

Practice: 550 - Range Planting

Scenario: #1 - Native, standard tillage preparation

Scenario Description:

Establishment of a mixture of NATIVE adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of Native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with LIGHT TO MODERATE TILLAGE and seeding with a no-till drill, range drill, or by broadcasting.

Before Situation:

Rangeland or cropland with or without an existing stand of perennial or annual grasses, OR a monoculture, OR no grasses are present, where natural reseeding or vegetation enhancement by grazing management alone is unlikely. Resource concerns may include: undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Situation:

Establishment of NATIVE adapted perennial vegetation such as grasses, forbs, and legumes improve forage quality and quantity and reduce soil erosion on grazed range, pasture, forest or other suitable location.

Scenario Feature Measure: Acres of Range Planting

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$20,240.00

Scenario Cost/Unit: \$253.00

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	80	\$878.40
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	80	\$1,683.20
Materials						
Three plus Species Mix, Warm Season, Native Perennial	2327	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$220.98	80	\$17,678.40

Practice: 550 - Range Planting

Scenario: #2 - Native, standard tillage preparation, foregone income

Scenario Description:

Establishment of a mixture of NATIVE adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of Native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with LIGHT TO MODERATE TILLAGE and seeding with a no-till drill, range drill, or by broadcasting.

Before Situation:

Rangeland or cropland with or without an existing stand of perennial or annual grasses, OR a monoculture, OR no grasses are present, where natural reseeding or vegetation enhancement by grazing management alone is unlikely. Resource concerns may include: undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Situation:

Establishment of NATIVE adapted perennial vegetation such as grasses, forbs, and legumes improve forage quality and quantity and reduce soil erosion on grazed range, pasture, forest or other suitable location.

Scenario Feature Measure: Acres of Range Planting

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$22,042.40

Scenario Cost/Unit: \$275.53

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	80	\$878.40
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	80	\$1,683.20
Foregone Income						
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	AUM	\$15.02	120	\$1,802.40
Materials						
Three plus Species Mix, Warm Season, Native Perennial	2327	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$220.98	80	\$17,678.40

Practice: 550 - Range Planting

Scenario: #3 - Native, heavy tillage preparation

Scenario Description:

Establishment of a mixture of NATIVE adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of Native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Before Situation:

Rangeland or cropland with or without an existing stand of perennial or annual grasses, OR a monoculture, OR no grasses are present, where natural reseeding or vegetation enhancement by grazing management alone is unlikely. Existing conditions often require complete suppression or eradication of existing vegetation to ensure success of the planting. Resource concerns may include: undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Situation:

Establishment of NATIVE adapted perennial vegetation such as grasses, forbs, and legumes improve forage quality and quantity and reduce soil erosion on grazed range, pasture, forest or other suitable location.

Scenario Feature Measure: Acres of Range Planting

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$21,548.80

Scenario Cost/Unit: \$269.36

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	80	\$878.40
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$16.36	80	\$1,308.80
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	80	\$1,683.20
Materials						
Three plus Species Mix, Warm Season, Native Perennial	2327	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$220.98	80	\$17,678.40

Practice: 550 - Range Planting

Scenario: #4 - Native, heavy tillage preparation, foregone income

Scenario Description:

Establishment of a mixture of NATIVE adapted perennial species on a grazed land unit to improve forage condition, improve wildlife habitat and/or reduce erosion. Seed mix of Native species is chosen based on range conditions and availability of seed. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting.

Before Situation:

Rangeland or cropland with or without an existing stand of perennial or annual grasses, OR a monoculture, OR no grasses are present, where natural reseeding or vegetation enhancement by grazing management alone is unlikely. Existing conditions often require complete suppression or eradication of existing vegetation to ensure success of the planting. Resource concerns may include: undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Situation:

Establishment of NATIVE adapted perennial vegetation such as grasses, forbs, and legumes improve forage quality and quantity and reduce soil erosion on grazed range, pasture, forest or other suitable location.

Scenario Feature Measure: Acres of Range Planting

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$23,351.20

Scenario Cost/Unit: \$291.89

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	80	\$1,683.20
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$16.36	80	\$1,308.80
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	80	\$878.40
Foregone Income						
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	AUM	\$15.02	120	\$1,802.40
Materials						
Three plus Species Mix, Warm Season, Native Perennial	2327	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$220.98	80	\$17,678.40

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Scenario: #5 - Native, wildlife, or pollinator

Scenario Description:

Establishment of a mixture of PREDOMINANTLY NATIVE adapted perennial species on a grazed land unit to improve habitat for pollinators, beneficial insects, and wildlife species. Seed mix of PREDOMINANTLY NATIVE SPECIES IS CHOSEN TO SPECIFICALLY BENEFIT WILDLIFE (ex: big game spp, Sage grouse, Lesser Prairie Chicken, others) or POLLINATORS (eg. inclusion of 5-10 forb species) based on range conditions. FOR POLLINATOR HABITAT: Consideration is given to selecting plants that bloom sequentially throughout the growing season, where feasible. For honeybee foraging habitat, species are selected which will be in bloom when hives are in the area. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or by broadcasting. Includes foregone income.

Before Situation:

Rangeland or cropland with or without an existing stand of perennial or annual grasses, OR a monoculture, OR no grasses are present, where natural reseeding or vegetation enhancement by grazing management alone is unlikely. Existing conditions often require complete removal, suppression, or eradication of existing vegetation to ensure success of planting. Resource concerns may include: inadequate habitat for wildlife (ex: big game spp, Sage grouse, Lesser Prairie Chicken, others) undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Situation:

Establishment of PREDOMINANTLY NATIVE adapted perennial vegetation, such as grasses, forbs, legumes, with an emphasis on species beneficial to wildlife or Pollinators on grazed range, pasture, forest, or other suitable location. For Pollinator habitat: Plants that bloom sequentially throughout the growing season are established, where feasible.

Scenario Feature Measure: Acres of Range Planting

Scenario Unit: Acre

Scenario Typical Size: 50

Scenario Cost: \$16,610.00

Scenario Cost/Unit: \$332.20

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	50	\$549.00
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$16.36	50	\$818.00
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	50	\$1,052.00
Foregone Income						
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	AUM	\$15.02	75	\$1,126.50
Materials						
Native Grass and Forb Mix, for Wildlife (including pollinators) or Ecosystem Restoration	2335	Native grass and forb/legume mix, including specialized species. Includes material and shipping only.	Acre	\$261.29	50	\$13,064.50

Practice: 550 - Range Planting

Scenario: #9 - Saline

Scenario Description:

Establish and maintain permanent herbaceous vegetation on saline/sodic sites. Grass seeding on 20 acres of saline/sodic affected soils. This practice designed for Saline Seep with Recharge or Discharge Area and Saline/Sodic soils. Seed mix of Predominantly Non-Native species is chosen based on site conditions and availability of seed. Planting by preparing a seedbed with MODERATE TO HEAVY TILLAGE (ex: ripping & heavy disk) and seeding with a no-till drill, range drill, or broadcasting. Includes foregone income.

Before Situation:

Cropland is without existing stand of annual grasses OR monoculture OR no grasses present where natural reseeding or vegetation enhancement is unlikely. Existing conditions often require complete suppression or eradication of existing vegetation to ensure success of planting. Resource concerns may include: undesirable plant productivity and health, soil erosion and soil quality. Saline areas left unattended continue to expand.

After Situation:

The establishment and maintenance of permanent herbaceous vegetation on saline/sodic sites. Grass seeding on 20 acres of saline/sodic affected soils. This practice designed for Saline Seep with Recharge or Discharge Area and Saline/Sodic soils.

Scenario Feature Measure: Acres of Saline Planting

Scenario Unit: Acre

Scenario Typical Size: 20

Scenario Cost: \$5,442.93

Scenario Cost/Unit: \$272.15

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$10.98	20	\$219.60
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$16.36	20	\$327.20
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.04	20	\$420.80
Foregone Income						
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$115.67	6.7	\$774.99
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$144.36	6.6	\$952.78
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$271.04	6.7	\$1,815.97
Materials						
Three Species Mix, Cool Season, Introduced Perennial Grass	2315	Cool season, introduced grass mix. Includes material and shipping only.	Acre	\$46.58	20	\$931.60