

**Practice: 327 - Conservation Cover**

**Scenario: #1 - Introduced Species**

**Scenario Description:**

This practice applies on land to be retired from agricultural production and on other lands needing permanent protective cover. This practice typically involves conversion from a clean-tilled (conventional tilled) intensive cropping system to permanent non-native vegetation (scenario includes non-native grasses and legumes). The typical size of the practice is 10 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and reduce air quality impacts.

**Before Situation:**

Crops such as corn, soybeans, or cotton are conventionally grown and harvested. Full width tillage is utilized, weeds controlled by cultivation and/or chemical application. Soil surface residue amounts average 10% or less. Soil erosion occurs with visible rills present, sediment may be moving offsite into surface water degrading water quality. Soil quality (soil organic matter) declines over time as a result of tillage practices, low residue, and long periods of bare soil. Air quality may be impacted during field operations by the creation of particulates. The system provides little to no wildlife habitat.

**After Situation:**

Land covered with permanent non-native vegetation has reduced soil erosion, reduced water/sediment runoff, and significant dust emissions are eliminated therefore, air quality is improved. Plants sown for conservation cover may provide cover for beneficial insects and wildlife. This scenario does not apply to plantings for forage production or to critical area plantings.

**Scenario Feature Measure:** Area planted

**Scenario Unit:** Acre

**Scenario Typical Size:** 10

**Scenario Cost:** \$1,950.30

**Scenario Cost/Unit:** \$195.03

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.39	10	\$203.90
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.50	10	\$65.00
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.86	10	\$58.60
<b>Materials</b>						
Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	10	\$496.50
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.63	10	\$156.30
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.54	500	\$270.00
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.72	500	\$360.00
Nitrogen (N), Ammonium Nitrate	69	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.85	400	\$340.00

**Practice: 327 - Conservation Cover**

**Scenario: #11 - Renovate NWSG Stands**

**Scenario Description:**

This practice applies to existing stands of native grasses that have become rank and lack a forb component necessary for many wildlife species. These stands exist with/without standard maintenance and may have been utilized as pasture/hay but are not currently utilized for those purposes. The typical size of the stand is 10 acres. This scenario includes the partial removal of existing native warm season grass (NWSG) stands through herbicide and/or disking. No till seeding is then utilized to incorporate native forbs into the stand remnants. The stand is then maintained by standard methods.

**Before Situation:**

Native warm season stands are thick monocultures and/or rank and contain no forb component. Stands are smothering out or have little regrowth and actions are required to rejuvenate rank, monoculture stands that provide little to no wildlife benefits.

**After Situation:**

Area is planted to provide habitat for multiple speices and provides habitat for early succeional wildlife and macroinvertebrates. Native grass residual stand becomes integral component tothe new stand at much lower density. Erosion is controlled and the stand is then maintained by prescribed burning/disking/etc. at proper densities and intervals.

**Scenario Feature Measure: Area Renovated**

**Scenario Unit:** Acre

**Scenario Typical Size:** 10

**Scenario Cost:** \$4,538.05

**Scenario Cost/Unit:** \$453.81

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Equipment/Installation</b>						
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$20.39	10	\$203.90
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.86	10	\$58.60
Tillage, Primary	946	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	\$15.85	10	\$158.50
<b>Labor</b>						
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	\$18.41	2	\$36.82
<b>Materials</b>						
One Species, Native Forb, Low/Moderate Cost	2330	Native forb. Includes material and shipping only.	Acre	\$406.46	10	\$4,064.60
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.63	1	\$15.63