California Standardized

Prescribed Fire Plan

Project Title: \_\_\_\_\_\_\_\_\_\_

Prescribed Fire Burn Boss: - Landowner

Author of Plan:

Agency Having Jurisdiction (AHJ): CALFIRE

Property Owner:

Date Created: 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:

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

Latitude: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Longitude: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Unit Size (acres):

***Unit Description:***

property is located north west of \_\_\_\_\_\_\_\_\_, California. The burn unit is a small part of the property and located adjacent to their residence. The burn area is dominated by Douglas Fir (*Pseudotsuga menziesii*) trees with a small number of black oak *(Quercus kelloggii)* trees .

The burn area is predominately steep with logging roads along the west and north boundary. The property has been thinned and treated in the past. The owner owns the parcels on the north, west, and south side of the unit. The east side of the unit is owned by several smaller private parcels.

|  |  |  |
| --- | --- | --- |
|  | **Within the Unit** | **Adjacent to Unit** |
| Fuel type/model | TL1: Low load, compact conifer litter | 11: Light logging slash |
| Slope | 40% | 5-40% |
| Aspect | East | East |
| Special features | Residence adjacent to 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 hazardous fuel loads and promote resiliency to wildfire
* Reintroduce fire’s natural role in a fire adapted ecosystem
* Create conditions for subsequent applications of prescribed fire
* Build capacity of the Prescribed Burn Association

Objectives:

* Reduce fine fuel and 10 and 100 hour fuels by at least 30%
* Reduce small seedlings by 10 or more
* Retain 90% of canopy

**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.):*

Unit will be prepared by creating a hand line on the south side of the unit. Logging roads will be utilized for the remaining boundary of the unit. Heavy fuels will be moved away from the unit boundaries and jackpots against trees will be dispersed throughout the unit. The burn boss will scout the lines to ensure they are suitable to burn prior to ignition.

Calfire and the local volunteer Fire Departments will be notified of the burn. Local property owners will be notified as well as the US Forest Service. A permit will be requested from the County Air Pollution Control District and smoke clearances will be requested the day before the burn.

Prior to ignition a spot fire weather forecast from the National Weather Service will be obtained with temperature, wind and RH. Prior to ignitions on site weather will be taken with a Kestrel. The weather will be communicated to crews during briefing and throughout the burn.

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

Water supply will be brought in with 2 x 55 gallon slip in pumps, 10 x 7 backpack pumps, 4 x 40 gallon sprayers. If more water is needed resupply can be utilized at the house. The local volunteer fire departments will participate in the burn and bring their water tender and hoselay and an engine.

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

The unit is located \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. There are other unnamed dirt roads that run north and south of the property that can be accessed at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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

The owner residence is adjacent to the unit. The property is currently enrolled in a Timber Harvest Plan and has been surveyed for cultural sites and sensitive species.

**3. Prescription**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | **Minimum (cool)** | **Desired** | **Maximum (hot)** |
| Temperature (F) | 50 | 60-70 | 75 |
| Relative Humidity (%) | 40 | 25-35 | 20 |
| Mid-Flame Wind Speed (mph) | 1 | 3-5 | 7 |
| Fine Dead Fuel Moisture (%) | 12 | 2-5 | 1 |
| Probability of Ignition (%) | 20 | 45 | 70 |

***Wind direction*** *(acceptable range and optimal)****:*** The wind direction is expected to be from the east or north east which will provide upslope winds.

***Seasonality of burn*** *(if applicable; in many cases, implementation will be appropriate at any time that prescription parameters are met):* Favorable conditions for burning are expected occur between the months of September and June.

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

☑ Submitted through PFIRS

□ Submitted in hard copy to air district

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

**5. Ignition Plan**

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

Ignition operations will be coordinated with holding resources so that igniters do not out pace holding forces. Primary ignition will be with hand held drip torches. A test fire will occur on the downwind side of the unit (location determined by the burn boss on burn day). If fire and smoke behavior are deemed appropriate by the burn boss, ignitions will commence and a baseline will be established along the downwind control line.

Once the downwind baseline is established, hand ignition will proceed along the containment lines and in the interior of the unit with a small strip fire. Ignition pattern will be determined on the day of the operation and will be based on wind directions and expected and observed fire behavior.

***Holding plan***

|  |  |  |
| --- | --- | --- |
| **Anticipated Fire Behavior (head fire)** | **Flame length (FL)**  **(feet)** | **Rate of spread (ROS)**  **(chains/hour)** |
| *Within the unit* | 1-2 | 2 |
| *Adjacent to unit* | 2-6 | 13 |

|  |  |
| --- | --- |
| **Production Rates** | **Chains/hour** |
| *Crews/resources* | 1-2 chains/hour/ person  12-15 chains/hour /3 person engine |

*\*Line production rates are based on the Wildland Fire Incident Management Field Guide for Fire Behavior Fuel Model 8 (Closed Timber litter) and Model 11 (Light Logging Slash).*

***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):*

Based on fire fighter production tables both fuel types can be contained with 13 firefighters and either 1 four person engine module or 2 two person engine modules. These would be the minimum resources needed. A water tender will be on site. Hose lay will be utilized across the west side of the unit.

Holding will be coordinated with ignition and will be conducted primarily with engines, hand tools, backpack pumps, slip in units and wet lining. Initial ignition on the downwind side will progress until enough black is established to secure the fire line. Holders will watch for spot fires and possible flare-ups near the line and ensure a solid black line has been established. Holders in engines or on foot will patrol behind lighters to check for slop overs or spot fires.

An organization chart will be completed prior to ignitions and communicated to participants during the pre-burn briefing.

Known critical holding concerns include adjacent residence and neighboring properties to the east of the unit. Roads and driveways in the neighborhood are accessible by engines.

Prior to ignitions an on-site weather reading will be taken. On-site weather readings will continue to be taken at the discretion of the burn boss throughout burn operations.

**6. Post-Burn Activities**

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

Mop up will concentrate on areas adjacent to potentially available fuels to ensure a secure fire perimeter. This will include 10 feet around the perimeter of the unit.

Unit will be monitored after burning. When no smoke has been detected for 3 days the fire will be declared out.

**Other post-burn activities** (optional; include appendices for marked activities):

□ Fire effects monitoring plan

□ Project rehabilitation plan (including infrastructure, improvements, and land rehabilitation)

□ Other (describe):

**7. Notifications**

**Pre-Burn Notifications:**

*Adjacent Landowners*

|  |  |  |  |
| --- | --- | --- | --- |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Call |  |
|  | 48 hrs and Day of | Door knock |  |
| Door knocks | 48 hrs and Day of | Call |  |

*Additional Notifications*

□ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone:

□ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone

□ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone:

□ Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Phone:

*Air Quality Management District*

□ Name/Title: Air Pollution Control District Phone:

*Fire Agency Having Jurisdiction*

□ Name/Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Phone: \_\_\_\_\_\_\_\_\_\_\_

*Other notifications may be required based on parameters outlined in the smoke management plan (e.g., schools and other sensitive receptors). Record additional notifications on separate page and include in appendices.*

**Day-of-Burn Notifications:**

*CAL FIRE Emergency Command Center (ECC):*

□ Name/Title: Phone:

*Air Quality Management District*

□ Name/Title: Air Pollution Control District Phone:

*Other Fire Agency Having Jurisdiction (if applicable):*

□ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Phone:

□ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8. Wildfire Conversion Plan**

Person designated to make declaration: Burn Boss

Designated Incident Commander in case of wildfire: Determined on day of burn

Person(s) to contact for declaration:

Name/Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: 911 or

Name/Position:­­ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: 911 or

Name/Position:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: 911 or

Name/Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone : 911 or

Size-up/reporting considerations:

* Rate of spread
* Fuel type
* Structure threat
* Potential acreage
* Current actions being taken

**9. Risk Management Activities**

□ Contingency plan

All spot fires occurring outside the primary control lines will be reported to the landowner / burn boss and immediately suppressed. Crew member(s) reporting the spot will conduct an initial size up of the spot fire or slop-over. Upon the initial report of a spot fire or slop-over, prescribed fire ignition will cease unless continuing firing is needed to keep fire within the lines. The holding specialist or other identified individual will take command of the spot fire or slop-over until contained or controlled. If additional resources are needed the holding specialist or person responsible for containing the spot fire will work with the landowner/ burn boss to order those resources.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Contact** | **Phone** | **Availability** | **Response Time** |
|  |  |  |  | <1 hour |
|  |  |  |  | <1 hour |
|  |  |  |  | < 1 hour |
|  |  |  |  | <1 hour |
|  |  |  | On-Call | 1+ hours |

□ Medical plan

All personnel present during the burn with medical training and location of first aid kits will be identified during the pre-burn briefing. In the event of injury or illness, medically trained personnel will secure the scene to prevent further harm and ensure responder safety. The landowner and/or burn boss will be immediately notified. The patient will be assessed and report status to the burn boss or designee. If necessary, the burn boss or designee will call 911 for emergency assistance. First aid will be administered and the patient's status will continuously be monitored until fit or released to EMS. If applicable, keep a written record of treatments and send a copy with the patient.

The closest hospital to the burn area is**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**. The closest Burn Center is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Inert map

|  |  |  |
| --- | --- | --- |
| **Emergency Assistance** | | |
| Fire |  | Call 911 or |
|  | Call 911 or |
|  | Call 911 or |
| Law Enforcement |  | Call 911 or |
|  | Call 911 or |
| Medical |  | Call 911 |
| Dispatch |  | Call |

□ Communications plan

The operational plan, including radio communication channels, will be communicated to all crew members during the pre-burn briefing. Participants will conduct a radio check before or during the pre-burn briefing. Attempts will be made to provide radios to all personnel. If there are not enough radios to supply each participant with one, persons without a radio will be assigned to stay in communication with someone with a radio. The radio designee will be accountable for communications with participant(s) who do not have a radio but have been assigned to them.

* Fire and Protection Department:
* Open frequencies available:

**Emergency Assistance**

Fire: Call 911

Law Enforcement: Call 911

Medical Dispatch: Call 911

□ Briefing checklist (Attached with GO/NO-GO)

□ Safety plan

Initial safety zones and escape routes will be discussed during the briefing. However, escape routes and safety zones will be continuously evaluated and updated as the burn progresses. Escape routes within the burn area will be constantly reevaluated based on the fire spread and behavior but will likely include handlines, riparian areas, and roads.

Primary escape routes will be the roads throughout the property and depend on the location of crew and the direction of maximum spread of the fire. Key escape routes will include north on French Creek Road to Highway 3.

□ Other (describe):

**10. Other Attachments**

***Check boxes for other pertinent attachments included with the prescribed fire plan:***

☒ Burn Unit Map

☒ Go-no-go checklist

☒ Briefing checklist

☒ Pre-burn preparations checklist

☒ Spot Weather Forecast

Landowner/Burn Boss Signature: Date:

Preparer name and signature: Date:

Reviewer name and signature: Date:

Reviewer name and signature: Date:

Map of Burn Unit

GO/NO-GO CHECKLIST

|  |  |  |
| --- | --- | --- |
| **YES** | **NO** | **QUESTIONS** |
|  |  | Are all fire prescription elements met? |
|  |  | Are all smoke management specifications met? |
|  |  | Has the weather forecast been obtained and is within prescription? |
|  |  | Has the long-range forecast been checked for severe weather? |
|  |  | Have all the required notifications been made? |
|  |  | Are all the necessary permits and clearances obtained? |
|  |  | Is the burn unit as described in the plan and a copy of the plan is on site? |
|  |  | Are required firebreaks complete and are consistent with current and predicted conditions? |
|  |  | Is all the required equipment for holding, weather monitoring, ignition and suppression on-site and functioning? |
|  |  | Have crews reviewed equipment? |
|  |  | Have all the pre-burn considerations identified in the prescribed fire plan been completed or addressed? |
|  |  | Are the planned ignition and containment methods appropriate for current and predicted conditions? |
|  |  | Are the planned contingencies and mop-up appropriate for current and predicted conditions? |
|  |  | Have the participants been briefed on the operations based on the Briefing Checklist? |

Briefing Checklist

* Burn unit size and boundaries
* Burn unit hazards and safety issues
* Purpose of burn, anticipated fire and smoke behavior
* Organization and assignments
* Methods of ignition, holding, mop-up, communications
* Instructions for contact with the public
* Location of main roads, vehicles, keys, and nearest phone
* Location of back-up equipment, supplies, and water
* Contingencies for escaped prescribed fire
* Planning for medical emergency
* Answer questions from crew

Prescribed Burn Pre-Burn Preparations Checklist

|  |  |  |
| --- | --- | --- |
|  | **Task** | **Timeline** |
|  | Neighbors notified | Before burn |
|  | Handline installed | Before burn |
|  | Burn permit requested and issued from Calfire | Before burn |
|  | Smoke permit requested from Air Quality District | Before burn |
|  | Smoke clearance requested and approved | Burn Day |
|  | Weather forecast obtained | Before burn |
|  | On-site weather taken and reported to crews during briefing | Burn Day |
|  | Notifications, including press release, signage, and social media post | Burn Day |
|  | Determine organizational chart & IC for wildfire conversion plan | Burn Day |
|  | Traffic control plan established | Burn Day |

Post Burn Report: