Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	10
Scenario Name	Establish Annual Vegetation - Broadcast w/ Fertilization
Scenario Description	This scenario is for the establishment of annual (non-persistent) vegetation on all land uses where the targeted species has been identified as Rare and Declining. This scenario is utilized when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where habitats are utilized by species indentified as rare & declining. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality and develop wildlife habitat as part of a habitat management system. Often times this scenario is utilized to temporarily provide cover or forage while permanent vegetation is being established. Vegetation will be established utilizing convenational methods including disking, herbicide applicaiton and broadcast seeding. Fertilization will be required and will be completed in response to a soil test.
Before Practice Situation	A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need to establish annual (non-persistent) vegetation to bring one or more habitat limiting factors of inadequate habitat for fish and wildlife, up to planning criteria. An evaluation of the site has indicated resource concerns are present, or may become present during the implementation of the habitat management system planned. Resource concerns identified may include soil erosion with visible rills present resultging in sediment 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 current system provides little to no wildlife habitat with habitat limiting factors such as quality, quantity and continuity of forage, cover, shelter and space being identified.
After Practice Situation	Planning unit is adequatly covered with annual (non-persistent) vegetation. As a result of installation soil erosion, water/sediment runoff, and/or dust emissions have been eliminated. Plants sown provide cover and forage for target species. Forage may include the vegetation itself or promote an abundance of beneficial insects. This scenario does not apply to plantings for forage production or critical area plantings and vegetation established under this scenario will remain unharvested.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	25

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$4,083.50	$163.34
Equipment/Installation	$1,345.74	$53.83
Labor	$327.20	$13.09
Mobilization	$142.56	$5.70
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$5,899.00	$235.96

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
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	$0.78	1250	$975.00
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	$0.78	1250	$975.00
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.52	1000	$520.00
Materials	109	Ladino Clover (Trifolium repens)	Introduced Legumes and shipping.	Pound	$3.74	125	$467.50
Materials	200	Wheat, Winter (Triticum aestivum)	Small Grains, Cover Crops. Shipping not included.	Pound	$0.58	1500	$870.00
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	25	$276.00
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	$15.28	25	$382.00
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$4.48	25	$112.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$7.21	25	$180.25
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Includes equipment, power unit and labor costs.	Acre	$20.69	25	$517.25
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	$19.28	8	$154.24

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	$18.77	8	$150.16
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.13	8	$177.04
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	$142.56	1	$142.56

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	11
Scenario Name	Establish Annual Vegetation - Broadcast; No Fertilization
Scenario Description	This scenario is for the establishment of annual (non-persistent) vegetation on all land uses where the targeted species has been identified as Rare and Declining. This scenario is utilized when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where habitats are utilized by species indentified as rare & declining. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality and develop wildlife habitat as part of a habitat management system. Often times this scenario is utilized to temporarily provide cover or forage while permanent vegetation is being established. Vegetation will be established utilizing convenational methods including disking, herbicide applicaiton and broadcast seeding. Fertilization will NOT be required.
Before Practice Situation	A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need to establish annual (non-persistent) vegetation to bring one or more habitat limiting factors of inadequate habitat for fish and wildlife, up to planning criteria. An evaluation of the site has indicated resource concerns are present, or may become present during the implementation of the habitat management system planned. Resource concerns identified may include soil erosion with visible rills present resultging in sediment 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 current system provides little to no wildlife habitat with habitat limiting factors such as quality, quantity and continuity of forage, cover, shelter and space being identified.
After Practice Situation	Planning unit is adequatly covered with annual (non-persistent) vegetation. As a result of installation soil erosion, water/sediment runoff, and/or dust emissions have been eliminated. Plants sown provide cover and forage for target species. Forage may include the vegetation itself or promote an abundance of beneficial insects. This scenario does not apply to plantings for forage production or critical area plantings and vegetation established under this scenario will remain unharvested. Fetilization will NOT be required.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	25

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$1,613.50	$64.54
Equipment/Installation	$1,165.49	$46.62
Labor	$327.20	$13.09
Mobilization	$142.56	$5.70
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$3,248.75	$129.95

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
Materials	109	Ladino Clover (Trifolium repens)	Introduced Legumes and shipping.	Pound	$3.74	125	$467.50
Materials	200	Wheat, Winter (Triticum aestivum)	Small Grains, Cover Crops. Shipping not included.	Pound	$0.58	1500	$870.00
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	25	$276.00
Equipment/Installation	946	Tillage, Primary	Includes heavy disking (offset) or chisel plow. Includes equipment, power unit and labor costs.	Acre	$15.28	25	$382.00
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$4.48	25	$112.00
Equipment/Installation	959	Seeding Operation, Broadcast, Ground	Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Includes equipment, power unit and labor costs.	Acre	$20.69	25	$517.25
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	$19.28	8	$154.24
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	$18.77	8	$150.16
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.13	8	$177.04
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	$142.56	1	$142.56

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	12
Scenario Name	Establish Annual Vegetation - Drill w/ Fertilization
Scenario Description	This scenario is for the establishment of annual (non-persistent) vegetation on all land uses where the targeted species has been identified as Rare and Declining. This scenario is utilized when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where habitats are utilized by species indentified as rare & declining. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality and develop wildlife habitat as part of a habitat management system. Often times this scenario is utilized to temporarily provide cover or forage while permanent vegetation is being established. Establishment of vegetation will require methods including light disking, herbicide applicaiton and use of seed drill for planting. Fertilization will be required and will be completed in response to a soil test.
Before Practice Situation	A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need to establish annual (non-persistent) vegetation to bring one or more habitat limiting factors of inadequate habitat for fish and wildlife, up to planning criteria. An evaluation of the site has indicated resource concerns are present, or may become present during the implementation of the habitat management system planned. Resource concerns identified may include soil erosion with visible rills present resultging in sediment 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 current system provides little to no wildlife habitat with habitat limiting factors such as quality, quantity and continuity of forage, cover, shelter and space being identified.
After Practice Situation	Planning unit is adequatly covered with annual (non-persistent) vegetation. As a result of installation soil erosion, water/sediment runoff, and/or dust emissions have been eliminated. Plants sown provide cover and forage for target species. Forage may include the vegetation itself or promote an abundance of beneficial insects. This scenario does not apply to plantings for forage production or critical area plantings and vegetation established under this scenario will remain unharvested.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	25

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$4,083.50	$163.34
Equipment/Installation	$813.74	$32.55
Labor	$327.20	$13.09
Mobilization	$142.56	$5.70
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$5,367.00	$214.68

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
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	$0.78	1250	$975.00
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	$0.78	1250	$975.00
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	$0.52	1000	$520.00
Materials	109	Ladino Clover (Trifolium repens)	Introduced Legumes and shipping.	Pound	$3.74	125	$467.50
Materials	200	Wheat, Winter (Triticum aestivum)	Small Grains, Cover Crops. Shipping not included.	Pound	$0.58	1500	$870.00
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	25	$276.00
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$4.48	25	$112.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$7.21	25	$180.25
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	$14.69	25	$367.25
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	$19.28	8	$154.24
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	$18.77	8	$150.16

Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.13	8	$177.04
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	$142.56	1	$142.56

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	13
Scenario Name	Establish Annual Vegetation - Drill; No Fertilization
Scenario Description	This scenario is for the establishment of annual (non-persistent) vegetation on all land uses where the targeted species has been identified as Rare and Declining. This scenario is utilized when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. The typical size range for this scenario is 5 to 50 acres. This scenario would be applied on any land use where habitats are utilized by species indentified as rare & declining. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality and develop wildlife habitat as part of a habitat management system. Often times this scenario is utilized to temporarily provide cover or forage while permanent vegetation is being established. Establishment of vegetation will require methods including light disking, herbicide applicaiton and use of seed drill for planting. Fertilization will NOT be required.
Before Practice Situation	A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need to establish annual (non-persistent) vegetation to bring one or more habitat limiting factors of inadequate habitat for fish and wildlife, up to planning criteria. An evaluation of the site has indicated resource concerns are present, or may become present during the implementation of the habitat management system planned. Resource concerns identified may include soil erosion with visible rills present resultging in sediment 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 current system provides little to no wildlife habitat with habitat limiting factors such as quality, quantity and continuity of forage, cover, shelter and space being identified.
After Practice Situation	Planning unit is adequatly covered with annual (non-persistent) vegetation. As a result of installation soil erosion, water/sediment runoff, and/or dust emissions have been eliminated. Plants sown provide cover and forage for target species. Forage may include the vegetation itself or promote an abundance of beneficial insects. This scenario does not apply to plantings for forage production or critical area plantings and vegetation established under this scenario will remain unharvested. Fetilization will NOT be required.
Scenario Feature Measure	Area planted
Scenario Unit	Acre
Scenario Typical Size	25

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$1,613.50	$64.54
Equipment/Installation	$633.49	$25.34
Labor	$327.20	$13.09
Mobilization	$142.56	$5.70
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$2,716.75	$108.67

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
Materials	109	Ladino Clover (Trifolium repens)	Introduced Legumes and shipping.	Pound	$3.74	125	$467.50
Materials	200	Wheat, Winter (Triticum aestivum)	Small Grains, Cover Crops. Shipping not included.	Pound	$0.58	1500	$870.00
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	25	$276.00
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	$4.48	25	$112.00
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	$14.69	25	$367.25
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	$19.28	8	$154.24
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	$18.77	8	$150.16
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.13	8	$177.04
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	$142.56	1	$142.56

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	16
Scenario Name	Golden winged warbler initiative practice
Scenario Description	Management for non-games species, e.g., Golden Winged Warblers; clear-cuts around habitat islands and mechanical thinning of the stand of remaining trees to < 350 trees/acre; This practice is typically used on established stands of hardwood trees that are ready for harvest. The land owner contracts for harvest of merchantable timber, but stipulates in the contract that 2.5-5% of the total stand acreage be left in 1/4-1/2 acre islands of trees left to provide wildlife habitat. The islands themselves will be thinned to < 350 stems per acre. In addition, 10-15 trees of 10"dbh/acre will be left distributed randomly across the acreage outside of the island habitat. These actions will leave open areas of early successional habitat around the islands and habitat favorable for Golden Winged Warblers throughout the cut. The remaining trees within the islands will experience improved condition and vigor accelerating growth. Typical stand acreage: 25-100 total acres with 10% assumed to be in the newly created habitat islands; Since the land owner is compensated for the harvested timber, they will only be paid for the increased costs to harvest with islands and individual trees left and for the associated foregone income (net forgone income ='s the net present value between what they could receiv
Before Practice Situation	Mature hardwood stands ready for harvest are poor with respect to habitat for the Golden Winged Warbler;
After Practice Situation	The resulting open, early successional habitat creates excellent conditions for target species;
Scenario Feature Measure	Acres of habitat created
Scenario Unit	Acre
Scenario Typical Size	40

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment/Installation	$66.24	$1.66
Labor	$433.59	$10.84
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$499.83	$12.50

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	$5.52	12	$66.24
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.13	10	$221.30
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	$24.76	4	$99.04
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	$37.75	3	$113.25

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	Virginia
Discipline Group	Wildlife Wetland
Practice Code/Name	643 - Restoration and Management of Rare and Declining Habitats
Scenario ID	4
Scenario Name	Monitoring, & Management, Low Intensity and Complexity - No Foregone Income
Scenario Description	Setting is any land use with the potential to provide habitat for species of plants and animals identified as Rare and Declining and the habitat potential is not currently being captured. The identified habitat limiting factors can be restored, enhanced or created, with the application of this practice alone, or in combination with other supporting and facilitating practices. Monitoring will be used to determine if the conservation system meets or exceeds the minimum quality criteria for the targeted wildlife. Management will be implemented based on the findings of the habitat assessment and monitoring. Habitat management and monitoring needed to treat the resource concerns requires no training, no qualitative data assessment, no water quality monitoring and is low in complexity and intensity. Examples of prescribed monitoring, include but are not limited to: photo points taken, use documentation by livestock, regeneration/breeding success, completing an annual management records log, documenting wildlife sightings, documenting location and species of invasive plants and condition of vegetative and structural treatments. No decision or treatment associated with this practice or facilitating practices will require income foregone. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan.
Before Practice Situation	Existing degraded plant conditions and resulting inadequate habitat for fish and wildlife have resulted in low use of the area by target species identified as Rare and Declining and associated species.
After Practice Situation	Based on the results of a State-approved upland wildlife habitat assessment process, the application of habitat management efforts and prescribed monitoring have been implemented. With the application of this practice alone, or in combination with other supporting and facilitating practices, the inadequate habitat conditions have been addressed. Monitoring has maximized the benefits of the needed habitat treatment efforts.
Scenario Feature Measure	Acres Managed and Monitored
Scenario Unit	Acre
Scenario Typical Size	100

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	$55.80	$0.56
Equipment/Installation	$1,240.28	$12.40
Labor	$75.08	$0.75
Mobilization	$137.69	$1.38
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Total	$1,508.85	$15.09

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price ($/unit)	Quantity	Cost
Materials	298	Miscellaneous, containers, traps, etc.	Pheromone Traps, Culture container with lid	Each	$2.89	4	$11.56
Materials	967	Rangeland/grassland field monitoring kit	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes equipment costs only.	Each	$44.24	1	$44.24
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	$26.73	4	$106.92
Equipment/Installation	940	Mower, Bush Hog	Equipment and power unit costs. Labor not included.	Hour	$43.50	16	$696.00
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	$19.28	16	$308.48
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	$29.22	4	$116.88
Equipment/Installation	966	Satellite imagery, aerial photography, infrared	Infrared imagery	Acre	$0.12	100	$12.00
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	$18.77	4	$75.08
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$18.47	1	$18.47
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	$21.92	1	$21.92
Mobilization	1138	Mobilization, small equipment	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	$97.30	1	$97.30