

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	North Carolina
Discipline Group	Range/Pasture Grazing
Practice Code/Name	338 - Prescribed Burning
Scenario ID	1
Scenario Name	Understory Burn
Scenario Description	Applying a prescribed burn according to designed burn plan and NRCS Prescribed Burning (338) standard and specifications. An Understory burn can consume debris or leaf litter under controlled conditions that otherwise could burn uncontrollably and devastatingly. Prior to burning unit may need to be treated to reduce slash height and quantities. Burn should be cool enough to not cause mortality to residual stand but also must reduce litter and debris. Burned firebreaks used to achieve total firebreak width are part of these burns. (Constructed firebreak cost is not included in cost of burn. Refer to Firebreak (394) standard and cost scenarios) Existing firebreaks are cleared of combustible debris or vegetation prior to ignition of fire using labor and hand tools. A bulldozer is brought on site and held in standby mode for suppression contingencies until the burn site is safe to leave unsupervised. Burn sites are monitored the next day for remaining hot spots and or spot over fire.
Before Practice Situation	Light slash accumulation in a open forest stand. Leaf litter and debris throughout stand. Small seedlings of various quantities may be present. Existing firebreaks are in various states of O&M and must be 'refreshed' prior to the prescribed burn. Hand raking to protect 'snags' and tie firebreaks into riparian areas and other sensitive areas is done where required.
After Practice Situation	Litter, debris and slash are consumed, small seedlings may be killed during active burning. Residual larger trees have little to no scorching. Post treatment fire danger is significantly reduced.
Scenario Feature Measure	Acres planned
Scenario Unit	Acres
Scenario Typical Size	40

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$39.90	\$1.00
Equipment/Installation	\$535.71	\$13.39
Labor	\$1,159.24	\$28.98
Mobilization	\$176.50	\$4.41
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,911.35	\$47.78

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1596	Fuel, ignition fuel mixture	Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.99	10	\$39.90
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	8	\$210.48
Equipment/Installation	1320	Dozer, 105 HP	Track mounted Dozer with horsepower range of 90 to 125. Equipment and power unit costs. Labor not included.	Hour	\$75.55	1	\$75.55
Equipment/Installation	1602	Water tank, portable	Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.45	8	\$19.60
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	\$28.76	8	\$230.08
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	\$35.43	8	\$283.44
Labor	230	Skilled Labor	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.98	24	\$575.52
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$75.07	4	\$300.28
Mobilization	1137	Mobilization, very small equipment	Equipment that is small enough to be transported by a pick-up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$25.64	1	\$25.64
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.15	1	\$23.15
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$35.11	1	\$35.11

Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$92.60	1	\$92.60
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Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	North Carolina
Discipline Group	Range/Pasture Grazing
Practice Code/Name	338 - Prescribed Burning
Scenario ID	2
Scenario Name	Site Preparation
Scenario Description	Treating areas to encourage natural seeding or to permit reforestation by planting or direct seeding. Burning is utilized to eliminate existing competition and debris, reduce forest fuel and to prepare the site for planting or seeding. Burning a cutover site helps prepare the site for replanting. Burn should expose a portions of bare soil for planting. Objectives of a site preparation burn may dictate timing and burn intensity. A bulldozer is brought on site and held in standby mode until the fire is safe to leave unsupervised. Burn sites are monitored the next day for remaining hot spots and or spot over fire.
Before Practice Situation	Area to be burned has had a portion of the over story removed. Slash, brush and grasses dominate the site. Random piles of slash exist near loading decks.
After Practice Situation	Area to be planted has been burned to remove slash left over from prior forest harvest activities. Site is clear enough to allow hand planting tree seedlings and some bare ground is exposed.
Scenario Feature Measure	Acres planned
Scenario Unit	Acre
Scenario Typical Size	40

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$39.90	\$1.00
Equipment/Installation	\$430.47	\$10.76
Labor	\$1,234.31	\$30.86
Mobilization	\$199.65	\$4.99
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,904.33	\$47.61

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1596	Fuel, ignition fuel mixture	Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.99	10	\$39.90
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	4	\$105.24
Equipment/Installation	1320	Dozer, 105 HP	Track mounted Dozer with horsepower range of 90 to 125. Equipment and power unit costs. Labor not included.	Hour	\$75.55	1	\$75.55
Equipment/Installation	1602	Water tank, portable	Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.45	8	\$19.60
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	\$28.76	8	\$230.08
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	\$35.43	8	\$283.44
Labor	230	Skilled Labor	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.98	24	\$575.52
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$75.07	5	\$375.35
Mobilization	1137	Mobilization, very small equipment	Equipment that is small enough to be transported by a pick-up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$25.64	1	\$25.64
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.15	2	\$46.30
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$35.11	1	\$35.11
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$92.60	1	\$92.60

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Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	North Carolina
Discipline Group	Range/Pasture Grazing
Practice Code/Name	338 - Prescribed Burning
Scenario ID	3
Scenario Name	Pile Burning
Scenario Description	Burning pile of woody debris within a forest stand derived from mechanical mid-story control activities necessary to facilitate understory enhancement and/or restoration activities. Each pile measures 12'X12'X12' and is ignited separately. No more than three piles are actively burning at one time. 10 piles are burned each day by one individual.
Before Practice Situation	Woody brush piles are restricting native plant community development and creating high levels of wildfire fuel load and sites for invasive species establishment.
After Practice Situation	Desirable native understory composition achieved. Wildfire fuel load is reduced and invasive species risk is reduced.
Scenario Feature Measure	Number of piles burned
Scenario Unit	Each
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$19.95	\$2.00
Equipment/Installation	\$335.32	\$33.53
Labor	\$432.80	\$43.28
Mobilization	\$79.30	\$7.93
Acquisition of Technical Knowledge	\$116.67	\$11.67
Foregone Income	\$0.00	\$0.00
Total	\$984.04	\$98.40

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1596	Fuel, ignition fuel mixture	Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.99	5	\$19.95
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	4	\$105.24
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	\$28.76	8	\$230.08
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	\$35.43	8	\$283.44
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	\$18.67	8	\$149.36
Mobilization	1137	Mobilization, very small equipment	Equipment that is small enough to be transported by a pick-up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$25.64	1	\$25.64
Mobilization	1142	Mobilization, General labor	Mobilization of general labor: Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.55	1	\$18.55
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$35.11	1	\$35.11
Acquisition of Technical Knowledge	294	Training, Workshops	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$116.67	1	\$116.67

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Practice and Scenario Description:

Information Type	Data
Region	Appalachian
State	North Carolina
Discipline Group	Range/Pasture Grazing
Practice Code/Name	338 - Prescribed Burning
Scenario ID	4
Scenario Name	Native Grass Burn
Scenario Description	Applying a prescribed burn according to designed burn plan and NRCS Prescribed Burning (338) standard and specifications in order to control undesirable species, improve wildlife habitat, improve plant productivity and/or quality, facilitate grazing distribution and maintain ecological processes. This scenario is based on native warm season grass hayfield and terrain <15% slope. Cost to inspect firebreaks and cleared them of combustible material prior to ignition is included in cost of burn. However cost to install and establish the firebreaks is not included in the scenario cost. Refer to Firebreak (394) standard and cost scenarios.
Before Practice Situation	Desirable plant composition is lacking due to reduced plant vigor, invasive species or improper livestock distribution.
After Practice Situation	Desirable plant composition is restored, plant vigor improved and invasive species reduced. Forage production and quality for livestock and /or wildlife is improved.
Scenario Feature Measure	Acres planned
Scenario Unit	Acre
Scenario Typical Size	15

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$15.96	\$1.06
Equipment/Installation	\$177.46	\$11.83
Labor	\$633.84	\$42.26
Mobilization	\$83.90	\$5.59
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$911.16	\$60.74

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1596	Fuel, ignition fuel mixture	Mixture of gasoline and diesel for ignition of prescribed burns. Materials only.	Gallon	\$3.99	4	\$15.96
Equipment/Installation	939	Truck, Pickup	Equipment and power unit costs. Labor not included.	Hour	\$26.31	2	\$52.62
Equipment/Installation	1602	Water tank, portable	Portable water tank transported in a pick up truck. Typically with 200 gallon capacity includes tank with pump, hose and sprayer. Does not include the pickup truck. Equipment only.	Hour	\$2.45	4	\$9.80
Equipment/Installation	965	All terrain vehicles, ATV	Includes equipment, power unit and labor costs.	Hour	\$28.76	4	\$115.04
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	\$35.43	4	\$141.72
Labor	230	Skilled Labor	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.98	8	\$191.84
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$75.07	4	\$300.28
Mobilization	1137	Mobilization, very small equipment	Equipment that is small enough to be transported by a pick-up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$25.64	1	\$25.64
Mobilization	1141	Mobilization, Skilled labor	Mobilization of skilled labor: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$23.15	1	\$23.15
Mobilization	1145	Mobilization, Supervisor or Manager	Mobilization of supervisors or management. Includes crew supervisors, foremen and farm/ranch managers, etc.	Hour	\$35.11	1	\$35.11