Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Range/Pasture Grazing
Practice Code/Name	512 - Forage and Biomass Planting
Scenario ID	1
Scenario Name	Native Perennial Grasses (1 species)
Scenario Description	Establish or reseed adapted perennial native grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of native grasses for pasture, hayland, and wildlife openings. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding ,and spreading. Associated Practices: Fence (382), Forage Harvest Management (511), and Watering Facility (614).
Before Practice Situation	Poorly managed/degraded pasture land or cropland being converted to pasture and/or hay.
After Practice Situation	Suitable species are established to improve forage quality and quantity and reduce soil erosion on cropland ,hayland, pasture, and/or biomass production.
Scenario Feature Measure	Acres of Forgage and Biomass Planting
Scenario Unit	Acre
Scenario Typical Size	30

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$10,511.33	$350.38
Equipment/Installation	$944.10	$31.47
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	$11,455.43	$381.85

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	299	Test, Soil Test, Standard	Includes materials, labor, and equipment costs.	Each	$9.53	1	$9.53		
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	30	$331.20		
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	1500	$795.00		50 pounds 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	1500	$1,440.00		50 pounds per acre
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	$93.78	60	$5,626.80	sandy and naturally acidic soils combined with higjh rainfall typical of the northeast means that lime is generally needed.	2 tons per acre
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	$9.62	240	$2,308.80		8 pounds per acre PLS (MD job sheet)
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$6.50	30	$195.00		
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	30	$176.70		
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$19.08	30	$572.40		

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Range/Pasture Grazing
Practice Code/Name	512 - Forage and Biomass Planting
Scenario ID	3
Scenario Name	Introduced Perennial Cool Season Grasses with legume
Scenario Description	Establish or reseed adapted perennial introduced cool season grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced cool season grasses for pasture, hayland, and wildlife openings. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding ,and spreading. Associated Practices: Fence (382), Forage Harvest Management (511), and Watering Facility (614).
Before Practice Situation	Poor or nonexistent stand of grass species. Resource concerns may include undesireable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.
After Practice Situation	Suitable species are established to improve forage quality and quantity and reduce soil erosion on cropland ,hayland, pasture, and/or biomass production.
Scenario Feature Measure	Acres of Forgage and Biomass Planting
Scenario Unit	Acre
Scenario Typical Size	30

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$10,870.73	$362.36
Equipment/Installation	$1,233.00	$41.10
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	$12,103.73	$403.46

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	299	Test, Soil Test, Standard	Includes materials, labor, and equipment costs.	Each	$9.53	1	$9.53		
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	30	$331.20		
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	1500	$795.00		50 pounds 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	1500	$1,440.00		50 pounds per acre
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	$2.04	180	$367.20		6 pounds per acre
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	$93.78	60	$5,626.80	sandy and naturally acidic soils combined with higjh rainfall typical of the northeast means that lime is generally needed.	2 tons per acre
Materials	104	Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	$4.15	300	$1,245.00		10 pounds per acre
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	1200	$1,056.00		40 pounds per acre
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$6.50	30	$195.00		
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$9.63	30	$288.90		
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	30	$176.70		
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$19.08	30	$572.40		

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Range/Pasture Grazing
Practice Code/Name	512 - Forage and Biomass Planting
Scenario ID	5
Scenario Name	Legumes
Scenario Description	Establishment of legumes for the purpose of increasing plant diversity, soil quality and fertility, and plant health and enhancing the quality of forage. This practice may be utilized for organic or regular production. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding ,and spreading. Associated Practices: Fence (382), Forage Harvest Management (511), and Watering Facility (614).
Before Practice Situation	Existing stand of perennial grasses or monoculture with no legumes present .
After Practice Situation	Legumes will be maintained through proper grazing management and improve plant diversity and soil quality.
Scenario Feature Measure	Acres of Forgage and Biomass Planting
Scenario Unit	Acre
Scenario Typical Size	30

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$8,666.33	$288.88
Equipment/Installation	$1,038.00	$34.60
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	$9,704.33	$323.48

Cost Details:									
Cost Category	**Component ID**	**Component Name**	**Component Description**	**Unit**	**Price ($/unit)**	**Quantity**	**Cost**	**Component Justification**	**Quantity Justification**
Materials	299	Test, Soil Test, Standard	Includes materials, labor, and equipment costs.	Each	$9.53	1	$9.53		
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	1500	$795.00		50 pounds per acre
Materials	109	Ladino Clover (Trifolium repens)	Introduced Legumes and shipping.	Pound	$3.74	150	$561.00		5 pounds per acre
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	$2.60	90	$234.00		3 pounds 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	1500	$1,440.00		50 pounds per acre
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	$93.78	60	$5,626.80	sandy and naturally acidic soils combined with higjh rainfall typical of the northeast means that lime is generally needed.	2 tons per acre
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$9.63	30	$288.90		
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	30	$176.70		
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$19.08	30	$572.40		

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Range/Pasture Grazing
Practice Code/Name	512 - Forage and Biomass Planting
Scenario ID	7
Scenario Name	Organic Introduced Perennial Cool Season Grasses with legume
Scenario Description	This practice applies to organically managed pasture or hayland.Establish or reseed adapted perennial introduced cool season grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced cool season grasses for pasture, hayland, and wildlife openings. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding ,and spreading. Producer follows all National Organic Program (NOP) rules and regulations. Associated Practices: Fence (382), Forage Harvest Management (511), and Watering Facility (614).
Before Practice Situation	Poor or nonexistent stand of grass species. Resource concerns may include undesireable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.
After Practice Situation	NOP approved species, materials, and methods are utilized to establish pasture or hayland, to improve forage quality and quantity, and reduce soil erosion on cropland ,hayland, pasture, and/or biomass production.
Scenario Feature Measure	Acres of Forgage and Biomass Planting
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$5,807.33	$580.73
Equipment/Installation	$346.00	$34.60
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	$6,153.33	$615.33

Cost Details:									
Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	267	Phosphorus, Organic	ORGANIC Phosphorus	Pound	$3.02	500	$1,510.00		50 pounds per acre
Materials	266	Nitrogen, Organic	ORGANIC Nitrogen	Pound	$2.52	400	$1,008.00		40 pounds per acre
Materials	268	Potassium, Organic	ORGANIC Potassium	Pound	$1.33	500	$665.00		50 pounds per acre
Materials	299	Test, Soil Test, Standard	Includes materials, labor, and equipment costs.	Each	$9.53	1	$9.53		
Materials	100	Certified Organic, Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	$5.02	60	$301.20		6 pounds per acre
Materials	114	Certified Organic, Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	$4.38	100	$438.00		10 pounds per acre
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	$93.78	20	$1,875.60	sandy and naturally acidic soils combined with high rainfall typical of the northeast means that lime is generally needed.	2 tons per acre
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	$9.63	10	$96.30		
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	10	$58.90		
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$19.08	10	$190.80		

Scenario Worksheet

Practice and Scenario Description:	
Information Type	**Data**
Region	Mid Atlantic
State	New Jersey
Discipline Group	Range/Pasture Grazing
Practice Code/Name	512 - Forage and Biomass Planting
Scenario ID	8
Scenario Name	Organic - Native Perennial Grasses
Scenario Description	This practice applies to organically managed pasture and hayland. Establish or reseed adapted perennial native grasses to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of native grasses for pasture, hayland, and wildlife openings. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding ,and spreading. Producer follows all National Organic Program (NOP) rules and regulations. Associated Practices: Fence (382), Forage Harvest Management (511), and Watering Facility (614).
Before Practice Situation	Poorly managed/degraded pasture land or cropland being converted to pasture and/or hay.
After Practice Situation	NOP approved species, materials, and methods are utilized to establish pasture or hayland, to improve forage quality and quantity and reduce soil erosion on cropland ,hayland, pasture, and/or biomass production.
Scenario Feature Measure	Acres of Forgage and Biomass Planting
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$4,829.73	$482.97
Equipment/Installation	$249.70	$24.97
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	$5,079.43	$507.94

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost	Component Justification	Quantity Justification
Materials	267	Phosphorus, Organic	ORGANIC Phosphorus	Pound	$3.02	500	$1,510.00		50 pounds per acre
Materials	268	Potassium, Organic	ORGANIC Potassium	Pound	$1.33	500	$665.00		50 pounds per acre
Materials	299	Test, Soil Test, Standard	Includes materials, labor, and equipment costs.	Each	$9.53	1	$9.53		
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	$93.78	20	$1,875.60	sandy and naturally acidic soils combined with higjh rainfall typical of the northeast means that lime is generally needed.	2 tons per acre
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	$9.62	80	$769.60		8 pounds per acre PLS (MD job sheet)
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	10	$58.90		
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	$19.08	10	$190.80		