

## Exhibit B-3



# Forest Ecosystem Management, pllc

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### **Northern Spotted Owl Assessment**

Cathiard Komes Ranch Vineyard Project

**Napa County**

Report Completed by: Pamela Town, Consulting  
Wildlife Biologist on November 30, 2020

The enclosed information regarding northern spotted owl (*Strix occidentalis caurina*, NSO) surveys and protection measures for the Cathiard Komes Ranch Vineyard Project will help determine how the proposed operations avoid impacts to northern spotted owls.

### **Cathiard Komes Ranch Vineyard Project General Information**

Project Location: 1889 West Zinfandel Lane; St Helena, CA (Attachment #1)

Legal of THP: Section 7, T07N, R05W MDB&M

County: Napa County

Proposed Project:

- Development of vineyard (Attachment #2)
  - Block M – 2.3 acres of open area
  - Block O – 2.99 acres of timber (less than 3-acre timber conversion) and 9.91 acres of open area = total of Block O is 12.9 acres

Total Acres of Project: 15.2 acres

### **Known Northern Spotted Owl Territories**

According to the California Department of Fish & Wildlife's spotted owl viewer dated 30NOV20, there are no known northern spotted owl territories within 1.3-miles of the Project (Attachment #3). The 1.3-mile assessment area was created by USFWS for a Take Avoidance of northern spotted owls within the California Interior (outside the coastal redwood zone). Although Napa County does have redwoods, the environmental conditions in the area are hotter/drier than the coastal redwood zone; therefore, the 1.3-mile assessment area was used for this Project.

The closest known northern spotted owl territory (NAP035) is located approximately 1.8 miles from the Project Boundary. This site is based upon only a single detection of a pair of NSOs on 02JUL95 during the evening hours. No other NSO detections are known for this site.

Northern spotted owl territory (NAP011) is located approximately 1.9 miles to the south of the Project Boundary. This site is based upon positive NSO detections in 1989 – 1991 with no detections in 1993 or 1995. No other NSO detections are known for this site.

### **Northern Spotted Owl Habitat**

The attributes for northern spotted owl habitat include a forest with:

- Dense, multi-layered canopy of several tree species.
- Trees of varying sizes and ages.
- Abundant logs, snags/cavity trees, and trees with broken tops or platform-like substrates (i.e. broken tops, mistletoe, debris piles, or old raptor/squirrel nests).
- Open spaces among lower branches to allow flight under the canopy.

The specific definitions of NSO habitat from USFWS are included under Additional Information.

### **Project Boundary:**

The Project Boundary includes 2 blocks to be converted to vineyards (Attachment #2).

- Block M is 2.3 acres of open area and is not suitable NSO habitat due to lack of trees.
- Block O is 9.91 acres of open area and 2.99 acres of timber.
  - The open area has a few scattered trees; however, is not suitable NSO habitat due to lack of canopy cover.
  - The Project's timbered area, combined with the adjacent forest, provides the necessary stand structure of suitable nesting/roosting habitat; however, is primarily surrounded by unsuitable NSO habitat (vineyards, residential, commercial vineyards, shrubland); therefore, would potentially only serve as foraging habitat and not support a resident NSO.

Northern Spotted Owls in this area rely on topographical features (canyons and cooler lower slope positions) to provide stable micro-climates that are within NSO thermal tolerances. This Project will remove 2.99 acres of low quality northern spotted owl habitat from the landscape. The placement of this habitat is adjacent to an existing vineyard and open areas and occurs along the lower portion of a large developed valley. There are no known NSOs within 1.3-miles of this project.

### **2020 Glass Wildfire:**

Using the available on-line wildfire perimeter maps, the Cathiard Komes Ranch Vineyard Project and NAP011 are outside the Glass fire perimeter. NAP035 and the area to the northwest, around NAP006 (Attachment #3) are within the Glass fire perimeter. A fire severity map is unavailable until 60 to 90 days after the fire is extinguished, so determining impact to the landscape and surrounding NSO habitat cannot be completed at this time.

## Northern Spotted Owl Surveys

A small portion (2.99 acres) of the Cathiard Komes Ranch Vineyard Project is considered suitable NSO habitat. In addition, there is suitable NSO habitat within ¼-mile of the Project area. Four survey stations have been used to survey suitable NSO habitat both on and around the Project area. Stations 1, 3 & 4 (Attachment #4) are located along the valley bottom and survey the forested habitat on the hillside. Station #2 primarily surveys the Project and immediate surrounding area. All stations can hear distant traffic from the St Helena area; however, it does not impede potential hearing northern spotted owls. No northern spotted owls or barred owls were detected. Great horned owls were detected, which is expected due to the openness of the landscape.

Table #1: Northern Spotted Owl Surveys for Cathiard Komes Ranch Vineyard Project

Date & Survey Number	Survey Station	Survey Time	NSO Response & Notes
03MAR19	4	2026 – 2038	N/R
Survey #1	1	2046 – 2056	N/R
	2	2100 – 2116	N/R – GHOW & frogs
	3	2103 - 2113	N/R - frogs
15MAR19	1	2210 – 2220	N/R – frogs and distant traffic
Survey #2	2	2222 – 2232	N/R - frogs
	3	2353 – 0004	N/R - crickets
	4	2152 – 2202	N/R – frogs, coyotes, distant traffic
01APR19	3	2244 – 2255	N/R – frogs, jet, distant traffic
Survey #3	1 & 2	2307 - 2331	N/R – Gate locked, walked between STA #2 and #1 surveying. Frogs, jet, distant traffic
	4	2339 – 2353	N/R - WSOW
22APR19	1 & 2	2101 - 2125	N/R – Gate locked, walked between STA #1 and #2.
Survey #4	3	2135 – 2145	N/R - frogs
	4	2157 – 2207	N/R - frogs
04MAY19	1 & 2	2300 – 2330	N/R – Gate locked, walked between STA#1 and #2. GHOW, coyotes
Survey #5	3	2336 – 2346	N/R – frogs and distant traffic
	4	2357 – 0007	N/R – distant GHOW moving
16MAY19	4	2233 – 2243	N/R
Survey #6	3	2252 – 2302	N/R
	1 & 2	2312 – 2333	N/R – Gate locked, walked between STA#1 and #2. Frogs and duck

03MAR20	1 & 2	2118 – 2138	N/R – Gate locked, walked between STA #1 and #2. Geese
Survey #1	3	2148 – 2158	N/R - Geese
	4	2208 – 2218	N/R
17MAR20	2	2035 – 2048	N/R - frogs
Survey #2	1	2050 – 2100	N/R - frogs
	3	2102 – 2112	N/R - frogs
	4	2120 – 2130	N/R – frogs and dogs
09APR20	1 & 2	2256 – 2316	N/R – Gate locked, walked between STA #1 and #2
Survey #3	3	2239 – 2249	N/R - SWOW
	4	0140 – 0150	N/R - GHOW
22APR20	4	2033 – 2043	N/R - GHOW
Survey #4	3	2056 – 2106	N/R
	2	2115 – 2125	N/R - frogs
	1	2133 – 2143	N/R - dogs
11MAY20	1	2237 – 2247	N/R
Survey #5	2	2224 – 2234	N/R
	3	2207 – 2217	N/R
	4	0024 – 0034	N/R – WSOW
04JUN20	1	2221 – 2231	N/R - frogs
Survey #6	2	2234 – 2244	N/R
	3	2250 – 2300	N/R – skunk and crickets
	4	2307 – 2317	N/R - tractor

N/R = No Response from northern spotted owl

GHOW = Great Horned Owl

WSOW = Western Screech Owl

SWOW = Saw-whet Owl

#### **Survey Compliance to Protocol:**

- Protocol Followed: 2011 Protocol for Surveying Proposed Management Activity that may impact NSOs (Revised 09JAN12).
- 2019 is Year 1 = 6 Survey Visits
- 2020 is Year 2 = 6 Survey Visits
- Different surveyors were used:
  - Scott Butler, RPF
  - Heather Morrison, RPF
  - Pamela Town, Consulting Wildlife Biologist

- 10 – Minute Point Count Survey Used
- Digital Recording Used at all survey stations
- At least 7 Days between Surveys: Yes
- Surveys Between Sunset and Sunrise: Yes
- Survey stations the same: Yes
- Survey Stations ¼ to ½ mile apart: Stations were placed where they would obtain best coverage of the suitable NSO habitat
- Daytime follow-up within 48 hours if NSO Detected: N/A

### **Mitigation Measures for Northern Spotted Owls**

- This Project is in compliance with USFWS Northern Spotted Owl Take Avoidance Scenarios (Scenario 3):
  - The Project Boundary occurs within suitable NSO habitat and,
  - Protocol surveys are complete, and
    - No NSOs are detected within 1.3 miles of timber operations AND
    - No historic NSO activity centers within 1.3 miles of timber operations.
- Northern spotted owl surveys were completed in 2019 and 2020, with no NSOs detected. These surveys are valid until the next breeding season (01FEB21). If timber operations are not complete prior to 01FEB21, a current years' survey effort must occur.
  - **2021: Surveys require 3 spot check surveys prior to timber operations.**
  - **Surveys are required in each year prior to timber operations. Once timber operations are complete, surveys are no longer required.**
- If a northern spotted owl is heard or observed during operations of this Project, all operations will cease until new mitigation measures can be proposed and applied.
- At this time, it is unknown how or if the 2020 Glass wildfire impacted northern spotted owls in the landscape. Movement of NSOs within territories that burned is possible, and should be detected during a current breeding season years' survey effort. If a new NSO territory is identified within 1.3-miles of the Project, additional mitigation measures may be required.
- Seasonal disturbance buffers (1/4 mile) will be observed for occupied sites during the breeding season (01FEB – 31AUG) or at least until monitoring efforts support probable absence, non-nesting, nest failure, or fledgling flight can be determined. ***There are no known NSO activity centers within ¼-mile of this Project.***

### **Attachments**

Attachment #1 – Topographical Map – General Location Map (1 page)  
 Attachment #2 – Aerial of Project Area (1 page)  
 Attachment #3 – Northern Spotted Owls within 1.3-Miles of Project (2 pages)  
 Attachment #4 – Northern Spotted Owl Survey Stations Map (1 page)

## **Northern Spotted Owl Contact Information**

Questions or comments regarding this NSO information can be directed to:

Pamela Town  
Consulting Wildlife Biologist & SOE  
Forest Ecosystem Management, PLLC  
(406) 490-7427  
[Pamtown30@gmail.com](mailto:Pamtown30@gmail.com)

## **Additional Information**

### **Definitions:**

- Activity Center: Area of concentrated activity of either a pair of NSOs or a single territorial NSO, represented by a mapped location (usually a nest tree) that occurs within, but not necessarily in the exact center of, the core area. Where clusters of site centers exist in a core area a geographic centroid or nearest neighbor calculation may be used as a designated activity center for habitat analysis purposes. A single territory may also have more than one designated activity center.
- Territory: A spatial area of landscape that is defended by a single resident or pair of northern spotted owls. Specific NSO territories generally refer to a fixed geographic area. Over time, individual spotted owls may occupy different territories (i.e. breeding dispersal, interference competition with barred owls, changes in habitat or prey availability, etc.).
- Territory Identification Number (NAP0005): A number generated by the California Department of Fish & Wildlife assigned to a geographic area currently and/or historically occupied by northern spotted owls.
- High Quality Nesting/Roosting Habitat: Mixed tree species with basal area of 210+ ft<sup>2</sup> and  $\geq 15''$  quadratic mean diameter, and  $\geq 8$  trees per acre of trees  $\geq 26''$  in diameter at breast height, and  $\geq 60\%$  canopy closure.
- Suitable Nesting/Roosting Habitat: Mixed tree species with basal area ranging from 150 - 180+ ft<sup>2</sup> and  $\geq 15''$  quadratic mean diameter, and  $\geq 8$  trees per acre of trees  $\geq 26''$  in diameter at breast height, and  $\geq 60\%$  canopy closure.
- Suitable Foraging Habitat: Mixed tree species with basal area ranging from 120 - 180+ ft<sup>2</sup> and  $\geq 13''$  quadratic mean diameter, and  $\geq 5$  trees per acre of trees  $\geq 26''$  in diameter at breast height, and a mix of  $\geq 40\%$  to 100% canopy closure.
- Low Quality Foraging Habitat: Mixed tree species with basal area ranging from 80 - 120+ ft<sup>2</sup> and  $\geq 11''$  quadratic mean diameter, and  $\geq 40\%$  canopy closure.
- Suitable Habitat: Areas meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- Unsuitable Habitat: Areas not meeting the criteria for high quality nesting/roosting habitat, suitable nesting/roosting habitat, suitable foraging habitat, and low-quality foraging habitat.
- NSO Breeding Season: February 1 to August 31<sup>st</sup> within the inland ecotype of Napa County.
- Assessment Area: The area used to address northern spotted owls includes 1) Project Footprint; 2) Area within  $\frac{1}{4}$  mile of Project Footprint; 3) 1.3 miles from Project Footprint.

## References:

Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls. Endorsed by the U.S. Fish & Wildlife Service. February 2, 2011 and Revised January 9, 2012.

Important Information for Timber Operations Proposed within the Range of the Northern Spotted Owl. California Department of Forestry & Fire Protection. February 2008.

Northern Spotted Owl Viewer (BIOS CA Natural Diversity Database). Managed by California Department of Fish & Wildlife.

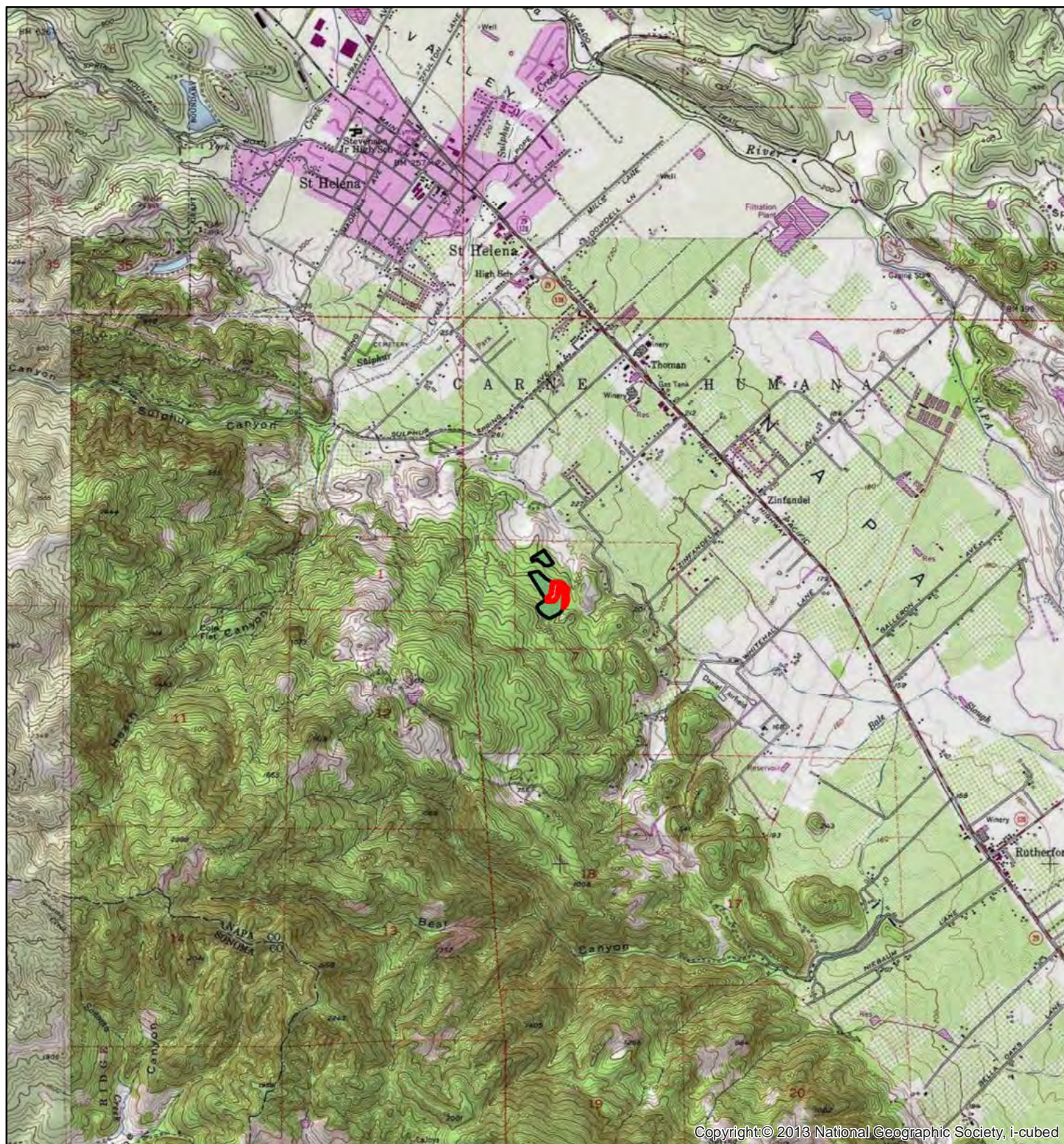
Wildfire perimeter maps. 28NOV20. UC Davis Map: <https://ucanr.edu/sites/fire/safety/current/>

Wildfire Severity maps. 28NOV20. RAVG link

Zeiner, D.C., W.F. Laudenslayer, K.E. Mayer, and M. White, eds. 1988 – 1990. California's Wildlife. Vol. I – III. California Department of Fish & Game, Sacramento, CA.



# Vicinity Map - Cathiard Komes Ranch Vineyard Project



## Legend



Project Area - Timber



Project Area - Open

Section 7 T07N, R05W MDB&M  
Napa County

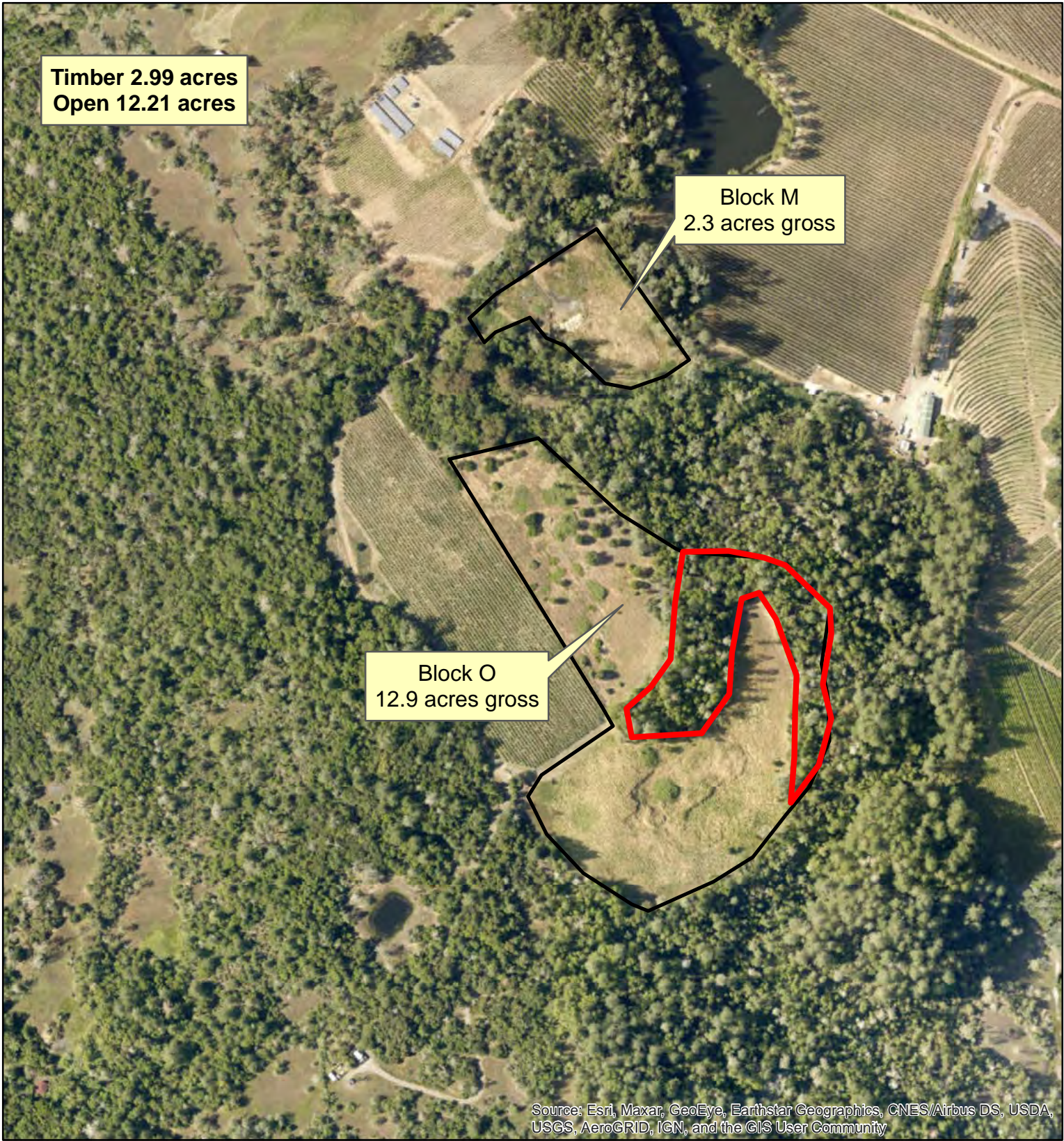
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1 in = 4,167 ft  
Date: 11/30/2020



# Aerial of Cathiard Komes Ranch Vineyard Project



Section 7 T07N, R05W MDB&M  
Napa County

**Legend**

Project Area - Timber

Project Area - Open

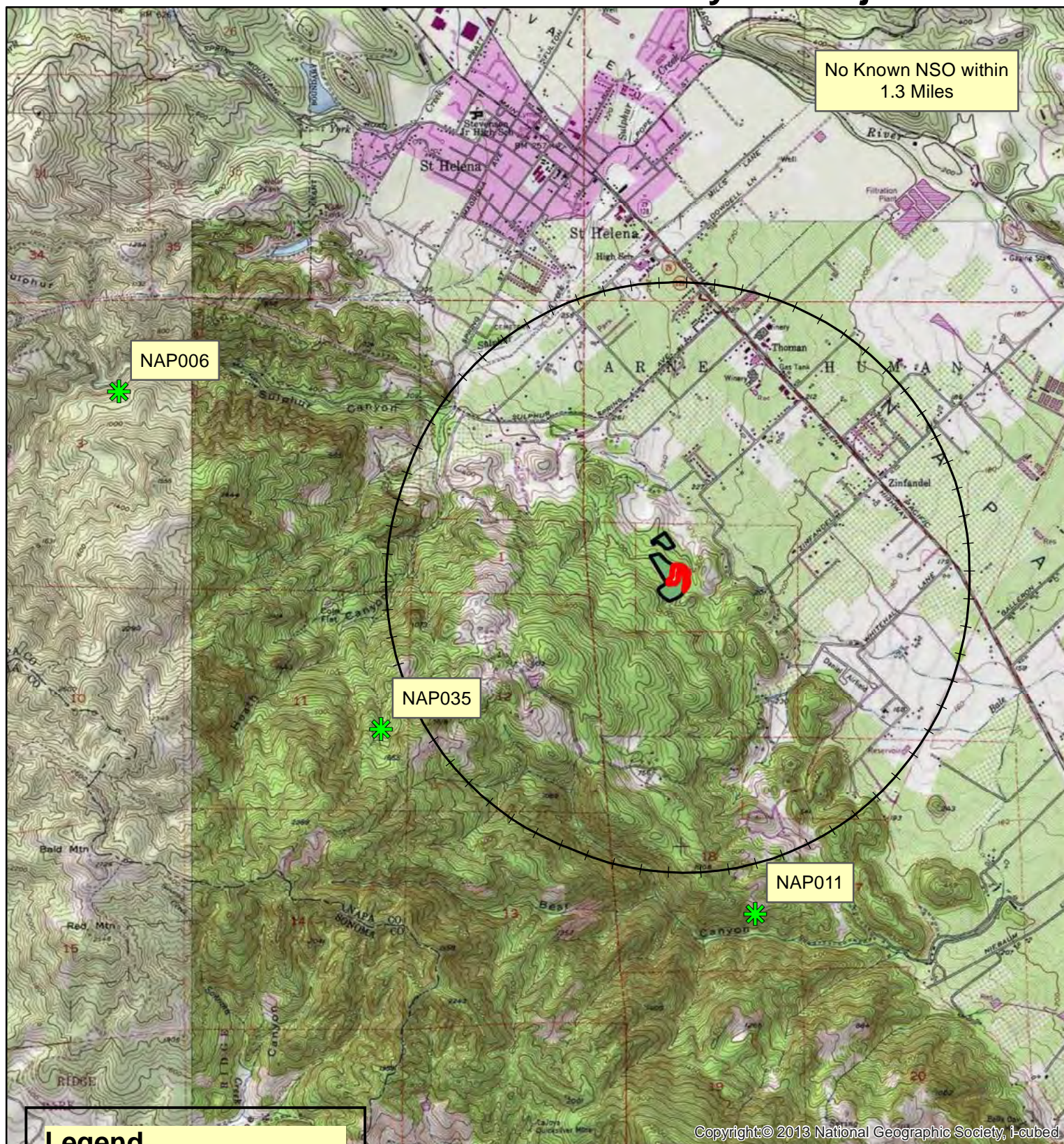


Forest Ecosystem Management, pllc

1 in = 417 ft  
Date: 11/30/2020



# Northern Spotted Owls within 1.3 Miles of Cathiard Komes Ranch Vineyard Project



Section 7 T07N, R05W MDB&M  
Napa County

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1 in = 4,167 ft  
Date: 11/30/2020



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Attachment #3  
Page 2 of 2

Data Version Date:  
06/29/2020

Report Generation Date:  
11/30/2020

**Report #1 - Spotted Owl Sites Found**  
Known Spotted Owl sites having observations  
within the search area.



Meridian, Township, Range, Section (MTRS) searched:

M\_07N\_06W Sections(01,02,11,12,13,14);

M\_07N\_05W Sections(05,06,07,08,17,18);

NOTES:

Cathiard Komes Ranch

Masterowl	Subspecies	LatDD NAD83	LonDD NAD83	MTRS	AC Coordinate Source
NAP0006	NORTHERN	38.488207	-122.507031	M 07N 06W 03	Contributor 3.3 Miles
NAP0011	NORTHERN	38.453687	-122.453049	M 07N 05W 18	Contributor 1.9 Miles
NAP0035	NORTHERN	38.465999	-122.484936	M 07N 06W 11	Contributor 1.8 Miles

# Northern Spotted Owl Survey Stations for Cathiard Komes Ranch Vineyard Project



**Legend**

Project Area - Timber

Project Area - Open

NSO Survey Station

NSO Activity Center

Section 7 T07N, R05W MDB&M  
Napa County

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1 in = 2,492 ft  
Date: 11/30/2020