surface water and/or excessive nutrients/organics in ground water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$13.26	\$19.90

Scenario 4: Pressure Flow, Less than or Equal to 6 Inch Diameter Conduit

Pressure flow pipeline used to transfer manure wastewater by pumping from the waste storage pond to the field where it is to be applied according to the CNMP. These pipelines may also be utilized to transfer waste within the waste treatment system. Pressure flow transfer pipelines can be between 3" and 12" diameter but 6" diameter is a commonly used pipe size. Pressure pipe will handle an internal pumping pressure between 130 and 200 psi depending on the designed pumping system and must have gasketed joints to seal for the wastewater transfer.

The pressure pipe moves the water by pumping from the intake riser location, through a buried mainline with outlet risers spaced at 300 ft intervals for a traveler applicator. This practice includes the pipe plus an inlet riser structure, clean-out risers and outlet risers plus all other valves and fittings, trench excavation and backfill, labor and equipment for installation. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, risers, and inline valves, and are included in the cost of pipe material (additional 10% of pipe material quantity). Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

This pipeline is part of a manure transfer system for a planned waste management or comprehensive nutrient management plan. This scenario addresses the transport of liquid waste to a waste storage or treatment facility to prevent a water quality resource concern of excessive nutrients/organics and harmful levels of pathogens in surface water and/or excessive nutrients/organics in ground water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.74	\$10.11

Scenario 5: Pressure Flow, 8 Inch Diameter Conduit

Pressure flow pipeline used to transfer manure wastewater by pumping from the waste storage pond to the field where it is to be applied according to the CNMP. These pipelines may also be utilized to transfer waste within the waste treatment system. Pressure flow transfer pipelines can be between 3" and 12" diameter but 8" diameter is a commonly used pipe size. Pressure pipe will handle an internal pumping pressure between 130 and 200 psi depending on the designed pumping system and must have gasketed joints to seal for the wastewater transfer.

The pressure pipe moves the water by pumping from the intake riser location, through a buried mainline with outlet risers spaced at 300 ft intervals for a traveler applicator. This practice includes the pipe plus an inlet riser structure, clean-out risers and outlet risers plus all other valves and fittings, trench excavation and backfill, labor and equipment for installation. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, risers, and inline valves, and are included in the cost of pipe material (additional 10% of pipe material quantity). Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

This pipeline is part of a manure transfer system for a planned waste management or comprehensive nutrient management plan. This scenario addresses the transport of liquid waste to a waste storage or treatment facility to prevent a water quality resource concern of excessive nutrients/organics and harmful levels of pathogens in surface water and/or excessive nutrients/organics in ground water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$9.67	\$14.50

Scenario 6: Pressure Flow, 10 Inch Diameter Conduit

PVC pipelines are used to transfer manure wastewater by a low pressure pump from the waste storage pond to the field where it is applied according to the CNMP. These pipelines may also be utilized to transfer waste within the waste treatment system. PVC transfer pipelines can be between 3" and 30" diameter. This practice includes the pipe plus an inlet riser structure, clean-out risers and outlet risers plus all other valves and fittings, trench excavation and backfill, labor and equipment for installation. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, risers, and inline valves, and are included in the cost of pipe material (additional 10% of pipe material quantity). Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

This pipeline is part of a manure transfer system for a planned waste management or comprehensive nutrient management plan. This scenario addresses the transport of liquid waste to prevent a water quality resource concern of excessive nutrients/organics and harmful levels of pathogens in surface water and/or excessive nutrients/organics in ground water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$12.63	\$18.94

Scenario 7: Pressure Flow, 12 Inch or Greater Diameter Conduit

PVC pipelines are used to transfer manure wastewater by a low pressure pump from the waste storage pond to the field where it is applied according to the CNMP. These pipelines may also be utilized to transfer waste within the waste treatment system. PVC transfer pipelines can be between 3" and 30" diameter. This practice includes the pipe plus an inlet riser structure, clean-out risers and outlet risers plus all other valves and fittings, trench excavation and backfill, labor and equipment for installation. Appurtenances include: couplings, fittings, air vents, pressure relief valves, thrust blocks, risers, and inline valves, and are included in the cost of pipe material (additional 10% of pipe material quantity). Cost of appurtenances does not include flow meters or backflow preventers. Typical installation applies to soils with no special bedding requirements.

This pipeline is part of a manure transfer system for a planned waste management or comprehensive nutrient management plan. This scenario addresses the transport of liquid waste to prevent a water quality resource concern of excessive nutrients/organics and harmful levels of pathogens in surface water and/or excessive nutrients/organics in ground water.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$18.75	\$28.12

Scenario 8: Agitator, Liquids Transfer

This scenario is for a manure and wastewater agitator, piping and reception pit associated with an agricultural production operation to transfer agricultural waste product from the production source to a storage facility for proper utilization. This agitator is typically no more than 15 HP and is used for smaller tanks or pits that are less than 10 feet deep. This scenario does not include a pump.

The waste transfer equipment is installed to address water quality concerns by facilitating timely land application of waste at agronomic rates according to the nutrient management plan. This scenario addresses the potential for surface water and groundwater quality degradation.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10,137.90	\$15,206.85

Scenario 9: Agitator, Slurry Transfer

This scenario is for a manure and wastewater agitator, piping and reception pit associated with an agricultural production operation to transfer agricultural waste product from the storage facility to a site for proper utilization. This agitator is typically 30 HP and is used where the tank or pond is between 10 and 15 feet deep. This scenario does not include a pump.

The waste transfer equipment is installed to address water quality concerns by facilitating timely land application of waste at agronomic rates according to the nutrient management plan. This scenario addresses the potential for surface water and groundwater quality degradation.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$16,563.96	\$24,845.93

Criteria:

1. Eligible only for the transportation of manure through the animal waste system, not to empty the system for manure application.
2. Slurry pump is used in a manure transfer system for dairy or hog feeding operation containing a reception pit, slurry pump, and agitator with appropriate piping.
3. Liquid pump is used in a manure transfer system for an open lot runoff containing a liquid manure pump, pumping pit, and appropriate piping.
4. Eligible land – Cropland where livestock manure will be applied. For second and third years, management practice payments are only eligible on land where livestock manure is applied in that year.
5. A conservation plan must be developed to ensure that this practice is applied during the contract period.
6. Participants may be eligible for other management practice payments on the same land. They are eligible for any needed cost share practices.
7. Management practice payments will not be made until documentation is provided by the participant to NRCS that this practice has been applied as required.
8. Refer to scenarios for specific applicability either improved N utilization or P-based application rates.
9. This practice includes managing the amount, source, placement, form, and timing of the application of nutrients. This practice follows non-site specific soil testing procedures and soil nutrient analysis in accordance with 590 Practice Standards. Manure analysis is required utilizing University of Nebraska testing procedures.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice

with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Waste Treatment

Code: 629

Reporting Unit: No.

Definition:

The mechanical, chemical or biological treatment of agricultural waste.

Purpose:

To use mechanical, chemical, or biological treatment facilities and/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 byproducts
- 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 byproducts can be produced to offset treatment costs.
- Reduction of pathogens is required.

Scenario 1: Swine Waste, Phosphorus Reduction System

This practice scenario includes infrastructure to remove phosphorus from swine operation wastewater in watersheds with limited land for application and the phosphorus index is rated High or greater. The purpose of the practice is to address resource concerns related to water quality degradation (excess nutrients).

Payment Unit: Gallons per Minute

Payment Schedule:

EQIP-General	EQIP-General-HU
\$316.80	\$475.20

Scenario 2: Pathogen Removal System

This practice scenario includes a reclamation system to treat and recycle water collected from the overflow of livestock watering facilities. The associated pipelines, collection manholes, pumping plants, and other items are covered by other conservation practices. The portion of the system covered by this scenario includes sand media filters, a pathogen removal system (such as an ultraviolet light treatment unit, chlorination, or ozone system), and a small building to house the treatment facility. The complete system collects overflows from multiple feedlot watering facilities (where overflow is used to prevent winter freeze-up), filters and disinfects the water to a quality suitable for livestock consumption, and then conveys the treated water back into the livestock water supply system.

Payment Unit: Gallons per Minute

Payment Schedule:

EQIP-General	EQIP-General-HU
\$46.39	\$69.59

Scenario 3: Milking Parlor Waste Dosing System and Organic Bed

This practice scenario includes a dosed treatment system with an organic bed for milking parlor wastewater. The purpose of the practice is to address resource concerns related to water quality degradation due to (excess nutrient, salts and pathogens).

Payment Unit: Gallons/Day

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.44	\$30.66

Criteria

1. EQIP financial assistance may not be used to implement practices to establish a new AFO or livestock operation (including CAP102) per CPM 440 515.52 and 515.81. (see General Criteria I-2)
2. A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with an existing facility cannot be adequately addressed in the original location. The original facility must be completely removed in accordance with Waste Facility Closure (Code 360). (see General Criteria I-2)
 - a. The following statement shall be included in the EQIP contract: “As a condition of EQIP Payment on AFO relocation, the participant agrees to eliminate designated pollution sources at the existing operation. Failure to comply with this provision may result in a recovery of federal payment funds”.
3. EQIP financial assistance may be used to implement practices needed for an existing AFO or livestock operation OR to expand an existing established AFO or livestock operation. (see General Criteria I-3)
4. Low priority applications for waste storage and/or treatment facilities will not be ranked that this time. (See General Criteria I-4)
5. Participants applying and receiving EQIP funding for waste storage or treatment facilities must (See General Criteria I, 1-5 for additional guidance and contract language requirements):
 - a. Develop and provide an EQIP-Ready (preliminary) CNMP at EQIP application or prior to EQIP ranking.
 - b. For operations with 300 animal units and greater, develop and provide a National Air Quality Site Assessment Tool (NAQSAT) report.
 - c. Develop and provide an NRCS-approved CNMP prior to implementation of the waste handling and or storage/treatment facilities and implementation of nutrient management.
 - d. Implement all practices listed in an NRCS-approved CNMP by the end of the contract period, regardless of financial assistance provided.
 - e. Demonstrate compliance with Nutrient Management (590) for three years following the completion of the waste storage structure(s).
 - f. As applicable, demonstrate compliance with Irrigation Water Management (449) for land application sites where effluent, runoff, or wastewater is applied via irrigation equipment (i.e., sprinkler, volume gun, gravity flow, etc.).

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.

Scenario 1: Embankment Lagoon

A waste treatment lagoon is a component of a waste management system that provides biological treatment of manure and other byproducts of animal agricultural operations by reducing the pollution potential. Resource concern addressed is water quality by reducing the pollution potential to surface and groundwater by treating and storing liquid waste. Earthen lagoon liners are addressed with another standard.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.05	\$0.07

Scenario 2: Excavated Lagoon

A waste treatment lagoon is a component of a waste management system that provides biological treatment of manure and other byproducts of animal agricultural operations by reducing the pollution potential. Resource concern addressed is water quality by reducing the pollution potential to surface and groundwater by treating and storing liquid waste. Earthen lagoon liners are addressed with another standard.

Payment Unit: Cubic Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.06	\$0.10

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Criteria

1. EQIP financial assistance may not be used to implement practices to establish a new AFO or livestock operation (including CAP102) per CPM 440 515.52 and 515.81. (see General Criteria I-2)

2. A new facility may be constructed using EQIP assistance when it is determined that resource concerns associated with an existing facility cannot be adequately addressed in the original location. The original facility must be completely removed in accordance with Waste Facility Closure (Code 360). (see General Criteria I-2)
 - a. The following statement shall be included in the EQIP contract: “As a condition of EQIP Payment on AFO relocation, the participant agrees to eliminate designated pollution sources at the existing operation. Failure to comply with this provision may result in a recovery of federal payment funds.”
3. EQIP financial assistance may be used to implement practices needed for an existing AFO or livestock operation OR to expand an existing established AFO or livestock operation. (see General Criteria I-3)
4. Low priority applications for waste storage and/or treatment facilities will not be ranked that this time. (See General Criteria I-4)
5. Participants applying and receiving EQIP funding for waste storage or treatment facilities must (See General Criteria I, 1-5 for additional guidance and contract language requirements):
 - a. Develop and provide an EQIP-Ready (preliminary) CNMP at EQIP application or prior to EQIP ranking.
 - b. For operations with 300 animal units and greater, develop and provide a National Air Quality Site Assessment Tool (NAQSAT) report.
 - c. Develop and provide an NRCS-approved CNMP prior to implementation of the waste handling and or storage/treatment facilities and implementation of nutrient management.
 - d. Implement all practices listed in an NRCS-approved CNMP by the end of the contract period, regardless of financial assistance provided.
 - e. Demonstrate compliance with Nutrient Management (590) for three years following the completion of the waste storage structure(s).
 - f. As applicable, demonstrate compliance with Irrigation Water Management (449) for land application sites where effluent, runoff, or wastewater is applied via irrigation equipment (i.e., sprinkler, volume gun, gravity flow, etc.).

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:

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

- To reduce watercourse and gully erosion;
- To trap sediment; and
- To reduce and manage onsite and downstream runoff.

Conditions Where Practice Applies:

This practice applies to sites where: The topography is generally irregular; Watercourse or gully erosion is a problem; Sheet and rill erosion is controlled by other conservation practices; Runoff and sediment damages land and works of improvements; Adequate outlets can be provided; and Do not use this standard in place of terraces. Where the ridge and/or channel extends beyond the detention basin or level embankment, use Conservation Practice Standard (CPS) Terrace (600) or Diversion (362) as appropriate.

Scenario 1: WASCOB Base

Typical scenario for the construction of 700 CY earthen embankment. Outlet is typically an underground outlet. An earthen embankment or combination ridge and channel generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin. Work is done with dozer, scraper, or road grader. Costs include all equipment necessary to excavate, shape, grade and compact the Water and Sediment Control Basin and mobilization of equipment. This practice is utilized to reduce watercourse and gully erosion, trap sediment, reduce and manage onsite and downstream runoff. Sheet and rill erosion will be controlled by other conservation practices.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.01	\$3.02

Scenario 2: WASCOB Topsoil

Typical scenario for the construction of 700 CY earthen embankment. Prior to building the embankment, 6 inches of topsoil is removed and stockpiled. Outlet is typically an underground outlet. An earthen embankment or combination ridge and channel generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin. Topsoil is replaced following construction of the embankment. Costs include all equipment necessary to strip and stock pile topsoil, excavate, shape, grade and compact the Water and Sediment Control Basin, spread and replace topsoil after construction and mobilization of equipment. Seeding not included. This practice is utilized to reduce watercourse and gully erosion, trap sediment, reduce and manage onsite and downstream runoff. Sheet and rill erosion will be controlled by other conservation practices. Work is done with dozer, scraper, or road grader.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.17	\$3.25

Criteria:

Payment units include all earthfill, including backfill of required excavation areas, required to construct the water and sediment control basin.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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, and other agricultural uses.
- Facilitate proper use of vegetation, such as keeping animals on rangeland and pastures and away from streams, and providing water for wildlife.

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 water 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; above ground installations, such as pumping plants, pipelines, and tanks; temporary test wells; and decommissioning of wells (refer to Conservation Practice Standard (CPS) Water Well Decommissioning (351)).

Scenario 1: Well Point

Typical construction is for a 2" diameter well screen, 36" long, with 2" diameter pipe and couplings are driven or water jetted to a typical depth depth of 20 feet into a shallow water bearing formation. The purpose of the practice is to provide water for livestock. The area near the well point is sloped to direct surface water away from entering the well.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$45.87	\$68.81

Scenario 2: Dug (Excavated) Well

Typical construction is for the excavation of a shallow dug well. The purpose of the practice is to provide water for livestock. A typical dug well is 4 foot in diameter and 15 feet in depth. The well is excavated using a backhoe. Excavate to a depth where the water recharge is greater than the equipment can remove. Washed gravel is placed in the base of the dug opening. Concrete manhole risers are installed to hold the water. Pea gravel is placed above the washed gravel to transition to the earth backfill. The hole is backfilled and sloped to direct surface water away from entering the manhole cover.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$323.57	\$485.35

Scenario 3: Shallow Well, 100 ft. Deep or Less

Typical construction is for the installation of a well, in areas where sufficient water is known to occur within 100 feet of the ground surface. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or irrigation. An average well depth is 75 feet. Well casings are 4-6" in diameter. Plastic casing is installed to a depth of 55 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$27.76	\$45.12

Scenario 5: Single PVC Casing, Greater than 100 ft. Deep

Typical construction is for the installation of a well, in areas where sufficient water is known to occur 100 - 300 feet of the ground surface. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or micro-irrigation. An average well depth is 200 feet. Well casings are 4-6" in diameter. Plastic casing and screen is installed to a depth of 200 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$17.10	\$29.32

Scenario 6: Single PVC Casing with Pitless Unit, Greater than 100 ft. Deep

Typical construction is for the installation of a well with a pitless unit, in areas where sufficient water is known to occur 100 - 300 feet of the ground surface. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or micro-irrigation. An average well depth is 200 feet. Well casings are 4-6" in diameter. Plastic casing and screen is installed to a depth of 200 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$20.35	\$33.06

Scenario 7: Steel or Copper, 100 ft. or Deeper

Typical construction is for the installation of a well, in areas where sufficient water is known to occur greater than 2000 feet from the ground surface. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or micro-irrigation. An average well depth is 2500 feet. Plastic Surface casings are 6" in diameter with smaller diameter casing and screen extending into the water bearing formation. Steel casing and screen is installed to a typical depth of 2500 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$22.50	\$33.75

Scenario 8: Steel or Copper with Pitless Unit, 100 ft. or Deeper

Typical construction is for the installation of a well with a pitless unit, in areas where sufficient water is known to occur greater than 2000 feet from the ground surface. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or micro-irrigation. An average well depth is 2500 feet. Plastic Surface casings are 6" in diameter with smaller diameter casing and screen extending into the water bearing formation. Steel casing and screen is installed to a typical depth of 2500 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$22.60	\$33.90

Scenario 9: Dual Casing PVC

Typical construction is for the installation of a well, in areas where sufficient water is known to occur within 300 feet from the ground surface in formations that typically contain artesian pressure. The well shall be drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer for water supply. The purpose of the practice is to provide water for livestock or micro-irrigation. An average well depth is 300 feet. Surface casings are 4-6" in diameter with grouting to contain artesian pressures, smaller diameter casing (2") extends into water bearing formation. Plastic casing and screen is installed to a typical depth of 300 feet.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$27.33	\$41.00

Criteria:

Applies to new livestock wells and replacements for existing wells which have met the practice lifespan (20 years). If blowouts, trailing or other resource concerns are present at the replacement well location, the well should be relocated to a more suitable location.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 requirement;
- 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.

Scenario 1: Wildlife Guzzler

A permanent watering facility for livestock and or wildlife constructed of approved materials with less than 500 gallons of capacity that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock and or wildlife, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$429.33	\$644.00

Scenario 2: Steel Tank

A permanent watering facility for livestock constructed of galvanized steel with 1,200 gallon capacity that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. The watering facility will be placed on a gravel or compacted earthen base. This watering facility will address the resource concerns of inadequate supply of water for livestock and or wildlife, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.74	\$1.16

Scenario 3: Rubber Tire Tank on Earth

A permanent watering facility for livestock constructed using a rubber equipment tire with concrete plug with 1,200 gallon capacity placed on a gravel or compacted earth foundation that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.80	\$1.19

Scenario 4: Fiberglass Tank on Earth

A permanent watering facility for livestock constructed using a fiberglass tank with 1,200 gallon capacity placed on a gravel or compacted earth foundation that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health. **Limited to ½ of the stated cost per gallon amount for Program Year 2015 (both General and HU components).** . For example, the maximum total of 1000 gallon tank using the HU amount would be \$1685 (1000 gallons x 3.37/gallon x ½).

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.28	\$1.92

Scenario 5: Rubber Tire Tank on Concrete

A permanent watering facility for livestock constructed using a rubber equipment tire with concrete plug with 1,200 gallon capacity placed on a concrete foundation that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.95	\$1.43

Scenario 6: Fiberglass Tank on Concrete

A permanent watering facility for livestock constructed using a rubber equipment tire with concrete plug with 1,200 gallon capacity placed on a concrete foundation that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health. **Limited to ½ of the stated cost per gallon amount for Program Year 2015 (both General and HU components).** For example, the maximum total of 1500 gallon tank using the General amount would be \$1740 (1500 gallons x 2.32/gallon x ½).

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.44	\$2.15

Scenario 7: Steel Rim Tank – Bottomless

A permanent watering facility for livestock constructed of a 30' diameter galvanized steel rim with impermeable membrane or bentonite treated earthen bottom with 10,500 gallons of capacity that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.23	\$0.32

Scenario 8: Steel Rim Tank – Concrete Base

A permanent watering facility for livestock constructed of a 20' diameter galvanized steel rim set in a reinforced concrete base with 4,700 gallons of capacity that stores adequate quantity and quality of water for storage and or direct drinking access. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.82	\$1.16

Scenario 12: Enclosed Storage Tank

A permanent below ground storage facility to provide water for a watering facility for livestock, wildlife and/or other conservation practices. All water storage facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock and or wildlife, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.81	\$1.21

Scenario 13: Portable Tank

A portable watering facility for livestock constructed of structural foam, polyethylene, galvanized steel or other similar UV resistant material of adequate strength, with 300 gallon capacity placed on the ground. This installation provides adequate quality and quantity of water for storage and or direct drinking access when coupled with a higher volume supply. For portable systems, the water flow rate should be 2 gallons per minute for each animal that can water at the tank at one time. For example, if four animals can water at one time, the maximum water flow rate should be 8 gallons per minute. All watering facilities will be constructed from approved durable materials that have a life expectancy that meets or exceeds the planned useful life of the installation. This watering facility will address the resource concerns of inadequate supply of water for livestock, habitat degradation, water quality, and undesirable plant productivity and health.

Payment Unit: Gallon

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.48	\$0.70

Criteria:

1. The scenario used should be that that most closely matches the expected cost of installation. For example if a rubber material that can be installed to provide greater volume than typical rubber tire tanks, the scenario for steel rim – concrete base may be applicable rather than one with rubber.
2. Concrete or other erosion protection placed around a watering facility that is in excess of that required for the tank should be included as the appropriate Heavy Use Protection area.
3. Use of the guzzler payment scenario requires that a habitat evaluation be conducted to support the need for drinking water for wildlife as a limiting factor for wildlife habitat.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Waterspreading

Code: 640

Reporting Unit: Acre

Definition:

A system of dams, dikes, ditches, or other means of diverting or collecting runoff from natural channels, gullies, or streams and spreading it over relatively flat areas.

Purpose:

Supplement natural precipitation in areas where plants can effectively use additional moisture.

Conditions Where Practice Applies:

Waterspreading differs from irrigation in that applications are timed by the availability of natural runoff flow rather than scheduled to meet plant needs. This standard does not apply to Conservation Practice Standard 443 – Irrigation System, Surface and Subsurface.

Although applicable to any climatic condition, areas with an average annual precipitation of 8 to 25 inches show the greatest benefit from waterspreading.

Waterspreading systems apply to areas where:

- Local, state, and federal laws and regulations will permit development;
- Soils have suitable intake rates and adequate water-holding capacities for the type of system and crops to be grown. See National Engineering Handbook, Part 652, Nebraska Supplements to the National Irrigation Guide for information on intake families and rates as well as water holding capacities for different soils.
- Topography is suitable for the diversion or collection and the benefited area allows uniform spreading of water to achieve the desired result;
- A system can be installed that allows for the economical production of feed, forage, or grain crops;
- Climatic conditions are such that the additional moisture can be expected to improve plant growth;
- Runoff and streamflow are available at the time of year, of suitable quality, and in a volume sufficient to increase plant growth;
- Flows can be collected or diverted and spread and excess water returned without causing excessive erosion;
- Fish, wildlife, and cultural resources will not be adversely affected;
- Grazing of the spreading area can be controlled.

Scenario 1: Dikes

A waterspreading system of dikes installed to uniformly distribute surface water to the field. Dikes are commonly installed on 2% slopes. Dikes are installed with gates to manage the release of the water.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$976.68	\$1,465.03

Scenario 2: Ditches

A waterspreading system of level lip ditches installed to uniformly distribute surface water to the field.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$71.70	\$107.55

Well Decommissioning

Code: 351

Reporting Unit: Number

Definition:

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

Purpose:

- Eliminate physical hazard to people, animals, and farm machinery; and to prevent entry of animals, debris, or other foreign substances.
- Prevent contamination of groundwater by surface water inflow.
- Restore the natural hydrogeological conditions, to the extent possible, by preventing vertical cross- contamination or commingling of ground waters between separate water bearing zones.
- Eliminate the possibility of the water well being used for any other purpose.
- Allow future alternative use or management of the site.

Conditions Where Practice Applies:

This practice applies to any vertical water well that is to be decommissioned. This practice does not apply to water wells that were used for waste disposal.

Scenario 1: Shallow, Greater than 15 inch Diameter

A licensed well driller will seal and permanently close an inactive, abandoned, or unusable water well to prevent excess nutrients in surface and groundwater and to eliminate pesticides transported to surface and ground water. Well will be cleared of all equipment and materials. Residual water column must be treated with chlorine concentration of >50 ppm or according to local, State, Tribal, or Federal regulations. Install fill material (gravel, earth, concrete, and/or bentonite) consisting of 80% Gravel, 10% Cement or Bentonite, and 10% Earthfill.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$26.48	\$31.77

Scenario 2: Shallow Less than 15 inches Diameter

A licensed well driller will seal and permanently close an inactive, abandoned, or unusable water well to prevent excess nutrients in surface and groundwater and to eliminate pesticides transported to surface and ground water. Well will be cleared of all equipment and materials. Residual water column must be treated with chlorine concentration of >50 ppm or according to local, State, Tribal, or Federal regulations. Install fill material (gravel, earth, concrete, and/or bentonite) consisting of 60% Gravel, 20% Concrete or Bentonite, and 20% Earthfill.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.85	\$5.77

Scenario 3: Drilled, Less than 300 ft

A licensed well driller will seal and permanently close an inactive, abandoned, or unusable water well to prevent excess nutrients in surface and groundwater and to eliminate pesticides transported to surface and ground water.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$11.07	\$16.61

Scenario 4: Drilled, Between 300 and 1000 ft

A licensed well driller will seal and permanently close an inactive, abandoned, or unusable water well to prevent excess nutrients in surface and groundwater and to eliminate pesticides transported to surface and ground water.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$10.17	\$15.25

Scenario 5: Drilled, Greater than 1000 ft

A licensed well driller will seal and permanently close an inactive, abandoned, or unusable water well to prevent excess nutrients in surface and groundwater and to eliminate pesticides transported to surface and ground water.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$5.50	\$8.25

Criteria:

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Wetland Creation

Code: 658

Reporting Unit: Acre

Definition:

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

Purpose:

To establish wetland hydrology, vegetation, and wildlife habitat functions on soils capable of supporting those functions.

Conditions Where Practice Applies:

This practice applies only to sites where hydric soils do not exist and the objective is to establish specific wetland functions.

This practice does not apply to:

- The treatment of point and non-point sources of water pollution (Conservation Practice Standard (CPS) Constructed Wetland (656)).
- The rehabilitation of a degraded wetland or the reestablishment of a former wetland so that soils, hydrology, vegetative community, and habitat are a close approximation of the original natural condition and boundary that existed prior to the modification. (CPS Wetland Restoration (657)).
- The rehabilitation of a degraded wetland, the reestablishment of a former wetland, or the modification of an existing wetland, where specific wetland functions are augmented beyond the original natural conditions; possibly at the expense of other functions. (CPS Wetland Enhancement (659)).
- The management of fish and wildlife habitat created under this standard (CPS Wetland Wildlife Habitat Management – (644)).

Scenario 1: Wetland Creation, Excavation

A wetland is created on a flat mineral upland at a location where surface runoff may be intercepted and ponded by excavation. The wetland is created by excavating a depression.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.80	\$2.16

Scenario 2: Excavation at Saturated Site

A wetland is created on a saturated flat mineral location where surface runoff may be intercepted and ponded by excavation.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.38	\$4.05

Scenario 3: Excavation and Embankment

A wetland is created on a flat mineral upland at a location where surface runoff may be intercepted and ponded by excavation. The wetland is created by excavating a depression and building a dike to intercept runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.23	\$3.88

Criteria:

Use this conservation practice and scenarios only for sites which were not historically wetland based on soils information and historic aerial photography.

Excavation and Embankment is suitable for sites where the embankment is not being designed as a dike. Otherwise, use one of the other excavation scenarios and schedule a 356 Dike conservation practice.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Wetland Enhancement

Code: 659

Reporting Unit: Acre

Definition:

The augmentation of wetland functions beyond the original natural conditions on a former, degraded, or naturally functioning wetland site; sometimes at the expense of other functions.

Purpose:

To increase the capacity of specific wetland functions (such as habitat for targeted species, and recreational and educational opportunities) by enhancing:

- Hydric soil functions (changing soil hydrodynamic and/or bio-geochemical properties);
- Hydrology (dominant water source, hydroperiod, and hydrodynamics);
- Vegetation (including the removal of undesired species, and/or seeding or planting of desired species);
- Enhancing plant and animal habitats.

Conditions Where Practice Applies:

Scenario 1: Excavation

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be enhanced. The tract size is 15 acres, and the actual wetland size is 10 acres. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.67	\$2.00

Scenario 2: Excavation on Saturated site

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be enhanced. The tract size is 15 acres, and the actual wetland size is 10 acres. The site is a recharge depression, fed only from surface runoff. The soils are saturated requiring dewatering and tracked equipment.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.25	\$3.90

Scenario 3: Depression Sediment Removal and Ditch Plug

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be enhanced. The tract size is 15 acres, and the actual wetland size is 10 acres. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.70	\$2.05

Criteria:

Compare the four payment options for Wetland Enhancement and Wetland Restoration that involve excavation and determine which payment rate is most appropriate based on site conditions, amount of material to be excavated, and estimated cost relative to local bids on previous projects. Payment scenarios for this purpose include: Wetland Enhancement – Excavation; Wetland Enhancement – Excavation on Saturated Site; Wetland Restoration – Depression Sediment Removal; and Wetland Restoration – Sediment Removal – Saturated Site.

Depression Sediment Removal and Ditch Plug may be better suited to plan as a different excavation scenario in combination with 657 Wetland Restoration – Ditchplug-Lateral Restoration if the ditch plug will function as a wetland restoration technique.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

Wetland Restoration

Code: 657

Reporting Unit: Acre

Definition:

The return of a wetland and its functions to a close approximation of its original condition as it existed prior to disturbance on a former or degraded wetland site.

Purpose:

To restore wetland function, value, habitat, diversity, and capacity to a close approximation of the pre-disturbance conditions by restoring:

- Conditions conducive to hydric soil maintenance.
- Wetland hydrology (dominant water source, hydroperiod, and hydrodynamics).
- Native hydrophytic vegetation (including the removal of undesired species, and/or seeding or planting of desired species).
- Original fish and wildlife habitats.

Conditions Where Practice Applies:

This practice applies only to natural wetland sites with hydric soils which have been subject to the degradation of hydrology, vegetation, or soils. This practice is applicable only where the natural hydrologic conditions can be approximated by actions such as modifying drainage, restoring stream/floodplain connectivity, removing diversions, dikes, and levees, and/or by using a natural or artificial water source to provide conditions similar to the original, natural conditions.

This practice does not apply to:

- The treatment of point and non-point sources of water pollution (Conservation Practice Standard (CPS) Constructed Wetland (656));
- The rehabilitation of a degraded wetland, the reestablishment of a former wetland, or the modification of an existing wetland, where specific wetland functions are augmented beyond the original natural conditions; possibly at the expense of other functions.(CPS Wetland Enhancement (659);
- The creation of a wetland on a site location which was historically non-wetland (CPS Wetland Creation (658).
- The management of fish and wildlife habitat on wetlands restored under this standard (CPS Wetland Wildlife Habitat Management – (644)).

Scenario 1: Fill in Dugout

Restoring a wetland to its original condition by filling a dugout. Typical size is approximately 1,000 cu. yd. and 1 1/2 acres of land restored.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.80	\$3.36

Scenario 2: Depression Sediment Removal

A Depressional HGM (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) class wetland is to be restored by removing sediment. The typical size of sediment removal is 1 acre. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.12	\$3.74

Scenario 3: Sediment Removal – Saturated Site

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be restored by removing sediment. The typical size of sediment removal is 1 acre. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$3.38	\$4.05

Scenario 4: Ditchplug – Lateral Restoration

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be restored by filling in the drainage ditch. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.20	\$7.44

Scenario 5: Embankment - Fill Height Less than or Equal to 4 Feet

A Depressional HGM class wetland (Hydrogeomorphic approach to classifying the seven types of wetlands as defined by Brinson, 1993) is to be restored by filling across the drainage ditch to block drainage. The site is a recharge depression, fed only from surface runoff.

Payment Unit: Cubic Yard

Payment Schedule:

EQIP-General	EQIP-General-HU
\$4.67	\$5.61

Criteria:

Compare the four payment options for Wetland Enhancement and Wetland Restoration that involve excavation and determine which payment rate is most appropriate based on site conditions, amount of material to be excavated, and estimated cost relative to local bids on previous projects. Payment scenarios for this purpose include: Wetland Enhancement – Excavation; Wetland Enhancement – Excavation on Saturated Site; Wetland Restoration – Depression Sediment Removal; and Wetland Restoration – Sediment Removal – Saturated Site.

Embankment – Fill Height \leq 4 ft. may be used instead of 356 Dike – Wetland Dike when the embankment will not meet the dike standard or when wet/saturated conditions justify a higher cost per cubic yard.

Fill in Dugout may be used in combination with Sediment Removal-Saturated Site when it is necessary to excavate silt, vegetation and other material prior to placement of fill into the dugout.

Payment Documentation:

The person exercising Engineering Job Approval Authority (JAA) or Technical Service Provider (TSP) will certify the practice with the appropriate JAA certification statement or the Warranty of Technical Services Provided Form.

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 Wetland Restoration (657), Wetland Enhancement (659), and Wetland Creation (658).

Scenario 1: Haul Fill with Native Seed Bank

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 utilized 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, improve soil quality, improve water quality, and develop wildlife habitat as part of a habitat management system. This scenario is utilized to increase species diversity and richness. Monitoring of site by a biologist, post installation, will be required to determine management strategies for appropriate 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 patches, 10-25% of each wetland acre. Fertilization will NOT be required.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$91.27	\$136.90

Scenario 2: Wetland Hydrology Management

Water level manipulation will require the use of Water Control Structures (587) and hand labor implementation techniques on constructed wetlands. The setting is all landuses, 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 thru 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 under a separate conservation practice code (587) Structure for Water Control.

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$33.58	\$50.37

Scenario 3: Management and Monitoring Only, Foregone Income

Site management will include managing/monitoring the site to provide food and cover for wetland wildlife species on cropland. Annual vegetation (crops or other annual vegetation) will be allowed to establish and persist during critical nesting and brood rearing seasons and will remain standing (not harvested) until migratory species have left the site. The setting is on lands used for the production of crops where the slope gradient is less than two percent and soils 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 mechanical methods to provide a diverse vegetation mosaic, within and adjacent to the existing wetland, addressing inadequate habitat for wetland wildlife. Where this occurs on cropped fields, annual crops will be lost for one growing season (foregone income is included).

Payment Unit: Acre

Payment Schedule:

EQIP-General	EQIP-General-HU
\$176.26	\$178.69

Criteria:

Haul Fill with Native Seed Bank applies to transplanting vegetation or seed stock into a created, enhanced, or restored wetland by moving vegetated mats, plugs, or other transplanted material as well as inoculating soil from an established wetland. Consult with the State Wildlife Biologist to determine the amount of material needed per acre to meet the minimum requirements for payment.

Management and Monitoring Only, Foregone Income (FI) can be used when a wetland that has been in cropland production in recent years is left idle and wetland vegetation is allowed to establish and persist throughout the entire year. Management is required to leave vegetation undisturbed and monitoring may consist of documenting hydrology levels at different points during the growing season. Evidence of management and monitoring is required to certify for payment.

Wetland Hydrology Management is intended for wetland sites where hydrology may be manipulated using a water control structure or pumping and appropriate measures are taken to allow draw-down during summer months and adding hydrology during migration periods in the spring and fall. Consult with the State Wildlife Biologist to determine if the site conditions will allow for proper use of this scenario.

Payment Documentation:

Windbreak/Shelterbelt Establishment

Code: 380

Reporting Unit: Foot

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 screens.
- Provide 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.
- Reduce energy use.

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.

Scenario 1: Hand Planted, Bare Root

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. This practice is typically applied to crop, pasture or range lands.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.39	\$1.67

Scenario 2: Hand Planted, Potted

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. This practice is typically applied to crop, pasture or range lands.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$2.86	\$3.43

Scenario 4: One Row Windbreak, Trees, Hand Planted, Balled and Burlap Greater than 18"

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.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.47	\$0.56

Scenario 5: Trees, Machine Planted

Tree planting consisting of 2500 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.19	\$0.23

Scenario 6: Tree, Machine Planted, Wildlife Protection

Tree planting consisting of 2500 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.60	\$0.72

Scenario 7: Hand Planted, Bare Root, Supplemental Water for Establishment

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 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. This practice is typically applied to crop, pasture or range lands.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$4.95	\$7.01
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Scenario 8: Hand Planted, Potted, Supplemental Water for Establishment

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. This practice is typically applied to crop, pasture or range lands.

Payment Unit: Each

Payment Schedule:

EQIP-General	EQIP-General-HU
\$6.13	\$8.68

Scenario 12: Trees, Machine Planted, Wildlife Protection, Supplemental Water for Establishment

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 2500 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.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$1.07	\$1.28

Criteria:

All weed barrier fabric will be paid under the 484 Mulching conservation practice to better match with associated costs. Micro-irrigation for drip irrigation systems must be paid under the appropriate scenario in 380 Windbreak/Shelterbelt Establishment on lands that have not been recently irrigated for production purposes since the 441 Irrigation System, Microirrigation requirements mandate that the land must have been irrigated 2 of the past 5 years.

1. Practice payment based on total length of all rows planted, not the length of the windbreak. REMINDER: Report practice applied as length of windbreak, not total length of rows planted.
2. Hand Planted, Bare Root – This scenario is primarily suited to replants of bareroot seedlings into a previously planted windbreak/shelterbelt to maintain adequate survival. In that situation, payment on a per foot basis may not be suitable.
3. Hand Planted, Potted – This scenario is primarily suited for replants of small “potted” stock such as conifers in cones into a previously planted windbreak/shelterbelt to maintain adequate survival. In that situation, payment on a per foot basis may not be suitable.
4. One Row Windbreak, Trees, Hand Planted, Balled and Burlap Less than 18” – This scenario applies to planting rows consisting of small “potted” stock such as conifers in cones regardless of planting method (machine vs. hand planted).
5. One Row Windbreak, Trees, Hand Planted, Balled and Burlap Greater than 18” – This scenario applies ONLY to the establishment of specific trees species using potted stock (often 1 gallon pots) in order to improve survival of species such as oaks, pines, etc.
6. Trees, Machine Planted – This scenario is the most commonly used for windbreak/shelterbelt establishment when no other associated appurtenances are used (browse protection, drip irrigation, etc.).
7. Tree, Machine Planted, Wildlife Protection – This scenario is used for windbreak/shelterbelt establishment where wildlife protection is needed on hardwood and conifer species. This scenario would only apply to those rows needing wildlife

protection.

8. Hand Planted, Bare Root, Supplemental Water for Establishment – This scenario is used for windbreak/shelterbelt establishment where supplemental water (in the form of drip irrigation) is needed to improve survivability of the planted species. It applies to any seedling tree whether bareroot or small “potted” stock such as conifers in cones. This scenario would only apply to those trees within the planting needing supplemental water.
9. Hand Planted, Potted, Supplemental Water for Establishment – This scenario is used for windbreak/shelterbelt establishment where supplemental water (in the form of drip irrigation) is needed to improve survivability of the planted species. It ONLY applies to any larger potted (i.e., 1 gallon) tree which is used to improve survival such as for oaks, pines, etc. This scenario would only apply to those trees within the planting needing supplemental water.
10. Trees, Machine Planted, Wildlife Protection, Supplemental Water for Establishment – This scenario is ONLY used for windbreak/shelterbelt establishment where any larger potted (i.e., 1 gallon) stock are used and require wildlife protection and supplemental water (in the form of drip irrigation) to improve survivability of the planted species. It typically is only needed for certain species such as oaks, pines, etc. This scenario would only apply to those trees within the planting where large potted stock are used and that need wildlife protection and supplemental water.

Payment Documentation:

Windbreak/Shelterbelt Renovation

Code: 650

Reporting Unit: Foot

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 Windbreak/Shelterbelt Establishment, 380. For normal and periodic pruning, refer to Tree/Shrub Pruning, 660.

Scenario 1: Sod Release

Reduce competition from sod around trees/shrubs within a windbreak/shelterbelt. Apply appropriate herbicides to stress or kill competing sod vegetation between and/or within tree/shrub rows. A herbicide application is completed to significantly reduce competition from sod (grass) in the windbreak.

Payment Unit: Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.10	\$0.11

Scenario 3: Removal Less than 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 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.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
\$0.47	\$0.70

Scenario 4: Removal Greater than to 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 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.

Payment Unit: Linear Foot

Payment Schedule:

EQIP-General	EQIP-General-HU
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\$1.33	\$2.00
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Criteria:

Any re-planting or establishment of trees/shrubs into areas where trees were removed as part of the windbreak/shelterbelt renovation are to be done under either the 380 Windbreak/Shelterbelt Establishment or the 612 Tree/Shrub Establishment conservation practice standard and associated payment scenarios.

1. It is acceptable to simply remove undesirable species from the existing windbreak/shelterbelt without any re-planting or re-establishment if the remaining structure of trees/shrubs accomplishes the purpose according to the 380 Windbreak/Shelterbelt Establishment standard. Examples of this may include removal of invasive species such as Russian olive or eliminating female Eastern red cedars from a multiple row windbreak.
2. It is NOT acceptable to eliminate the entire existing windbreak/shelterbelt and consider the project a windbreak/shelterbelt renovation. In those instances where the entire existing windbreak/shelterbelt is removed, that activity is not eligible for payment.
3. Sod Release – This scenario is to be used to control sod-forming grass (typically smooth brome) that is suppressing the growth of established trees. The proper timing, application method, and herbicide product must be outlined to accomplish the purpose and not negatively affect the established tree planting. It may be necessary (and it is acceptable) to repeat this treatment in a subsequent year to adequately control the sod-forming grass.
4. Thinning – This scenario is used when relatively small trees are to be removed from the windbreak/shelterbelt by clipping using hand tools or spot treated with appropriate herbicides. Re-sprouting species would need to have stumps treated following mechanical removal.
5. Removal Less than 8 Inches DBH with Skidsteer – This scenario involves the removal of medium sized trees (larger than can be removed using hand tools but smaller than 8 inches in diameter) from the windbreak/shelterbelt. Re-sprouting species would need to have stumps treated following mechanical removal.

Removal Greater than to 8 Inches DBH with Dozer – This scenario involves the removal of large trees with a dozer/backhoe from the windbreak/shelterbelt. Re-sprouting species would need to have stumps treated following mechanical removal unless an adequate amount of stump is removed by the heavy equipment. It is NOT appropriate to provide a payment when the entire existing windbreak/shelterbelt is removed. A functioning portion of the windbreak/shelterbelt must remain in place to meet the purpose of the conservation practice.

Comprehensive Nutrient Management Plan

Conservation Activity Plan (CAP)

Code: 102

Reporting Unit: Each

Definition:

A Comprehensive Nutrient Management Plan (CNMP) is a conservation plan unique to AFOs. A Conservation Activity Plan for Comprehensive Nutrient Management Plan (CAP102) is a conservation plan that addresses resource concerns for an animal feeding operations (AFOs) including at the production area, on land application sites, and during nutrient management. The plan documents how manure and/or wastewater will be collected, transferred and stored at the production area and how the manure nutrients will be applied on the land application sites in accordance with Practice Standard 590 (Nutrient Management). Planned practices on the production area and land application sites must meet NRCS practice standards cited in the NRCS FOTG. Negative air quality impacts occurring as a result of existing or planned practices must be mitigated in the CNMP, if feasible. The CNMP needs to meet the AFO producer/operator's production objective.

Purpose:

To assist owners/operators in the development of a conservation plan for CNMPs (CAP102) that identifies natural resource concerns in the production area and on land treatment sites owned or controlled by the owner/operator. Natural resource concerns include water quality, soil erosion, plant production and other associated concerns. This CAP plan is designed for the development of a preliminary CNMP to enable an AFO to be eligible to apply for EQIP funds for structural practices including, but not limited to, waste storage and/or treatment facilities and associated structures, dry stacking pads, animal mortality facilities, manure composting facilities at the production site; and terraces, field borders, grass waterways, cover crops on the land application sites.

Conditions Where Practice Applies:

Existing and expanding animal feeding operations with existing or planned waste storage and/or treatment facilities and land application sites for the nutrient application of manure and organic by-products. Producer is willing to collaborate with a certified TSP (for CAP102) to develop the plan.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
102	Non-Dairy Operation, < 300 AU with land application	\$6,051.35	\$7,261.61
102	Non-Dairy Operation, 300 – 699 AU with land application	\$7,794.50	\$9,353.39
102	Non-Dairy Operation \geq 700 AU with land application	\$9,415.50	\$11,298.60
102	Dairy Operation, < 300 AU with land application	\$7,549.85	\$9,059.82
102	Dairy Operation, 300 – 699 AU with land application	\$8,627.08	\$10,352.49
102	Dairy Operation \geq 700 AU with land application	\$9,593.20	\$11,511.84
102	Livestock Operation < 300 AU <u>without land application</u>	\$5,450.60	\$6,540.72
102	Livestock Operation \geq 300 AU <u>without land application</u>	\$6,771.40	\$8,125.70
102	CNMP Less than or Equal to 300 AU with Land Application (Minimal Engineer Assistance)	\$3,509.93	\$4,211.91
102	CNMP Less than or Equal to 300 AU without Land Application (Minimal Engineer Assistance)	\$2,054.74	\$2,465.69
102	CNMP greater than 300 AU with Land Application (Minimal Engineer Assistance)	\$4,609.80	\$5,531.76
102	CNMP Greater than 300 AU without Land Application (Minimal Engineer Assistance)	\$2,332.50	\$2,799.00

Criteria:

1. CAP plan must meet basic criteria for the 102 plan as cited in the NRCS FOTG and 590 Standard.
2. New AFOs are not eligible for EQIP financial assistance (see General Criteria I-2).
3. Must be completed by a NRCS Technical Service Provider (TSP) certified for CAP102.
4. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
5. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Nutrient Management Plan

Conservation Activity Plan (CAP)

Code: 104

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Nutrient Management Plan (CAP104) is a conservation plan designed to minimize nonpoint source pollution of ground and surface water and to budget, supply and conserve nutrients for plant production. It documents various on-farm uses of organic or inorganic amendments (i.e. commercial fertilizer, manure, compost, biosolids, municipal waste, etc.) on cropland, pasture and rangeland. Nutrient management procedures for plant production will be developed in accordance with Practice Standard 590 (Nutrient Management).

Purpose:

To assist owners/operators in the development of a conservation plan for nutrient management (CAP104) that identifies resource concerns including: offsite movement of nutrients and sediment to surface water; leaching of nutrients to ground water; and minimizing odors, nitrogen emissions and particulate matter. The plan will budget, supply, and conserve nutrients for plant production through the 4 Rights of nutrient management: right amount (rate), right source, right placement (method of application), and right timing of plant nutrients and soil amendments.

Conditions Where Practice Applies:

Applies to all lands (cropland, hayland, and pasture) where plant nutrients and soil amendments are applied. Producer is willing to collaborate with a certified TSP to develop plan.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
104	≤ 100 acres (NOT Element of a CNMP)	\$1,706.40	\$2,047.68
104	101 – 300 acres (NOT Element of a CNMP)	\$2,275.20	\$2,730.24
104	> 300 acres (NOT Element of a CNMP)	\$2,844.00	\$3,412.80
<u>104</u>	≤ 100 acres (Element of a CNMP)	\$2,844.00	\$3,412.80
104	101 – 300 acres (Element of a CNMP)	\$3,981.60	\$4,777.92
104	> 300 acres (Element of a CNMP)	\$4,834.80	\$5,801.76

Criteria:

1. New AFOs are not eligible for EQIP financial assistance if the activity is an element of a CNMP.
2. CAP must meet basic criteria for 104 plan as cited in the NRCS FOTG.
3. CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP104.
4. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
5. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Forest Management Plan

Conservation Activity Plan (CAP)

Code: 106

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Forest Management Plan (CAP106) is a site plan developed for a client, which addresses one or more resource concerns on land where forestry-related conservation activities will be planned and applied. Specifically a CAP106 is a plan to manipulate species composition, stand structure and/or stand density by cutting or killing selected trees and/or understory vegetation to achieve desired forest conditions. Natural resource concerns may include: fish and wildlife, soil erosion, soil condition, water quality, plant condition or forest land.

Purpose:

To assist owners/operators in the development of a conservation plan for forest management (CAP106) that meets NRCS planning criteria for the identified resource concern(s). CAP106 will plan to manage nonindustrial private forest lands for conservation, economic, and recreational purposes, will inventory the type, amount and location of standing timber and appraise the timber's condition. Will determine how to conserve wildlife habitats, improve water quality and soil stability, and how best to comply with environmental regulations. May devise plans for planting and growing new trees, monitoring trees for healthy growth, determining optimal thinning schedules, and increasing carbon capture and storage.

Conditions Where Practice Applies:

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

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
106	≤ 20 acres	\$1,024.43	\$1,229.32
106	21 to 100 acres	\$1,294.02	\$1,552.82
106	101 to 250 acres	\$2,318.45	\$2,782.14
106	251 to 500 acres	\$3,342.89	\$4,011.46
106	501 to 1000 acres	\$3,882.06	\$4,658.47
106	> 1000 acres	\$4,852.58	\$5,823.09

Criteria:

1. CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP106.
2. CAP must meet basic criteria for 106 plan as cited in the NRCS FOTG.
3. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
4. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Feed Management Plan

Conservation Activity Plan (CAP)

Code: 108

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Feed Management Plan (CAP108) is a farm specific documented plan developed for a client who needs to manage and control the quantity and quality of available nutrients, feedstuffs, and/or additives fed to livestock and poultry as a means to reducing the output of nitrogen and phosphorus in the manure excreted. Present operation and feed methodology poses risk of feeding excessive amounts of nutrients in animal manure which result in negative impacts to water quality and odor resource concerns.

Purpose:

To develop a conservation plan for feed management (CAP108) that compliments a comprehensive nutrient management plan. The CAP plan may serve as the basis for implementation of the primary Practice Standard 592 (Feed Management). Feed management is an important tool for meeting Practice Standard 590 (Nutrient Management) at animal feeding operations (AFOs) by reducing the amount of nitrogen and/or phosphorus excreted in the manure.

Conditions Where Practice Applies:

Existing and expanding AFOs are eligible for this practice.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
108	Feed Management Plan	\$1,802.04	\$2,162.45

Criteria:

1. New AFOs are not eligible for EQIP funding assistance.
2. CAP108 must be completed by a NRCS Technical Service Provider (TSP) certified for CAP108.
3. CAP must meet basic criteria for 108 plan as cited in the NRCS FOTG.
4. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
5. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Grazing Management Plan

Conservation Activity Plan (CAP)

Code: 110

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Grazing Management Plan (CAP110) is a site specific conservation plan developed for managing the harvest of vegetation with grazing and/or browsing animals. The plan addresses one or more resource concerns on land where grazing related activities or practices will be planned and applied

Purpose:

To assist in the development of a conservation plan for grazing management (CAP110) that identifies resource concerns and meets the requirements outlined in Practice Standard 528 (Prescribed Grazing). The CAP criteria requires the plan to meet quality criteria for applicable resources concerns and provides opportunities to implement essential conservation practices: Brush Management, Fencing, Firebreak, Forage Harvest Management, Grazing Land Mechanical Treatment, Herbaceous Weed Control, Nutrient Management, Forage and Biomass Planting, Prescribed Grazing, Range Planting, Access Control, and Watering Facilities.

Conditions Where Practice Applies:

This practice applies to grazed range and pasture only.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
110	≤ 100 acres	\$1,672.43	\$2,006.91
110	101 to 500 acres	\$2,229.90	\$2,675.88
110	501 to 1500 acres	\$2,787.38	\$3,344.85
110	1501 to 5000 acres	\$3,344.85	\$4,013.82
110	> 5000 acres	\$3,902.33	\$4,682.79

Criteria:

1. CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP110.
2. CAP plan must meet criteria for CAP110 outlined on the NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Prescribed Burn Management Plan

Conservation Activity Plan (CAP)

Code: 112

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Prescribed Burn Management Plan (CAP112) is a site specific plan developed for a client for controlled fire applied to a predetermined area that is dominated by fire tolerant species that are competing with undesirable vegetation and accumulating fuel load. The plan will be developed in accordance with Practice Standard 338 (Prescribed Burn). Natural resource concerns may include: fish and wildlife, soil erosion, soil condition, water quality, plant condition.

Purpose:

To assist in the development of a conservation plan for prescribed burn (CAP112) in accordance with Practice Standard 338. The CAP plan will fully describe all aspects of the prescribed burn including, but not limited to objectives of the burn, implementation strategies, tolerable weather parameters, and identification of Smoke Sensitive Areas. Associated resources concerns may include:

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

Conditions Where Practice Applies:

This practice applies to non-industrial private forest land, pasture or range land as appropriate.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
112	21 to 100 acres	\$431.34	\$517.61
112	101 to 250 acres	\$647.01	\$776.41
112	251 to 500 acres	\$862.68	\$1,035.22
112	501 to 1000 acres	\$1,078.35	\$1,294.02
112	> 1000 acres	\$1,294.02	\$1,552.82

Criteria:

1. CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP112.
2. CAP plan must meet criteria outlined on NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Integrated Pest Management Plan

Conservation Activity Plan (CAP)

Code: 114

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Integrated Pest Management Plan (CAP114) is a site specific combination of pest prevention, pest avoidance, pest monitoring, and pest suppression strategies. Current pest control activities cause environmental concerns with water quality, soil erosion and air quality (drift). The CAP114 will document decisions made by producers/growers who agree to implement an ecosystem-based strategy to manage pests on all lands, including smaller operations or organic / specialty crop operations where more complicated pest management evaluations and solution may be necessary.

Purpose:

To assist in the development of a conservation plan for integrated pest management (CAP114) in accordance with Practice Standard 595 (Integrated Pest Management). The plan identifies resource concerns due to off-site pesticide risks, including:

- Leaching, solution runoff and adsorbed runoff losses (water quality, soil erosion);
- Drift and volatilization of pesticides to soil, water, air, plants, animals and humans; and
- Direct contact of pesticide to pollinators and other beneficial species.

The strategy is a sustainable approach using a combination of conservation practices and IPM techniques that are characterized as chemical applications, biological control and 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. Associated practices include integrated pest management, crop rotation, cover crop, field boarder, filter strip, strip cropping, and residue and tillage management practices.

Conditions Where Practice Applies:

Various agricultural lands, including smaller operations, organic and specialty crop lands, where pests will be managed.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
114	Small Specialty < 50 acres	\$1,422.00	\$1,706.40
114	Medium 51 to 250 acres	\$1,820.16	\$2,184.19
114	Large > 250 acres	\$2,844.00	\$3,412.80

Criteria:

1. CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP114.
2. CAP plan must meet criteria for CAP114 outlined on NRCS FOTG.
3. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
4. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Irrigation Water Management Plan

Conservation Activity Plan (CAP)

Code: 118

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Irrigation Water Management Plan (CAP118) is a conservation plan that documents decisions by producers/growers to control the volume, frequency, and rate of water for efficient irrigation in accordance with Practice Standard 490 (Irrigation Water Management). Natural resource concerns include water quantity and all other appropriate resource concerns.

Purpose:

To assist the client in the development of a conservation plan for irrigation water management (CAP118) in accordance with Practice Standard 490 that identifies resource concerns (including, but not limited, to the following); provides the producer with a guide for proper management of irrigation water resources; and an IWM plan to implement:

- 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 or movement.
- Reduce energy use.

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).

Conditions Where Practice Applies:

This practice is applicable to agricultural operations with existing irrigation systems.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
118	Irrigation Water Management Plan	\$2,330.74	\$2,796.89
118	Irrigation Water Management Plan with pump test	\$3662.59	\$4,395.11

Criteria:

1. The CAP plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP118.
2. The CAP118 plan must meet criteria outline in the NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Agricultural Energy Management Plan

Conservation Activity Plan (CAP)

Code: 128

Reporting Unit: Each

Definition:

A conservation activity plan for Agricultural Energy Management Plan (AgEMP) (CAP128) is a detailed documentation and inventory of the energy consuming activities and components of the current agricultural operation. The ASABE S612 Standard On-Farm Energy Audit Standard provides a definition for each type of enterprise. The CAP128 will document a typical prior year of the on-farm energy consumption, and the strategy by which the producer will explore and prioritize their on-farm energy conservation concerns, objectives, and opportunities. Natural resource concerns include energy conservation.

Purpose:

To assist in the development of an AgEMP (CAP128) in accordance with ASABE S612 (July 2009). The AgEMP (or energy audit) will provide appropriate energy savings for each major activity (including a comparison to the baseline energy use) that reduces energy use and addresses the energy management needs for the agricultural operation. The AgEMP will 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. An AgEMP incorporates recommended measures to maximize energy conservation and efficiency.

Conditions Where Practice Applies:

This practice applies to existing and expanding animal feeding operations, farming or forestry operations where energy use may be reduced through more efficient system.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
128	AgEMP Small, One Enterprise	\$1,526.21	\$1,831.46
128	AgEMP Small, Two Enterprises	\$2,356.26	\$2,827.51
128	AgEMP Small, Three Enterprises	\$2,725.21	\$3,270.25
128	AgEMP Small, Four Enterprises	\$3,326.00	\$3,991.19
128	AgEMP Medium, One Enterprise	\$1,895.16	\$2,274.19
128	AgEMP Medium, Two Enterprises	\$3,186.31	\$3,823.57
128	AgEMP Medium, Three Enterprises	\$3,555.26	\$4,266.31
128	AgEMP Medium, Four Enterprises	\$4,156.04	\$4,987.25
128	AgEMP Large, One Enterprise	\$2,495.95	\$2,995.14
128	AgEMP Large, Two Enterprises	\$4,349.32	\$5,219.18
128	AgEMP Large, Three Enterprises	\$4,784.86	\$5,741.83
128	AgEMP Large, Four Enterprises	\$5,452.24	\$6,542.69

Criteria:

1. New Animal Feeding Operations (AFOs) are not eligible for EQIP funding assistance.

2. CAP128 must be completed by a NRCS Technical Service Provider (TSP) certified for CAP128.
3. CAP128 must meet criteria outlined for CAPs in the NRCS FOTG.
4. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
5. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Drainage Water Management Plan

Conservation Activity Plan (CAP)

Code: 130

Reporting Unit: Each

Definition:

The objective of a Conservation Activity Plan for Drainage Water Management Plan (CAP130) is to control soil water table elevations and the timing of water discharges from subsurface or surface agricultural drainage systems) in accordance with Practice Standard 554 (Drainage Water Management). 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 in accordance with the standard.

Purpose:

To assist the client in the development of a conservation plan for drainage water management (CAP130) in accordance with Practice Standard 554 that identifies resource concerns for reasons that include, but are not limited, to the following:

- Reduce nutrient, pathogen, and/or pesticide loading from drainage systems into downstream receiving waters.
- Improve productivity, health and vigor of plants.
- Reduce oxidation of organic matter in soils.
- Reduce wind erosion or particulate matter (dust) emissions.
- Provide seasonal wildlife habitat.

The plan will be ready for implementation with structural measures and management once the structures are installed.

Conditions Where Practice Applies:

This practice is applicable to agricultural land with surface and subsurface agricultural drainage systems that are adapted to allow management of drainage discharges.

This practice may not apply where saline or sodic soil conditions require special considerations.

The practice does not apply to the management of irrigation water supplied through a subsurface drainage system. For that purpose, use CAP118.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
130	Tile Map Available	\$1,979.90	\$2,375.88
130	No Tile Map Available	\$2,361.98	\$2,834.38

Criteria:

1. CAP130 plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP130.
2. CAP130 plan must meet criteria outlined in the NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Conservation Plan Supporting Organic Transition (CPSOT) Management Plan

Conservation Activity Plan (CAP)

Code: 138

Reporting Unit: Each

Definition:

A Conservation Plan Supporting Transition to an Organic System (CAP138) is a conservation activity plan assists in the transition from conventional farming or ranching system to an organic production system. The plan documents resource concerns, the organic resource assessment inventory and the producer's decisions to implement a system of conservation practices.

Purpose:

To assist the client in the development of a conservation plan for the transition to an organic system (CAP138). The plan will address planning criteria for resource concerns for soil erosion, water quality and plant condition. The organic resource assessment inventory and recommended practices provided to the producer by the TSP will be documented in the CAP 138. 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 a CPSOT as required by the National Organic Program.

Conditions Where Practice Applies:

This practice is eligible on agricultural land, including: cropland, forestland, pasture, and range where the producer will transition from conventional to organic.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
138	Conservation Plan Supporting Organic Transition CAP	\$2,277.65	\$2,733.18
138	Conservation Plan Supporting Organic Transition CAP – no local TSP	\$3,555.36	\$4,266.43

Criteria:

1. CAP138 plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP138.
2. CAP138 plans must meet criteria as outlined in the NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Fish and Wildlife Habitat Plan

Conservation Activity Plan (CAP)

Code: 142

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Fish and Wildlife Habitat Plan (CAP142) is a site-specific plan developed for a client who is ready to plan and implement decisions with considerations for fish and wildlife habitat and other biological resources. Client's objectives may include: managing the working lands for fish and wildlife resources; increasing populations of selected species or groups; maintaining populations of selected species or groups; and/or improving habitat for aquatic, wetland, and/or terrestrial species.

Purpose:

To assist in the development of a conservation activity plan for fish and wildlife habitat (CAP142) that will meet NRCS planning criteria for fish and wildlife habitat and other identified resource concerns. The plan will include documentation of existing conditions using NRCS habitat assessment / evaluation worksheets. The plan will satisfy the participant's objectives in regard to fish and wildlife resources.

Conditions Where Practice Applies:

This practice applies to various on-farm land uses where wildlife and wildlife habitat concerns exist.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
142	Fish and Wildlife Habitat Management Plan	\$2,418.89	\$2,902.66

Criteria:

1. CAP142 plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP142.
2. CAP142 plan must meet the criteria as outlined in NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

Pollinator Habitat Enhancement Plan

Conservation Activity Plan (CAP)

Code: 146

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Pollinator Habitat Enhancement (CAP146) 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. Natural resource concerns include fish and wildlife, plant condition, soil erosion, water quality on an agricultural operation.

Purpose:

To assist in the development of a conservation plan for pollinator habitat enhancement (CAP146) that will meet NRCS planning criteria for pollinator habitat and other identified resource concerns and satisfy the participant's objectives in regard to fish and wildlife resources. Existing conditions on the farmland will be documented using the appropriate habitat assessment, evaluation, or Habitat Suitability Index model and (when available) the Ecological Site Description to define the existing conditions for wildlife.

Conditions Where Practice Applies:

This practice applies to various on-farm land uses where pollinator and pollinator habitat resource concerns exist.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
146	Pollinator Habitat Enhancement Plan	\$2,418.89	\$2,902.66
146	Pollinator Habitat Enhancement Plan – no local TSP	\$3,513.14	\$4,215.77

Criteria:

1. CAP146 plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP146.
2. CAP146 plan must meet criteria outlined in NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

IPM Herbicide Resistant Weed Conservation Plan

Conservation Activity Plan (CAP)

Code: 154

Reporting Unit: Each

Definition:

A Conservation Activity Plan for Integrated Pest Management (IPM) Herbicide Resistance Weed Conservation Plan (CAP154) is a conservation plan that documents decisions by producers who agree to implement a system of conservation practices and IPM techniques with an emphasis on herbicide use orientation to suppress herbicide resistant weeds at the same time reduce the potential of herbicide resistant weeds establishing again in the treated area of cropland by utilizing the four IPM strategies: prevention, avoidance, monitoring, and suppression. This approach will be implemented with the augmentation of one or more of the following key essential conservation practices: crop rotations, cover crops, and residue tillage management practices.

Purpose:

To assist in the development of a conservation plan for pollinator habitat enhancement (CAP154) that will meet NRCS planning criteria for IPM (Practice Standard 595) and other identified resource concerns. The plan will satisfy the participant's objectives in regard to IPM Herbicide Resistant Weeds. Natural Resource concerns include water quality, soil erosion, soil condition and plan condition.

Conditions Where Practice Applies:

On-farm cropland where weeds are resistant to herbicides, including organic and specialty crops. Where producers choose to implement an IPM Herbicide Resistance Weed Conservation Plan for reasons that include, but are not limited to:

- Changing herbicide rotation (modes of action and herbicide) and intensifying mechanical practices (initially some manual labor may be needed where farms are presently populated with herbicide resistance weeds).
- Changing herbicide rotation (modes of action and herbicide) and increasing the use of conservation practices, along with IPM techniques, that prevent early term resistance weeds on farms.
- Minimize resistance weeds seed production by reducing the weed populations before the flowering stage or before maturity.
- Managing the weeds seed bank with a healthy soil (cover crops) to improve soil biological activity and shortening the half-life of the weed seed bank and establishing a desirable habitat for seed predators (invertebrates, small rodents, birds) that consume weed seed.
- Managing resistance weeds effectively and economically.
- Cover Crops—consider using cover crops to (1) aid in controlling herbicide resistance weeds by shading and out competing weeds for nutrients, (2) reduce water erosion to prevent herbicide contamination of water bodies and streams adjacent to treated site or field, and (3) manage cover crop residues left on soil surface can maximize the allelopathic (chemical) and mulching (physical) effects in suppressing herbicide resistance weed.

Payment Unit: Each

Payment Schedule:

Code	Activity Description	EQIP-General	EQIP-General-HU
154	Small Specialty Operation ≤ 50 acres	\$1,706.40	\$2,047.68
154	Medium Operation 51 – 250 acres	\$2,218.32	\$2,661.98
154	Large Operation >250 acres	\$3,412.80	\$4,095.36

Criteria:

1. CAP154 plan must be completed by a NRCS Technical Service Provider (TSP) certified for CAP154.
2. CAP154 plan must meet criteria outlined on NRCS FOTG.
2. Only one Conservation Activity Plan (CAP) may be concurrently approved and developed on an eligible land unit (i.e., field) at the same time, and must cover all eligible acres currently under the control of the applicant and included in their conservation plan.
3. CAPs are to be completed within the first year. Modifications are strongly discouraged.

