BURNED-AREA REPORT

(Reference FSH 2509.13)

PART I - TYPE OF REQUEST

A. Type of Report

- [X] 1. Funding request for estimated emergency stabilization funds
- [] 2. Accomplishment Report
- [] 3. No Treatment Recommendation

B. Type of Action

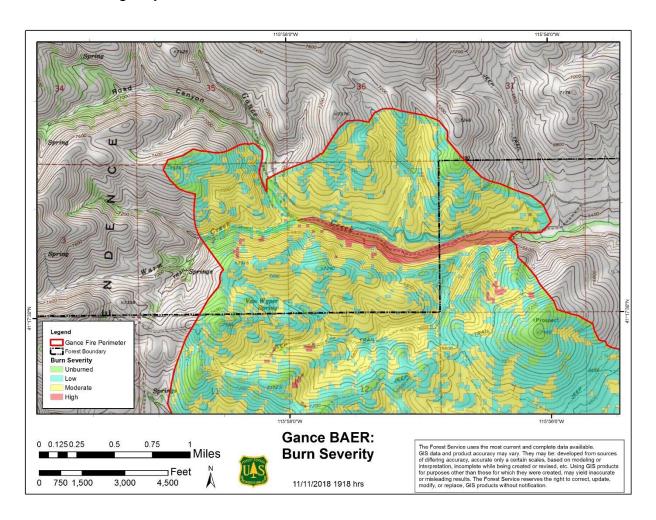
- [X] 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
- [] 2. Interim Report #____
 - [] Updating the initial funding request based on more accurate site data or design analysis
 - [] Status of accomplishments to date
- []3. Final Report (Following completion of work)



Figure 1 the riparian area burned with High Severity. The stream is in a gully to the left (where the unburned willow tops are visible)

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PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Gance B. Fire Number: NV-HTF-010358

C. State: NV D. County: Elko

E. Region<u>: 04</u> F. Forest<u>: 17</u>

G. District: RMJ H. Fire Incident Job Code: P4 L4HY (0417)

I. Date Fire Started: 9/3/2018

J. Date Fire Contained: 9/6/2018

K. Suppression Cost: 1,500,000

L. Fire Suppression Damages Repaired with Suppression Funds

- 1. Fireline waterbarred (miles): 0
- 2. Fireline seeded (miles): 0
- 3. Other (identify):
- M. Watershed Number: Forest only-160401020208 1011.47
- N. Total Acres Burned:____ NFS Acres(1011) Other Federal (3202) State (0) Private (1221)
- O. Vegetation Types: sage, pinyon juniper, riparian, grass
- P. Dominant Soils: Sumine, Bullump, Hapgood
- Q. Geologic Types: sedimentary to metasedimentary including shale, chert, quartzite, greenstone and limestone in 60% of the forest portion of the fire and silicic ash flow tuffs in the other 40%
- R. Miles of Stream Channels by Order or Class:

Stream Type	miles
Ephemeral	2.47
Intermittant	0
Perennial	1.69

S. Transportation System

Trails: 0 miles Roads: 3.06 miles

PART III - WATERSHED CONDITION

- A. Burn Severity (acres): on NFS 293.5 (low) 601 (moderate) 47 (high)
- B. Water-Repellent Soil (acres): 200

C. Soil Erosion Hazard Rating (acres): estimated based on slope and burn severity due to NRCS surveys not yet being completed in the fire area.

<u>50 (low)</u> <u>0</u> (moderate) <u>961</u> (high)

D. Erosion Potential: 3 tons/acre

E. Sediment Potential: <u>1800</u> cubic yards / square mile

PART IV - HYDROLOGIC DESIGN FACTORS

A. Estimated Vegetative Recovery Period, (years): 3-5

B. Design Chance of Success, (percent): <u>85</u>

C. Equivalent Design Recurrence Interval, (years): 5

D. Design Storm Duration, (hours): 1.52

E. Design Storm Magnitude, (inches): _______

F. Design Flow, (cubic feet / second/ square mile): 1505

G. Estimated Reduction in Infiltration, (percent): 20

H. Adjusted Design Flow, (cfs per square mile): 1805

PART V - SUMMARY OF ANALYSIS

A. Describe Critical Values/Resources and Threats:

Several critical calues were identified as being at risk. They include occupied Lahontan Cutthroat Habitat (LCT), a road that provides year round access to a communication site as well as a private inholding and the native plant community. The threats to these resources are discussed below in the table. Only those threats that had a high or very high rick level associated with them were brought forward for treatment proposals.

Based on the Risk assessment exihibit 2 in FSM 2500-2017-1 the following Value at risk table was developed.

Color Scheme Legend		
	Risk Level	
	Very High	
	High	
	Intermediate (Where Treatments Are	
	Recommended)	

Value At Risk	Value Life (L), Property, (P), Resources (R)	Probability of Damage or Loss	Magnitude of Consequences	Risk	Discussion
Occupied LCT habitat	R	Very Likely	Moderate	Very High	Gance Creek is an occupied self-sustaining population of threatened Lahontan Cutthroat trout (LCT). While Nevada Department of Wildlife (NDOW) has relocated the fish from the fire impacted reach the threat to the overall population viability remains Very High within the fire area due to the need to restock the fish as soon as possible back into the stream per the recovery plan. Additionally there are remaining fish in the unburned upper reaches of the drainage system that are going to wash and migrate down in spring flows to try and spawn in the burned reaches. The loss of one or more reproductive cycles in this system will markedly impact the stability of this population. Additional incision of these stream systems due to the loss of the willows that have been holding the system together will contribute to degraded habitat conditions and the loss of potential habitat due to increased fire caused run off and a flashier hydrograph due to the loss of attenuating vegetation on the hill slopes.

Value At Risk	Value Life (L), Property, (P), Resources (R)	Probability of Damage or Loss	Magnitude of Consequences	Risk	Discussion
Road	L, P, R	Likely	Moderate	High	The road is mildly degraded in its current condition but failure of even the smallest of crossing structures would result in the contribution of 40+ cubic yards of sediment to the LCT habitat. The failure of any of the stream crossings in the road or the ruts being allowed to go untreated would result in the road no longer being passible for private land owners to access their land, the communication site maintenance folks to access the active com site and would cause the range allotment to no longer be easily or timely accessed for monitoring or management action. The road is moderately used year round by recreationists due to the hot spring and hunting opportunities in the watershed. On multiple occasions campers were observed in the fire area, they could become trapped if one or more crossings failed in the road.
Native Plant Community	R	Likely	Moderate	High	There were multiple locations of known noxious weeds within the fire area. There are also unmapped populations detected during assessment in early October. Due to fire these populations could expand and greatly diminish the plant population which includes regionally sensitive species as well as soil productivity, sediment generation and hydrology of the site.

Value At Risk	Value Life (L), Property, (P), Resources (R)	Probability of Damage or Loss	Magnitude of Consequences	Risk	Discussion
Lewis' buckwheat	R	Unlikely	Low	Low	This species is on the ridge tops and the visited sites were unburned. This species is not listed under ESA but is a regionally and state sensitive species. Other than the weed concern noted above this species is not at risk due to the fire.

B. Emergency Treatment Objectives:

There are several objectives to the proposed treatments in this fire area they can be summerized as: Retain fisheries habitat integrity for the threatened Lahontan Cutthroat Trout (LCT), protect the road as an item of property as well as for the year round access that it provides, reduce the spread of weeds post fire through out the fire area. These will be accomplished by reducing the unacceptable risk of sediment being discharged from the road and the two high risk stream crossings and by increasing inset floodplain connectivity in the main channel in order to provide energy dissipation thereby preventing additional downcutting of the stream system. The road and access will be protected by properly sizing the culverts and providing preventative maintenance to the road to prevent the loss of the road and the associated sediment discharge into the downslope LCT habitat. Early Detection and Rapid Response weed surveys will be conducted to identify and provide for timely treatment to any new infestations as well as expansion of the known populations (normal weed treatments will also occur in the fire area to treat the known populations to further limit the potential for their expansion).

C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land NA % Channel 85 % Roads/Trails 90 % Protection/Safety 90 %

D. Probability of Treatment Success

	Years after Treatment		
	1 3 5		
Land	NA NA NA		

Channel	85	80	75/unk
			nown
Roads/Trails	90	90	90
Protection/Safety	90	90	90
·			

E. Cost of No-Action (Including Loss):

Risk	Repair Treatment	Cost(s)
The channel will incise further and	Traditional grade control type	\$1.5 million
abandon the inset floodplains that it	structures or building a new stream	Loss of at least two year classes
is currently developing. This would	channel on the floodplain and plug	of fish
cause degraded fisheries habitat	and pond the existing gully (one mile	
and reduced success of the	minimum)	
population in the stream as it		
repopulates from upstream.		
Road stream crossings could fail and	Repair road including gullying and	Repair road- \$6,000
cause the loss of the road needed for	replacing a subset of three	Repair crossings- \$60,000
access to the communication site as	crossings including replacing lost fill.	Loss of fisheries habitat-
well as contribute additional		unmeasurable. Including loss of
sediment to the stream		several nesting sites for at least
		one season.
Loss of desired plant community to	Multiple years of high intensity weed	\$29,562
invasise species (see dicsussion	treatments	
below)		
	Cost of no action	\$1,595,562

Placing a monitary value on the loss of 1,011 acres of high value sagegrouse habitat, the potential degredation of Lahontan cutthroat trout habitat in Gance Creek, as well the loss of valuable rangelands is difficult. If the proposed BAER treatment is not funded, it is expected that non-native invasive annual grasses and noxious weeds will spread through the burned area. The expected consequences include: diminishing the quality of both terrestrial and aquatic wildlife habitat and decreasing the value of forage production.

In order to estimate costs to treat infested NF lands affected by the Gance Fire through herbicide applications, without BAER funds, a series of calculations were performed. Without BAER funding, the regular weed program would likely not be able to focus adequate attention to the fire area because they cover over one million acres of NFS land on this District. This would allow invasive species time to spread into the fire area; in order to treat this larger infestation, it was determined that a weed crew would need to dedicate 12 days a year, for three years to reduce the invasive species populations in this size of an area back to pre-fire levels of 0.74 percent. The work would require multiple trips to the fire area, totaling 11 days of time, but up to 20 visits to survey, apply treatments, and monitor effectiveness. Mileage includes a UTV and a vehicle to travel to and from treatment areas. Round trip travel from the District office in Elko to the treatment area is 70 miles with an additional 30 miles of off road travel per day.

Line Item	Unit Cost	Total
Salaries two GS 4	\$135 per day x 2 x 12 days	\$3,240

	Total Cost x 3 years	\$29,562
	Total Cost	\$9,854
Supplies	\$300	\$300
Implementation team leader	\$410 per day x 1 day	\$410
Vehicle mileage	\$0.60 per mile x 1,100 miles	\$6,60
GIS/FACTS specialist	\$442.63 per day x 5 days	\$2,213
Salary one GS 9	\$241.85 per day x 5 days	\$1,209
District plant specialist	\$364.32 per day x 5 days	\$1,822

Unmeasurable items: soil productivity, forage production due to lost soil productivity for wildlife and livestock.

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

[X] Hydrology	[X] Soils	[] Geology	[X] Range
[] Forestry	[A] Wildlife	[] Fire Mgmt.	[X] Engineering
[] Contracting	[] Ecology	[] Botany	[] Archaeology
[A] Fisheries	[] Research	[] Landscape Are	ch [X]GIS
A-Adjunct- co	nsulted but not	ordered	

Team members included: Hydrology- Robin Wignall; Soils- Jim Hurja; Fisheries- Rachel van Horne and Carol Evans (retired BLM); Range/Native Plants- Cecily Fitch; GIS- Allison Bruner; Archeology- Chimalis Kuehn; Engineering- Anita Lusty

Team Leader: Robin J Wignall Email: rjwignall@fs.fed.us Phone: 775-778-6122

H. Treatment Narrative:

(Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates and species selection rationale.)

Land Treatments:

Early Detection Rapid Response (EDRR):

Treatment Objective: To detect, manage, and reduce unacceptable risk to native plant community regeneration post-fire by the spread of opportunistic, invasive weed species.

What: A two person weed crew to survey and monitor the burn area for the presence of invasive weeds along roads, trails, dozer lines, staging, riparian and rangeland areas; rapid response treatment with herbicide may be warranted. How: The work is to be completed by multiple trips to the fire area, totaling 11 days of time, but up to 20 visits to survey, apply treatments, and monitor effectiveness. Mileage includes a UTV and a vehicle to travel to and from treatment areas. Round trip travel from the District

office in Elko to the treatment area is 70 miles with an additional 30 miles of off road travel per day. The recommended supply budget would be shared with EDRR efforts on the Echo Fire.

Line Item	Unit Cost	Total
Salaries two GS 4	\$135 per day x 2 x 11 days	\$2,970
District plant specialist	\$364.32 per day x 5 days	\$1,822
Salary one GS 9	\$241.85 per day x 5 days	\$1,210
GIS/FACTS specialist	\$442.63 per day x 5 days	\$2,213
Vehicle mileage	\$0.60 per mile x 1,100 miles	\$660
Implementation team leader	\$410 per day x 1 day	\$410
Supplies	\$500	\$500
	Total Cost	\$9,785

Noxious weed and invasive annual grass species early detection surveys and monitoring, with the potential for rapid response herbicidal treatments, are necessary in year one post-fire for the entire forest service portion of the fire area. Treatment objectives are to reduce and manage unacceptable risk of invasive weed invasion and establishment with early detection and rapid response surveys and monitoring methods to avoid or minimize threats to the re-establishment of the native plant community.

EDRR will concentrate on determining if weed sites are expanding and determine if extra treatments, such as ground-based herbicidal application, are necessary. No effort will be made through EDRR to eradicate existing weed infestation areas, rather surveys will be conducted to determine if these sites are expanding and then the areas of expansion will be addressed. Normal annual treatments of the existing weed populations would occur in addition to the EDRR treatment. The data gathered from EDRR will be used to determine if and what treatment will be needed for the pre-existing populations.

Considered but not brought forward for implementation funding:

Treatments considered but not brought forward include seeding and mulching the slopes adjacent to the stream.

Seeding:

- A reseeding alternative in the uplands totaling 630 acres was considered but ultimately eliminated. This alternative was dismissed in consideration of the high costs of aerial reseeding, compared to the size of the area. It was determined that due to the extent of the burned area, the response to potential invasive species spread could be handled more effectively and economically through EDRR. Drill-seeding was also considered, however do to the slope class of the area ranging from 40-80% (Appendix B), and the rocky nature of the soils, the conclusion was reached that this alternative would be ineffective.
- A reseeding alternative in the riparian along Gance Creek totaling 73 acres was considered but ultimately eliminated. This alternative was eliminated due to the potential of the native plant community to re-establish naturally through willows in the channel of Gance Creek that were left unburned (Appendix F), and through seed source washing down from the unburned riparian upstream from the burned area.

 Aerial herbicide applications were considered as a component of the EDRR proposal, however there is not currently an EIS for this treatment on the Forest and consequently this alternative is not currently an option. An aerial herbicide application EIS would cost approximately \$ 500,000 to prepare, and would take a minimum of 6 months.

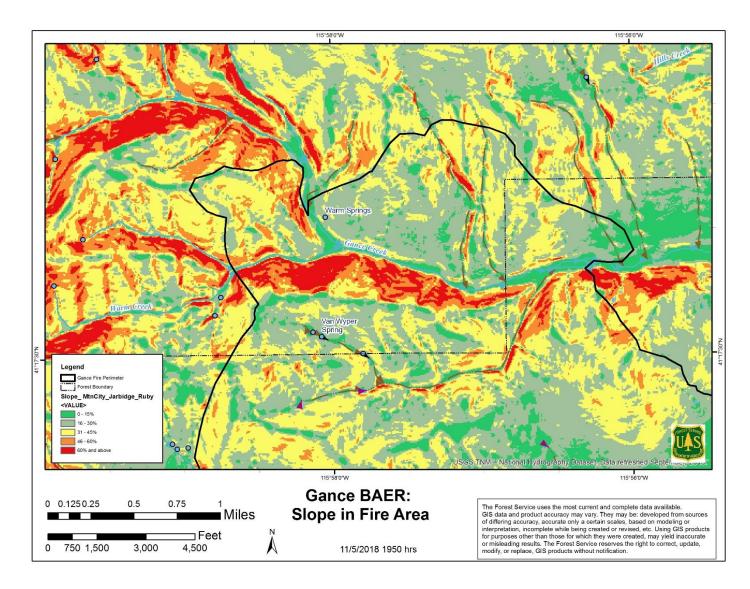
 Landscape scale ground based herbicide applications were considered as a component, unfortunatly as is evident in the slope maps there is not sufficient economically treatable area to make this an effective option.

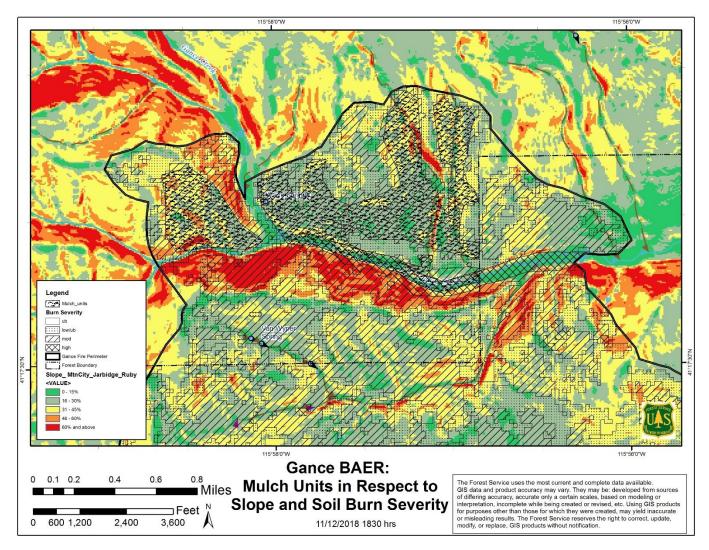
Mulch-

Straw Mulch was considered but based on observed wind speeds within the fire area was discarded due to low potential success rate. Also the hill side to the south of the channel is too steep for successful mulch application. This slope consitutes more than a third of the contributing watershed.

Wood strand mulch was considered, costing based on \$2000/acre price point (Bruggink personal communication) was done to determine least cost to mitigate the unacceptable risk; please see below table for costs. This alternative was carried forward to the point of a field tour with potential partners including the BLM and NDOW. It was determined that it would not be effective in preventing the potential incision of the stream reach through the fire. Additionally the prohibatively steep slopes on the south side of the stream would also limit acres where treatment could be applied.

Item	Unit Cost	Total Cost
Woodstrand Mulch Contract	\$2000/acre x 351 acres=	\$702,000





<u>No Action alternative:</u> this was considered for all of the fire area. It was determined that the risk of degredation to Lahontan cutthroat trout occupied habitat had significant enough consequences to require action.

Fire line seeding:

There are 3 miles of dozer line of FS land within the fire area due to suppression activities, and at two dozer length passes (13ft wide each) that totals 9 acres of dozer line. The local BLM office offered to seed these 3 miles along with the dozer line within their jurisdiction, however this offer was declined due to the seed mix being used by the BLM including non-native seeds that did not follow FS regulations. The p-code for this fire has already been closed, therefore it is proposed to buy seed to plant on the dozer line on FS land with species that meet regulations.

Seed Mix:

				Total	Granite	Granite	Granite	Great	Great	
	PLS	Bulk		lbs.	Seed Co.	Seed Co.	Seed Co.	Basin	Basin	Great
	lbs/	lbs./				Seed	Cost/acr	Seed	Seed	Basin
Species	Acre	Acre	Acres	needed	(estimat	Cost	е		Cost	Seed

					ed price/bu lk#)			(estimat e price/bu lk#)		cost/acre
Sandberg Bluegrass										
(Poa Secunda spp.										
Sandergii)vns	3.5	4.5	9	40.5	\$9.00	\$364.50	\$40.50	\$6.50	\$263.25	\$29.25
Western										
Wheatgrass										
(Pascopyrum										
smithii)	2	2.5	9	22.5	\$5.00	\$112.50	\$12.50	\$5.95	\$133.88	\$14.88
Bluebunch										
Wheatgrass										
(Pseudoroegneria										
spicata)	3	3.8	9	34.2	\$9.00	\$307.80	\$18.95	\$8.95	\$306.09	\$34.01
Bottlebrush										
Squirreltail										
(Elymus elymoides)	1.5	2	9	18	\$18.00	\$324.00	\$36.00	\$18.95	\$341.10	\$37.90
Total	10	12.8	9	115.2	N/A	\$1,110	\$107.95	N/A	\$1,044	\$116.04

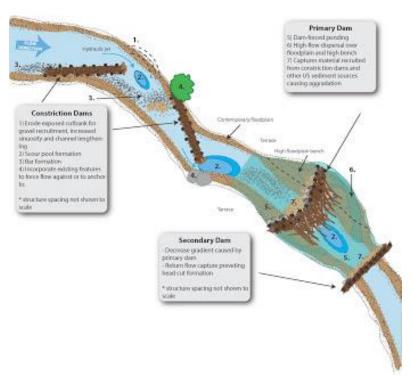
Cost:

Line Item	Unit Cost	Total
Seed mix	\$1,110	\$1,110
Implementation	(2) \$241.85 x 1 days	\$484
Vehicle mileage	\$.60 per mile x 250 miles	\$150
	Total Cost	\$1,744

Channel Treatments:

Post assisted structures (PAS) including Beaver Dam Analogs (BDA)

a. Treatment Objective: To provide baffling and connection to the inset flood plain though out the one mile length of the highly burned riparian area until the willows that were present have the opportunity to regrow and stabilize the stream banks. To prevent additional incision of the channel, pseudo beaver dams and post assisted structures are proposed to be placed on average every 100ft thorough out the reach for a total of 53 treatment points. There are beavers actively present above and below the treatment reach that could potentially adopt the structures for travel between the two population areas and provide further stabilization in the reach. LCT were observed in the beaver dam ponds above the burned reach as they provide protection from predation and cooler water temperatures.



The in-channel treatments would consist mainly (approximately 50%) of "primary dam" type structures interspersed with "secondary dams" and potentially "constriction dams" in order to widen those minor sub-reaches where there is not an inset flood plain and allow for the slowing of the flood flows through the runoff season.

b. Treatment Cost:

Line Item	Unit Cost	Total
Posts (1100) including delivery	\$6x1100=	\$ <mark>6,600</mark>
Implementation team (20 person crew)	\$11,000/day*7=	\$77,000
Volunteers and partner match	(\$11,000/day *7=)	(\$77,000)
Blue rooms	4*\$75/day*7 days=	\$ <mark>2,100</mark>
Hand wash station	1@\$60/day*7 days=	<mark>\$420</mark>
Team leader	450*10 days=	<mark>\$4500</mark>
Per diem	20ppl*(93+51)*7=	\$20,160 (if local hotshot crew is available then this is zero)
Supplies (saw gas, ice, incidentals)	3000	\$3,000
Mileage (2 crew buggies, chase rig, run about- 4 total)	\$.50*1000*4=	\$2,000
Pre-design survey	\$6,000	\$6,000 (same cost to use local or contract)
Design assistance	450*10days	<mark>\$4,500</mark>
	Total Cost	\$126,280 <mark>\$29,120</mark>

Considered but not brought forward for implementation funding:

Straw bale check dams in the tributary channels- as is evident in the above maps the two swales that are tributary to the stream reach of concern are at the lower end of the reach and the western one has a steep grade that limits the effectiveness of the straw bale treatment. Due to the limited area of benefiting reach this treatment was not carried forward.

Roads and Trail Treatments:

Treatment objective:

Gance Creek road FDR #56868 is a level 2 road that is 8.7 miles long, 14 feet wide, with ditches and a few rolling dips. 2.5 miles of this road is in the fire perimeter which begins at milepost 0.5 of the road. This road has not had regular maintenance and has a few mudholes, sections with ruts in the driving surface, and ditches that are filling in with sediment. Increased runoff from lack of vegetation from the uphill slopes threaten the existing drainage structures and will likely lead to road damage or major washouts. One of the cattle guards had wooden bases which were partially burned in the fire causing the structure to not meet safety standards. The road is used to access private inholdings, permittee allotments, fishing, hunting, communication site, and dispersed recreation areas. Trucks pulling horse trailers often use this road. Warm Creek and Gance Creek are downslope from Gance Creek road and would be affected by increased sedimentation or road washouts. The minimal treatment recommendation to protect the road and these important fisheries is as follows:

- Reshape the road to reestablish the crown, repair the existing rutting, and reestablish the ditches.
- Reshape existing rolling dips and lead out ditches.
- Clean out the basins of culverts of built up sediments and other debris. Repair damaged culvert inlets.
- Replace undersized culverts to handle increased flows.

Considered but not brought forward for implementation funding:

Outsloping the road was considered as a minimal treatment but the cost to reshape the road from a template with a crown and a ditch was prohibitive. Replacing all the culverts with an armored rolling dip was also unreasonable because of the transport cost for the volume of riprap needed to key in the wash area. The option of doing no treatment was discarded because of the potential for huge sediment loads into Warm Creek and Gance Creek from the existing road.

Treatment Costs:

Road Grading Costs

The road will be graded from the first cattleguard at milepost 0 (just west of the turnoff to the Saval ranch) to milepost 3.

	Cost		
	per	Number	Total
	day	of days	Cost
Motor grader	\$360	2	\$720
Operator	\$500	2	\$1000
Laborer	\$400	2	\$800
Service truck	\$100	2	\$200
Equipment transport			\$620

Total \$3340

Culvert installation and Cattleguard Cleaning Costs

24" culvert is \$25.50/lft plus \$45.50/band 36" culvert is \$34.25/lft plus \$68.50/band Cattleguard bases \$2620/set delivered

		Cost		
Labor	and	per	Number	Total
equipment		day	of days	Cost
Backhoe		\$182	1	\$182
Operator		\$500	1	\$500
Laborer		\$400	1	\$400
Service trud	ck	\$100	1	\$100
Equipment				
transport				\$57

Total \$1239

Road Treatments

Existing culverts that are too small to handle the predicted runoff from the burned area will be upsized according to the recommendation in the chart below. One cattleguard needs to be cleaned and one cattleguard needs cleaning plus new bases which were burnt. Properly functioning cattleguards are necessary to manage livestock and *serve as secondary drainage features*.

Gance Creek Road BAER Treatment								
Milepost	Treatment Recommendation	Material Costs	Labor and Equipment Costs	Total Cost				
	Blade and shape							
	14' wide road							
0 to 3.0	with ditches	\$0	\$3,340	\$3,340				
	Clean Cattle							
0	guard	\$0	\$1,239	\$1,239				
	Replace 18"							
	culvert with							
	24"diameter x							
0.9	22' long CMP	\$607	\$1,239	\$1,846				
	Replace 4"							
0.9	culvert with	\$811	\$1,239	\$2,050				

	24"diameter x 30' long CMP			
	Add 24"diameter	+		
1.1	x 24' long CMP	\$658	\$1,239	\$1,897
1.1	Replace 8"	2020	\$1,239	\$1,057
	culvert with			
	24"diameter x			
1.7	28' long CMP	\$760	\$1,239	\$1,999
1.7	Replace 18"	\$700	\$1,239	\$1,555
	culvert with			
	24"diameter x			
1.8	28' long CMP	\$760	\$1,239	\$1,999
1.0	Replace 24"	\$700	\$1,239	\$1,555
	culvert with			
	36"diameter x			
2	36' long CMP	\$1,302	\$1,239	\$2,541
2	Replace cattle	71,302	71,233	72,541
	guard bases and			
2.2	clean	\$2,620	\$1,239	\$3,859
2.2	Replace 12"	72,020	71,233	75,655
	culvert with			
	24"diameter x			
2.3	26' long CMP	\$709	\$1,239	\$1,948
2.5	Replace 18"	7703	71,233	71,540
	culvert with			
	36"diameter x			
2.6	28' long CMP	\$1,028	\$1,239	\$2,267
2.0	Replace 18"	71,020	Ψ1,233	72,207
	culvert with			
	24"diameter x			
2.7	20' long CMP	\$561	\$1,239	\$1,800
	- 13118 21111	7	τ -,	7-,-50
	Total Treatment			
	Cost			\$26,781

Protection/Safety Treatments:

Culvert end marking carsonites to aid in finding the culvert ends if they become burried and to provide a visual indicator of roadside safety risks presented by the culverts and the fill slopes. **\$500**

I. Monitoring Narrative:

(Describe the monitoring needs, what treatments will be monitored, how they will be monitored, and when monitoring will occur. A detailed monitoring plan must be submitted as a separate document to the Regional BAER coordinator.)

The forest proposes to monitor the inchannel treatment in order to determine if they are effective at protecting the channel post fire.

Part VI – Emergency Stabilization Treatments and Source of Funds Interim #

			NFS Lands				Other Lands			All	
		Unit	# of		Other		# of	Fed		Non Fed	Total
Line Items	Units	Cost	Units	BAER \$	\$		units	\$	Units	\$	\$
A. Land Treatments											
EDRR	each	9785	1	\$9,785	\$0			\$0		\$0	\$9,785
Fire Line seeding	each	1744	1	\$1,744	\$0			\$0		\$0	\$1,744
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Land Treatments				\$11,529	\$ 0			\$0		\$0	\$11,529
B. Channel Treatmen	ts										
PAS&BDA	each	#####	1	\$29,120	\$0			\$0		\$0	\$29,120
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Channel Treat.				\$29,120	\$ 0			\$0		\$0	\$29,120
C. Road and Trails				-						•	
road package	each	26781	1	\$26,781	\$0			\$0		\$0	\$26,781
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Road & Trails				\$26,781	\$ 0			\$0		\$0	\$26,781
D. Protection/Safety											
culvert end markers	each	500	1	\$500	\$0			\$0		\$0	\$500
				\$0	\$0			\$0		\$0	\$0
				\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Structures				\$500	\$ 0			\$0		\$0	\$500
E. BAER Evaluation											
								\$0		\$0	\$0
Insert new items above this line!					\$0			\$0		\$0	\$0
Subtotal Evaluation					\$0			\$0		\$0	\$0
F. Monitoring											·
	each	36,458	0	\$0	\$0			\$0		\$0	\$0
Insert new items above this line!				\$0	\$0			\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0			\$0		\$0	\$0
G. Totals				\$67,930	\$0			\$0		\$0	\$67,930
Previously approved											
Total for this request				\$67,930			_				

PART VII - APPROVALS

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	Forest Supervisor (signature)	Date
2.	/s/ David Rosenkrance(for)	12/3/2018
	Regional Forester (signature)	 Date