TREATMENT/ACTIVITY NAME	#1 Emergency Stabilization Plan Preparation	PART E Abbreviated Name	Plan Preparation
NFPORS TREATMENT CATEGORY*	Planning – ES/BAER Plan	FISCAL YEAR(S) (list each year):	FY2007
NFPORS TREATMENT TYPE *	Planning – Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	N/A
FSM 2520 REFERENCE	2523.03 (1) – Policy, Conduct Assessments	SPECIFICATION #	1

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE (describe or attach exact specifications of work to be done):

A. General Description:

Plan preparation of the Burned Area Emergency Response Emergency Stabilization Plan for Forest Service lands impacted by the Murphy Fire Complex: Wildhorse Zone.

B. Location/(Suitable) Sites:

USFS Humboldt-Toiyabe National Forest: Mountain City Ranger District and Ruby Mountains/Jarbidge Ranger District lands within the Murphy Fire Complex: Wildhorse Zone, consisting of 95,163 acres, Elko County, Nevada.

C. Design/Construction Specifications:

- Conduct a detailed assessment of soil burn severity, its impacts to lands and the threats to life and property, protect critical cultural and natural resources, mitigate impacts to cultural and natural resources, and assess and mitigate suppression impacts.
- 2. Write emergency stabilization treatment specifications based on aerial and ground reconnaissance, and consultations with local specialists. Treatments must meet objectives of approved land management plans.
- 3. Write resource assessments justifying treatments, identifying issues, observations, findings, and recommendations.
- 4. Prepare GIS maps for BAER Plan and presentations.
- 5. Print/copy plan in hardcopy and on CDs.
- 6. Submit plan and documentation to District Rangers.

D. Purpose of Treatment Specifications:

Per the Delegation of Authority received from the USFS Humboldt-Toiyabe National Forest, the BAER Team was tasked to prepare a Burned Area Report (FS-2500-8) and comprehensive ES plan to manage or mitigate the fire impacts in order to protect life and property and protect cultural and natural resources. Emergency stabilization actions are based on a plan developed immediately post-fire and intended to be implemented within one year of fire containment (Aug. 2, 2007). In addition, the BAER Team entered into a Memorandum of Understanding with the BLM Jarbidge Field Office to provide GIS support developing a soil burn severity map, vegetation mortality map, and GIS analysis as needed. In addition the BAER Team provided aerial reconnaissance, watershed modeling, and training on watershed issues.

E. Treatment consistent with Agency Land Management Plan:

- The treatments prescribed in the ES Plan comply with the Districts' plans including:
 - Humboldt National Forest Land and Resource Management Plan and Final Environmental Impact Statement, October 1999 Reprint with Amendments #1 #6
 - Humboldt-Toiyabe National Forest, Land and Resource Management Plan, Assessment of Wilderness Potential, 2006
 - Humboldt-Toiyabe National Forest Fire Management Plan, 2007
 - Environmental Assessment for Noxious Weed Control Program, Humboldt-Toiyabe National Forests, Elko, White Pine
 and Humboldt Counties, Nevada 1996
 - Environmental Assessment Bruneau River Watershed Environmental Analysis, Humboldt National Forest, Mountain City Ranger District, Nevada 1994
 - FSM 2000 National Forest Resource Management, Chapter 2080 Noxious Weed Management, 2004

F. Treatment Effectiveness Monitoring Proposed:

The ES Plan details monitoring for treatment effectiveness as prescribed for each treatment specification. A final report will be prepared to document the treatment monitoring.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
Administration: Vegetation: Archeology: Wildlife: Hydrology: Documentation: Forestry: GIS: Operations:	\$35,826 9,734 10,152 10,298 21,599 6,735 10,700 22,346 10,464
TOTAL PERSONNEL SERVICE COST	\$137,854
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
Plotter Paper, Toner, External Hard Drives, BARC Services, office supplies TOTAL MATERIALS AND SUPPLY COST	\$5,045 \$5,045
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
BAER Team Costs: Airline: Lodging: Rental Cars: GSA Vehicles: Per Diem: Fuel:	\$4,522 15,658 9,698 1,350 8,580 2,140
TOTAL TRAVEL COST	\$41,948
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
Aerial Support BAER Den – Carpet Cleaning Print N Copy TOTAL CONTRACT COST	\$10,900 400 985 \$12,285

SPECIFICATION COST SUMMARY

FISCA L YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNIT S	UNIT COS T	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07	7/28/2007	8/13/2007		1		BAER Plan	\$167,562
FY07	7/30/2007	8/10/2007		1		BLM Consult	29,570
TOTAL				\$197,132			

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	P, M, T, C
5.	No cost estimate required – cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

JURISDICTION	UNITS TREATED	COST
USFS Humboldt-Toiyabe National Forest:		\$167,562
BLM Jarbidge Field Office:		29,570
	TOTAL COST	\$197,132

TREATMENT/ACTIVITY NAME	#2 Hicks Ford Improvement	PART E Abbreviated Name	Hicks Ford Improvement
NFPORS TREATMENT CATEGORY*	Emergency Stabilization	FISCAL YEAR(S) (list each year):	2007, 2008
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	None	IMPACTED T&E SPECIES	None
FSM 2520 REFERENCE	2523.3 Structures	SPECIFICATION #	2

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: The bridge at Hicks crossing on Road #745 in Meadow Creek Canyon was severely damaged during the fire and had to be removed for safety purposes. An emergency ford was quickly installed to keep the road in service during suppression operations. But, the rip rap used to armor the ford was not properly set in the stream bed for long-term service. The rip rap was placed on top of the channel bottom, essentially filling in the channel, such that the ford now functions like a French drain and creates a backwater pool on the upstream side of the ford. This backwater situation has the potential to divert storm runoff out of the channel and no to the road, thus increasing the risk for further damage to the road. The rip rap needs to be embedded lower into the bed of the channel's capacity to pass flow at the road crossing. Reconstructing the ford will allow for better passage of high water, minimize the risk of further flood damage to the road and keep the road in long-term service with minimal maintenance at this stream crossing.

B. Location/(Suitable) Sites: Former location of Hicks Summit Bridge on Road #745 in Meadow Creek Canyon. See Appendix IV, Watershed Treatments Map.

C. Design/Construction Specifications:

- 1. Excavate the rip rap material already in the channel and stock pile on site.
- 2. Excavate channel banks and bottom approximately 12 to 18 inches. Excavated width should be approximately the same width as the road template.
- 3. Place the stock piled and additional rip rap into the excavated portion of the channel and banks (road approaches); blend smoothly with the lip of the road on each side of the crossing, as well as the upstream and downstream channel bottom.
- 4. May need an additional 6 to 12 cubic yards of small rip rap, available locally, to armor the approaches.
- 5. Work should take 1 to 2 hours to complete.
- 6. This specification can be done in conjunction with Specification #3, Inspect and clean culverts and one bridge; so there should be no further mobilization costs for this specification.
- D. Purpose of Treatment Specifications (relate to damage/change caused by fire): To improve post fire storm runoff and prevent damage to road segments above and below crossing.
- E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt National Forest Land Resource Management Plan.
- F. Treatment Effectiveness Monitoring Proposed: See Specification 5, Post-storm Road Patrol and Maintenance.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).		
See Specification #3, Inspect and clean culverts and one bridge (no additional costs)		
TOTAL PERSONNEL SERVICE COST		
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.		
One fully operated excavator (at least 100 horse power) with bucket and thumb attachment @ \$100 / hr x 2 hrs (back hoe could be substituted)	\$200	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$200	

MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
Up to 12 cubic yards of rip rap @ \$25 / yard	\$300
TOTAL MATERIALS AND SUPPLY COST	\$300
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
Equipment mobilization included in Specification #3, Inspect and clean culverts and one bridge (no additional costs)	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
Specification #3, Inspect and clean culverts and one bridge (no additional costs)	
TOTAL CONTRACT COST	

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLIS HMENTS	PLANNED COST
FY07	15 Sept 2007	31 Oct 2007	S	site	\$500	1	\$500
FY08							
FY08							
FY09							
1						ΤΟΤΑΙ	\$500

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	E
3.	Estimate supported by cost guides from independent sources or other federal agencies	E
4.	Estimates based upon government wage rates and material cost.	М
5.	No cost estimate required - cost charged to Fire Suppression Account	

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Soil and Water Resources Assessment; See Appendix IV, Watershed Treatments Map; See Specification #5, Patrol roads for storm-induced hazards.

JURISDICTION	UNITS TREATED	COST
USFS, Humboldt-Toiyabe National Forest	1	\$500
	TOTAL COST	\$500

TREATMENT/ACTIVITY NAME	#3 Upsize culverts	PART E Abbreviated Name	Upsize culverts
NFPORS TREATMENT CATEGORY*	Emergency Stabilization	FISCAL YEAR(S) (list each year):	2007, 2008
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	None	IMPACTED T&E SPECIES	None
FSM 2520 REFERENCE	2523.2 (3b) Structures	SPECIFICATION #	3

* See NFPORS Restoration & Rehabilitation module – Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: Several stream crossings drain steep watersheds that are prone to flash flooding, washout, and deposition of mud. Nine (9) culverts along FS system roads within the burned area were determined during the BAER field assessment to be undersized for potential post-fire runoff events. This project will replace nine culverts with larger culverts in order to pass storm flow with minimal to no damage to the roads.

B. Location/(Suitable) Sites: Three (3) culvert sites on Road #745; three (3) culvert sites on Road #751; two (2) culvert sites on Road #067; and one (1) culvert site on Road #668. For exact locations see Appendix IV, Watershed Treatments Map.

C. Design/Construction Specifications:

- 1. FS engineer will do design work for each of the 9 sites and will oversee project work by contractor such that the replacement culverts are properly set at the right depth and aligned with the stream channels at the inlets and outlets.
- 2. FS Implementation Leader will develop the contract and review the job sites for adherence to the contract.
- 3. FS Archeologist will use engineer's design showing changes in culvert alignment, length and width and staging areas at each site to conduct archeological survey before contract work begins; and obtain clearance from SHPO.
- 4. Contractor will direct the site work.
- 5. Contractor will use a backhoe to remove undersized culverts from road bed. Removed culverts are not to be left on site, but carried to warehouse where they can be either reused or scrapped.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): To upsize culvert capacity to handle post-fire increased flows and possible flood flows in order to protect road beds and motorists.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt National Forest Land Resource Management Plan.

F. Treatment Effectiveness Monitoring Proposed: See Specification 5, Post-storm Road Patrol and Maintenance. These nine new culverts will be included in the road patrol specification for proper functioning and condition.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):	COST /
Do not include contract personnel costs here (see contractor services below).	ITEM
One FS GS-12/5 Implementation Leader @ \$3976/pp x 0.5 pp (includes 35% for Benefits; 17% for Admin and	¢1 000
oversight)	\$1,900
One FS GS-07/5 Engineer Tech @ \$30.76/hour x 8 hours x 7 days (includes 35% for Benefits; 17% for Admin and	¢1 700
oversight)	φ1,723
One GS-11/5 Archeologist @ \$61.29/hour x 8 hours x 5 days (includes 35% for Benefits; 17% for Admin and	¢0.450
oversight)	JZ,45Z
Contract administration (15% overhead for cost of contract)	\$5,082
TOTAL PERSONNEL SERVICE COST	11,245
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years =	
Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or	
renting.	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
(see CONTRACT COST)	
TOTAL MATERIALS AND SUPPLY COST	

TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
One truck for Implementation Leader for 2 days (truck: \$80; fuel: \$100)	\$180
One truck for Engineer Tech for 7 days (truck: \$280; fuel: \$350)	\$630
One truck for Archeologist for 3 days (truck: \$120; fuel: \$150)	\$270
TOTAL TRAVEL COST	\$1,080

CONTRACT COST (Labor AND Equipment AND Materials @ Cost/Hour X #Hours X #Fiscal Years =	
Cost/Item):	
Site 1 - Road #751-1 Replace 18-inch culvert with 24-inch culvert 24-feet long	\$2,880
Site 2 - Road #751-4 Replace 18-inch culvert with 24-inch culvert 30-feet long	\$3,600
Site 3 - Road #751-7 Replace 12-inch culvert with 18-inch culvert 22-feet long	\$2,200
Site 4 - Road #067-6 Replace 24-inch culvert with 36-inch culvert 30-feet long	\$4,500
Site 5 - Road #668-1 Replace 24-inch culvert with 36-inch culvert 30-feet long	\$4,500
Site 6 - Road #745-1 Replace 18-inch culvert with 24-inch culvert 30-feet long	\$3,600
Site 7 - Road #745-7 Replace 18-inch culvert with 24-inch culvert 30-feet long	\$3,600
Site 8 - Road #067-2 Replace 36-inch culvert with 36-inch culvert 30-feet long	\$4,500
Site 9 - Road #745-4 Replace 36-inch culvert with 36-inch culvert 30-feet long	\$4,500
TOTAL CONTRACT COST	\$33,880

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNIT S	UNIT COST	PLANNED ACCOMPLIS HMENTS	PLANNE D COST
FY07	30 August 2007	30 September 2007	F, S	sites	\$5,134	5 sites	\$25,670
FY08	1 October 2007	Before winter snow sets in	F, S	sites	\$5,134	4 sites	\$20,534
FY08							
FY09							
TOTAL						\$46.204	

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	P, C, T
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	
5.	No cost estimate required - cost charged to Fire Suppression Account	

 \mathbf{P} = Personnel Services, \mathbf{E} = Equipment \mathbf{M} = Materials/Supplies, \mathbf{T} = Travel, \mathbf{C} = Contract, \mathbf{F} = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Soil and Water Resources Assessment; See Appendix IV, Watershed Treatments Map.

JURISDICTION	UNITS TREATED	COST
USFS, Humboldt-Toiyabe National Forest		\$46,204
	TOTAL COST	\$46,204

TREATMENT/ACTIVITY NAME	#4 Inspect and clean culverts and one bridge	PART E Abbreviated Name	Inspect and clean culverts and bridge
NFPORS TREATMENT CATEGORY*	Emergency Stabilization	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI?Y/N	Ν
IMPACTED COMMUNITIES AT RISK	None	IMPACTED T&E SPECIES	None
FSM 2520 REFERENCE	2523.2 (3b) Structures	SPECIFICATION #	4

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: Several stream crossings drain steep watersheds that are prone to flash flooding, washout, and deposition of mud or rock. Several culverts in need of maintenance were documented during the BAER field assessment. Floatable woody debris from a pre-fire storm runoff event is deposited on the upstream side of a bridge within the burned area. This project will inspect the condition of existing culverts to process flows and then clean debris and sediment out of catch basins and culvert inlets and outlets that are clogged. This project will also remove the woody debris from the channel near the bridge so that it does not re-mobilize and cause a log jam under the bridge.

B. Location/(Suitable) Sites: Conduct culvert inspections and cleaning along all FS system roads (#067, #745, #750 and #751) in the Wildhorse Zone of the Murphy Fire burned area. The bridge is located on Road #067 in Meadow Creek Canyon just below Sand Creek. See Appendix IV, Watershed Treatments Map for detailed site locations.

C. Design/Construction Specifications:

- 1. FS personnel will direct the work.
- 2. Remove woody debris around catch basins, from channels upstream or downstream from culverts and from the stream above the Road #067 bridge.
- 3. Use a backhoe or backhoes to remove debris and fill (rocks, sand and mud) from catch basins and culvert inlets and outlets.
- 4. Shovel and flush debris and fill from culverts.
- 5. Place all excess material outside of bank-full channel where it cannot re-enter stream channels.
- 6. The emergency stabilization recommendation for the bridge on Road #067 is to keep all log jams from blocking the upstream side of the bridge. This is accomplished by performing storm patrols during or after high intensity storm events and after the start of spring snow melt. (See Specification #5, Post-storm Road Patrol and Maintenance)

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): To maximize bridge, culvert and channel capacity to handle post-fire increased flows and possible flood flows and to protect road beds, the bridge structure and motorists.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt National Forest Land Resource Management Plan.

F. Treatment Effectiveness Monitoring Proposed: See Specification 5, Post-storm Road Patrol and Maintenance for additional monitoring of sites.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
One FS GS-12/5 Implementation Leader @ \$3976/pp x 0.5 pp (includes 35% for Benefits; 17% for Admin and oversight)	\$1,988
One FS GS-07 Engineer Tech @ \$23.39 / hour x 40 hours x 1 week (includes 35% for Benefits; 17% for Admin and oversight)	\$1,422
One general laborer @ \$25 / hr X 40 hrs X 1 week	\$1,000
TOTAL PERSONNEL SERVICE COST	\$4,832

EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.		
One backhoe @ \$60 / hr X 40 hrs X 1 year	\$2,400	
One 6x4 dump truck (8 – 10 cubic yards) and trailer (to haul backhoe) @ \$65 / hr X 40 hrs	\$2,600	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$5,000	

MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):		
TOTAL MATERIALS AND SUPPLY COST		

TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):		
One truck for Implementation Leader for 2 days (truck: \$80; fuel: \$100)	\$ 180	
One truck for FS engineer for 1 week @ \$400.00/week (truck: \$200; fuel: \$250)	\$ 450	
TOTAL TRAVEL COST	\$ 630	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):		
TOTAL CONTRACT COST		

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07	15 September 2007	30 September 2007	F	sites	\$523	20 sites	\$10,462
FY08							
FY08							
FY09							
TOTAL					\$10,462		

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	Ρ, Τ
3.	Estimate supported by cost guides from independent sources or other federal agencies	E, P
4.	Estimates based upon government wage rates and material cost.	
5.	No cost estimate required - cost charged to Fire Suppression Account	
-		

 $\textbf{P} = \text{Personnel Services}, \quad \textbf{E} = \text{Equipment} \quad \textbf{M} = \text{Materials/Supplies}, \quad \textbf{T} = \text{Travel}, \quad \textbf{C} = \text{Contract}, \quad \textbf{F} = \text{Suppression}$

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Soil and Water Resources Assessment; See Appendix IV, Watershed Treatments Map.

JURISDICTION	UNITS TREATED	COST
USFS, Humboldt-Toiyabe National Forest		\$10,462
	TOTAL COST	\$10,462

TREATMENT/ACTIVITY NAME	#5 Post-storm road patrol and maintenance	PART E Abbreviated Name	Patrol and maintain roads after storms
NFPORS TREATMENT CATEGORY*	Emergency Stabilization	FISCAL YEAR(S) (list each year):	2007, 2008
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	None	IMPACTED T&E SPECIES	None
FSM 2520 REFERENCE	2523.2 (3b) Structures	SPECIFICATION #	5

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

Number and Describe Each Task:

A. General Description: : Roads in the Wildhorse Zone of the Murphy Fire Complex primarily follow river bottoms, passing through long narrow canyons in several places, and cross long steep slopes in and out of the canyons. There is an immediate and future threat to travelers along the roads within the burned area due to the increased potential for rolling and falling rock from burned slopes above the highway and increased potential for flash floods and mudflows. With the loss of vegetation normal storm frequencies and magnitudes can more easily initiate rill and gully erosion on the slopes and it is likely that this runoff will cover the roads or cause washouts at drainage facilities (culverts) or stream crossings. These events make for hazardous access along steep slopes and put the safety of users at risk. (See Specification 12, Install and replace safety signs.)

B. Location/(Suitable) Sites: Roads #067, #745, #750, #751 and access to power line from Road #751 for maintenance. Approximately 220 miles of FS system roads. See Appendix IV, Watershed Treatments Map for road locations within the burned area.

C. Design/Construction Specifications:

- 1. FS personnel will direct the work.
- 2. Immediately upon receiving heavy rain and Spring snowmelt the FS will send out patrols to the Wildhorse Zone burned area to identify road hazard conditions obstructions such as rocks, sediment, washouts and plugged culverts so the problems can be corrected before they worsen or jeopardize motor vehicle users.
- 3. Immediately after road patrols mechanically remove any obstructions from the roads and culvert inlets and catch basins.
- 4. Immediately after road patrols mechanically shovel and flush debris and fill from culverts. Place all excess material outside of bank-full channel where it cannot re-enter stream channels.
- 5. Five patrols are anticipated two in 2007 and three in 2008.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): The purpose of the monitoring is to evaluate the condition of roads for motorized access and to identify and implement additional work needed to maintain and/or repair damage road surface and flow conveyance structures across roads in order to provide safe access across FS lands. Engineering personnel will survey the roads within the fire perimeter after high-intensity summer thunderstorms in 2007 and 2008 and Spring 2008 snow-melt. Survey will inspect road surface condition, ditch erosion, and culverts/inlet basins for capacity to accommodate runoff flows.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt National Forest Land Resource Management Plan.

F. Treatment Effectiveness Monitoring Proposed: Monitor roads and culverts after storms and snow melt for possible obstructions and damage and initiate maintenance.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
One FS GS-12/5 Implementation Leader @ \$3976/pp x 0.5 pp (includes 35% for Benefits; 17% for Admin and oversight)	\$1,988
One FS GS-07/5 Engineer Tech @ \$23.39 / hour X 40 hours x 3 weeks (includes 35% for Benefits; 17% for Admin and oversight)	\$4,266
One general laborer @ \$25 / hr X 40 hrs X 3 weeks	\$3,000
	\$9,254

EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years =	
Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or	
renting.	
One backhoe @ \$60 / hr X 100 hrs X 1 year	\$6,000
One 6x4 dump truck (8 – 10 cubic yards) and trailer (to haul backhoe) @ \$65 / hr X 100 hrs	\$6,500
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$12,500
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
TOTAL MATERIALS AND SUPPLY COST	
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
One truck for Implementation Leader for 2 days (truck: \$80; fuel: \$100)	\$ 180
Vehicle for FS engineer for 3 week @ \$400.00/week	\$1,200
TOTAL TRAVEL COST	\$1,380
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
TOTAL CONTRACT COST	1

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISH- MENTS	PLANNED COST
FY07	After 10 August 2007 (when appropriate)		F	1 event	\$4,627	220 miles patrolled and maintained once	\$4,627
FY08	After 01 October 2007 (when appropriate)		F	4 events	\$4,627	220 miles patrolled and maintained up to 4 times	\$18,507
FY08							
FY09							
TOTAL					\$23,134		

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	Ρ, Τ
3.	Estimate supported by cost guides from independent sources or other federal agencies	E, P
4.	Estimates based upon government wage rates and material cost.	
5.	No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Soil and Water Resources Assessment; See Appendix IV, Watershed Treatments Map; See Specification 12, Install and replace safety signs.

JURISDICTION	UNITS TREATED	COST
USFS, Humboldt-Toiyabe National Forest		\$23,134
	TOTAL COST	\$23,134

TREATMENT/ACTIVITY NAME	#6 Streambank and Road Stabilization	PART E Abbreviated Name	Streambank Stabilization
NFPORS TREATMENT CATEGORY*	Emergency Stabilization	FISCAL YEAR(S) (list each year):	2007, 2008
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	None	IMPACTED T&E SPECIES	None
FSM 2520 REFERENCE	2523.2 (3b)	SPECIFICATION #	6

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

Number and Describe Each Task:

A. General Description: Stabilize three segments of the road fill-slopes (up to 650 feet) along a 1.5 mile segment of Road #751 which is alongside an unnamed stream with steep gully walls. Also, improve the road drainage by installing hardened drive-thrudips at 8 to 10 ephemeral stream crossings and/or road surface drainage pour points currently in place along that same segment of Road #751.

B. Location/(Suitable) Sites: Unvegetated fill-slopes along a 1.5 mile segment of Road #751 that drains into Bruneau River. The work sites are where the stream channel edge is within 15 feet of the toe of the fill-slope. These segments will be identified on the ground by the road engineer and/or forest hydrologist. See Watershed Treatment Map, Appendix IV for the general location of stabilization work.

C. Design/Construction Specifications:

1. The streambank stabilization would include the reshaping of the fill-slope to a minimum of a 1:1 slope angle; along with the placement of Class II rip-rap along the toe of the fill-slope. This is denoted as **Treatment A** in the photos, Appendix III, Soil and Watershed.

2. Install 8-10 hardened drive-thru-dips at locations identified by the design engineer and hydrologist to convey water from ephemeral channels across the road prism, or to remove surface water accumulation from the road surface. Insure that the downstream lip (transition from normal road surface to dip) of the drive-thru-dip is higher in elevation than the spillway bottom of the dip. This is denoted as **Treatment B** in the photos, Appendix III, Soil and Watershed.

3. The drive-thru-dips need to be excavated deep enough to insure that potential water flow does not divert from the

perpendicular crossing of the road prism, and runs downgrade on the road surface.

4. The drive-thru-dips need to be designed into the road in such a manner that a pick-up pulling a trailer can drive thru the dip without bottoming out on the road surface.

5. Harden the dips and road fill-slopes both along the stream/road inter-face and below the dips is necessary to insure that erosion of the road prism does not take place at the dip location. Hardening materials in the road surface location will be smaller in size (4 inch minus) than the materials used on the fill-slopes protection areas (class II rip-rap).

6. Seed areas of bare ground caused by the excavation activities with grass seed (used standard seed mix for Humboldt-Toiyabe NF engineering projects).

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): Road #751 is a key transportation route between the Bruneau River and the Jarbidge River drainages. This is a cooperative management road shared between the Forest Service and Elko County. This road is the primary spring access to the Diamond A Ranch, Jarbidge, and Murphy Hot Springs from the south and east. This is due to the deep snow depth on the Bear Creek Summit Road # 748, and the spring flood potential on the main Jarbidge road # 752. There is a 1.5 mile portion of the road that is located in an ephemeral draw that drains into the Bruneau River. Currently there are eight ephemeral streams that cross the road prism and are intercepted by a gully in the main ephemeral draw. The gully wall is immediately adjacent to the fill-slope along approximately 650 feet of the road length. In addition, this is a direct sediment source into the Bruneau River. The sediment from this source enters the Burneau River above resident red-band trout habitat, and probable over-wintering bull trout habitat (T&E species).

The post-fire run-off from 800+ acres that burned above the road location is expected to increase significantly for several years until the post-fire hydrologic recovery has occurred. The stream in this location occurs in the bottom of a recovering gully. The gully is located in very erodable soil conditions (sandy loams from granite). There is a very high potential for the road-fill to be eroded away due to additional stream-flow in the gully stream type. "These stream types are very sensitive to disturbance and tend to make significant adverse channel adjustments to changes in flow regime and sediment supply from the watershed." (Applied River Morphology, Rosgen, 1996) In addition to the increased stream-flow, there are eight ephemeral streams that cross the road prism. The current road drainage is not adequate to accommodate the potential post-fire runoff. The stabilization improvements would accomplish two objectives: 1) The installation of 8-10 drive-thru-dips would reduce the head-cutting erosion

of the road prism into the gully. 2) The spreading out of the water input into the gully will reduce the erosion power of the water flow on the fill-slopes in several locations. This would reduce the collapse of the road-fill and the amount of sediment transport into the stream system. It would also reduce the possibility of gully plugging/widening. 3) Reduce the sediment yield entering the Burneau River and into resident Red-band Trout habitat, and probable over-wintering Bull Trout habitat.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt National Forest - Land Resource Management Plan – "To protect or improve water quality or soil productivity."

F. Treatment Effectiveness Monitoring Proposed: The Forest Hydrologist will review the effectiveness of the treatment following any major storm events for the first year following implementation to insure the stabilization treatments are adequate to reduce sedimentation into the Bruneau River.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
GS-11 Hydrologist @ \$310/day X 4 days X 1 Year	\$1,240
GS-12/5 Engineer @ \$390/day X 8 days X 1 Year	\$3,120
GS-11/5 Archeologist @ \$490/day X 3 days X 1 Year	\$1,471
GS-12/5 Baer Implementation Leader @ \$390/day X 5 days X 1 Year	\$1,950
TOTAL PERSONNEL SERVICE COST	\$7,781
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
620 Cubic Yards of materials (dip hardening / fill-slope hardening) X \$35/yard X 1 year	\$21,700
200 pounds grass seed mix X \$ 17/pound X 1 year	\$3,400
TOTAL MATERIALS AND SUPPLY COST	\$25,100
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
1 each Pick-up 4X4, for one week vehicle rental and gas (Implementation leader)	\$500
1 each Pick-up 4X4, for two weeks vehicle rental and gas (Engineer /Hydrologist)	\$1,000
1 each Pick-up 4X4, for three days vehicle rental and gas (Archeologist)	\$270
TOTAL TRAVEL COST	\$1,770
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
Excavator @ \$85/hour X 50 hours	\$4,250
Tractor, Crawler (D5N) @ \$65/hour x 16 hours	\$1,040
Dump Truck 6X4 (8-10 yard) @ \$55/hour X 50 hours	\$2,750
Truck & Lowboy Trailer @ \$82/hour X 32 hours	\$2,624
TOTAL CONTRACT COST	\$10,664

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07							
FY08	10/1/07	10/30/07	F	acres	\$4,532	10 acres	\$45,315
FY08							
FY09							
TOTAL					\$45,315		

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	P, E, M
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	
5.	No cost estimate required - cost charged to Fire Suppression Account	

 \mathbf{P} = Personnel Services, \mathbf{E} = Equipment \mathbf{M} = Materials/Supplies, \mathbf{T} = Travel, \mathbf{C} = Contract, \mathbf{F} = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Soil and Water Resources Assessment; See Appendix III Soil and Watershed Photos; and See Appendix IV, Watershed Treatments Map.

JURISDICTION	UNITS TREATED	COST
Humboldt-Toiyabe National Forest	10 acres	\$45,315
	TOTAL COST	\$45,315

TREATMENT/ACTIVITY NAME	#7 Native American Consultation	PART E Abbreviated Name	Native American Consult.
NFPORS TREATMENT CATEGORY*	Planning	FISCAL YEAR(S) (list each year):	2008
NFPORS TREATMENT TYPE *	Emergency Stabilization Plan Preparation	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	Ν
FSM 2520 REFERENCE	2523.2 (3)(e) Consultation	SPECIFICATION #	7

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: Murphy Fire Complex Wild Horse Zone. Pursuant to Federal cultural resource laws, Federal Undertakings, including Emergency Stabilization that may affect significant heritage resources of religious significance or traditional cultural importance

require the lead Federal agency to consult with affected tribes as equal partners. Therefore, local tribes must be consulted concerning any stabilization that may occur at, on, or near historic properties of Native American origin that are located in areas subject to emergency stabilization efforts. The Duck Valley Shoshone-Paiute Tribes has been identified as a consulting party having cultural concerns within the burned area.

B. Location/(Suitable) Sites: Murphy Complex: Wild Horse Zone. Rock shelters, burial locations, traditional cultural properties and religious/sacred sites that may have been subject to fire effects and may have treatments proposed at, on, or near them. Such locations are exempt from public disclosure under the Archaeological Resources Protection Act and the National Historic Preservation Act.

C. Design/Construction Specifications:

- 1. One field consultation meeting with a Duck Valley Shoshone-Paiute Tribes elder and the Cultural Director (representatives) to discuss treatment plans and site concerns. Additional tribal elders may be involved as appropriate.
- 2. Allowance is made for one field trip to follow up on specific concerns raised in the initial consultation. Tribal member travel to the field is included as part of information gathering.

D. Purpose of Treatment Specifications: To meet consultation requirements of Federal legislation.

E. Treatment consistent with FS Land Management Plan: Humboldt National Forest Land and Resource Management Plan, 1999, reprint with Amendments #1 - #6.

F. Treatment Effectiveness Monitoring Proposed: Initial consultation meeting will determine whether the Duck Valley Shoshone-Paiute Tribes has cultural concerns about treatment locations.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):	COST /
Do not include contract personnel costs here (see contractor services below).	ITEM
FS-Elko GS-11 Archaeologist @\$38.80/hour X 24 hours X 35% benefits X 17% admin & oversight X 1	
Fiscal Year	\$1,471
2 Tribal Representatives (1 Tribal Representative & 1 Tribal Elder) @\$150/day X 1 Fiscal Year	\$300
TOTAL PERSONNEL SERVICE	¢1 771
COST	φ1,771
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/ Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	

MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
USFS Vehicle @\$66.67/day X 3 days X 1 Fiscal Year	\$200
Gas @ 300 miles @ 12 mpg x 3.10/gal. X 1 Fiscal Year	\$78
TOTAL MATERIALS AND SUPPLY COST	\$278

TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
TOTAL CONTRACT COST	

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07	08/13/07	09/30/07	F	1	\$2,049	Consultation	\$2,049
FY08							
FY09							
						TOTAL	\$2.049

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	Р
3.	Estimate supported by cost guides from independent sources or other federal agencies	Т
4.	Estimates based upon government wage rates and material cost.	Т
5.	No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

Specific site locations are exempt from public disclosure under the Archaeological Resources Protection Act and the National Historic Preservation Act.

JURISDICTION	UNITS TREATED	COST
USFS Mountain City Ranger District, Murphy Complex Fire, Wildhorse Zone	1 consultation	\$2,049
	TOTAL COST	\$2,049

TREATMENT/ACTIVITY NAME	#8 NOXIOUS WEEDS TREATMENT	PART E Abbreviated Name	Noxious Weeds-Weed Control- Herbicide, Manual, Biological
NFPORS TREATMENT CATEGORY*	Invasive Species	FISCAL YEAR(S) (list each year):	2008
NFPORS TREATMENT TYPE *	Chemical/Hand/Biological Treatment	WUI?Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	N/A
FSM 2520 REFERENCE	2523.2 (3g(2)) Other Measures	SPECIFICATION #	8

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: Control the spread of known non-native weed infestations within the Murphy Fire Complex: Wildhorse Zone perimeter, prior to seed-set and maturation. Treatment of these Nevada Listed noxious weeds is proposed since the likelihood of their movement into non-infested areas of the burn has been aggravated by the fire. Utilize integrated pest management techniques (chemical, biological, mechanical and cultural control methods) as appropriate to prevent the spread and establishment of noxious weeds within the fire area. No cost was developed for possible hand grubbing of weeds since so few weeds will be treated in this manner, and grubbing will occur in association with spraying.

B. Location/(Suitable) Sites: Control the spread of all known exotic weed populations along road systems, riparian areas, and suppression related sites within the fire area. Based on the point and polygonal locations of known infestations, the acreage of noxious weeds is estimated at 704 acres. All known and mapped locations of weeds are on the Mountain City Ranger District. Many of the locations are plotted as point source data. For ease of computing treatment costs, each point was rounded to one acre in size. Known noxious weeds to occur within the Murphy Fire Complex: Wildhorse Zone are Canada thistle (*Cirsium arvense*), Wild licorice (*Glycyrrhiza lepidota*), Bull thistle (*Cirsium vulgare*), Scotch cottonthistle (*Onopordum acanthium*), Perennial pepperweed (*Lepidium latidolium*), Hoary cress (*Cardaria draba*), Yellowspine thistle (*Cirsium ochrocentrum*) and Black Henbane (*Hyoscyamus niger*). Refer to the FS Geographic Information System database for approximate locations of noxious weeds. Control sites identified include but are not limited to areas along FS Roads 745 (Meadow Creek), 751 (Trail Gulch), 067 (Bruneau Canyon), 997 (Rattlesnake Canyon), 061 (Wickiup Creek, and 750. Other sites occur in Martin Creek, Hicks Summit and above Robinson Canyon. USFS control efforts should be conducted along all major road systems but in accordance with area closures and safety guidelines. Estimated acres for control by species are as follows: Canada thistle, 548 acres; Bull thistle, 107 acres; Scotch cottonthistle, 44 acres; Perennial pepperweed, 1 acre; Hoary cress, 1 acre; Black Henbane, 1 acre; and Wild licorice, 1 acre.

C. Design/Construction Specifications:

- Control the spread of noxious/non-native weeds identified during FS monitoring surveys prior to seed set. Use truckmounted sprayers, ATV-mounted sprayers, or backpack sprayers (depending on access and ability for spray personnel to reach infestations), to apply herbicides to selected noxious weed populations. All spraying will be in accordance with guidelines contained within FS management plans and approved Environmental documents using FS approved herbicides, such as 2,4-D amine®, metsulfuron methyl (Escort®), glyphosate (Roundup®) and picloram (Tordon®), and clopyralid (Transline®).
- 2. Hand grub noxious weeds located at springs and along perennial creeks. Grubbing will be by FS crews or technicians.
- Follow-up control in subsequent years on all new infestation sites, as identified through noxious weed detection monitoring surveys, will be through rehabilitation or other funding requests.
- 4. Biological agents will be used in conjunction with hand grubbing in sensitive riparian areas where herbicidal control is not feasible. Some of the biological agents approved for use in the Noxious Weed Control Program Environmental Assessment are: several Thistle Weevils, a Tephritid Fly, Aphthona beetles, moths, mites and midges. A complete listing is contained in the aforementioned Environmental Assessment. The biological agents will be used primarily on Canada thistle.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): Stabilization funds can be used to control non-native invasive plants within burned areas when it can be documented that those plants may quickly invade or hamper re-establishment of native vegetation. The cost to assess and control invasive species is an appropriate use of emergency stabilization funding. Using IPM techniques to minimize the establishment of non-native invasive species within the burned area.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt-Toiyabe National Forest Land and Resource Management Plan and FEIS; Noxious Weed Control Environmental Assessment

F. Treatment Effectiveness Monitoring Proposed: A separate specification for detection of noxious weeds/non-native invasive plant species and control effectiveness has been prepared. Control of noxious weeds in both burned and unburned areas will be monitored according to the strategy outlined. Control will be considered to be successful upon determination that all noxious weeds have been controlled or populations reduced substantially.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
Implementation Leader: GS-12/5 @ \$3,976/pp X 1 pp X 1 year	\$3,976
Noxious Weed Coordinator: GS-11/5 @ \$3,114/pp X 3pp X 1 year	\$9,342
Biological Technician: GS-05/5 @ \$1,510/pp X 3pp X 1 year	\$4,530
Biological Technician: GS-04/5 @ \$1,350/pp X 3pp X 2 personnel X 1 year	\$8,100
GIS Support: GS-11/5 @ \$3,114/pp X 1⁄2 pp X 1 year	\$1,557
TOTAL PERSONNEL SERVICE COST	\$27,505
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years =	
Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
Vehicle for Implementation Leader @ \$200/week X 2 weeks	\$400
Vehicle for Noxious Weed Coordinator @ \$200/week X 6 weeks	\$1,200
Vehicle for Biological Techs @ \$200/week X 6 weeks	\$1,200
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$2,800
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
Herbicide: 2,4-D amine® @ \$15/acre X 704 acres X 1 year	\$10,560
Herbicide: Escort® @ \$42/acre X 4 acres X 1 year	\$168
Herbicide: Tordon® @ \$55/acre X 350 acres X 1 year	\$19,250
Herbicide: Transline® @ \$55/acre X 350 acres X 1 year	\$19,250
Colorant: Highlighter @ \$5/acre X 704 acres X 1 year	\$ 3,520
TOTAL MATERIALS AND SUPPLY COST	\$52,748
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
Biological Agents (Insects): 3,000 insects @ \$0.50/insect X 1 year	\$1,500
TOTAL CONTRACT COST	\$1,500

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLIS HMENTS	PLANNED COST
FY07							
FY08	0/01/2007	09/30/2008	F	acres	\$120.11	704	\$84,553
FY08							
FY09							
					•	TOTAL	\$84,553

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	С, М
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	Р
5.	No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Vegetation Resource Assessment; See Appendix IV, Vegetation Treatment Map.

JURISDICTION	UNITS TREATED	COST
FS-Humboldt-Toiyabe National Forest-Mountain City Ranger District	704	\$84,553
	TOTAL COST	\$84,553

TREATMENT/ACTIVITY NAME	#9 NOXIOUS WEED/INVASIVE DETECTION	PART E Abbreviated Name	Noxious Weeds & Invasives Detection
NFPORS TREATMENT CATEGORY*	Invasive Species	FISCAL YEAR(S) (list each year):	2008
NFPORS TREATMENT TYPE *	Chemical/Hand/Biological Treatment	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	N/A
FSM 2520 REFERENCE	2523.2 (3g(2)) Other Measures 2523.3 Monitoring	SPECIFICATION #	9

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

A. General Description: Conduct noxious weed/non-native invasive plant species detection monitoring for possible invasion on roads, hand lines, dozer lines, retardant drops, and other disturbed areas within the perimeter of the Murphy Fire Complex: Wildhorse Zone. Monitor existing noxious weed/non-native invasive plant species infestations within the burned area to determine if expansion is occurring into non-infested areas. Inventory for noxious weeds/non-native invasive plant species near existing locations and in areas that have a high probability for invasion within the burned area and prescribe treatments to control the invasion and spread of the plants.

B. Location/(Suitable) Sites: Monitor at known locations of noxious weeds/non-native invasive plant species. All known locations are within the Mountain City Ranger District boundaries. Inventory areas that have a high potential for weed/invasive species invasion (or as determined by FS staff). Critical areas include drainages, roads, dozer lines, and burned areas where suppression vehicles and equipment traveled through known noxious weed/non-native invasive plant species populations. Monitoring and inventory sites will include but are not limited to FS Roads 745 (Meadow Creek), 751 (Trail Gulch), 067 (Bruneau Canyon), 997 (Rattlesnake Canyon), 061 (Wickiup Creek) and 750. Monitor all visible noxious weed/non-native invasive plant species along roads systems and creeks within the fire area. Estimated acreage of detection monitoring is 1,042 acres. See Vegetation Treatment Map, Appendix IV.

C. Design/Construction Specifications:

- Conduct detection monitoring on existing noxious weed/non-native invasive plant species populations within the burned area using protocol determined by the FS, Humboldt-Toiyabe National Forest. Monitoring to determine the post-fire presence or spread of invasive species will be conducted on existing and historical noxious weed/non-native invasive species populations within the burned area using protocols determined by the Humboldt-Toiyabe National Forest and current management plans. Detection monitoring will be conducted in areas disturbed by the fire and fire suppression activities.
- 2. Inventory, photo document, and map new noxious weed/non-native invasive plant species infestations within disturbed lands using Global Positioning System (GPS) technology. Enter data into the TERRA DATA BASE.
- 3. Initiate agency approved control measures where detection demonstrates the establishment or expansion of noxious weed/ invasive species populations. Direct treatment will occur when there is a threat to natural regeneration and recovery of native vegetation, establishment of effective ground cover, or expansion within and outside the burn area from invasive species inside the burned area.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): Purpose is to detect the invasion or spread of noxious weeds and non-native invasive plant species and to prescribe treatments that will control the invasion or spread. The level of monitoring required will be commensurate with the complexity of the project, level of concern, and the objectives of the plan. Monitoring and evaluation to determine the effectiveness of stabilization treatments is funded for up to three years following containment of a wildfire. Using IPM techniques will help to minimize the establishment of non-native invasive species within the burned area.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt-Toiyabe National Forest Land and Resource Management Plan and FEIS, along with Noxious Weed Control Environmental Assessment.

F. Treatment Effectiveness Monitoring Proposed: Control and detection of noxious weeds/non-native invasive plant species in both burned and unburned areas will be monitored according to the strategy outlined in the specification. Control will be considered to be successful upon determination that all noxious weeds have been controlled and non-native invasive plant species have not spread beyond their pre-fire locations. This treatment will also monitor the effectiveness of Specification #8, Noxious Weeds Treatment.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
Implementation Leader: GS-12/5 @ \$3,976/pp X 1 pp X 1 year	\$3,976
Noxious Weed Coordinator: GS-11/5 @ \$3,114/pp X 1 pp X 1 year	\$3,114
Biological Technician: GS-05/5 @ \$1,510/pp X 1 pp X 1 year	\$1,510
Biological Technician: GS-04/5 @ \$1,350/pp X 1 pp X 1 year	\$1,350
GIS Support: GS-11/5 @ \$3,114/pp X 1/2 pp X 1 year	\$1,557
TOTAL PERSONNEL SERVICE COST	\$11,507
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
Vehicle for Implementation Leader @ \$200/week X 2 weeks	\$400
Vehicle for Noxious Weed Coordinator @ \$200/week X 2 weeks	\$400
Vehicle for Biological Technicians @ \$200/week X 2 weeks	\$400
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$1,200
MATERIALS AND SUPPLIES (Item @ Cost/Each Quantity X #Fiscal Years = Cost/Item):	
Survey supplies (posts, stakes, paint, post driver, etc.) @ \$300/year X 1 year	\$300
TOTAL MATERIALS AND SUPPLY COST	\$300
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
TOTAL CONTRACT COST	

SPECIFICATION COST SUMMARY

FISCA L YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07							
FY08	04/01/2008	09/30/2008	F	acres	\$12.48	1,042	\$13,007
FY09							
FY10							
		-				TOTAL	\$13,007

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	М
3.	Estimate supported by cost guides from independent sources or other federal agencies	E
4.	Estimates based upon government wage rates and material cost.	Р
5.	No cost estimate required - cost charged to Fire Suppression Account	
-		

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Vegetation Resource Assessment; See Appendix IV, Vegetation Treatment Map.

JURISDICTION	UNITS TREATED	COST
FS-Humboldt-Toiyabe National Forest-Mountain City Ranger District	1,042	\$13,007
	TOTAL COST	\$13,007

TREATMENT/ACTIVITY NAME	#10 MONITOR CRITICALHABITAT	PART E Abbreviated Name	Monitor Critical Habitat
NFPORS TREATMENT CATEGORY*	Monitoring	FISCAL YEAR(S) (list each year):	2008
NFPORS TREATMENT TYPE *	Ecosystem Recovery Monitoring	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	N/A
FSM 2520 REFERENCE	2523.3 Monitoring	SPECIFICATION #	10

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE

6.

A. General Description: Conduct critical habitat recovery monitoring during the spring/summer of 2008, to determine vegetation recovery and re-establishment in critical wildlife and plant habitat, within the perimeter of the Murphy Fire Complex: Wildhorse Zone. Recovery monitoring will occur on all disturbed plant community types within critical habitat where vegetation mortality was moderate and high and to determine the need for supplemental seeding for critical wildlife habitat improvement. The FS will establish recovery criteria, i.e., plants per square foot, for each vegetation type prior to monitoring. Monitoring will also occur on one site where suppression efforts may have impacted a FS Region 4 Sensitive Plant Species, Lewis' buckwheat (Eriogonum lewisii).

B. Location/(Suitable) Sites: All areas of concern to the FS that may impact future resource management activities in critical wildlife and plant habitat. Monitoring plots should be located in each vegetation type to ascertain whether re-vegetation criteria has been met and whether additional treatments are necessary. The areas within critical habitat that have moderate and high vegetation mortality encompasses approximately 19,400 acres. Areas with high vegetation mortality and high shrub mortality should be prioritized for recovery monitoring, especially in critical riparian zones. Disturbed areas within and along the fire perimeter, such as dozer lines, hand lines, and safety zones will also be prioritized for monitoring. Final site selections to be made by FS resource specialist. A potential suppression impact to a FS Region 4 Sensitive Plant Species (Lewis' buckwheat (Eriogonum lewisii) may have occurred in Sections 32, 33, 34, and 35, T47N, R57E, MDM. The dozer line impacts are approximately 2 1/2 miles in length. The monitoring of this suppression impact should receive priority before further damage occurs from public usage of the dozer line for access to forest lands.

C. Design/Construction Specifications: Monitoring transects shall be established and methodologies designed to determine: Vegetative cover and density will be monitored in late spring of 2008, and in late summer of 2008. At least one monitoring location will be established for each vegetation type of concern that is within polygons of high and moderate vegetation mortality-in each vegetation type that is within critical habitat and in areas of known locations of critical wildlife species. Sagebrush communities are especially critical due to presence of sage grouse and pygmy rabbit. The monitoring locations will be in representative areas that are not transitional from one vegetation monitoring stratum to another, using local agency specified methods.

Sampling should determine species composition and density. 2. 3.

Monitor cover of vegetation, litter, rock, bare ground and cryptogamic crusts.

Cover sampling methodologies, as referenced in BLM Technical Reference 1730-1, Measuring and 4. Monitoring Plant Populations, shall represent dominant plant community type, aspect, and slope variations within the fire area. Photos shall accompany data records as supporting documentation of findings.

Observations should be documented both in written and photographic documents to record other factors 5. such as herbivory, surface erosion, etc.

Continuous surveys in years 2 and 3 will also aid in further detection and minimize spread.

Annual monitoring reports shall be published that document sampling methodologies, techniques, areas 7. sampled, and summary of findings.

Look at the impacts to a Region 4 Sensitive Plant Species (Lewis' buckwheat (Eriogonum lewisii)) from the 8. dozer line in Sections 32, 33, 34, and 35, T47N, R57E, MDM. Monitor the impacts and prepare a recovery plan for the species, if necessary, using fire suppression funding. Monitoring for the impacts to this species will be prioritized over any other monitoring planned.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): Monitoring of critical habitat is necessary to determine whether further vegetative treatments are necessary to meet management goals and objectives. If recovery has not been met then additional funding requests must be prepared and submitted.

E. Treatment Consistent with Agency Land Management Plan (identify which plan): Humboldt-Toiyabe National Forest Land and Resource Management Plan and FEIS.

F. Treatment Effectiveness Monitoring Proposed: Monitoring is required to ascertain whether vegetative recovery of critical habitat, as anticipated, has occurred. Management decisions that will be based on the monitoring results include the need for additional treatments and the need for non-native invasive species control. Additional treatments may be proposed if monitoring concludes that the criteria for re-vegetation success is not achieved.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
Implementation Leader: GS-12/5 @ \$3,976/pp X 1pp X 1 year	\$3,976
Range Ecologist: GS-11/5 @ \$3,114/pp X 2pp X 1 year	\$6,228
GIS Support: GS-11/5 @ \$3,114/pp X 1pp X 1 year	\$3,114
Biological Technicians: GS-05/5 @ \$1,510/pp X 2pp X 3 personnel X 1 year	\$9,060
TOTAL PERSONNEL SERVICE COST	\$22,378
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
Vehicle Costs for Implementation Leader @\$200/week X 2 weeks X 1 year	\$400
Vehicle Costs for Range Ecologist @ \$200/week X 4 weeks X 1 year	\$800
Vehicle Costs for Biological Techs @ \$200/week X 8 weeks X 1 year	
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$2,800
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
Miscellaneous Field Supplies	\$600
Miscellaneous Office Materials and Supplies	\$500
TOTAL MATERIALS AND SUPPLY COST	\$1,100
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
TOTAL CONTRACT COST	

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLIS HMENTS	PLANNED COST
FY07							
FY08	05/01/2008	09/30/2008	F	acres	\$1.35	19,400	\$26,278
FY08							
FY09							
		-				TOTAL	\$26,278

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	Р
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	С, М
5.	No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

List Relevant Documentation and Cross-Reference Location within this BAER Plan.

JURISDICTION	UNITS TREATED	COST
FS-Humboldt-Toiyabe National Forest-Mountain City Ranger District	19,400	\$26,278
	TOTAL COST	\$26,278

PART F - TREATMENT SPECIFICATION

TREATMENT/ACTIVITY NAME	#11 PROTECTIVE FENCING	PART E Abbreviated Name	Protective Fence
NFPORS TREATMENT CATEGORY*	Facility & Infrastructure	FISCAL YEAR(S) (list each year):	2008
NFPORS TREATMENT TYPE *	Fence Repair	WUI? Y/N	Ν
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	N/A
FSM 2520 REFERENCE	2523.2 (3b) Structures	SPECIFICATION #	11

WORK TO BE DONE

A. General Description: Construct new temporary fences to protect recovery and keep domestic livestock out of burned grazing units within grazing allotments within the perimeter of the Murphy Fire Complex: Wildhorse Zone. The 13 miles of fence are necessary to prevent grazing by livestock on burned areas needing grazing rest or to protect recovering R4 sensitive species in critical habitats. All temporary protective fences will tie into existing unburned fences or natural barriers. Fences will primarily be built along the fire perimeter, between the burned and unburned portions of the grazing allotments. When recovery parameters are met, the fences will be removed.

B. Location/(Suitable) Sites: Fences will be constructed along the fire perimeter where no previous fence existed, or where exclosure is needed to protect recovering sites. Miles of fence to be constructed are approximates and located on or within the following grazing allotments: Bruneau Summer C&H*, 3 miles. This fencing is proposed to protect critical or significant natural resources such as critical habitat for R4 sensitive wildlife species such as the sage grouse, goshawk, Columbia spotted frog, and probable Bull trout over-wintering habitat, along with protecting recovering areas from uses that could cause erosion or interfere with recovery. This allotment lies above the Bruneau River, probable Bull trout over-wintering habitat; Telephone C&H, 3 miles. This fence is located between burned and unburned portions of the allotment and will protect recovering areas that are critical habitat for the pygmy rabbit and critical wintering habitat for sage grouse. The fence will also protect recovering burned area from uses that could cause erosion or interfere with recovery; McDonald Creek C&H, 1 mile. This fence is also located between burned and unburned portions of the allotment and will protect recovering areas that are critical habitat for the pygmy rabbit, a sensitive R4 wildlife species, and protect critical wintering habitat for the sage grouse. The fence will also protect recovering areas from uses that could cause erosion or interfere with recovery; and 6 miles of fencing between the burned Wickiup S&G* and the unburned Buck Creek C&H*. The Wickiup allotment is critical habitat for R4 sensitive species sage grouse, goshawk, and the Columbia spotted frog. This allotment is also within the watershed above the Bruneau River, probable Bull trout over-wintering habitat. The fence, which separates the Mountain City Ranger District from the Jarbidge Ranger District, will allow grazing to continue outside the perimeter of the fire and stabilize critical or significant natural resources and protect recovering areas from uses that could cause erosion or interfere with recovery. See the Vegetation Treatment Map in Appendix IV for actual fence location.

C. Design/Construction Specifications: Fence construction shall be in accordance with standard FS design specifications. Due to the nature of the fence needed, which is to keep livestock out of recovering burned vegetation, and to protect recovery of critical habitat for R4 sensitive wildlife species, the minimum fence specification needed to meet objectives in this area is a 4-strand barbed wire fence. An electric fence was considered but rejected due to several reasons that follow. The areas where these fences are located is rough country, approximately 3-4 hours away from the agency by 4 wheel drive vehicle. The 4 portions of fence are far apart, which would allow inspection of only one or two of the portions per day. Electric fences require considerable maintenance, much more than a 4-strand wire fence. Wild ungulates, such as elk and deer, do not recognize electric fencing for the purpose intended. When an elk hits an electric fence, it keeps on going. To maintain the electric fence would require reconstructing the electric fence. A 3-strand barbed fence was also not considered, as re-growth in the burned protected recovery areas will be an irresistible attraction to domestic livestock. Cattle will try, in any way possible, to access the new green re-growth. In discussions with Range Specialists, a 3-strand wire fence will not keep the livestock out. Therefore, recovery to critical habitat for the R4 sensitive species will not occur. A 4-strand wire fence is justified based on the critical habitat recovery requirements in the critical habitats.

- 1. New fence materials shall be utilized.
- Construct 4-wire fence for allotment boundaries consisting of 3 strands of 12 ½ gauge twisted barbed wire and a bottom strand of 12 ½ gauge twisted smooth wire unless high stock pressure necessitates barbed wire throughout. Steel 6 foot T-posts shall be driven 1 ½ feet in the ground and spaced at 16 ½ feet apart.

3. Steel posts (stress panels) as recommended by the Forest shall be placed at all corners or at a maximum of ¹/₄ mile spacing or as necessary to compensate for topographical undulations. Posts are to be secured using 12 1/2 gauge smooth twisted steel wire with a minimum breaking strength of 950 pounds of force.

2. Additional specifications regarding fence replacement will be provided at time of reconstruction initiation. Remove all burned fence materials that interfere with installation of the temporary fence.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): Installing protective fences or barriers to protect recovering areas that are critical habitat for R4 sensitive wildlife species (sage grouse, goshawk, Columbia spotted frog and pygmy rabbit) and the Bull trout, a T&E species, which probably over-winters in the Bruneau River, down slope from the proposed fencing areas. Fences will protect habitat and resources for recovery and will keep domestic livestock out of the recovering vegetation.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt-Toiyabe National Forest Land and Resource Management Plan and FEIS.

F. Treatment Effectiveness Monitoring Proposed: The treatment will be considered successful if domestic livestock are excluded from the burned area during the prescribed recovery period, and habitat for sensitive wildlife species is allowed to recover without erosion or interference. (See Vegetation Resources Assessment for details)

* C&H- Cattle and Horse Grazing Unit

* S&G- Sheep and Goat Grazing Unit

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):	COST
Do not include contract personnel costs here (see contractor services below).	COST/TIEM
Implementation Leader: GS-12/5 @ \$3,976/pp X 2pp X 1 year	\$ 7,952
Contracting Officer: GS-11/5 @ \$3,114/pp X ½pp X 1 year	\$ 1,557
Range Management Specialist (Inspector): GS-11/5 @ \$3,114/pp X 4pp X 1 year	\$12,456
Archeologist: GS-11/5 @ \$3,114/pp X ½ pp X 1 year	\$ 1,557
TOTAL PERSONNEL SERVICE COST	\$23,522
EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	
Vehicle for Implementation Leader @ \$200/week X 4 weeks X 1 year	\$ 800
Vehicle for Project Inspector @ \$200/week X 8 weeks X 1 year	\$1,600
Vehicle for Archeologist @ \$200/week X 1 week X 1 year	\$ 200
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	\$2,600
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	
12 ½ gauge domestic galvanized twisted two-point barbed wire: \$44.98/roll X 12 rolls/mile X 13 miles X 1 year	\$ 7,017
12 1/2 gauge domestic galvanized twisted smooth wire: \$39.98/roll X 4 rolls/mile X 13 miles X 1 year	\$ 2,079
6 foot steel painted T-posts: \$3.29/post X 320 posts/mile X 13 miles X 1 year	\$13,686
36" wire fence stays: \$21.90/bundle X 6.4 bundles/mile X 13 miles X 1 year	\$ 1,822
Wire fence clips (50/pk): \$1.69/pk X 26 pks/mile X 13 miles X 1 year	\$ 571
Gate Closure: \$24.50/mile X 1 closure/mile X 13 miles X 1 year	\$ 318
Steel Pipe (2 3/8" x 7'): \$14.78/pipe X 12 pipes/mile X 13 miles X 1 year	\$ 2,306
Steel pipe (1 5/8" x 7'): \$9.10/pipe X 8 pipes/mile X 13 miles X 1 year	\$ 946
Galvanized brace bands (2 ¼" heavy): \$0.44/band X 14 bands/mile X 13 miles X 1 year	\$ 80
Carriage bolts and nuts (3/8 " x 1 1/2 "): \$0.08/each X 14/mile X 13 miles X 1 year	\$ 15
TOTAL MATERIALS AND SUPPLY COST	\$28,840
TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	
TOTAL TRAVEL COST	
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	
Fencing Cost for Installation: \$3,500/mile X 13 miles X 1 year	\$45,500
Fencing Cost for Removal: \$1,800/mile X 13 miles X 1 year	\$23,400
TOTAL CONTRACT COST	\$68.900

TOTAL CONTRACT COST

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLI SHMENTS	PLANNED COST
FY07							
FY08	10/01/2007	09/30/2008	S	Miles	\$9,528	13	\$123,862
FY08							
FY09							
TOTAL					\$123,862		

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

- 1. Estimate obtained from 2-3 independent contractual sources.
- 2. Documented cost figures from similar project work obtained from local agency sources.
- 3. Estimate supported by cost guides from independent sources or other federal agencies
- 4. Estimates based upon government wage rates and material cost.
- 5. No cost estimate required cost charged to Fire Suppression Account

P = Personnel Services, **E** = Equipment **M** = Materials/Supplies, **T** = Travel, **C** = Contract, **F** = Suppression

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

See Appendix I, Vegetation Resource Assessment; See Appendix IV, Vegetation Treatment Map.

TOTAL COST BY JURSIDICTION

JURISDICTION	UNITS TREATED	COST
FS- Humboldt-Toiyabe National Forest-Mountain City Ranger District	13	\$123,862
	TOTAL COST	\$123,862

M, C

Е

Р

TREATMENT/ACTIVITY NAME	#12 Install and Replace Safety Signs	PART E Abbreviated Name	Safety Signs
NFPORS TREATMENT CATEGORY*	Roads	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Signs	WUI?Y/N	Y
IMPACTED COMMUNITIES AT RISK	N/A	IMPACTED T&E SPECIES	Ν
FSM 2520 REFERENCE	2523.2 (3d)	SPECIFICATION #	12

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

WORK TO BE DONE (describe or attach exact specifications of work to be done):

Number and Describe Each Task:

A. General Description: Five informational public safety signs were damaged as a result of the Murphy Fire Complex: Wildhorse Zone and need to be replaced. These signs contained safety directions or information for the public in remote areas. Also, there will be 25 Hazard Warning signs developed for immediate installation on roads entering the burned area for the protection of life and property. These signs are necessary to inform the public of immediate danger posed by flash floods, falling rocks, and washouts.

B. Location/(Suitable) Sites: Various locations throughout the fire area to protect and inform the public. The Hazard warning signs will be installed at strategic locations on roads where hazards exist to public users. See Appendix IV, Watershed Treatments Map which identifies key areas of concern for sign locations.

C. Design/Construction Specifications:

- 1. Design and size will meet current FS sign shop specifications.
- 2. Depending on sign type, these signs will be fastened to metal or wood posts and buried at an appropriate depth.
- 3. FS will identify specific locations for each sign based on local knowledge and assessed needs.
- 4. The following wording will be used for the Hazard Warning signs.

Warning

Entering Burned Area.

Watch for Falling Rocks,

Flash Floods, and Washouts.

Turn Arounds May be Unavailable.

D. Purpose of Treatment Specifications (relate to damage/change caused by fire): To provide for public health and safety by providing safety directions as well as possible hazards found within the burned area.

E. Treatment consistent with Agency Land Management Plan (identify which plan): Humboldt Forest Land and Resource Management Plan.

F. Treatment Effectiveness Monitoring Proposed: Implementation Leader will verify installation and locations and monitor continued need for hazard signs.

LABOR, MATERIALS AND OTHER COST:

PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	
GS 12 step 5 to design, contract, and install 30 signs @ one half pay period (Based on 2008 scale with 35%	
Addition for benefits and 17% increase for Admin and oversight costs)	
TOTAL PERSONNEL SERVICE COST	\$1,988

EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years =

Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.

TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST

MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):							
Safety/Ha	zard Signs @ \$150.000/S	Sign X 30 Signs X 1 Year					
			TOT	AL MATER	RIALS AND S	UPPLY COST	\$4,500
TRAVEL	COST (Personnel or Equ	uipment @ Rate X Round T	Trips X #Fis	cal Years	= Cost/Item)	:	
Vehicle for	r implementation leader for	or 1 week @ \$200.00/week					
	•				TOTAL T	RAVEL COST	\$200
CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):							
					TOTAL CON	TRACT COST	\$6,688.00
FISCA PLANNED PLANNED WORK PLANNED							
L	INITIATION DATE	COMPLETION DATE	AGENT	UNITS	COST	ACCOMPLI	COST
YEAR	(M/D/YYYY)	(M/D/YYYY)	AGENT		0031	SHMENTS	0031
FY07	10/1/07	8/1/08		30	\$223.00	30	\$6,688
FY08							
FY08							
FY09							
						TOTAL	\$6,688

Work Agent: C=Coop Agreement, F=Force Account, G=Grantee, P=Permittees, S=Service Contract, T=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1.	Estimate obtained from 2-3 independent contractual sources.	
2.	Documented cost figures from similar project work obtained from local agency sources.	Р
3.	Estimate supported by cost guides from independent sources or other federal agencies	
4.	Estimates based upon government wage rates and material cost.	М
5.	No cost estimate required - cost charged to Fire Suppression Account	
-		

 $\textbf{P} = \text{Personnel Services}, \quad \textbf{E} = \text{Equipment} \quad \textbf{M} = \text{Materials/Supplies}, \quad \textbf{T} = \text{Travel}, \quad \textbf{C} = \text{Contract}, \quad \textbf{F} = \text{Suppression}$

RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS PLAN:

List Relevant Documentation and Cross-Reference Location within this BAER Plan. See Appendix I, Operations and Soil and Watershed Assessments. See Appendix IV, Watershed Treatment Map.

JURISDICTION	UNITS TREATED	COST
USDA Forest Service, Humboldt-Toiyabe National Forest	30	\$6,688
	TOTAL COST	\$6,688