

INTRODUCTION

SECTION I – COST DATA

The initial phase of evaluating the effectiveness of conservation measures is the collection, analysis, and use of current information on costs and prices. The prices are appropriate to use in estimating the beneficial and/or adverse effects of installing conservation practices. To be effective in working with individuals, field personnel must have knowledge of these costs and prices.

Section I – Cost Data, contains general economic reference data and has been prepared to aid Natural Resources Conservation Service personnel in providing economic information to farmers, ranchers, and others who make land use and land treatment decisions. The economic data will be used to evaluate alternative Conservation Management Systems (CMS).

The general economic reference data contained herein contains current information on costs for items such as seed, fertilizers, farm or ranch supplies, farm machinery, tractors, and other materials that may be used in crop or livestock production. Other factors that make up a farming or ranching operation are also included such as labor, construction, and operation and maintenance of Resource Management Systems (RMS).

Information should be used only for evaluating the consequences of alternative CMS. The information is not intended to be an analysis of a crop or livestock enterprise or of the total farm business. If a land user desires farm management assistance, he/she should be referred to the Extension Service or other farm management assistance. For the purpose of making RMS evaluations, the production costs, costs of conservation practice(s), and prices to be used are the most recent published data. Other costs and prices may be used if they are reasonable or to illustrate the effect of price changes. Other costs and prices are contained in the current issue of North Dakota Agricultural Statistics, Section I, FOTG, Reference Section. Other costs and prices cannot be used if cost-shared programs are involved.

COST-SHARING DEFINITION

Methods and policy on cost-sharing, development of average cost data, and procedures for establishing cost-share rates are discussed in General Manual (GM), Title 120, Part 404, Subpart D, 404.30, 404.31, and 404.32.

Average Cost (AC) – Average costs are used, unless cost data cannot be obtained. Average costs are developed for each practice or component of a practice identified for financial assistance. **Costs shown in Section I, Cost Data are average costs, unless otherwise identified by abbreviation following the cost values.**

Actual Cost Not to Exceed Average Cost (AA) – The Actual Cost Not to Exceed Average Cost method applies to situations involving volume discounts, unusually large jobs subject to competitive bids, materials, or services subject to volatile price fluctuations, and installation of used materials as allowed under GM, Title 120, Part 404, Subpart F 404.58.

Actual Cost Not to Exceed a Specified Maximum Cost (AM) – The AM method applies to insufficient or unreliable average cost data, difficulty or impracticality in measuring quantities, or the need for a definite limit on a particular practice. All practices and identifiable components cost-shared according to specified maximum cost must be supported by acceptable itemized receipts, invoices, or cost statements. The established specified maximum for all prior year cost-share designations of AM will be the current average cost, unless a specified maximum has been made a part of the cost table.

Flat Rate (FR) – Flat Rate method is used to encourage adoption of conservation practices where it is difficult to establish actual cost.

SECTION I – COST DATA

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TABLE A - EARTHMOVING AND RELATED COSTS

EARTH EXCAVATION

	<u>Per Cubic Yard</u>
Excavation Dry	\$1.15
Excavation Wet <u>1/</u>	1.30
Excavation for Small Conservation Structures <u>2/</u>	5.00
Borrow Development <u>3/</u>	Engineer's Estimate AM

IRRIGATION LAND LEVELING

\$125/acre AM

SITE CLEARING OR OBSTRUCTION REMOVAL

\$1,000/acre AA

EARTHFILL

	<u>Per Cubic Yard</u>
Hand Compaction <u>4/</u>	\$5.00
Machine Compaction	1.30
Roller Compaction	1.50
	<u>Per Structure</u>
Wetland Restoration - Ditch Plug <u>5/</u>	250.00
Water for Earthfill Moisture Control	12.00/1000 gallons

TERRACE CONSTRUCTION 5/

Broadbase terrace - (per lineal foot)	
frontslope of 20 feet or less, excluding any cost of tile and/or intakes and/or outlets	\$0.70
frontslope greater than 20 feet, excluding any cost of tile and/or intakes and/or outlets	\$0.85
Grassed backslope terrace - (per lineal foot)	
frontslope of 20 feet or less, excluding any cost of tile and/or intakes and/or outlets	\$1.00
frontslope greater than 20 feet, excluding any cost of tile and/or intakes and/or outlets	\$1.82
Intake – (per structure)	
Includes 6-foot perforated riser and an elbow or tee. See Table B for corrugated drain pipe	\$100.00
Corrugated metal pipe (cmp) – (per diameter inch per lineal foot)	
For last section of terrace outlets (includes predator guard).	\$0.80

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- 1/ Wet excavation normally occurs in high water table dugouts, core trenches, wetlands, etc. Material is in a near saturated condition. If over 30% of a dugout is wet (over half the depth), figure the entire dugout is wet. If a reach of a channel or core trench is wet, pay for wet excavation for that reach. Sound individual judgement is required in determining what is wet excavation.
- 2/ Use for structural excavation for small conservation structures.
- 3/ Average costs shall be based on site specific engineer's estimates for providing borrow materials transported in from off-site sources or requiring abnormal on-site development.
- 4/ Use for compaction of fill around small structures or when specified for structure installation.
- 5/ Earth excavation and earthfill per cubic yard costs may be used for flat channel level terraces, terrace reconstruction, and wetland restorations.

TABLE A - EARTHMOVING AND RELATED COSTS (CONTINUED)

WATERWAY CONSTRUCTION

1. The cost-share for grading, shaping, or filling operations for grassed waterways will be based on cubic yards of excavation for waterways with drainage areas more than 40 acres using site specific designs. Waterways with drainage areas of 40 acres or less using the standard waterway design as set forth in the FOTG will be based on area in acres taken up by the waterway. Those sites that have site specific designs will be based on cubic yards of excavation, the same as the waterways with drainage areas of more than 40 acres.
 - A. For waterways where the drainage area exceeds 40 acres, cost-share will be based on cubic yards of excavation (see Table A).
 - B. For waterways where the drainage area is 40 acres or less, cost-share rates will be as follows:
 - (1) Cost-shared based on cubic yards of excavation (see Table A), or
 - (2) Cost-shared at a rate of \$600.00/acre. When the construction of one or multiple waterways on the same farm tract totals less than 0.6 acres, the minimum rate will be \$360.00.
2. Obstruction removal - use cost shown in Table A.

TRENCHING FOR PIPELINES

	per lineal foot of trench
Stockwater pipelines	
0'-3' depth (plowed)	0.20
0'-3' depth (shallow trench)	0.50
6' depth (frost protected)	1.00
per foot depth greater than 6'	0.10
Backhoe installed pipelines	
0'-3' depth (shallow)	1.00
6' depth (frost protected)	1.50
per foot depth greater than 6' depth (frost protected)	0.50
Sections with rocky conditions, highwater table conditions or where bank and stability is a serious problem.	
0 - 6' depth	2.00
per foot depth greater than 6'	0.50
Irrigation, Spring Development, Ag Waste Pipelines, Underground Outlet Pipelines, and Offset Wells from Reservoirs	
0 - 6' depth	1.75
per foot depth greater than 6'	0.50
Boring (roadways and stream crossings)	10.00 AM
Excavation for Spring Boxes and Spring Collection Systems	10.00/cu.yd. (limited to 150 cu. yd.)

TABLE A - EARTHMOVING AND RELATED COSTS (CONTINUED)

CRITICAL AREA TREATMENT

Grading, shaping, and filling - (limited to extent needed for seedbed or use of area for intended purpose).

		<u>Per Acre</u>
Heavy	for areas requiring moving substantial quantities of earth some distance. (This work is generally done by earthmoving contractors using scrapers or other larger earthmoving equipment).	600.00
Light	for areas prepared by normal farm tillage equipment. (While this work is generally done with farm tillage equipment, road patrols and/or small bulldozers may be used).	240.00

Note: Cost for seeding areas once they are shaped are covered under Table D – Vegetative Establishment and Related Costs.

TABLE B - PIPE AND RELATED COSTS

SMALL DIAMETER PIPE

Diameter Inches	PVC Base Cost (per foot) ^{1/}	PE Base Cost (per foot) ^{1/}
1	\$0.38 AA	\$0.58 AA
1¼	0.53 AA	0.97 AA
1½	0.78 AA	1.11 AA
2	1.22 AA	1.37 AA
2½	1.80 AA	---
3	2.68 AA	2.95 AA
4	4.40 AA	4.95 AA

^{1/} 200 PSI Pipe: For other pressures, use the cost times the following: 100 psi = 0.54, 125 psi = 0.68, 160 psi = 0.84, 200 psi = 1.00, 250 psi = 1.23, 315 psi = 1.72. For pressures not listed, use the factor for the closest pressure rating. The pressure-factored cost should be computed to the nearest .01.

TABLE B - PIPE AND RELATED COSTS (CONTINUED)

CORRUGATED PLASTIC PIPE

	3 inch	4 inch	5 inch	6 inch	8 inch	10 inch	12 inch	15 inch	18 inch	24 inch
DUAL-WALL PIPE ^{1/}	---	0.60	---	1.30	2.20	3.30	3.50	4.50	7.50	11.50
Split Coupler	---	1.00	---	1.60	2.70	3.30	4.50	7.80	11.50	19.00
Soil-Tight Split Coupler	---	---	---	---	---	---	10.00	13.80	18.30	28.00
Gasketed Sleeve	---	---	---	---	---	---	22.50	47.00	64.00	162.00
Coupler	---	---	---	---	---	---	97.00	120.00	216.00	298.00
Cross	---	34.00	---	47.00	82.00	90.00	21.00	30.00	47.00	82.00
Elbow, 22½ degrees	---	6.00	---	8.20	15.00	18.00	21.00	32.00	57.00	105.00
45 degrees	---	7.70	---	12.80	17.30	21.00	23.00	39.00	75.00	120.00
90 degrees (2 part)	---	9.00	---	12.80	18.80	24.00	25.50	49.00	90.00	135.00
90 degrees (3 part)	---	12.00	---	15.00	32.00	35.00	38.00	62.00	113.00	183.00
Tee	---	18.00	---	24.00	38.00	44.00	50.00	62.00	113.00	183.00
Wye	---	41.00	---	66.00	116.00	131.00	135.00	165.00	275.00	402.00
Reducer X 4 inch	---	---	---	27.00	35.00	42.00	46.00	53.00	76.00	116.00
X 6 inch	---	---	---	---	38.00	50.00	50.00	46.00	79.00	120.00
X 8 inch	---	---	---	---	---	57.00	57.00	65.00	83.00	124.00
X 10 inch	---	---	---	---	---	---	64.00	72.00	94.00	135.00
X 12 inch	---	---	---	---	---	---	---	76.00	98.00	146.00
X 15 inch	---	---	---	---	---	---	---	---	113.00	157.00
X 18 inch	---	---	---	---	---	---	---	---	---	172.00
TUBING/CULVERTS ^{1/}	0.20	0.25	0.45	0.65	1.15	2.20	2.60	4.10	6.50	10.30
With Polyester Fabric (sock)	0.30	0.40	0.60	0.84	1.44	2.50	3.00	5.25	7.20	11.30
Split Coupler	---	1.00	1.50	1.60	2.70	3.20	4.50	7.80	11.50	19.00
Wye, 45 degree	3.00	3.20	4.70	5.80	19.80	---	---	---	---	---
Reducer X 3 & 4 inch	---	1.90	2.80	3.10	3.90	5.40	---	---	---	---
X 5 & 6 inch	---	---	---	3.10	3.90	---	---	---	---	---
X 8 & 10 inch	---	---	---	---	6.40	8.70	---	---	---	---
X 12 inch	---	---	---	---	---	---	---	10.70	---	---
End Plug	1.10	1.20	1.40	1.70	2.50	3.90	6.00	8.00	19.00	52.00
Blind or Reducing Tee (Elbow, Use Blind Tee)	2.20	2.50	3.90	4.60	7.70	11.40	19.70	62.00	103.00	183.00
MISCELLANEOUS										
Plastic Anti-Seep Collar (4x4)	---	100.00	---	110.00	115.00	120.00	130.00	135.00	145.00	150.00
Beehive Inlet	---	---	10.70	10.70	13.70	17.50	23.00	29.00	35.00	62.00
End Section	---	---	---	---	39.00	43.00	50.00	62.00	81.00	119.00
Rodent Guard	---	11.00	---	13.00	15.00	19.00	22.00	29.00	43.00	52.00
Hickenbottom Intake:										
1" or 5/16" holes	---	---	12.00	16.00	24.00	36.00	98.00	---	---	---
1" X 4" slots	---	---	17.00	23.00	33.00	45.00	112.00	---	---	---
Special blind tee	---	---	12.00	15.00	26.00	34.00	97.00	---	---	---
Restrictor	---	---	2.00	3.20	5.00	---	---	---	---	---

^{1/} Cost per foot.

TABLE B - PIPE AND RELATED COSTS (CONTINUED)

CORRUGATED METAL PIPE

PIPE: 1/			
Steel, Standard Galvanized (SG) - also includes concrete and fiberglass			1.00
SG Steel, Close Riveted/Caulked Seams (CR/CS)			1.30
Steel, Polymeric Coated (PC)			1.40
PC Steel, CR/CS			1.70
Standard Aluminum			1.15
Aluminum, CR/CS			1.45
CONNECTING BAND: 2/			
	7½" wide	12" wide	24" wide
Steel, Standard Galvanized (SG)	1.00	1.25	2.50
Steel, Polymeric Coated (PC)	1.25	1.80	3.70
Aluminum	1.00	1.45	2.90
Watertight SG Steel, incl. 4 rods/lugs	---	---	5.00
Watertight PC Steel, incl. 4 rods/lugs	---	---	6.50
ANTI-SEEP DIAPHRAGM: 3/			
SG Steel, 2 piece, with watertight coupling, rods/lugs			20.00
PC Steel, 2 piece, with watertight coupling, rods/lugs			28.00
SPLITTER TYPE ANTI-VORTEX WALL: 3/			
SG Steel, size based on riser diameter (not barrel)			5.00
HOODED INLET BAFFLE PLATE: 3/			
SG Steel, double angle iron			9.00
END SECTION: 3/			
SG Steel, 12 inch through 24 inch diameter			5.00
SG Steel, 30 inch through 36 inch diameter			8.00
SG Steel, 42 inch through 54 inch diameter			15.00
SG Steel, 60 inch diameter and larger			20.00
SCREEN OR END CAP: 3/			
SG Steel			5.00
FLAP GATE: 3/			
SG Steel			12.00
CONICAL TRASH RACK: 3/			
SG Steel, based on riser diameter, 36 inch and less			24.00
SG Steel, based on riser diameter, 42 inch and over			40.00
WEIR BOX TRASH RACK: 3/			
SG Steel, for hooded inlets			8.00
ANTI-VORTEX VANE: 3/			
SG Steel, for hooded inlets			2.00
FABRICATION (LABOR ONLY): 4/			
Tees, Wyes, and Riser Stubs			8.00
Elbows			6.00
Skewed or Beveled Ends			3.50

- 1/ Pipe costs are listed per diameter inch, per lineal foot, 16-gauge thickness.
 Use above costs X 1.20 for 14 gauge, 1.50 for 12 gauge, and 1.90 for 10 gauge.
 Examples: 20 ft., 24 in. dia. steel, CR/CS, 16 ga. = (1.30) X (24 in. dia.) X (20 ft.) = 624.00
 20 ft., 24 in. dia. steel, CR/CS, 14 ga. = (1.30 X 1.20) X (24 in. dia.) X (20 ft.) = 748.80
- 2/ Connecting band costs are listed for the band width listed, per diameter inch, 16 gauge thickness.
 Use above costs X 1.20 for 14 gauge, and 1.70 for 12 gauge.
 Examples: 12 in. wide steel band, PC, 16 ga., 24 in. dia. = (1.80) X (24 in. dia.) = 43.20
 24 in. steel watertight band, SG, 12 ga., 48 in. dia. = (5.00 X 1.70) X (48 in. dia.) = 408.00
- 3/ Costs are per diameter inch of pipe, any gauge (no added factors for gauge).
- 4/ Cost per diameter inch. For riser/stub assemblies, use stub diameter. Fabrication does NOT include any material costs.

TABLE B - PIPE AND RELATED COSTS (CONTINUED)

LARGE DIAMETER PIPE 1/ 2/ 3/

Pipe Diameter	RATED PRESSURE					
	Head 50 ft 22 psi	SDR-81 50 psi	SDR-51 80 psi	SDR-41 100 psi	SDR-32.5 125 psi	SDR-26 160 psi
6"	0.80 AA	1.07 AA	1.40 AA	1.60 AA	2.30 AA	2.30 AA
8"	1.00 AA	1.75 AA	2.15 AA	2.55 AA	3.25 AA	3.90 AA
10"	1.40 AA	2.25 AA	3.20 AA	3.90 AA	5.50 AA	6.10 AA
12"	1.90 AA	3.60 AA	4.65 AA	5.60 AA	8.00 AA	8.60 AA
15"	3.00 AA	6.35 AA	7.85 AA	9.60 AA		

PIPE FOR IRRIGATION WATER CONVEYANCE - GATED PIPE

<u>Pipe Diameter</u>	<u>PVC Pipe (per foot)</u>
8"	\$2.90 AA
10"	3.25 AA
12"	3.45 AA

IRRIGATION SYSTEM REORGANIZATION

Conversions that result in a net water saving in current irrigation method (Example: High pressure to low pressure, sprinkler; flood to surge irrigation)	\$125/Acre AM
Conversion to a more efficient irrigation water application method (Example: flood irrigation to sprinkler)	\$250/Acre AM

ANTI-SEEP COLLAR, BUTYL RUBBER/NEOPRENE WITH WOOD FRAME

<u>Size</u>	<u>Price</u>
2x2 feet	15.00AA
4x4 feet	35.00AA
5x5 feet	55.00AA
6x6 feet	65.00AA

VALVES, GATES, AND PIPE APPURTENANCES 4/

Gate Valves or Combination Gate/Check	50.00 per diameter inch AA
Hand Opening Slide Gate	3.00 per diameter inch AA
Wheel Opening Slide Gate	25.00 per diameter inch AA
Reverse Flow Flap Gate	5.00 per diameter inch AA
Air Relief Valve	17.50 per diameter inch AA
Pressure Relief Valve	35.00 per diameter inch AA
Coated Steel "Z" Section	50.00 per diameter inch AA
Alfalfa Valves 8" to 12" installed	9.50 per diameter inch AA
Surge Valves 6" to 12" installed	170.00 per diameter inch AA

- 1/ Any type pipe that meets the required specifications for the applicable practice may be used, but cost-share shall be based on the above cost. This table is based on the lowest per lineal foot cost of materials that meet specifications. See Table A for trenching costs.
- 2/ The cost of each Tee, Y, or elbow is limited (AA) to the cost of 35 feet of equivalent pipe in the table. The costs of other accessories are included in the table.
- 3/ Perforated pipe price same as solid pipe through 6 inch diameter. Add 1.25 per foot for 8, 10, 12 inch perforated pipe.
- 4/ Not applicable to small diameter livestock pipelines.

TABLE C - CONSTRUCTION MATERIALS, WELLS, AND STORAGE FACILITIES

CONCRETE

Concrete and steel reinforcing, formed in place	\$350.00/cu.yd.
Concrete slabs with steel reinforcing, in place	200.00/cu.yd.
Nonreinforced concrete or soil cement for bedding or grouting	150.00/cu.yd.

LUMBER AND STRUCTURAL STEEL

Redwood or preservation-treated lumber	\$0.98/bd.ft.
Wood piling or construction poles per diameter inch of butt thickness	0.50/ln.ft.
Structural steel including fabrication	2.50/lb.

RIPRAP

Riprap in place including bedding and/or Engineering Fabric	\$25.00/cu.yd.
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GRAVEL OR SCORIA

Gravel, sand, or scoria (pit run)	\$10.00/cu.yd.
Gravel (washed and graded)	18.00/cu.yd.

RESERVOIR SEALING

Material to reduce seepage in place (membrane, bentonite, or salt)	\$0.25/sq.ft.
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WELLS

Drilling and casing less than 4 inches Artesian <u>1/</u>	\$24.00/ft. AA
Drilling and casing 4 inches and over Artesian <u>1/</u>	28.00/ft. AA
Drilling and casing less than 4 inches <u>1/</u>	15.00/ft. AA
Drilling and casing 4 inches and over <u>1/</u>	20.00/ft. AA
Drilling and casing 4 inches and over (plastic) <u>1/</u>	18.00/ft. AA
Drilling in consolidated material not requiring casing	10.00/ft. AA
Bored or dug and cased 12 inches or larger <u>1/</u>	25.00/ft. AA
Well screen, stainless steel or brass installed <u>2/</u>	80.00/ft. AA
Well screen, plastic or galvanized steel installed <u>2/</u>	25.00/ft. AA
Water Pump <u>3/</u>	1000.00 AM
Pitless Well Units (Steel) <u>3/</u>	110.00 per diameter inch AA
Frost-free Vault, Complete with Pressure Tank, Switches, Controls <u>3/</u>	1200.00 AA

-
- 1/ Costs as shown are installed costs including but not limited to such things as cement, cement basket, lead packing, gravel screen, and other permanently installed items necessary for drilling and casing the well.
- 2/ Costs as shown are installed costs and include drilling. Costs are for manufactured screens.
- 3/ Livestock water only. Does not include power source – power source is NOT eligible for payment.

TABLE C - CONSTRUCTION MATERIALS, WELLS, AND STORAGE FACILITIES (CONTINUED)

DECOMMISSIONING ABANDONED WELLS 1/

Well diameter less than 4 inches	2.55/ln.ft. AM
Well diameter less than 4 inches (flowing)	3.55/ln.ft. AM
Well diameter - 4 inches	2.70/ln.ft. AM
Well diameter - 5 inches	4.60/ln.ft. AM
Well diameter - 6 to 11 inches	8.44/ln.ft. AM
Well diameter - 12 to 29 inches	8.75/ln.ft. AM
Well diameter - 30 to 36 inches	25.00/ln.ft. AM
Well diameter - larger than 36 inches	30.00/ln.ft. AM

LIVESTOCK WATER FACILITIES

Storage tank – New – Complete Installation 2/	\$1.00/gal. AA
Storage tank, Frost Free – New – Complete Installation 2/	3.00/gal. AA

ANIMAL WASTE STORAGE TANKS (excludes earth holding ponds and lagoons)

Average costs shall be based on site specific engineer's estimates for complete installation of the structure. Earthmoving components of the estimate shall be taken from Table A. Costs for other construction material components previously covered in Table C shall be used to develop the engineer's estimate. Cost of construction materials not covered in the tables will be determined by utilizing available local market prices.

Engineer's Estimate/
Structure - AM

GRADE STABILIZATION STRUCTURES, STREAMBANK PROTECTION, STREAM CHANNEL STABILIZATION, LINED WATERWAY OR OUTLET, AND STRUCTURAL RENOVATIONS 3/

Average costs shall be based on site specific engineer's estimates for complete installation of the structure. Earthmoving components of the estimate shall be taken from Table A. Costs for other construction material components previously covered in Table C shall be used to develop the engineer's estimate. Cost of construction materials not covered in the tables will be determined by utilizing available local market prices.

Engineer's Estimate/
Structure - AM

-
- 1/ Costs as shown are installed costs and includes but not limited to such things as sanitizing chemicals, bentonite, cement, sand, and other permanently installed items necessary for sanitizing and sealing the abandoned well.
- 2/ Complete installation includes necessary components, accessories, labor, etc. to cover the entire installation costs.
- 3/ This is not to be used for initial installations of reinforced concrete and closed conduit pipe structures.

TABLE D - VEGETATIVE ESTABLISHMENT AND RELATED COSTS

SEEDBED PREPARATION

	Per Acre
Chemical treatment, without tillage (Cost-share for chemicals is limited to the following per acre AM cost, regardless of the number of applications)	\$20.00 AM
Mechanical seedbed preparation (Includes 1 or more packing operations)	\$ 8.30
Seedbed preparation, abandoned mined land	\$105.00
Seedbed preparation, EWP and WRP	\$30.00 AM
Chemical application	
Ground (limited to 2 applications)	\$4.00
Aerial (limited to 2 applications)	\$5.00

SEEDING OPERATIONS

	Per Acre
Grass drill	\$10.60
Grain drill	\$ 7.50
Grass drill, abandoned mined land	\$30.00 AA
Grass drill, EWP and WRP seedings	\$20.00
Temporary Cover	\$19.00

CRITICAL AREA PREPARATION

	Per. Sq. Yd.
Mulch Blankets	\$0.50
Anchored mulch w/netting	\$0.25
Anchored mulch w/treader	\$0.05
Hydroseeder, seeding and mulch	\$0.20
Sod in-place	\$1.00

FERTILIZATION

Application of fertilizer	\$2.00 per acre
Nitrogen (N ₂)	\$0.24 per lb., actual
Phosphate (P ₂ O ₅)	\$0.25 per lb., actual
Potash (K ₂ O)	\$0.10 per lb., actual

WEED OR PEST CONTROL

	Per Acre
Mechanical weed control	\$ 5.75
Chemical for weed or pest control	\$ 8.00
Chemical application - Ground	\$4.00
Chemical application - Aerial	\$5.00 AA

TABLE E - SEED COSTS

NATIVE GRASSES	AVERAGE COST 1/ Per lb. PLS	INTRODUCED GRASSES	AVERAGE COST 1/ Per lb. PLS
Alkali sacaton	3.60	Altai wildrye	9.00
Beardless wildrye	13.25	Creeping foxtail	7.25
Big bluestem	5.50	Crested wheatgrass	1.70
Improved varieties	5.50	Improved varieties	1.70
Blue grama	13.15		
Buffalograss	10.50	Hard Fescue	2.40
Canada Wildrye	7.50	Intermediate wheatgrass	2.00
Green needlegrass	5.75	Improved varieties	2.00
Improved varieties	5.75	Meadow brome	2.50
Indiangrass	12.65		
Improved varieties	12.65	Pubescent wheatgrass	2.50
Little bluestem	15.60	Improved varieties	2.50
Improved varieties	15.60		
Prairie sandreed	13.00	Russian wildrye	3.00
Reed canarygrass	3.50	Improved varieties	3.00
Improved varieties	3.50	Smooth brome	1.50
Sand bluestem	15.00	Improved varieties	1.50
Sideoats grama	8.00	Tall wheatgrass	1.75
Improved varieties	8.00	Improved varieties	1.75
Slender wheatgrass	2.25	Timothy	1.25
Streambank wheatgrass	4.00		
Switchgrass	4.50	LEGUMES	
Improved varieties	4.50	Alfalfa, common	1.50
Thickspike wheatgrass	4.25	Improved standard varieties	1.50
Western wheatgrass	4.50	Improved creeper varieties	2.00
Improved varieties	4.50	Commercial blends	1.75
NATIVE SHRUBS		Alsike clover	1.25
Fourwing saltbush	20.00	Birdsfoot trefoil	1.75
Improved varieties	20.00	Sweetclover	.80
Gardner saltbush	22.35	Legume inoculation	.05
Winterfat	40.00		
Leadplant	130.00	SEED COST (per acre)	
NATIVE FORBS		Introduced Species	50.00/ac. AM
Purple prairieclover	15.50	Native Species	120.00/ac. AM
Maximilian sunflower	27.30	CRP grass mixes with shrub seed	200.00/ac. AM
Yellow Coneflower	19.00		
Purple Coneflower	26.00		
Black-Eyed Susan	20.60		

1/ Method of payment for cost-share programs will vary, **depending on the specific program.** For GPCP and Interim EQIP method of payment will be **Actual Cost Not to Exceed Average Cost (AA).**

TABLE F - AVERAGE COSTS FOR ESTABLISHING OR REESTABLISHING TREES OR SHRUBS

SITE PREPARATION

	Per Acre
Chemical treatment, without tillage (Cost-share for chemicals is limited to the following per acre AM cost, regardless of the number of applications)	\$20.00 AM
Mechanical site preparation	\$20.00
Chemical application	
Ground (limited to 2 applications)	\$4.00
Aerial (limited to 2 applications)	\$5.00 AA
Site Preparation, EWP flood plain easement	\$30.00 AM
Heavy site preparation (dozed, sheared, clipped, etc.)	\$106.00

PLANTING COSTS (includes planting and materials)

Bare Root (machine planted)	16.00 per 100-ft. row AM
Bare Root (hand planted)	1.00 per tree AM
Container (machine planted)	16.00 per 100-ft. row AM
Container (hand planted)	1.10 per tree AM
Sod Scalped (bare root)	16.00 per 100-ft. row AM
Sod Scalped (container)	16.00 per 100-ft. row AM
Unrooted Cuttings (hand planted)	0.40 per tree AM

PLANT MAINTENACE / MANAGEMENT

Competition Control	
Mechanical (4 to 6-foot band with in-the-row equipment, 1 cultivation)	\$2.40 per 100-ft. row AM
Chemical (3- to 4-foot band with in-the-row)	4.60 per 100-ft. row AM
Synthetic Weed Barrier (6 feet wide)	45.00 per 100-ft. row AM
Synthetic Weed Barrier Squares (4' x 4' minimum)	2.80 per square AM
Supplemental Water System	\$2.10 per emitter AM
(This pertains to a drip irrigation system and the price includes emitter, pipe, and other appurtenances but does not include pipeline from water source to tree planting.)	
Tree shelter:	
2 foot	\$2.10 per shelter AM
3 foot	\$2.90 per shelter AM
4 foot	\$3.30 per shelter AM

RENOVATION

Removal of entire tree and/or shrub row	\$60.00 per 100-ft. row AM
Bury trees and/or shrubs	\$15.00 per 100-ft. row AM
Thinning of trees and/or shrubs	7.50 per 100-ft. row AM

TABLE G - GRASSLAND PRACTICES

BRUSH CONTROL

Approved <u>chemical</u> for control of competitive shrubs on non-cropland	<u>Per Acre</u> \$9.75 AA
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FENCE CONSTRUCTION

New materials for all purposes

	<u>Per LF</u>
Barbed or smooth 2-strand wire	
3-wire	0.70
4-wire	0.75
5-wire or more	0.85
Chain link fence (minimum height 6')	12.00 AM
Feedlot Fence	4.50 AM
Permanent electric fence	
2-wire	0.35
3-wire	0.40
4-wire or more	0.50
Woven wire	1.25 AM
	<u>Each</u>
Electric Fence Energizers	500.00 AM

CONTOUR FURROWING OR CHISELING

	<u>Per Acre</u>
Contour Furrowing	12.50
Contour Chiseling	5.75

TABLE H - CROPLAND PRACTICES

STRIPCROPPING

	<u>Per Acre</u>
North-south or east-west strips	
Wind strips of not more than 10 rod-width	\$4.50
Wind strips 11 to 20 rods in width	3.70
Wind strips protected with perennial grass wind barrier established at less than 60-foot intervals	6.60
Diagonal strips, northeast-southwest	
Wind strips of not more than 10 rod-width	\$5.40
Wind strips 11 to 20 rods in width	4.40
Wind strips protected with perennial grass wind barrier established at less than 60-foot intervals	7.70
Field stripcropping (cross slope strips 200' or less)	5.40
Contour strips	7.70

CROP BUDGET AND CUSTOM RATE INFORMATION

Crop Budget information can be accessed at the following website:
www.ext.nodak.edu/extpubs/ecguides.htm. Budgets can be printed and completed on the hard copy.

North Dakota Custom Rates can be accessed at the following website:
www.nass.usda.gov/nd/custom.htm.