

“M”

Biological Study

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January 21, 2016

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Environmental Resource Management
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RE: Sodhani Winery Project
Section 22 T8N, R6W, MDB&M - Napa County

Scott,

This is an assessment for northern spotted owls (*strix occidentalis caurinia*), or NSOs, for the Sodhani Winery Project located at 3283 St. Helena Hwy near St. Helena, California. The Project proposes to remove 8 conifers (Douglas-fir trees) and 1 hardwood (Olive tree). As the Project proposes to harvest trees, this assessment uses U.S. Fish & Wildlife Service's guidelines for proposed management activities that may impact northern spotted owls.

Known Northern Spotted Owl Territories:

On 12JAN16, I ran a California Department of Fish & Wildlife's spotted owl viewer for the above listed project (Attachment #1). An assessment area of 1.3 miles from the project area was used. The 1.3 mile assessment area was created by USFWS for a Take Avoidance of northern spotted owls within the California Interior (outside the 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 (Attachment #2). A summary of the report includes:

Owls Sites Found (there is one known NSO territory within 1.3 miles of the Project Area):

1. NAP005 – Northern Spotted Owl Territory is located approximately 3,400' (within 0.7 miles) from the Project Area. This territory is based upon a pair of NSOs located with 1 young in 1989. The territory was found active in 1987, 1989, 1990, 1991, and 1998. Surveys in 2000 and 2002 did not detect any NSOs. To my knowledge, there is no current survey information available.

Northern Spotted Owl Habitat:

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

- Dense, multi-layered canopy of several trees 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.

USFWS more specifically defines northern spotted owl habitat within the California Interior as follows:

- High Quality Nesting/Roosting Habitat: Mixed tree species with basal area of 210+ ft² and ≥ 15 " quadratic mean diameter, and ≥ 8 trees per acre of trees ≥ 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+ ft² and ≥ 15 " quadratic mean diameter, and ≥ 8 trees per acre of trees ≥ 26 " in diameter at breast height, and $\geq 60\%$ canopy closure.
- Suitable Foraging Habitat: Mixed tree species with basal area ranging from 120 - 180+ ft² and ≥ 13 " quadratic mean diameter, and ≥ 5 trees per acre of trees ≥ 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+ ft² and ≥ 11 " quadratic mean diameter, and $\geq 40\%$ canopy closure.

Project Area:

The Project Area is on the edge of an existing vineyard and mixed second-growth forest (Attachment #3). The trees to be removed are close to buildings, a vineyard, along an access road, and a large expanse of unsuitable habitat to the east of Highway 128 & Highway 29 (Attachment #4).

The location of the 9 trees is within unsuitable northern spotted owl habitat due to lack of contiguous canopy closure, adjacent to vineyard, and presence of actively-used structures (Attachment #5). The forest immediately adjacent to the Project Area does meet USFWS definitions of suitable northern spotted owl habitat.

No Take of Northern Spotted Owls:

As the proposed removal of 9 trees for the Sodhani Winery is within unsuitable NSO habitat but does have suitable NSO habitat immediately adjacent to the Project Area; the Project should fall under USFWS Scenario 2 of the Northern Spotted Owl Take Avoidance Scenarios, in which the following applies:

Scenario 2: No Take

- A. No suitable habitat in harvest units, and
- B. Suitable habitat within 0.25 miles of timber operations (tree removal), then:
 - a. Seasonal restrictions from February 1 to July 9, OR
 - b. Protocol surveys completed with no reproductive behavior and no timber operations (tree removal) until the conclusion of protocol surveys.

Options for Sodhani Winery Project Removal of 9 Trees:

This Project has a few options:

1. Due to potential habitat within 0.25 miles, they are allowed to cut trees and complete harvest operations outside the nesting season without surveys. ***This means trees could be removed between July 10th through January 31st of any given year; without surveys being completed.***
2. Due to suitable NSO habitat within 0.25 miles, they can survey for northern spotted owls within the ¼ mile suitable habitat, with harvest operations occurring after protocol surveys are completed and submitted to the appropriate regulatory agency. They should be able to use a one year disturbance only protocol. ***The protocol surveys would require six NSO calling surveys during the period of March 1st through July 30th. The six surveys must be completed with at least 7 days in between surveys. Surveys can begin, at the earliest of March 1st and should have at least one survey in the month of April, May, and June.***
 - a. If Surveys are completed, the findings will be submitted to the County.
 - i. If no northern spotted owls are detected – cutting of trees can be completed upon submittal of surveys to Napa County.
 - ii. If a northern spotted owl is detected – the landowner will be notified immediately, and mitigation measures will be submitted to the Project Leader and Napa County. Napa County has 5 business days to review and comment on the mitigation measures.
3. Due to NSO territorial size requirements and topography of the landscape around the Project Area, if NSO territory NAP005 is detected within their historic activity center prior to the completion of the six surveys; surveys can be discontinued and harvest operations can begin once survey findings are submitted to the County.

This is a general assessment of northern spotted owls for the above listed project area. This is not a complete Biological Assessment for all listed species for an EIR/EIA, nor can it be used in place of USFWS Protocol Surveys.

If you have questions regarding this information, please feel free to contact me.

Pamela Town
Consulting Wildlife Biologist

Attachments:

- 1: CA Fish & Wildlife Report #1 & Report #2 – NSO Database (5 pages)
- 2: Topographical Map of NSOs within 1.3 Miles of Sodhani Winery Project (1 page)
- 3: Aerial Photo of Landscape Around Sodhani Winery Project (1 page)
- 4: Aerial Photo of Sodhani Winery Project – Close Up of Trees to be Removed (1 page)
- 5: Photos of Trees to be Removed (5 pages)

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.

Sodhani Winery

Attachment #1
(5 pages)

Data Version Date:
01/04/2016
Report Generation Date:
1/12/2016

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



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

M_08N_06W Sections(08,09,10,11,12,13,14,15,16,17,20,21,22,23,24,25,26,27,28,29);

NAPA County

| Masterowl | Subspecies | LatDD NAD83 | LonDD NAD83 | MTRS | AC Coordinate Source |
|-----------|------------|-------------|-------------|--------------|----------------------|
| NAP0001 | NORTHERN | 38.539867 | -122.546050 | M 08N 06W 17 | Contributor |
| ➔ NAP0005 | NORTHERN | 38.532391 | -122.521177 | M 08N 06W 22 | Contributor |
| NAP0033 | NORTHERN | 38.508038 | -122.526177 | M 08N 06W 33 | Contributor |

1.3 miles Around Project:

NAP0001 = 2.02 Miles to Project

➔ NAP0005 = 3,410' to Project

NAP0033 = 2.07 Miles to Project

Only owl
within 1.3 Miles:

NAP0005

Data Version Date:
01/04/2016

Report Generation Date:
1/12/2016

Report #2 - Observations Reported
List of observations reported by site.



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

M_08N_06W Sections(08,09,10,11,12,13,14,15,16,17,20,21,22,23,24,25,26,27,28,29);

NAP005 = Found 1983
87, 89, 90-91, 98 Active
'00 & '02 - N/R

AC point for
NAP005 based
on 1989 pair
w/young (Historic Nest site)

Only relevant
Pages included:
NAP005
Pages 6-8

| Type | Date | Time | #Adults | Age/Sex | Pair | Nest | #Young | Latitude DD NAD83 | Longitude DD NAD83 | MTRS | Coordinate Source |
|------|------------|------|---------|---------|------|------|--------|----------------------|-----------------------|-----------------|-----------------------------|
| POS | 2002-05-21 | 2034 | 1 | UM | | | | 38.542015 | -122.555067 | M 08N 06W 17 | Quarter-section centroid |
| POS | 2002-05-25 | 2006 | 1 | UM | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| NEG | 2002-05-30 | 2135 | 0 | | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| POS | 2002-06-12 | 2134 | 1 | UF | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| POS | 2002-06-29 | 1922 | 1 | UF | | Y | 1 | 38.542015 | -122.555067 | M 08N 06W 17 | Quarter-section centroid |
| NEG | 2002-07-02 | 2131 | 0 | | | | | 38.542242 | -122.582552 | M 08N 07W 13 | Quarter-section centroid |
| NEG | 2003-02-07 | 1806 | 0 | | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| POS | 2003-05-04 | 1125 | 1 | UM | | | | 38.542015 | -122.555067 | M 08N 06W 17 | Quarter-section centroid |
| NEG | 2003-05-08 | 1052 | 0 | | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| POS | 2003-05-26 | 2046 | 1 | UU | | | | 38.542015 | -122.555067 | M 08N 06W 17 | Quarter-section centroid |
| POS | 2004-02-05 | 1501 | 1 | UU | | | | 38.542015 | -122.555067 | M 08N 06W 17 | Quarter-section centroid |
| POS | 2004-04-26 | 1138 | 2 | UMUF | Y | Y | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| NEG | 2005-04-17 | 1419 | 0 | | | | | 38.545439 | -122.550168 | M 08N 06W 17 | Section centroid |
| POS | 2005-04-18 | 1543 | 1 | UM | | | | 38.541700 | -122.545854 | M 08N 06W 17 | Quarter-section centroid |
| POS | 2010-03-21 | | 2 | UMUF | Y | | | 38.543540 | -122.536938 | M 08N 06W 16 | Contributor |
| AC | 2012-05-28 | 1638 | 2 | UMUF | Y | Y | | 38.539867 | -122.546050 | M 08N 06W 17 | Contributor |

Masterowl: NAP0005 Subspecies: NORTHERN

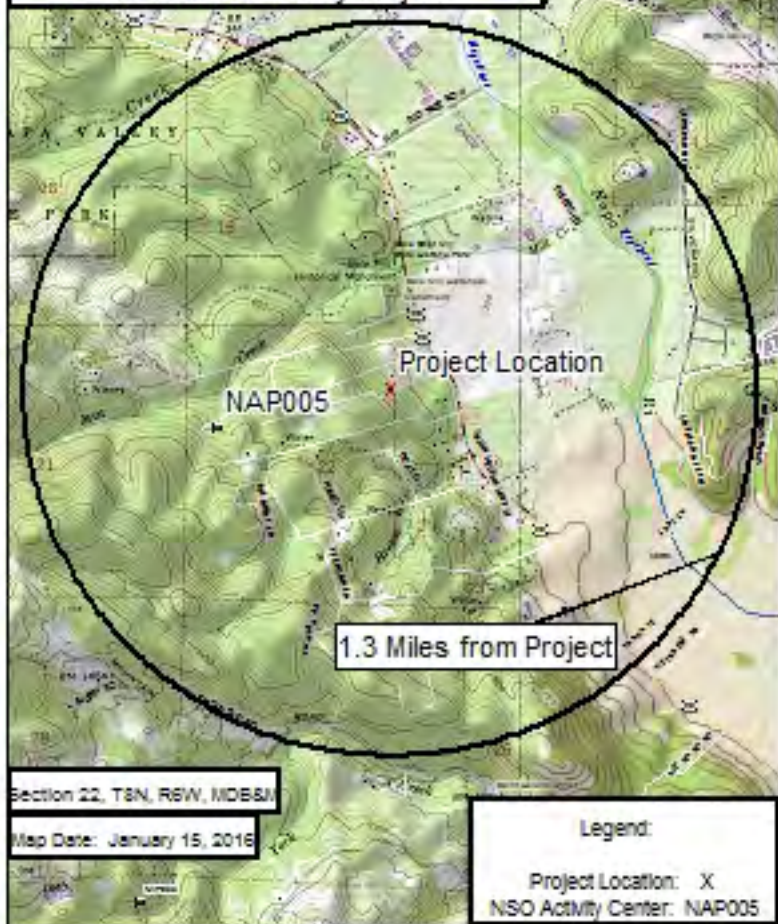
| Type | Date | Time | #Adults | Age/Sex | Pair | Nest | #Young | Latitude DD NAD83 | Longitude DD NAD83 | MTRS | Coordinate Source |
|------|------------|------|---------|---------|------|------|--------|----------------------|-----------------------|-----------------|-----------------------------|
| POS | 1983-12-27 | | 1 | UU | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| POS | 1987 | | 2 | UMUF | Y | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| POS | 1987 | | 2 | UMUF | Y | | | 38.534410 | -122.532293 | M 08N 06W 21 | Half-section centroid |
| AC | 1989-07-30 | 0630 | 2 | UMUF | Y | | 1 | 38.532391 | -122.521177 | M 08N 06W 22 | Contributor |
| POS | 1989-07-30 | | 2 | UMUF | Y | | 1 | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |
| POS | 1990-04-29 | 1640 | 1 | UM | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| POS | 1991-01-01 | 0343 | 1 | UM | | | | 38.532391 | -122.521177 | M 08N 06W 22 | Contributor |
| POS | 1991-04-11 | 1629 | 1 | UM | | | | 38.530855 | -122.513729 | M 08N 06W 22 | Section centroid |
| POS | 1991-05-05 | 2045 | 1 | UM | | | | 38.532391 | -122.521177 | M 08N 06W 22 | Contributor |
| POS | 1991-09-29 | 2028 | 1 | UM | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| NEG | 1992 | | 0 | | | | | 38.530855 | -122.513729 | M 08N 06W 22 | Section centroid |
| NEG | 1992-03-01 | 1757 | 0 | | | | | 38.530855 | -122.513729 | M 08N 06W 22 | Section centroid |
| NEG | 1993-04-03 | 2031 | 0 | | | | | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |
| NEG | 1996-10-13 | 1935 | 0 | | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| POS | 1998 | 0215 | 2 | UMUF | Y | | | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |
| NEG | 2000-04-03 | 2228 | 0 | | | | | 38.530904 | -122.532304 | M 08N 06W 21 | Section centroid |
| NEG | 2000-05-16 | 2001 | 0 | | | | | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |

AC point
on MAP

This detection
is 2,000+
from
AC Pt.
Further from Project

| Type | Date | Time | #Adults | Age/Sex | Pair | Nest | #Young | Latitude DD NAD83 | Longitude DD NAD83 | MTRS | Coordinate Source |
|-----------------------------------------|------------|---------------|---------|---------|------|------|--------|----------------------|-----------------------|-----------------|-----------------------------|
| NEG | 2000-06-29 | 1925 | 0 | | | | | 38.530904 | -122.532304 | M 08N 06W 21 | Section centroid |
| NEG | 2002-02-08 | 2400 | 0 | | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| NEG | 2002-02-08 | 2400 | 0 | | | | | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |
| NEG | 2002-03-12 | 2400 | 0 | | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| NEG | 2002-06-10 | 2400 | 0 | | | | | 38.534418 | -122.527692 | M 08N 06W 21 | Quarter-section centroid |
| NEG | 2002-06-10 | 2400 | 0 | | | | | 38.534425 | -122.518352 | M 08N 06W 22 | Quarter-section centroid |
| Masterowl: NAP0033 Subspecies: NORTHERN | | | | | | | | | | | |
| POS | 1995-06-26 | 2129 | 2 | UMUF | Y | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| POS | 1995-07-12 | 2045 | 1 | UM | | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| POS | 1997-03-18 | 1900 | 1 | UM | | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| POS | 1997-03-31 | 1832 | 1 | UM | | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| POS | 1997-04-19 | 1510 | 2 | UMUF | Y | N | | 38.515786 | -122.515552 | M 08N 06W 27 | Contributor |
| POS | 1999-03-28 | 1905 | 1 | UM | | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| POS | 2000-06-29 | 2206 | 1 | UM | | | | 38.516446 | -122.514033 | M 08N 06W 27 | Section centroid |
| NEG | 2001-01-01 | 0225- 0240 | 0 | | | | | 38.513105 | -122.518884 | M 08N 06W 27 | Quarter-section centroid |
| NEG | 2001-02-08 | 2059 | 0 | | | | | 38.516446 | -122.514033 | M 08N 06W 27 | Section centroid |
| NEG | 2001-02-16 | 1716 | 0 | | | | | 38.516446 | -122.514033 | M 08N 06W 27 | Section centroid |

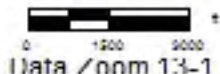
Northern Spotted Owls within 1.3 Miles
of Sodhani Winery Project



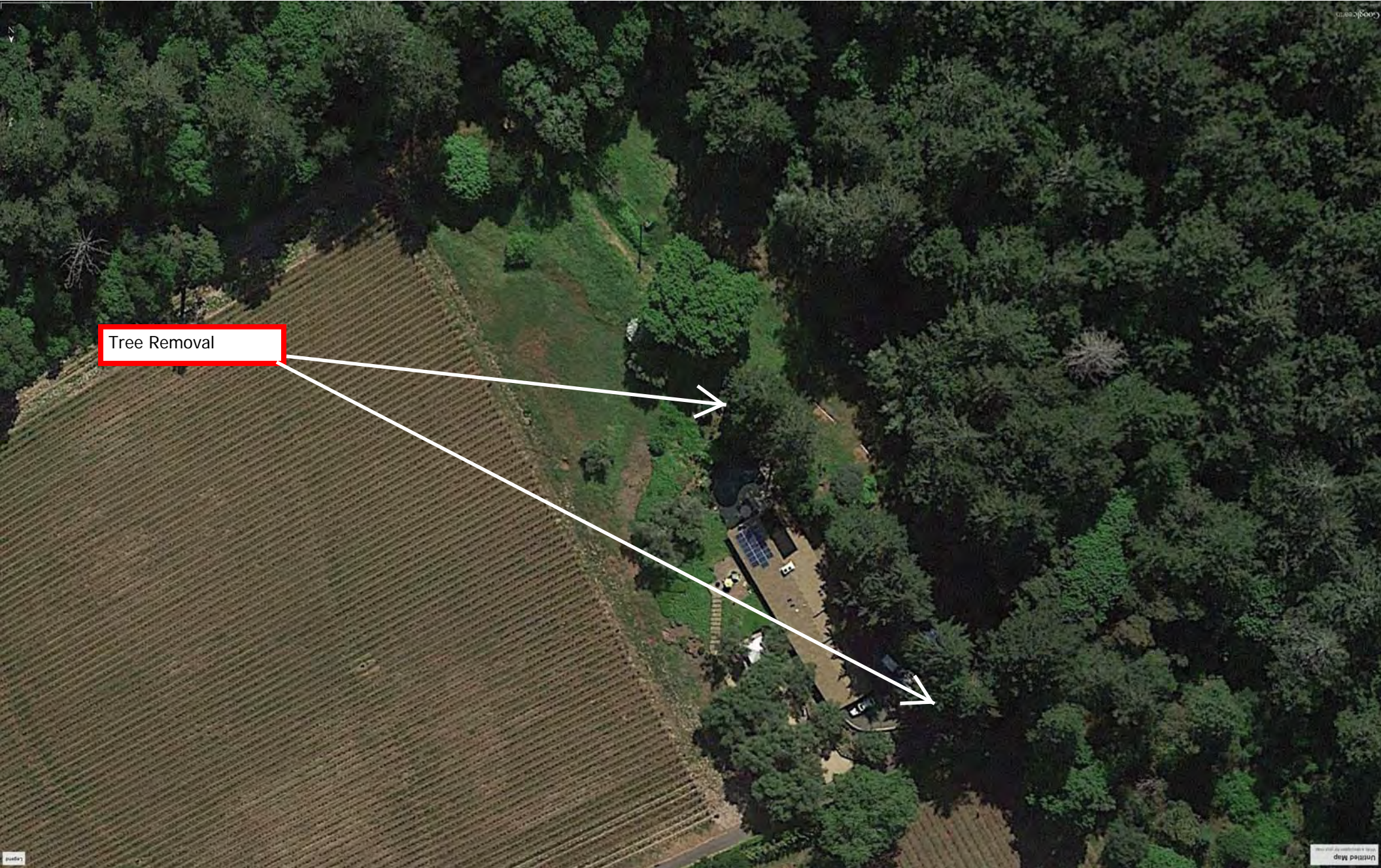
Data use subject to license.

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Tree Removal





West of the House. Tree 4, 5, and 6, slated for removal with the winery permit. They also need to be removed for safety reasons, heavy limbs and a slight lean toward the house.



Tree number 1, 2 and 3, behind house, need to be removed for safety reasons.



Tree 1, 2, 3, 4 and 5, note heavy limbs on the right, toward the house.

Tree 5 and 6, note limbs heavy on the down hill side toward the house.





Panoramic view of trees 1, 2, 3, 4, 5, and 6 behind the house.



Tree 1, 2 and 3 are to the right of the photo, tree 4, 5, and 6 are in the middle of the photo, note the lean toward the house and the heavy limbs on the down hill side.



South of the house, tree 7 and 8, note the lean and the heavy limbs on the down hill side.



Looking toward the house, the 8 fir trees are behind the hardwood in the foreground.



Olive tree south of the house, to be removed for the winery. The hardwood is to the right of the photo.