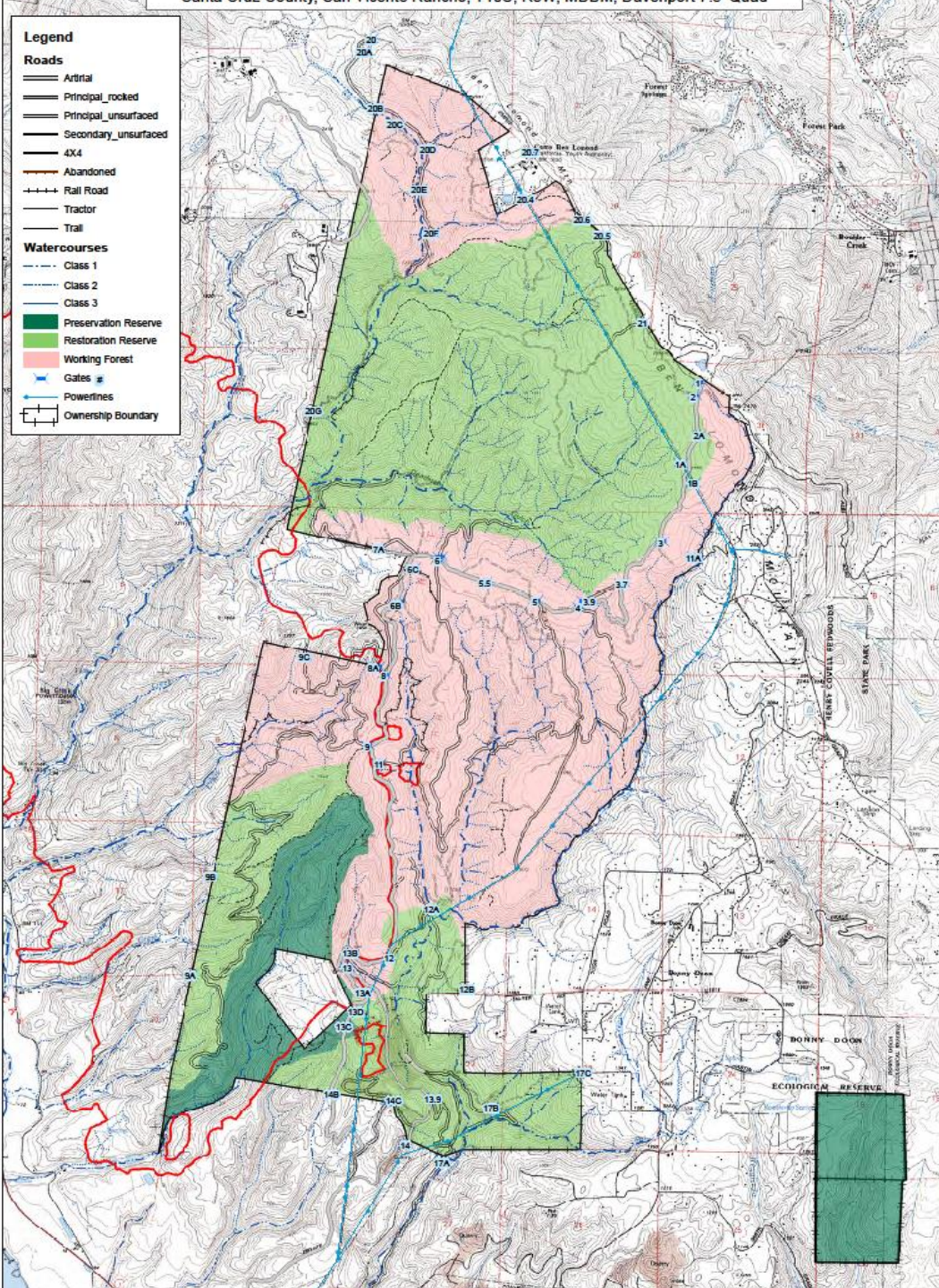




# San Vicente Redwoods: Fuels Management Strategy

Nadia Hamey  
RPF #2788



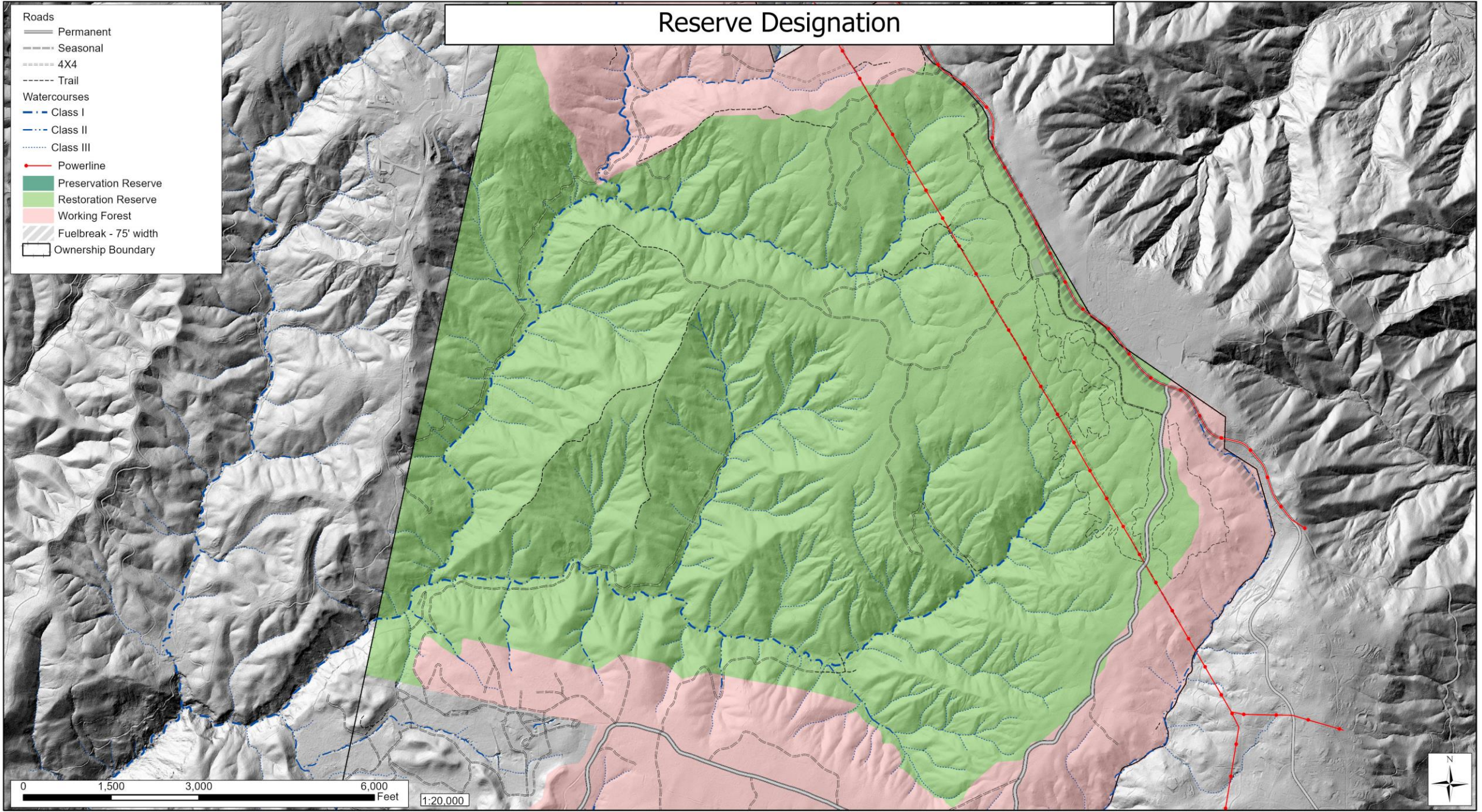


# SAN VICENTE REDWOODS RESERVE DESIGNATIONS



# Reserve Designation

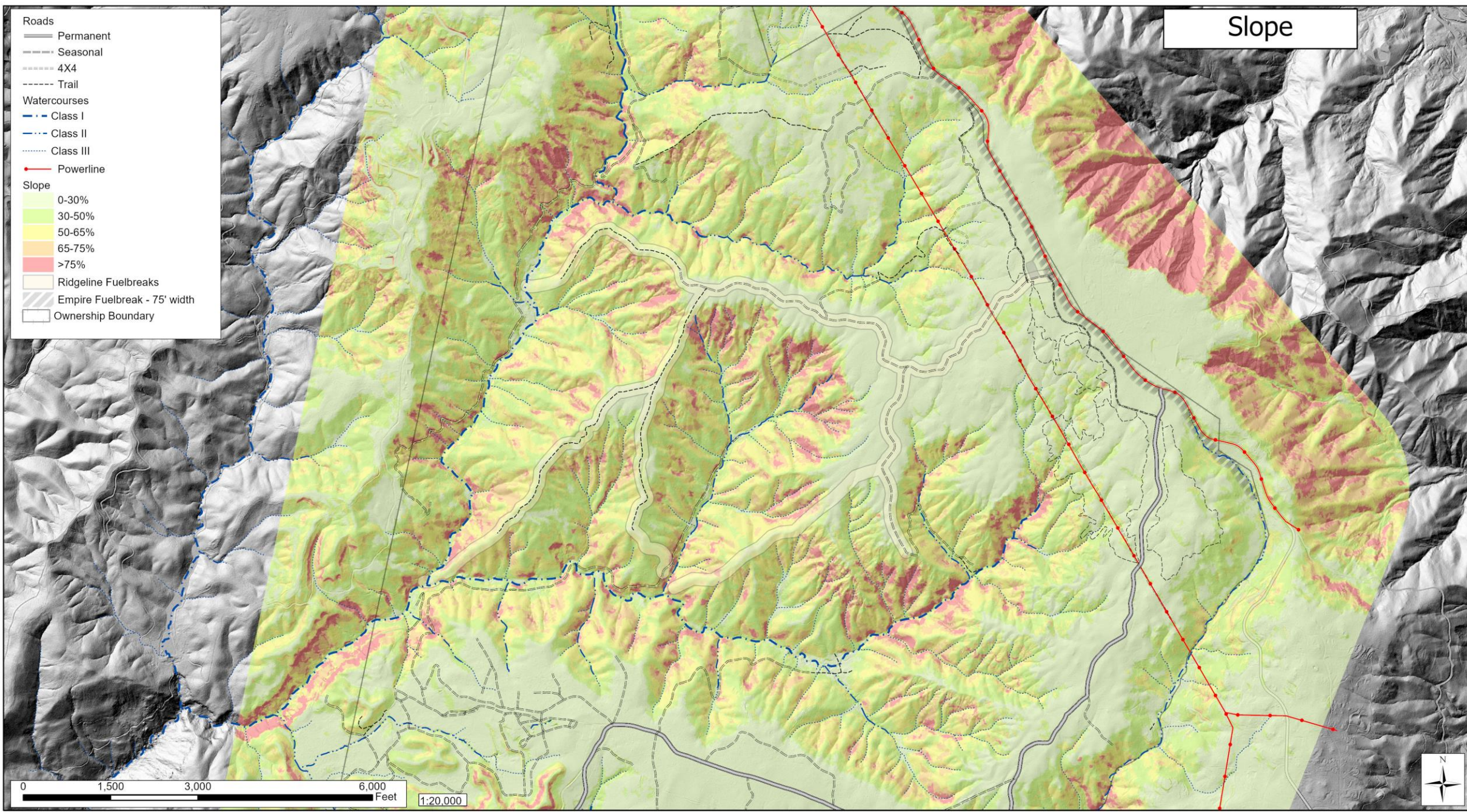
- Roads**
  - Permanent
  - Seasonal
  - 4X4
  - Trail
- Watercourses**
  - Class I
  - Class II
  - Class III
- Powerline
- Preservation Reserve
- Restoration Reserve
- Working Forest
- Fuelbreak - 75' width
- Ownership Boundary





# Slope

- Roads**
  - Permanent
  - Seasonal
  - 4X4
  - Trail
- Watercourses**
  - Class I
  - Class II
  - Class III
- Powerline**
  - Powerline
- Slope**
  - 0-30%
  - 30-50%
  - 50-65%
  - 65-75%
  - >75%
- Fuelbreaks**
  - Ridgeline Fuelbreaks
  - Empire Fuelbreak - 75' width
- Ownership Boundary**



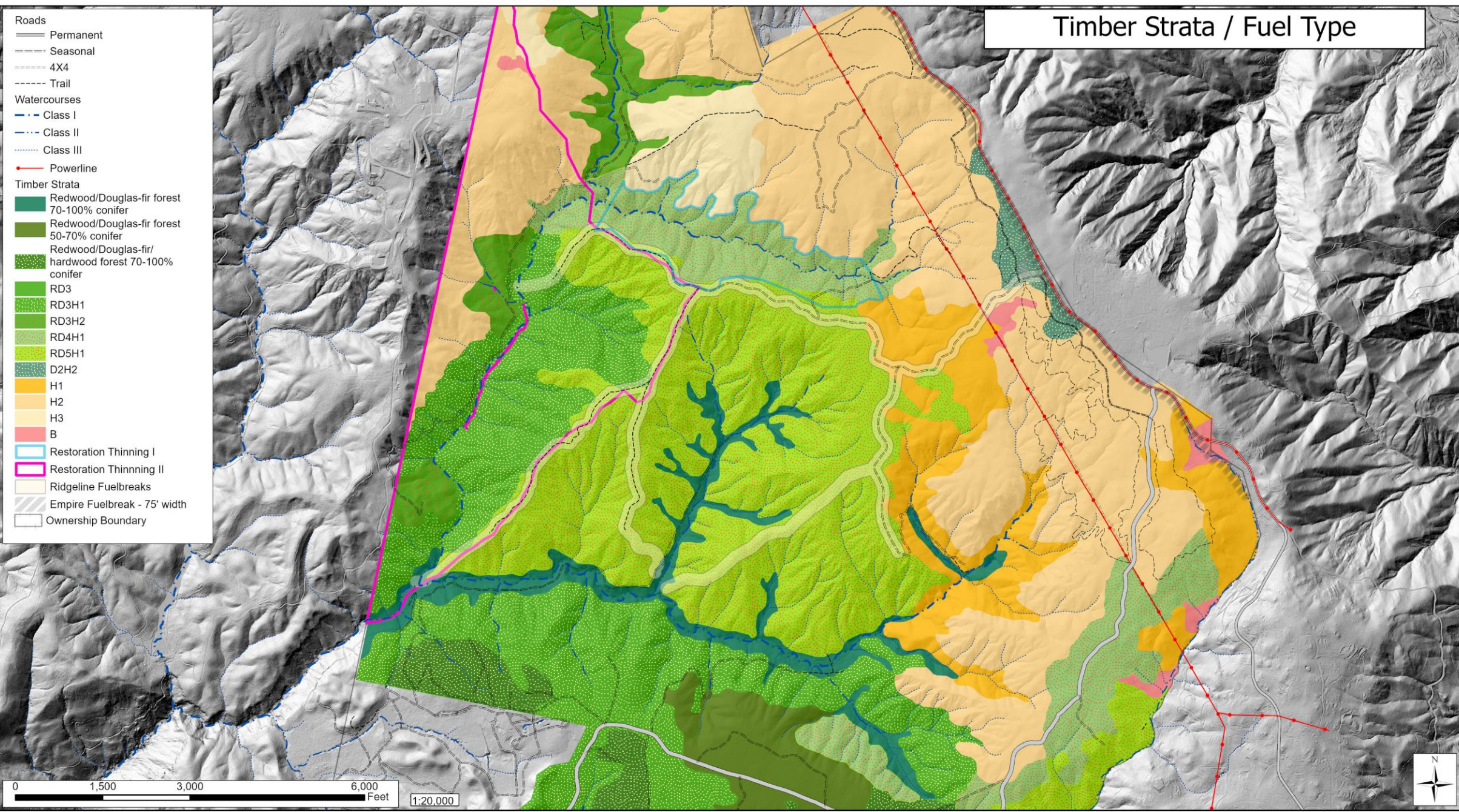
0 1,500 3,000 6,000 Feet 1:20,000





# Timber Strata / Fuel Type

- Roads**
  - Permanent
  - Seasonal
  - 4X4
  - Trail
- Watercourses**
  - Class I
  - Class II
  - Class III
- Powerline**
  - Powerline
- Timber Strata**
  - Redwood/Douglas-fir forest 70-100% conifer
  - Redwood/Douglas-fir forest 50-70% conifer
  - Redwood/Douglas-fir/hardwood forest 70-100% conifer
  - RD3
  - RD3H1
  - RD3H2
  - RD4H1
  - RD5H1
  - D2H2
  - H1
  - H2
  - H3
  - B
- Restoration Thinning**
  - Restoration Thinning I
  - Restoration Thinning II
- Fuelbreaks**
  - Ridgeline Fuelbreaks
  - Empire Fuelbreak - 75' width
- Ownership Boundary**



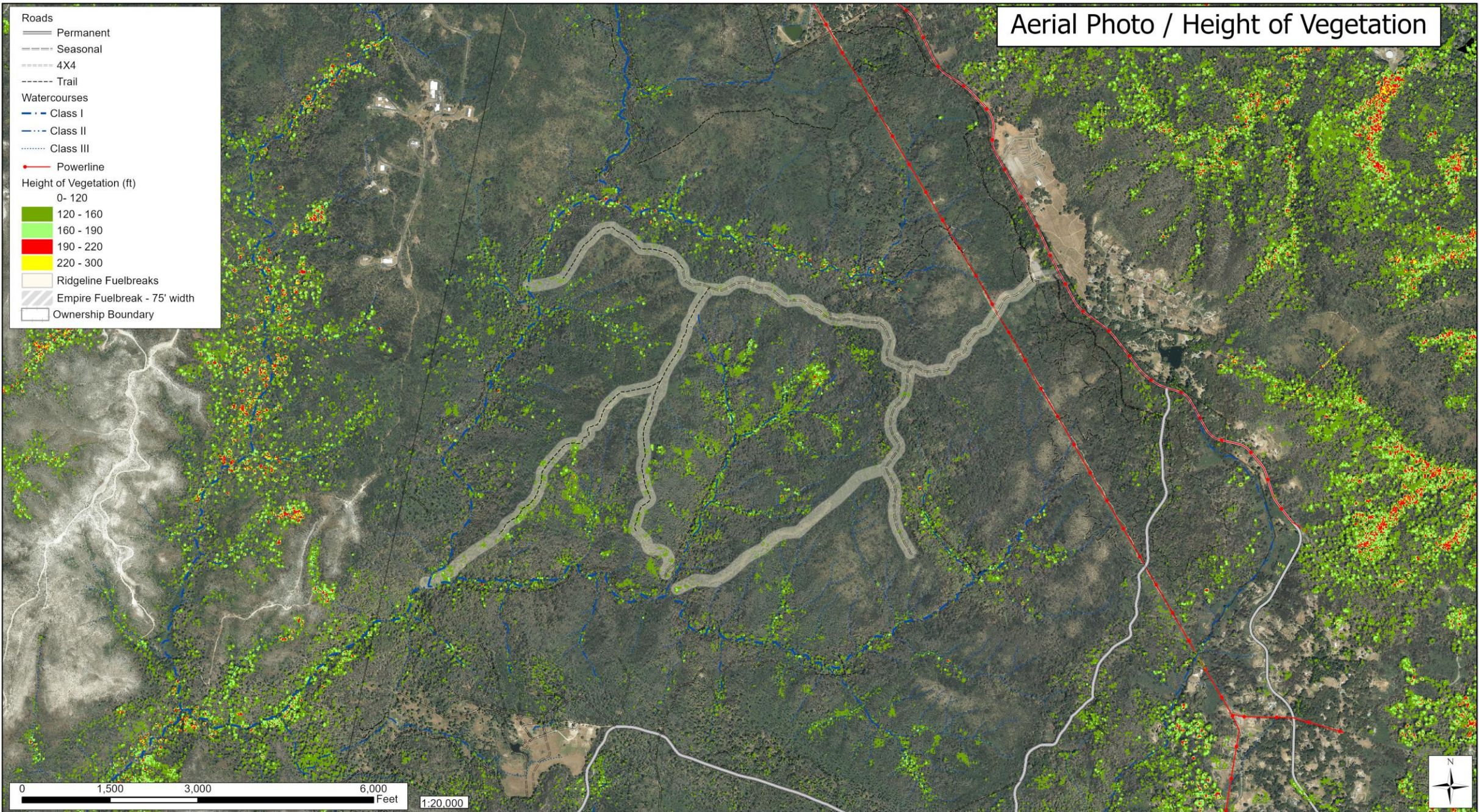
0 1,500 3,000 6,000 Feet 1:20,000





# Aerial Photo / Height of Vegetation

- Roads**
  - Permanent
  - Seasonal
  - 4X4
  - Trail
- Watercourses**
  - Class I
  - Class II
  - Class III
- Powerline**
- Height of Vegetation (ft)**
  - 0 - 120
  - 120 - 160
  - 160 - 190
  - 190 - 220
  - 220 - 300
- Ridgeline Fuelbreaks**
- Empire Fuelbreak - 75' width**
- Ownership Boundary**



0 1,500 3,000 6,000 Feet

1:20,000





**Santa Cruz County CWPP**  
**Santa Cruz North Coastal**  
**Priority Project Area Map**  
**2010**



Santa Cruz North Coastal  
CWPP Planning Area



Adjacent Planning Areas

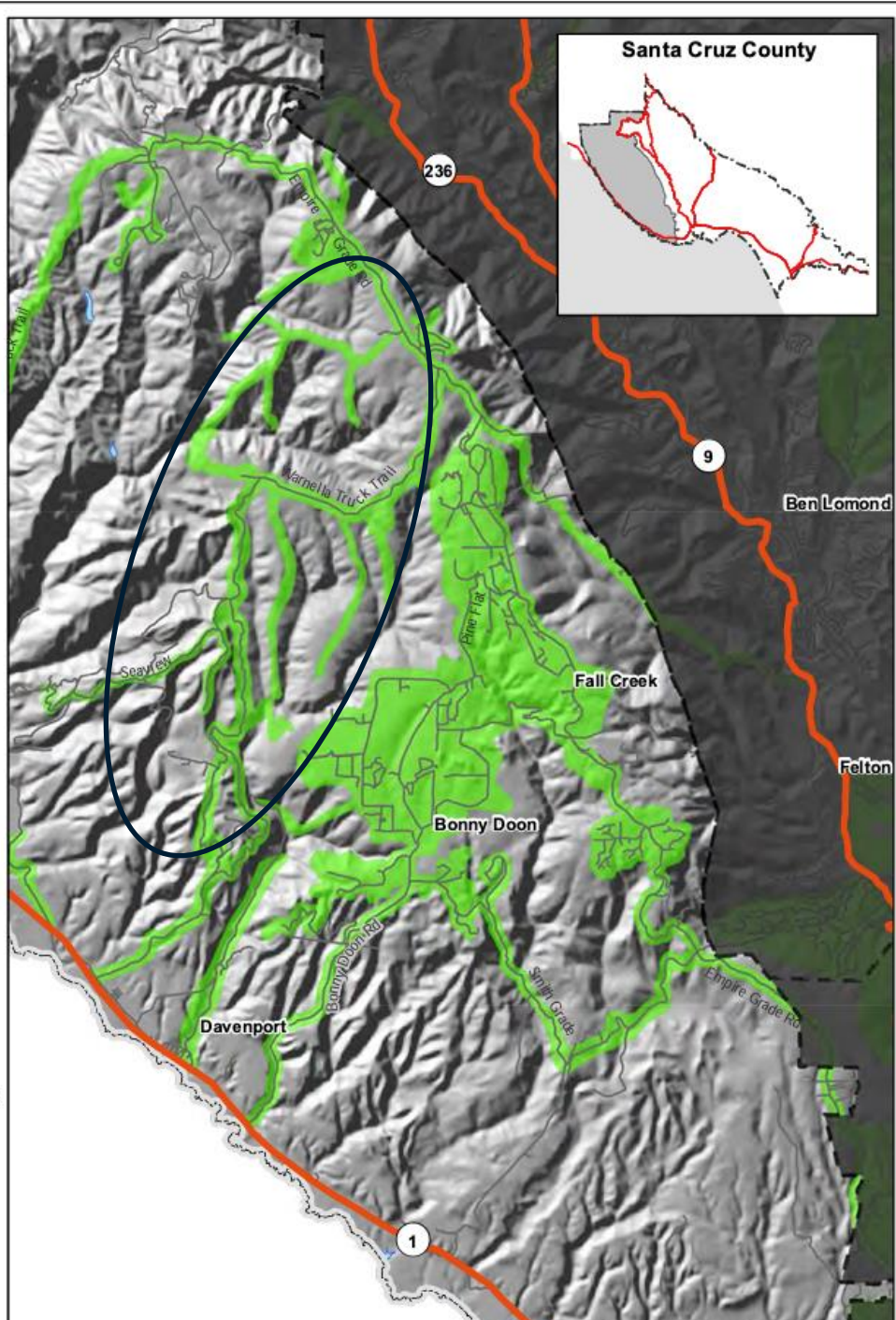


Roads

Highways

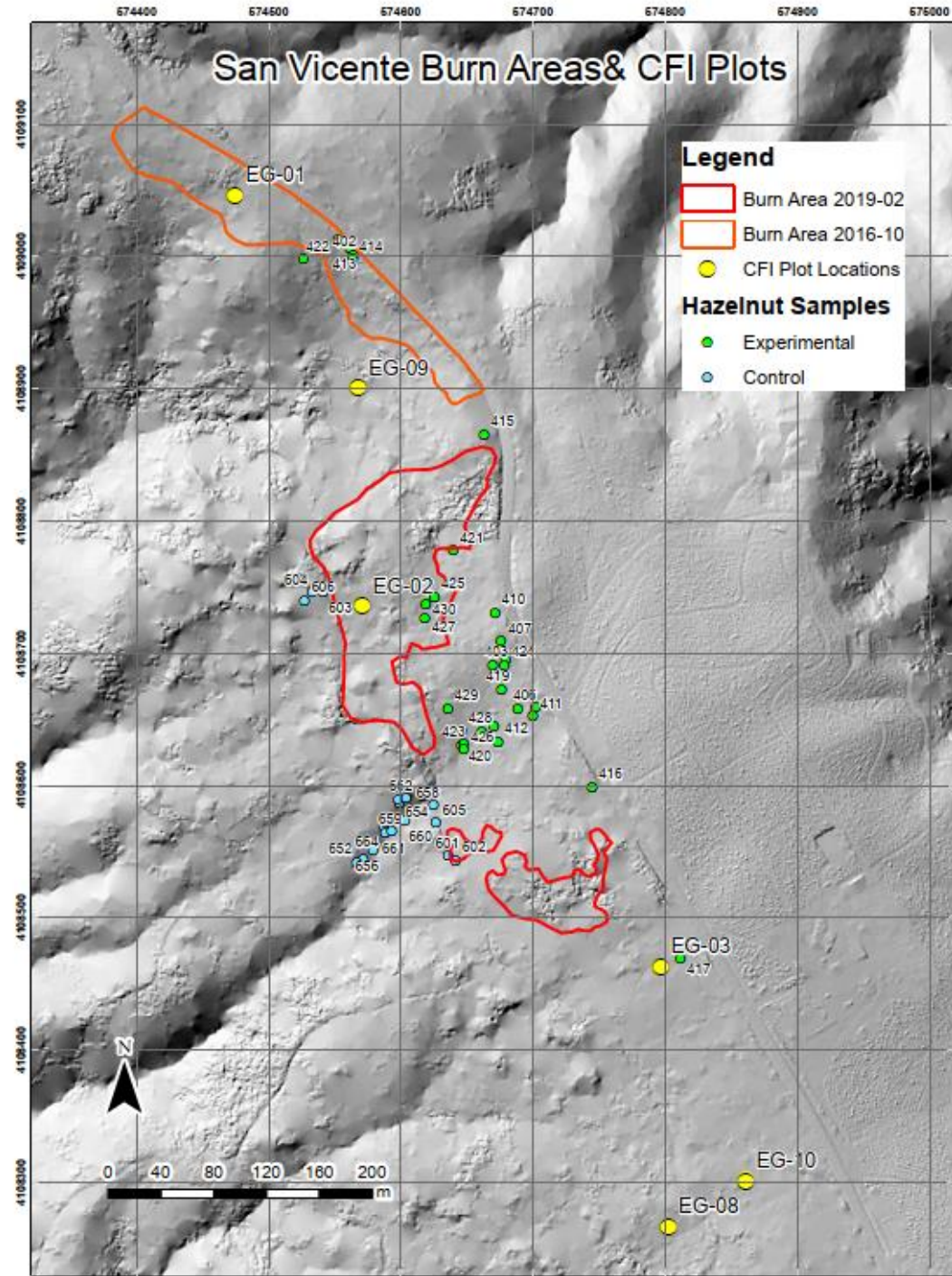
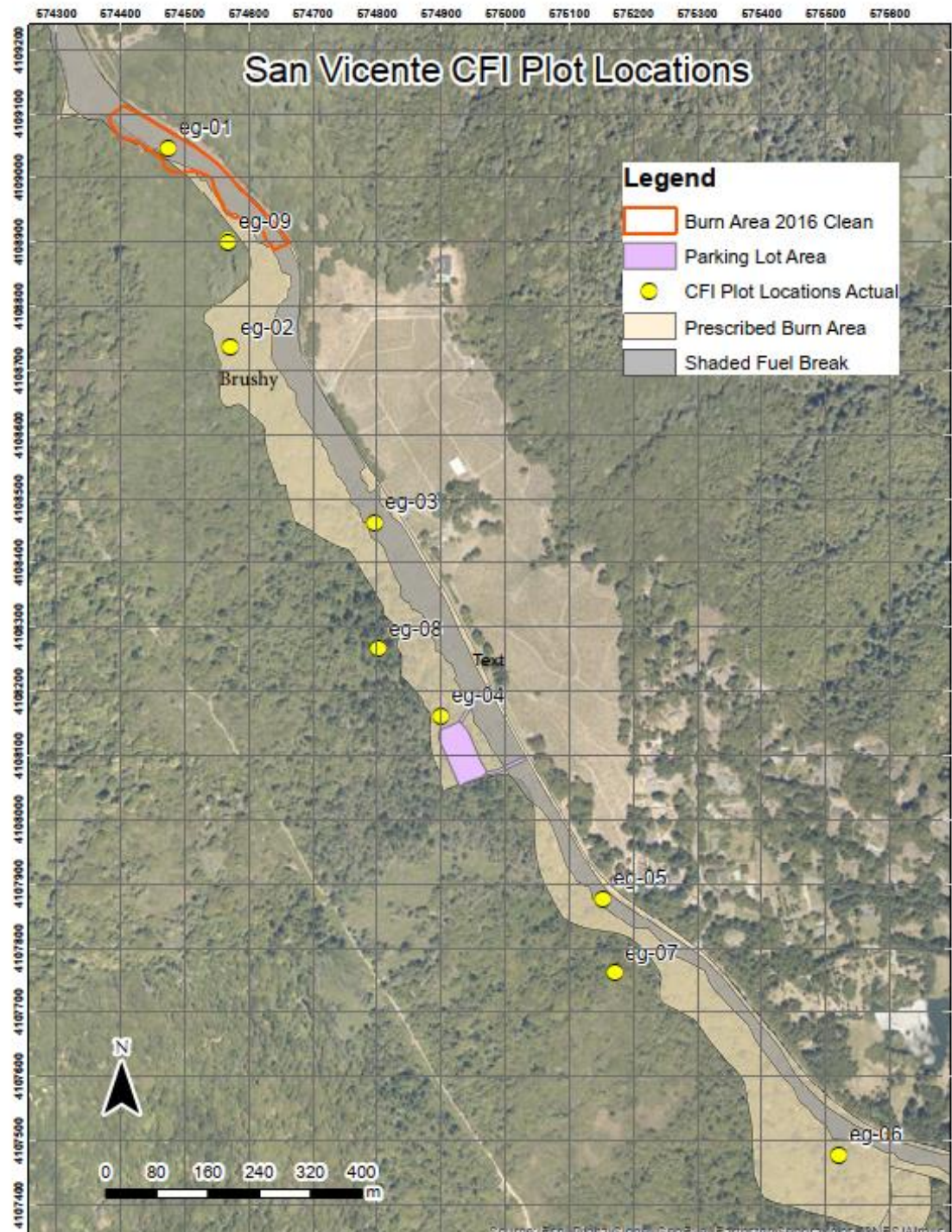


High Priority Area



# STRATEGIC FUEL BREAK LOCATIONS







# CAL FIRE PRESCRIBED FIRE



February 27, 2020 (6 months pre-CZU fire)









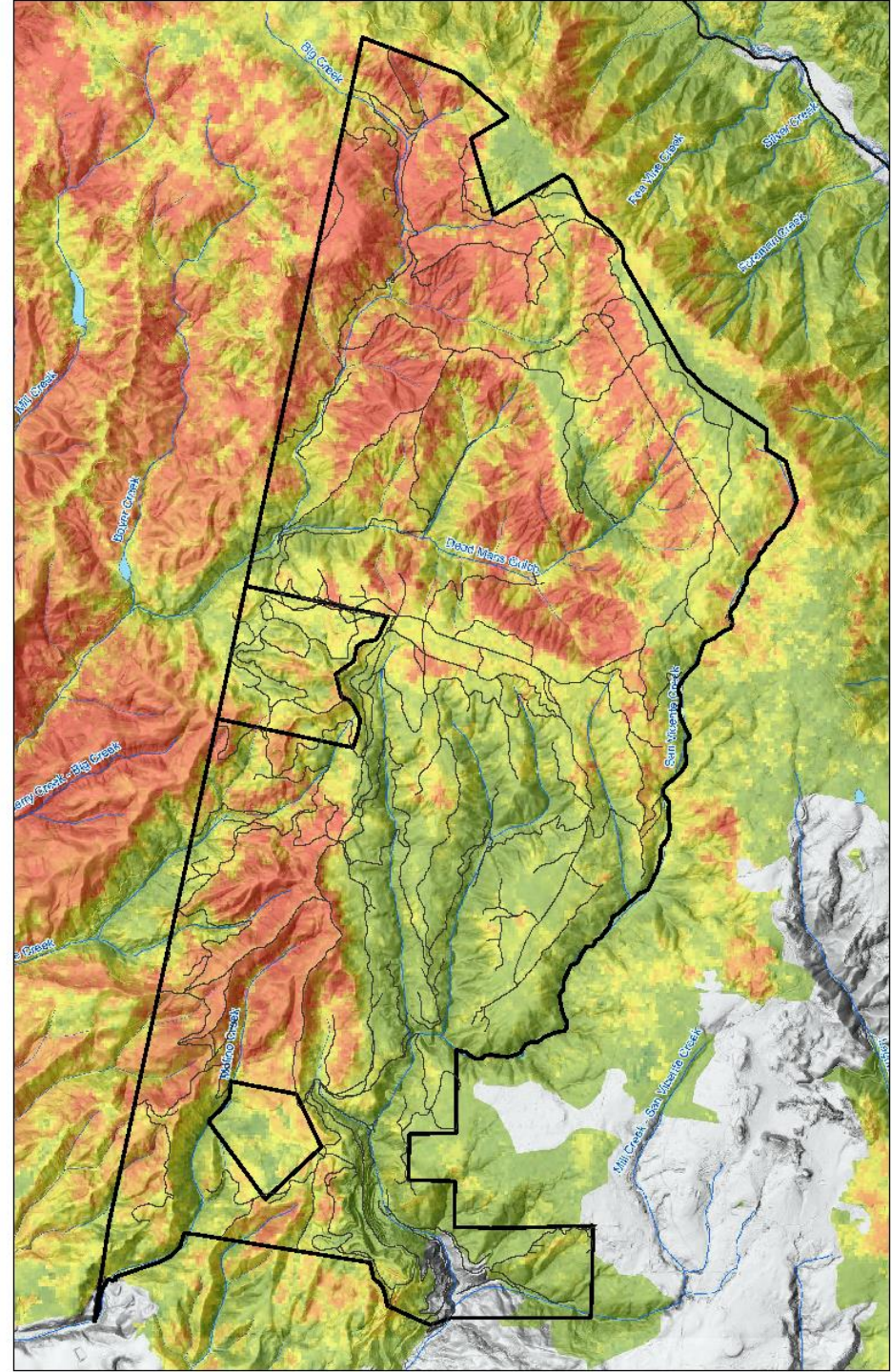
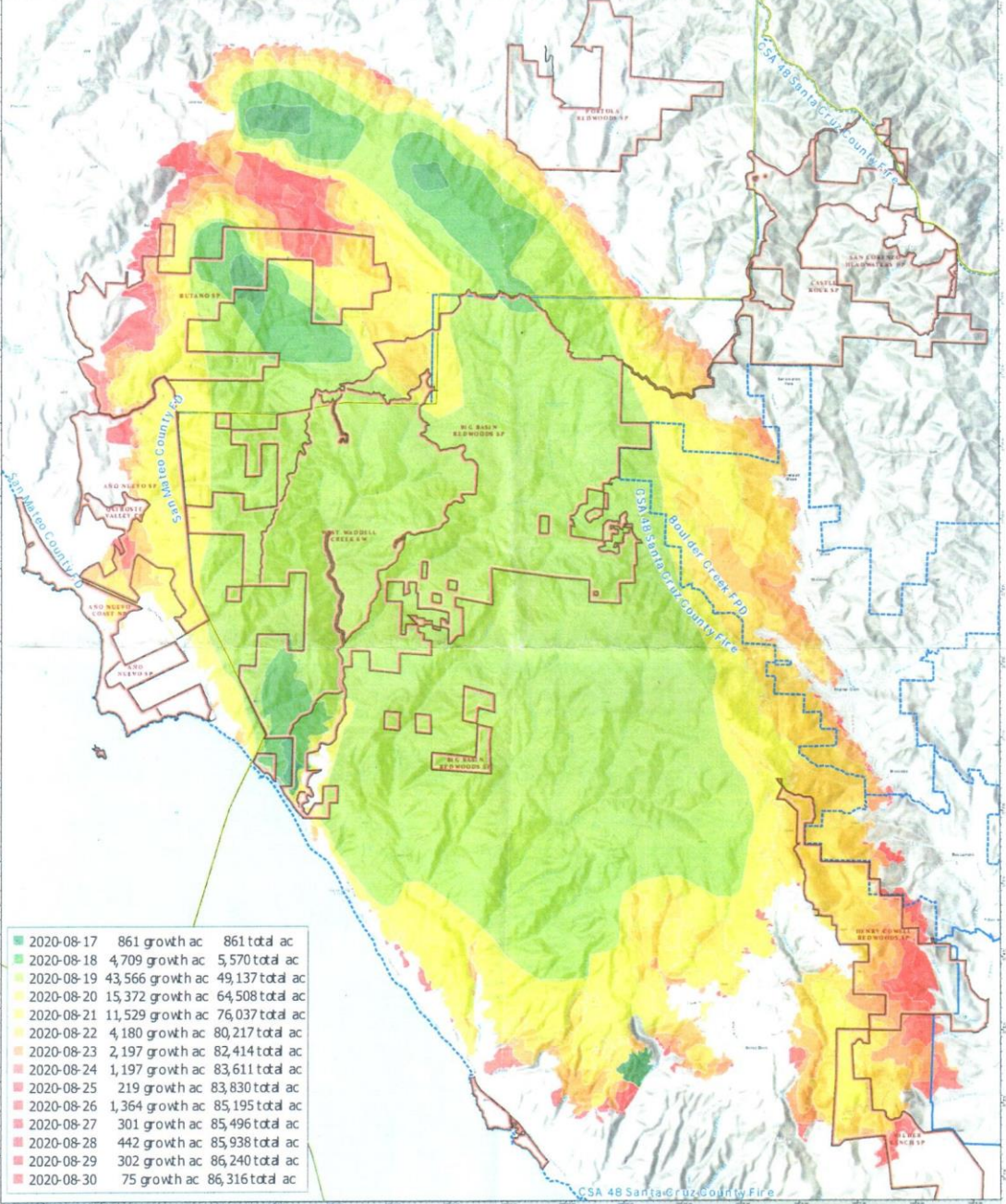
# CZU LIGHTNING COMPLEX FIRE

August 17, 2020









Progression  
MAP  
September 1, 2020

CZU LIGHTNING  
CA-CZU-005205  
Progression Map  
September 1, 2020  
0700 - 0700









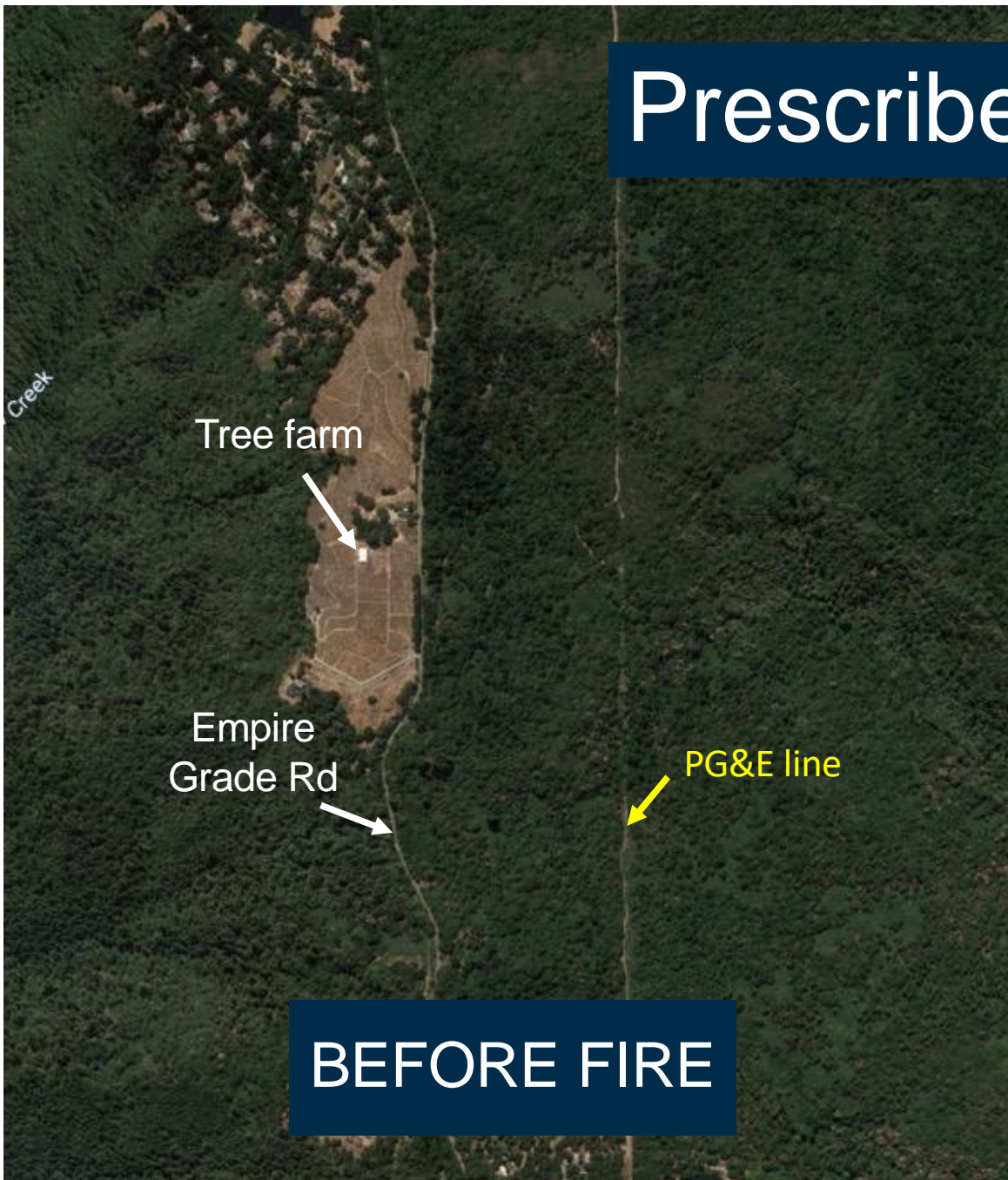








# Prescribed Burn Area





High Severity

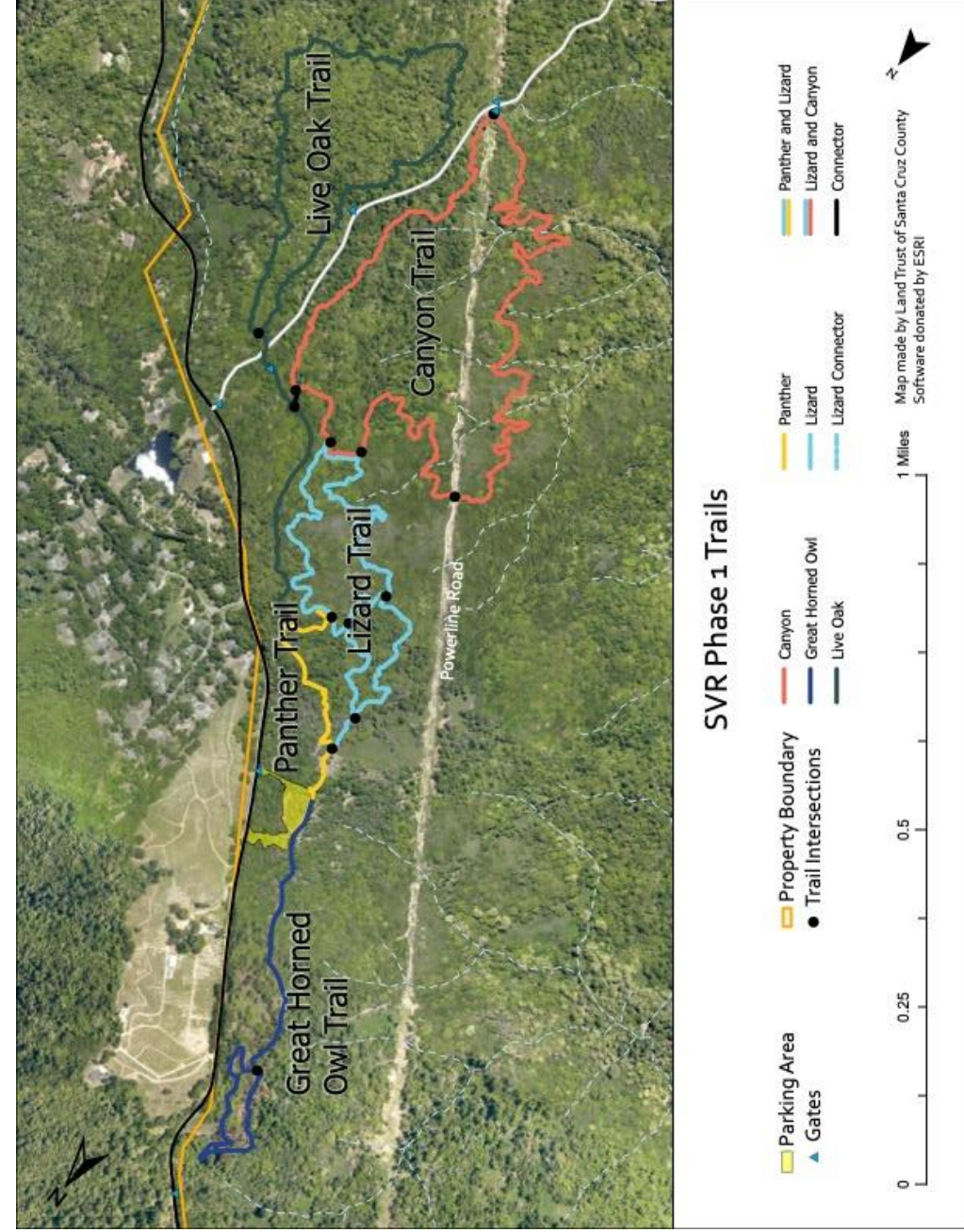
Low Severity



November 2022 (2 years post-fire)



# PUBLIC ACCESS OPPORTUNITIES







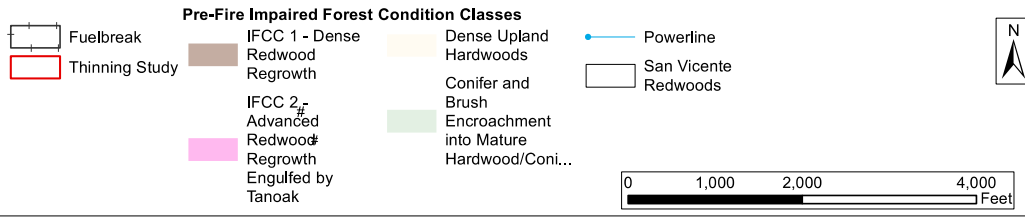
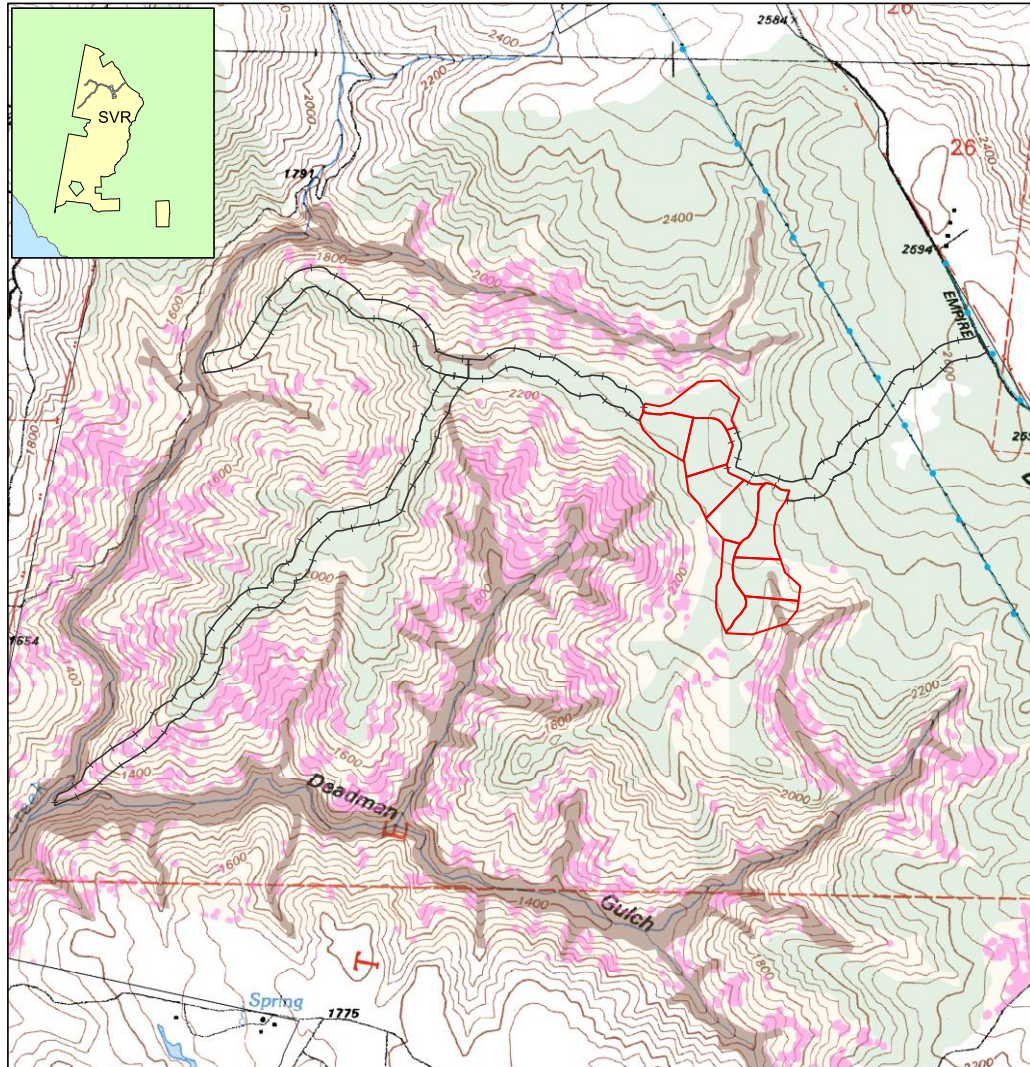






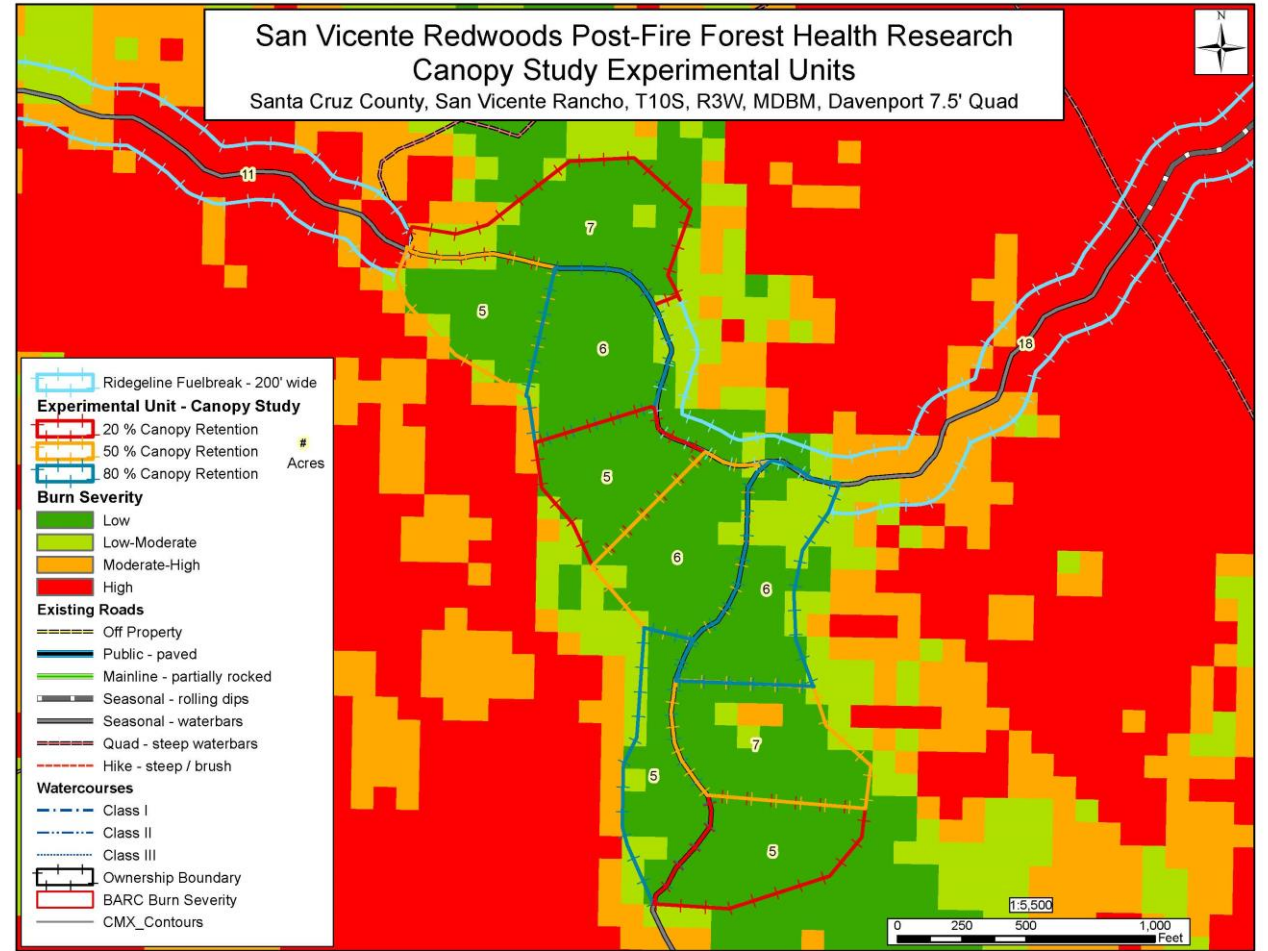
# San Vicente Redwoods Post Fire Shaded Fuelbreak and Thinning Study

Santa Cruz County, San Vicente Rancho, T10S, R3W, MDBM, Davenport 7.5' Quad

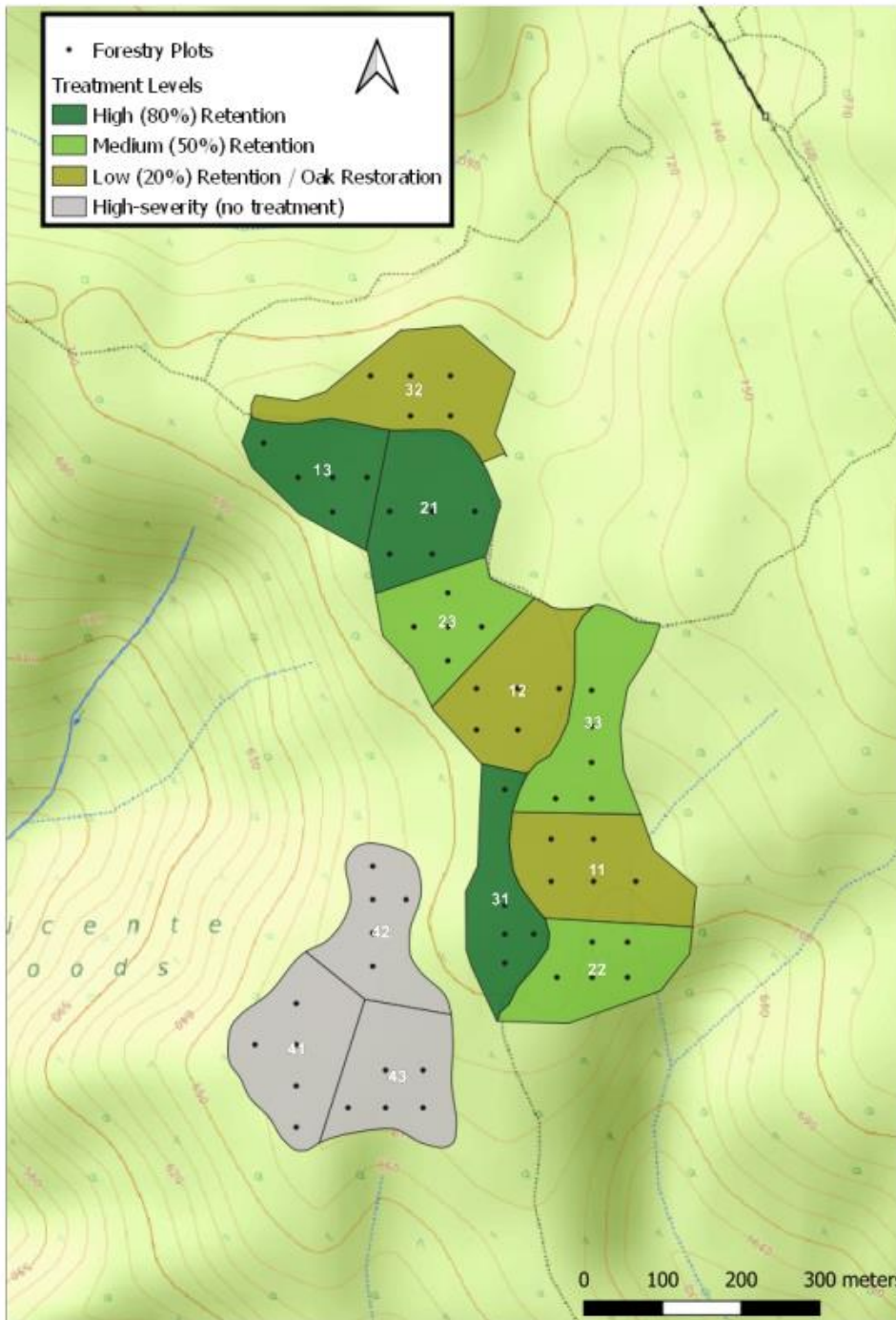


# San Vicente Redwoods Post-Fire Forest Health Research Canopy Study Experimental Units

Santa Cruz County, San Vicente Rancho, T10S, R3W, MDBM, Davenport 7.5' Quad



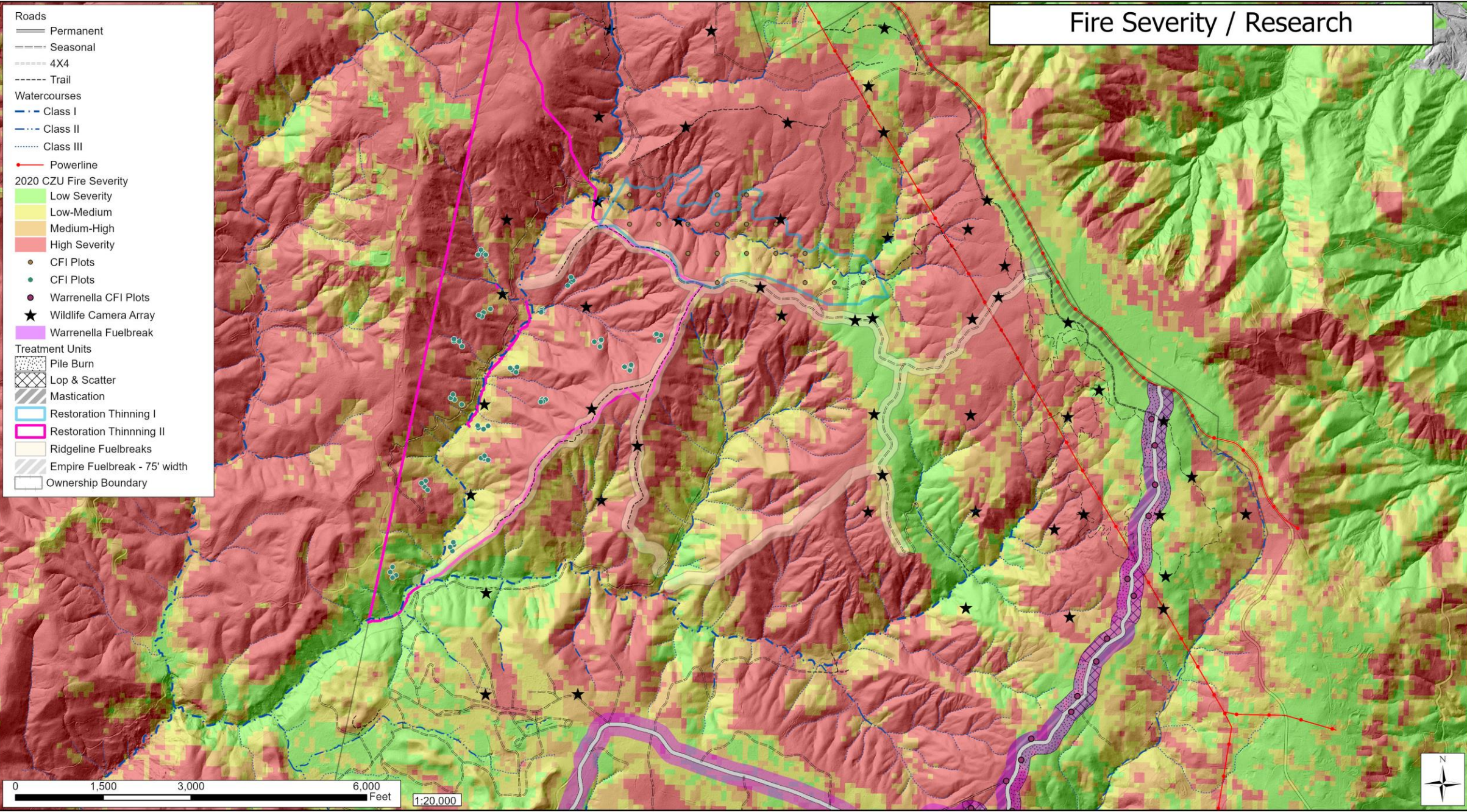






# Fire Severity / Research

- Roads**
  - Permanent
  - Seasonal
  - 4X4
  - Trail
- Watercourses**
  - Class I
  - Class II
  - Class III
- Powerline**
  - Powerline
- 2020 CZU Fire Severity**
  - Low Severity
  - Low-Medium
  - Medium-High
  - High Severity
- CFI Plots**
  - CFI Plots
  - Warrenella CFI Plots
- Wildlife Camera Array**
  - Wildlife Camera Array
  - Warrenella Fuelbreak
- Treatment Units**
  - Pile Burn
  - Lop & Scatter
  - Mastication
  - Restoration Thinning I
  - Restoration Thinning II
  - Ridgeline Fuelbreaks
  - Empire Fuelbreak - 75' width
  - Ownership Boundary







September 2020 (1 month post-fire)

August 2022 (2 years post-fire)





# CUTTING DEAD TREES AND LADDER FUELS TO ENCOURAGE OAKS



Before thinning



After thinning



Before thinning



After thinning









**LARGE FUELS  
PILED FOR  
TRANSPORT**









**DOUG-FIR  
LOGS  
LOADED  
TO SHIP TO  
BIG CREEK  
LUMBER**



# DECKED LOGS AT A PROCESSING LOCATION





# BIOMASS PROCESSING: AIR CURTAIN BURNERS (CAL FIRE)
















# CAL FIRE's ACB Go/No Go Weather Conditions

Temp F	Wind Speed				
100	30+	30+	30+	30+	30+
	20	20	20	20	20
	10	10	10	10	10
90	7+	7+	7+	7+	7+
	5	7	7	7	7
	4	3	7	7	7
80	10+	10+	10+	10+	10+
	7	5	10	10	10
	5	7	5	10	10
70	15+	15+	15+	15+	15+
	10	7	15	15	15
	5	5	5	5	5
60	15	15	15+	15+	15+
	20	15	10	12	15
	10	10	10-	10	1
50	20+	15+	15+	15+	15+
	20	15	10	12	15
	10	10	10-	10	1
	70%+	60%	40%	30%	20%
	Relative Humidity				

-  No Curtain Burner Operations - Shut Down
-  Fire watch and monitor conditions hourly
-  Normal Operations

Wind Speed in MPH

Prevention Measures Include:

- 500 gallon "water buffalo" **or larger** on site.
- Water supply to be always available onsite during Fire Watch. Recommend a 5,000 gallon supply.
- Water supply to have pump and hose that can reach entire operation.
- Have a fire watch continue for 2 hours after everything on site is out cold to the touch.
- Do not attempt to fight a fire larger than 20' x 20'
- Immediately call 911 in case of any fire.
- If Red Flag is declared for the unit, operations must cease

# DRAFT

Note: This is a recommended guideline, this is not a rule or regulation. Always keep in mind that you or your organization is responsible for any fire caused by your operations whether it follows this guideline or not.



# BIOMASS PROCESSING: CARBONATOR (Ventana)

Ventana Carbonator operations at Swanton Ranch 11/22/2022



to kiln. Trees were burned in the 2020 CZU wildfire





# Limitations to on-site biomass processing

## Air Curtain Burner/Carbonator Challenges

1. A large, "flat" staging area is required, with a buffer of removed vegetation and a water source nearby.
2. ACB/carbonator requires a heavy equipment operator + field staff to buck/load logs into the unit while it's running.
3. Cool down periods required before you can leave a site.
4. Ideal climate conditions are sometimes hard to predict for ACB/carbonator operation.
5. Winter conditions are ideal for processing, but unpaved roads limit access.
6. Potential energy/emissions goes "up in smoke" during both of these processing options. No (or minimal) opportunity for cost recovery.



# Pile Burning



(Not SVR)

STATE OF CALIFORNIA  
DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
**CALIFORNIA INTER-AGENCY BURNING PERMIT**  
LE-3 (REV. 6/98)

California Inter-Agency  
**BURNING PERMIT** No. **DS 21526**

ISSUED TO: SEBASTIAN HOLMES  
18955 CHINA GRADE ROLYER CREEK CA 95006  
TELEPHONE NUMBER 707/954-4449

BURNING LOCATION: WARNER RA - GATE #1 ACROSS OF 11440 EMPIRE GRADE  
SEC. \_\_\_\_\_ TWP. 9S R. 3W

COUNTY OF SANTA CRUZ STATE OF CALIFORNIA. SAN VICENTE RANCHO

Burning authorized by this permit hereby applies to:  
(Check applicable block below)

Burn in incinerator  
 Burn debris in small 4' X 4' piles  
 Burn small plots of grass or weeds in lots or residential premises  
 Burn small parcels or strips for hazard reduction  
 Set off fireworks

AGRICULTURAL BURNING, CROP TYPE \_\_\_\_\_ ACRES/TONS \_\_\_\_\_  
 OTHER (Explain) HAZARD & FUEL REDUCTION

Burning shall be confined to hours 6 P.M. to 6 P.M.  
This permit valid during period 1/31/2022  
(Month & Day) (Month & Day) (Year)

THIS PERMIT IS SUBJECT TO THE TERMS AND CONDITIONS OF USE AS INDICATED

- Permittee must not burn during very hot and dry periods when winds are strong enough that burning would be considered unsafe. (Example: wind keeps leaves in motion or extends a light fog or cloth.)
- The fire shall be: (a) attended at all times by at least one prudent and responsible person; (b) confined within cleared firebreaks or barriers adequate to prevent it from escaping control.
- When the burning operation authorized by this permit is in an incinerator: (a) a minimum clearance of 10 feet from all flammable material must be provided and maintained; (b) all openings must be screened with nonflammable material with holes not larger than 1/4 inch; and (c) must be attended at all times by a responsible person until fire is dead out.
- This permit does not relieve the permittee of any duty to use reasonable and ordinary care to prevent damage to the property of others or injury to persons as prescribed by law.
- THIS PERMIT IS VOID DURING PERIODS WHEN BURNING IS PROHIBITED BY STATE LAW, LOCAL ORDINANCE, OR PROCLAMATION OF PUBLIC OFFICERS.
- This permit is valid only on those days which are not prohibited by the State Air Resources Board pursuant to Section 41855 of the Health and Safety Code or by the local air pollution control district.
- Before burning call 1-800-CALBURN & FALL CREEK 831/426-3131  
For Air Pollution Control call 1-800-CALBURN
- Additional terms: HAVE AN ADULT IN ATTENDANCE / CONTROL LINES IN PLACE PRIOR TO BURNING / AVAILABLE WATER SOURCE / NO PRECAST

I own or legally control the above described land. I agree to comply with all fire laws, ordinances, and regulations. I further agree to comply with specific terms of this permit.

SIGNED: Ben Hink DATE: 1/31/2022  
DIRECTOR OF THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

BY: TOM KASKA AGENT  
TITLE: FIRE CAPTAIN DATE: 1/31/2022  
ISSUING AGENCY: CAL FIRE DIST./BATT. 3

SEE REVERSE SIDE FOR FURTHER INFORMATION  
**CAUTION YOU CAN BE HELD LIABLE FOR ESCAPED FIRES VIOLATIONS OF ANY BURNING PERMIT TERMS ARE A VIOLATION OF STATE LAWS AND RENDERS THE PERMIT NULL AND VOID.**

CDP FORM 2-0-REV. 6/98 (Original stored in Ranger Database File) to Permittee. Topics: (1/16/16) No Local File

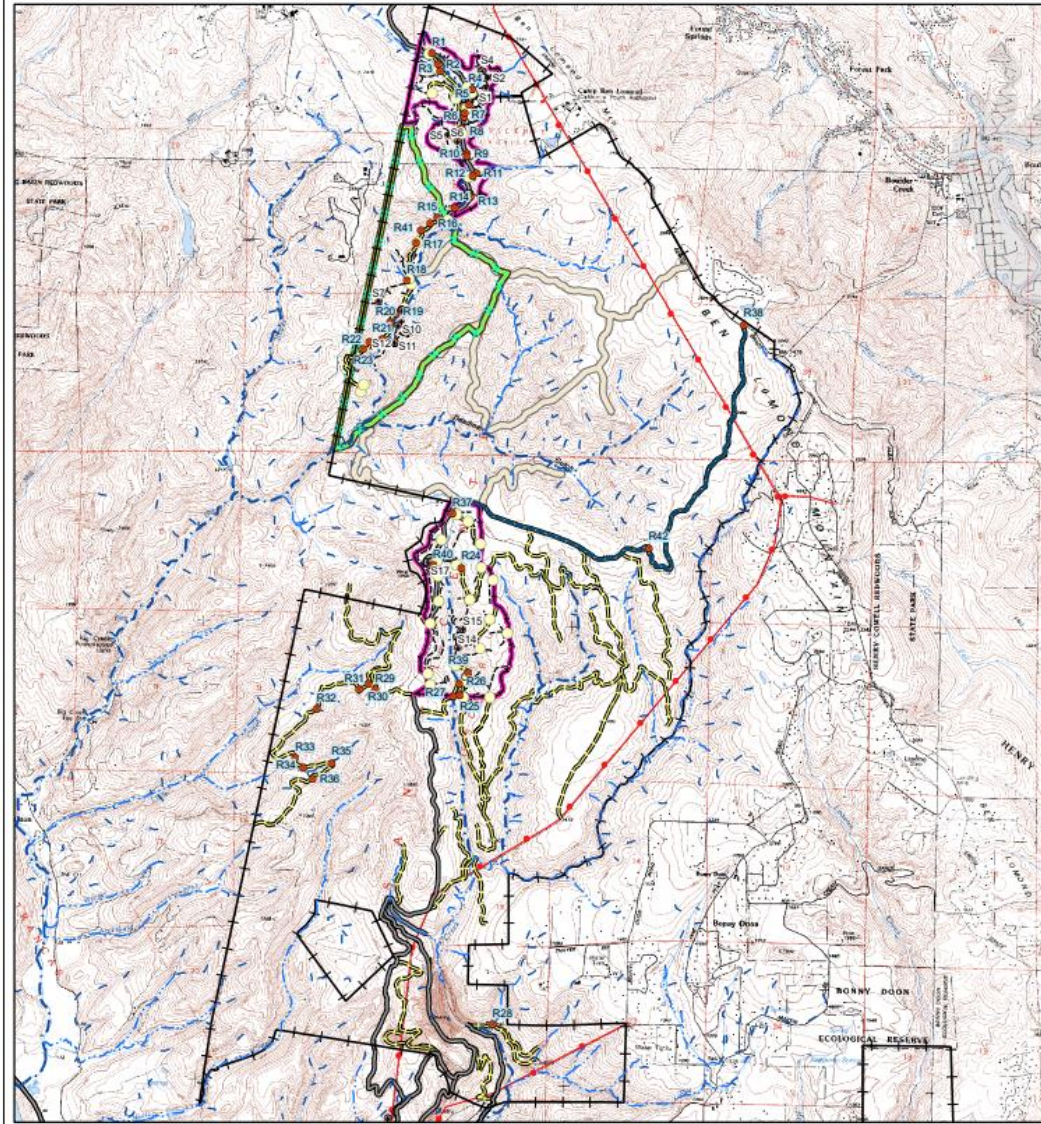


**PERMITTING**



# Big Jim THP - Operations Map - Overview

Santa Cruz County, San Vicente Rancho, T9S, T10S, R3W, MDBM, Davenport 7.5' Quad



# Timber Harvest Plan #1-19-00045 SCR



**10% DEAD, DYING OR DISEASED TREES  
FUELWOOD OR SPLIT PRODUCTS or REMOVAL OF SLASH  
& WOODY DEBRIS NOT LOCATED WITHIN A WLPZ  
EXEMPTION**

STATE OF CALIFORNIA, DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
NOTICE OF TIMBER OPERATIONS THAT ARE EXEMPT  
FROM TIMBER HARVESTING PLAN REQUIREMENTS RM-73 (1038b) (03/2019)

VALID FOR ONE YEAR FROM DATE RECEIPT BY CAL FIRE.

FOR ADMIN. USE ONLY

EX. # \_\_\_\_\_

Date of Receipt \_\_\_\_\_

Date Validation by CAL FIRE \_\_\_\_\_

Date Expires \_\_\_\_\_

The Director of the Department of Forestry and Fire Protection (CAL FIRE) is hereby notified of timber operations under the requirements of 14 CCR § 1038(b) to cut or remove trees that are dead, dying, or diseased, fuelwood or split products in amounts less than 10% of the average volume per acre or remove slash and woody debris not located within a WLPZ.

**Timber Operations pursuant to the notice of exemption may not commence for five (5) working days from the date of the Directors receipt of the notice unless this delay is waived by the director. If the Director does not act within five (5) days working days of receipt of the notice of exemption, Timber Operations may commence. 14 CCR § 1038.1(c)(13)**

Type of timber operations to be conducted:

(If more than one type is selected please indicate approximate acreage. Please verify the total is consistent with total acres listed in Item #9)

162 AC: Harvesting dead, dying or diseased trees of any size in amounts less than 10 percent of the average volume per acre, where timber operations will meet the conditions listed in 14 CCR § 1038(b).

AC: Harvesting fuelwood or split products in amounts less than 10 percent of the average volume per acre, where timber operations will meet the conditions listed in 14 CCR § 1038(b)

- Note: for Santa Cruz County harvesting for fuelwood purposes **greater than three acres are limited to 45 days** (14 CCR § 926.8(j))

- Note: If you are harvesting fuelwood or split products, please be aware that cut wood can be infested with harmful forest pests. Long distance transport of infested firewood can result in the unintentional spread of these pests. Please see [www.firewood.ca.gov](http://www.firewood.ca.gov) for more information.

AC: Removal of Slash and Woody Debris not located within a WLPZ

1. LICENSED TIMBER OPERATOR(S): Name Holmes Logging Inc. Lic. No. A10399

Address 18955 China Grade Road

City Boulder Creek State CA Zip 95006 Phone (707) 954-4449

Email (optional): \_\_\_\_\_

2. TIMBERLAND OWNER(S) OF RECORD: Name Peninsula Open Space Trust (POST)

Address 222 High Street

City Palo Alto State CA Zip 94301 Phone (650) 854-7696

Email: (optional) \_\_\_\_\_

*I certify, under penalty of perjury, that I have read and understand the information on this form and that I am the Timberland Owner of record.*

Signature: \_\_\_\_\_ Date \_\_\_\_\_

**Daniel Olstein, Director, Land Stewardship, POST**

Name Sempervirens Fund

Address 419 South San Antonio Road, Suite 211

City Los Altos State CA Zip 94022 Phone (650) 949-1453

Email (optional): \_\_\_\_\_

# Dead, Dying, or Diseased Exemption

# Or

# Emergency Notice

# (CAL FIRE)





# 2022 Agricultural Burn Permit

Permit Valid for Agricultural Burning  
 Burn Day Information <http://mbard.org/air-quality/> or 1-800-CAL-BURN (1-800-225-2876)

This permit is valid for the year **2022**

BURN ZONE FIRE DISTRICT  
 Coastal Big Creek

NUMBER OF TONS	TYPE(S) OF WASTE	FUEL LOAD
1900		1

RESPONSIBLE PERSON	COMPANY	BURN SITE ADDRESS	CITY	STATE	ZIPCODE
Nadia Hamey	San Vicente Redwoods	12001 Emple Grade	Santa Cruz	CA	95060
PRIMARY PHONE #	SECONDARY PHONE #	SITE COUNTY	GEOLOCATION		
831-431-0288		Santa Cruz County			

**THIS AGRICULTURAL AND LAND MANAGEMENT PILE BURN PERMIT IS VALID ONLY IF ALL OF THE FOLLOWING CONDITIONS ARE MET:**

- This permit may be revoked, suspended, or terminated for violation of any condition specified or when necessary for public safety by the APCO or his designated deputy. In addition, permit holders must also comply with local fire protection agency permit requirements.
- Burning is limited to: Agricultural and land management waste pile burning. Ag pile burning applies to the burning of materials produced from agricultural operations in the growing and harvesting of crops or the raising of food or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. Land management pile burning applies to the burning of natural vegetation and woody materials cleared from wildland areas managed by state and federal agencies, private camps, institutions and ranchers.
- You cannot burn residential or "backyard" waste, plastics, petroleum products and petroleum wastes, construction and demolition debris, tires, and motor vehicle bodies and parts.
- Burn Day Status: Fires are only allowed on permissive burn days. Check the MBARD Website at <http://www.mbard.org/> after 4:00 p.m. the day prior to determine burn day status. The burn day status link is found at the top right of the website page.
- Burn Hour Restrictions: No ignitions shall commence after 5:00 p.m. and the hours of burning must comply with burn hours allowed by the local fire agency.  
 For field crop burning (a crop other than fruits or vegetables that is grown for agricultural purposes such as cotton and hay), no ignitions shall commence before 10:00 a.m. or after 5:00 p.m. of any day.
- For all burns, all burnt materials shall be extinguished (cold to the touch) by sunset.
- Smoke Production: Piled material must be arranged to provide adequate aeration to allow the material to burn with a minimum of smoke.
- Drying Times: The material to be burned must dry:
  - 180 days: trees, stumps, and branches greater than 6 inches in diameter
  - 60 days: trees, branches, and prunings greater than 2 inches but equal to or less than 6 inches in diameter
  - 30 days: trees, branches, and prunings equal to or less than 2 inches in diameter.
- Fuel Condition: The material to be burned must be reasonably free of dirt and soil.
- Wind Conditions: Burning shall not commence when the wind direction would blow smoke toward a Smoke Sensitive Area or populated area which would be adversely affected by the smoke.
- ALL BURNERS must check with their local fire agency to make sure conditions are safe for burning and to obtain any required fire agency permits.

**I HEREBY CERTIFY THAT:**

- I have read the above conditions, and those specified in the instructions, and agree to comply with all the conditions stated on the burn permit.
- I understand that failure to comply with Monterey Bay Air Resources District (MBARD) Rules and Regulations will subject me to civil or criminal action, or both.
- I understand that the issuance of this permit does not relieve me of responsibility to use reasonable and ordinary care to prevent damage to the property of others or injury to persons.
- I accept responsibility for all burning activities, including smoke impacts, as a result of burning conducted at the above specified burn site location which is under my legal control.

Signature \_\_\_\_\_ Date \_\_\_\_\_

STATE OF CALIFORNIA  
 DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
**CALIFORNIA INTER-AGENCY BURNING PERMIT**  
 LE-5 (REV. 6/98)

California Inter-Agency  
**BURNING PERMIT**

No. **DS 21526**

ISSUED TO: SEBASTIAN HOLMES  
 18955 CHINA GRADE BOULDER CREEK CA 95006  
 TELEPHONE NUMBER: 707 1954-4449

BURNING LOCATION: WARNELA RA - GATE #1 ACROSS OF 11440 EMPIRE GRADE

SEC. \_\_\_\_\_ TWP. 9S R. 3W

COUNTY OF SANTA CRUZ STATE OF CALIFORNIA. SAN VICENTE RANCHO

Burning authorized by this permit hereby applies to:  
 (Check applicable block below)

- Burn in incinerator
- Burn debris in small 4' X 4' piles
- Burn small plots of grass or weeds in lots or residential premises
- Burn small parcels or strips for hazard reduction
- Set off fireworks

Burning shall be confined to hours 6:00 AM to 6:00 PM  
 This permit valid during period 1/31 to 4/30 2022  
 (Month & Day) (Month & Day) (Year)

AGRICULTURAL BURNING, CROP TYPE \_\_\_\_\_ ACRES/TONS \_\_\_\_\_  
 OTHER (Explain) HAZARD & FUEL REDUCTION

THIS PERMIT IS SUBJECT TO THE TERMS AND CONDITIONS OF USE AS INDICATED

- Permittee must not burn during very hot and dry periods when winds are strong enough that burning would be considered unsafe. (Example: wind keeps leaves in motion or extends a light flag or cloth.)
- The fire shall be: (a) attended at all times by at least one prudent and responsible person; (b) confined within cleared firebreaks or barriers adequate to prevent it from escaping control.
- When the burning operation authorized by this permit is in an incinerator: (a) a minimum clearance of 10 feet from all flammable material must be provided and maintained; (b) all openings must be screened with nonflammable material with holes not larger than 1/4 inch; and (c) must be attended at all times by a responsible person until fire is dead out.
- This permit does not relieve the permittee of any duty to use reasonable and ordinary care to prevent damage to the property of others or injury to persons as prescribed by law.
- THIS PERMIT IS VOID DURING PERIODS WHEN BURNING IS PROHIBITED BY STATE LAW, LOCAL ORDINANCE, OR PROCLAMATION OF PUBLIC OFFICERS.
- This permit is valid only on those days which are not prohibited by the State Air Resources Board pursuant to Section 41855 of the Health and Safety Code or by the local air pollution control district.
- Before burning call 1-800-CALBURN & FALL CREEK 831/426-3131

For Air Pollution Control call 1-800-CALBURN  
 Additional terms: HAVE AN ADULT IN ATTENDANCE / CONTROL LINES IN PLACE PRIOR TO BURNING / AVAILABLE WATER SOURCE / NO PRECAST

I own or legally control the above described land. I agree to comply with all fire laws, ordinances, and regulations. I further agree to comply with specific terms of this permit.

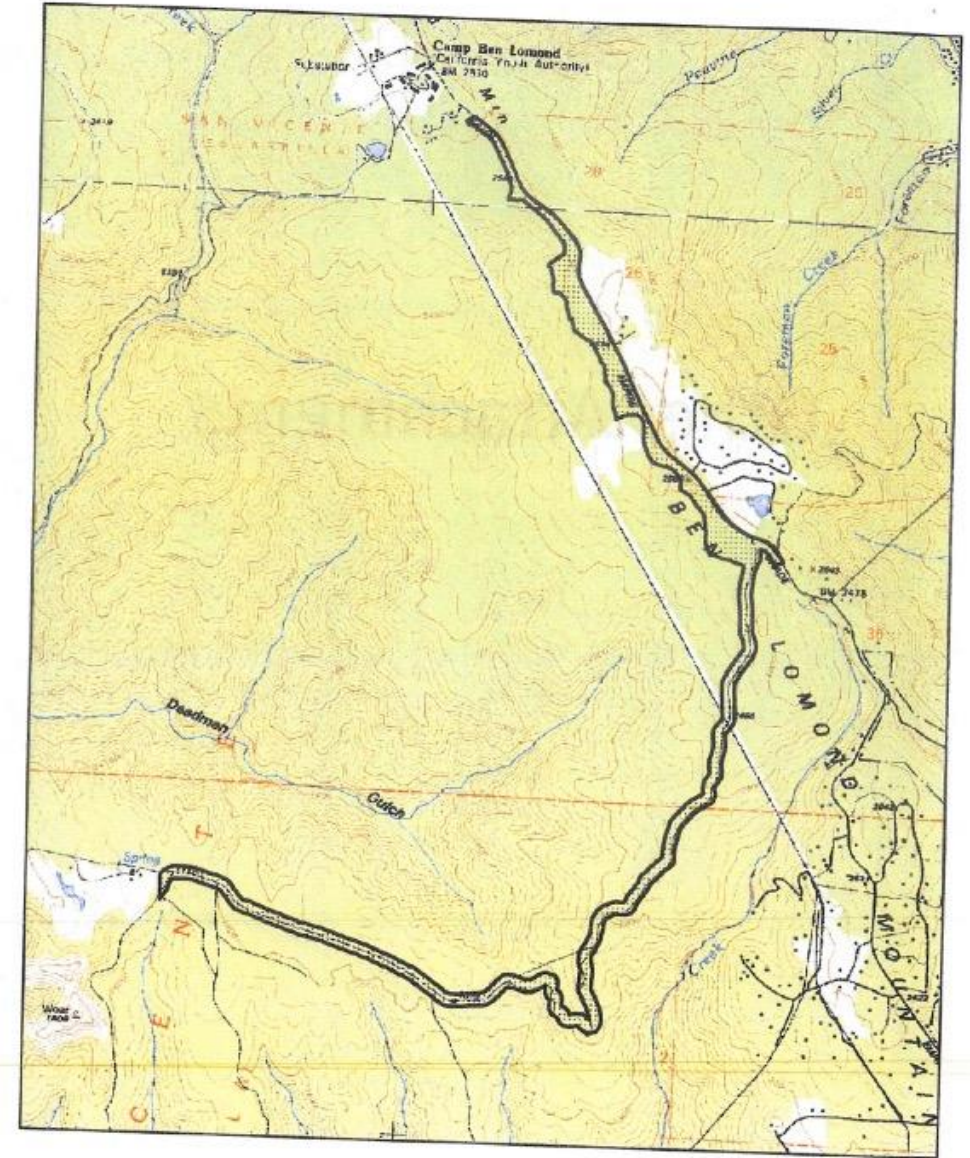
SIGNED: Tom Kaska DATE: 1/31/2022  
 DIRECTOR OF THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION  
 BY TOM KASKA AGENT  
 TITLE FIRE CAPTAIN DATE 1/31/2022  
 ISSUING AGENCY CAL FIRE DIST./BATT. 3

SEE REVERSE SIDE FOR FURTHER INFORMATION  
**CAUTION YOU CAN BE HELD LIABLE FOR ESCAPED FIRES**  
**VIOLATIONS OF ANY BURNING PERMIT TERMS ARE A VIOLATION OF STATE LAWS AND RENDERS THE PERMIT NULL AND VOID.**



# Warrenella/Empire Grade VMP

- Completed in 2016
- Authorizes 139 acres of prescribed burn areas
- Successfully used for several prescribed burns involving CAL FIRE and AMLT



San Vicente Redwoods VMP

Prescribed Burn Area

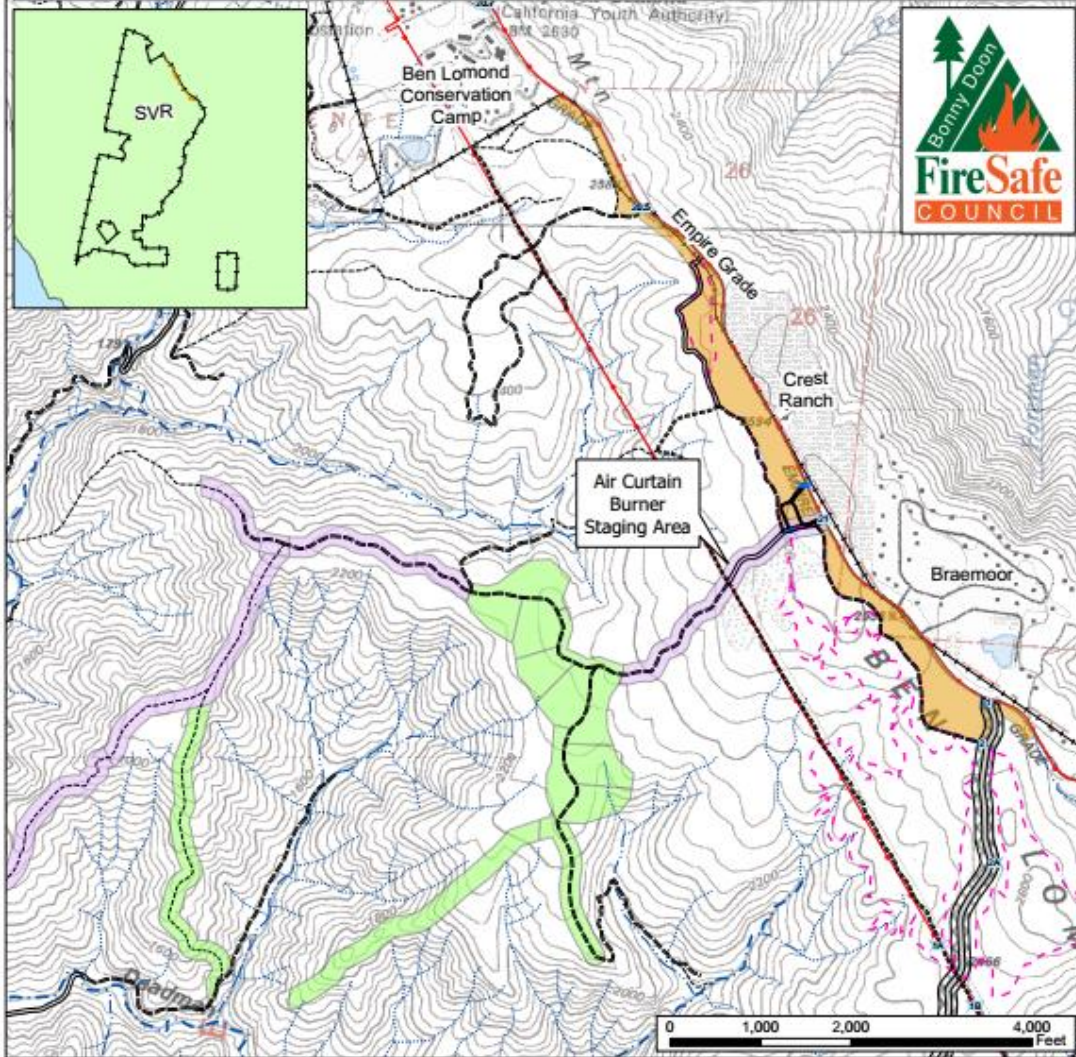
A. Hubbs  
9/1/15



# San Vicente Redwoods - Empire Grade Fuelbreak Project

## Bonny Doon Fire Safe Council

Santa Cruz County, San Vicente Rancho, T10S, T9S, R3W, MDBM, Davenport 7.5' Quad



Empire Grade Fuelbreak Project/2018 San Vicente VMP	Roads Artifrial	Watercourses Class I	Public Access Phase I Trail
2021-2022 Deadman Ridge Fuel Break (5GG17134)	Principal rocked	Class II	Public Access Staging Area
UCB & AMLT Canopy Study on Deadman Ridge (5GA21109)	Principal unsurfaced	Class III	Gates
Warrenella Fuel Break	Secondary unsurfaced		Powerline
	4X4		Ownership Boundary
	Rail Road		
	Tractor		

6/15/2022 1:18,000

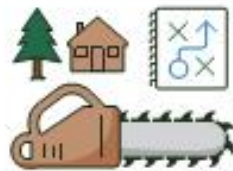




# CAL FIRE'S GRANT PROGRAMS

# Funding Opportunities

## WILDFIRE PREVENTION



### ACTIVITIES

- Hazardous Fuels Reduction
- Wildfire Prevention Planning
- Wildfire Prevention Education

## FOREST LEGACY



### ACTIVITIES

- Conservation Easements
- Fee Title Purchase

## WILDFIRE RESILIENCE \*BLOCK GRANT\*



### ACTIVITIES

- Forest Improvement
- Reforestation
- Technical Assistance
- Planning

## FOREST HEALTH



### ACTIVITIES

- Forest Fuels Reduction
- Prescribed Fire
- Pest Management
- Reforestation
- Biomass Utilization

## BUSINESS & WORKFORCE DEVELOPMENT



### ACTIVITIES

- Workforce Training
- Research and Development
- Business Development
- Biomass
- Wood Products
- Tree Nurseries

## TRIBAL WILDFIRE RESILIENCE



### ACTIVITIES

- Planning
- Cultural Burns
- Workforce Development

## CALIFORNIA FOREST IMPROVEMENT PROGRAM \*COST-SHARE\*



### ACTIVITIES

- Forest Improvement
- Reforestation
- Planning

## URBAN & COMMUNITY FORESTRY



### ACTIVITIES

- Urban Tree Planting
- Planning
- Workforce Development
- Education

## FOREST HEALTH RESEARCH



### ACTIVITIES

- Research





