

***High Tunnel Initiative
IOWA
Environmental Quality Incentives Program
(EQIP)***

***List of Eligible Practices and
Payment Schedule FY2012***

January, 2012

PAYMENT UNIT TYPES

AC = Acres

AU = Animal Units

CFD= cubic foot per second X drop in feet

CY = Cubic Yards

EA = Each

NO = Number

FT = Feet

FT²= Square Foot

FT³ = Cubic Foot

FRP=feet of riser weir length X pipe barrel length in feet

GA = Gallon

HP = Horse Power

COST TYPE IS PR = Payment Rate – The payment rate is the amount of financial assistance (\$/unit) available through EQIP.

HU = Historically Underserved: Includes, Beginning Farmers, Limited Resource Farmers, Socially Disadvantaged Farmers, Tribal Farmers. The payment rate is higher for HU producers on most practices. To determine if you are an HU producer go to:

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/people/outreach/slbfr>

Table of Practices

Practice Code	Practice Name
328	Conservation Crop Rotation
330	Contour Farming
340	Cover Crop
342	Critical Area Planting
362	Diversion
412	Grassed Waterway
595	Integrated Pest Management
114	Integrated Pest Management Plan - Written
441	Irrigation System, Microirrigation
449	Irrigation Water Management
118	Irrigation Water Management Plan – Written
590	Nutrient Management
104	Nutrient Management Plan – Written
329	Residue and Tillage Management, No-Till/Strip-Till/Direct Seed
346	Residue and Tillage Management, Ridge-Till
798	Seasonal High Tunnel System for Crops
606	Subsurface Drain
620	Underground Outlet

**CONSERVATION CROP ROTATION
Practice Code 328**

Non-Livestock Management Practice

PRS Unit of Measurement: Acre

Definition: Growing crops in a recurring sequence on the same field.

Purposes: To reduce sheet and rill erosion, reduce soil erosion from wind, maintain or improve soil organic matter content, manage the balance of plant nutrients, manage plant pests (weeds, insects, and diseases), provide food for domestic livestock and provide food and cover for wildlife.

Applicability: This practice applies to all land where crops are grown, except pastureland, hayland, or other land used for crops grown occasionally only to facilitate renovation or re-establishment of perennial vegetation. It does not apply to land devoted to orchards, vineyards, or nurseries.

Organic Crop Production incentive is meant to offset some of the costs incurred by conversion to organic farming.

Conversion of Irrigated Land to Dry Land incentive is meant to offset some of the costs incurred by changing to a rotation that includes a less water intensive use crop than was part of the prior rotation.

Payment Schedule:

State-wide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
The use of crop rotation to reduce soil erosion, and to improve soil quality. Requires establishment of new acres of a rotation that includes perennial vegetation. Typical size is fifty (50) acres.	AC	\$52.00 <u>HU Rate</u> \$52.00	PR	100

Limitations: The Conservation Crop Rotation practice may be paid annually for up to 3 consecutive years.

Maintenance: Practice will be maintained for a lifespan of 1 year.

CONTOUR FARMING
Practice Code 330

Non-Livestock Management Practice

PRS Unit of Measurement: Acre

Definition: Farming sloping land in such a way that preparing land, planting, and cultivating are done on the contour. (This includes following established grades of terraces or diversions). This farming method may be used in conjunction with Contour Buffer Strips, Practice 332, which are narrow strips of perennial, herbaceous vegetative cover established across the slope and alternated down the slope with wider cropped strips.

Purpose: To reduce sheet and rill erosion, reduce transport of sediment and other water-borne contaminants down slope, on-site or off-site and to enhance upland wildlife habitat.

Applicability: Applicable on sloping cropland and on recreation and wildlife areas where crops are grown to reduce sheet and rill erosion and sediment production when other cultural or management cropping system practices do not adequately control soil and water loss.

This practice is most suitable on uniform slopes with slope lengths equal to or less than the Critical Slope Length, determined using the RUSLE2 or current erosion prediction model "P" factor procedure.

The effect on erosion reduction for this practice is reduced on fields where slope length exceeds the Critical Slope Length for contouring, unless the slope length is shortened by the installation of other practices such as terraces.

Payment Schedule:

State-wide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
Tillage and planting of row crops on the contour instead of up and down the hill to reduce soil erosion. Typical size is 50 acres.	AC	\$11.25 <u>HU Rate</u> \$13.50	PR	100

Limitations: This practice is unsuitable for use on irregular sloping topography because of the difficulty of staying within-row grade limits and the number of point rows. Contour Buffer Strips are a permanent vegetative cover not part of the normal crop rotation.

Maintenance: Contour Farming will be maintained for a lifespan of 5 year.

**COVER CROP
(AND GREEN MANURE)
Practice 340**

Non-Livestock Vegetative Practice

PRS Unit of Measurement: Acre

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

Purpose: To 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, increase biodiversity. To suppress diseases, weeds and insects, provide supplemental forage, soil moisture management, reduce particulate emissions into the atmosphere and minimize or reduce soil compaction.

Applicability: On all lands requiring vegetative cover for natural resource protection and/or improvement.

Cover Crop is an annually seeded small grain crop for erosion control purposes, livestock purposes or organic production.

Payment Schedule: This practice may be scheduled for 3 consecutive years.

State-wide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
This scenario will be used to establish any cover crop consisting of cereal grains . Examples include winter wheat, cereal rye, or winter triticale. Seed cover crops in accordance with species, rates, dates, and methods in the Cover Crop Standard. Please see additional cover crop scenarios created for organic and transitioning to organic producers.	AC	\$40.62 <u>HU Rate</u> \$48.74	PR	100
This scenario will be used to establish any grass and/or cereal grain cover crop. Where cereal grains will be seeded, only certified seed will be used. Seed cover crops in accordance with species, rates, dates, and methods in the Cover Crop Standard. Please see additional cover crop scenarios created for organic and transitioning to organic producers.	AC	\$35.46 <u>HU Rate</u> \$42.55	PR	100
This scenario will be used to establish any leguminous cover crop. Examples include but are not limited to Austrian winter pea, cow pea, Crimson clover, red clover, sweet clover, and hairy vetch. Seed cover crops in accordance with species, rates, dates, and methods in the Cover Crop Standard. Please see additional cover crop scenarios created for organic and transitioning to organic producers.	AC	\$38.76 <u>HU Rate</u> \$46.52	PR	100
This scenario will be used to establish any cover crop consisting of two or more species . This can include grasses, legumes, forbs, or other herbaceous plants. Seed cover crops in accordance with species, rates, dates, and methods in the Cover Crop Standard. Please see additional cover crop scenarios created for organic and transitioning to organic producers.	AC	\$42.46 <u>HU Rate</u> \$50.95	PR	100

<p>This scenario will be used to establish any cover crop species that winter kills. No species termination is required. Examples include oats, turnips, or radishes. Seed cover crops in accordance with species, rates, dates, and methods in the Cover Crop Standard. Please see additional cover crop scenarios created for organic and transitioning to organic producers.</p>	<p>AC</p>	<p>\$29.98 <u>HU Rate</u> \$35.98</p>	<p>PR</p>	<p>100</p>
<p>Used for non organic, transitioning to organic and certified organic Seasonal High Tunnels. Cropping system leaves Seasonal High Tunnel void of vegetation after harvest resulting in depletion in soil organic matter and nutrients. A certified organic, pure legume cover crop or a predominantly legume-based mixture containing other brassicas, grains or grasses will be established after harvest to increase soil organic matter, improve nutrient cycling, reduce soil compaction, and increase microbial populations. Cover crops will be terminated, typically by hand labor using rototillers and/or hand held crimpers in preparation for the following crop. Typical situation is a one (1) SHT average size 1500 sq. ft. growing diversified vegetable.</p>	<p>EA</p>	<p>\$47.30 <u>HU Rate</u> \$56.76</p>	<p>PR</p>	<p>100</p>

Limitations:

Maintenance: Cover Crop will be maintained for a lifespan of 1 year.

**CRITICAL AREA PLANTING
Practice Code 342**

Non-Livestock Vegetative Practice

PRS Unit of Measurement: Acre

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

Purposes: To stabilize areas with existing or expected high rates of soil erosion by water or wind and restore degraded sites that cannot be stabilized through normal methods.

Applicability: On areas with existing or expected high rates of erosion or on degraded sites that cannot be stabilized by ordinary conservation treatment and/or management. And if left untreated, the site could be severely damaged by erosion or sedimentation or could cause significant off-site damage. Examples of applicable areas are dams, terraces, dikes, mine spoil, levees, cuts, fills, surface-mined areas and denuded or gullied areas where vegetation is difficult to establish by usual planting methods.

Payment Schedule:

State-wide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
Area seeded to non-native cover – Introduced Grasses/Legumes Typical size is two (2) acres.	AC	\$141.00 <u>HU Rate</u> \$169.20	PR	100

Limitations:

Maintenance: Practice will be maintained for a lifespan of 10 year.

DIVERSION
Practice Code 362

Livestock Structural Practice

PRS Unit of Measurement: Feet

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

Purpose: To divert water away from farmsteads, agricultural waste systems, gullies, critical erosion areas or construction areas, or collect and direct runoff or protect terrace systems.

Applicability: As part of a resource management system, this applies to all cropland and other land uses where surface runoff water control and or management are needed. It also applies where soils and topography are such that the diversion can be constructed and a suitable outlet is available or can be provided.

Payment Schedule:

State-wide rate	Payment Unit Type	Unit Cost	Cost Type	Share Rate
Diversion: A channel and ridge constructed across a slope to divert water away from farmsteads, agricultural waste systems, gullies, critical erosion areas or construction areas or collect and direct runoff or protect terrace systems.	FT	\$1.55 <u>HU Rate</u> \$1.85	PR	100
GWV Protection Temporary Diversion: A ridge constructed parallel to the perimeter of a grassed waterway for the purpose of diverting runoff water from new construction until such time seeding is established and runoff water may safely flow through the grassed waterway. At such time diversion must be removed and blended into the landscape to ensure proper flow into the waterway.	FT	\$1.01 <u>HU Rate</u> \$1.22	PR	100

Limitations: Must be a component of a Comprehensive Nutrient Management Plan.

Maintenance: Practice will be maintained for a lifespan of 10 years.

**GRASSED WATERWAY
Practice Code 412**

Non-Livestock Structural Practice

PRS Unit of Measurement: Acre

Definition: A natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff.

Purpose: To convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding and to improve water quality.

Applicability: Sites where added capacity, vegetative protection, or both are required to control erosion resulting from concentrated runoff and where such control can be achieved by using this practice alone or combined with other conservation practices. This practice is not applicable where its construction would destroy important woody wildlife cover or wetlands and the present watercourse is not seriously eroding.

Payment Schedule:

Statewide (Unless indicated below)	Payment Unit Type	Rate	Cost Type	Share Rate
A grassed waterway less than 50 feet wide; does not include seeding, tile or fertilizer. It does include fabric / rock checks. Typical size is 700 linear feet. CRA 1	FT	\$1.16 <u>HU Rate</u> \$1.39	PR	100
A grassed waterway less than 50 feet wide; does not include seeding, tile or fertilizer. It does include fabric / rock checks. Typical size is 700 linear feet. CRA 2	FT	\$1.73 <u>HU Rate</u> \$2.08	PR	100
A grassed waterway less than 50 feet wide; does not include seeding, tile or fertilizer. It does include fabric / rock checks. Typical size is 700 linear feet. CRA 3 & 4	FT	\$1.46 <u>HU Rate</u> \$1.76	PR	100
A grassed waterway 50 feet to 60 feet wide: does not include seeding, tile or fertilizer. It does include fabric/rock checks. Typical size is 1,500 lineal feet. CRA 1	FT	\$1.55 <u>HU Rate</u> \$1.85	PR	100
A grassed waterway 50 feet to 60 feet wide: does not include seeding, tile or fertilizer. It does include fabric/rock checks. Typical size is 1,500 lineal feet. CRAs 2, 3, & 4	FT	\$2.24 <u>HU Rate</u> \$2.68	PR	100
A grassed waterway greater than 60 feet wide, does not include seeding, tile or fertilizer. It does include fabric/rock checks. Typical size 2,000 lineal feet. CRA 1	FT	\$1.70 <u>HU Rate</u> \$2.03	PR	100
A grassed waterway greater than 60 feet wide, does not include seeding, tile or fertilizer. It does include fabric/rock checks. Typical size 2,000 lineal feet. CRAs 2, 3, & 4	FT	\$2.90 <u>HU Rate</u> \$3.47	PRPR	10000

Limitations: Rates include fabric / rock checks; but do not include seeding, tile or fertilizer. These practices: Critical Area Seeding – 342 and Subsurface Drain – 606 must be added separately to the contract.

Maintenance: Practice must be maintained for a lifespan of 10 years.

**INTEGRATED PEST MANAGEMENT
Practice 595**

Non-Livestock Management Practice

PRS Unit of Measurement: Acre

Definition: The management of pests on farmland.

Purposes: To enhance the quantity and quality of commodity crops by minimizing the negative impacts of pests on soil, water, air, plant and animal resources.

Applicability: Where agricultural commodities or livestock are produced.

Payment Schedule: The rate is provided for developing and implementing the components of a 595 Pest Management Plan which could include scouting for insect pests, diseases, and weeds; record keeping, training, installation of weather monitoring, equipment calibration training and spray card coverage pattern assessment

This Payment is available for up to 3 consecutive years the activities are applied.

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
Mitigating the risk of pesticide loss from pest management activities used in Seasonal High Tunnels .	EA	\$211.46 <u>HU Rate</u> \$253.76	PR	100

Limitations: Pest management is capped (lifetime) at \$10,000/Participant and \$15,000/Historically Underserved Participant.

Maintenance: Practice must be maintained for a lifespan of 1 year.

INTEGRATED PEST MANAGEMENT PLAN - WRITTEN
Practice Code 114

PRS Unit of Measurement: Number

Definition: Integrated Pest Management (IPM) is an ecosystem-based strategy that is a sustainable approach to manage pests using a combination of techniques such as chemical tools biological control, habitat manipulation, and 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. The Integrated Pest Management activity plan:

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

Producers choose to implement an Integrated Pest Management Plan for reasons that include, but are not limited to:

- Managing pests effectively and economically;
- Minimizing the risk associated with pest suppression;
- Producing quality commodities;

Purpose: Plan conservation practices and IPM technique to mitigate potential environmental risk not to degrade the soil, water, air, and plant quality as related to suppression tactics being applied to manage the pest. Integrated Pest Management guidance for individual crops that indicate activities to be undertaken throughout the year based on the crop production cycle.

Applicability: On lands in Iowa that will benefit from the development and implementation of an Integrated Pest Management Plan.

Payment Schedule:

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
Development of a 114 Integrated Pest Management Conservation Activity Plan CAP.	NO	\$1,260.00 HU Rate \$1,512.00	PR	100

Limitations:

Maintenance: Practice must be maintained for a lifespan of 1 year.

**IRRIGATION SYSTEM, MICROIRRIGATION
Practice Code 441**

Non-Livestock Structural Practice

PRS Unit of Measurement: 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(s): 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.

Applicability: On sites where soils and topography are suitable for irrigation of proposed crops and an adequate supply of suitable quality water is available for the intended purpose(s).

Microirrigation is suited to vineyards, orchards, field crops, windbreaks, gardens, greenhouse crops, and residential and commercial landscape systems. Microirrigation is also suited to steep slopes where other methods would cause excessive erosion, and areas where other application devices interfere with cultural operations.

Microirrigation is suited for use in providing irrigation water in limited amounts to establish desired vegetation such as windbreaks, living snow fences, riparian forest buffers, and wildlife plantings.

This practice standard applies to systems with design discharge less than 60 gal/hr at each individual lateral discharge point.

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.

Payment Schedule:

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
This practice scenario is a drip irrigation system for a tree windbreak. The typical windbreak site being irrigated is composed of five rows of trees with each row being 600 feet in length. The typical total length of drip irrigation line would be 3000 feet. This practice includes all components of the micro irrigation system including the hose/pipe, emitters, connectors, valves, vents, and etc.	FT	\$0.38 <u>HU Rate</u> \$0.45	PR	100

Limitations:

Maintenance: Practice must be maintained for a lifespan of 15 years.

**IRRIGATION WATER MANAGEMENT
Practice Code 449**

Non-Livestock Structural Practice

PRS Unit of Measurement: 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, and improve air quality by managing soil moisture to reduce particulate matter movement.

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

Payment Schedule:

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
Flowmeter Installation –The installation of a flowmeter to monitor and measure irrigation application volume and/or depth of application. Flowmeter shall be capable of reading instantaneous flow along with total flow (i.e.: totalizer). Meter shall be installed as per manufacturer’s requirements and include all necessary appurtenances and fittings (i.e.: straightening fans and tubes).	NO	\$1,157.25 <u>HU Rate</u> \$1,388.70	PR	100
This practice includes measurement of irrigation water applications, rainfall during the growing season. These measurements along with crop water use (ET) will be used for decision making to schedule irrigation water application according to the 449-Irrigation Water Management standard requirements. Documentation/records of these items will be provided to ensure that IWM is being practiced. Typical application of this practice is 160 acres of irrigated cropland.	AC	\$3.49 <u>HU Rate</u> \$4.19	PR	100

Limitations:

Maintenance: Practice must be maintained for a lifespan of 1 year.

**IRRIGATION WATER MANAGEMENT PLAN - WRITTEN
Practice Code 118**

Non-Livestock Structural Practice

PRS Unit of Measurement: Acre

Definition: The objective of Irrigation Water Management (IWM) is to control the volume, frequency, and rate of water for efficient irrigation

Purpose: Promote desired crop response, optimize the use of available water supplies, improve water quality, by reducing irrigation sources of surface and ground water contamination, minimize irrigation induced soil erosion, improve soil environment for vegetative growth, manage salts in the root zone, improve air quality, by reducing movement of particulate matter, provide appropriate and safe fertigation and chemigation, and reduce energy consumption.

The objective of an Irrigation Water Management Plan (IWMP) is to provide the producer a guide for the proper management and application of irrigation water resources. The potential benefits of IWM can be effectively determined by interviewing the producer to identify fields, soils, crops, climate, and available water supply; measuring the volumes of water withdrawn or applied; determining irrigation system uniformity, selecting a method to schedule irrigations, and then combining these components to produce an IWMP for the farm.

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

Payment Schedule:

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
Development of a 118 Irrigation Water Management Conservation Activity Plan CAP.	NO	\$1,942.50 <u>HU Rate</u> \$2,331.00	PR	100

Limitations:

Maintenance: Practice must be maintained for a lifespan of 1 year.

**NUTRIENT MANAGEMENT
Practice Code 590**

Non-Livestock Management Practice

PRS Unit of Measurement: Acre

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

Purposes: To budget and supply nutrients for plant production; to properly utilize manure or organic by-products as a plant nutrient source; to minimize agricultural nonpoint source pollution of surface and ground water resources, protect air quality by reducing both nitrogen emissions (ammonia and NO_x compounds), and the formation of atmospheric particulates and finally to maintain or improve the physical, chemical and biological condition of soil.

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

Payment Schedule: This Payment is available for the first 3 consecutive years that the activities are applied. If the activities are only applied every other year in a rotation, the payment would be scheduled for those years.

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
Implementing a basic level of nutrient management for a cropping system used in Seasonal High Tunnels includes soil, compost and manure tests and labor for analyzing results, developing a nutrient management plan and recordkeeping.	EA	\$65.73 <u>HU Rate</u> \$78.87	PR	100

Limitations: All categories with enhancements require the following 1) If associated with irrigated land must also apply 449 Irrigation Water Management, 2) If associated with drained land must also apply 554 Drainage Water Management if feasible. Nutrient Management is capped (lifetime) at \$24,000/Participant and \$29,000/Historically Underserved Participant.

Maintenance: Practice must be maintained for a lifespan of 1 year.

NUTRIENT MANAGEMENT PLAN - WRITTEN
Practice Code 104

PRS Unit of Measurement: Number

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

A Nutrient Management conservation activity plan must:

- a. Meet NRCS quality criteria for soil erosion (sheet, rill, wind, and ephemeral/concentrate flow erosion), water quality and quantity, and other identified resource concerns;
- b. Be developed in accordance with technical requirements of the NRCS Field Office Technical Guide (FOTG) and policy requirements of General Manual, Title 190, Part 402, Nutrient Management; and guidance contained in the National Agronomy Manual, Subpart 503C.
- c. Comply with federal, state, tribal, and local laws, regulations and permit requirements; and
- d. Satisfy the operator's objectives.

Purposes: The Nutrient Management Plan shall address the resource concerns identified and the conservation practices needed to comprise a conservation system. Document the planned conservation practices, the site specific specifications for the practice, the amount to be applied, and schedule of application.

Applicability: On lands in Iowa that will benefit from the development and implementation of a Nutrient Management Plan.

Payment Schedule:

Statewide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
Development of a 104 Nutrient Management Conservation Activity Plan CAP. < 100 AC	NO	\$1,596.00 <u>HU Rate</u> \$1,915.20	PR	100
Development of a 104 Nutrient Management Conservation Activity Plan CAP. 101-300 AC	NO	\$1,890.00 <u>HU Rate</u> \$2,268.00	PR	100
Development of a 104 Nutrient Management Conservation Activity Plan CAP. >300 AC	NO	\$2,268.00 <u>HU Rate</u> \$2,721.60	PR	100

Limitations:

Maintenance: Practice must be maintained for a lifespan of 1 year.

**RESIDUE AND TILLAGE MANAGEMENT, NO-TILL OR STRIP-TILL
Practice 329**

Non-Livestock Management Practice

PRS Unit of Measurement: 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: To reduce sheet and rill, and wind erosion; improve soil organic matter content; reduce CO₂ losses from the soil; reduce soil particulate emissions; increase plant-available moisture, provide food and escape cover for wildlife.

Applicability: This practice applies to all cropland and other land where crops are planted. These planting methods are commonly referred to as no-till, strip till, direct seed, zero till, slot till, or zone till. Approved implements are: no-till and strip-type fertilizer and manure injectors and applicators; and similar implements that only disturb strips and slots. All others are considered to be full-width or capable of full disturbance and therefore not compatible.

Payment Schedule:

State-wide rate	Payment Unit Type	Rate	Cost Type	Share Rate
Year 1 - Agricultural planted crops utilizing no-till/strip-till with soil disturbance less than 30% and STIR value shall be no greater than of 10 for no-till and no greater than 15 for strip till. Typical size is 200 acres.	AC	\$22.50 <u>H Rate</u> \$27.00	PR	100
Year 2 - Agricultural planted crops utilizing no-till/strip-till with soil disturbance less than 30% and STIR value shall be no greater than of 10 for no-till and no greater than 15 for strip till. Typical size is 200 acres.	AC	\$37.50 <u>HU Rate</u> \$45.00	PR	100
Year 3 - Agricultural planted crops utilizing no-till/strip-till with soil disturbance less than 30% and STIR value shall be no greater than of 10 for no-till and no greater than 15 for strip till. Typical size is 200 acres.	AC	\$45.00 <u>HU Rate</u> \$50.00	PR	100

Soil disturbance percentage is determined by measuring the amount of the row width that is disturbed by soil preparation and planting equipment. For example, for a 30" row, up to 9" can be disturbed by drilling equipment and still qualify as No-till for EQIP.

STIR (Soil Tillage Intensity Ratio) is estimated using the Revised Universal Soil Loss Equation 2 (RUSLE2) which estimates soil loss from rill and inter-rill erosion caused by rainfall on cropland, for several alternative combinations of crop system and management practices. It also considers specified soil types, rainfall patterns, and topography.

Limitations: This practice is payable only to producers who have not previously used the practice for a full rotation, example: If the applicant has only no-tilled the soybean year of a corn-soybean rotation they are eligible, but if the applicant had no-tilled both corn and soybeans anywhere in there operation they are not eligible. Applicants who previously received financial assistance from any government program for applying this

[Back To Table Of Practices](#)

practice, are not eligible for EQIP financial assistance for no-till or strip-till. When no-till is scheduled for more than one year, the scheduled years must run consecutively. The maximum number of years payment can be made for is 3. Residue and Tillage Management, No-Till or Strip-Till is capped (lifetime) at \$34,000/Participant and \$39,000/Historically Underserved Participant.

Maintenance: Practice will be maintained for a minimum lifespan of 1 year.

RESIDUE AND TILLAGE MANAGEMENT, RIDGE-TILL
Practice Code 346

Non-Livestock Management Practice

PRS Unit of Measurement: Acre

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

Purpose: To reduce sheet and rill, and wind erosion; maintain or improve soil condition; manage snow to increase plant-available moisture; modify cool wet site conditions; provide food and escape cover for wildlife.

Applicability: This practice applies to all cropland and other land where crops are planted. These tillage and planting methods are commonly referred to as ridge till or ridge planting. It does not include no-till planting on ridges, or bedding or listing operations that bury crop residues.

Payment Schedule:

State-wide rate	Payment Unit Type	Rate	Cost Type	Share Rate
Agriculture crops planted utilizing ridge-till planting and fertilizer placement with no more than 30% soil disturbance. Typical size is 200 acres	AC	\$14.50 <u>HU Rate</u> \$15.08	PR	100

Limitations: This practice is payable only to producers who have never used the practice. When ridge till is scheduled for more than one year, the scheduled years must run consecutively. The maximum number of years payment can be made for is 3. Residue and Tillage Management, Ridge-Till is capped (lifetime) at \$14,000/Participant and \$15,000/Historically Underserved Participant.

Maintenance: Practice will be maintained for a minimum lifespan of 1 year.

SEASONAL HIGH TUNNEL SYSTEM FOR CROPS
Practice Code 798

Non-Livestock Structural Practice

PRS Unit of Measurement: SQ. FT.

Definition: A seasonal polyethylene covered structure with no electrical, heating, and/or mechanical ventilation systems that is used to cover crops to extend the growing season in an environmental safe manner.

Purpose: Extend the growing season, improve plant quality, improve soil quality, and improve water quality from reduced nutrient and pesticide transport.

Applicability: This practice applies to existing cultivated cropland where extension of the growing season is needed due to climate conditions and crops can be grown in the natural soil profile.

Payment Schedule:

State-wide rates	Payment Unit Type	Rate	Cost Type	Share Rate
The high tunnel is used in vegetable or small fruit crops to extend the growing season, improve water quality, improve soil condition, and increase local food production. A 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. All runoff shall be managed to reduce soil erosion and prevent water quality issues; if plastic is not removed at the end of growing season, landowners must ensure management of snow load and adequate ventilation. Additional consideration should be made for Nutrient and Pest Management.	FT ²	\$2.97 <u>HU Rate</u> \$3.08	PR	100

Limitations: The following are not eligible for financial assistance but are allowed at the participant's expense: electricity, heating, or ventilation (other than lifting the sides). When the sides are lifted for ventilation, a mesh screen may be used to keep insects out. The participant must purchase a manufacturer's kit and must follow the manufacturer's specifications. Practice is eligible for use with annual and perennial crops. Structure must be at least 6 feet tall and no more than 30 feet wide. The participant is allowed to leave the tunnel cover in place through the winter. It is the participant's responsibility to replace or repair the cover if it is damaged. Plants must be grown in natural ground. Raised beds with structural sides are NOT permitted. Mounding natural soil without structural sides is allowed. If surface water drainage issues causing erosion are present or created, practices must be installed to treat this resource concern. Practice is only eligible on existing cropland. Financial assistance is limited to no more than 2,178 square feet.

Maintenance: Practice must be maintained for a lifespan of 4 years.

**SUBSURFACE DRAIN
Practice Code 606**

Non-Livestock Structural Practice

PRS Units of Measurement: Feet

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

Purposes: To improve the soil environment for vegetative growth, reduce erosion, and improve water quality by removing surface runoff.

Applicability: To areas having a high water table where the benefits of lowering the water table or controlling ground water or surface runoff justify installing such a system.

Payment Schedule:

State-wide rates	Payment Unit Type	Unit Cost	Cost Type	Share Rate
The installation of a 4 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 2,000 linear feet.	FT	\$0.85 <u>HU Rate</u> \$1.02	PR	100
The installation of a 5 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 2,000 linear feet. CRAs 1 & 2	FT	\$1.19 <u>HU Rate</u> \$1.43	PR	100
The installation of a 5 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 2,000 linear feet. CRAs 3 & 4	FT	\$1.04 <u>HU Rate</u> \$1.25	PR	100
The installation of a 6 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 2,000 linear feet. CRAs 1 & 2	FT	\$1.46 <u>HU Rate</u> \$1.76	PR	100

<p>The installation of a 6 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 2,000 linear feet. CRAs 3 & 4</p>	FT	\$1.24 <u>HU Rate</u> \$1.49	PR	100
<p>The installation of an 8 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 1,000 linear feet.</p>	FT	\$2.12 <u>HU Rate</u> \$2.55	PR	100
<p>The installation of a 10 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 500 linear feet.</p>	FT	\$3.28 <u>HU Rate</u> \$3.93	PR	100
<p>The installation of a 12 inch plastic tile drain. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling ground water. Typical size is 200 linear feet.</p>	FT	\$4.36 <u>HU Rate</u> \$5.23	PR	100
<p>The installation of a plastic tile drain with a nominal diameter larger than 12 inches. A plastic conduit installed beneath the ground to collect and/or convey drainage water for the purpose of controlling groundwater. Typical size is 200 linear feet.</p>	FT	\$10.03 <u>HU Rate</u> \$12.03	PR	100

Limitations: This practice can only be used when required in combination with another practice on this list. When used in combination with a grassed waterway, payment is limited to no more than the amount needed to maintain the grassed waterway. The maximum diameter size for payment when used in combination with a grassed waterway is 6 inches.

Maintenance: Practice must be maintained for a lifespan of 20 years.

**UNDERGROUND OUTLET
Practice Code 620**

Non-Livestock Structural Practice

PRS Unit of Measurement: Feet

Definition: A conduit installed beneath the surface of the ground to collect surface water and convey it to a suitable outlet.

Purpose: To dispose of excess water from terraces, diversions, subsurface drains, surface drains, trickle tubes or principal spillways from dams (outside the dam area only), or other concentrations without causing damage by erosion or flooding.

Applicability: Where excess surface water needs to be disposed of; an underground outlet can be installed that will safely dispose of excess water, and surface outlets are impractical because of stability problems, climatic conditions, land use, or equipment traffic.

Payment Schedule:

Underground Outlet	Payment Unit Type	Unit Cost	Cost Type	Share Rate
A 5" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 1 & 2	FT	\$1.78 <u>HU Rate</u> \$2.13	PR	100
A 5" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 3 & 4	FT	\$1.55 <u>HU Rate</u> \$1.85	PR	100
A 6" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 1 & 2	FT	\$2.32 <u>HU Rate</u> \$2.78	PR	100

<p>A 6" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 3 & 4</p>	<p>FT</p>	<p>\$1.85 <u>HU Rate</u> \$2.22</p>	<p>PR</p>	<p>100</p>
<p>A 8" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 1 & 2</p>	<p>FT</p>	<p>\$2.59 <u>HU Rate</u> \$3.11</p>	<p>PR</p>	<p>100</p>
<p>A 8" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc. CRAs 3 & 4</p>	<p>FT</p>	<p>\$2.32 <u>HU Rate</u> \$2.78</p>	<p>PR</p>	<p>100</p>
<p>A 10" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc.</p>	<p>FT</p>	<p>\$3.47 <u>HU Rate</u> \$4.17</p>	<p>PR</p>	<p>100</p>
<p>A 12" diameter or less pipe (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc.</p>	<p>FT</p>	<p>\$4.40 <u>HU Rate</u> \$5.27</p>	<p>PR</p>	<p>100</p>
<p>A pipe greater than 12" in diameter (all types) buried in the ground, acting as a water outlet for a corresponding conservation practice. This includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a corresponding conservation practice. Typically this would be an underground outlet for the practice of terraces, water and sediment control basins, etc.</p>	<p>FT</p>	<p>\$10.03 <u>HU Rate</u> \$12.03</p>	<p>PR</p>	<p>100</p>

<p>The installation of underground outlet system for diverting roof runoff from concrete open lot systems. Includes lot floor concrete removal to facilitate the clean water diversion outlet. Includes granular backfill and replacement concrete. Also includes the conduit and all affiliated appurtenances (inlets, outlets, and fittings) installed beneath the ground surface to collect and convey surface water from a 558 practice. Typical gutter length of 100 ft with 8" diameter underground outlet pipe. Gutter and downspouts are not part of this practice.</p>	<p>FT</p>	<p>\$15.00 <u>HU Rate</u> \$18.00</p>	<p>PR</p>	<p>100</p>
---	-----------	---	-----------	------------

Limitations: This practice can only be used when required in combination with another practice on this list. The unit cost includes all affiliated appurtenances (inlets, outlets and fittings) installed beneath the ground to collect and/or convey drainage water.

Maintenance: Practice must be maintained for a lifespan of 20 years.