

Practice: 382 - Fence

Scenario: #1 - Exclusion, electric

Scenario Description:

A beef cattle operation where livestock currently have access to surface waters. The fence is needed to exclude the livestock from 1,320 ft. of riparian zone. The fence is built with wood posts buried in the ground. It has 4 strands of high tensile wire that are electrified. The fence has 4 corners and one gate is included to facilitate livestock movement.

Before Situation:

Livestock have open access to water resources and/or other sensitive areas causing degradation of resources. Degradation would include soil erosion, water quality, plant health and vigor, and wildlife habitat.

After Situation:

Permanent fence is installed to protect the riparian areas and/or other sensitive areas from degradation by livestock. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$3,219.33

Scenario Cost/Unit: \$2.44

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	5	\$156.50
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	10	\$239.50
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	\$6.43	4	\$25.72
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	9.2	\$78.57
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	9.2	\$178.76
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	38	\$714.02
Materials						
Electric, Tester	26	Electric, Tester for electric fence. Includes materials and shipping only.	Each	\$40.76	1	\$40.76
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.20	52	\$322.40
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$113.03	2	\$226.06
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
Electric, Energizer, 3-4 joule	28	Electric, Energizer, 3-4 joule for electric fence. Includes materials and shipping only.	Each	\$228.01	1	\$228.01
Electric, Power Surge Protector	24	Electric, Power Surge Protector for electric fence. Includes materials and shipping only.	Each	\$9.55	1	\$9.55
Electric, Lightening Diverter	22	Electric, Lightening diverter for electric fence. Includes materials and shipping only.	Each	\$10.17	2	\$20.34
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	8	\$89.28
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	13	\$194.48

Materials

Electric, Ground Rods	20	Electric, Ground Rod for electric fence. Includes materials and shipping only.	Each	\$10.41	7	\$72.87
Fence, Wire Assembly, High Tensile, Electric, 3 Strand	34	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.12	1650	\$198.00
Electric, Ground Rod Clamps	21	Electric, Ground Rod Clamps for electric fence. Includes materials and shipping only.	Each	\$1.79	7	\$12.53
Electric, Insulated cable	23	Electric, Insulated cable for electric fence. Typically in spools of 100 to 200 feet. Includes materials and shipping only.	Each	\$29.70	1	\$29.70

Mobilization

Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$175.68	1	\$175.68
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Practice: 382 - Fence

Scenario: #2 - Exclusion, electric, mountain site

Scenario Description:

A beef cattle operation where livestock currently have access to surface waters. The fence is needed to exclude the livestock from 1,320 ft. of riparian zone. The fence is built with wood posts buried in the ground. It has 4 strands of high tensile wire that are electrified. The fence has 6 corners and one gate is included to facilitate livestock movement. A higher payment is justified for this scenario due to the additional corners, braces and posts required for mountainous site and corresponding increase in labor to install the fence.

Before Situation:

Livestock have open access to water resources and/or other sensitive areas causing degradation of resources. Degradation would include soil erosion, water quality, plant health and vigor, and wildlife habitat.

After Situation:

Permanent fence is installed to protect the riparian areas and/or other sensitive areas from degradation by livestock. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$4,017.95

Scenario Cost/Unit: \$3.04

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	\$6.43	4	\$25.72
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	15	\$359.25
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	10	\$313.00
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	14.6	\$124.68
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	45	\$845.55
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	14.6	\$283.68
Materials						
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	12	\$133.92
Electric, Insulated cable	23	Electric, Insulated cable for electric fence. Typically in spools of 100 to 200 feet. Includes materials and shipping only.	Each	\$29.70	1	\$29.70
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$113.03	2	\$226.06
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.20	69	\$427.80
Electric, Ground Rods	20	Electric, Ground Rod for electric fence. Includes materials and shipping only.	Each	\$10.41	7	\$72.87
Electric, Lightening Diverter	22	Electric, Lightening diverter for electric fence. Includes materials and shipping only.	Each	\$10.17	2	\$20.34
Electric, Power Surge Protector	24	Electric, Power Surge Protector for electric fence. Includes materials and shipping only.	Each	\$9.55	1	\$9.55
Fence, Wire Assembly, High Tensile, Electric, 3 Strand	34	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.12	1650	\$198.00

Materials

Electric, Energizer, 3-4 joule	28	Electric, Energizer, 3-4 joule for electric fence. Includes materials and shipping only.	Each	\$228.01	1	\$228.01
Electric, Ground Rod Clamps	21	Electric, Ground Rod Clamps for electric fence. Includes materials and shipping only.	Each	\$1.79	7	\$12.53
Electric, Tester	26	Electric, Tester for electric fence. Includes materials and shipping only.	Each	\$40.76	1	\$40.76
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	19	\$284.24

Mobilization

Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$175.68	1	\$175.68
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Practice: 382 - Fence

Scenario: #3 - Exclusion, barbed wire

Scenario Description:

A cow-calf pasture where livestock currently have access to surface waters. The fence is needed to exclude the livestock from 1,320 ft. of riparian zone. The fence is built with wood posts driven into the ground. It has 5 strands of galvanized barbed wire with lower strands spaced closer together than upper strands (spacing of 6", 6", 10", 10", 12"). One gate is included to facilitate livestock movement.

Before Situation:

Livestock have open access to water resources and/or other sensitive areas causing degradation of resources. A robust fence is needed to prevent livestock damaging fence, or escaping it in order to reach lush forage in the riparian zone. The soils are light-textured, loamy, so the soil has lower bearing strength against livestock pressing on the fence. Degradation would include soil erosion, water quality, plant health and vigor, and wildlife habitat.

After Situation:

Permanent fence is installed to protect the riparian areas and/or other sensitive areas from degradation by livestock. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$3,433.50

Scenario Cost/Unit: \$2.60

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.98	5	\$189.90
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	\$6.43	4	\$25.72
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	8	\$191.60
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	10	\$313.00
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	8	\$68.32
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	38	\$714.02
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	8	\$155.44
Materials						
Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	1	Galvanized 12.5 gauge, 1,320' roll. Includes materials and shipping only.	Each	\$70.53	5	\$352.65
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.20	88	\$545.60
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	13	\$194.48
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	8	\$89.28
Fence, Wire Assembly, Barbed Wire	30	Brace pins, battens, clips, staples. Includes materials and shipping only.	Foot	\$0.16	1320	\$211.20
Mobilization						
Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$175.68	1	\$175.68

Practice: 382 - Fence

Scenario: #4 - Interior

Scenario Description:

A constructed interior barrier for implementing prescribed grazing of livestock (usually cattle). Fence includes wood posts driven into the ground with three strands of high tensile wire and 1 gate built according to state FOTG standards. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Before Situation:

Grazing distribution is less than optimal. Plants are either over or underutilized causing degradation of organic matter or spot grazing.

After Situation:

Permanent fence is installed to divide pasture into paddocks. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$2,587.19

Scenario Cost/Unit: \$1.96

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	8	\$68.32
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	5	\$156.50
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	8	\$191.60
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	30	\$563.70
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	8	\$155.44
Materials						
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.20	55	\$341.00
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$113.03	1	\$113.03
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	3	\$33.48
Electric, Energizer, 3-4 joule	28	Electric, Energizer, 3-4 joule for electric fence. Includes materials and shipping only.	Each	\$228.01	1	\$228.01
Fence, Wire Assembly, High Tensile, Electric, 3 Strand	34	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.12	1320	\$158.40
Electric, Ground Rod Clamps	21	Electric, Ground Rod Clamps for electric fence. Includes materials and shipping only.	Each	\$1.79	5	\$8.95
Electric, Ground Rods	20	Electric, Ground Rod for electric fence. Includes materials and shipping only.	Each	\$10.41	5	\$52.05
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	7	\$104.72

Materials

Electric, Insulated cable	23	Electric, Insulated cable for electric fence. Typically in spools of 100 to 200 feet. Includes materials and shipping only.	Each	\$29.70	1	\$29.70
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Mobilization

Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$175.68	1	\$175.68
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Practice: 382 - Fence

Scenario: #5 - Interior, mountain site

Scenario Description:

A constructed interior barrier for implementing prescribed grazing of livestock (usually cattle). Fence includes charger, wood posts driven into the ground with three strands of high tensile wire and 1 gate built according to state FOTG standards. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat. A higher cost is justified for this scenario due to the rough, undulating terrain and or additional corners braces and posts required for mountainous areas as determined by each state.

Before Situation:

Grazing distribution is less than optimal. Plants are either over or underutilized causing degradation of organic matter or spot grazing.

After Situation:

Permanent fence is installed to divide pasture into paddocks. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Foot

Scenario Typical Size: 1,320

Scenario Cost: \$3,068.58

Scenario Cost/Unit: \$2.32

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	11.5	\$275.43
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	10	\$313.00
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	11.5	\$98.21
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	11.5	\$223.45
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	33	\$620.07
Materials						
Electric, Ground Rod Clamps	21	Electric, Ground Rod Clamps for electric fence. Includes materials and shipping only.	Each	\$1.79	5	\$8.95
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$113.03	1	\$113.03
Post, Wood, CCA treated, 3-4" x 7'	9	Wood Post, Line 3-4" X 7', CCA Treated. Includes materials and shipping only.	Each	\$6.20	69	\$427.80
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	3	\$33.48
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	7	\$104.72
Electric, Ground Rods	20	Electric, Ground Rod for electric fence. Includes materials and shipping only.	Each	\$10.41	5	\$52.05
Electric, Insulated cable	23	Electric, Insulated cable for electric fence. Typically in spools of 100 to 200 feet. Includes materials and shipping only.	Each	\$29.70	1	\$29.70
Electric, Energizer, 3-4 joule	28	Electric, Energizer, 3-4 joule for electric fence. Includes materials and shipping only.	Each	\$228.01	1	\$228.01
Fence, Wire Assembly, High Tensile, Electric, 3 Strand	34	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.12	1320	\$158.40

Materials

Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
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Mobilization

Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$175.68	1	\$175.68
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Practice: 382 - Fence

Scenario: #6 - Woven wire

Scenario Description:

A 2.5 acre, small ruminant pasture where the livestock currently have access to surface waters. The fence is needed to exclude the livestock from 1,320 ft. of riparian zone. The fence is built with wood posts buried into the ground, 48" woven wire fabric, a barbed wire strand on bottom and top, and fasteners. The fence has 4 corners and one gate is included to facilitate livestock movement.

Before Situation:

Livestock have open access to water resources and/or other sensitive areas causing degradation of resources. Degradation would include soil erosion, water quality, plant health and vigor, and wildlife habitat.

After Situation:

Permanent fence is installed to protect the riparian areas from degradation by livestock. Benefits of the practice are managed livestock grazing intensity, duration and frequency, reduced soil erosion, improved water quality, improved plant health and vigor, and/or improved wildlife habitat.

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 1,320

Scenario Cost: \$4,157.35

Scenario Cost/Unit: \$3.15

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	15	\$359.25
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	15	\$128.10
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.98	5	\$189.90
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$31.30	5	\$156.50
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	\$6.43	4	\$25.72
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	8	\$155.44
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	43	\$807.97
Materials						
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	13	\$194.48
Wire, Barbed, Galvanized, 12.5 Gauge, 1,320' roll	1	Galvanized 12.5 gauge, 1,320' roll. Includes materials and shipping only.	Each	\$70.53	2	\$141.06
Wire, Woven, Galvanized, 12.5 Gauge, 48"	4	Galvanized 12.5 gauge, 48" - 330' roll. Includes materials and shipping only.	Each	\$249.98	4	\$999.92
Post, Wood, CCA treated, 5" x 8'	11	Wood Post, End 5" X 8', CCA Treated. Includes materials and shipping only.	Each	\$11.16	8	\$89.28
Gate, Pipe, 16'	1059	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$206.61	1	\$206.61
Post, Wood, CCA treated, 4" x 8'	10	Wood Post, Line 4" X 8', CCA Treated. Includes materials and shipping only.	Each	\$7.99	88	\$703.12

Practice: 382 - Fence

Scenario: #7 - Polywire, no charger

Scenario Description:

Installing a polywire fence with step in/fiberglass posts on 50' centers and all appurtenances to control movemnt of grazing animals in an managed grazing system such as stockpiling or stripgrazing. Polywire power source provided by connetion to perimeter electric fence.

Before Situation:

Forage use is inefficient and this effects plant condition negatively. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

The practice facilitates improved forage utilization. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Feet of fence installed

Scenario Unit: Foot

Scenario Typical Size: 1,300

Scenario Cost: \$299.36

Scenario Cost/Unit: \$0.23

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	2	\$37.58
Materials						
Wire, Polywire	8	Wire, Polywire for electric fence - 1,300 roll. Includes materials and shipping only.	Each	\$47.17	2	\$94.34
Post, Fiberglass, 11/16" X 6'	19	Fiberglass line post, 11/16" diameter X 6' length. Includes materials and shipping only.	Each	\$6.44	26	\$167.44

Practice: 382 - Fence

Scenario: #8 - Polywire, with charger

Scenario Description:

Installing a polywire fence with step in/fiberglass posts on 50' centers, solar energizer, and all appurtenances to control movemnt of grazing animals in an managed grazing system such as stockpiling or stripgrazing.

Before Situation:

Forage use is inefficient and this effects plant condition negatively. The resource concerns to be addressed by this practice are poor grazing distribution, inadequate water supply, and degraded site conditions leading to poor animal health.

After Situation:

The practice facilitates improved forage utilization. Associated Practices: Prescribed Grazing, Pipeline, Water Well, Spring Development, Heavy Use Area, Pumping Plant, Watering Facility, Forage and Biomass Planting, Critical Area Planting, Access Control

Scenario Feature Measure: Feet of fence installed

Scenario Unit: Foot

Scenario Typical Size: 1,300

Scenario Cost: \$615.84

Scenario Cost/Unit: \$0.47

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	2	\$37.58
Materials						
Post, Fiberglass, 11/16" X 6'	19	Fiberglass line post, 11/16" diameter X 6' length. Includes materials and shipping only.	Each	\$6.44	26	\$167.44
Electric, Energizer, Solar	27	Electric, Energizer, Solar for electric fence. Includes materials and shipping only.	Each	\$316.48	1	\$316.48
Wire, Polywire	8	Wire, Polywire for electric fence - 1,300 roll. Includes materials and shipping only.	Each	\$47.17	2	\$94.34

Practice: 382 - Fence

Scenario: #9 - Confinement

Scenario Description:

Aconfinement fence is installed around a 60'x180', heavy use area to keep cattle confined away from pasture during non-grazing periods. This scenario is priced using a typical specification for 5 strand high tensile wire and wood posts buried in the ground at 6-foot spacing. One gate is included to facilitate livestock movement in and out of the confinement area. Resource conservation benefits of this practice scenario, used in combination with other supporting and facilitating practices (such as Heavy Use Area and Prescribed Grazing) include improving water quality and forage plant condition.

Before Situation:

Cattle feed and lounge in an area where their waste contaminates a stream. In addition, forage in the vicinity of lounging area is over-utilized, and poor quality due to the over grazing and soil compaction.

After Situation:

Cattle lounge and feed confined inside the heavy use area during non-grazing periods. Surface water contamination is reduced and forage condition recovers on the pasture.

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 480

Scenario Cost: \$2,584.88

Scenario Cost/Unit: \$5.39

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Concrete, CIP, formless, non reinforced	36	Non reinforced concrete cast-in-placed without forms by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$109.07	2	\$218.14
Fence, Wire Assembly, High Tensile Electric, 5 Strand	1087	Brace pins, springs, strainers, battens, clips, crimp sleeves, staples, insulators, wrap around sleeves. Includes materials and shipping only.	Foot	\$0.18	480	\$86.40
Tractor, agricultural, 60 HP	963	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$23.95	8	\$191.60
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer. Does not include power unit. Labor not included.	Hour	\$8.54	8	\$68.32
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.43	8	\$155.44
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.79	16	\$300.64
Materials						
Wire, High Tensile, 12.5 Gauge, 4,000' roll	2	High Tensile 12.5 gauge, 4,000' roll. Includes materials and shipping only.	Each	\$113.03	1	\$113.03
Gate, Pipe, 12'	1057	6 rail tube gate, 16 gauge. Includes materials and shipping only.	Each	\$164.75	1	\$164.75
Post, Wood, CCA treated, 6" x 8'	12	Wood Post, End 6" X 8', CCA Treated. Includes materials and shipping only.	Each	\$14.96	86	\$1,286.56

Practice: 382 - Fence

Scenario: #10 - Safety

Scenario Description:

A barrier (fence) implemented on an NRCS constructed waste storage system according to engineering design to exclude human access. Permanently installed fence built to (1) keep humans away from waste ponds & lagoons, or (2) to protect sensitive areas (riparian areas, wetlands, springs, etc.) from heavy livestock pressure. Heavy grade fence materials and close post spacing required. Fence is typically installed by a contractor and includes labor and materials.

Before Situation:

Where a NRCS designed and constructed waste storage pond is planned whereby significant risk to human safety is determined to be evident. Livestock has access to sensitive areas that may cause detrimental effect to animal/human health and wildlife habitat. Resource concerns affected are plant health and vigor, wildlife habitat, compaction of soils, runoff of sediment or water quality due to turbidity..

After Situation:

Humans and livestock are excluded from the waste storage pond for safety purposes by installing a fence around a waste holding pond. The fence would typically be 100 wide x 175 long with one gate and installed by a fencing contractor. Woven wire fence with one strand of barb wire on top with a gate. Improved livestock control and access to water or other sensitive areas will promote safety for livestock/humans improve health, vigor of sensitive species, limiting soil erosion, and condition.

Scenario Feature Measure: Length of Fence

Scenario Unit: Feet

Scenario Typical Size: 450

Scenario Cost: \$2,918.00

Scenario Cost/Unit: \$6.48

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<i>Materials</i>						
Fence, Chain Link	1079	Fence, Chain Link, 5' High, 9 ga Wire, Posts in Concrete on 10' Centers. Includes all materials, equipment and labor.	Foot	\$14.59	200	\$2,918.00