|  |
| --- |
| Prescribed Fire Plan |

# Element 1: Signature Page

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| --- | --- |
| **Administrative Unit(s):** | **Los Padres NF** |
| **Project Name:** | **Frontier Road Fuels Reduction** |
| **Burn Unit Name:** | **Tecuya** |
| **Complexity Rating:** | **Moderate** |

|  | **Name and Qualification or Position** | **Date** |
| --- | --- | --- |
| **Prepared By:** |  |  |
| **Technical Reviewer:** |  |  |
| **Recommended By:** |  |  |
| **Recommended By:** |  |  |
|  |  |  |
| **Approved By:** |  |  |
| **Agency Administrator** |

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# Element 2, Part 1: Agency Administrator GO/NO-GO Pre-Ignition Approval Checklist

**Instructions:** The Agency Administrator’s GO/NO-GO Pre-Ignition Approval is the intermediate planning review process (i.e., between the Prescribed Fire Complexity Rating System Guide and Go/No-Go Checklist) that should be completed before a prescribed fire can be implemented. The Agency Administrator’s Go/No-Go Pre-Ignition Approval evaluates whether compliance requirements, Prescribed Fire Plan elements, and internal and external notifications have been or will be completed and expresses the Agency Administrator’s intent to implement the Prescribed Fire Plan. If ignition of the prescribed fire is not initiated prior to the expiration date determined by the Agency Administrator, a new approval is required.

|  |  |  |
| --- | --- | --- |
| Yes | No | Key Element Questions |
|  |  | Is the Prescribed Fire Plan up to date?  *Hints: amendments, seasonality.* |
|  |  | Will all compliance requirements be completed?  *Hints: cultural, threatened and endangered species, smoke management, NEPA.* |
|  |  | Is risk management in place and the residual risk acceptable?  *Hints: Prescribed Fire Complexity Rating Guide completed with rational and mitigation measures identified and documented?* |
|  |  | Will all elements of the Prescribed Fire Plan be met?  *Hints: preparation work, mitigation, weather, organization, prescription, contingency resources.* |
|  |  | Will all internal and external notifications and media releases be completed?  *Hints: preparedness level restrictions.* |
|  |  | Will key agency staff be fully briefed and understand prescribed fire implementation? |
|  |  | Are there any other extenuating circumstances that would preclude the successful implementation of the plan? |
|  |  | Have you determined if and when you are to be notified that contingency actions are being taken? Will this be communicated to the Burn Boss? |
|  |  | Other: |

Recommended by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 FMO/Prescribed Fire Burn Boss

Approved by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Agency Administrator

Approval expires (date): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Element 2, Part 2: Prescribed Fire GO/NO-GO Checklist

|  |  |  |
| --- | --- | --- |
| Item | Yes | No |
| **A**. Has the burn unit experienced unusual drought conditions or does it contain above-normal fuel loadings which were not considered in the prescription development?   * If **No**, proceed with checklist below. * If **Yes**, go to item **B**. |  |  |
| **B**. Has the prescribed fire plan been reviewed and an amendment and technical review been completed, or has it been determined that no amendment is necessary?   * If **Yes** to any, proceed with checklist below. * If **No**, **STOP**. |  |  |

|  |  |  |
| --- | --- | --- |
| Yes | No | Questions |
|  |  | Have ALL pre-burn prescription parameters been met? |
|  |  | Have ALL smoke management specifications been met? |
|  |  | Has ALL required current and projected fire weather forecasts been obtained and are they favorable? |
|  |  | Are ALL planned operations personnel and equipment onsite, available, and operational? |
|  |  | Has the availability of ALL contingency resources been checked and are they available? |
|  |  | Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones? |
|  |  | Have all the pre-burn considerations identified in the Prescribed Fire Plan been completed or addressed? |
|  |  | Have ALL the required notifications been made? |
|  |  | Have ALL permits and clearances been obtained? |
|  |  | In your opinion, can the burn be carried out according to the Prescribed Fire Plan, and will it meet the planned objective? |

**If all the questions were answered with “Yes,” proceed with a test fire. Document the current conditions, location, and results.**

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Burn Boss Date

# Element 3: Complexity Analysis Summary

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| --- | --- | --- | --- |
| Burn Unit Name: Tecuya | | | |
| Element | Risk | Potential Consequence | Technical Difficulty |
| 1. Potential for escape | **Moderate** | **Moderate** | **Moderate** |
| 2. The number and dependence of activities | **Low** | **Low** | **Low** |
| 3. Offsite values | **Moderate** | **Moderate** | **Moderate** |
| 4. Onsite values | **Moderate** | **Moderate** | **Moderate** |
| 5. Fire behavior | **Moderate** | **Moderate** | **Moderate** |
| 6. Management organization | **Moderate** | **Low** | **Moderate** |
| 7. Public and political interest | **Low** | **Moderate** | **Low** |
| 8. Fire treatment objectives | **Low** | **Moderate** | **Moderate** |
| 9. Constraints | **Low** | **Low** | **Low** |
| 10. Safety | **Moderate** | **Moderate** | **Moderate** |
| 11. Ignition procedures/ methods | **Low** | **Low** | **Low** |
| 12. Interagency coordination | **Low** | **Low** | **Low** |
| 13. Project logistics | **Moderate** | **Low** | **Low** |
| 14. Smoke management | **Low** | **Low** | **Low** |

|  |  |
| --- | --- |
| Complexity Rating Summary | |
| Complexity Factor | Overall Rating |
| Risk | **Moderate** |
| Consequences | **Moderate** |
| Technical Difficulty | **Moderate** |
| Summary Complexity Determination | **Moderate** |
| **Rationale:** **Rationale: This burn rates a moderate complexity due to structures adjacent to the unit. Safety and escaped fire risk have been mitigated by: 1) Requiring the use of qualified personnel in all positions, 2) Time of the burn (both time of year and time of day), 3) Requiring careful ignition methods to achieve desired fire behavior and adequate buffers.** | |

# Element 4: Description of the Prescribed Fire Area

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| Element 4: Description of the Prescribed Fire Area | Project Name: Frontier Road Fuels Reduction | |
| Burn Unit Name: Tecuya | |
| 1. Physical Description | | |
| **Location:** Narrative description of the location of the prescribed fire project, including legal description, Universal Transverse Mercator coordinates and/or latitude/longitude (decimal degrees; NAD83 preferred), county, and state. | | |
| **Southwest corner: Latitude: 34.844265 Longitude: -119.0888019 Northeast corner: Latitude: 34.8460858 Longitude: -119.0879951** | | |
| **Size:** Area, in acres of the project with a breakdown by prescribed fire unit and/or ownership if applicable. | | |
| **Project Size: 5 acres; Area to be burned: 3 acres** | | |
| **Topography:** Identify the upper and lower range of elevation, slopes (max, min, and average), and aspect(s) of the prescribed fire project. | | |
| **Aspect ranges from 30 to 43 degrees (N/NE)   Slope ranges from 25 to 44%. The southern-most area of the burn unit (25% of the unit) has a slope of 25%, and the slope increases to 44% in the northern-most area.   Elevation ranges from 5807 to 5971 feet** | | |
| **Project Boundary:** **The project area boundary defines that area where the fire will be ignited and may be allowed to burn.** Describe the physical, natural, and/or human-made boundaries (including multiple units) of the prescribed fire project. This will be done through maps and may include narratives. The entire prescribed fire project must be analyzed under NEPA. | | |
| **The Tecuya prescribed fire is located approximately 55 miles southwest of Bakersfield, California and 10 miles west of Frazier Park, California. The burn consists of one burn unit for a total of 3 acres (see attached map in Appendix A). To gain access to the burn area, from I-5 N take exit 205 for Frazier Mountain Park Road. Head west on Frazier Mountain Park Road for 6.8 miles, and continue onto Cuddy Valley Road for 5 miles. Take a slight right onto Forest Route 9N05 and turn left on Frontier Road for 0.2 miles and take the 1st right into Camp Tecuya. The entire project boundary is located within Los Padres National Forest boundaries. There are several structures adjacent to the burn unit.** | | |
| 1. Vegetation/Fuels Description | | |
| Onsite Fuels Data | | Adjacent/Surrounding Area Fuels Data |
| **Fuel Model 8 Compact Timber Litter (98%) Fuel Model 5 Brush (2%) Fuel Model 8 best represents fire behavior inside of the burn unit. Average Canopy Base Height = 0.7 feet Average Canopy Height = 57 feet Average Canopy Bulk Density = 0.02 lb/feet3 Average Canopy Cover = 75%   0-1 inch fuel loading = 1.7 tons/acre 1-3 inch fuel loading = 1.8 tons/acre 3+ inch fuel loading = 3.3 tons/acre** | | **Fuel Models 8, 10, 5, and 9 scattered along the burn unit boundaries. Fuel model 8, with patches of Fuel Model 5 and 10 best represent fire behavior outside of the burn unit.** |
| 1. Description of Unique Features | | |
| **There are two structures (platforms) located directly south of the burn unit. These structures will need to be protected prior to burning. A dirt road accesses the structures from the south side of the unit. There are also structures 500 feet south of the unit.** | | |

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# Element 5: Objectives

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| Element 5: Objectives | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Specific, Measurable, and Attainable Resource and Fire Objectives | |
| **Resource Objectives** | |
| **Reduce the risk of future wildland urban interface fire from destroying structures.** | |
| **Fire Objectives** | |
| **The objective of this prescribed fire is fuel reduction by reintroduction of fire into a fire dependent system.   Burn at least 90% of the target area. Remove 80-90% of 0-1 inch fuels, 60-80% of 1-3 inch fuels, and 20-25% of 3+ inch fuels.** | |

# Element 6: Funding

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| --- | --- | --- | --- |
| Element 6: Funding | Project Name: Frontier Road Fuels Reduction | | |
| Burn Unit Name: Tecuya | | |
| Prescribed Fire Phase | | Funding Source | Estimated Cost |
| Administration Cost | | **USFS** | **$120** |
| Planning (Personnel and Labor) | | **USFS** | **$300** |
| Implementation (Personnel and Labor) | | **USFS** | **$500** |
| Implementation (Equipment and Supplies) | | **USFS** | **$150** |
| Total of all estimated costs | | | **$1070** |

# Element 7: Prescription

Multiple prescriptions for one prescribed fire plan are permissible but may require identifying and developing multiple organizations in Element 11. From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, p. 21): “Prescription is defined as the measurable criteria that define a range of conditions during which a prescribed fire may be ignited and held as a prescribed fire. Parameters are quantitative variables expressed as a range that result in acceptable fire behavior and smoke management. The plan prescription will describe a range of low to high limits for the environmental (weather, topography, fuels, etc.) and fire behavior (flame lengths, rate of spread, spotting distance, etc.) parameters required to meet Prescribed Fire Plan objectives while meeting smoke management and control objectives.”

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| Element 7: Prescription (Environmental) | Project Name: Frontier Road Fuels Reduction | | | |
| Burn Unit Name: Tecuya | | | |
| Prescription Coverage: | | | |
| Weather | Low Fire Behavior (Within Unit) | High Fire Behavior (Within Unit) | Optimal Fire Behavior (Within Unit) | Maximum Fire Behavior (Outside Unit) |
| Temperature | **50** | **70** | **70** | **85** |
| Relative humidity | **> 35** | **< 35** | **< 35** | **< 35** |
| Mid-flame wind speed (mi/h) | **1.1** | **3.9** | **3.4** | **5** |
| Mid-flame wind direction (°) | **180** | **180** | **180** | **180** |
| 20-ft wind speed (mi/h) | **10** | **35** | **30** | **45** |
| 20-ft wind direction (°) | **180** | **180** | **180** | **180** |
| Cloud cover (%) | **100** | **0** | **40** | **0** |
| Fuel shading from sun (%) | **100** | **0** | **60** | **0** |
| Aspect (°) | **N/NE (30 to 43 degrees)** | **N/NE (30 to 43 degrees)** | **N/NE (30 to 43 degrees)** | **N/NE (30 to 43 degrees)** |
| Slope (%) | **25** | **44** | **44** | **44** |
| Fuel Moisture |  |  |  |  |
| 1 hour (%) | **14** | **6** | **6** | **4** |
| 10 hour (%) | **16** | **8** | **8** | **6** |
| 100 hour (%) | **20** | **12** | **12** | **8** |
| 1000 hour sound (%) | **35** | **18** | **18** | **15** |
| Live woody (%) | **180** | **120** | **105** | **90** |
| Live herbaceous (%) | **100** | **75** | **60** | **50** |
| Duff moisture (%) | **35** | **25** | **25** | **15** |
| Soil moisture (%) | **n/a** | **n/a** | **n/a** | **n/a** |
| KBDI1 | **0** | **500** | **250** | **500** |
| 1 The Keetch-Byram Drought Index (KBDI) is a soil/duff moisture (%) index. It ranges from 0 (no drought) to 800 (extreme drought). A KBDI of 600 indicates that lower litter/duff layers contribute to active fire intensity. A KBDI of 200–400 is typical of late spring, where lower litter/duff layers begin to dry and contribute to fire intensity. | | | | |

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| Element 7: Prescription  (Fire Behavior Outputs) | | | | Project Name: Frontier Road Fuels Reduction | | | | | | | | | |
| Burn Unit Name: Tecuya | | | | | | | | | |
| Fuel Model: 8 (Compact Timber Litter) | | | | | | | | | |
| Prescription Coverage: | | | | | | | | | |
| Fire Behavior 🡺 | Low Fire Behavior (Within Unit) | | | | High Fire Behavior (Within Unit) | | | Optimal Fire Behavior (Within Unit) | | | Maximum Fire Behavior (Outside Unit) | | |
| Type of Fire | H | B | F | | H | B | F | H | B | F | H | B | F |
| Fuel Model | **Fuel Model 8 Compact Timber Litter** | | | | **Fuel Model 8 Compact Timber Litter** | | | **Fuel Model 8 Compact Timber Litter** | | | **Fuel Model 8 Compact Timber Litter** | | |
| Flame length (ft) | **0.37** | **0.21** | **0.26** | | **0.8** | **0.28** | **0.37** | **0.73** | **0.28** | **0.36** | **1.11** | **0.33** | **0.44** |
| Rate of spread (ch/hr) | **0.23** | **0.0662** | **0.10** | | **1.03** | **0.10** | **0.19** | **0.84** | **0.10** | **0.18** | **1.85** | **0.13** | **0.24** |
| Fireline intensity (btu/ft/s) | **0.67** | **0.19** | **0.30** | | **3.52** | **0.36** | **0.65** | **2.87** | **0.35** | **0.63** | **7.11** | **0.5** | **0.94** |
| Spotting distance (mi) | **0.0094** | **0.072** | **0.0078** | | **0.0377** | **0.0241** | **0.0251** | **0.0318** | **0.0208** | **0.0218** | **0.0576** | **0.0311** | **0.0328** |
| Scorch height (ft) | **0.3** | **0.0821** | **0.14** | | **0.49** | **0.035** | **0.0707** | **0.47** | **0.0429** | **0.0809** | **0.98** | **0.0466** | **0.0964** |
| Probability of ignition (%) | **13** | | | | **55** | | | **52** | | | **77** | | |
| Reaction intensity (btu/ft2/ min) | **771.54** | | | | **921.44** | | | **921.44** | | | **1031.72** | | |
| Heat per unit area (btu/ft2) | **156.85** | | | | **187.32** | | | **187.32** | | | **209.75** | | |
| *(H = Head Fire, B = Backing Fire, F = Flanking Fire)*  Fire behavior outputs may be derived from BEHAVE models, nomograms, or historical or empirical evidence. Include modeling and/or empirical evidence documentation as an appendix or in the fire behavior narrative. | | | | | | | | | | | | | |

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| Element 7: Prescription (Fire Behavior Narrative) | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Prescription Coverage: |
| Fire Behavior Narrative, or Description of Empirical Evidence | |
| *Summarize the fire behavior identified in the prescription and how it will achieve the desired treatment objectives.* | |
| **The above tables indicate acceptable ranges (PRESCRIPTION WINDOW) of weather elements, fuel moisture, and fire behavior characteristics for a successful burn. At the end of this prescription, the spotting potential is only projected to be 0.0576 miles, although the probability of ignition is high (High Fire Behavior = 55%, Maximum Fire Behavior = 77%).   The prescription limits flame lengths to less than 4 feet. No torching or crown fires are predicted for minimum fire behavior with a canopy base height of 0.10 ft, and maximum fire behavior with a canopy base height of 3 feet. It is imperative to prune ladder fuels within the burn unit so that the canopy base height is greater than or equal to 3 feet prior to burning. Although there is no transition to crown fire predicted under these conditions, the high, optimal, and maximum fire behavior conditions predict a "conditional crown fire", which means that if the fire were to reach the canopy, active crown fire is possible.   The module "Calculate fuel consumption for natural fuels (Consume)" predicted 88.8% consumption for 0-1 inch fuels, 78% consumption for 1-3 inch fuels, and 22.4% consumption for fuels > 3 inches under the "Optimal Fire Behavior" environmental prescription using FCCS Fuelbed #16 (Jeffrey pine -- Ponderosa pine -- Douglas-fir -- California black oak forest (Fire Exclusion)). This module is predicting that we will meet or fuels reduction objectives (Element 5) under the optimal fire behavior conditions.** | |

# Element 8: Scheduling

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| Element 8: Scheduling | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| 1. Ignition Time Frames or Season(s) | |
| **Either spring or fall burn as long as constraints are followed.** | |
| 1. Project Duration | |
| **Only 3 acre burn - will complete in one day with the possibility of overnight spotters/mop-up depending upon weather and smoke conditions.** | |
| 1. Constraints | |
| **Only surface fire (no torching or crowning) Flame lengths < 4 feet   Technical review annually, with new technical review and superintendent signatures. If for any reason burn bans are imposed they will be honored.** | |

# Element 9: Pre-burn Considerations and Weather

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| Element 9: Pre-burn Considerations and Weather | | | Project Name: Frontier Road Fuels Reduction | | | | | |
| Burn Unit Name: Tecuya | | | | | |
| 1. Onsite and Offsite Considerations | | | | | | | | |
| **Mow/weed-whack and clear all vegetation 3 to 8 feet around the two structures (platforms) directly adjacent to the unit (south) withing 2 weeks of ignition.   Place prescribed fire or smoke signs at designated locations morning of the burn.   Place wet foam/line where needed during the time of the burn.   Spot weather forecast morning of the burn.   Set fuel sticks 2 weeks prior to the burn.   Ladder fuels adjacent to control lines that provide an opportunity for crown fire should be thinned and scattered.   Ladder fuels <3 feet within the burn unit should be thinned and scattered.   Forest FMO or AFMO will be notified at least 2 days prior to burning.   Photographs will be taken before and after burning.   Go-no-go checklist will be completed before ignition.   Spot weather data will be called in to the National Weather Service (NWS) by either the Burn Boss or Fire Dispatch office. If the spot weather forecast is received back after the Burn Boss and burn crew have left for the field, the Dispatcher will read off the forecast over the radio and then provide it to the Burn Boss for the prescribed fire plan records. Depending on the time of year, the spot weather forecast may need to be called in to NWS on the day prior to the burn.** | | | | | | | | |
| 1. Method and Frequency for Obtaining  Weather and Smoke Management Forecast(s) | | | | | | | | |
| **A spot weather forecast is required prior to ignition. If phases are implemented over multiple days a spot weather forecast is required for each day of ignition.   Fuel sticks and weather will be taken daily, as designated by the Burn Boss, for at least 5 days prior to ignition operations.** | | | | | | | | |
| 1. Notifications (internal and external organizations  and individuals that might be affected by the burn, and media) | | | | | | | | |
| Organizations and Individuals (include emergency dispatchers) | | | | | | | | |
| Organization | When to Notify | | | Telephone Number | Contact Name | Date | | Contact Method |
| **Adjacent Property Manager** | **No later than 1 week prior to the burn** | | | **xxx-xxxx** | **Joe Shmoe** |  | | **Personal contact** |
| **Adjacent Property Manager** | **No later than 1 week prior to the burn** | | | **xxx-xxxx** | **Bob Baker** |  | | **Personal contact** |
| **Kern County Sheriff's Office** | **2 days prior to burn** | | | **xxx-xxxx** |  |  | | **Burn Boss or Designee** |
| **Kern County Air Quality** | **1 week prior to burn and day before burn** | | | **xxx-xxxx** |  |  | | **Burn Boss or Designee** |
|  |  | | |  |  |  | |  |
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|  |  | | |  |  |  | |  |
|  |  | | |  |  |  | |  |
| Media Contacts | | | | | | | | |
| Type of Media | | Media Name | | | Location | | Telephone Number | |
| Newspaper | | The Mountain Enterprise | | | Frazier Park, Ca | | xxx-xxxx | |
|  | |  | | |  | |  | |
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# Element 10: Briefing

The Prescribed Fire Burn Boss will ensure that any new personnel arriving at the prescribed fire receives a briefing prior to assignment.

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| Element 10: Briefing | | | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Briefing Checklist | | | |
| **Yes** | **No** |  | |
|  |  | Burn organization and assignments  Burn objectives and prescription  Description of the prescribed fire area  Expected weather and fire behavior  Communications  Ignition plan  Holding plan  Contingency plan and assignments  Wildfire conversion  Safety plan  Medical plan  Aerial ignition briefing (if aerial ignition devices will be used)  Incident action plan (IAP) The IAP is optional, but is recommended for large multi-day or high-complexity prescribed fires | |

# Element 11: Organization and Equipment

Specify the minimum required implementation organization needed to meet the capabilities (line production rates, etc.) by position, equipment, and the supplies needed for all phases of the prescribed fire until the fire is declared out. See the *Interagency Prescribed Fire Planning and Implementation Procedures Guide* for details.

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| Element 11: Organization and Equipment | | Project Name: Frontier Road Fuels Reduction | | | | | | | | | |
| Burn Unit Name: Tecuya | | | | | | | | | |
| A. Positions | | | | | | | | | | | |
| Position | | | ICS Code | | | Amount Needed | | | Line Building Rates (ch/hr) | | |
| Prescribed Fire Burn Boss | | | **RXBX** | | | **1** | | | **--** | | |
| Ignition Specialist Function | | | **FIRB** | | | **1** | | | **--** | | |
| Holding Specialist Function | | |  | | | **1** | | | **--** | | |
| Fire Effects Monitor | | | **FEMO** | | | **1** | | | **--** | | |
| Lookout | | | **FFT2** | | | **3** | | | **--** | | |
| Engine Boss, Operator, and Crew | | | **ENGB/ENOP** | | | **6** | | | **--** | | |
| Ignition Crew | | | **FFT2** | | | **3** | | | **15** | | |
| Holding Crew | | | **FFT2** | | | **10** | | | **25** | | |
| Aerial Ignition Crew (as needed) | | | **n/a** | | | **n/a** | | | **n/a** | | |
|  | | |  | | |  | | |  | | |
| B. Equipment | | | | | | | | | | | |
| Equipment | Type | | | | Amount Needed | | Number of Personnel | | | Line Building Rates (ch/hr) | |
| Engine | **Type 2** | | | | **1** | | **3** | | | **--** | |
| Engine | **Type 6** | | | | **1** | | **3** | | | **--** | |
| Dozer | **n/a** | | | | **n/a** | | **n/a** | | | **n/a** | |
| Water Tender | **Type 4** | | | | **1** | | **1** | | | **--** | |
| Aviation Resources | **n/a** | | | | **n/a** | | **n/a** | | | **n/a** | |
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| C. Supplies | | | | | | | | | | | |
| Supplies | | | | Amount Needed | | | | Need to Order | | | |
| Drip Torches | | | | **3/engine** | | | | **0** | | | |
| Chainsaws | | | | **1/engine** | | | | **0** | | | |
| Hand Tools | | | | **std inventory/engine** | | | | **0** | | | |
| Fuel | | | | **5 gal/engine** | | | | **0** | | | |
| Portable Water Tanks | | | | **3/engine** | | | | **0** | | | |
| Hoses | | | | **std inventory/engine** | | | | **0** | | | |
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| D. Total Line Production Rates | | | | | | | | | | | |
| Total line building capability at dry/hot end of prescription (ch/hr): | | | | | | | | | | | **40** |
| Expected line building capability needed during initial escape at critical holding area at dry/hot end of prescription (ch/hr): | | | | | | | | | | | **20** |
| The line building rate of on-site resources will exceed perimeter increase during initial escape if the wind speed is (mi/hr): | | | | | | | | | | | **40** |

**Organization Chart**

Organization will be assigned by the burn Boss prior to commencing any prescribed fire operations and documented in the prescribed fire plan files.

# Element 12: Communication

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| Element 12: Communications | | Project Name: Frontier Road Fuels Reduction | | | | | | | | | |
| Burn Unit Name: Tecuya | | | | | | | | | |
| Command, Tactical, and Air Operations Frequencies | | | | | | | | | | | |
| System | RX | | RX | | TX | TX | | Assignment | | Remarks | |
| **Group 1** | **166.375** | |  | |  |  | | | **Command** | **All personnel on this burn** | |
| **Group 1** | **168.350** | |  | |  |  | | | **Tactical** |  | |
| **Group 7** | **170.000** | |  | |  |  | | | **Medical Operations** |  | |
| **Group 7** | **162.875** | |  | |  |  | | | **Fire Trucks** | **Call Directly to Dispatch** | |
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| Project Phone Numbers | | | | | | | | | | | |
| Personnel Name | | | | Agency/Affiliation | | | Telephone Number | | | |
| **Dispatch** | | | | **xxx-xxxx** | | |  | | | |
| **Field Manager** | | | | **xxx-xxxx** | | |  | | | |
| **Zone FMO** | | | | **xxx-xxxx** | | |  | | | |
| **Fuels Specialist** | | | | **xxx-xxxx** | | |  | | | |
| **Fuels Technician** | | | | **xxx-xxxx** | | |  | | | |
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# Element 13: Public and Personnel Safety, Medical

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| --- | --- |
| Element 13: Public and Personnel Safety and Medical Plan | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Safety Hazards | |
| **All safety hazards that are encountered during the implementation phase of this prescribed fire plan will immediately be brought to the attention of the Burn Boss who will make any necessary notifications and/or adjustments to tactics.** | |
| Measures Taken to Reduce the Hazards | |
| **All personnel in the burn area will have full PPE, including any member of the public who has permission from the Burn Boss to be on site.   No trainee will be expected to perform task functions without close supervision. All tactical vehicles will have a radio with common communication and any line crew members who work separately will have a radio. Crew members are expected to work in pairs. All equipment will be tested for satisfactory operation prior to ignition.   Cautions for stinging/biting/poisonous insects and poisonous snakes (rattlesnakes) will be given during the briefing.   All ignition and holding operations will be closely monitored by the Burn Boss, Firing Boss, and Holding Boss. All ignition personnel will carry a portable radio and the Firing Boss will maintain radio contact with all Igniters during ignition operations. The Holding Boss will work with his/her holding forces to ensure minimum smoke exposure during the burning and mop-up operations.** | |
| Emergency Medical Plan | |
| Emergency Medical Procedures | |
| **In case of serious injury needing immediate medical attention, the Burn Boss will contact the servicing Dispatch Office, Police/Sheriff's Office, or medical facility, whichever is more appropriate for the project area for medical services.   The nature of the injury will need to be conveyed to the ambulance/life flight crew to insure the proper response. DO NOT broadcast the name of any injured personnel. The Agency FMO and Superintendent are to be notified immediately in the event of a medical emergency.   At the discretion of the Burn Boss, ignition operations may be halted or curtailed, in order to support the medical emergency.** | |
| Emergency Evacuation Methods | |
| **If the nature of the injury requires medi-vac to trauma or burn center, request air ambulance from/to nearest center.** | |
| Emergency Facilities | |
| **Grossman Burn Center - Bakersfield San Joaquin Community Hospital 2615 Chester St., Bakersfield, CA 93301   OJAI VALLEY COMMUNITY HOSPITAL 1306 Maricopa Highway Ojai, CA** | |
| Directions from Nearest Medical Facility to Project via Ground | |
|  | |
| **Standardized Medical Emergency Procedures**  **Reference: NWCG#025-2010** | |
| **In the event of serious accidents or injuries, the burn boss shall be notified immediately. The burn boss will initiate on-site response (if not already in progress) and coordinate additional response needs using the following communications plan:** | |
| 1. **Declare the nature of the emergency**  * **Type of medical injury or illness and whether it is life-threatening** * **Type of response needed**   + **Life-threatening = Medivac**   + **Non-life-threatening = Medical Transport** | |
| 1. **If emergency is life threatening, request that the designated frequency be cleared for emergency traffic** | |
| 1. **Identify the on-scene Point of Contact (POC) by resource position and last name (i.e. Burn Boss Smith)** | |
| 1. **Identify the following:**    * **Nature of the incident**    * **Number of people injured or sick**    * **Patient assessment**    * **Location (geographic and lat/long coordinates)**    * **Accessibility by ground and/or air** | |
| **5. Identify on-scene medical personnel by position and name (i.e. EMT Jones)** | |
| **6. Identify preferred method of patient transport** | |
| **7. Request any additional resources and/or equipment needed** | |
| **8. Document all information received and transmitted on the radio or phone** | |
| **9. Identify any changes in the on-scene Point of Contact or medical personnel as they occur** | |

# Element 14: Test Fire

|  |  |  |  |
| --- | --- | --- | --- |
| Element 14: Test Fire | Project Name: Frontier Road Fuels Reduction | | |
| Burn Unit Name: Tecuya | | |
| Planned Location and Specific Instructions | | | |
| **The test fire will be ignited in an area that can be safely and quickly extinguished if unsuccessful. Select a site that is representative of the fuels to realistically portray the fire behavior and smoke emissions. Ensure that adequate resources are on scene and prepared to suppress an unsuccessful test fire. The test fire should be in a location and under conditions that enable two different suppression tactics to extinguish it.   The test fire will be ignited in an area that has been identified by the burn boss. The selected area should contain fuels that when ignited, would provide representative fire behavior. The selected site should also facilitate rapid, complete suppression if the test fire was not successful.** | | | |
| Test Fire Documentation | | | |
| Weather Conditions Onsite | | | |
| **Weather will be taken prior to the ignition of the Test Fire to verify that the unit is in prescription. The burn boss is responsible to make sure that all weather observations taken are stored in the project file.** | | | |
| Test Fire Results | | | |
| **Make a notation of the test fire results on the Go-no-go checklist.** | | | |
| Did the test fire meet prescription parameters? | | Yes | No |
|  |  |
| Comments | | | |
|  | | | |

# Element 15: Ignition Plan

Maps may be included.

|  |  |
| --- | --- |
| Element 15:  Ignition Plan | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Firing Methods (including techniques, sequences, and patterns) | |
| **Note:** Multiple prescriptions may require identifying and developing multiple ignition organizations and implementation instructions. | |
| **The ignition methods will be ground-based with devices and techniques adjusted as needed according to the burn boss or the firing boss to meet management objectives. Specific patterns will be developed when the project is ignited dependent on wind directions. Modifications to the patterns may be required by the Firing/Burn Boss to help successfully complete ignition operations.** | |
| Devices | |
| **Handheld drip torches and/or fusees.** | |
| Ignition Staffing | |
| **3 igniters under the direct supervision of the Firing Boss, unless otherwise directed by the Firing/Burn Boss.** | |

# Element 16: Holding Plan

From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, p. 24): “Describe general procedures to be used for operations to maintain the fire within the project area and meet project objectives until the fire is declared out. This may include mop-up and/or patrol procedures. Describe critical holding points (if any) and mitigation actions. Critical holding points will be identified on the project map. Describe minimum capabilities needed for all phases of implementation (see Element 11: Organization and Equipment). If used, attach or reference modeling outputs or worksheets (i.e. Fireline Handbook production rates, BEHAVE, etc.) and/or documented empirical evidence to justify minimum holding resources required.

“Different organizations may be identified for different phases of implementation (i.e., holding v. mop-up and patrol, different ignition operations, different prescriptions). Multiple prescriptions may require identifying multiple complexity ratings and developing multiple holding organizations. If onsite resources are insufficient to meet the prescribed fire plan objectives, then the Burn Boss should implement the Contingency Plan or Wildfire Conversion.”

|  |  |
| --- | --- |
| Element 16:  Holding Plan | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| General Procedures for Holding | |
| **A lookout will be positioned in an area that allows for good viewing of the area outside of the project boundary. All holding personnel will monitor outside o the project boundary as able.   Holding resources will be stationed near the two structures (platforms) adjacent to the burn unit (on the south end) and other specific locations based on their capabilities and considering wind direction, fuel loading, fire behavior, and weather factors.   Slopovers and spot fires will need to be attacked quickly to minimize fire spread and fire establishment into a running head fire, and will generally be attacked along the flanks, anchoring from the back, unless otherwise directed by the Holding Boss.** | |
| Critical Holding Points and Mitigation Actions | |
| **The forest adjacent to the right (east) flank is at risk for torching trees. This area presents the most potential for holding problems.     Critical holding points and safety zones will be identified during the briefing.** | |
| Minimum Organization or Capabilities Needed  (see also Element 11) | |
|  | |

# Element 17: Contingency Plan

From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, p. 25): “Contingency planning is the determination of initial actions and additional resources needed if the prescribed fire is not meeting, exceeds, or threatens to exceed:

• Project or unit boundary

• Objectives

• Prescription parameters

• Minimum implementation organization

• Smoke management objectives

• Other Prescribed Fire Plan elements"

|  |  |
| --- | --- |
| Element 17:  Contingency Plan | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Trigger Points | |
| **If fire burns outside of the specific perimeter limits, which cannot be contained by onsite resources, the fire will then be assessed for containment at contingency lines.   Unexpected weather changes drastically affect fire behavior.   Multiple spot fires occur and wind is increasing.   Multiple trees begin to torch and wind is increasing.** | |
| Actions Needed | |
| **Weather observations will be closely monitored and any significant changes in behavior or weather will require the burn boss and holding boss to discuss the holding forces ability to maintain control. Whenever the holding boss feels that his resources are being stretched too thin, they can ask for firing to cease until holding resources are ready to continue. If weather parameters are found to be out of prescription parameters, firing may cease at the discretion of the burn boss until weather conditions are once again suitable to meet prescription parameters.** | |
| Additional Resources and Maximum Response Time(s) | |
| **Kern County Fire Station 57 729 West End Drive Frazier Park, California Max Response Time = 30 minutes   Kern County Fire Station 56 1548 Lebec Service Road Lebec, California Max Response Time = 45 minutes   Pine Mountain Club Fire Department 2420 Symonds Drive Pine Mountain Club, CA 93222 Max Response Time = 30 minutes** | |

# Element 18: Wildfire Conversion

From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, pp. 25–26): “A prescribed fire must be declared a wildfire by those identified in the plan when that person(s) determines that the contingency actions have failed or are likely to fail and cannot be mitigated by the end of the next burning period. A prescribed fire must be declared a wildfire when the fire has spread outside the project boundary, or is likely to do so, and cannot be contained by the end of the next burning period. A prescribed fire can be converted to a wildfire for reasons other than an escape.

Describe the actions to be taken when a prescribed fire is declared a wildfire. Description will include:

• Wildfire declaration (by whom)

• IC assignment

• Notifications

**A prescribed fire declared a wildfire cannot be returned to prescribed fire status.”**

|  |  |
| --- | --- |
| Element 18:  Wildfire Conversion | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Wildfire Declared By (i.e., who has the authority to declare?) | |
| **Burn Boss** | |
| Incident Commander (IC) Assignment | |
| **Burn Boss or anyone qualified as an IC as assigned by the Burn Boss.** | |
| Notifications | |
| **The Burn Boss will notify the district FMO, local dispatch, and superintendent of the wildfire declaration. Burn Boss will also have local dispatch notify the County Law Enforcement.** | |
| Extended Attack Actions and Opportunities to Aid in Fire Suppression | |
| **The IC will order needed resources through the local dispatch.** | |

# Element 19: Smoke Management and Air Quality

How will the project comply with local community, county, state, tribal, and federal air quality regulations? For more information, see the *Smoke Management Guide for Prescribed and Wildland Fire, 2001 Edition* (<http://www.fs.fed.us/pnw/pubs/journals/pnw_2001_ottmar001.pdf>), and <http://www.nifc.gov/smoke/>.

|  |  |
| --- | --- |
| Element 19:  Smoke Management and Air Quality | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Compliance and Permits to be Obtained | |
| **This burn will meet the requirements and obtain permits needed from the California Environmental Protection Agency - Air Resources Board, and the San Joaquin Valley Air Pollution Control District.** | |
| Smoke-Sensitive Receptors (population centers, hospitals, schools, airports, transportation corridors, non-attainment areas, Class 1 areas, and restricted areas) | |
| **There are children's summer camps in the immediate area, but burning will occur before and/or after the summer camps are in session.** | |
| Potential Impacted Areas | |
| **Forest Highway 95** | |
| Mitigation Strategies and Techniques for Reducing Smoke Impacts | |
| **Place smoke signs and provide road monitors/traffic controllers if the wind direction causes smoke to lie over the local roads, as directed by the burn boss. Placement of smoke signs will help to mitigate the possibility of the public stopping along Forest Highway 95.** | |

# Element 20: Monitoring

From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, p. 26): “At a minimum, specify the weather (forecast and observed), fire behavior and fuels information, and smoke dispersal monitoring required during all phases of the project and the procedures for acquiring it, including who and when.”

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| Element 20:  Monitoring | | | | | Project Name: Frontier Road Fuels Reduction | | | | | | | | | | | | |
| Burn Unit Name: Tecuya | | | | | | | | | | | | |
| Fuels Information Required, and Procedures | | | | | | | | | | | | | | | | | |
| **Fuel moisture will be documented for at least five days prior to commencing ignition operations, and until ignition operations are completed.** | | | | | | | | | | | | | | | | | |
| **Pre-Burn Conditions** | | | | | | | | | | | | | | | | | |
| **Date/Time** | **Temperature** | | | **Relative Humidity** | | | **Midflame Wind Speed and Direction** | | | **1-hour Fuel Moisture** | | **10-hour Fuel Moisture** | | **100-hour Fuel Moisture** | | | **Live Fuel Moisture** |
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| Weather Monitoring (forecast and observed) Required, and Procedures | | | | | | | | | | | | | | | | | |
| **General weather forecasts will be monitored for at least five days prior to operations. Site weather conditions will be documented. Spot weather request data and forecasts will also be in the prescribed fire project file.** | | | | | | | | | | | | | | | | | |
| Fire Behavior Monitoring Required, and Procedures | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | |
| **Ignition Date:** | | | | | | **Ignition Time/Start:** | | | | | | | **Ignition Time/Stop:** | | | | |
| **Time** | | **Temperature** | | | | **Relative Humidity** | | | **Wind Speed** | | | | **Wind Direction** | | | **Flame Length** | |
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| Monitoring Required to Ensure That Prescribed Fire Plan Objectives Are Met | | | | | | | | | | | | | | | | | |
| **Fire effects/objective accomplishments will be documented with pre- and post-burn photos of the monitoring plots with an attached narrative discussing post-objective estimates. Vegetation plots will be established inside the burn unit, and these plots will be measured pre-burn, 1 week post burn, 1 month post burn, 6 months post burn, and 1 year post burn. Photo points will be established at each plot center. These plots will be used to measure vegetation response to the prescribed fire and re-sprouting of desirable species post burn.** | | | | | | | | | | | | | | | | | |
| Smoke Dispersal Monitoring Required, and Procedures | | | | | | | | | | | | | | | | | |
| **Smoke dispersal will be monitored throughout the burn, and the monitoring will be in compliance with regulations.** | | | | | | | | | | | | | | | | | |
| **Date/Time** | **Direction of Smoke Movement** | | **Approx. Mixing Height** | | | | | **Column Formation (weak or well formed)** | | | **Unique Characteristics of Smoke Behavior** | | | | **Other** | | |
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# Element 21: Post-Burn Activities

From the *Interagency Prescribed Fire Planning and Procedures Guide* (July 2008, p. 26): “Post-burn activities that must be completed … may include [a] post-burn report, safety mitigation measures, and rehabilitation needs, including those [that arose] as a result of pre-burn activities.”

|  |  |
| --- | --- |
| Element 21:  Post-Burn Activities | Project Name: Frontier Road Fuels Reduction |
| Burn Unit Name: Tecuya |
| Post-Burn Activities That Must Be Completed | |
| **Rehabilitation of lines as directed by the burn boss.   Conduct an after action review at the end of the burn. Make a note of any significant incidents/events in the burn folder.   Document actual costs.   Additional recommendations for future burns in this fuel type and location.** | |
| Post-Burn Report | |
| **A post-burn evaluation and summary that documents burn day weather, fuel conditions, fire effects, and problems/concerns is required. The report must also indicate if objectives were met and make recommendations for future projects. The prescribed fire results will be compared to the fire treatment objectives and resource objectives that were identified for the project. The prescribed fire report must be completed and signed by the Burn Boss and retained as a part of the prescribed fire project file.** | |
| Other | |
|  | |

# Appendices

Appendices A through E are required. Additional appendices can be included as needed (e.g., plastic sphere dispenser aviation safety plan, desired wind directions for project area, and so on).

A. Maps: Vicinity and Project; include other maps as needed, such as smoke dispersal maps, project maps, and maps of water or air quality monitoring sites

B. Technical Review Checklist

C. Complexity Analysis

D. Agency-Specific Job Hazard Analysis

E. Fire Behavior Modeling Documentation or Empirical Documentation (unless it is included in the fire behavior narrative in Element 7, Prescription)

## Appendix A: Maps

### 1. Vicinity Map

|  |  |
| --- | --- |
| **Name of Preparer(s):** | EMB |
| **Date:** | 6/25/12 |
| **Project Name:** | Frontier Road Fuels Reduction |
| **Burn Unit Name:** | Tecuya |



Tecuya Burn Unit

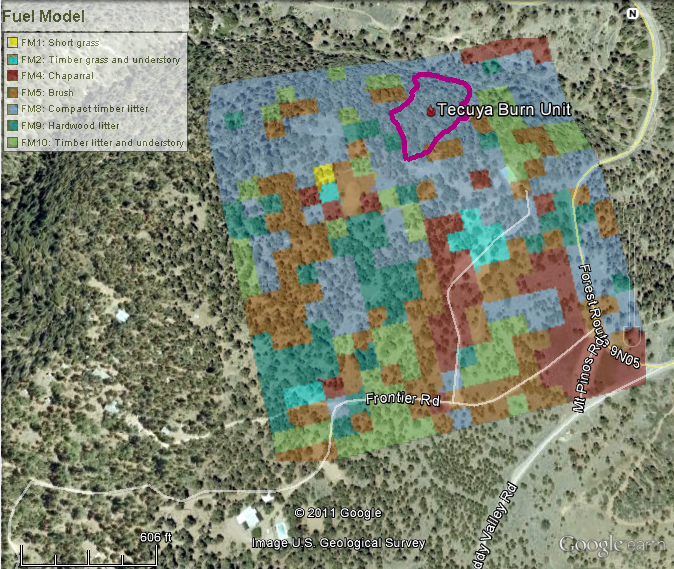
Summer Camps

Access Roads

Helispot

### 2. Project Map 1

|  |  |
| --- | --- |
| **Name of Preparer(s):** | EMB |
| **Date:** | 6/25/12 |
| **Project Name:** | Frontier Road Fuels Reduction |
| **Burn Unit Name:** | Tecuya |

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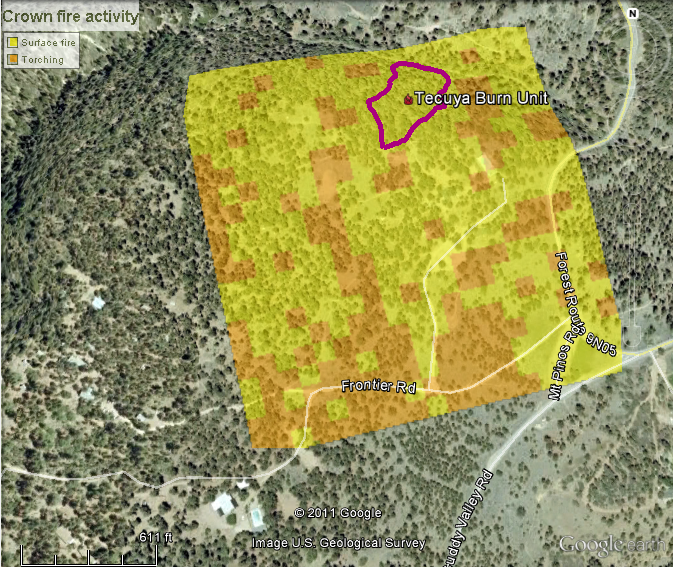
Project Map #1

Fuel Model

Tecuya Burn Unit

### 2. Project Map 2

|  |  |
| --- | --- |
| **Name of Preparer(s):** | EMB |
| **Date:** | 6/25/12 |
| **Project Name:** | Frontier Road Fuels Reduction |
| **Burn Unit Name:** | Tecuya |

****

Project Map #2

Crown Fire Activity

Tecuya Burn Unit

## 2. Project Map 3

|  |  |
| --- | --- |
| **Name of Preparer(s):** | EMB |
| **Date:** | 11/29/11 |
| **Project Name:** | Frontier Road Fuels Reduction |
| **Burn Unit Name:** | Tecuya |

## Appendix B: Technical Reviewer Checklist

Project Map #3

Flame Length

Tecuya Burn Unit

|  |  |  |
| --- | --- | --- |
| Prescribed Fire Plan Elements | S/U | Comments |
| 1. Signature page |  |  |
| 1. GO/NO-GO Checklists |  |  |
| 1. Complexity Analysis Summary |  |  |
| 1. Description of the Prescribed Fire Area |  |  |
| 1. Objectives |  |  |
| 1. Funding |  |  |
| 1. Prescription |  |  |
| 1. Scheduling |  |  |
| 1. Pre-burn Considerations and Weather |  |  |
| 1. Briefing |  |  |
| 1. Organization and Equipment |  |  |
| 1. Communication |  |  |
| 1. Public and Personnel Safety, Medical |  |  |
| 1. Test Fire |  |  |
| 1. Ignition Plan |  |  |
| 1. Holding Plan |  |  |
| 1. Contingency Plan |  |  |
| 1. Wildfire Conversion |  |  |
| 1. Smoke Management and Air Quality |  |  |
| 1. Monitoring |  |  |
| 1. Post-burn Activities |  |  |
| Appendix A: Maps |  |  |
| Appendix B: Technical Reviewer Checklist |  |  |
| Appendix C: Complexity Analysis |  |  |
| Appendix D: Agency-Specific Job Hazard Analysis |  |  |
| Appendix E: Fire Prediction Modeling Runs or Empirical Documentation |  |  |
| Other |  |  |

S = Satisfactory U = Unsatisfactory

Recommended for Approval: \_\_\_\_\_\_\_\_\_ Not Recommended for Approval: \_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Technical Reviewer Qualification and currency (Y/N) Date

🞏 Approval is recommended subject to the completion of all requirements listed in the comments section, or in the Prescribed Fire Plan.

## Appendix C: Complexity Analysis

**Instructions:** This worksheet is designed to be used with the Prescribed Fire Complexity Rating descriptors on Page 6 of the [Prescribed Fire Complexity Rating System Guide](http://www.nwcg.gov/pms/RxFire/complexity_analysis.pdf).

**1. Potential for Escape**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**2. The Number and Dependency of Activities**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**3. Off-Site Values**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**4. On-Site Values**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**5. Fire Behavior**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**6. Management Organization**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**7. Public and Political Interest**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

|  |  |
| --- | --- |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**8. Fire Treatment Objectives**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**9. Constraints**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**10. Safety**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**11. Ignition Procedures/Methods**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**12. Interagency Coordination**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**13. Project Logistics**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**14. Smoke Management**

|  |  |
| --- | --- |
| **Risk** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Potential Consequences** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |
| **Technical Difficulty** | **Rationale** |
| **Preliminary Rating:**  ***Low Moderate High*** |  |
| **Final Rating:**  ***Low Moderate High*** |  |

**COMPLEXITY RATING SUMMARY**

|  |  |  |  |
| --- | --- | --- | --- |
| RISK | | Overall Rating: | |
| POTENTIAL CONSEQUENCES | | Overall Rating: | |
| TECHNICAL DIFFICULTY | | Overall Rating: | |
| **SUMMARY COMPLEXTITY RATING:** | |  | |
|  |  |  |  |
| **Rationale:** | | | |
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Prepared by: Date:

Approved by: Date: (Agency Administrator)

## Appendix D: Agency-Specific Job Hazard Analysis

## Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

Surface Fire Behavior (IFT-surface):

Probability of Ignition from a Firebrand (IFT-ignite)

Scorch height (IFT-scorch)

