Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	1
Scenario Name	Grass
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 grass). The typical size of the practice is 50 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitit, and reduce air quality impacts. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595)
Before Practice Situation	Crops such as corn, soybeans, small grains or vegetables 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 Practice Situation	Land covered with permanent non-native grass 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	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$4,747.10	$237.36
Equipment/Installation	$1,014.60	$50.73
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$4,773.80	$238.69
Total	$10,535.50	$526.78

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	97	Timothy (Phleum pratense)	Introduced Perennial Grasses and shipping.	Pound	$2.46	20	$49.20	1 lb/ac seeding rate (mix)	
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	$9.45	30	$283.50	1.5 lb/ac seeding rate (mix)	
Materials	95	Smooth Bromegrass (Bromus inermis)	Introduced Perennial Grasses and shipping.	Pound	$3.15	80	$252.00	4 lb/ac seeding rate (mix)	
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	$2.04	40	$81.60	2 lb/ac seeding rate (mix)	
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.53	2000	$1,060.00	100 pounds per acre of K	
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.96	2000	$1,920.00	100 pounds per acre of P	
Materials	69	Nitrogen (N), Ammonium Nitrate	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.88	1000	$880.00	50 pounds per acre of N	
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	$11.04	20	$220.80	site prep spray	
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	$6.50	20	$130.00	herbicide application	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	40	$385.20	two passes for site prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	20	$381.60	planting of cover	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	20	$117.80	application of fertilizers	
Foregone Income	1963	FI, Wheat Dryland	Dryland Wheat is Primary Crop	Acre	$217.71	6.67	$1,451.40		Corn-Soybean-Wheat Rotation
Foregone Income	1961	FI, Soybeans Dryland	Dryland Soybeans is Primary Crop	Acre	$295.69	6.67	$1,971.27		Corn-Soybean-Wheat Rotation
Foregone Income	1959	FI, Corn Dryland	Dryland Corn is Primary Crop	Acre	$202.67	6.67	$1,351.13		Corn-Soybean-Wheat Rotation

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	2
Scenario Name	Native Grass
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 native vegetation (scenario includes native grass). The typical size of the practice is 20 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitit, and reduce air quality impacts. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595)
Before Practice Situation	Crops such as corn, soybeans, small grains or vegetables 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 Practice Situation	Land covered with permanent native grass 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	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$3,669.00	$183.45
Equipment/Installation	$1,519.20	$75.96
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$4,773.80	$238.69
Total	$9,962.00	$498.10

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	$9.62	40	$384.80	2 lb/ac seeding rate (mix)	
Materials	84	Wild Rye, Virginia (Elymus virginicus)	Native Grasses and shipping.	Pound	$9.81	40	$392.40	2 lb/ac seeding rate (mix)	
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	$11.81	100	$1,181.00	5 lb/ac seeding rate (mix)	
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.53	1000	$530.00	50 pounds per acre of P	
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.96	1000	$960.00	50 pounds per acre of K	
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	$11.04	20	$220.80	site prep spray	
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	$6.50	20	$130.00	herbicide application	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	20	$192.60	one pass for site prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	20	$381.60	planting of seeds	
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	40	$697.20	two mowings during establishment for weed control	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	20	$117.80	application of fertilizer	
Foregone Income	1963	FI, Wheat Dryland	Dryland Wheat is Primary Crop	Acre	$217.71	6.67	$1,451.40		Corn-Soybean-Wheat Rotation
Foregone Income	1961	FI, Soybeans Dryland	Dryland Soybeans is Primary Crop	Acre	$295.69	6.67	$1,971.27		Corn-Soybean-Wheat Rotation
Foregone Income	1959	FI, Corn Dryland	Dryland Corn is Primary Crop	Acre	$202.67	6.67	$1,351.13		Corn-Soybean-Wheat Rotation

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	3
Scenario Name	Orchard or Vineyard Alleyways
Scenario Description	This practice applies on orchards and vineyards needing permanent protective cover in the alleyways between tree and vine rows. The typical size of this practice is 20 acres. This practice typically involves conversion from a clean-tilled (conventional tilled) intensive cropping system to permanent vegetation (scenario includes non-native grass and legume mix). This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, enhance wildlife and/or pollinator habitit, manage plant pests, and reduce air quality impacts. 60% conservation cover per acre is typical. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595).
Before Practice Situation	Orchard or vineyard with bare soil between vine/tree rows. Bare soil is exposed to wind erosion and/or intense rainfall during the fall, winter, and early spring. Over the winter sediment/nutrient runoff from orchards/vineyards increases. Sheet and rill erosion occurs with visible rills by spring. Runoff from the fields flows into streams, water courses or other water bodies causing degradation to the receiving waters. Soil health (soil organic matter) declines over time as a result of long periods of bare soil. Little to no wildlife/pollinator habitat present.
After Practice Situation	Orchard or Vineyard area between vine/tree rows are planted with permanent introduced grass/legume mix. Area covered 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, pollinators, and wildlife.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	20

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$1,856.64	$92.83
Equipment/Installation	$739.92	$37.00
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$2,596.56	$129.83

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	$2.04	24	$48.96	2 lb/ac seeding rate (mix)	Based on 60% of Area Planted
Materials	87	Fescue, Tall (Festuca arundinacea)	Introduced Perennial Grasses and shipping.	Pound	$1.80	48	$86.40	4 lb/ac seeding rate (mix)	Based on 60% of Area Planted
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	$2.60	36	$93.60	3 lb/ac seeding rate (mix)	Based on 60% of Area Planted
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.53	480	$254.40	Fertilizer 40 pounds per acre of K	Based on 60% of Area Planted
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.96	600	$576.00	Fertilizer 50 pounds per acre of P	Based on 60% of Area Planted
Materials	69	Nitrogen (N), Ammonium Nitrate	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.88	600	$528.00	Fertilizer 50 pounds per acre of N	Based on 60% of Area Planted
Materials	106	Birdsfoot Trefoil (Lotus corniculatus)	Introduced Legumes and shipping.	Pound	$11.22	24	$269.28	2 lb/ac seeding rate (mix)	Based on 60% of Area Planted
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	24	$231.12	two passes for seedbed prep	Based on 60% of Area Planted
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	12	$70.68	application of fertilizers	Based on 60% of Area Planted
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	12	$209.16	mowing for weed control during establishment	Based on 60% of Area Planted
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	12	$228.96	planting of cover	Based on 60% of Area Planted

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	4
Scenario Name	Pollinator Habitat
Scenario Description	Permanent vegetation, including mix of native grasses, legume, forbs (mix may also include non-native species), established on any land needing permanent vegetative cover that provides habitat for pollinators. Typical practice size is variable depending on site, this scenario uses 1 ac as the typical size. In addition to providing pollinator habitat, this practice scenario may also reduce sheet and rill erosion, improve soil quality, improve water quality, and improve air quality. The practice may also provide wildlife habitat. Practice applicable on cropland, odd areas, corners, etc. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595).
Before Practice 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 or pollinator habitat.
After Practice Situation	Land covered with permanent pollinator habitat including a mix of native grasses, legume, forbs (mix may also include non-native species). This practice may also have reduced soil erosion, reduced water/sediment runoff, and significant dust emissions are eliminated therefore, air quality is improved. Plants sown for pollinator habitat may also provide cover for beneficial insects and wildlife. This scenario does not apply to critical area plantings.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$749.28	$749.28
Equipment/Installation	$88.96	$88.96
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$116.67	$116.67
Foregone Income	$229.69	$229.69
Total	$1,184.60	$1,184.60

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	133	Smooth Aster (Aster laevis)	Native Forbs and shipping.	Pound	$217.74	1	$217.74		
Materials	148	Black-Eyed Susan (Rudbeckia hirta)	Native Forbs and shipping.	Pound	$33.55	1	$33.55		
Materials	84	Wild Rye, Virginia (Elymus virginicus)	Native Grasses and shipping.	Pound	$9.81	1	$9.81		
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	$15.43	1	$15.43		
Materials	77	Eastern Gamagrass (Tripsacum dactyloides)	Native Grasses and shipping.	Pound	$17.45	1	$17.45		
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.53	100	$53.00	100 pounds per acre of K	
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.96	100	$96.00	100 pounds per acre of P	
Materials	136	Purple Coneflower (Echinacea purpurea)	Native Forbs and shipping.	Pound	$32.78	1	$32.78		
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Refer to WIN-PST for product names and active ingredients. Materials only.	Acre	$11.04	3	$33.12	two site prep sprays and one post plant spray for weed control	
Materials	129	Wild Senna (Cassia hebecarpa)	Native Legumes and shipping.	Pound	$68.25	1	$68.25		
Materials	125	Partidge Pea (Chamaecrista fasciculata)	Native Legumes and shipping.	Pound	$15.70	1	$15.70		
Materials	119	Blue Wild Indigo (Baptisia australis)	Native Legumes and shipping.	Pound	$156.45	1	$156.45		
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	$6.50	3	$19.50	herbicide applications	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	1	$9.63	seed bed prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	1	$19.08	planting	
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	2	$34.86	mowings for weed control during establishment	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	1	$5.89	application of fertilzier	
Acquisition of Technical Knowledge	294	Training, Workshops	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	$116.67	1	$116.67	attedance at a workshop regarding the establishment and maintenance of pollinator habitat is highly encouraged for long term success of this practice	
Foregone Income	1963	FI, Wheat Dryland	Dryland Wheat is Primary Crop	Acre	$217.71	0.25	$54.43		Rotation of 2 years corn, 1 year soybeans, 1 year wheat
Foregone Income	1961	FI, Soybeans Dryland	Dryland Soybeans is Primary Crop	Acre	$295.69	0.25	$73.92		Rotation of 2 years corn, 1 year soybeans, 1 year wheat
Foregone Income	1959	FI, Corn Dryland	Dryland Corn is Primary Crop	Acre	$202.67	0.5	$101.34		Rotation of 2 years corn, 1 year soybeans, 1 year wheat

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	5
Scenario Name	Organic Introduced Mix
Scenario Description	This practice applies on organically managed land needing permanent protective cover. This practice typically involves conversion from an intensive organic cropping system to permanent non-native vegetation (scenario includes non-native grass/legume mix). The typical size of the practice is 5 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitit, and reduce air quality impacts. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595)
Before Practice Situation	Crops such as vegetables and small fruit crops are organically grown and harvested. Full width tillage is utilized, weeds controlled mainly by cultivation. 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 Practice Situation	Organically managed land covered with permanent non-native grass/legume mix 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	5

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$2,003.90	$400.78
Equipment/Installation	$443.60	$88.72
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$4,807.50	$961.50
Total	$7,255.00	$1,451.00

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	102	Certified Organic, Smooth Bromegrass (Bromus inermis)	Introduced Perennial Grasses and shipping.	Pound	$4.41	20	$88.20	4 lb/ac seeding rate (mix)	
Materials	100	Certified Organic, Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	$5.02	10	$50.20	2 lb/ac seeding rate (mix)	
Materials	114	Certified Organic, Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	$4.38	20	$87.60	4 lb/ac seeding rate (mix)	
Materials	268	Potassium, Organic	ORGANIC Potassium	Pound	$1.33	200	$266.00	Fertilizer (40 lb/ac rec)	
Materials	267	Phosphorus, Organic	ORGANIC Phosphorus	Pound	$3.02	250	$755.00	Fertilizer (50 lb/ac rec)	
Materials	266	Nitrogen, Organic	ORGANIC Nitrogen	Pound	$2.52	250	$630.00	Fertilizer (50 lb/ac rec)	
Materials	117	Certified Organic, Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	$8.46	15	$126.90	3 lb/ac seeding rate (mix)	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	15	$144.45	three passes for site prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	5	$95.40	planting of cover	
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	10	$174.30	two mowings for weed control during establishment	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	5	$29.45	application of fertilizers	
Foregone Income	2033	FI, Vegetables	Vegetables is Primary Crop	Acre	$961.50	5	$4,807.50		Vegetable rotation

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	6
Scenario Name	Organic Native Mix
Scenario Description	This practice applies on organically managed land needing permanent protective cover. This practice typically involves conversion from an intensive organic cropping system to permanent native vegetation (scenario includes native grass/legume mix). The typical size of the practice is 5 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitit, and reduce air quality impacts. *Certified Organic Native Seed is typically NOT available, therefore non-organic seed components were used. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595).
Before Practice Situation	Crops such as vegetables and small fruit crops are organically grown and harvested. Full width tillage is utilized, weeds controlled mainly by cultivation. 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 Practice Situation	Organically manage land covered with permanent native grass/legume mix 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	5

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$3,253.80	$650.76
Equipment/Installation	$530.75	$106.15
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$4,807.50	$961.50
Total	$8,592.05	$1,718.41

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	$9.62	10	$96.20	2 lb/ac seeding rate (mix)	
Materials	84	Wild Rye, Virginia (Elymus virginicus)	Native Grasses and shipping.	Pound	$9.81	10	$98.10	2 lb/ac seeding rate (mix)	
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	$11.81	25	$295.25	5 lb/ac seeding rate (mix)	
Materials	127	Slender Bush Clover (Lespedeza virginica)	Native Legumes and shipping.	Pound	$224.95	5	$1,124.75	<1 lb/ac seeding rate (mix)	
Materials	121	Canada Tick Trefoil (Desmodium canadense)	Native Legumes and shipping.	Pound	$171.45	5	$857.25	<1 lb/ac seeding rate (mix)	
Materials	119	Blue Wild Indigo (Baptisia australis)	Native Legumes and shipping.	Pound	$156.45	5	$782.25	<1 lb/ac seeding rate (mix)	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	15	$144.45	three passes for site prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	5	$95.40	planting of cover	
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	15	$261.45	three mowings for weed control during establishment	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	5	$29.45		
Foregone Income	2033	FI, Vegetables	Vegetables is Primary Crop	Acre	$961.50	5	$4,807.50		Vegetable rotation

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Agronomy
Practice Code/Name	327 - Conservation Cover
Scenario ID	7
Scenario Name	Organic Pollinator Habitat
Scenario Description	Permanent vegetation, including mix of native grasses, legume, forbs (mix may also include non-native species), established on organically managed land needing permanent vegetative cover that provides habitat for pollinators. Typical practice size is variable depending on site, this scenario uses 1 ac as the typical size. In addition to providing pollinator habitat, this practice scenario may also reduce sheet and rill erosion, improve soil quality, improve water quality, and improve air quality. The practice may also provide wildlife habitat. Practice applicable on cropland, odd areas, corners, etc. *Certified Organic Native Seed is typically NOT available, therefore non-organic seed components were used. Associated Practices: Brush Management (314), Nutrient Management (590), Integrated Pest Management (595).
Before Practice Situation	Crops such as vegetables and small fruit crops are organically grown and harvested. Full width tillage is utilized, weeds controlled mainly by cultivation. 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 or pollinator habitat.
After Practice Situation	Organically managed land covered with permanent pollinator habitat including a mix of native grasses, legume, forbs (mix may also include non-native species). This practice may also have reduced soil erosion, reduced water/sediment runoff, and significant dust emissions are eliminated therefore, air quality is improved. Plants sown for pollinator habitat may also provide cover for beneficial insects and wildlife. This scenario does not apply to critical area plantings.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$641.66	$641.66
Equipment/Installation	$106.15	$106.15
Labor	$0.00	$0.00
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$961.50	$961.50
Total	$1,709.31	$1,709.31

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	133	Smooth Aster (Aster laevis)	Native Forbs and shipping.	Pound	$217.74	1	$217.74	<1 lb/ac seeding rate (mix)	
Materials	148	Black-Eyed Susan (Rudbeckia hirta)	Native Forbs and shipping.	Pound	$33.55	1	$33.55	<1 lb/ac seeding rate (mix)	
Materials	84	Wild Rye, Virginia (Elymus virginicus)	Native Grasses and shipping.	Pound	$9.81	1	$9.81	<1 lb/ac seeding rate (mix)	
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	$15.43	1	$15.43	<1 lb/ac seeding rate (mix)	
Materials	77	Eastern Gamagrass (Tripsacum dactyloides)	Native Grasses and shipping.	Pound	$17.45	1	$17.45	<1 lb/ac seeding rate (mix)	
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.53	50	$26.50	50 pounds of K per acre	
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.96	50	$48.00	50 pounds of P per acre	
Materials	136	Purple Coneflower (Echinacea purpurea)	Native Forbs and shipping.	Pound	$32.78	1	$32.78	<1 lb/ac seeding rate (mix)	
Materials	129	Wild Senna (Cassia hebecarpa)	Native Legumes and shipping.	Pound	$68.25	1	$68.25	<1 lb/ac seeding rate (mix)	
Materials	125	Partidge Pea (Chamaecrista fasciculata)	Native Legumes and shipping.	Pound	$15.70	1	$15.70	<1 lb/ac seeding rate (mix)	
Materials	119	Blue Wild Indigo (Baptisia australis)	Native Legumes and shipping.	Pound	$156.45	1	$156.45	<1 lb/ac seeding rate (mix)	
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	$9.63	3	$28.89	three passes for seedbed prep	
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	$19.08	1	$19.08	planting	
Equipment/Installation	957	Mechanical weed control, Vegetation termination	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acre	$17.43	3	$52.29	three mowings for weed control during establishment	
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$5.89	1	$5.89	application of fertilizer	
Foregone Income	2033	FI, Vegetables	Vegetables is Primary Crop	Acre	$961.50	1	$961.50		Vegetable rotation