Nevada County Prescribed Burn Association

Programmatic Burn Plan

Jo Ann Fites-Kaufman CARx

Abstract: This programmatic burn plan identifies resources and conditions necessary to bring prescribed fire (also known as *planned* or *controlled fire*) back to the landscape of Nevada County through the empowerment of Nevada County's private landowners. The primary objective for all prescribed burning operations is to reduce wildfire risk for landowners, while also reintroducing fire as an ecological and cultural process to promote and maintain historically fire-dependent forest communities. Elements that are addressed include, but are not limited to, burn unit descriptions, prescriptions and objectives, safety hazards, resources needed for ignition, holding, and contingency, and a Go/No-go checklist for the day of burns. Burn units for 11 private landowners are identified totaling 30 acres. The burn units range in size from 0.5- 8 acres. These units require minimal to moderate preparation to be ready for burning as of 2024; preparation primarily requires fire line establishment or refreshing where the unit perimeter is not already bounded by a road. This plan will serve as an umbrella document for the development of site-specific materials for these units. For all units, appendices can be added, as necessary, with updated burn unit structure and fuel conditions.

Insert Nevada county rcd logo	Insert Nevada county pba logo

Nevada Prescribed Burn Association Go/No-Go Checklist Worksheet

Date: _____

The following document must be completed, signed, and followed in order to be considered a Nevada PBA burn.

Print:

Landowner *Burn Boss (if different)* *Unit Name*

Preliminary Questions

		Circle Y/N	
A.	Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? *If **NO,** proceed to the Checklist section below. If **YES,** go to item **B**.*	**YES**	**NO**
B.	Have the appropriate changes been made to plans for ignition, holding, & mop-up **AND** been approved by landowner **and** Burn Boss? *If **YES**, continue with Checklist 1. If **NO**, **STOP** and consult with landowner and Burn Boss in order to create an amendment to the Burn Plan based on current weather and/or fuel loadings.*	**YES**	**NO**

Checklist 1 *can be completed day before ignitions, must be completed before Checklist 2*

1a.	Have CAL FIRE permit(s) been obtained, approved, and the agency notified? OR permits are not applicable?	**YES**	**NO**
1b.	Have Air Quality permit(s) been obtained, approved, and the agency notified? OR permits are not applicable?	**YES**	**NO**
1c.	Have ALL smoke management specifications been met?	**YES**	**NO**
1d.	Have ALL neighbors, adjoining properties, and other relevant parties been notified and/or invited?	**YES**	**NO**
1e.	Have ALL required current and projected fire weather forecast been obtained?	**YES**	**NO**
1f.	Are the fire weather forecasts favorable?	**YES**	**NO**

Print: Sign:

Nevada PBA Coordinator *Nevada PBA Coordinator*

Checklist 2 *must be completed day of ignitions*

2a.	Have local dispatch centers and fire response agencies been notified?	**YES**	**NO**
2b.	Have ALL prescription parameters been met? Is someone assigned to monitor conditions? (RH, winds, temp, POI)	**YES**	**NO**
2c.	Has ALL prep work identified by CAL FIRE permit and/or PUC landowner site visit form been completed?	**YES**	**NO**
2d.	Are ALL planned operations personnel and equipment on-site, available, and operational?	**YES**	**NO**
2e.	Have critical roles been filled by people with adequate experience to fill those roles?	**YES**	**NO**
2f.	Has someone been assigned to be in charge of mop-up or patrol after the ignition period?	**YES**	**NO**
2g.	Is there a contingency resource available? Have they been notified?	**YES**	**NO**
	Who: Equipment:		
2g.	Have ALL personnel been given a task, purpose, and endstate? (I.e. assignments and objectives)	**YES**	**NO**
2h.	Have ALL personnel been briefed on lookouts, communications, and escape routes to safety zones?	**YES**	**NO**

*If all of the Checklist questions were answered **YES**, proceed with item **C: Test Fire.** Document the current conditions, location, and results. If any questions were answered **NO**, **DO NOT proceed** with the test fire: Implementation is **not allowed**.*

Test Fire

C.	After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire plan and will it meet the planned objective? *If **YES,** continue with ignitons. If **NO, extinguish**.*	**YES**	**NO**

Sign:

Landowner *Burn Boss (if different)* *Date*

Overview of Prescribed Burns

Name	Number of Units	Total Acres	APN/Address/coordinates
Bue, Darin	3	1.5	22211 Tamarack St., Floriston, CA 96111 Lat. 39.3924 Long. -120.0212
Cone, Amber	6	8	16818 China Flat Rd, Nevada City, CA 95959 Lat 38.3362014 Long: -121.0246629
Cook, Kristen	4	4	13612 Old Emigrant Trail, Grass Valley, CA Lat 39.1816126 Long. -120.9198651
de la Fuente, Mariana	3	4	19146 Rock Creek Rd., Nevada City, CA 95959 Lat 39.3100 Long: -121.0043
Dwyer, Pat	3	3	17173 Sages Road, Nevada City, CA Latitude: 39.381286 Longitude: -121.040352_
Galston, David	3	4	15763 Foxboro Dr, Truckee, California 96161 Latitude 39.3348093 Longitude-120.0949913
Hastings, Terry	3	1	15112 Cedar View Rd., Nevada City, CA 95959 Lat:39016.83'N Long: 12100.552'W
Hauber, Deva	1	0.5	11951 Banner Lava Cap Rd., Nevada City, CA 95959 Lat 39.14285 Long: -120.59953
Henson, Ralph and Nancy	3	2.5	14178 Mountain Spring Rd., Nevada City, CA 95959 Lat: 39.34168'N Long: 120.97927'W
Jarvis, Cole	4	2	15833 Kitkitdizze Drive, Grass Valley, CA 95945 39.183717682079255, -120.94715004820496
Kissler, Pam	2	2	15484 Auburn Rd, Grass Valley CA 95949 Lat. 39.897N Long -121.4738 W
Kravetz, Alexandra	4	5	12499 Elster Place, Grass Valley, CA 95945 Lat:39.1213 Long: -121.1261
Lettington, Paige	3	5	17318 Misty Green Ct., Grass Valley 95945 Lat 39.2010 Long: -120.9543

Objectives

A. Resource Objectives:

- Provide for firefighter and public safety during all burn operations.
- Reintroduce fire as an ecological and cultural process.
- Provide training opportunities where appropriate based on conditions and staffing

B. Prescribed Fire Objectives:

- For All Units: 50-100% litter consumption
- For All Units: Reduce any invasive weeds by 25%
- For All Units: Target less than 10% canopy tree mortality

Prescription

A. Prescription Narrative:

This plan recommends low- to moderate-intensity broadcast burning to reduce surface fuels, minimize overstory mortality, reduce invasive weeds, reintroduce fire as an ecological and cultural process as well as provide for training opportunities. The Burn Boss and firing boss(es) will decide upon specific firing tactics to create optimal fire intensities. Each property has a specific and individualized prescription. Overstory mortality is acceptable but should be minimized unless specified in the individual burn plan.

Briefing

A. Briefing Checklist; including, but not limited to: (additional items may be added)

- □ Burn organization and assignments
- □ Prescribed Fire objectives and prescription
- □ Description of prescribed fire project area
- □ Expected weather and fire behavior
- □ Communications
- □ Ignition plan
- □ Holding plan
- □ Contingency plan and assignments
- □ Wildfire declaration
- □ Safety and medical plan

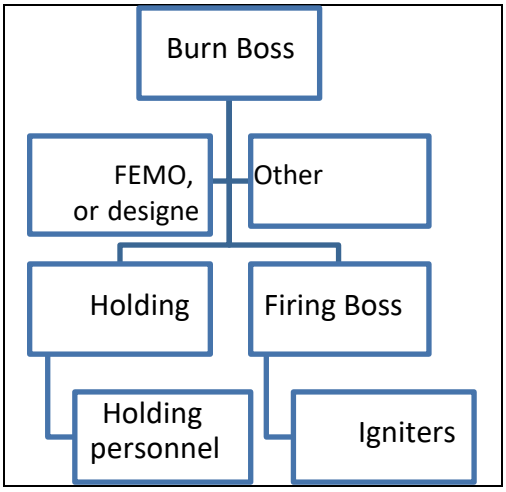
Organization and Equipment

A. Positions:

Staffing and organizational charts will vary depending on the availability of resources as well as the complexity of specific units/sub-units. The Burn Boss will identify organizational needs for each operational period. Organizational structure should be included in the IAP and covered during daily briefings.

A fire effects monitor (FEMO) or person designated for this role, is recommended so that weather and fire effects can be documented. The FEMO, or designated person, may be tied in with other tasks such as recording fire behavior observations, but should aim to track hourly weather, significant meteorological events, and take photos/video over the course of operations.

Example of recommended organizational structure:



B. Equipment:

The Burn Boss is ultimately responsible for determining required equipment on the burns. See "Minimum Organization or Capabilities Needed" in the Holding plan for minimum staffing levels needed per below.

C. Supplies:

Supplies will essentially be items to support ignition, including: mixed fuel for firing operations (3 parts diesel: 1 part gas), drip torches, matches/lighters, gloves for fuel handling, fuel moisture meters or measuring devices, belt weather kits, radios, GPS units, and needed suppression supplies that are standard for suppression. At the time of ignition, all necessary supplies will be on site. Due to close proximity to local commercial infrastructure, acquiring supplies quickly, even during burn operations, does not significantly add to the complexity of operations.

Public and Personnel Safety, Medical

A. Safety Hazards:

- Environmental hazards including: Uneven terrain, slips, trips and falls (especially on large/loose or slippery rocks), adverse weather (including snow, heat, rain, wind)
- Work hazards including: Fire, fatigue, smoke, snags, falling trees, uneven footing, slips, trips and falls, firing devices, vehicles
- Biological: ticks, mosquitos, wasps/hornets, parasites
- General hazards: dehydration, power lines, road traffic, unfamiliar setting, working in the wildland urban interface (WUI)

B. Mitigation: Measures Taken to Reduce the Hazards:

Daily briefings will detail known hazards, medical response plan, trained medical personnel on the incident, location of medical equipment, operational assignments, and LCES (lookouts, communications, escape routes, safety zones).
Firefighters will follow the 10 standard orders, 18 watch-out situations, wear all proper PPE during all phases of operations, and all personnel will be in contact via a predetermined radio frequency. Contact will be made with Northern Sierra Air Quality Management District (NSQMD) the day of the burn prior to conducting daily operations.

- The use of prescribed fire and smoke signage may be placed on major roadways around the burn unit, although this is not an explicit duty of the burn team at this time.

C. Emergency Medical Procedures:

In the case of an injury and when appropriate, information regarding this occurrence must be passed up the chain of command to the burn boss. The nearest highest qualified medically trained person will at least temporarily act as the Incident Commander (IC) and be responsible solely for patient care, while another individual simultaneously works to mobilize additional resources to the patient to facilitate transport of the patient. Inside of each Incident Action Plan (IAP), there should be a Medical Incident Report (ICS wf 206) for each member of the burn operation to follow in the event of a medical situation. A back up copy is also included in the IRPG, p. 118-119. Ground transportation by the closest onsite vehicle is the primary mechanism by which injured persons will be evacuated.

In the case of an injury where ground support is not appropriate, the Burn Boss or predetermined delegate thereof will contact emergency first responders to expedite the mobilization of medical services. Remember to NEVER DISCLOSE THE NAME OF THE PATIENT OVER THE RADIO. Persons onsite awaiting medical services will ensure that a patient is safe to transport and that they will be mobilized to the nearest predetermined location (helispot, gate, highway intersection, etc.) where medical personnel will then receive and transport to a location where higher medical care may be administered.

Details regarding information such as meeting locations for ambulances, and helispots, will be known to all members of the burn team, and are to be outlined in the daily medical briefing. Any change in day-to-day procedures regarding the medical plan will be broadcast to all personnel in daily medical briefings.

Test Fire

A. **Planned Location:**
A test fire will be conducted prior to making the final “GO/NO-GO” decision. The test fire should be ignited in representative fuels for the burn unit and in a suitable location that facilitates ease of holding with a good anchor point. The test fire will determine whether fire behavior is appropriate to meet objectives, consumption is adequate, and smoke dispersal is acceptable. The test fire should be allowed to burn long enough to give the Burn Boss a good idea of ease of ignition and holding, flame lengths, initial flame pulse, and wind impact prior to the start of main ignition operations. If the Burn Boss decides that the observed or anticipated fire behavior will meet objectives, the Burn Boss will announce to all resources that firing operations will continue. Otherwise, the test fire will be fully suppressed. The

Burn Boss will work with the Firing Boss to designate the size of the test fire.

B. **Test Fire Documentation:**

1. Weather conditions on-site

   Weather conditions will be documented for recording purposes and announced to resources prior to lighting the test fire. Fireline weather can be taken with a belt weather kit or other weather monitoring device (e.g., Kestrel).

2. Test fire results

   Test fire results will be documented by the Burn Boss and/or FEMO (or designee) if onsite. Results of the test fire and the decision to continue with firing operations will be shared with all personnel on the incident prior to proceeding. Ignition Plan

A. **Firing Methods & Devices:**

Broadcast burning will be utilized to meet burn objectives. The Burn Boss or Firing Boss will determine the appropriate strategies for the unit. Firing devices may include drip torches, lighters/matches, fusees, or another feasible ignition device.

B. **Ignition Techniques**

Ignitions will build blackline off two-track roads, natural barriers, vegetation transitions, and/or hand line. A qualified individual will supervise progression of blacklining and use interior lighters in firing patterns that are fitting for the desired fire effects, topography, fuels, and weather. Coordination between resources is paramount to prevent holding issues and to keep fire effects within desired prescription. Head, backing, flanking, strip, strip head, ring, and point firing techniques may be employed alone or in combination at the discretion of the Firing Boss to meet objectives.

C. **Patterns and Sequences**

In all cases, the actual ignition sequence will be determined on the burn day by the Firing Boss or Burn Boss according to existing and expected conditions. Before ignition, any threats to values at risk should be mitigated. Firing and holding teams are expected to work closely together to see that the ignition pattern and sequence do not present holding concerns. Fuel type and winds should be the dominant influences on fire behavior and the primary factor in establishing the ignition pattern and sequence for the unit. Ideally, the test fire would be ignited on the downwind side of the unit. Following the test fire, ignitions can continue along a barrier that allows for a flanking fire or backing fire. Once a sufficient blackline is established as an anchor, flanking, strip head, or other appropriate firing tactics may be incorporated. Ignition complexity largely will be determined by size of the unit, resource availability, and day of burn weather and fuel conditions. The Burn Boss will change any of the firing patterns if they are not producing desired intensity during the burn to meet management objectives.

D. **Minimum Ignition Staffing:**

Firing or Burn Boss will be in charge of determining the minimum number of igniters needed for each unit. Among firing teams, there will be an experienced burner with each.

Holding Plan

A. General Procedures for Holding:

The primary factors that determine holding actions are the weather, fuel conditions, adjacent resource values, and the quality and extent of control features. This is continually evaluated and the Burn Boss will determine specific holding requirements based on these factors and the proximity of the burn to resource values; holding expectations and concerns will be communicated to all resources during briefing.

Primary control lines will include roads, handline, two tracks, and mow lines. These will be patrolled during fire operations. In the event of spot fires or slop-overs, size ups will be provided and containment actions will be immediately taken.

Ignitions will pause until containment is achieved, unless the Burn Boss deems this inappropriate.

Mop-Up: Any fuels threatening post-ignition containment will be assessed for mop-up based on hazard to personnel, hazard to containment, fuel consumption objectives, and smoke management concerns. Mop-up standards will be based on local conditions and described in the IAP (mop-up standards will describe how far into the unit snags, smoking fuels, and open flames will be extinguished.) and may be modified by the Burn Boss. A suggested mop-up standard is all smoke, flames and residual heat, up to 100 feet interior from any containment line, be extinguished. Water should be utilized as much as is available.

Contingency Plan

A. Medical

Injury will be evaluated by nearest person and notify the burn boss immediately. For injuries requiring immediate medical attention, the closest first responder or most appropriate EMT will render immediate care and supervise treatment. If the injury warrants it, 911 will be called. The burn boss will designate the most qualified person to manage any further medical response. A basic medical emergency plan is attached including key, pertinent information such as location of nearest hospital. Wherever possible, a certified first responder will be present at burns > 1 acre.

B. Excessive Smoke Production

Smoke production and direction will be constantly monitored to limit negative public health effects and nuisance. Actions that will be considered and applied if excessive smoke production occurs include the following.
Delay ignition until fuels burn down.

Smaller areas of burn could be ignited and allowed to burn down before igniting additional areas.
Large woody piles can be pulled apart if safe to do so. If the smoke continues, then the firing will stop and mop up will begin.

C. Fire Behavior Exceeds Prescription

Fire behavior will be constantly monitored to ensure that it is within the prescription. Firing and holding techniques may be modified to increase or decrease fire behavior. If possible, ignition can be delayed until fire behavior returns to desired conditions. As a last resort, ignition may need to stop, and mop-up and patrol should begin.

D. Fire Escape

If fire escapes the burn unit and cannot be contained by onsite resources, then 911 and the Grass Valley ECC will be contacted immediately. If an area of 1/10 of an acre or less cannot be readily contained within 30 minutes by resources on site, then emergency services will be notified.

Wildfire Declaration

A. **Wildfire Declared By:**

Fire may cross the boundary of designated burn units and not be considered an escape. The Burn Boss will make the decision and announce to resources on-scene that an escape has occurred if fire behavior exceeds the capabilities of resources on-hand. A wildfire must be declared if:

- The fire crosses a property boundary;
- Contingency resources are not able to contain fire within 24 hours of escape;
- If current conditions, such as weather or National Preparedness levels, dictate otherwise.

If an escape is declared, prescribed fire activities will transition to suppression operations and dispatch will be notified.

B. **IC Assignment:**

In the event of an escape, the Burn Boss may choose to transition command of the prescribed burn to a qualified delegate, and run the wildfire and prescribed fire as separate operations.

C. **Notifications:**

The Burn Boss or delegate thereof will immediately notify the Grass Valley Emergency Command Center listed on the burn plan in the event of an escape.

D. **Extended Attack Actions and Opportunities to Aid in Fire Suppression (Optional):**

The onsite IC will establish an Incident Command Post (can be an ATV or truck) and Staging Area for incoming resources. The IC will establish a Unified Command upon arrival of the fire administrator of the affected jurisdiction (i.e., County Fire Marshall, local Fire Chief, and other personnel). Additional local resources will be requested as needed for extended attack and structure protection. Strategies for containing escaped fires will consider the safety of firefighters and the public to be paramount. Strategies will include flanking the fire until the forward rate of spread is stopped and/or burning out from natural or constructed barriers.

Smoke Management and Air Quality

A. Compliance

Operations will meet all local smoke management guidelines.

B. Potential Impacted Areas:

There are several smoke sensitive receptors to all the prescribed burn units (see above for list of smoke-sensitive receptors). The burn team will take all necessary precautions to monitor weather conditions and ensure their compliance with the weather parameters set in the burn plan; special consideration will be paid to wind direction, dispersion index, and extended outlook post-burn forecast.

C. Mitigation Strategies and Techniques to Reduce Smoke Impacts:

Actions taken by the burn team to mitigate impacting smoke sensitive areas include but are not limited to, minimizing size of burn area, re-evaluating ignition techniques, and prompt and thorough mop-up.

If the areas are impacted by smoke beyond legal local limits, ignitions will cease, and active fire will be suppressed. If visibility becomes a hazard for driving, the following will happen in order as determined by the burn boss:

1. Vehicles will be posted equipped with emergency lights on highways to slow vehicles before visual hazard.
2. Ignitions will slow and avoid heavy pockets of fuel.
3. Ignitions will halt if number one and two do not mitigate the situation or if requested by BCAQMD.
4. Rapid mop-up will take place as needed. If residual smoke becomes a problem after ignition, mop-up will be initiated to reduce the smoke. At any time during the burn if driving conditions on roadways become hazardous, law enforcement will be notified, and roadways may be closed.

Post-burn Activities

A. Post-Burn Activities that must be Completed

Immediately after operations, an After Action Review will be conducted. The burn will transition into mop-up status and, at the determination of the Burn Boss, patrol status. Ongoing monitoring will be conducted by the Landowner, Nevada PBA volunteers, and/or other agency personnel.

Appendix A

Individual Burn Plans and Maps

Prescribed Fire Plan

Project Title: 22211 Tamarack Street, Floriston CA 96111
Prescribed Fire Burn Boss: Darin Bue
Author of Plan: Darin Bue and Jo Ann Fites-Kaufman
Reviewed by: Jo Ann Fites-Kaufman (CARX)
Agency Having Jurisdiction (AHJ): CAL-FIRE NEU
Property Owner: Darin Bue
Date Created: 10/3/24 Date Re-Evaluated* (if applicable): ____
**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 22211 Tamarack St., Floriston CA
Latitude and longitude *(in Degrees Decimal Minutes (DMM)): 39.3923376 -120.0213214*
Property Ownership (private, state, etc.): private
Unit Size (acres): 0.7

Unit Description:

Open eastside pine with pine litter understory, and openings dominated by deciduous (bittercherry) and evergreen (manzanita) shrubs.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house and workshop.
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and value.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Provide educational opportunities for NCRCD workshop participants through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply *(describe quantity, location, and other considerations):*

Pressured water will be available from 2 spigots at the house. Garden hose will be lined around three sides (top and flanks) spray nozzles. 4 back-pack pumps will be placed around the unit.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Tamarack Street in Floriston, off of Highway 80.

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites.):*

Defensible space and will be completed. Includes removing needles from the roof of the home and off of any porches or patios.

3. Prescription85

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**15**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**5**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by the air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to reduce the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

Holding plan
All fire control operations will be directed by the burn boss and/or holding lead. The holding resources will be spaced around the perimeter of the unit at a spacing of 75 to 150 feet. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*
At least two to three experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry a hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 3 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 3bladder bags there will also be several hundred feet of hose with nozzles attached to water spigots or portable water tanks with a pump.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):
Mop-up specifications will be based on site conditions as well as forecasted weather.

A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 16818 China Flat Road, Nevada City CA

Prescribed Fire Burn Boss Amber Cone

Author of Plan: Jo Ann Fites-Kaufman and Amber Cone

Agency Having Jurisdiction (AHJ): NEU

Property Owner: Amber Cone

Date Created: 11/9/23 Date Re-Evaluated* (if applicable): _____

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Location Description: Flat and gently sloping blue oak-grass woodland, at 16818 China Flat Road

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: 38.3362014 Longitude: 121.0246629

Property Ownership (private, state, etc.): private

Unit Size (acres): 0.5 to 5 acres

Unit Description:

Oak woodland with grass understory.

Adjacent to the Unit:

Mixed conifer with black oak with large patches of kitkitdizzie, and timber litter throughout. One patch of blue oak woodland and annual grass.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

1. Reduce surface fuels next to road and driveway for safe fire access/evacuation.
2. Reduce 60-100% of the dead grass component.
3. Minimize mortality of blue oak, especially mature oaks.
4. Retain large snags.
5. Enhance basketry materials from redbud.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Rake along roads on two sides to clear fine fuels.
Construct 4-foot-wide control line along other two sides.
Scrape around large snags and catface scars on any large oaks. Cut and pile down, larger branches into a more open area and pre-burn if there is a heavy accumulation.

Water supply *(describe quantity, location, and other considerations):*

Spicket fed by several thousand-gallon water tank above or pressurized water from a portable tank and pump will be available. Will have garden hose that reaches all parts of the unit.

Unit access *(describe roads, signage needs, etc.):*

China Flat Road is off of Jackass Flats Road, which intersects with Tyler Foote Road. A sign for Prescribed Fire will be placed at the junction of China Flat Road and Jackass Flats.

Plan to protect values at risk *(if applicable; e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Defensible space will be cleared around any structures, water tanks or other flammable household related items near the burn. Areas around any water lines will have a scratch line around them.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	50	<75	80
Relative Humidity (%)	45	>15 and <35	15
Mid-Flame Wind Speed (mph)	0	<5	8
Fine Dead Fuel Moisture (%)	25	>10	7
Probability of Ignition (%)	30	<50	70

**Include other prescription elements as appropriate*

Wind direction *(acceptable range and optimal):* ***any direction***

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Fall or late spring when tall grass is dead

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

x□ Not required by air district based on project size/emissions

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

X □ Firing Boss to be designated (landowner)

Note: test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

A test fire will be conducted in a location that is representative of the burn unit the northwest corner of the unit, where the firing will start after determining if conditions are within prescription for burning. Firing will start along the upslope, north boundary of the unit, starting at the northwest corner (high point). Backing fire against the wind will be used to extend the control line first. After that the fire will either be allowed to back slowly down the gentle slope to the south and east or carried slowly with closely spaced strips. Fire will be carried along the flanks to keep extending a black line, slightly ahead of the main front.

Holding plan

x□ Holding Specialist to be designated

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

A minimum of 3 to 5 people will implement the burn, depending upon the weather, soil and fuel moisture conditions. 2 to 4 people will be assigned to holding.

Weather forecasting for the day of the burn and following day will be tracked, including on the morning of the burn. Weather will be monitored hourly, including humidity, temperature and windspeed. Winds will be continuously monitored informally throughout the burn to allow immediate changes as needed.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop up will occur within the same burning period, using both the water on site and handtools. Monitoring will be conducted several times in the early to mid-evening and the following morning. Because the unit is very small, all burning will be extinguished within the unit.

Prescribed Fire Plan

Project Title: 13612 Old Emigrant Trail

Property Owner: Kristen Cook

Date Created: 1/24/2024 Date Re-Evaluated* (if applicable): 3 / 1 4 / 2 4 (see attached addendum for additional information on water, organization and communication)

Author: Joaquin Pastrana Reviewed by: Jo Ann Fites-Kaufman (CARX)

Burn Boss: Kristen Cook

1. Project Area Description

Location Description: 13612 Old Emigrant Trail

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: 39.1816126 Longitude: -120.9198651
Property Ownership (private, state, etc.): Private

Unit Size (acres): 0.5 to 2 acres

Unit Description:

The unit is in a mixed conifer forest-oak, with mostly pine and Douglas-fir. Understory and surface fuels are variable, mostly with oak and timber litter or dry grass. The unit is on a South facing aspect, mostly moderately sloping (5 to 25%) but with some steeper areas (>35 to 45%).

Prescribed fire goals and objectives

- Reduce wildfire hazard and improve defensible space.
- Reduce surface fuels.
- Promote forest health and resiliency.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Very little preparation is needed because the burn unit has been burned several years ago, most of the surrounding area has been treated and both have light fuels. Before the burn the hand line along the

western edge will be improved and be made 4 feet wide down to bare mineral soil using a tractor, hand tools and leaf blowers.

Water supply *(describe quantity, location, and other considerations):*

The property contains a 3,000 gallon well connected to 2 hose spigots. One at the NW corner of the unit next to the house. The second next to the guest house at the SW corner. Both will be turned on and connected to hose during the burn. A minimum of three, five-gallon bladder bags will also be filled and placed in strategic locations during the burn. Depending on burn conditions, an additional portable water tank with a pump on a trailer or truck will be positioned along lower edge (bottom of the slope) of the unit, along the driveway.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessible directly from Old Emigrant Trail Road off You Bet Road. You Bet Road is off of Highway 174. The driveway off Old Emigrant Trail forks into two paths. The residence where the burn is taking place is accessed by staying right when the driveway forks. Signs will be placed at the junction of You Bet Road and Old Emigrant Trail, and at the driveway entrance.

Plan to protect values at risk *(if applicable; e.g., structures, water lines, sensitive species, cultural sites, etc.):*

The homes next to the unit are the primary value at risk. There are also two septic vents within the unit. The residential property and septic vent. A clear area will be scraped around the vents. Water and hose will be turned on next to the structures and people stationed nearby to protect them if needed.

3. Prescription

Element	Minimum (Cool)	Desired	Maximum (Hot)
Temperature (F)	50		80
Relative Humidity (%)	55		25
Mid-Flame Wind Speed (mph)	0		5
Flamelength			<2’
Probability of Ignition (%)	10	30-50	70

Ranges are given to provide flexibility for safe burning in a variety of conditions.
It is not intended to burn when all parameters are at the hot end of the prescriptions.
However, when one parameter approaches the high end, carefully monitor the others every 30”. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal)****:*** Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Note: test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the Firing Boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of these burns is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it; the initial 20-30 minutes of burning is an ideal time for squads to work slowly, talk about what they are seeing, and practice working as a group. In general, firing will proceed downslope, with lighters choosing ignition patterns which best meet the burn objectives.

Holding plan

All fire control operations will be directed by the Holding Boss. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding boss. There will also be holding resources positioned near the propane tank and shed during the entire firing of the top unit. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

At least two experiences prescribed burn practitioners will be present for the burn. Along with several local community members of varying prescribed fire experience and the landowners.

For the hot end of the prescription, a minimum 8 persons/firefighters will be available at the unit. One will be designated as “burn boss”, one as “firing boss”, one as “holding lead”. One will be designated to monitor fire behavior and weather. Most of the resources will be assigned to holding, 5-6.

For the ideal or medium prescription conditions, a minimum of 6 persons will be available at the unit, with the same organization as above. For the cool end of the prescription, a minimum of 4 persons will be available at the unit.

There will be enough hand tools for all participants to carry and hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozels attached to the water spigots. The standpipe and 1 1/2” hose will be available if needed. All will have leather gloves, eye protection, natural fiber pants and long-sleaves, and preferably leather boots.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up specifications will be based on site conditions as well as forecasted weather. Mop-up will be conducted around the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. After ignitions are complete and the majority of surface fuels are consumed, the burn unit will be patrolled and monitored by the landowner until burn down is complete and no imminent fire behavior or forecasted weather present any threat to containment. Mop-up and patrol will be conducted 3 to 5 times per day for a week. Most of units are visible from the house and will be continuously monitored visually as well. During the burn and immediately after, any burning snags or large stumps will be mopped up. It will be the responsibility of the landowner to complete mop-up operations and patrols.

Prescribed Fire Plan

Project Title: 19146 Rock Creek Rd. Nevada City, Ca
Prescribed Fire Burn Boss: Christopher Kohler
Author of Plan: Jennifer Rain Crosby, for Nevada County Resource Conservation District
Reviewed by: Jo Ann Fites-Kaufman (CARX)
Agency Having Jurisdiction (AHJ): CAL-FIRE NEU
Property Owners: de la Fuente, Mariana
Date Created: 10/3/2024 Date Re-Evaluated* (if applicable):
**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 19146 Rock Creek Rd. Nevada City, Ca 95959

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*
39.3100 - 121.0043

Property Ownership (private, state, etc.): private

Unit Size (acres): 0.5 to 3 acres

Unit Description:

Most of the area is mature, open ponderosa pine forest over a dense and continuous layer of kitkitdizzi. Scattered incense cedar, blue oak, live oak, manzanita and ceanothus. Some large patches of dry annual grass with large clumps of shrubby live oak and old manzanita.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house.
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and values.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Provide educational opportunities for NCRCD workshop participants through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, pile/burned, removed, or in

small piles away from ladder potential or control issues. Snags near control lines felled if they have the potential to fall across control lines, or safety hazard to burn crews. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply *(describe quantity, location, and other considerations):*
Pressured water will be available from 2 spigots, one at owner's house below the unit and one in the orchard north of the unit. Garden hose will be lined around four sides (top, bottom and flanks) with spray nozzles. A water trailer with portable pump will be placed near the bottom of the unit along the dirt road. 4 back-pack pumps will be placed around the unit.

Unit access *(describe roads, signage needs, etc.):*
The unit is accessed by Rock Creek Road (off Lake Vera/Purdon Rd or North Bloomfield).

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites, etc.):*
Fuels will be scraped away to mineral soil around any power poles directly adjacent to the unit. Large ponderosas adjacent to the unit will be raked around and wetted down ahead of the burn.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**20**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**6**
Probability of Ignition (%)	**15**	**30**	**60**
Flame length	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.
Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):
× Not required by air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of this burn is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it. Throughout the burn, the burn boss or spokesperson will talk about what they are seeing and answer any questions from community members that are attending the demonstration burn.

Holding plan
All fire control operations will be directed by the burn boss and/or holding lead. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding lead. There will also be holding resources positioned near the propane tank and shed during the entire firing of the top unit. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*
At least three to four experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry a hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozzles attached to the water spigot.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):
Mop-up specifications will be based on site conditions as well as forecasted weather.
Fuels within the unit are very light and it is expected that mop-up will be readily completed within several hours of completion of the burn.

A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any additional mop-up needed after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 17173 Sages Road, Nevada City, CA

Prescribed Fire Burn Boss Pat Dwyer

Author of Plan: Joaquin Pastrana Reviewed by: Jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): CAL-FIRE NEU

Property Owner: Pat Dwyer and Ben Wright

Date Created: 04/08/2024 Date Re-Evaluated* (if applicable): ____

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address:

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: 39.381286 Longitude: -121.040352

Property Ownership (private, state, etc.): Private

Unit Sizes (acres): 0.5 to 3

Unit Description:

Ponderosa pine mixed conifer and black oak over timber litter, kitkitdizzie and annual grass. East to southeast, gently sloping (5 to 20%).

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard in defensible space and neighborhood WUI.
- Promote Forest health and Resiliency.
- Promote community experience/skills building.
- Continue re-introduction of regular fire return intervals to restore forest resilience.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Induce mortality of conifer saplings (Douglas-fir and incense cedar).
- Improve native plant habitat and populations.
- Increase the knowledge, skills and abilities of private landowners to conduct prescribed

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Lines: gravel road and driveway with litter raked off; mineral soil a length 1-1/2 times adjacent surface fuel type; free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around for at least module leads (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Snags near control lines felled if they have the potential to fall across control lines, or safety hazard to burn crews. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Handline will be built along the northern edge of the unit connecting the landowner's driveway on the East to Prophet's way on the West. This handline will be constructed using hand tools and will be at least 3ft wide down to bare mineral soil. There are several piles of wood chips and debris within the unit, and these will be excluded by scratching line around each of them. A PG&E transformer within the unit will be excluded from the burn unit via a handline put around it. There is a shed on the Northern edge adjacent to where handline will be installed, the pine litter and vegetation around the base of this shed will also be removed within 8 to 10 feet. A propane tank next to the shed will be cleared 10 out from the tank to mineral soil or gravel. A 20-foot buffer around the propane tank will be excluded with a hand-line.

Water supply *(describe quantity, location, and other considerations):*

There are two hose spigots near the burn unit that will feed ¾ inch hose around north, east and west side of unit. Water spigots: 2 water spigots on east flank, including one adjacent to shed and propane tank. There is a standpipe with 1 ½" hose 30 feet from northeast corner, fed by a well and pump, ready and available. There is a filled 1,500-gallon water tank at adjacent neighbor (600 feet down Prophets Way). There will also be at least 4 filled bladder bags staged in strategic places around the unit and filled while burn operations are being conducted.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Sages Road, off of Tyler Foote Road (connects to Highway 49). The burn unit is at the intersection of Sages Road and Prophets Way. There is dirt turnaround for a Type III Engine across Prophets Way. Signs will be placed at Sages Roads at the intersection with Salmon Mine, and another on Sages at Prophets Way.

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Several values at risk are present within and adjacent to the proposed burn unit, including: structures (home and shed), a propane tank, PG&E ground-based transformer box, and a patch of native soap-weed.

The home has defensible space and is on the other side of the gravel driveway from unit a. The shed and propane tank adjacent to the unit will have 8-10 and >10' cleared to mineral soil or gravel respectively. An additional handline will be constructed along the northern edge will be far enough away from both the shed and propane that ambient heat is not a concern. The area near the propane tank will only be burned if flames are <8 inches in that area. There is a spigot adjacent to the propane tank and shed that will be connected and ready to use. A holder will be positioned near the propane tank and shed.

A handline will be established around the PG&E transformer and patch of soap-weed prior to any ignitions. There will be a ¾ inch water hose adjacent to the PG&E transformer and near the patch of soap-weed. A water bag and holder will be placed near the PG&E transformer box.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	35	65	80
Relative Humidity (%)	50	25	25
Mid-Flame Wind Speed (mph)	0	3	7
Fine Dead Fuel Moisture (%)	15	10	6
Probability of Ignition (%)	15	30	60
Flamelength	0.5	1-2	2-4

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions.
It is not intended to burn when all parameters are at the hot end of the prescriptions.
However, when one parameter approaches the high end, carefully monitor the others every 30". Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

x□ Submitted in hard copy to air district: A smoke management plan for the Prophets Neighborhood Burn Plan (encompassing this parcel) is on file with the Northern Sierra Air Quality Management District.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Note: test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the Firing Boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of these burns is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it; the initial 20-30 minutes of burning is an ideal time for squads to work slowly, talk about what they are seeing, and practice working as a group. In general, firing will proceed downslope, with lighters choosing ignition patterns which best meet the burn objectives.

Holding plan

All fire control operations will be directed by the Holding Boss. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding boss. There will also be holding resources positioned near the propane tank and shed during the entire firing of the top unit. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

At least two experiences prescribed burn practitioners will be present for the burn. Along with several local community members of varying prescribed fire experience and the landowners.

For the hot end of the prescription, a minimum 8 persons/firefighters will be available at the unit. One will be designated as “burn boss”, one as “firing boss”, one as “holding lead”. One will be designated to monitor fire behavior and weather. Most of the resources will be assigned to holding, 5-6.

For the ideal or medium prescription conditions, a minimum of 6 persons will be available at the unit, with the same organization as above. For the cool end of the prescription, a minimum of 4 persons will be available at the unit.

There will be enough hand tools for all participants to carry and hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozels attached to the water spigots. The standpipe and 1 1/2” hose will be available if needed. All will have leather gloves, eye protection, natural fiber pants and long-sleaves, and preferably leather boots.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up specifications will be based on site conditions as well as forecasted weather. Mop-up will be conducted around the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. After ignitions are complete and the majority of surface fuels are consumed, the burn unit will be patrolled and monitored by the landowner until burn down is complete and no imminent fire behavior or forecasted weather present any threat to containment. Mop-up and patrol will be conducted 3 to 5 times per day for a week. Most of units are visible from the house and will be continuously monitored visually as well. During the burn and immediately after, any burning snags or large stumps will be mopped up. It will be the responsibility of the landowner to complete mop-up operations and patrols.

Prescribed Fire Plan

Project Title: 15763 Foxboro, Truckee CA
Prescribed Fire Burn Boss: David Galson
Author of Plan: Jo Ann Fites-Kaufman
Reviewed by: Jo Ann Fites-Kaufman (CARX)
Agency Having Jurisdiction (AHJ): CAL-FIRE NEU
Property Owner: David Galson
Date Created: 10/3/24 Date Re-Evaluated* (if applicable): ____
**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 15763 Foxboro, Truckee CA
Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*
Property Ownership (private, state, etc.): private
Unit Size (acres): 18

Unit Description:

Open eastside pine and white fir with timber litter understory, and openings with bitterbrush, grasses and some bitter cherry and other shrubs. South-facing, gently sloping (5 to 15%).

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house and workshop.
- Promote Forest health and Resiliency.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.

2. Pre-burn Considerations

Plan for unit preparation (describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply (describe quantity, location, and other considerations):

Pressured water will be available from water spigots, back pack pumps and or a portable water tanks with pump. Garden hose will reach across most of the unit and around at least 2 sides. Sides without hose will have back pack pumps pre-positioned.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Foxboro Drive. A sign will be placed a the intersection of Foxboro Drive and The Strand, as well as the entry to the Juniper Hills Community.

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites.):*

Defensible space and will be completed. Includes removing needles from the roof of the home and off of any porches or patios.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**15**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**5**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by the air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to reduce the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

Holding plan
All fire control operations will be directed by the burn boss and/or holding lead. The holding resources will be spaced around the perimeter of the unit at a spacing of 75 to 150 feet. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*
At least two to three experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry a hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 3 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 3bladder bags there will also be several hundred feet of hose with nozzles attached to water spigots or portable water tanks with a pump.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):
Mop-up specifications will be based on site conditions as well as forecasted weather.

A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 15112 Cedar View Rd., Nevada City, CA

Prescribed Fire Burn Boss if different than landowner

Author of Plan: Terry Hastings and Joaquin Pastrana

Reviewed by: Jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): Cal Fire NEU

Property Owner: Hastings-Hollibaugh Trust

Date Created: 11/28/23**Date Re-Evaluated*** (if applicable)

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Location Description: 15112 Cedar View Rd., Nevada City

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: 39016.83' N Longitude: 12100.552' W

Property Ownership (private, state, etc.): Private

Unit Size (acres): .1 - .4 acre units

Unit Description:

Mixed conifer-black oak with timber litter and patches of dry annual grass. Gently to moderately sloping (5 to 20%), west and northwest facing slopes.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound)*:

Fuels reduction and expansion of defensible space; forest health/stewardship; and education for neighboring landowners, community members and prescribed fire workforce.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines are already established using gravel driveway surrounding the unit (approx. 7 feet wide). Gravel driveway will be blown with leaf blower prior to burn to remove leaf litter. Hose will be removed from interior of the unit and trees + hose spigot will have vegetation scraped from base.

Water supply *(describe quantity, location, and other considerations):*

Primary: Pressurized residential irrigation from one well. Max 6 gal./min. 1500-gallon storage tank. Project area is adjacent to NID fire hydrant. Bear Yuba Burn Cooperative tool trailer with 3 bladder bags will be available.

Unit access *(describe roads, signage needs, etc.):*
Access via Cedar View Rd.. Sign to be placed on Harmony Estates Rd. at intersection of N. Bloomfield Rd.

Plan to protect values at risk *(if applicable; e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Large value trees and interior hose spigot will have vegetation scraped away from the base and will be sprayed with water prior to burning.

3. Prescription **Include other prescription elements as appropriate*

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	50		80
Relative Humidity (%)	55		25
Mid-Flame Wind Speed (mph)	0		5
Fine Dead Fuel Moisture (%)	14		9
Probability of Ignition (%)	10		50

Wind direction *(acceptable range and optimal):* N, NW, W

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):*
Implementation will be appropriate at any time that prescription parameters are met excluding summer months.

4. Smoke Management Plan
(to be prepared according to local air district rules; refer to SMP for detailed plan):

X Not required by air district based on project size/emissions

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

□ Firing Boss to be designated

Note: test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions.

A test fire will be conducted in a location that is representative of the burn unit the northwest corner of the unit, where the firing will start after determining if conditions are within prescription for burning.

Firing will start along the upslope, north boundary of the unit, starting at the northwest corner (high point). Backing fire against the wind will be used to extend the control line first. After that the fire will either be allowed to back slowly down the gentle slope to the south and east or carried slowly with closely spaced strips. Fire will be carried along the flanks to keep extending a black line, slightly ahead of the main front.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

Landowner is equipped with 250 ft.+ of hose and hand tools to adequately suppress any slop over of spot fire. Bear Yuba Burn Cooperative will provide bladder bags. Water on site will primarily be used for heat management. Burns will only be implemented with a minimum of 2 personnel per unit in any operational period (i.e., <12 hours).

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up specifications will be based on site conditions as well as forecasted weather. Mop-up will be conducted around the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. After ignitions are complete and the majority of surface fuels are consumed, the burn unit will be patrolled and monitored by the landowner until burn down is complete and no imminent fire behavior or forecasted weather present any threat to containment. Mop-up and patrol will be conducted 3 to 5 times per day for a week. During the burn and immediately after, any burning snags or large stumps will be mopped up. It will be the responsibility of the landowner to complete mop-up operations and patrols.

Prescribed Fire Plan

Project Title: 11951 Banner Lava Cap Rd, Nevada City, CA, 95959

Prescribed Fire Burn Boss: Deva Hauber

Author of Plan: Haley Coopergard, for Nevada County Resource Conservation District

Reviewed by: Jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): CAL-FIRE NEU

Property Owner: Deva Hauber

Date Created: 10/3/24 Date Re-Evaluated* (if applicable):

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 11951 Banner Lava Cap Rd, Nevada City, CA, 95959

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*39°14.285'N, -120°59.953'W

Property Ownership (private, state, etc.): Private

Unit Sizes (acres): 0.4 to 0.7

Unit Description:

Mature conifer--black oak forest. Overstory is dominated by Douglas-fir, with some black oak. There are many medium sized incense cedars throughout the unit. Douglas-fir, incense cedar and oak leaf litter are throughout the unit

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the buildings near the unit..
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and value.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Provide educational opportunities for NCRCD workshop participants through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. Gravel road will serve as the control line at the bottom of the unit. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Snags near control lines will be excluded from the unit. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply *(describe quantity, location, and other considerations):*

Pressured water will be available from a spigot on the West side of the unit. Garden hose will be lined around three sides (North, South, East, and West) spray nozzles. A water trailer with portable pump will be placed at the East side of the unit along the road. 3-4 back-pack pumps will be placed around the unit.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Madrona Way and Banner Lava Cap Rd.

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Fuels will be scraped away to mineral soil around any power poles within or directly adjacent to the unit. Wood chip piles will be wetted down. Defensible space will be completed.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**20**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**6**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal)**:*** Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by the air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

Holding plan

All fire control operations will be directed by the burn boss and/or holding lead. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding lead. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

At least two to four experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry and hand tools. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozzles attached to the water spigot.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up specifications will be based on site conditions as well as forecasted weather. A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 14178 Mountain Springs Road, Nevada City

Prescribed Fire Burn Boss Ralph Henson

Author of Plan: Jo Ann Fites-Kaufman and Nancy Henson

Agency Having Jurisdiction (AHJ): NEU

Property Owner: Ralph and Nancy Henson

Date Created: 10_6_24 Date Re-Evaluated* (if applicable): _____

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Location Description: Flat and gently sloping ponderosa pine mixed conifer

14178 Mountain Springs Road, Nevada City 95959

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: _____ **Longitude:** _____

Property Ownership (private, state, etc.): private

Unit Size (acres): approximately 2

Unit Description:

Ponderosa pine mixed conifer-black oak with timber litter and large patches of kitkitdizzie in the understory.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

1. Reduce surface fuels and fire hazard in defensible space
2. Minimize mortality of mature oaks.
3. Enhance native plant habitat

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Rake along roads on two sides to clear fine fuels. Construct 4-foot-wide control line along other two sides. Scrape around large snags and catface scars on any large oaks. Cut and pile down, larger branches into a more open area and pre-burn if there is a heavy accumulation.

Water supply *(describe quantity, location, and other considerations):*

Two to three spigots along the flanks of both units. 1000 gallon water tank. Garden hose will reach all parts of the burn units.

Unit access *(describe roads, signage needs, etc.):*

Mountain Springs Road with address sign at driveway, off of Grizzly Hill Road.

Plan to protect values at risk *(if applicable; e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Good defensible space will be maintained around the adjacent structures.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)		**<75**	**85**
Relative Humidity (%)		**>15 and <35**	**15**
Mid-Flame Wind Speed (mph)		**<8**	**8**
Fine Dead Fuel Moisture (%)		**>5**	**5**
Probability of Ignition (%)		**<50**	**70**

**Include other prescription elements as appropriate*

Wind direction *(acceptable range and optimal)**:*** any direction

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Fall or late spring when tall grass is dead

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

x□ Not required by air district based on project size/emissions

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

X □ Firing Boss to be designated (landowner)

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
A test fire will be conducted in a location that is representative of the burn unit the northwest corner of the unit, where the firing will start after determining if conditions are within prescription for burning.

Firing will start along the upslope, north boundary of the unit, starting at the northwest corner (high point). Backing fire against the wind will be used to extend the control line first. After that the fire will either be allowed to back slowly down the gentle slope to the south and east or carried slowly with closely spaced strips. Fire will be carried along the flanks to keep extending a black line, slightly ahead of the main front.

Holding plan

x□ Holding Lead to be designated

All fire control operations will be directed by the burn boss and/or holding lead. The holding resources will be spaced around the perimeter of the unit at a spacing of 75 to 150 feet. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

A minimum of 3 to 5 people will implement the burn, depending upon the weather, soil and fuel moisture conditions. 2 to 4 people will be assigned to holding.

Weather forecasting for the day of the burn and following day will be tracked, including on the morning of the burn.

Weather will be monitored hourly, including humidity, temperature and windspeed. Winds will be continuously monitored informally throughout the burn to allow immediate changes as needed.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop up will occur within the same burning period, using both the water on site and handtools. Monitoring will be conducted several times in the early to mid-evening and the following morning. Because the unit is very small, all burning will be extinguished within the unit.

Prescribed Fire Plan

Project Title: 15833 Kitkitdizze Drive, Grass Valley CA 95945

Prescribed Fire Burn Boss: Cole Jarvis

Author of Plan: Cole Jarvis and Joaquin Pastrana

Reviewed by: Jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): CAL FIRE NEU

Property Owner: Cole Jarvis

Date Created: 4/18/24 Date Re-Evaluated* (if applicable): _____

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Location Description: 15833 Kitkitdizze Drive, Grass Valley, CA 95945

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):*

Latitude: 121.94706 deg W Longitude: 39.18634 deg W

Property Ownership (private, state, etc.): private

Unit Size (acres): 0.8 to 1.5 acres

Unit Description:

Mixed conifer with black oak and timber litter understory. Some patches of perennial or irrigated grass below and around the pond.

Prescribed fire goals and objectives

(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound):

Goals

- Reduce fuel hazard in extended defensible space, along neighborhood fire egress/ingress route and neighborhood WUI.
- Promote forest health and forest resiliency.
- Educate private landowners how to burn safely, legally and responsibly on their property.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Limit mortality in trees greater than 12” dbh (most of these have been removed already).

2. Pre-burn Considerations

Plan for unit preparation

(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):

Control lines: completed and prepared prior to burn. Lines: mineral soil a length 1-1/2 times adjacent surface fuel type or 4 feet wide if required by CAL FIRE; free of leaf litter and live vegetation the day of the burn.

Hazards and resource values: flagged and marked, noted in briefings, and pre-burn walk around for at least module leads (i.e., holding, ignitions, contingency, safety).

Fuels: ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Snags near control lines felled if they have the potential to fall across control lines, or safety hazard to burn crews. Heavy fuels near control lines moved to avoid high heat and control issues.

Water supply *(describe quantity, location, and other considerations):*

A pump house with a spigot is available at the bottom of the unit, delivering xxx gpm. There is also a pond at the bottom of the unit. There is also water available from a spigot at the adjacent property at the top of the unit.

For the burn, there will be a water trailer with a 500-gallon tank with a pump and 400 feet of hose (200' 1 ½" and 200' ¾") along the road at the bottom of the unit, along Kitkitdizze Road. There is also a pond, pump house with a 158 gpm well on Kitkitdizze road. The water trailer has a drafting pump and hose. At the top of the unit, there is a spigot (water supply from two wells) that will be hooked up to 400' feet of ¾" hose, with a gated Y and two hoses going across the top of the unit to the east and west. Along the flanks there will be 2 filled water bladders along each side.

Unit access *(describe roads, signage needs, etc.):*

The unit can be accessed off of You Bet Road (off Highway 174). The parcel is approximately ½ mile off of You Bet Road, on Fifield Road to Kitkitdizze Drive. All are paved roads. Fifield and Kitkitdizze drive are single lane, paved roads, with pullouts There is parking and a T intersection at the base of the unit that can be used for a Type III Engine turnaround.

Plan to protect values at risk *(if applicable; e.g., structures, water lines, sensitive species, cultural sites, etc.):*

There is a home and metal shop above the top of the unit. There will be hose hooked up to a spigot at that location and 1 of the holding crew positioned there the entire time. The unit will be burned from the top of the unit near the structure. This will create a black buffer along the burn unit that will help protect the structures as the fire progresses down the slope.

The water trailer will be positioned along the road, near the pump house and pond.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	35	65	80
Relative Humidity (%)	50	25	15
Mid-Flame Wind Speed (mph)	0	3	7
Fine Dead Fuel Moisture (%)	15	10	8
Probability of Ignition (%)	14	30	<60
Flamelength (ft)	0.5	2-4'	<4'
Rate of Spread (ch/hr)	0.2	3	6

Wind direction *(acceptable range and optimal)**:*** any wind acceptable, SW optimal

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* any, when appropriate prescription parameters are met. Time of day will be varied when needed.

Ranges are given for the prescription to provide flexibility for safe burning in a variety of conditions.

It is not intended to burn when all parameters are at the hot end of the prescriptions. However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

x□ Not required by air district based on project size/emissions

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

x□ Firing Boss to be designated

Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

Backing fire using drip torches will be the primary technique. Strip burning will be applied starting from the top of the units, letting the fire back down. The sides of the units will be lit from the top down to keep up with the burning along the contour to create an additional blackened buffer along the cut lines. The spacing of strips will depend upon the fire behavior. Adjustments to firing timing and patterns will be made to maintain fire behavior to meet objectives and within holding guidelines (flamelength and rate of spread, torching) and control.

Holding plan and Resources

X□ Holding Specialist to be designated

Holding Plan:

All fire control and patrol operations will be directed by the Holding Boss. Assigned resources will observe the top edge of the unit and keep pace with the firing teams as they move down the flanks. Firing should not proceed into areas where holders are not present. Once the top of the unit has sufficient depth, the majority of the holding crew can move to the flanks, at the discretion of the holding boss.

Resources:

For the hot end of the prescription, a minimum 6 persons will be available at the unit, at least 2 with basic firefighter experience. One will be designated as “burn boss”, one as “firing boss”, one as “holding lead”. One will be designated to monitor fire behavior and weather. Most of the resources will be assigned to holding. A CARX will be present at the burn, serving as the

For the ideal or medium prescription conditions, a minimum of 5 persons will be available at the unit, with the same organization as above. For the cool end of the prescription, a minimum of 3 persons will be available at the unit.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up and patrol will be conducted 3 to 5 times per day for a week. Most of the unit is visible from the landowner’s house and will be continuously monitored visually as well. During the burn and immediately after, any burning snags, large stumps and scarred, overstory trees will be mopped up. Mop-up will be throughout the units, at least 100 to 300 feet from the lines.

Prescribed Fire Plan

Project Title: 15484 Auburn Road, Grass Valley, CA

Prescribed Fire Burn Boss: Pam Kissler

Author of Plan: Pam Kissler, Jennifer Rain Crosby, Haley Coopergard, for Nevada County Resource Conservation District

Reviewed by: jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): CAL-FIRE NEU

Property Owner: Pam Kissler

Date Created: 10/2/24 Date Re-Evaluated* (if applicable):

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 15484 Auburn Road, Grass Valley, CA 95945.

Latitude and longitude *(in Degrees Decimal Minutes (DMM)):* 39.1494456 -121.0806346

Property Ownership (private, state, etc.): private

Unit Size (acres): 1.1

Unit Description:

Ponderosa pine-black oak forest. Pine needle litter on the top ½ and short annual grass with mixed oak and pine litter on lower half. Scattered deerbrush.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house.
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and value.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Increase soil carbon.
- Provide educational opportunities for SAEL high school students through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. Paved road will serve as the control line at the bottom of the unit. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). There will be good defensible space around the home and all other structures. Roof and porches will be clear of needles and other flammable debris. The area around the power poles, outside of the unit but next to the control line, will have scratch line around down to bare mineral soil. **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Snags near control lines felled if they have the potential to fall across control lines, or safety hazard to burn crews. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply *(describe quantity, location, and other considerations):*

Pressured water will be available from 2 spigots at the top of the unit. Garden hose will be lined around three sides (top and flanks) with spray nozzles. A water trailer with portable pump will be placed at the bottom of the unit along the road. 4 back-pack pumps will be placed around the unit.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Auburn Road (off McCourtney or Highway 49).

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites.):*

Fuels will be scraped away to mineral soil around any power poles within or directly adjacent to the unit. Wood branch teepee will be raked around to exclude fire and wetted down ahead of the burn. Defensible space and will be completed. Includes removing needles from the roof of the home and off of the porch.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**85**
Relative Humidity (%)	**50**	**25**	**20**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**6**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of this burn is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it. Throughout the burn, the burn boss or spokesperson will talk about what they are seeing, and answer any questions from community members that are attending the demonstration burn.

Holding plan
All fire control operations will be directed by the burn boss and/or holding lead. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding lead. Throughout the burn, there will be holders positioned at the bottom of the unit to watch out for rolling material and along the flanks where there are powerlines or the rope course. There will also be holding resources positioned near the propane tank and house during the entire firing of the top unit. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

At least three to four experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry and hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozzles attached to the water spigot.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):
Mop-up specifications will be based on site conditions as well as forecasted weather.
Fuels within the unit are very light and it is expected that mop-up will be readily completed within several hours of completion of the burn.

A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. **The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn.** Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 12499 Elster Place, Grass Valley, Ca 95945

Prescribed Fire Burn Boss: Alexandra Kravetz

Author of Plan: Jennifer Rain Crosby, for Nevada County Resource Conservation District

Reviewed by: Jo Ann Fites-Kaufman (CARX)

Agency Having Jurisdiction (AHJ): CAL-FIRE NEU

Property Owner: Alexandra Kravetz

Date Created: 10/3/24 Date Re-Evaluated* (if applicable):

**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 12499 Elster Place, Grass Valley, Ca 95945

Latitude and longitude *(in Degrees Decimal Minutes (DMM)): 39.1213 - 121.1261*

Property Ownership (private, state, etc.): private

Unit Size (acres): 1- 1.25 acre

Unit Description:

Oaks and grassland. Mixed grass, herbs and oak leaf litter comprise most the unit with open grass in patches. Rest of the property in adjacent area is irrigated pasture, with open oak overstory and large patches of old blackberry.

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house and outbuildings.
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and value.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Provide educational opportunities for NCRCD workshop through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation *(describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):*

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. Gravel road will serve as the control line at the bottom of the unit. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Snags near control lines will be excluded from the unit.felled if they have the potential to fall across control lines, or safety hazard to burn crews. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply *(describe quantity, location, and other considerations):*

Pressured water will be available from the spigot at bottom of the unit by the outbuilding. Two 275 gallon water totes with hose and spray nozzles will be lined along top and down east and west flanks. Another 275 gallon tote with hose and spray nozzle will be on the east flank dirt road. 4 back-pack pumps will be placed around the unit. 600' of hose.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed from east dirt road beyond house and outbuildings.

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites, etc.):*

Fuels will be scraped away from well head and back of outbuilding. Fuels will be raked away from big oak and other large trees. Defensible space and will be completed.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**20**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**6**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal)**:*** Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*

Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of this burn is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it. Throughout the burn, the burn boss or spokesperson will talk about what they are seeing, and answer any questions from community members that are attending the demonstration burn.

Holding plan

All fire control operations will be directed by the burn boss and/or holding lead. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding lead. There will also be holding resources positioned near the propane tank and shed during the entire firing of the top unit. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*

At least three to four experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry and hand tools. There will be at least one drip torch which

may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozzles attached to the water spigot.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):

Mop-up specifications will be based on site conditions as well as forecasted weather. A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Prescribed Fire Plan

Project Title: 17318 Misty Green Ct., Grass Valley, CA 95945
Prescribed Fire Burn Boss: Paige Lettington
Author of Plan: Jennifer Rain Crosby, Haley Coopergard, for Nevada County Resource Conservation District
Reviewed by: Jo Ann Fites-Kaufman (CARX)
Agency Having Jurisdiction (AHJ): CAL-FIRE NEU
Property Owner: Paige Lettington
Date Created: 10/3/24 Date Re-Evaluated* (if applicable): ____
**Burn plans should be re-evaluated as needed to account for changes in fuel/site conditions or project objectives.*

1. Project Area Description

Address: 17318 Misty Green Ct., Grass Valley, CA 95945
Latitude and longitude *(in Degrees Decimal Minutes (DMM)): 39.2010 - 120. 9543*

Property Ownership (private, state, etc.): private
Unit Size (acres): 0.5-1

Unit Description:

Most of the burn area is on a ridgetop with gentle to moderate slopes (5 to 25%). Black oak woodland with clumps of ponderosa pine and low growing annual grasses are on the ridgetop. Along the north facing slope, there is a young-mature Douglas-fir mixed conifer forest with moderate load of timber litter. The slope is moderate (25 to 35%).

Prescribed fire goals and objectives *(include overarching project goals as well as specific project objectives. Objectives should be S.M.A.R.T. (specific, measurable, attainable, relevant, time-bound))*:

Goals:

- Reduce surface fuels and fuel hazard within the defensible space of the house and workshop.
- Promote Forest health and Resiliency.
- Promote community knowledge and awareness of prescribed burning practices and value.

Objectives

- Reduce surface fuel loading by 50 to 90% (live and dead fuels, tons/acre).
- Improve native plant habitat and populations.
- Provide educational opportunities for NCRCD workshop participants through prescribed burning preparation and implementation.

2. Pre-burn Considerations

Plan for unit preparation (describe line type/construction, pre-treatment of fuels, pre-burn land management considerations (e.g., grazing deferment), etc.):

Control lines: completed and prepared prior to burn. Hand lines constructed to bare mineral soil a width 1-1/2 times height of the adjacent fuels or to 4 feet wide if required by CAL FIRE. All control lines will be free of leaf litter and live vegetation the day of the burn. **Hazards and resource values**: flagged and marked, noted in briefings, and pre-burn walk around (i.e., holding, ignitions, contingency, safety). **Fuels:** ladder fuels pre-treated, & pile/burned, removed, or in small piles away from ladder potential or control issues. Heavy fuels near control lines moved to avoid high heat and control issues. Area will be scraped around rotten portions at the base of trees and any stumps.

Water supply (describe quantity, location, and other considerations):

Pressured water will be available from 2 spigots at the top of the unit. Garden hose will be lined around three sides (top and flanks) spray nozzles. 4 back-pack pumps will be placed around the unit.

Unit access *(describe roads, signage needs, etc.):*

The unit is accessed by Misty Green Ct. (off of Little Greenhorn Rd)

Plan to protect values at risk *(if applicable, e.g., structures, water lines, sensitive species, cultural sites.):*

Fuels will be scraped away to mineral soil around any power poles within or directly adjacent to the unit. Defensible space and will be completed. Includes removing needles from the roof of the home and off of the porch.

3. Prescription

Element	Minimum (cool)	Desired	Maximum (hot)
Temperature (F)	**35**	**65**	**80**
Relative Humidity (%)	**50**	**25**	**20**
Mid-Flame Wind Speed (mph)	**0**	**3**	**8**
Fine Dead Fuel Moisture (%)	**15**	**10**	**6**
Probability of Ignition (%)	**15**	**30**	**60**
Flamelength	**0.5**	**1-2**	**2-4**

**Include other prescription elements as appropriate*

Ranges are given to provide flexibility for safe burning in a variety of conditions. **It is not intended to burn when all parameters are at the hot end of the prescriptions.** However, when one parameter approaches the high end, carefully monitor the others every 30 minutes. Continue burning as long as fire behavior is controllable, and objectives are being met.

Wind direction *(acceptable range and optimal):* Any Acceptable.

Seasonality of burn *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Any seasonality when appropriate prescription parameters are met. Time of day will be varied when needed.

4. Smoke Management Plan

(to be prepared according to local air district rules; refer to SMP for detailed plan):

× Not required by the air district based on project size/emissions.

There are no downwind sensitive features such as schools, hospitals. A sign will be posted at the nearest main intersection or road near the unit to alert drivers of prescribed fire in progress.

SMP IS NOT REQUIRED - The burn is <10 acres overall. Thus
a Smoke Management Plan will not be required.

We have been issued an air quality permit from Butte County. Plan to call Butte County Air Quality Management District daily to ascertain burn-day status.

We will call Northern Sierra Air Quality Management District for burn day status and will notify Air Quality and CAL FIRE

of plan to burn.

5. Ignition Plan

× Firing Boss to be designated.

Firing plan *(describe sequence, patterns, techniques, and devices needed to meet objectives):*
Test fire will be conducted in a location that is representative of the burn unit. Location to be determined by Burn Boss on the day of burn based on environmental conditions. Usually, this will be the uphill portion of the unit, in a more open area representative of the drier parts of the unit to reflect the higher end of potential fire behavior. The test fire will be used to determine if fire behavior is expected to be within an acceptable range for the prescription and objectives. If it is not, the test burn will be suppressed and the burn postponed.

Drip torches, lighters, and hand tools may be used to conduct firing operations to meet our objectives during the burn. Ignitions will begin at the top of the slope, in the location which is most likely to be the downwind edge of the unit for the duration of the burning operations. Firing will be directed by the burn boss, and proceed slowly until there is a 2-to-4-foot black buffer, with a sufficient depth has been achieved to mitigate the potential for spot fires or torching. If time allows, rakes and pitchforks are the preferred method of moving fire adjacent to the top control line until some depth has been achieved.

A primary objective of this burn is to teach people how to understand firing patterns and the ways fire on the ground affects burning conditions adjacent to it. Throughout the burn, the burn boss or spokesperson will talk about what they are seeing, and answer any questions from community members that are attending the demonstration burn.

Holding plan
All fire control operations will be directed by the burn boss and/or holding lead. Most of the assigned resources will observe the top edge of the unit during the initial firing. Once the top of the unit has sufficient depth, most of the holding crew can move to the flanks, at the discretion of the holding lead. Firing will not proceed into areas where holders are not present.

Resources *(describe total number and type of resources needed to implement burn safely, based on production rates outlined above. Include description of plan for on-site weather observations and weather forecasting):*
At least three to four experienced prescribed burn practitioners will be present for the burn. There may be additional community members assisting.

There will be enough hand tools for all participants to carry a hand tool. There will be at least one drip torch which may be used for ignitions as well as at least 4 full bladder bags strategically placed around the unit. There will also be at least one kestrel present on the burn that will constantly be monitoring weather patterns and changes. Along with the 4 bladder bags there will also be several hundred feet of hose with nozzles attached to the water spigot.

6. Post-Burn Activities

Mop-up and patrol plan (describe activities, timeframes, and standards):
Mop-up specifications will be based on site conditions as well as forecasted weather.

A complete mop-up will be within the burn unit perimeter to extinguish any heat that would not burn down completely before the end of the day. The landowner will be responsible for patrol and monitoring and any needed additional mop-up after the burn. Mop-up and patrol will be conducted every hour for the first several hours after the burn, then 2 to 3 times a day after for several days, and then 3 to 5 times per day for a week.

Appendix B
Burn Location Maps

RX BURN UNIT MAPS

- Bue, Darin

- Cone, Amber

16818 China Flat Rd, Nevada City, CA 95959
Lat 38.3362014 Long: -121.0246629

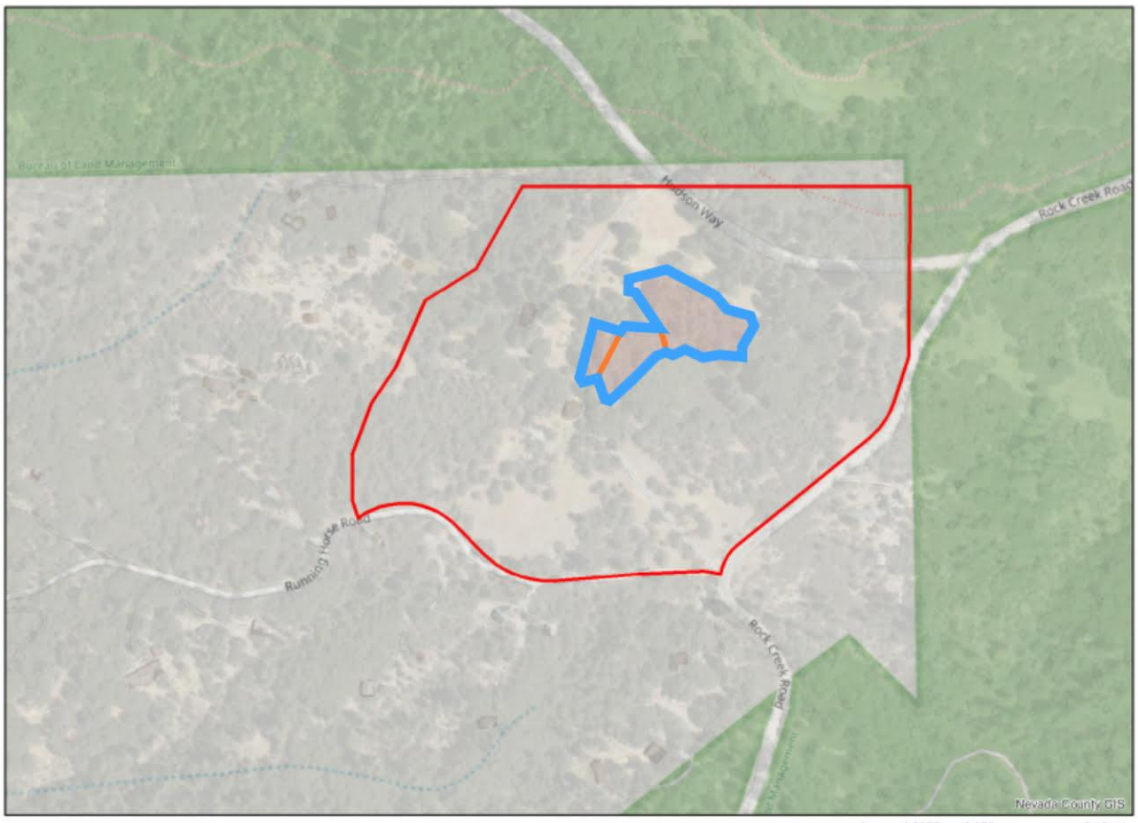
- Cook, Kristen

- Dwyer, Wright

17173 Sages Road, Nevada City CA 95959
Burn Unit Map

- de la Fuente, Mariana

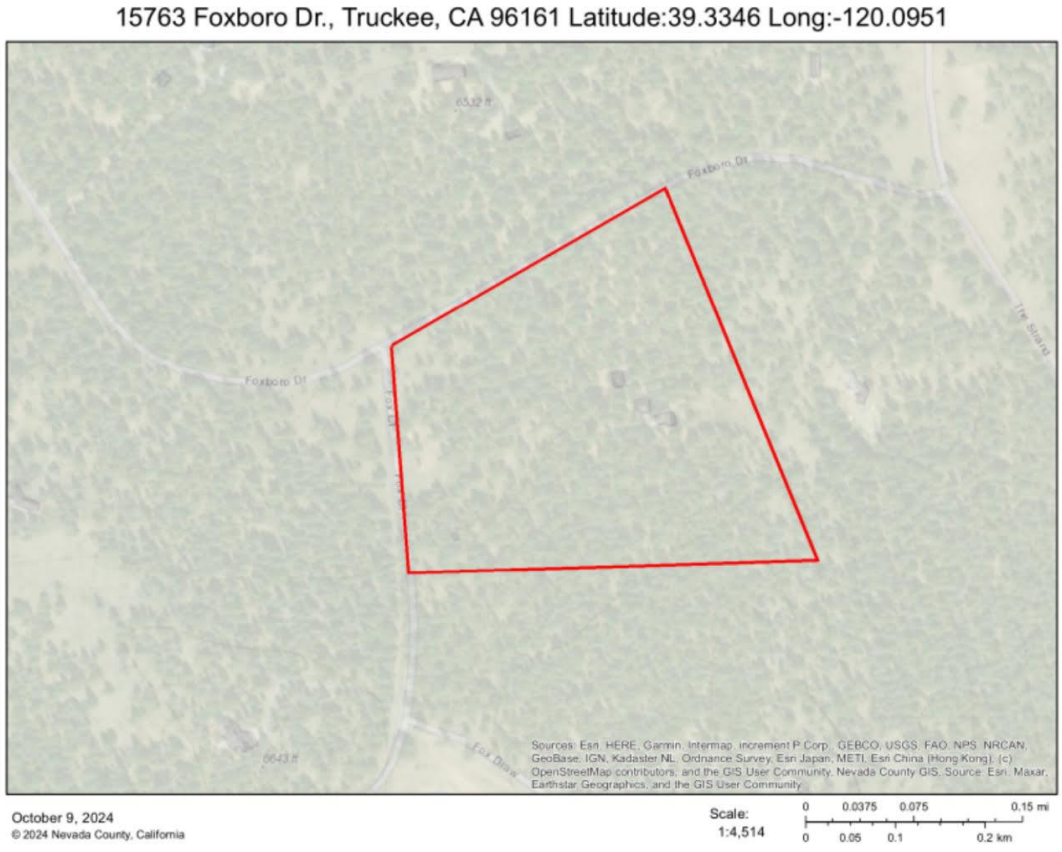
19146 Rock Creek Rd., Nevada City 95959 Latitude: 39°18.612' N Longitude:121°0.277' W



October 11, 2024
© 2024 Nevada County, California

Scale: 1:4,514
0 0.0375 0.075 0.15 mi
0 0.05 0.1 0.2 km

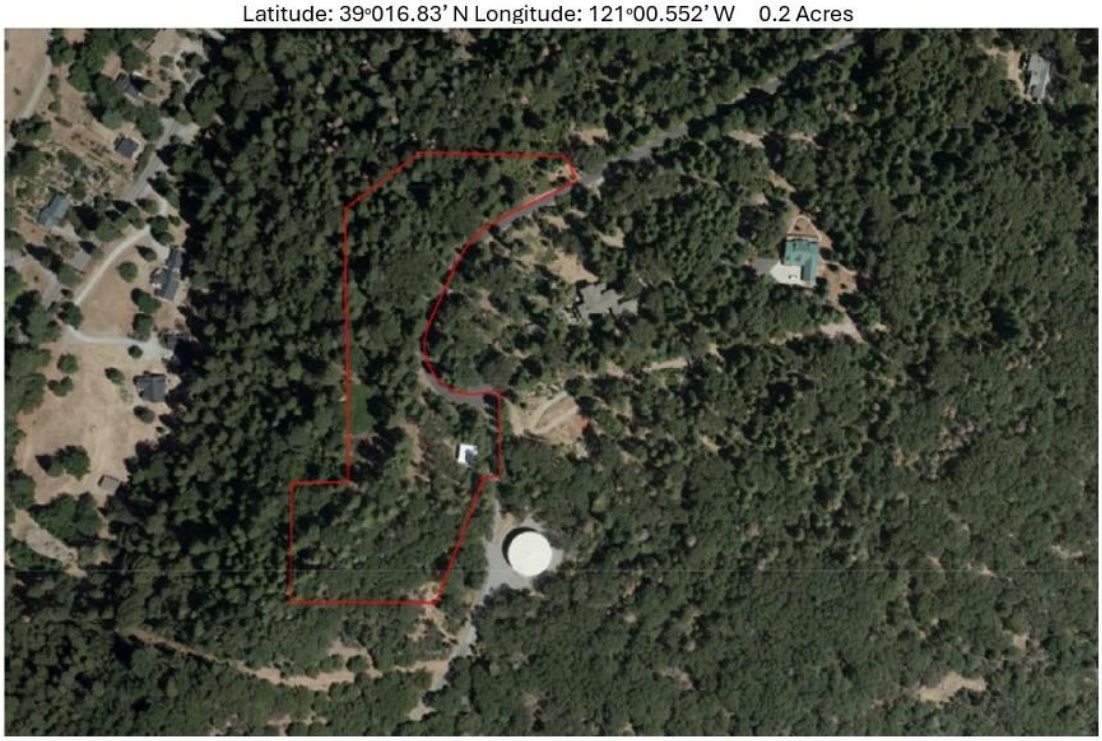
- Galson, David



- Hastings, Terry

15112 Cedar View Rd., Nevada City, CA 95959

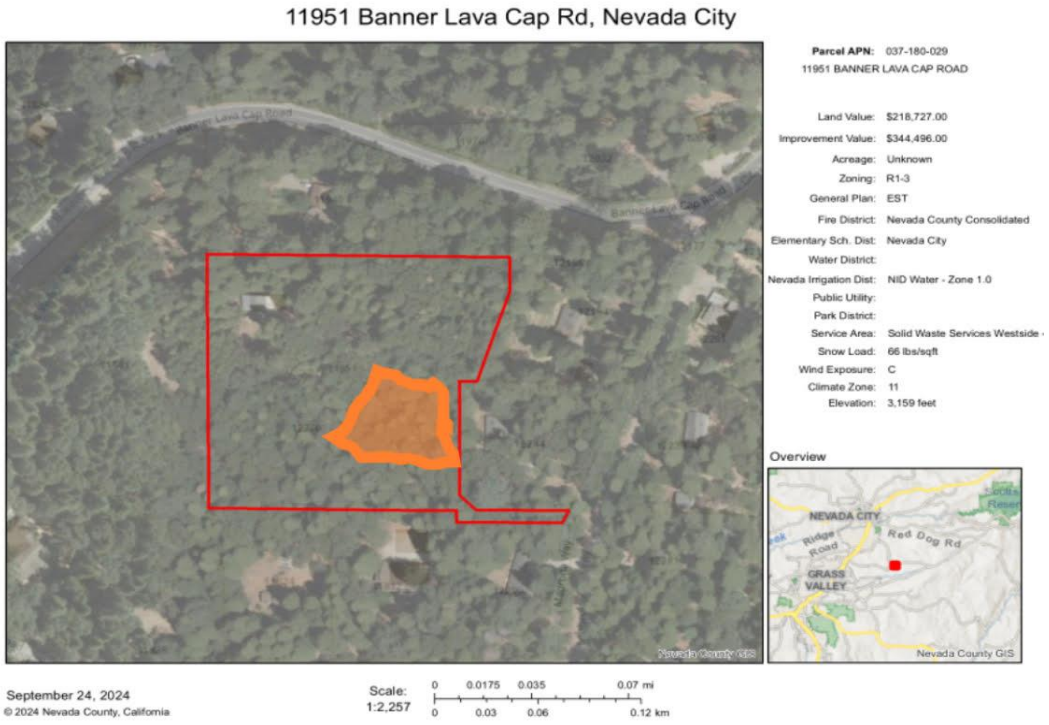
Latitude: 39°016.83' N Longitude: 121°00.552' W 0.2 Acres



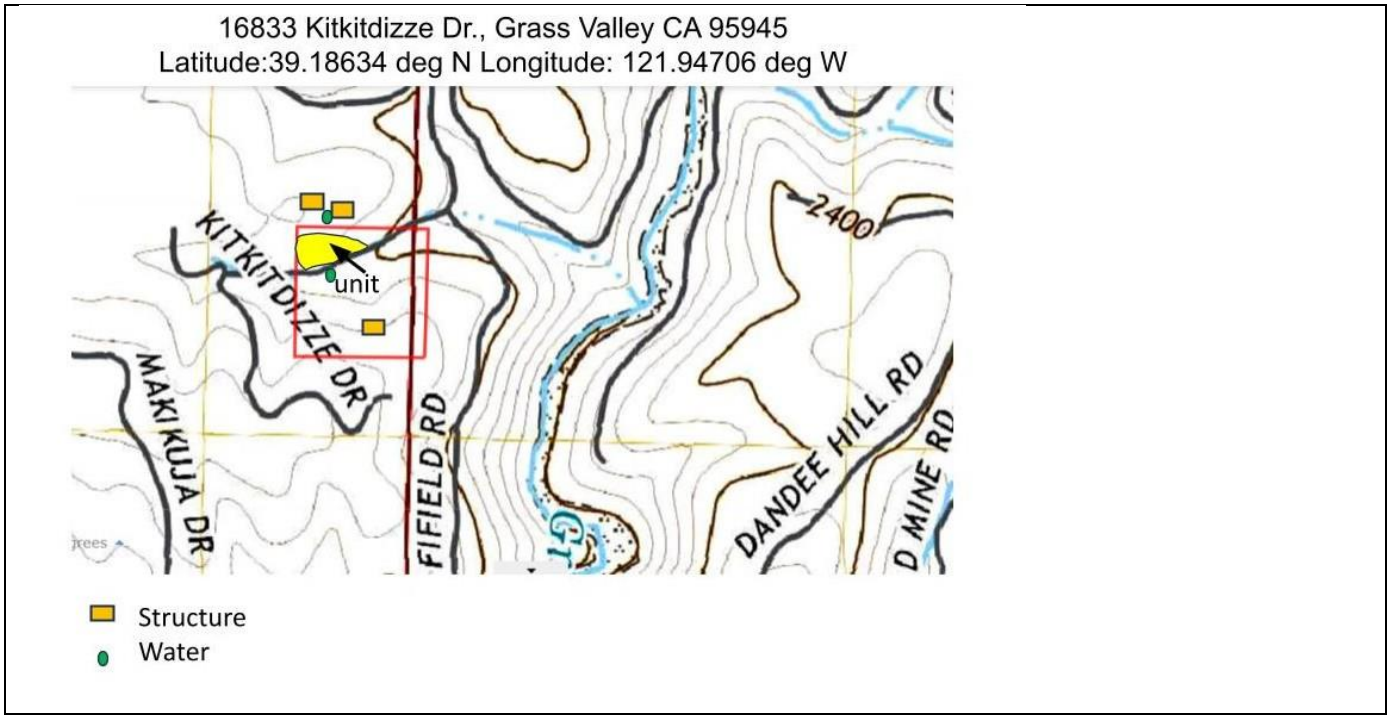
- Henson, Ralph and Nancy

14178 Mountain Spring Rd., Nevada City, CA 95959
Lat: 39.34168'N Long: 120.97927'W

- Hueber, Deva



- Jarvis, Cole



- Kissler, Pam

15484 Auburn Rd, Grass Valley CA 95949

Latitude: 39°8.978'N Longitude: 121°4.738'W 1.11 Acres

October 8, 2024

Scale: 1:2,257

0 0.0175 0.035 0.07 mi

0 0.03 0.06 0.12 km

- Kravetz, Alexandra

12499 Elster Pl., Grass Valley CA 95949

Latitude: 39°7.267'N Longitude: 121°7.588'W 4.88 Acres

October 3, 2024

Scale: 1:4,514

0 0.0375 0.075 0.15 mi

0 0.05 0.1 0.2 km

- Lettington, Paige