Practice: 512 - Forage and Biomass Planting

Scenario # 1 **Native Perennial Grasses (1 species)**

Scenario Description: **Actual Scenario # 1** **New York**

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 Typical Size: 30 | Acre | Tot Unit Cost | $402.65

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Phosphorus, P2O5	1500	Pound	$0.39	$585.00
Materials	Potassium, K2O	1500	Pound	$0.28	$420.00
Materials	Lime, ENM	60	Ton	$119.94	$7,196.40
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Herbicide, Glyphosate	30	Acre	$15.83	$474.90
Materials	One Species, Warm Season, Native	30	Acre	$65.98	$1,979.40
Equip./Install.	Tillage, Light	30	Acre	$11.57	$347.10
Equip./Install.	Chemical, ground application	30	Acre	$6.37	$191.10
Equip./Install.	Fertilizer, ground application, dry	30	Acre	$7.04	$211.20
Equip./Install.	Seeding Operation, No Till/Grass Drill	30	Acre	$22.17	$665.10
				Total Cost:	$12,079.56

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$301.99	EQIP-HU	$362.39
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 2 **Introduced Cool Season Grass Mix**

Scenario Description: **Actual Scenario # 2** **New York**

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 Typical Size:	30	Acre	Tot Unit Cost	$414.45

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Nitrogen (N), Ammonium Nitrate	1200	Pound	$0.79	$948.00
Materials	Phosphorus, P2O5	1500	Pound	$0.39	$585.00
Materials	Potassium, K2O	1500	Pound	$0.28	$420.00
Materials	Lime, ENM	60	Ton	$119.94	$7,196.40
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Herbicide, Glyphosate	30	Acre	$15.83	$474.90
Materials	Four Species Mix, Cool Season,	30	Acre	$46.18	$1,385.40
Equip./Install.	Tillage, Light	30	Acre	$11.57	$347.10
Equip./Install.	Chemical, ground application	30	Acre	$6.37	$191.10
Equip./Install.	Fertilizer, ground application, dry	30	Acre	$7.04	$211.20
Equip./Install.	Seeding Operation, No Till/Grass Drill	30	Acre	$22.17	$665.10
				Total Cost:	$12,433.56

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$310.84	EQIP-HU	$373.01
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 3 **Native Perennial Warm Season Grasses Mix**

Scenario Description: **Actual Scenario # 3** **New York**

Establish or reseed a mix of species of adapted native, perennial warm season 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 perennial native warm season grasses for pasture, hayland, and wildlife openings. 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 or no grasses present. Resource concerns may include undesireable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

After Practice Situation:

Suitable NWSG 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 Typical Size: 30 | Acre | Tot Unit Cost | $542.23

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Phosphorus, P2O5	1500	Pound	$0.39	$585.00
Materials	Potassium, K2O	1500	Pound	$0.28	$420.00
Materials	Lime, ENM	60	Ton	$119.94	$7,196.40
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Herbicide, Glyphosate	30	Acre	$15.83	$474.90
Materials	Three plus Species Mix, Warm	30	Acre	$205.56	$6,166.80
Equip./Install.	Tillage, Light	30	Acre	$11.57	$347.10
Equip./Install.	Chemical, ground application	30	Acre	$6.37	$191.10
Equip./Install.	Fertilizer, ground application, dry	30	Acre	$7.04	$211.20
Equip./Install.	Seeding Operation, No Till/Grass Drill	30	Acre	$22.17	$665.10
				Total Cost:	$16,266.96

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$406.67	EQIP-HU	$488.01
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 4 Sprigging

Scenario Description: **Actual Scenario # 4** **New York**

Sprigging new grasses with sprigging application for the purpose of providing forage, increasing plant diversity, soil quality and fertility, and plant health. This practice may be utilized for organic or regular production. This scenario assumes fertilizer, sprigs, equipment and labor for seed bed prep, tillage, sprigging ,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 Typical Size:	30	Acre	Tot Unit Cost	$510.19

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Nitrogen (N), Ammonium Nitrate	1200	Pound	$0.79	$948.00
Materials	Phosphorus, P2O5	1500	Pound	$0.39	$585.00
Materials	Potassium, K2O	1500	Pound	$0.28	$420.00
Materials	Lime, ENM	60	Ton	$119.94	$7,196.40
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Herbicide, Glyphosate	30	Acre	$15.83	$474.90
Materials	One Species, Warm Season,	30	Acre	$59.62	$1,788.60
Equip./Install.	Tillage, Light	30	Acre	$11.57	$347.10
Equip./Install.	Chemical, ground application	30	Acre	$6.37	$191.10
Equip./Install.	Fertilizer, ground application, dry	30	Acre	$7.04	$211.20
Equip./Install.	Ground sprigging	30	Acre	$104.47	$3,134.10
				Total Cost:	$15,305.76

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$382.64	EQIP-HU	$459.17
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 5 **Organic Introduced Perennial Cool Season Grasses with legume**

Scenario Description: **Actual Scenario # 5** **New York**

This practice applies to organically managed pasture or hayland. Establish or reseed three species of adapted perennial introduced cool season grasses and legume 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 Typical Size:	10	Acre	Tot Unit Cost	$384.17

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Lime, ENM	20	Ton	$119.94	$2,398.80
Materials	Nitrogen, Organic	400	Pound	$0.27	$108.00
Materials	Phosphorus, Organic	500	Pound	$0.27	$135.00
Materials	Potassium, Organic	500	Pound	$0.27	$135.00
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Certified Organic, Three Species Mix,	10	Acre	$64.77	$647.70
Equip./Install.	Tillage, Light	10	Acre	$11.57	$115.70
Equip./Install.	Fertilizer, ground application, dry	10	Acre	$7.04	$70.40
Equip./Install.	Seeding Operation, No Till/Grass Drill	10	Acre	$22.17	$221.70
				Total Cost:	$3,841.66

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$288.12	EQIP-HU	$345.75
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 6 Untreated Conventional Seed, WSG, 1 species

Scenario Description: **Actual Scenario # 6** **New York**

This practice applies to organically managed pasture and hayland. Establish or reseed adapted perennial native grasses (1 species) 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 Typical Size:	10	Acre	Tot Unit Cost	$363.01

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Lime, ENM	20	Ton	$119.94	$2,398.80
Materials	Phosphorus, Organic	500	Pound	$0.27	$135.00
Materials	Potassium, Organic	500	Pound	$0.27	$135.00
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Untreated Conventional Seed, One	10	Acre	$65.98	$659.80
Equip./Install.	Fertilizer, ground application, dry	10	Acre	$7.04	$70.40
Equip./Install.	Seeding Operation, No Till/Grass Drill	10	Acre	$22.17	$221.70
				Total Cost:	$3,630.06

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$272.25	EQIP-HU	$326.71
WHIP	$0.00	WHIP-HU	$0.00

Practice: 512 - Forage and Biomass Planting

Scenario # 7 Untreated Conventional Seed, WSG Mix

Scenario Description: **Actual Scenario # 7** **New York**

This practice applies to organically managed pasture and hayland. Establish or reseed adapted perennial native grasses (3 species) 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 Typical Size: 10 Acre | Tot Unit Cost $560.19

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Lime, ENM	20	Ton	$119.94	$2,398.80
Materials	Phosphorus, Organic	500	Pound	$0.27	$135.00
Materials	Potassium, Organic	500	Pound	$0.27	$135.00
Materials	Test, Soil Test, Standard	1	Each	$9.36	$9.36
Materials	Untreated Conventional Seed, Three	10	Acre	$263.16	$2,631.60
Equip./Install.	Fertilizer, ground application, dry	10	Acre	$7.04	$70.40
Equip./Install.	Seeding Operation, No Till/Grass Drill	10	Acre	$22.17	$221.70
				Total Cost:	$5,601.86

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	$420.14	EQIP-HU	$504.17
WHIP	$0.00	WHIP-HU	$0.00