Oct 15, 2021:

BURNED-AREA REPORT

Figure 1. This image for the Route Fire shows the Interstate 5 at top of slope, and mainly light burns with coast live oak understory burn in right background. The unnamed drainage flows into Big Oak Flat creek which is a tributary of Canton Creek. Canton Creek flows into Piru Creek right above the Piru Reservoir. (Photo courtesy of Ray Kidd, Acting DR)

Introduction/Background

The Route Fire started on Sep 11, 2021 off of Templin Hightway, initially on the west side of Hwy 5. It spread to the east side of Hwy 5 on Sep 11, closing Hwy 5 for about 4 hrs in both directions Sat evening and injuring two firefighters during this initial spread. After an initial containment on Sep 17 (Fig 2), there was a flareup occurring the following two days which necessitated more suppression actions. The total area of the fire was estimated at 455 GIS acres, and including the CalTrans ROW along Hwy 5, the entire area was about 462 acres. Dozer line of 5.7 miles reinforced an existing fuelbreak across the ridge of three drainages: Oak Flats, Ruby Canyon, and Fish Creek and ended above Piru Creek. The dozer line was mainly placed in the Developed Area Interface and skirted the Sespe Wilderness. Majority of the containment was with handlines (Fig 2 placed at end of report.) There were two spotfires outside of the main body of the fire.

About six miles from the Route Fire, the Emigrant Fire started as a tractor-trailer fire off of the Vista Del Lago offramp on Sep 21. From the off-ramp, the flames spread up the slope. As in the Route Fire, I5 traffic was halted. Aerial attack and cooperative agencies along with FS were able to halt forward progression within two days at 255 acres, although full containment was not declared until Sep 27.

Because the Route Fire and Emigrant Fire have similar issues next to I5 on FS lands, they are being considered together in this BAER assessment.

PART I - TYPE OF REQUEST

A. Type of Report

☒ 1. Funding request for estimated emergency stabilization funds
☐ 2. No Treatment Recommendation

B. Type of Action

☒ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)

☐ 2. Interim Request #___
☐ Updating the initial funding request based on more accurate site data or design analysis

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Route Fire and Emigrant Fire (Route Complex)

B. Fire Number: CA-ANF-003438 Route Emigrant Fire, ANF-3521-N92N

C. State: CA

D. County: Los Angeles

E. Region: 05 Pacific Southwest

F. Forest: Angeles NF

G. District: Los Angeles Gateway

H. Fire Incident Job Code: Route Fire, P5N9T4 Emigrant Fire, P5N92N

I. Date Fire Started: Sep 11, 2021 for Route

J. Date Fire Contained: Changed to Sep 20 because of flareup for Route Fire; Emigrant Fire contained on Sep 27, 2021 .

K. Suppression Cost:

L. Fire Suppression Damages Repaired with Suppression Funds (estimates):

1. **Route Fireline repaired (miles): Route Fire** 5.27 miles total;
2. **Other (identify): Route Fire** Handline, nearly 4 miles.
3. **Emigrant Fireline repaired** (miles): 2.7 miles
4. **Emigrant Other**: Handline, 2.0 miles

M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC #	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
180701020603	Reach 11-Lake Piru-Piru Creek, (Big Oak Flat into Canton Canyon subwatersheds)	34,249	465	1.4%
180701020602	Reach 11- Fish Creek-Piru Creek (Piru Creek Agua Blanca Creek to Pyramid Lake)		0 (Dozer line)	0%
180701020509	Liebre Gulch-Piru Creek	14,142	255	1.8%

N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership for Route Fire. Fig 2 for land ownership.

OWNERSHIP	ACRES
NFS	439
OTHER FEDERAL (LIST AGENCY AND ACRES)	0
STATE	5.9 ROW
PRIVATE	~34
TOTAL	471 (with CalTrans ROW)
EMIGRANT FIRE	Fig 3 for land ownership.

EMIGRANT FIRE Fig 3 for land ownership

OWNERSHIP	ACRES
NFS	254.5
OTHER FEDERAL (LIST AGENCY AND ACRES)	0
STATE	0.5
PRIVATE	
TOTAL	255

O. Vegetation Types:

ROUTE FIRE -Northern mixed chaparral with some oak overstory; About 29 acres are urban; And shrub densities differ with over 161 acres with shrubland cover greater than 45%. (Fig);

EMIGRANT FIRE Predominately lower montane mixed chaparral with scrub oak with ~5 acres of ruderal vegetation at base of fire.

P. Dominant Soils: Trigo – Caleguas Families – Calcixerollic Xerochrepts

Q. Geologic Types: XXX

R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	ROUTE FIRE MILES OF STREAM
PERENNIAL	
INTERMITTENT	
EPHEMERAL	~3 miles at top of subwatershed burned
OTHER (DEFINE)	

Emigrant Fire did not have stream channels that will be affected.

S. Transportation System:

Trails: *National Forest (miles):* *Other (miles):*
Roads: *National Forest (miles):* 6N53, 6N43,
Other (miles): State = Interstate 5 and Templin Hwy (Hwy 99)

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unburned						
Low						
Moderate						
High						
Total						

B. Water-Repellent Soil (acres):

C. Soil Erosion Hazard Rating: XX

D. Erosion Potential: XX

E. Sediment Potential: XX

F. Estimated Vegetative Recovery Period (years): 30-40 yrs, based on fire history and current state of vegetation

G. Estimated Hydrologic Response (brief description): XXX

PART V - SUMMARY OF ANALYSIS

The Route Fire area had little recent fire history, and recent fires were mainly along the south and east edges o (Fig 4). The previous fire footprints still are evident with vegetation differences, most notably within the 2007 Ranch Fire footprint. There have been other fuel reduction projects within this area which changed vegetation density as well as aiding suppression efforts during the Route Fire.

Because much of this area has not burned in the last 20 years, there are mainly three values-at-risk from this fire: 1. The spread of invasive weeds from the CalTrans ROW along Interstate 5 and the seed bank in ground onto the newly exposed, burned areas. 2. The reveal of microtrash attracting condors. 3. Because both fires are accessible, the threat of OHV trespass affecting soil productivity and hindering natural resource recovery is high.

A. Describe Critical Values/Resources and Threats (narrative):

Table 5: Critical Value Matrix

Probability of Damage or Loss	**Magnitude of Consequences**		
	Major	Moderate	Minor
	RISK		
Very Likely	**Very High**	**Very High**	**Low**
Likely	**Very High**	**High**	**Low**
Possible	**High**	**Intermediate**	**Low**
Unlikely	**Intermediate**	**Low**	**Very Low**

1. **Human Life and Safety (HLS):** XXX
2. **Property (P): A.** Road: 6N38 Townsend Peak Road is gated at bottom of the road, and has been unstable since the Ranch Fire.
   b. 6N53A & B accesses a communication site, and had boulders placed on it.
   c. 6N43 and Ridge Road have sections on steep inclines.

   However, most of the road segments are near the top of the slopes and will not have much ravel or slump onto it.

   B. Private Property – Paradise Ranch is a film production ranch. They have parcels which abuts Hwy 99 (Templin Highway). The dozer line ends at Paradise Ranch boundary. (Fig 2.)

3. **Natural Resources (NR):** Wildlife Resources

   Threatened/Endangered Species: There are two federally listed species within and downstream of the fire area: California condor and arroyo toad. In addition, arroyo toad Designated Critical Habitat occurs downstream of the fire area.

Endangered Species - California Condor: The 2014 data shows stopovers and one roost within the fire footprint (Fig 4a&b). There were also roost trees or rock outcrops along the dozer line (Fig 4c, clusters of green GPS points). Although the GPS data is from 2014, our partner, HabitatWorks, have removed microtrash for several years along the same roads and Whitaker Peak area. They noted that condors were regularly sighted overhead in their 2020 final report. There is also a former nest site near Agua Blanca Creek, a tributary of Piru Creek.

When vegetation is burned, the cover that might have kept debris, lead shot, and microtrash concealed is removed. If a condor visits the area, there is potential for it to consume this microtrash. Microtrash consumption, especially of lead, can lead to injury or death.

Since fire recovery funds were obtained in 2014, Habitat Works, has removed shooting area microtrash at the Y of 6N53B as well as other sites within the Ranch Fire. They removed 79 lbs in 2018 and 39 lbs in 2019 in areas 10' from the road. They noted that as areas get exposed, there are more microtrash that is revealed. With this fire, more areas have become exposed in which the target practice could have left lead-laden microtrash. Also, the communication site nearby generates electronic pieces that gets blown into the vegetation.

Risk Assessment for California condor:
Probability: **Very high** because of previous condor activity and documented lead and microtrash in this area.
Magnitude: **Major** because just a minute amount of lead causes death in condors. Microtrash can lead to death or injury of condors, especially if fed to young.

Risk: **Very High**. *A treatment to address unauthorized target shooting and microtrash is recommended for the California condor.*

Endangered Species – Arroyo toad: Although there are only ephemeral streams downslope of the fire and dozer lines, these water courses are the headwaters to occupied and Designated Critical Habitat for the arroyo toad. Sedimentation of ash could cause a change in pH in waters. However, the occupied areas are many miles downstream.
Probability: **Possible**.
Magnitude: **Minor**
Risk: **Low** because the occupancy in Canton Canyon is intermittent; debris flow and sedimentation would be attenuated over the stream-miles, and the adult arroyo toads are likely to be buried or out of the main floodplain during a large flooding event.

B. Botanical Resources/Native Plant Recovery/Ecosystem Recovery
An emergency exists with respect to vegetative recovery as a result of the threat of post-fire weed introduction and spread and OHV trespass. From the HabitatWorks 2020 Final Report, they noted that there were infestations of noxious weeds along the access into the Route Fire on 6N38 and along 6N38b. Also, mowing and vegetative work at the Whitaker Peak communication site will spread seeds onto the recently burned area. There is a high probability that extant weed infestations along constructed fire lines will increase in the burn area due to mechanical soil disturbance and their release from competition with native plant species. For the Emigrant fire, there was ruderal vegetation at the origin point along the road near the Vista del Lago exit. With the easy access, OHV trespass through the ruderal vegetation will likely disperse the seeds into the burned area.

Vegetation Recovery in Burned Area
Probability: Very Likely due to the change in watershed response causing sheet and rill erosion of topsoil. There is also a potential for unauthorized off-highway vehicle use within the burn area and dozer lines that will be highly detrimental to vegetation recovery and encourage noxious weed invasion in native habitats
Magnitude: Major due to the high potential for vegetation type conversion to non-native annual grasslands across the burn area, most especially along dozer lines and exposed areas to heat.
Risk Level: Very High. *Several treatments are proposed to address the ecosystem/native plant recovery critical value. An early detection/rapid response treatment is proposed for the non-native invasive plants. A forest closure and closure patrols are proposed to limit the potential for OHV incursions.*

Vegetation Recovery on Suppression Features
No equipment washing occurred during fire suppression operations and equipment intersected known invasive plant populations near the forest boundary. For the Route Fire, our partner HabitatWorks had worked on the known invasive populations, but in 2020, they noted that certain patches of priority invasive weeds had reappeared. These were the same areas wich the dozers worked in.

4. **Cultural and Heritage Resources:** No risks noted within the footprint of either fire.

C. Emergency Treatment Objectives:

- Early detection and rapid response of nonnative invasive plants
- Prevention of condor mortality
- Prevention of resource damage due to OHV and hiker trespass

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

Land: NA for treatments prior to damaging storm events for EDRR and for microtrash removal should be prior to breeding season for condors.
Channel: none proposed

Roads/Trails: None proposed
Protection/Safety: NA

D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	85	95	100
Channel			
Roads/Trails			
Protection/Safety			

E. Cost of No-Action (Including Loss): Loss of habitat of native chaparral and understory for Oak woodland if EDRR is not implemented; Risk of condor mortality because small amounts of lead cause mortality in adults, and shiny objects fed to young affect nestlings.

F. Cost of Selected Alternative (Including Loss):

G. Skills Represented on Burned-Area Survey Team:

☐ Soils ☐ Hydrology ☐ Engineering ☐ GIS ☒ Archaeology (email)

☒ Weeds ☒ Recreation ☐ Fisheries ☒ Wildlife

☐ Other:

Team Leader: Jamie Uyehara
Email: julie.uyehara@usda.gov **Phone(s)** 626-372-6107

Forest BAER Coordinator: Jamie Uyehara
Email: julie.uyehara@usda.gov **Phone(s):**626-372-6107

Team Members:*Table 7: BAER Team Members by Skill*

Skill	Team Member Name
Team Lead(s)	Jamie Uyehara
Soils	
Hydrology	
Engineering	
GIS	Jamie Uyehara (that's why it's so unprofessional!)
Archaeology	Contacted Thalia Ryder
Weeds	Contacted Janet Nickerman/Vilius Zukauskas
Recreation	Ray Kidd, Acting DR and AA, Recreation Mgr
Wildlife	Jamie Uyehara, Contacted Leslie Welch

H. Treatment Narrative:

Land Treatments:
Early Detection, Rapid Response – Related to Suppresion Activities (*Route and Emigrant Fires combined*
EDRR – Suppression In the Route Fire, there were 5.7 miles of dozer lines along 6N53 and 6N53b road up to Whitaker Peak Communication site and to the overlook of Paradise Ranch. The access road had weeds that had come back since 2019. Handlines of 4 miles need to be checked.
In the Emigrant Fire, there was 2.7 miles of dozer lines and 2.0 miles of handline connecting between dozer line segments.
Because HabitatWorks has been weeding in the Route Fire area, they can do a quick check 3x in spring 2022. The Emigrant Fire is located ~6 miles away on I5 from the Route Fire, so Habitat Works

can do quick checks on the same day. Forest Service personnel are only needed to modify agreement and one inspection.

Proposed Treatment Areas	
Dozer lines	8.4 miles
Handlines	6 miles

Land Treatment #1: Early Detection, Rapid Response – Related to Suppression for both Route and Emigrant Fire				
Item	**Unit**	**Unit Cost**	**# of Units**	**Cost**
Invasive Plant Detection & Treatment				
One administrative and volunteer lead	day	$400	6	$1200
Volunteers ($28.54/hr value)	day	0	12	0
Travel mileage, 2 cars	Mile	0.55	200	$118
Administration, Travel, and Materials				
1 GS-9/11 POC Agreements	Days	$500	1	$500
1 MobilizeGreen Intern, Botanist	Days	0	6	
Vehicle Mileage	Miles	$0.58	200	$116
Supplies, including herbicide	Each	$250	1	$250
Total Cost				**$2184**

Early Detection, Rapid Response – Related to Burned Area (*Route and Emigrant Fires combined)*

Along 6N53 and 6N53B within the Route Fire, HabitatWorks has noted they had cleared and treated 10' to either side.

Proposed Treatment Areas
Route Fire --Polygons of areas next to HabitatWorks agreement for Highway Fire (Figs 4a & 4b) Emigrant Fire --Upslope of area at start of fire on Vista Del Lago exit off-ramp to ensure no dispersal via OHV trespass;

In the Emigrant fire, there was ruderal vegetation of 5 acres at the access point, so about 3 miles of dozer lines and handlines need to be surveyed.

EDRR-BAER The Completion of surveys and treatment in the black is the area next to another area which HabitatWorks is already working for restoration post-Highway Fire (Fig 4a & 4b). We request funds so that they can expand their weeding into the Route Fire for this initial year.

Land Treatment #1: Early Detection, Rapid Response – Related to Burn Area				
Item	**Unit**	**Unit Cost**	**# of Units**	**Cost**
Invasive Plant Detection & Treatment				
One administrative and volunteer lead	day	$400	10	$4000
Volunteer effort ($28.54/hr value)	day	0	50	
Travel mileage, 4 cars	mile	0.55	2800	$660
Supplies	season	$1000	1	
Administration, Travel, and Materials				
1 GS-9/11 POC Agreements	Days		1	$400
1 MobilizeGreen Intern, Botanist	Days	0	6	
Vehicle Mileage	Miles	$0.58	200	$116
Supplies, including herbicide	Each	$250	1	$250

Total Cost	**$5,426**

Surveying will include walking the lines, documenting and hand pulling/herbiciding new weed occurrences at the time of inspection. All locations of weed species will be mapped, using the Angeles NF, "Invasive Weeds" list. All invasive weeds with seed or flowers that are handpulled will be bagged in heavy, contractor grade trash bags and disposed of into dumpsters at Oak Flat Campground. Herbicide will be used in compliance with the Forest Wide NEPA project. New weed occurrences will be pulled to root depth, placed in sealed plastic bags, and properly disposed or sprayed with the appropriate and approved herbicide. Because HabitatWorks has been weeding in this site and following this protocol, we have the expectation that they will be able to reduce the spread into these sites.

Channel Treatments: None proposed.

Roads and Trail Treatments: There are no new road treatments proposed as a result of this fire. We have installed gates at Templin Highway in response to the Ranch Fire. Although the road is badly undermined, that is a result of postfire erosion after the Ranch Fire, and not this fire.

Protection/Safety Treatments:

CONDOR Protection:
Within the Route Fire are two sites which were heavily used for recreational shooting and other sites were frequented by condors as roost sites (figs 4). Condors are extremely susceptible to lead poisoning so cleaning up the two sites are a priority. HabitatWorks has been diligently cleaning the microtrash that has been exposed with rain, wind or other earth movements. In their 2020 Final Report, they note that there just seems to be layers that get exposed by wind, and this was when there was no exposed soils from fires. During suppression repair, fire personnel hauled out large trash items. We request funds for HabitatWorks to continue the work because inevitably, there will be more exposure within the exposed soils and the microtrash of soda tabs, broken glass, and lead fragments require many eyes and scrutiny.

In the Emigrant fire, a scouting visit and cleanup of five days is proposed. Especially at the Vista del Lago exit are warranted because condors have been noted stopping at that site on the off-ramp. (Fig 4D).
In order to clean up 40 acres of the Highway Fire, HabitatWorks contributed 200 hrs of volunteer labor for the investment of 50 hrs of manager oversight and 2000 miles reimbursal of mileage. For the Emigrant Fire, a comparable amount of cleanup is needed.

Land Treatment: Condor protection through partnership				
Item	**Unit**	**Unit Cost**	**# of Units**	**Cost**
One administrative and volunteer lead	day	$400	10	$4,000
Volunteer effort ($28.54/hr value)	day	0	50	
Travel mileage, 4 cars	mile	0.58	2000	$1,160
Supplies	season	$1000	1	$1,000
Administration, Travel, and Materials				
1 GS-9/11 POC Agreements	Days		1	$400
Vehicle Mileage	Miles	$0.58	200	$116
Total Cost				**$6,676**

1) Unauthorized OHV Barriers and Closure Patrols

Unauthorized OHV access is a threat to the burned watershed due to the open terrain created next to easily accessible roads and the visibility of these sites from Interstate 5. Therefore, we are asking for OHV patrols, and t-posts/wire at selected pinch points to be put in when warranted. In the recent Lake Fire, the light T-post and wire barriers were effective whenever the T-posts ended in the shrubs. This might work also with the rock outcrops, boulders already in place on the roads in Route Fire, and tying into shrub areas which have not burned or trunks of trees. The Emigrant fire area needs fencing to line of sight that was not burned.

OHV Barriers				
Item	**Unit**	**Unit Cost**	**# of Units**	**Cost**
GS-11 Recreation Officer	Days	$425	2	$850
Labor oversight 1 GS-07 Rec Tech	Days	225	3	$675
T-post and wire fencing	Each	$450	5	$2,250
Volunteers, Value of $28.54/hr				
Vehicle gas mileage	Miles	$0.58	600	$348
Total Cost				**$4,123**

I. Monitoring Narrative:

Microtrash removal will be documented via annual reports with a partner; EDRR will also be monitored by inputing data into the AGOL TESP-IS database.

PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

ROUTE FIRE

A. Land Treatments										
EDRR suppresion related	hr	1	1	$1,092			$0		$0	$1,092
2 volunteers/day with herbicide (3 days each fire)	day		3		$685					
EDRR -BAER related Invasive weed removal	hr	25	40	$2,713						$2,250
Volunteers (hand pulling), 5/day	day		5		$5,708					
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$3,805	$6,393		$0		$0	$3,342
B. Channel Treatments										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treatments				$0	$0		$0		$0	$0
C. Road and Trails										
					$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Road and Trails				$0	$0		$0		$0	$0
D. Protection/Safety										
OHV trespass and fencing installation	1			$2,062	$0		$0		$0	$2,062
Microtrash Removal by volunteers	season		1	$3,338			$0		$0	$3,338
Volunteers contributions	days		50		$5,708		$0		$0	$5,708
Insert new items above this line!				$0	$0		$0		$0	$0
Subtotal Protection/Safety				$5,400	$5,708		$0		$0	$11,108
E. BAER Evaluation										
Initial Assessment	Report	$3,000		---	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert new items above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$0	$0		$0		$0	$0
F. Monitoring										
				$0	$0		$0		$0	$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				$9,205	$12,101		**$0**		**$0**	**$14,450**
Previously approved										
Total for this request				**$9,205**						

Emigrant Fire

A. Land Treatments										
EDRR suppresion related	hr	1	1	$1,092			$0		$0	$1,092
2 volunteers/day with herbicide (3 days each fire)	day		3		$685					
EDRR -BAER related Invasive weed removal	hr	25	40	$2,713						$2,250
Volunteers (hand pulling), 5/day	day		5		$5,708					
Insert newitems above this line!				$0	$0		$0		$0	$0
Subtotal Land Treatments				$3,805	$6,393		$0		$0	$3,342
B. Channel Treatments										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert newitems above this line!				$0	$0		$0		$0	$0
Subtotal Channel Treatments				$0	$0		$0		$0	$0
C. Road and Trails										
					$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert newitems above this line!				$0	$0		$0		$0	$0
Subtotal Road and Trails				$0	$0		$0		$0	$0
D. Protection/Safety										
OHV trespass and fencing installation	1			$2,062	$0		$0		$0	$2,062
Microtrash Removal by volunteers	season		1	$3,338			$0		$0	$3,338
Volunteers contributions	days		50		$5,708		$0		$0	$5,708
Insert newitems above this line!				$0	$0		$0		$0	$0
Subtotal Protection/Safety				$5,400	$5,708		$0		$0	$11,108
E. BAER Evaluation										
Initial Assessment	Report	$3,000		---	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert newitems above this line!				---	$0		$0		$0	$0
Subtotal Evaluation				$0	$0		$0		$0	$0
F. Monitoring										
				$0	$0		$0		$0	$0
				$0	$0		$0		$0	$0
Insert newitems above this line!				$0	$0		$0		$0	$0
Subtotal Monitoring				$0	$0		$0		$0	$0
G. Totals				$9,205	$12,101		**$0**		**$0**	**$14,450**
Previously approved										
Total for this request				**$9,205**						

PART VI – EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

PART VII – APPROVAL [of REQUEST]

Admin Unit(s): JEROME PEREZ Digitally signed by JEROME PEREZ Date: 2021.11.02 12:47:01 -07'00'

Forest Supervisor (Angeles National Forest) Date

Figures

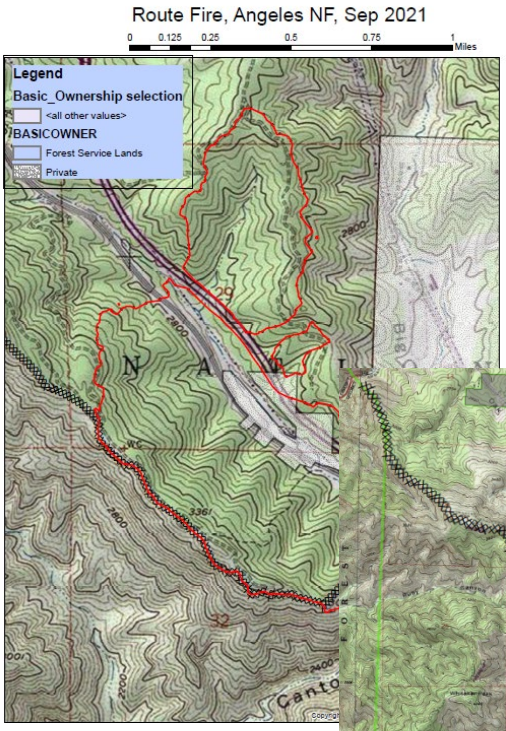


Figure 1. 1st page

Figure 2. FS Lands and Private Lands in Route Fire

2a. Most of the Route Fire was on NFS lands. The Route Fire had a disjunct pattern of burning with three polygons, likely due to the lack of fuel loads in areas with active weeding and other restoration activities in area of Highway Fire.
2b. Over 5 miles of dozer line was put in across the ridge of HUC12 boundaries.

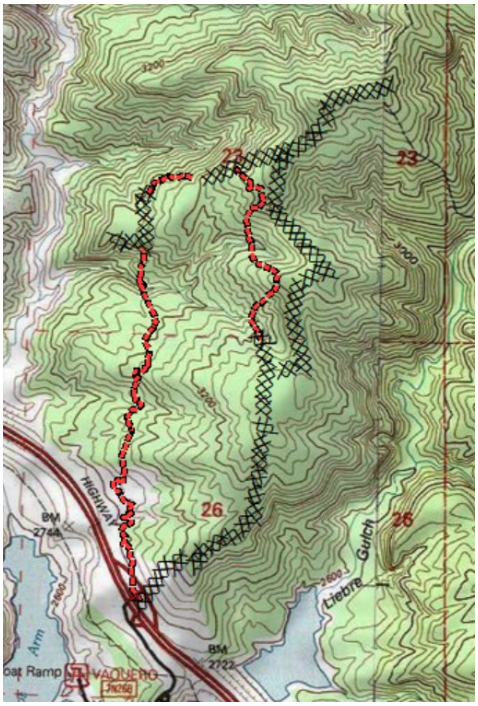
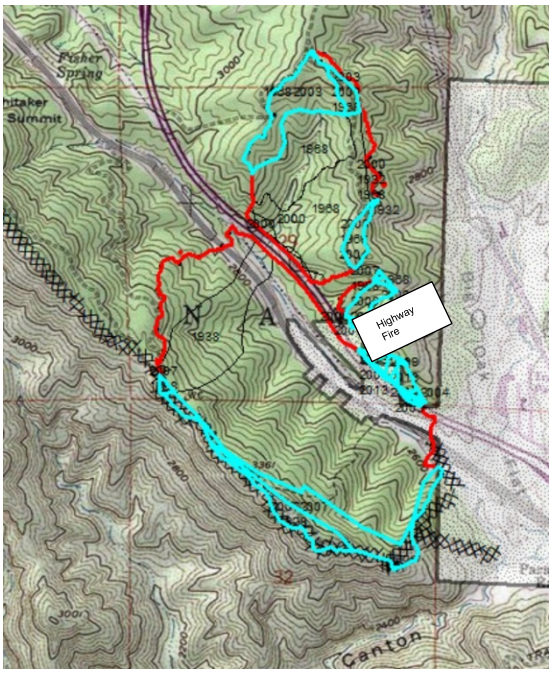
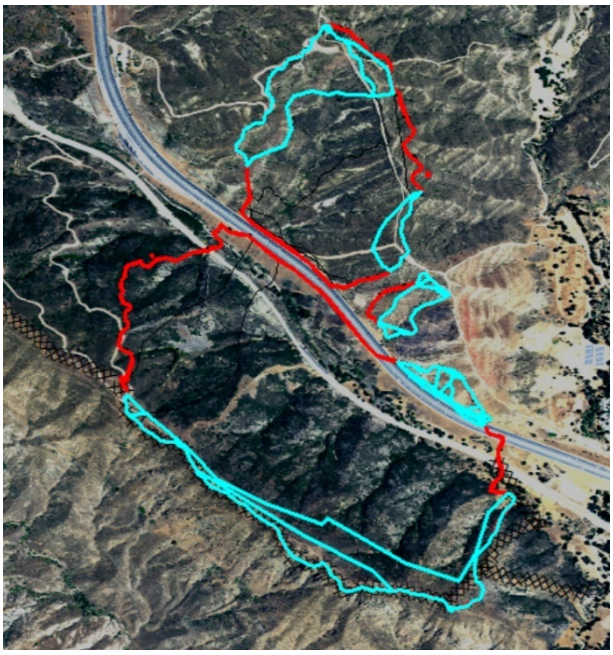


Fig 3. EMIGRANT FIRE

All 255 acres of the Emigrant Fire are on FS lands, except there is likely a CalTrans Right-Of-Way at the exit of Vista del Lago.

Vegetation types are scrub oak chaparral or lower montane chaparral, with 5 acres of ruderal vegetation at the exit off-ramp where the tractor trailer caught fire.





Route Fire burned in an area with few fires within the last 20 years. The Route Fire is outlined in red, and the previous fires within the Route Fire footprint are outline in blue. And, the vegetation shows subtle differences with aspect.
The vegetation is sparser and less dense in the areas still recovering from the previous fires.
The southern edge of the Route Fire was burned in the Ranch Fire (2007) and the effects of the Ranch Fire are still reflected in the sparse vegetation and difference in color of the vegetation in the southwest corner of the image.
On the northeastern side of I5, the 2013 Highway Fire burned between and overlapping with the two easternmost polygons. With the restoration activities occurring there now, there is not enough fuel load to sustain flames which explains why there is a disjunct pattern of fires. (Highway Fire 'box' is approximate)

We have invested in a partner, HabitatWorks, who has been cleaning the microtrash, removing invasive weeds, and replanting within the Ranch for $216,044 for the past 5 yrs. In 2015, they removed 144 50-gallon trash bags of noxious weeds, and continued to maintain the area until the access road was not safe to drive. In 2018, with 18 volunteer events, they removed 79 lbs of microtrash along 6N53, extending 10' from roadside edge. In 2020, we have a new agreement investing $24,105 for invasive weed removal and seeding within the 40-acres of FS lands within the Highway Fire. With the Route and the Emigrant Fires, we are requesting funds for them to maintain that area, clear any new microtrash/lead that has been exposed, and reseed. (Imagery is from 2018.)

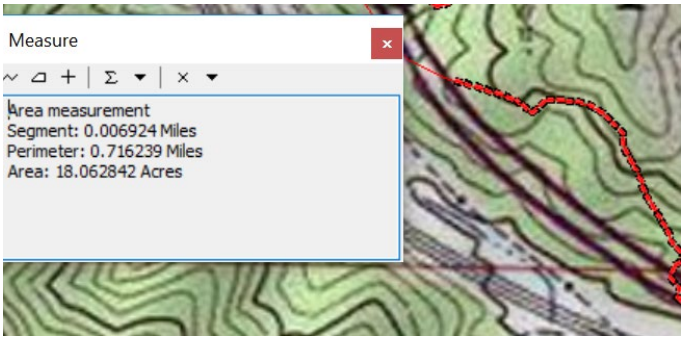
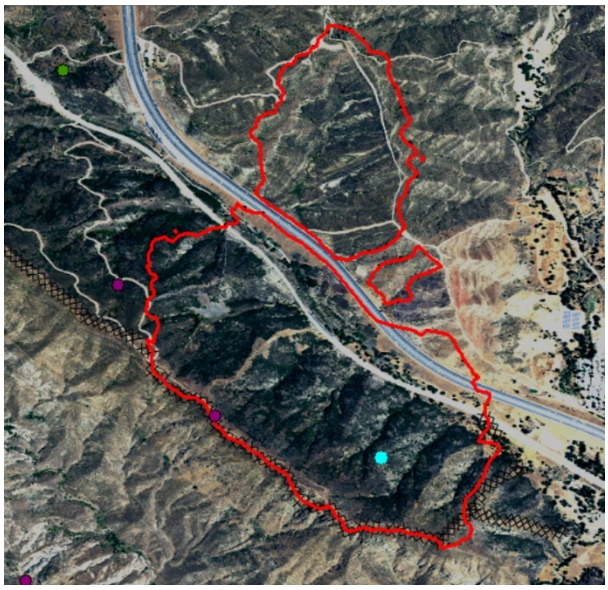


Fig 4a. In the Route Fire, the area in the black just west of the Highway Fire restoration project is about 9 acres.
Fig 4b. In the Route Fire, the area in the black just east of the Highway fire and upslope from the trail is about 18 acres.

Condors have been GPS'd within and adjacent to both the Route and the Emigrant site in 2014. The blue dot was timestamped at 2200 hrs indicating that the tree was being used as a roosting site, and appears to be a coast live oak. The imagery is from 2018, and note all the trails within the area which allow access for crews or trespass.



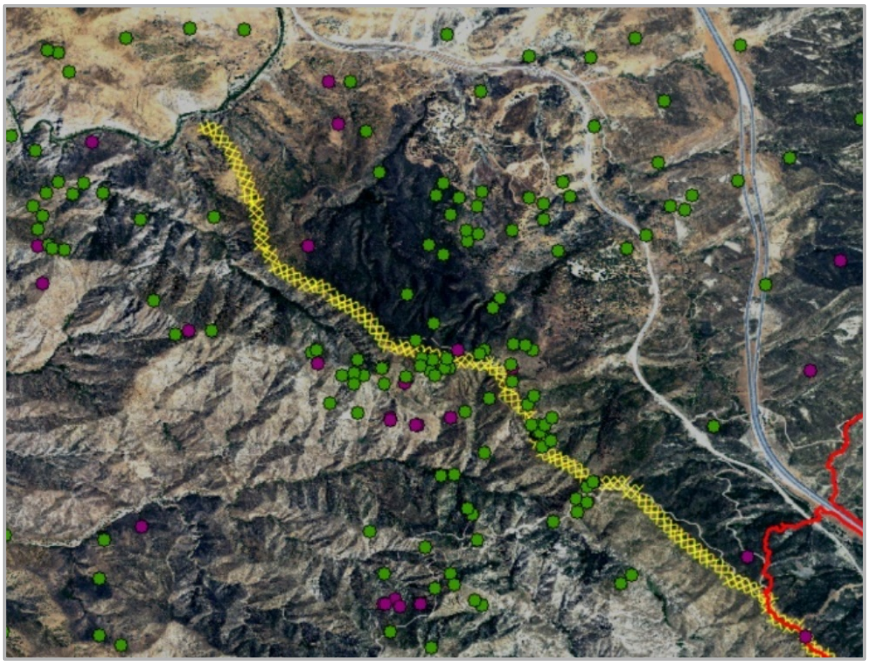
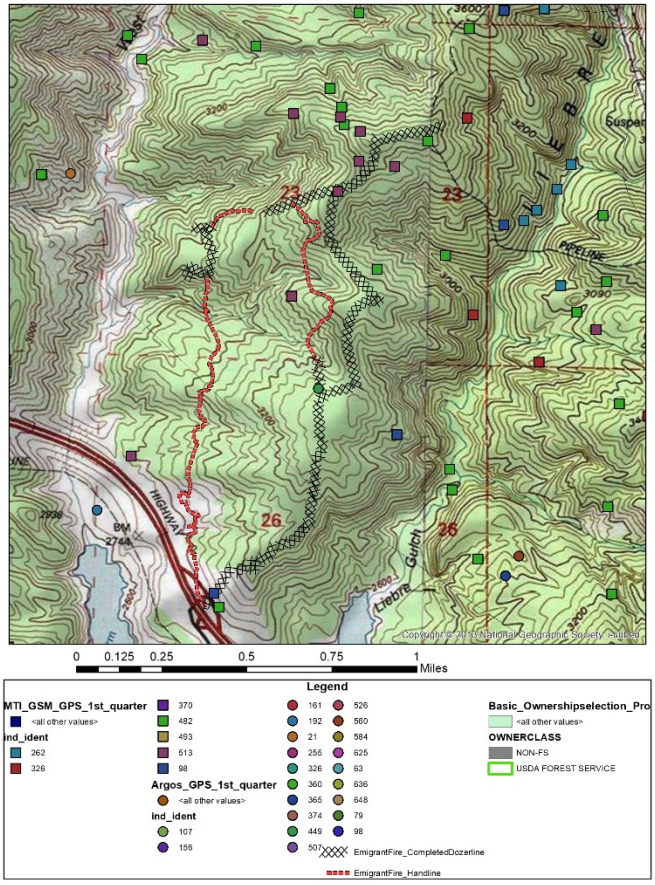


Fig 4c. Along the dozer lines (yellow x) are trees or rock outcrops which condors used as roost sites in 2014 as indicated by clusters of gps points for tagged individuals on the same day and time in evening. There are many trails near these areas that should be checked for microtrash or lead shot.

fig 4.d. For the Emigrant Fire, there were several condors that frequented that site. The symbols indicate an individual condor's tag, so if the symbol is the same color and shape, it is the same condor. There were condors which also were GPS-tagged at the off-ramp where the fire started at the Vista del Lago off-ramp. The danger would be if there were radiator fluid that the condors could drink. Also, risks with any exposed microtrash or lead products.

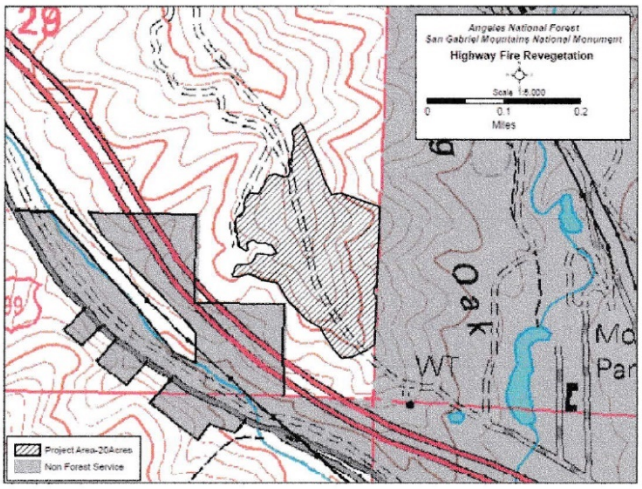
Emigrant Fire, within the 'Route Complex', Sep 2021



INVASIVE WEED Summaries

Our longtime partner, Habitatworks, (Now called Social and Environmental Entrepeneurs) has removed noxious weeds in the Ranch fire roads which are the same as the roads within the Route Fire. They have also revegetated three sites with native plants. In their 2020 annual report, they had been successful in reducing the incidence of the 6 priority noxious weed species in the area. And, they have revegetated the 3 sites to native species. They have not worked the area previously in the Emigrant Fire, but because that is a smaller fire with good access, they should be quite successful. Habitatworks is a good investment for previous funds because they bring many volunteer hours, essentially leveraging our investment and accomplishing more. For example, in one year, they had brought in 200 volunteer hours for the 45 hrs of the project manager.

The Route fire burned near the Highway Fire footprint. HabitatWorks has an agreement to remove invasive weeds and reseed within the Highway Fire. Given their efforts which will occur adjacent to the Route Fire, we are requesting more funds to also weed and reseed the Route Fire section that is intermingled with the Highway fire on the north side of I5. For that reason, we request revegetation for 40 acres, similar to the seeding that will occur in the Highway Fire footrpint. The SPA for the Highway Fire has FS contribution of $24,105 for invasive weed removal and reseeding within 40 acres of the Highway Fire. This side of the Route Fire does not have any condor observations.



The Highway Fire was adjacent to the Route Fire segments.