

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agronomy
Practice Code/Name	484 - Mulching
Scenario ID	2
Scenario Name	Aggregate
Scenario Description	Application of bark, wood chips, peat/sand mix or other state approved aggregate material where mulch is needed. Typically used to prevent erosion, improve vegetative cover, improve soil quality, or conserve soil moisture.
Before Practice Situation	Vegetative cover is poor/declining. The potential for soil erosion is high and mulch is needed to stabilize the soil.
After Practice Situation	Exposed soil is mulched with appropriate materials according to state specifications. Erosion and sedimentation is reduced, water and soil quality is protected.
Scenario Feature Measure	Area mulched
Scenario Unit	1000 Square Feet
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$170.52	\$170.52
Labor	\$12.86	\$12.86
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$183.38	\$183.38

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
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	0.5	\$9.64
Equipment/Installation	1098	Aggregate, Wood Chips	Includes materials, equipment and labor	Cubic yard	\$20.11	8	\$160.88
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	0.5	\$12.86

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Region	New England
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Practice Code/Name	484 - Mulching
Scenario ID	3
Scenario Name	Erosion Control Blanket
Scenario Description	Installation of erosion control blanket on critical areas with steep slopes, grassed waterways or diversions. Blanket is typically made of coconut coir, wood fiber, or straw and is typically covered on both sides with polypropylene netting. Used to help control erosion and establish vegetative cover.
Before Practice Situation	There are areas of concentrated flow and a grassed waterway is being installed. Soil erosion is a concern and there is little to no vegetation.
After Practice Situation	The erosion control blanket is placed on concentrated flow areas and secured with ground staples. Soil erosion is minimized and vegetative cover is established.
Scenario Feature Measure	Area Covered by Mulch
Scenario Unit	1000 Square Feet
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,622.06	\$162.21
Equipment/Installation	\$53.02	\$5.30
Labor	\$154.26	\$15.43
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,829.34	\$182.93

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1213	Erosion Control Blanket, biodegradable	Biodegradable erosion control blanket, typically a composite of natural fibers with reinforcing polymer netting. Materials only.	Square Yard	\$1.46	1111	\$1,622.06
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	2	\$53.02
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	6	\$154.26

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Region	New England
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Discipline Group	Agronomy
Practice Code/Name	484 - Mulching
Scenario ID	1
Scenario Name	Straw
Scenario Description	Application of straw mulch or other other state approved natural material to reduce erosion, moderate soil temperature, conserve soil moisture and/or facilitate the establishment of vegetative cover.
Before Practice Situation	Typical scenario ranges from a 0.1 to 1.0 acre disturbed site around a newly constructed structural practice to a 5-10 acre irrigated orchard/vineyard. Water quantity and soil moisture is a concern. The potential for soil erosion is high and mulch is needed to stabilize the soil, facilitate the establishment of vegetative cover or suppress weeds.
After Practice Situation	Straw mulch has been applied to areas needing mulch. Erosion and sedimentation is reduced, water and soil quality is protected, and vegetative cover is established. Soil moisture is conserved, energy use associated with irrigation is decreased, and weed growth is suppressed.
Scenario Feature Measure	Area Covered by Mulch
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$300.00	\$300.00
Equipment/Installation	\$13.26	\$13.26
Labor	\$257.10	\$257.10
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$570.36	\$570.36

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1237	Straw	Small grain straw (non organic and certified organic). Materials and shipping only.	Ton	\$120.00	2.5	\$300.00
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.51	0.5	\$13.26
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	10	\$257.10

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Region	New England
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Practice Code/Name	484 - Mulching
Scenario ID	4
Scenario Name	Synthetic Material
Scenario Description	Installation of geotextile, biodegradable plastic, polyethylene plastic, or other state approved synthetic mulch to conserve soil moisture, moderate soil temperature, suppress weed growth and provide erosion control. Payment based based on total acres mulched (not the actual area of the rows that are mulched). Assumes 4 ft wide material with 6 feet between rows providing 7260 ft of material per acre.
Before Practice Situation	Site conditions vary. Typically scenarios include new tree and shrub plantings, irrigated orchards or vineyards, or annual and perennial specialty crops. Water quantity and soil moisture is a concern.
After Practice Situation	Synthetic mulch is applied in rows with a mulch layer or by other mechanized means. Soil moisture is conserved, energy use associated with irrigation is decreased, and weed growth is suppressed.
Scenario Feature Measure	Acres Mulched
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$688.00	\$688.00
Equipment/Installation	\$0.00	\$0.00
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$688.00	\$688.00

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1304	Mulch, biodegradable plastic, 0.8 mil	0.8 mil starch-based biodegradable plastic mulch, with anchoring. Materials only.	Square Yard	\$0.64	1075	\$688.00

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Practice Code/Name	484 - Mulching
Scenario ID	5
Scenario Name	Tree and Shrub
Scenario Description	Weed barrier fabric or other suitable natural or synthetic mulch is installed with a new tree and shrub planting. Typically used to prevent weed competition during the installation of conservation practices. Rate is per tree/shrub.
Before Practice Situation	Site conditions vary. Typical scenario is an installation of 100 native trees and shrubs to enhance wildlife habitat. Sites are often remote and trees may not be planted in rows, requiring each tree to be mulched individually
After Practice Situation	Weed barrier squares are installed around individual trees and shrubs to control weed competition. Weeds are controlled and tree/shrub growth is minimally influenced by weed competition.
Scenario Feature Measure	Number of Trees Mulched
Scenario Unit	Each
Scenario Typical Size	100

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$122.00	\$1.22
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	\$122.00	\$1.22

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	42	Geotextile, woven	Woven Geotextile Fabric. Includes materials, equipment and labor	Square Yard	\$2.44	50	\$122.00