

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	1
Scenario Name	Cool Season
Scenario Description	Establish cool season grass or grass/legume mix on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Involves site preparation with typical implements, and includes grass/legume seed, and fertilizer and lime application. Mulch is not included - use CPS 484 (Mulching) for mulch.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is amended with lime and fertilizer and seeded to a grass and legume cover. Erosion is minimized and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$377.93	\$377.93
Equipment/Installation	\$41.17	\$41.17
Labor	\$51.42	\$51.42
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$470.52	\$470.52

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	\$9.45	2	\$18.90
Materials	105	Alsike Clover (Trifolium hybridum)	Introduced Legumes and shipping.	Pound	\$3.06	2	\$6.12
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.69	50	\$34.50
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	85	Fescue, Creeping Red (Festuca rubra)	Introduced Perennial Grasses and shipping.	Pound	\$1.99	15	\$29.85
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
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
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.36	1	\$8.36
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	1	\$9.62
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.67	1	\$7.67
Labor	231	General Labor	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	\$25.71	2	\$51.42

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	2
Scenario Name	Cool Season, Extra Site Preparation
Scenario Description	Establish cool season grass or grass/legume mix on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Typically includes grading/shaping/fill, seedbed preparation, grass/legume seed, and fertilizer and lime application. Mulch is not included - use CPS 484 (Mulching) for mulch.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is graded/shaped/filled, amended with lime and fertilizer and seeded to a grass and legume cover. Erosion is minimized and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$377.93	\$377.93
Equipment/Installation	\$319.07	\$319.07
Labor	\$221.92	\$221.92
Mobilization	\$308.11	\$308.11
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,227.03	\$1,227.03

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	\$9.45	2	\$18.90
Materials	105	Alsike Clover (Trifolium hybridum)	Introduced Legumes and shipping.	Pound	\$3.06	2	\$6.12
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.69	50	\$34.50
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	85	Fescue, Creeping Red (Festuca rubra)	Introduced Perennial Grasses and shipping.	Pound	\$1.99	15	\$29.85
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
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
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.36	1	\$8.36
Equipment/Installation	929	Dozer, 80 HP	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$55.58	5	\$277.90
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	1	\$9.62
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.67	1	\$7.67
Labor	233	Equipment Operators, Heavy	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$34.10	5	\$170.50
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	1	\$274.33

Mobilization	1144	Mobilization, Heavy Equipment Operator	Mobilization of heavy equipment operators: Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$33.78	1	\$33.78
Labor	231	General Labor	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	\$25.71	2	\$51.42

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	3
Scenario Name	Dense Vegetation
Scenario Description	Establish vegetation using a higher than average seeding rate. Typically used to seed Vegetated Treatment Areas (635) or other other critical areas where a higher seed rate is needed. Involves site preparation with typical implements, and includes seed, and fertilizer and lime application. Mulch is not included - use CPS 484 (Mulching) for mulch.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is amended with lime and fertilizer and seeded to permanent vegetative cover. Erosion is minimized and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$431.97	\$431.97
Equipment/Installation	\$41.17	\$41.17
Labor	\$51.42	\$51.42
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$524.56	\$524.56

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	95	Smooth Bromegrass (Bromus inermis)	Introduced Perennial Grasses and shipping.	Pound	\$3.15	4	\$12.60
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	\$9.45	1	\$9.45
Materials	105	Alsike Clover (Trifolium hybridum)	Introduced Legumes and shipping.	Pound	\$3.06	2	\$6.12
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.69	50	\$34.50
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	91	Kentucky Bluegrass (Poa pratensis)	Introduced Perennial Grasses and shipping.	Pound	\$3.02	4	\$12.08
Materials	85	Fescue, Creeping Red (Festuca rubra)	Introduced Perennial Grasses and shipping.	Pound	\$1.99	20	\$39.80
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	\$9.62	3	\$28.86
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
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
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.36	1	\$8.36
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	1	\$9.62
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.67	1	\$7.67
Labor	231	General Labor	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	\$25.71	2	\$51.42

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	6
Scenario Name	Hydroseeding
Scenario Description	Hydroseeding on a highly disturbed site that is relatively steep with concentrated flow resulting rills and channel erosion. Involves minimal site preparation. Site is susceptible to high rates of soil erosion and it is difficult to establish vegetation through conventional means.
Before Practice Situation	Steep side slopes such as those on road banks and travel ways in forestland are eroding or have the potential to erode and cause severe road stability problems and environmental degradation. Sufficient seedbed is present such that grading is not necessary.
After Practice Situation	Seed, fertilizer, and wood-fiber mulch materials are mixed into a slurry. Slurry is applied to steep slopes. Permanent vegetation is established, erosion is minimized, and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$377.93	\$377.93
Equipment/Installation	\$2,742.68	\$2,742.68
Labor	\$0.00	\$0.00
Mobilization	\$321.67	\$321.67
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,442.28	\$3,442.28

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	\$9.45	2	\$18.90
Materials	105	Alsike Clover (Trifolium hybridum)	Introduced Legumes and shipping.	Pound	\$3.06	2	\$6.12
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.69	50	\$34.50
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	85	Fescue, Creeping Red (Festuca rubra)	Introduced Perennial Grasses and shipping.	Pound	\$1.99	15	\$29.85
Equipment/Installation	1291	Seeding Operation, hydroseeder	Hydroseeding with typical 1500 to 3600 gallon seeder. Includes all costs for equipment, power unit, and labor.	Acre	\$2,742.68	1	\$2,742.68
Mobilization	1143	Mobilization, Light Equipment Operator	Mobilization of light equipment operators: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.67	2	\$47.34
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	1	\$274.33

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	7
Scenario Name	Hydroseeding, Extra Site Preparation
Scenario Description	Hydroseeding on a highly disturbed site that is relatively steep with concentrated flow resulting rills and channel erosion. Shaping/grading/fill is required to prepare seedbed for hydroseed slurry. Site is susceptible to high rates of soil erosion and it is difficult to establish vegetation through conventional means.
Before Practice Situation	Steep side slopes such as those on road banks and travel ways in forestland are eroding or have the potential to erode and cause severe road stability problems and environmental degradation.
After Practice Situation	Seed, fertilizer, and wood-fiber mulch materials are mixed into a slurry. Seedbed is shaped/graded. Slurry is applied to steep slopes. Permanent vegetation is established, erosion is minimized, and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$377.93	\$377.93
Equipment/Installation	\$3,076.16	\$3,076.16
Labor	\$204.60	\$204.60
Mobilization	\$355.45	\$355.45
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,014.14	\$4,014.14

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	96	Redtop (Agrostis gigantea)	Introduced Perennial Grasses and shipping.	Pound	\$9.45	2	\$18.90
Materials	105	Alsike Clover (Trifolium hybridum)	Introduced Legumes and shipping.	Pound	\$3.06	2	\$6.12
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.69	50	\$34.50
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	85	Fescue, Creeping Red (Festuca rubra)	Introduced Perennial Grasses and shipping.	Pound	\$1.99	15	\$29.85
Equipment/Installation	929	Dozer, 80 HP	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$55.58	6	\$333.48
Equipment/Installation	1291	Seeding Operation, hydroseeder	Hydroseeding with typical 1500 to 3600 gallon seeder. Includes all costs for equipment, power unit, and labor.	Acre	\$2,742.68	1	\$2,742.68
Labor	233	Equipment Operators, Heavy	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$34.10	6	\$204.60
Mobilization	1143	Mobilization, Light Equipment Operator	Mobilization of light equipment operators: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.67	2	\$47.34
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	1	\$274.33
Mobilization	1144	Mobilization, Heavy Equipment Operator	Mobilization of heavy equipment operators: Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$33.78	1	\$33.78

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	4
Scenario Name	Warm Season
Scenario Description	Establish native warm season grasses/legumes or a warm/cool season mix on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Involves site preparation with typical implements, and includes grass/legume seed, and fertilizer and lime application. Mulch is not included - use CPS 484 (Mulching) for mulch.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is amended with lime and fertilizer and seeded to a warm season grass. Erosion is minimized and soil is stabilized.
Scenario Feature Measure	Area Seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$492.83	\$492.83
Equipment/Installation	\$32.81	\$32.81
Labor	\$51.42	\$51.42
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$577.06	\$577.06

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	4	\$47.24
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	4	\$61.72
Materials	82	Switchgrass, Blackwell (Panicum virgatum)	Native Grasses and shipping.	Pound	\$9.62	5	\$48.10
Materials	83	Wild Rye, Canada (Elymus canadensis)	Native Grasses and shipping.	Pound	\$9.32	1	\$9.32
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	3	\$37.89
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
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
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	1	\$9.62
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. Labor included.	Acre	\$7.67	1	\$7.67
Labor	231	General Labor	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	\$25.71	2	\$51.42

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	5
Scenario Name	Warm Season, Extra Site Preparation
Scenario Description	Establishment of warm season grass or warm/cool season mix on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Typically includes grading/shaping/fill, seedbed preparation, grass/legume seed, and fertilizer and lime application. Mulch is not included - use CPS 484 (Mulching) for mulch.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is shaped, amended with lime and fertilizer and seeded to a warm season grass. Erosion is minimized and soil is stabilized.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$492.83	\$492.83
Equipment/Installation	\$310.71	\$310.71
Labor	\$221.92	\$221.92
Mobilization	\$308.11	\$308.11
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,333.57	\$1,333.57

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
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
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
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	2	\$187.56
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
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
Equipment/Installation	929	Dozer, 80 HP	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$55.58	5	\$277.90
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Equipment and labor cost included.	Acre	\$9.62	1	\$9.62
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.67	1	\$7.67
Labor	231	General Labor	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	\$25.71	2	\$51.42
Labor	233	Equipment Operators, Heavy	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$34.10	5	\$170.50
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	1	\$274.33
Mobilization	1144	Mobilization, Heavy Equipment Operator	Mobilization of heavy equipment operators: Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$33.78	1	\$33.78
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	4	\$47.24
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	4	\$61.72

Materials	82	Switchgrass, Blackwell (<i>Panicum virgatum</i>)	Native Grasses and shipping.	Pound	\$9.62	5	\$48.10
Materials	83	Wild Rye, Canada (<i>Elymus canadensis</i>)	Native Grasses and shipping.	Pound	\$9.32	1	\$9.32
Materials	78	Indian Grass, Tomahawk (<i>Sorghastrum nutans</i>)	Native Grasses and shipping.	Pound	\$12.63	3	\$37.89

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	9
Scenario Name	Wetland Planting 1 ft by 1 ft
Scenario Description	Establishment of wetland plants in both coastal and palustrine wetlands. The wetland has been restored, enhanced or created and establishment of vegetation using normal seeding methods is difficult because of the inflow of tidal waters or continuous flooding. Wetland vegetative plugs are used to establish the plants. Plants used for coastal wetland include <i>Spartina alterniflora</i> , <i>Spartina patens</i> , and <i>Distichlis</i> . Plants such as sedges, rushes, cattails, pickle weed, sparganium are used for freshwater wetlands. The plant selected for this scenario are a place holder. State Biologists will provide the field with a list of acceptable plants for their state. Plugs will be installed on 1 ft centers (21780plants/acre). If additional erosion control is needed use 484 Mulching.
Before Practice Situation	The surface of a coastal or palustrine wetland is void of vegetation. There is erosion and a lack of suitable vegetation to provide food and cover for native wildlife. Water quality may be impacted by the lack of vegetation.
After Practice Situation	The coastal or palustrine wetland has established native vegetation. Erosion is controlled and there is adequate cover and food for native wildlife. Water quality has improved. The established plants are uptaking excess nutrients.
Scenario Feature Measure	
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$35,247.30	\$35,247.30
Equipment/Installation	\$0.00	\$0.00
Labor	\$3,856.50	\$3,856.50
Mobilization	\$786.30	\$786.30
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$39,890.10	\$39,890.10

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1843	Native Aquatic Plants, Emergent - Sedges (<i>Carex</i> spp.), Plug	Native aquatic sedge plugs. Plants are emergent. All required materials for establishing vegetation. Includes materials and shipping.	Each	\$1.20	3630	\$4,356.00
Materials	1850	Native Aquatic Plants, Emergent - Sweetflag (<i>Acorus americana</i>)	Sweetflag. Native aquatic, plugs. Plants are emergent. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.74	3630	\$6,316.20
Materials	1859	Native Aquatic Plants, Submerged - Burreed (<i>Sparganium americanum</i>)	Burreed. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.76	3630	\$6,388.80
Materials	1858	Native Aquatic Plants, Submerged - Soft-stem Bulrush (<i>Scheuchzeria palustris</i>)	Soft-stem Bulrush. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.65	3630	\$5,989.50
Materials	1855	Native Aquatic Plants, Submerged - Hard-stem Bulrush (<i>Scheuchzeria palustris acutus</i>)	Hard-stem Bulrush. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.56	3630	\$5,662.80
Materials	1854	Native Aquatic Plants, Submerged - Northern Arrowhead / Duck Potato (<i>Sagittaria latifolia</i>)	Northern Arrowhead. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.80	3630	\$6,534.00
Labor	231	General Labor	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	\$25.71	150	\$3,856.50
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$26.21	30	\$786.30

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	8
Scenario Name	Wetland Plugging- Wetland Plant Establishment
Scenario Description	Establishment of wetland plants in both coastal and palustrine wetlands. The wetland has been restored, enhanced or created and establishment of vegetation using normal seeding methods is difficult because of the inflow of tidal waters or continuous flooding. Wetland vegetative plugs are used to establish the plants. Plants used for coastal wetland include <i>Spartina alterniflora</i> , <i>Spartina patens</i> , and <i>Distichlis</i> . Plants such as sedges, rushes, cattails, pickle weed, sparganium are used for freshwater wetlands. The plant selected for this scenario are a place holder. State Biologists will provide the field with a list of acceptable plants for their state. Plugs will be installed on 2 ft centers. If additional erosion control is needed use 484 Mulching.
Before Practice Situation	The surface of a coastal or palustrine wetland is void of vegetation. There is erosion and a lack of suitable vegetation to provide food and cover for native wildlife. Water quality may be impacted by the lack of vegetation.
After Practice Situation	The coastal or palustrine wetland has established native vegetation. Erosion is controlled and there is adequate cover and food for native wildlife. Water quality has improved. The established plants are uptaking excess nutrients.
Scenario Feature Measure	
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$17,623.65	\$17,623.65
Equipment/Installation	\$0.00	\$0.00
Labor	\$3,342.30	\$3,342.30
Mobilization	\$786.30	\$786.30
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$21,752.25	\$21,752.25

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1843	Native Aquatic Plants, Emergent - Sedges (<i>Carex</i> spp.), Plug	Native aquatic sedge plugs. Plants are emergent. All required materials for establishing vegetation. Includes materials and shipping.	Each	\$1.20	1815	\$2,178.00
Materials	1850	Native Aquatic Plants, Emergent - Sweetflag (<i>Acorus americana</i>)	Sweetflag. Native aquatic, plugs. Plants are emergent. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.74	1815	\$3,158.10
Materials	1859	Native Aquatic Plants, Submerged - Burreed (<i>Sparganium americanum</i>)	Burreed. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.76	1815	\$3,194.40
Materials	1858	Native Aquatic Plants, Submerged - Soft-stem Bulrush (<i>Scheuchzeria palustris</i>)	Soft-stem Bulrush. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.65	1815	\$2,994.75
Materials	1855	Native Aquatic Plants, Submerged - Hard-stem Bulrush (<i>Scheuchzeria palustris acutus</i>)	Hard-stem Bulrush. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.56	1815	\$2,831.40
Materials	1854	Native Aquatic Plants, Submerged - Northern Arrowhead / Duck Potato (<i>Sagittaria latifolia</i>)	Northern Arrowhead. Native aquatic, plugs. Plants are submerged. All required materials for establishing vegetation. Includes material and shipping.	Each	\$1.80	1815	\$3,267.00
Labor	231	General Labor	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	\$25.71	130	\$3,342.30
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$26.21	30	\$786.30