

## **PROGRAM PAYMENTS ON STRUCTURAL PRACTICES - FY 2011**

### **Introduction**

The following guidelines are provided to assist NRCS staff in determining eligible payments in the implementation of engineering practices for conservation programs administered by the Natural Resources Conservation Service (NRCS) in North Dakota. Individual program criteria may establish additional requirements, establish limits on the number of units that may be paid, or prohibit payment on some conservation practices. See applicable program guidelines for more information.

The Structural Payment Schedule Guidance is arranged numerically by conservation practice code for structural practices payments. Included is a basic description of the practice and activity type. The components that were used to develop the payment rate are also listed. Finally, each practice payment includes guidance on developing quantities for payment amounts.

**NOTE:** The bulleted items are for information on what components were used to develop the rate. Actual installed practices that are eligible for payment may not have installed all of the components of a 'typical' practice.

**The practice payment rate was included for convenience and was current as of November 2010. Always reference the appropriate payment schedule in Section I of FOTG for the most current rates.**

### 313 – Waste Storage Facility

313	EQIP	Waste Storage Facility (No.)	Solid Stacking Facility	Cu Yd	\$207.74
313	EQIP (existing AFO)	Waste Storage Facility (No.)	Solid Stacking Facility	Cu Yd	\$242.36

#### ***Solid Stacking***

A solid storage facility constructed to store manure and bedding. Costs used to determine the payment rate include:

- Steel Reinforced flatwork
- Formed steel reinforced exterior and interior walls
- Stripping
- Excavation

**Payment quantity will be cubic yards of concrete.** Quantity calculations include floor, footings, exterior walls, & interior walls.

313	EQIP	Waste Storage Facility (No.)	Liquid Storage-Concrete	Cu Ft	\$1.66
313	EQIP (existing AFO)	Waste Storage Facility (No.)	Liquid Storage-Concrete	Cu Ft	\$1.94

#### ***Liquid Storage - Concrete***

A liquid storage tank consisting of a storage facility buried in the ground. Costs used to determine the payment rate include:

- Steel Reinforced Flatwork
- Formed steel reinforced exterior and interior concrete walls
- Excavation

**Payment quantity will be cubic feet of storage.** Quantity calculations are based on the cubic feet of storage in the structure including above the pump out level.

313	EQIP	Waste Storage Facility (No.)	Earthen Pond	Cu Yd	\$1.37
313	EQIP (existing AFO)	Waste Storage Facility (No.)	Earthen Pond	Cu Yd	\$1.59

### ***Earthen Storage Pond***

An earthen storage pond constructed to store animal waste. Costs used to determine the payment rate include:

- Staff gauge
- Concrete chute
- Excavation
- Earthfill

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.** Quantity calculations for excavation include stripping under fill, over-excavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including core trench fill, overfill for settlement, topsoil and backfill of stripped area.

### **317 – Composting Facility**

317	EQIP	Composting Facility (No.)	Composting Facility	Cu Yd	\$169.19
317	EQIP (existing AFO)	Composting Facility (No.)	Composting Facility	Cu Yd	\$197.39

### ***Composting Facility***

This is a treatment component of an agricultural management system for the biological stabilization of organic material. Costs used to determine the payment rate include:

- Roof with Steel sidewalls
- Concrete flatwork
- Concrete Exterior walls
- Concrete Interior walls
- Stripping
- Site Prep
- Gravel Base
- Roof and Steel Sidewall installation

**Payment quantity will be cubic yards of storage available in the structure.** The storage volume is determined by the depth that material could reasonably be placed in the structure.

### 350 – Sediment Basin

350	EQIP	Sediment Basin (No.)	Sediment Basin	Cu Yd	\$1.32
350	EQIP (existing AFO)	Sediment Basin (No.)	Sediment Basin	Cu Yd	\$1.54

#### ***Sediment Basin***

A sediment control basin constructed in an ephemeral waterway to capture sediment and slowly-release water. The outlet to release water can be the soil, a grassed waterway, or an underground outlet. Costs used to determine the payment rate include:

- Excavation

**Payment quantity will be cubic yards of excavation.** Quantity calculations for excavation include excavation to grade and overexcavation for topsoil placement.

### 351 – Well Decommissioning

351	EQIP	Well Decommissioning (No.)	Well Decommissioning	Diameter inch foot	\$0.96
351	EQIP (existing AFO)	Well Decommissioning (No.)	Well Decommissioning	Diameter inch foot	\$1.12

#### ***Well Decommissioning 4” or greater, non-artesian***

The sealing and permanent closure of a water well no longer in use. Costs used to determine the payment rate include:

- Sand
- Bentonite
- Concrete
- Native Clay
- Chlorine
- Labor

**Payment quantity will be diameter inch foot.** Quantity calculations include the diameter of the well in inches and the entire length of the well in feet. Length is determined by maximum depth of the well to the ground surface.

351	EQIP	Well Decommissioning (No.)	Well Decommissioning less than 4" or Artesian	ft.	\$7.30
351	EQIP (existing AFO)	Well Decommissioning (No.)	Well Decommissioning less than 4" or Artesian	ft.	\$8.51

***Well Decommissioning less than 4" or Artesian***

The sealing and permanent closure of a water well no longer in use. The well casing is less than 4 inches in diameter or the well is under pressure not necessarily flowing at the surface. NRCS standard requires the decommissioning be conducted by a licensed well driller in the state of North Dakota. Costs used to determine the payment rate include:

- Concrete Grout
- Bentonite Grout
- Native Clay
- Chlorine
- Water for Construction
- Labor
- Mobilization

**Payment quantity will be diameter inch foot.** Quantity calculations include the diameter of the well in inches and the entire length of the well in feet. Length is determined by maximum depth of the well to the ground surface.

## 356 – Dike

356	EQIP	Dike (Ft.)	Dike	Cu Yd	\$2.20
356	EQIP (existing AFO)	Dike (Ft.)	Dike	Cu Yd	\$2.56

### ***Dike***

An embankment constructed of earth or other suitable materials to protect land against overflow or to regulate water. Costs used to determine the payment rate include:

- Earthfill
- Stripping
- Core Trench
- Culvert

**Payment quantity will be cubic yards of earthfill.** Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil placement on sideslopes to grade, and backfill of stripped area and core trench.

### ***Ring Dike 4 ft or less***

### ***Ring Dike 4.1 ft to 6 ft***

### ***Ring Dike >6 ft***

356	EQIP	Dike (Ft.)	Ring Dike 4ft or less	FT	\$8.23
356	EQIP	Dike (Ft.)	Ring Dike 4.1 to 6 ft	FT	\$11.19
356	EQIP	Dike (Ft.)	Ring Dike >6	FT	\$19.73

An embankment constructed of earth or other suitable materials to protect land against overflow or to regulate water. Ring Dikes form an enclosure to protect farmsteads or other property from flood waters of various heights. Costs used to determine the payment rate include:

- Earthfill
- Excavation
- Topsoil
- Culverts
- Gravel at driveway

**Payment quantity will be lineal feet of dike.** Quantity calculation for length includes transition area if raising existing dike or road.

### 360 – Closuresment of Waste Impoundment

360	EQIP	Closuresment of Waste Impoundment (No.)	Close Waste Impoundment	Each	\$4,787.20
360	EQIP (existing AFO)	Closuresment of Waste Impoundment (No.)	Close Waste Impoundment	Each	\$5,585.07

#### ***Closure Waste Impoundments***

The closure of waste impoundments that are no longer used for their intended purpose, in an environmentally safe manner. Costs used to determine the payment rate include:

- Earthfill

**Payment quantity will be each closure.** No quantity calculations are needed. Removal of stored waste is paid as a separate practice, 633 Waste Utilization.

### 362 – Diversion

Clean water diversions that are not part of a CNMP will compete for funding under the Local Work Group (LWG) funding pool.

362	EQIP	Diversion (Ft.)	Diversion	Cu Yd	\$1.84
362	EQIP (existing AFO)	Diversion (Ft.)	Diversion	Cu Yd	\$2.14

#### ***Diversion***

A channel constructed across long slopes, undulating land surfaces or gently rolling slopes to divert water away from farmsteads, agricultural waste systems, gullies, critical erosion areas or construction areas or collect and direct runoff or protect terraces. Costs used to determine the payment rate include:

- Excavation
- Topsoil
- Earthfill

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.** Quantity calculations for excavation include stripping under fill, overexcavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil and backfill of stripped area.

## 378 – Pond

378	EQIP	Pond (No.)	Embankment Pond	Cu Yd	\$1.74
378	EQIP (existing AFO)	Pond (No.)	Embankment Pond	Cu Yd	\$2.03

### ***Embankment Pond, No Permit***

Small farm pond for livestock water and wildlife habitat constructed by building an embankment across a small drain. This pond may not require a principal spillway but may include a trickle tube. Costs used to determine the payment rate include:

- Trickle Tube Pipe
- Machine Compacted Earthfill
- Excavation for Core Trench

**Payment quantity will be cubic yards of earthfill.** Quantity calculations include the earthfill required to construct the pond to total fill height including overfill for settlement, earthfill to replace the stripping, backfill of the core trench, and volume of topsoil specified in the plans.

378	EQIP	Pond (No.)	Principle Spillway Pipe	CFS	\$265.19
378	EQIP (existing AFO)	Pond (No.)	Principle Spillway Pipe	CFS	\$309.39

### ***Principle Spillway Pipe***

Pipe installed in a small farm pond for livestock water and wildlife habitat constructed by building an embankment across a small drain. The pipe is high cost item whose inclusion or exclusion will significantly alter the cost of implementing the practice. It may be necessary to repair/replace existing pipe without rebuilding dam structure itself. Costs used to determine the payment rate include:

- Pipe
- Anti-Seep Collars
- Connecting Bands
- Trash rack
- Concrete base or weir box
- Timber pipe support
- Hand Compaction

**Payment quantity will be cubic feet per second of flow passed through pipe.**

Quantity calculations hydraulic analysis to determine design flow required to specify the pipe size.

378	EQIP	Pond (No.)	Excavated Pond	Cu Yd	\$1.39
378	EQIP (existing AFO)	Pond (No.)	Excavated Pond	Cu Yd	\$1.62

### ***Excavated Pond***

A small farm pond for livestock water constructed by excavating an area. Costs used to determine the payment rate include:

- Excavation

**Payment quantity will be cubic yards of excavation.** Quantity calculations for excavation include stripping, excavation to grade and over-excavation for gravel placement.

378	EQIP	Pond (No.)	Wildlife Pond	Cu Yd	\$1.39
378	EQIP (existing AFO)	Pond (No.)	Wildlife Pond	Cu Yd	\$1.62

### ***Wildlife Pond***

Shallow water area developed to provide adequate drinking water for wildlife. A water impoundment made by excavating a pit or dugout. Costs used to determine the payment rate include:

- Excavation

**Payment quantity will be cubic yards of excavation.** Quantity calculations for excavation include stripping, excavation to grade and over-excavation for gravel placement.

## **410 – Grade Stabilization Structure**

410	EQIP	Grade Stabilization Structure	Sheet Pile Weir	Sq ft.	\$32.20
410	EQIP (existing AFO)	Grade Stabilization Structure	Sheet Pile Weir	Sq ft.	\$37.56

### ***Sheet Pile Weir***

A grade stabilization structure installed at the toe of ephemeral forming gully, consisting of an embankment across a drain with a weir constructed from sheet piling. Costs used to determine the payment rate include:

- Excavation
- Earthfill
- Piling
- Water for Construction
- Topsoil
- Rock Riprap

**Payment quantity will be square feet of piling.** Quantity calculations include the entire area of sheet piling above and below ground.

410	EQIP	Grade Stabilization Structure	Grade Stabilization Dam	Cu. Yd.	\$2.14
410	EQIP (existing AFO)	Grade Stabilization Structure	Grade Stabilization Dam	Cu. Yd.	\$2.49

### ***Grade Stabilization Dam***

A grade stabilization structure constructed by building an embankment across a small drain to control gully headcuts. A large diameter principal spillway pipe and drop inlet is installed along with a filter diaphragm, pipe support, and riprap as needed. Costs used to determine the payment rate include:

- Principal Spillway Pipe
- Filter Drain Pipe
- Drop Inlet
- Riser Base
- Principal Spillway Tee
- Trash Rack
- Filter Diaphragm
- Rock Riprap
- Temporary Erosion Control
- Manually Compacted Backfill
- Machine Compacted Earthfill
- Excavation for Core Trench

**Payment quantity will be cubic yards of earthfill.** Quantity calculations include the earthfill required to construct the embankment to total fill height including overfill for settlement, earthfill to replace the stripping, backfill of the core trench, and volume of topsoil specified in the plans.

410	EQIP	Grade Stabilization Structure	Concrete Drop Box Spillway	Cu. Yd.	\$339.94
410	EQIP (existing AFO)	Grade Stabilization Structure	Concrete Drop Box Spillway	Cu. Yd.	\$396.60

### **Concrete Drop Box Spillway**

Installation of a concrete box drop spillway structure installed at the toe of ephemeral forming gully. The structure uses standard designs and includes all components of installation. Costs used to determine the payment rate include:

- Concrete
- Geotextile
- Fine Drainfill
- Rock Riprap
- Earthfill

**Payment quantity will be cubic yards of concrete.** Quantity calculations for concrete include volume to grade along with volume for footers.

410	EQIP	Grade Stabilization Structure	Concrete Structure	Cu. Yd.	\$237.41
410	EQIP (existing AFO)	Grade Stabilization Structure	Concrete Structure	Cu. Yd.	\$276.97

### **Concrete Structure**

Installation of a concrete straight drop spillway structure installed at the toe of ephemeral forming gully. The structure uses standard designs and includes all components of installation. Costs used to determine the payment rate include:

- Concrete
- Drain Pipe
- Fine Drainfill
- Earthfill

**Payment quantity will be cubic yards of concrete.** Quantity calculations for concrete include volume to grade along with volume for footers.

410	EQIP	Grade Stabilization Structure	Concrete Block Structures	Structure Factor (Drop Height x Design Width)	\$40.24
410	EQIP (existing AFO)	Grade Stabilization Structure	Concrete Block Structures	Structure Factor (Drop Height x Design Width)	\$46.94

### **Concrete Block Structures**

A grade stabilization structure installed at the toe of ephemeral forming gully constructed of large concrete blocks stacked on each other or small concrete masonry units (CMU) laid on a slope to form a chute. Costs used to determine the payment rate include:

- Concrete Blocks
- Sand Bedding
- Geotextile
- Earthfill
- Excavation

**Payment quantity will be a structure factor.** The structure factor is calculated by multiplying the drop height by the design width.

410	EQIP	Grade Stabilization Structure	Rock Chute	Structure Factor (Drop Height x Design Flow)	\$10.71
410	EQIP (existing AFO)	Grade Stabilization Structure	Rock Chute	Structure Factor (Drop Height x Design Flow)	\$12.50

### **Rock Chute**

A grade stabilization structure consisting of a rock chute spillway structure installed at the toe of ephemeral forming gully. Costs used to determine the payment rate include:

- Rock Riprap
- Geotextile

**Payment quantity will be a structure factor calculated by multiplying the drop height in feet by the design flow in cfs.** The drop height is determined by the elevation change from the inlet to the chute to the outlet elevation. The design flow is determined by hydraulic analysis to determine the flow through the chute at the designed size.

410	EQIP	Grade Stabilization Structure	Pipe Drop	Structure Factor (Design Height x Design Flow)	\$12.68
410	EQIP (existing AFO)	Grade Stabilization Structure	Pipe Drop	Structure Factor (Design Height x Design Flow)	\$14.80

***Pipe Drop-***

A grade stabilization structure installed on steep land, at the toe of ephemeral forming gully constructed of primarily earthfill and a drop pipe. Costs used to determine the payment rate include:

- Clearing and grubbing
- Removal of water
- Excavation for Core Trench
- Earthfill
- Stripping
- Topsoil
- Concrete
- Pipe and appurtenances
- Rock Riprap
- Geotextile
- Trash Rack

**Payment quantity will be a structure factor calculated by multiplying the design height in feet by the design flow in cfs.** The design height is determined by the height of the structure from original ground to top of fill. The design flow is determined by hydraulic analysis to select the correct size of pipe.

## 412 – Grassed Waterway

412	EQIP	Grassed Waterway (Ac.)	Grass Waterway	Cu Yd	\$1.69
412	EQIP (existing AFO)	Grassed Waterway (Ac.)	Grass Waterway	Cu Yd	\$1.97

### **Grassed Waterway**

A natural or constructed channel that is shaped or graded to required dimensions and established with suitable vegetation. Costs used to determine the payment rate include:

- Excavation
- Topsoil
- Earthfill

**Payment quantity will be cubic yards of excavation.** Quantity calculations for excavation include excavation to grade and overexcavation for topsoil placement.

## 430 – Irrigation Water Conveyance, Pipeline

430	EQIP	Irrigation Water Conveyance, Pipeline(Ft.)	Plastic PIP	dia in-ft	\$0.57
-----	------	--	-------------	-----------	--------

### **Plastic PIP**

An 8”, 10”, or 12” pipeline and appurtenances installed in an irrigation system. Pipe will consist of plastic pipe rated to a pressure of 50 psi or higher. Costs used to determine the payment rate include:

- Pipe
- Vacuum Release Valve
- Pressure Relief Valve
- Flow Meter
- Grade Transition Section
- Trenching with backhoe

**Payment quantity will be diameter inch feet of pipeline.** Quantity calculations for length include all buried pipe. Quantity is calculated by multiplying the pipe diameter in inches by the buried length in feet.

## 431 – Above Ground, Multi-Outlet Pipeline

### IRRIGATION SYSTEM CONVERSIONS

Financial assistance is limited to the reorganization of existing systems (operating two out of the last five years and holding a current water permit) in which a net water savings will be realized.

Activities planned to properly deliver water to the irrigation system shall be scheduled separately under an Irrigation Water Conveyance practice code. Replacements considered to be maintenance on an existing system are also not eligible.

If the percentage of conditional soils exceeds the amount allowed using the EQIP screening tool, the area resource soil scientist will be contacted for a field visit to evaluate the site and water quality. Soils should be evaluated on a per irrigation system basis (per pivot, per flood system, etc).

431	EQIP	Above Ground, Multi-Outlet Pipeline	Gated Pipeline, PVC, 10"	Foot	\$2.85
-----	------	-------------------------------------	--------------------------	------	--------

#### **10" Pipe**

A rigid pipeline, with closely spaced gates, installed as part of a surface irrigation system. Pipe will consist of 10" plastic pipe. Costs used to determine the payment rate include:

- Gated Pipe

**Payment quantity will be lineal feet of pipeline.** Quantity calculations for length include all gated pipe installed.

431	EQIP	Above Ground, Multi-Outlet Pipeline	Gated Pipeline, PVC, 12"	Foot	\$3.30
-----	------	-------------------------------------	--------------------------	------	--------

#### **12" Pipe**

A rigid pipeline, with closely spaced gates, installed as part of a surface irrigation system. Pipe will consist of 12" plastic pipe. Costs used to determine the payment rate include:

- Gated Pipe

**Payment quantity will be lineal feet of pipeline.** Quantity calculations for length include all gated pipe installed.

## 436 – Irrigation Storage Reservoir

436	EQIP GEN & NDIA AWEP	Irrigation Storage Reservoir	Pipe Intake	Cu Yd	\$2.71
-----	-------------------------	---------------------------------	-------------	-------	--------

### Pipe Intake

An irrigation water storage structure made by constructing a dam, embankment, pit, or tank. This practice may be applied as part of a resource conservation system to store water to provide a reliable irrigation water supply tank. A water storage structure constructed by building an embankment across a small drain to fill by pumping from a near by water course. An intake structure with supply pipe is installed. Costs used to determine the payment rate include:

- Clearing and Grubbing
- Removal of Water
- Excavation
- Earthfill
- Topsoil of Spillway and Borrow
- Concrete
- 48” CMP and appurtenances
- 12” CMP and appurtenances

**Payment quantity will be cubic yards of earthfill.** Quantity calculations include the earthfill required to construct the pond to total fill height including overfill for settlement, earthfill to replace the stripping, backfill of the core trench, and volume of topsoil specified in the plans.

## 442 – Irrigation System Sprinkler

### IRRIGATION SYSTEM CONVERSIONS

Financial assistance is limited to the reorganization of existing systems (operating two out of the last five years and holding a current water permit) in which a net water savings will be realized. Activities planned to properly deliver water to the irrigation system shall be scheduled separately under an Irrigation Water Conveyance practice code. Replacements considered to be maintenance on an existing system are also not eligible.

If the percentage of conditional soils exceeds the amount allowed using the EQIP screening tool, the area resource soil scientist will be contacted for a field visit to evaluate the site and water quality. Soils should be evaluated on a per irrigation system basis (per pivot, per flood system, etc).

Systems used for manure transfer may be eligible if irrigation water will also be applied by the system.

If the percentage of conditional soils exceeds the amount allowed using the EQIP screening tool, the area resource soil scientist will be contacted for a field visit to evaluate the site and water quality. Soils should be evaluated on a per irrigation system basis (per pivot, per flood system, etc).

442	EQIP	Irrigation System, Sprinkler (Ac.)	Center Pivot (New)	ft	\$40.80
-----	------	------------------------------------	--------------------	----	---------

**Center Pivot – Complete - New**

Center pivot irrigating land previously flood irrigated. Part of an Irrigation Water Management System. All Components are NEW. Costs used to determine the payment rate include:

- Center pivot structure
- Control panel
- Booster Pump
- Drops
- Nozzles
- Pressure Regulators
- Concrete Pad Base

**Payment quantity will be lineal feet of pivot.** Quantity calculations for length include entire structure including overhang.

442	EQIP	Irrigation System, Sprinkler (Ac.)	Center Pivot Renozzle	ft	\$5.10
-----	------	------------------------------------	-----------------------	----	--------

**Center Pivot - Renozzle**

A renozzle package for an irrigation center pivot converting to a lower pressure. Part of an Irrigation Water Management System. Costs used to determine the payment rate include:

- Drops
- Nozzles
- Regulators
- Booster Pump

**Payment quantity will be lineal feet of pivot.** Quantity calculations for length include entire structure including overhang.

442	EQIP	Irrigation System, Sprinkler (Ac.)	Center Pivot (Used)	ft	\$12.38
-----	------	------------------------------------	---------------------	----	---------

### ***Center Pivot – Complete - Used***

Center pivot irrigating land previously flood irrigated. Part of an Irrigation Water Management System. All Components are USED, must be less than 10 years old and inspected by the State Engineer's Staff. Costs used to determine the payment rate include:

- Center pivot structure
- Control panel
- Booster Pump
- Drops
- Nozzles
- Pressure Regulators
- Concrete Pad Base

**Payment quantity will be lineal feet of pivot.** Quantity calculations for length include entire structure including overhang.

## **462 – Precision Land Forming**

Financial assistance is allowed for the reshaping of land to allow for improved surface drainage and to control erosion. For example: feedlot shaping and shaping and grading field gullies. (This list is not all inclusive.) The use of this practice simply to improve drainage to increase agricultural production is not eligible for financial assistance.

462	EQIP	Precision Land Forming	Land Forming	Cu Yd	\$1.26
462	EQIP (existing AFO)	Precision Land Forming	Land Forming	Cu Yd	\$1.47

### ***Precision Land Forming***

This practice consists of reshaping the surface of land to planned grades. Costs used to determine the payment rate include:

- Excavation

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.** Quantity calculations for excavation include stripping under fill, overexcavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil, and backfill of stripped area.

## 464 – Irrigation Land Leveling

464	EQIP	Irrigation Land Leveling (Ac.)	Land Leveling	Acre	\$504.00
-----	------	--------------------------------	---------------	------	----------

### ***Irrigation Land Leveling***

The practice of reshaping the surface of land to be irrigated to planned grades. Costs used to determine the payment rate include:

- Excavation
- Earthfill

**Payment quantity will be acres of field leveled.**

## 468 – Lined Waterway or Outlet

468	EQIP	Liner Waterway or Outlet (Ft.)	Rock Rip Rap Lining	Sq Yd	\$14.36
468	EQIP (existing AFO)	Liner Waterway or Outlet (Ft.)	Rock Rip Rap Lining	Sq Yd	\$16.76

### ***Rock - Riprap Lining***

The rock lined section extends up the side slopes to designed depth. The earth above the permanent lining way be vegetated or otherwise protected. This practice is installed in conjunction with a 412 Grassed Waterway for earthwork payment. Costs used to determine the payment rate include:

- Rock Riprap
- Geotextile

**Payment quantity will be square yards of rock.** Quantity calculations for rock include area of fill including side slopes.

468	EQIP	Liner Waterway or Outlet (Ft.)	Concrete Lined Waterway	Sq Yd	\$32.97
468	EQIP (existing AFO)	Liner Waterway or Outlet (Ft.)	Concrete Lined Waterway	Sq Yd	\$38.46

### ***Concrete Lining***

The concrete lined section extends up the side slopes to designed depth. The earth above the permanent lining way be vegetated or otherwise protected. This practice is installed in conjunction with a 412 Grassed Waterway for earthwork payment. Costs used to determine the payment rate include:

- Concrete

**Payment quantity will be square yards of concrete.** Quantity calculations for concrete include area of placement including side slopes.

468	EQIP	Liner Waterway or Outlet (Ft.)	Turf Reinforced Blanket	Sq Yd	\$2.65
468	EQIP (existing AFO)	Liner Waterway or Outlet (Ft.)	Turf Reinforced Blanket	Sq Yd	\$3.09

### ***Turf Reinforced Blanket***

The lined section extends up the side slopes to designed depth with 3D material designed for turf reinforcing. The earth above the permanent lining way be vegetated or otherwise protected. This practice is installed in conjunction with a 412 Grassed Waterway for earthwork payment. Costs used to determine the payment rate include:

- Turf Reinforcing Blanket

**Payment quantity will be square yards of blanket.** Quantity calculations for blanket include the area of the blanket installed including side slopes, blanket in the anchor trench, and overlap.

## 516 – Pipeline

516	EQIP	Pipeline (Ft.)	Pipeline - Plowed shallow	Foot	\$1.19
516	EQIP (existing AFO)	Pipeline (Ft.)	Pipeline - Plowed shallow	Foot	\$1.39

### ***Plowed Shallow***

Pipeline installed with a plow at a shallow burial depth (<3 ft). The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- HDPE Pipe
- Fittings or Fusion Joints
- Appurtenances – valves, drains, hydrants, etc
- Shallow Plow Installation

**Payment quantity will be lineal feet.** Quantity calculations include the total length of buried pipe.

516	EQIP	Pipeline (Ft.)	Pipeline - Laid on surface and anchored	Foot	\$0.88
516	EQIP (existing AFO)	Pipeline (Ft.)	Pipeline - Laid on surface and anchored	Foot	\$1.02

### ***Laid on surface***

Pipeline installed by staking the pipeline on the surface of the ground. The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Scenario must have prior approval from SCE. Costs used to determine the payment rate include:

- HDPE Pipe
- Fittings or Fusion Joints
- Anchors
- Appurtenances – valves, drains, hydrants, etc.

**Payment quantity will be lineal feet.** Quantity calculations include the total length of pipe.

516	EQIP	Pipeline (Ft.)	Pipeline - Trenched or deep plowed	Foot	\$2.02
516	EQIP (existing AFO)	Pipeline (Ft.)	Pipeline - Trenched or deep plowed	Foot	\$2.36

### ***Trenched or Deep Plowed***

Pipeline installed with a plow or trencher at a deep burial depth (>3 ft). The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- Pipe
- Fittings or Fusion Joints
- Appurtenances – valves, drains, hydrants, etc.
- Trenching

**Payment quantity will be lineal feet.** Quantity calculations include the total length of buried pipe.

516	EQIP	Pipeline (Ft.)	Pipeline - Backhoe	Foot	\$2.73
516	EQIP (existing AFO)	Pipeline (Ft.)	Pipeline - Backhoe	Foot	\$3.19

### ***Backhoe***

Pipeline installed with a backhoe due to rocky conditions or soil conditions that would require this type of equipment. The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- Pipe
- Fittings or Fusion Joints
- Appurtenances – valves, drains, hydrants, etc.
- Backhoe Installation

**Payment quantity will be lineal feet.** Quantity calculations include the total length of buried pipe.

516	EQIP	Pipeline (Ft.)	Pipeline - Trenched & Partial Backhoe	Foot	\$2.38
516	EQIP (existing AFO)	Pipeline (Ft.)	Pipeline - Trenched & Partial Backhoe	Foot	\$2.78

### ***Trenched and Partial Backhoe***

Pipeline installed with a plow or trencher at a deep burial depth (>3 ft) includes a significant distance (> 40%) of pipeline installed with a backhoe due to rocky conditions or soil conditions that would require this type of equipment. The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- Pipe
- Fittings or Fusion Joints
- Appurtenances – valves, drains, hydrants, etc.
- Trenching
- Backhoe Installation

**Payment quantity will be lineal feet.** Quantity calculations include the total length of buried pipe.

516	EQIP	Pipeline (Ft.)	Boring under Road or Creek	Foot	\$15.18
516	EQIP (existing AFO)	Pipeline (Ft.)	Boring under Road or Creek	Foot	\$17.71

### ***Boring under Road or Creek***

Pipeline installed with boring equipment under a road or creek. The boring is high cost item whose inclusion or exclusion will significantly alter the cost of implementing the practice. The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- HDPE Pipe
- Fittings or Fusion Joints
- Boring Installation

**Payment quantity will be lineal feet.** Quantity calculations include the total length of bored pipe. This distance will typically be less than 200 ft. Prior approval may be required for distances greater than 200 ft.

516	EQIP	Pipeline (Ft.)	Rural Water Hookup	Each	\$537.39	North Dakota
-----	------	----------------	--------------------	------	----------	--------------

### ***Rural Water Hookup***

Installation of a pipeline to a rural water system. The hookup is high cost item whose inclusion or exclusion will significantly alter the cost of implementing the practice. The pipeline is part of a livestock water delivery system as part of a prescribed grazing system. Costs used to determine the payment rate include:

- Cost of Installation by Water System employees

**Payment quantity will be Each.**

### **521A – Pond Sealing or Lining**

521A	EQIP	Pond Sealing or Lining (Sq Ft)	Pond, Flexible Membrane	Sq Ft	\$0.69
521A	EQIP (existing AFO)	Pond Sealing or Lining (Sq Ft)	Pond, Flexible Membrane	Sq Ft	\$0.81

### ***Pond, Flexible Membrane***

Flexible liner of PVC, PE, EPDM, or GCL placed in a water or waste storage pond to reduce seepage to allowable values. Costs used to determine the payment rate include:

- Flexible Liner
- Site Preparation
- Water for Earthfill
- Liner Installation
- Soil Cover

**Payment quantity will be square feet of liner.** Quantity calculations include the entire surface of liner including edges and area in the backfill trench.

## 521B – Pond Sealing or Lining

521B	EQIP	Pond Sealing or Lining (Cu Yd)	Soil Dispersant	Cu Yd	\$5.79
521B	EQIP (existing AFO)	Pond Sealing or Lining (Cu Yd)	Soil Dispersant	Cu Yd	\$6.76

### ***Soil Dispersant***

A liner for a pond or waste impoundment consisting of a compacted clay soil treated with a soil dispersant. Costs used to determine the payment rate include:

- Soda Ash
- Over-excavation
- Class A Compacted Earthfill
- Water for Earthfill Moisture Control
- Professional Density Testing Services

**Payment quantity will be cubic yards of liner material.** Quantity calculations include the volume of liner installed. The volume is determined by the depth of the dispersant mixed with soil and is a mixture of soil and dispersant compacted to a specified density.

## 521C – Pond Sealing or Lining

521C	EQIP	Pond Sealing or Lining (Cu Yd)	Bentonite	Cu Yd	\$10.51
521C	EQIP (existing AFO)	Pond Sealing or Lining (Cu Yd)	Bentonite	Cu Yd	\$12.26

### ***Bentonite***

A liner for a pond or waste impoundment consisting of a compacted soil-bentonite mixture. Costs used to determine the payment rate include:

- Bentonite
- Liner material installation
- Incorporation and Compaction
- Cover Installation

**Payment quantity will be cubic yards of liner material.** Quantity calculations include the volume of liner installed. The volume is determined by the depth of the bentonite mixed with soil and is a mixture of soil and bentonite.

## 521D – Pond Sealing or Lining

521D	EQIP	Pond Sealing or Lining (Cu Yd)	Clay Lining	Cu Yd	\$4.56
521D	EQIP (existing AFO)	Pond Sealing or Lining (Cu Yd)	Clay Lining	Cu Yd	\$5.32

### **Clay**

A liner for a pond or waste impoundment constructed using compacted soil without soil amendments. Costs used to determine the payment rate include:

- Borrow Hauling
- Over-excavation
- Class A Compacted Earthfill
- Water for Earthfill Moisture Control
- Professional Density Testing Services

**Payment quantity will be cubic yards of liner material.** Quantity calculations include the volume of clay after being placed to the specified density.

## 533 – Pumping Plant

533	EQIP	Pumping Plant (No.)	Pump - Livestock submersible	HP	\$1,807.62
533	EQIP (existing AFO)	Pumping Plant (No.)	Pump - Livestock submersible	HP	\$2,108.89

### **Livestock Submersible**

A submersible pump installed in a well for livestock watering purposes. The pump must be installed by certified pump installer. Costs used to determine the payment rate include:

- Pump
- Down Hole Delivery Pipe
- Down Hole Electrical Wiring
- Controls

**Payment quantity will be pump horsepower.** No quantity calculations are needed.

533	EQIP	Pumping Plant (no.)	Pump - Livestock Submersible w/ Pressure System	HP	\$2,595.60
533	EQIP (existing AFO)	Pumping Plant (no.)	Pump - Livestock Submersible w/ Pressure System	HP	\$3,028.20

***Livestock Submersible with Pressure System***

A submersible pump installed in a well for livestock watering purposes with a pressure system. The pump must be installed by certified pump installer. Costs used to determine the payment rate include:

- Pump
- Down Hole Delivery Pipe
- Down Hole Electrical Wiring
- Controls
- Pressure Tank
- Pressure Switch

**Payment quantity will be pump horsepower.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Pump - Retrofit existing irrigation pump - Well	HP	\$81.90
-----	------	---------------------	---	----	---------

***Irrigation Pump Retrofit (Well)***

The retrofit of an existing irrigation pump in a well to deliver lower pressure. Costs used to determine the payment rate include:

- Remove Pump from Well
- Trim Impellers
- Re-install Pump in Well

**Payment quantity will be pump horsepower following the retrofit work.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Pump - Retrofit existing irrigation pump - Surface	HP	\$50.40
-----	------	------------------------	--	----	---------

***Irrigation Pump Retrofit (Surface)***

The retrofit of an existing irrigation pump installed on a water source, other than a well, to deliver lower pressure. Typical installations of these pumps are on a river, lake or canal. Costs used to determine the payment rate include:

- Remove Pump from Current Installation
- Trim Impellers
- Re-install Pump

**Payment quantity will be pump horsepower following the retrofit work.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Pump - Surface Irrigation (new)	HP	\$132.60
-----	------	------------------------	------------------------------------	----	----------

***Surface Irrigation Pump (New)***

The installation of a new irrigation pump installed on a water source, other than a well, to deliver water to an irrigation system as needed by the conversion to a more efficient delivery. Typical installations of these pumps are on a river, lake or canal. Costs used to determine the payment rate include:

- Pump
- Installation
- Pump Housing

**Payment quantity will be pump horsepower.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Windmill	Each	\$4,767.60
533	EQIP (existing AFO)	Pumping Plant (No.)	Windmill	Each	\$5,562.20

### ***Windmill***

Complete windmill system to pump livestock water. This practice includes air injection windmills installed on shallow wells or water ponds. The well is used as a water source as part of a prescribed grazing system. Costs used to determine the payment rate include:

- Windmill
- Tower
- Concrete Pad
- Appurtances

**Payment quantity will be each installation.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Pump - Livestock solar pump	Ea	\$2,820.00
533	EQIP (existing AFO)	Pumping Plant (No.)	Pump - Livestock solar pump	Ea	\$3,290.00

### ***Livestock - Solar***

A pump installed for livestock watering purposes. Power is supplied by on-site solar panels. Costs used to determine the payment rate include:

- Pump
- Down Hole Delivery Pipe
- Down Hole Electrical Wiring
- Control System
- Solar Panels

**Payment quantity will be each installation.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Pump - Manure Transfer	Each	\$3,913.32
533	EQIP (existing AFO)	Pumping Plant (No.)	Pump - Manure Transfer	Each	\$4,565.54

### ***Manure Transfer***

Pump and accessories to move manure from storage location to manure distribution site/equipment. The pump is part of an animal waste management system. Costs used to determine the payment rate include:

- Manure Transfer Pump
- Pump Stand and Base
- Pipe
- Appurtenances
- Agitator with Hookups

**Payment quantity will be each installation.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Livestock Well Pump - VFD - 2HP or less	HP	\$2,100.00
533	EQIP (existing AFO)	Pumping Plant (No.)	Livestock Well Pump - VFD - 2HP or less	HP	\$2,450.00

### ***Variable Frequency Drive 2HP or Less***

A variable frequency drive pump utilized for livestock watering purposes. The pump must be installed by certified pump installer. Costs used to determine the payment rate include:

- Pump
- Down Hole Delivery Pipe
- Down Hole Electrical Wiring
- Controls

**Payment quantity will be pump horsepower.** No quantity calculations are needed.

533	EQIP	Pumping Plant (No.)	Irrigation Pump - VFD > 2HP	HP	\$60.00
533	EQIP (existing AFO)	Pumping Plant (No.)	Irrigation Pump - VFD > 2HP	HP	\$70.00

### ***Variable Frequency Drive > 2HP***

A variable frequency drive pump utilized for irrigation purposes. The pump must be installed by certified pump installer. Costs used to determine the payment rate include:

- Controls
- Electrical Wiring

**Payment quantity will be pump horsepower.** No quantity calculations are needed.

### **558 – Roof Runoff Structure**

558	EQIP	Roof Runoff Structure	Rain Gutters	Ft	\$3.91
558	EQIP (existing AFO)	Roof Runoff Structure	Rain Gutters	Ft	\$4.56

### ***Gutters and Downspouts***

Structures that collect, control, and transport precipitation from roofs. Practice pertains to gutter system only - roof not included. Costs used to determine the payment rate include:

- Rain Gutters
- Downspout Pipe
- Elbows
- Bolts and Straps

**Payment quantity will be lineal feet.** Quantity calculations for length include actual length of installed gutter not including roof edges without gutter.

## 560 – Access Road

560	EQIP	Access Road (Ft.)	Single Lane Road	Cu Yd	\$1.51
560	EQIP (existing AFO)	Access Road (Ft.)	Single Lane Road	Cu Yd	\$1.76

### **Construction**

A travel-way for equipment and vehicles constructed as part of a conservation plan. Costs used to determine the payment rate include:

- Earthfill

**Payment quantity will be cubic yards of earthfill.** Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil placement on sideslopes to grade, and backfill of stripped area.

560	EQIP	Access Road (Ft.)	Access Road - Culvert	Cu Yd	\$3.91
560	EQIP (existing AFO)	Access Road (Ft.)	Access Road - Culvert	Cu Yd	\$4.57

### **Construction with Culvert**

A travel-way for equipment and vehicles constructed as part of a conservation plan. This scenario exists for only 50 ft on either side of the culvert not the entire road. Costs used to determine the payment rate include:

- Earthfill
- Corrugated metal pipe
- CMP connecting band
- Hand Compaction

**Payment quantity will be cubic yards of earthfill.** Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil placement on sideslopes to grade, and backfill of stripped area. Only include the quantity of earthfill on 50 ft either side of every installed culvert.

## 561 – Heavy Use Area Protection

The payment for the concrete scenarios is capped at \$30,000.

561	EQIP	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Gravel	Cu Yd	\$11.39
561	EQIP (existing AFO)	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Gravel	Cu Yd	\$13.28

### **Gravel**

The stabilization or areas frequently and intensively used by people, animals or vehicles by surfacing with suitable materials, and/or by installing needed structures. Costs used to determine the payment rate include:

- Gravel

**Payment quantity will be cubic yards of gravel.** Quantity calculations for gravel include fill to grade.

561	EQIP	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Gravel on Geotextile	Cu Yd	\$22.47
561	EQIP (existing AFO)	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Gravel on Geotextile	Cu Yd	\$26.22

### **Gravel on Geotextile**

The stabilization or areas frequently and intensively used by people, animals or vehicles by surfacing with suitable materials, and/or by installing needed structures. Costs used to determine the payment rate include:

- Gravel
- Geotextile

**Payment quantity will be cubic yards of gravel.** Quantity calculations for gravel include fill to grade.

561	EQIP	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Concrete	Cu Yd	\$218.63
561	EQIP (existing AFO)	Heavy Use Area Protection (Ac.)	Heavy Use Protection, Concrete	Cu Yd	\$255.06

### **Concrete**

The stabilization or areas frequently and intensively used by people, animals or vehicles by surfacing with suitable materials, and/or by installing needed structures. Costs used to determine the payment rate include:

- Concrete
- Bedding Gravel

**Payment quantity will be cubic yards of concrete.** Quantity calculations for concrete include volume to grade along with volume for footers.

### **574 – Spring Development**

574	EQIP	Spring Development (No.)	Spring Development	Each	\$3,879.24
574	EQIP (existing AFO)	Spring Development (No.)	Spring Development	Each	\$4,525.78

### **Spring Development**

Utilizing springs and seeps to provide water for a conservation need. Costs used to determine the payment rate include:

- Site Leveling
- Collection Trench and Spring Box Excavation
- Washed coarse gravel
- Collection Pipe
- Outflow Trench
- Outflow Pipe
- Overflow Trench
- Overflow Pipe
- Valves and fittings
- Spring Box

**Payment quantity will be each development. No quantity calculations are required.**

## 575 – Animal Trails and Walkways

575	EQIP	Animal Trails and Walkways	New Walkway	Cu Yd	\$1.45
575	EQIP (existing AFO)	Animal Trails and Walkways	New Walkway	Cu Yd	\$1.69

### ***New Walkway Construction***

This is a travel facility for livestock and/or wildlife to provide movement through difficult or ecologically sensitive terrain. Costs used to determine the payment rate include:

- Earthfill
- Excavation

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.**

Quantity calculations for excavation include stripping under fill, overexcavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil and backfill of stripped area.

## 580 – Streambank and Shoreline Protection

580	EQIP	Streambank and Shoreline Protection (ft.)	Bioengineering	Sq Ft	\$0.45
-----	------	---	----------------	-------	--------

### ***Bioengineering***

This scenario consists of treatment(s) using bioengineering methods to stabilize and protect banks of streams, lakes, reservoirs, estuaries, or excavated channels against scour and erosion. This practice is also employed to influence scour and desposition patterns, working with streams power in order to influence streams planform and grade. Costs used to determine the payment rate include:

- Willow Poles
- Cedar Tree Revetments
- Erosion Control Blankets
- Excavation

**Payment quantity will be square feet of streambank protected.** Quantity calculations include the entire area of construction excluding any borrow.

580	EQIP	Streambank and Shoreline Protection (ft.)	Rock Armor	Sq Yd	\$9.12
580	EQIP (existing AFO)	Streambank and Shoreline Protection (ft.)	Rock Armor	Sq Yd	\$10.64

### **Rock Armoring**

This scenario consists of treatment(s) using rock riprap to stabilize and protect banks of streams, lakes, reservoirs, estuaries, or excavated channels against scour and erosion.

This practice is also employed to influence scour and desposition patterns, working with streams power in order to influence streams planform and grade. Costs used to determine the payment rate include:

- Rock Riprap
- Geotextile

**Payment quantity will be square yards of rock riprap.** Quantity calculations include the area of rock required to protect the designed surface.

### **606 – Subsurface Drain**

Subsurface drain is not eligible as a stand-alone practice or as part of a controlled drainage system. Perforated drains may only be used as a component of a conservation practice to the extent required to provide drainage necessary to facilitate the conservation purpose of the practice. Common practices associated with tile drains would be 412 Grassed Waterway to reduce saturation concerns in waterway bed or 313 Waste Storage Facility to lower water tables to reduce contamination concerns. Other practices may require drainage as determined by the engineer completing the design. Tile drains associated with a practice having greater than 80 acres of watershed are required to submit an application to drain with the state of ND.

606	EQIP	Subsurface Drain	Plastic Tubing 8" or less	ft	\$2.04
606	EQIP (existing AFO)	Subsurface Drain	Plastic Tubing 8" or less	ft	\$2.37

### ***Plastic Tubing 8” or less***

This practice consists of corrugated plastic tubing installed beneath the ground surface to collect and/or convey drainage water. A typical installation would be installed along with a waterway to facilitate the operation of the waterway by removing the potential for saturation of the waterway bed. Costs used to determine the payment rate include:

- Tubing
- End Plug
- Split Coupler
- Trenching

**Payment quantity will be feet of installed tile.** Quantity calculations include the entire length of the installed pipe in feet.

## **614 – Watering Facility**

614	EQIP	Watering Facility (No.)	Tank or Trough	Gallon	\$0.81
614	EQIP (existing AFO)	Watering Facility (No.)	Tank or Trough	Gallon	\$0.94

### ***Tank or Trough***

This practice consists of a device (tank, trough, or other watertight container) for providing animal access to water. Costs used to determine the payment rate include:

- Tank
- Float Shutoff
- Gravel Bedding
- Gravel Apron
- Site Preparation

**Payment quantity will be gallons of storage.** Quantity calculations include the maximum storage volume of the tank regardless of the overflow or float setting. The volume provided by the manufacturer is acceptable for quantity calculations.

614	EQIP	Watering Facility (No.)	Tank or Trough (Insulated)	Gallon	\$2.05
614	EQIP (existing AFO)	Watering Facility (No.)	Tank or Trough (Insulated)	Gallon	\$2.41

### ***Insulated Tank or Trough***

This practice consists of a device (tank, trough, or other watertight container) for providing animal access to water. The tank is constructed to resist freezing the water in the tank in cold weather. Tank must be installed in accordance with manufacturer’s recommendation. If the tank is fabricated on site it must be preapproved by NRCS engineers prior to installation. Costs used to determine the payment rate include:

- Tank
- Float Shutoff
- Additional Material to prevent tank freezing
- Gravel Bedding
- Gravel Apron
- Site Preparation

**Payment quantity will be gallons of storage.** Quantity calculations include the maximum storage volume of the tank regardless of the overflow or float setting. The volume provided by the manufacturer is acceptable for quantity calculations.

614	EQIP	Watering Facility (No.)	Nose Pump	Ea	\$324.60
614	EQIP (existing AFO)	Watering Facility (No.)	Nose Pump	Ea	\$378.70

### ***Nose Pump***

This practice consists of a device for providing animal access to water. The nose pump is operated by the livestock without a separate power supply. Costs used to determine the payment rate include:

- Nose Pump

**Payment quantity will be each installation.** No quantity calculations are needed.

614	EQIP	Watering Facility (No.)	Water Fountain	Ea	\$226.80
614	EQIP (existing AFO)	Watering Facility (No.)	Water Fountain	Ea	\$264.60

### ***Water Fountain***

This practice consists of a device for providing animal access to water. Water fountains have a heat source incorporated in the design of the structure to allow for use in freezing temperatures. Costs used to determine the payment rate include:

- Water Fountain

**Payment quantity will be each installation regardless of storage volume.** No quantity calculations are needed. Heavy Use Area (560) may still be contracted for the concrete base and apron around the fountain.

614	EQIP	Watering Facility (No.)	Wildlife Watering Guzzler	Each	\$809.00
614	EQIP (existing AFO)	Watering Facility (No.)	Wildlife Watering Guzzler	Each	\$943.83

### ***Wildlife Guzzler***

This practice will establish a collection device consisting of an apron to collect and funnel water into a tank for wildlife. This practice will be installed on Range or Pasture land next to targeted species habitat (woody draws, dense herbaceous cover,...). This facility will provide suitable water for wildlife. Costs used to determine the payment rate include:

- Tank
- Sheet Metal
- Lumber
- Posts
- Gutter
- Downspout
- Site Preparation

**Payment quantity will be each installation.** No quantity calculations are needed.

## 620 – Underground Outlet

620	EQIP	Underground Outlet (Ft.)	Inlet/Outlet Structure	Diameter inch foot	\$0.77
620	EQIP (existing AFO)	Underground Outlet (Ft.)	Inlet/Outlet Structure	Diameter inch foot	\$0.89

### ***Underground Outlet***

This practice consists of a conduit, such as corrugated plastic tubing, tile, or pipe, installed beneath the ground surface to collect and/or convey drainage water. Costs used to determine the payment rate include:

- Pipe
- Trenching
- Elbows
- Anti-seep diaphragm
- Riser
- Concrete
- Earthfill
- Trash Rack w/ anti-vortex vane
- Rodent Guard
- End Sections
- Connecting Bands
- Gravel

**Payment quantity will be diameter inch foot.** Quantity calculations include the diameter of the pipe in inches and the entire length of the outlet pipe in feet. The height and diameter of the riser pipe is not included in the calculations.

## 632 – Solid/Liquid Waste Separation Facility

Financial assistance is allowed for the installation of a screening device or settling basin used to separate solids from a liquid waste stream. Payment for a settling basin for manure will be paid under 350 Sediment Basin and the 632 payment will be included strictly for the screening structure.

632	EQIP	Solid / Liquid Waste Separation Facility	Solid Separation Facility - w/Picket Fence, Concrete	ft.	\$52.73
632	EQIP (existing AFO)	Solid / Liquid Waste Separation Facility	Solid Separation Facility - w/Picket Fence, Concrete	ft.	\$61.52

### ***Picket Fence w/ Concrete***

A filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream. The facility consists of a picket fence holding section and small concrete scraping pad. Costs used to determine the payment rate include:

- Steel Reinforced Concrete Flatwork
- Pressure Treated Lumber
- Manually Compacted Earthfill
- Posts

**Payment quantity will be lineal feet of picket fence.** Quantity calculations include the entire length of picket fence including any boards partially buried.

632	EQIP	Solid / Liquid Waste Separation Facility	Solid Separation Facility - w/Picket Fence, No Concrete	Ft	\$21.36
632	EQIP (existing AFO)	Solid / Liquid Waste Separation Facility	Solid Separation Facility - w/Picket Fence, No Concrete	Ft	\$24.92

### ***Picket Fence No Concrete***

A filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream. The facility consists of a picket fence holding section. Costs used to determine the payment rate include:

- Pressure Treated Lumber
- Manually Compacted Earthfill
- Posts

**Payment quantity will be lineal feet of picket fence.** Quantity calculations include the entire length of picket fence including any boards partially buried.

632	EQIP	Solid / Liquid Waste Separation Facility	Solid Separation Facility - Concrete	Cu Yd	\$314.49
632	EQIP (existing AFO)	Solid / Liquid Waste Separation Facility	Solid Separation Facility - Concrete	Cu Yd	\$366.90

### ***Concrete Separator***

A filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream. The facility consists of a concrete pad with concrete sidewalls and a picket fence entrance with a pipe outlet. Costs used to determine the payment rate include:

- Steel Reinforced Concrete Flatwork

- Steel Reinforced Formed Concrete
- Outlet Pipe
- Manually Compacted Earthfill
- Screen

**Payment quantity will be cubic yards of concrete.** Quantity calculations include floor, footings, exterior walls, & interior walls.

632	EQIP	Solid / Liquid Waste Separation Facility	Expanded Metal Screen w/ Outlet Pipe	Dia Inch-Ft	\$1.96
632	EQIP (existing AFO)	Solid / Liquid Waste Separation Facility	Expanded Metal Screen w/ Outlet Pipe	Dia Inch-Ft	\$2.29

### ***Expanded Metal Screen with Outlet Pipe***

A filtration or screening device, settling tank, settling basin, or settling channel used to separate a portion of solids from a liquid waste stream. The facility consists of a concrete pad with concrete sidewalls and a picket fence entrance with a pipe outlet. Costs used to determine the payment rate include:

- Expanded Metal Screen (welded)
- 18” CMP
- Connecting Bank
- Manually Compacted Earthfill

**Payment quantity will be Diameter Inch – Ft of outlet pipe.** Quantity calculations include diameter of outlet pipe in inches multiplied by the length of outlet pipe installed in feet.

## 634 – Manure Transfer

Financial assistance is only authorized for this practice when applied for proper operation and maintenance of the animal waste system. This practice is not eligible when the system transfers manure beyond the point of storage or installations primarily for operator convenience.

634	EQIP	Manure Transfer	Transfer pipe - 8"	ft	\$6.74
634	EQIP (existing AFO)	Manure Transfer	Transfer pipe - 8"	ft	\$7.86
634	EQIP	Manure Transfer	Transfer pipe - 10"	ft	\$9.47
634	EQIP (existing AFO)	Manure Transfer	Transfer pipe - 10"	ft	\$11.05
634	EQIP	Manure Transfer	Transfer pipe - 12"	ft	\$12.56
634	EQIP (existing AFO)	Manure Transfer	Transfer pipe - 12"	ft	\$14.66

### ***8" Transfer Pipe***

### ***10" Transfer Pipe***

### ***12" Transfer Pipe***

An 8", 10", or 12" pipeline and appurtenances installed in an animal waste system. Costs used to determine the payment rate include:

- Pipe
- Pump Out Point
- Trenching with backhoe

**Payment quantity will be lineal feet of pipeline.** Quantity calculations for length include all buried pipe from the pumping plant or collection point to the end section.

## 638 – Water and Sediment Control Basin

638	EQIP	Water and Sediment Control Basin (No.)	Water and Sediment Control Basin	Cu Yd	\$1.47
638	EQIP (existing AFO)	Water and Sediment Control Basin (No.)	Water and Sediment Control Basin	Cu Yd	\$1.71

### ***Water and Sediment Control Basin***

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. This practice will be installed in conjunction with a 620 Underground Outlet. Costs used to determine the payment rate include:

- Excavation
- Earthfill

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.** Quantity calculations for excavation include stripping under fill, overexcavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil and backfill of stripped area.

## 640 – Waterspreading

640	EQIP	Waterspreading	Waterspreading	Cu Yd	\$1.51
640	EQIP (existing AFO)	Waterspreading	Waterspreading	Cu Yd	\$1.76

### ***Waterspreading***

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. Costs used to determine the payment rate include:

- Earthfill

**Payment quantity will be cubic yards of earthfill or excavation, whichever is greater.** Quantity calculations for excavation include stripping under fill, overexcavation for topsoil placement, and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil and backfill of stripped area.

## 642 – Water Well

Financial assistance is authorized to facilitate improved grazing distribution and ensure adequate and reliable livestock water. A well may also be eligible for financial assistance when the installation of a redesigned or relocated animal waste system impacts the availability of the existing water source. This practice is not authorized for financial assistance when a new animal waste facility or expansion of an existing facility creates the need for an additional water source. When the installation of an animal waste system impacts the availability of the existing water source, the most economical water development is an eligible system practice.

Pitless well units shall be eligible for financial assistance only when installed or approved by a certified well contractor or water well pump installer. Dry wells are not eligible for cost-share.

Financial assistance will be pro-rated if the water development's primary function of grazing distribution is coupled with ineligible uses such as providing water to headquarters, feedlots, and corrals.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - Depth 100' or less	Each	\$2,395.45
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - Depth 100' or less	Each	\$2,794.69

### ***Well Depth 100 Ft. or less***

This is a shallow livestock well, 100 feet deep or less. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development

**Payment quantity will be each installation.** No quantity calculations are needed.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - Depth 100' or less with pitless unit	Each	\$2,898.85
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - Depth 100' or less with pitless unit	Each	\$3,381.99

***Well Depth 100 Ft. or less with Pitless Well Unit***

This is a shallow livestock well, 100 feet deep or less with a pitless unit installed. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development
- Pitless Unit

**Payment quantity will be each installation.** No quantity calculations are needed.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - Artesian	Diameter inch foot	\$6.48
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - Artesian	Diameter inch foot	\$7.56

***Artesian – Well Depth >100 FT.***

This is a well drilled into an artesian formation. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development

**Payment quantity will be diameter inch foot.** Quantity calculations include the diameter of the well in inches and the entire length of the well in feet. Length is determined by maximum depth of the well to the ground surface.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - Artesian with pitless unit	Diameter inch foot	\$6.98
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - Artesian with pitless unit	Diameter inch foot	\$8.14

**Artesian - Well Depth > 100 Ft. with Pitless Well Unit**

This is a well drilled into an artesian formation with a pitless unit installed. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development
- Pitless Unit

**Payment quantity will be diameter inch foot.** Quantity calculations include the diameter of the well in inches and the entire length of the well in feet. Length is determined by maximum depth of the well to the ground surface.

642	EQIP	Water Well (No.)	Well, Bored or Dug	foot	\$43.20
642	EQIP (existing AFO)	Water Well (No.)	Well, Bored or Dug	foot	\$50.40

**Bored or Dug**

This is a well bored or dug into a non-artesian formation. The typical installation would be a large diameter (>12”) well to a shallow depth (<80’). Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development

**Payment quantity will be lineal feet of hole.** Quantity calculations include the entire length of the well in feet. Length is determined by maximum depth of the well to the ground surface.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - > 100'	foot	\$21.26
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - > 100'	foot	\$24.81

***Non-Artesian - Well Depth >100'***

This is a well drilled into a non-artesian formation. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development

**Payment quantity will be lineal feet of hole.** Quantity calculations include the entire length of the cased well in feet. Length is determined by maximum depth of the cased hole to the ground surface.

642	EQIP	Water Well (No.)	Well, Drilled, Cased - > 100' with Pitless unit	foot	\$24.62
642	EQIP (existing AFO)	Water Well (No.)	Well, Drilled, Cased - > 100' with Pitless unit	foot	\$28.73

***Non-Artesian - Well Depth > 100' with Pitless Unit***

This is a well drilled into a non-artesian formation with a pitless unit installed. Costs used to determine the payment rate include:

- Drilling
- Casing
- Screen
- Development
- Pitless Unit

**Payment quantity will be lineal feet of hole.** Quantity calculations include the entire length of the cased well in feet. Length is determined by maximum depth of the cased hole to the ground surface.

## 656 – Constructed Wetland

656	EQIP	Constructed Wetland (Ac.)	Constructed Wetland Conjunction w/Ag Waste System	Acre	\$9,804.76
656	EQIP (existing AFO)	Constructed Wetland (Ac.)	Constructed Wetland Conjunction w/Ag Waste System	Acre	\$11,438.89

### ***Constructed Wetland - Ag Waste***

A constructed wetland that was constructed in conjunction with an ag waste system.

Costs used to determine the payment rate include:

- Wet Excavation
- Earthfill
- Grass Seed

**Payment quantity will be acres of wetland created.** Quantity calculations for area include entire surface area seeded.

## 657 – Wetland Restoration

657	EQIP	Wetland Restoration (Ac.)	Fill dugout	Cu Yd	\$1.29
657	EQIP (existing AFO)	Wetland Restoration (Ac.)	Fill dugout	Cu Yd	\$1.50

### ***Fill Dugout***

A wetland restoration is a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable. This practice consists of filling a dugout to restore a wetland to original condition. Costs used to determine the payment rate include:

- Earthfill

**Payment quantity will be cubic yards of earthfill.** Quantity calculations include the earthfill required to construct the wetland to original depth including overfill for

settlement, earthfill to replace the stripping, and any volume of topsoil specified in the plans.

657	EQIP	Wetland Restoration (Ac.)	Wetland Restoration - Ditch Plug	Each	\$289.17
657	EQIP (existing AFO)	Wetland Restoration (Ac.)	Wetland Restoration - Ditch Plug	Each	\$337.37

### ***Ditch Plug***

A wetland restoration is a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable. This practice consists of plugging an existing drain with earthen fill. Costs used to determine the payment rate include:

- Earthfill

**Payment quantity will be each ditch plug installed.** No quantity calculations are needed.

657	EQIP	Wetland Restoration (Ac.)	Wetland Restoration - Scrapes	Ac	\$1,658.76
657	EQIP (existing AFO)	Wetland Restoration (Ac.)	Wetland Restoration - Scrapes	Ac	\$1,935.23

### ***Scrapes (Sediment Removal)***

A wetland restoration is a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable. This practice consists of the removal of sediment at bottom of wetlands and hauling that material to the uplands. Costs used to determine the payment rate include:

- Excavation
- Hauling Materials

**Payment quantity will be acres of wetland cleaned.** Quantity calculations for area include entire surface area of the wetland that was cleaned of sediment.

657	EQIP	Wetland Restoration (Ac.)	Dike less than 2 ft.	ft	\$2.28
657	EQIP (existing AFO)	Wetland Restoration (Ac.)	Dike less than 2 ft.	ft	\$2.66

***Restoration Embankment 2' or less***

A wetland restoration is a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable. This practice consists of construction of a dike 2' in height or less with earthen fill. Costs used to determine the payment rate include:

- Earthfill
- Stripping

**Payment quantity will be Lineal feet of dike installed.** Length of dike is measured along the centerline of the fill.

657	EQIP	Wetland Restoration (Ac.)	2 - 4 ft dike	ft	\$5.36
657	EQIP (existing AFO)	Wetland Restoration (Ac.)	2 - 4 ft dike	ft	\$6.25

***Restoration Embankment 2' to 4'***

A wetland restoration is a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable. This practice consists of construction of a dike 2' to 4' in height with earthen fill. Costs used to determine the payment rate include:

- Earthfill
- Stripping

**Payment quantity will be Lineal feet of dike installed.** Length of dike is measured along the centerline of the fill.

## 658 – Wetland Creation

658	EQIP	Wetland Creation	Excavated Wetland W/embankment	Cu Yd	\$1.48
-----	------	------------------	-----------------------------------	-------	--------

### ***Excavated Wetland with Embankment***

This consists of the creation of a wetland. A wetland creation is a shallow water area developed to provide wetland functions and values. Excavated material is placed in a designed embankment. Costs used to determine the payment rate include:

- Excavation
- Hauling Materials

**Payment quantity will be cubic yards of excavation or earthfill, whichever is greater.** Quantity calculations for excavation include stripping under fill and excavation to grade. Quantity calculations for earthfill include fill to grade including overfill for settlement, topsoil and backfill of stripped area.

658	EQIP	Wetland Creation	Excavation	Cu Yd	\$1.30
-----	------	------------------	------------	-------	--------

### ***Excavated Wetland***

A wetland creation is a shallow water area developed to provide wetland functions and values. This practice consists of the excavation of a water impoundment. Costs used to determine the payment rate include:

- Excavation with Dozer
- Excavation with Excavator
- Excavation with Scraper

**Payment quantity will be cubic yards of excavation.** Quantity calculations for excavation include stripping and excavation to grade.