MORRIS JOINT TIMBER MANAGEMENT GUIDE

Assessor Parcel #	Property Owner / Mailing Address
AP# 208-142-035	Carol Morris PO Box 1212 Weaverville, CA 96093
AP# 208-142-033	M5 Land and Cattle LLC 39960 Alderpoint Road Blocksburg, CA 95514

Prepared By: Mark Pera, Staff

Reviewed By: Stephen Hohman, RPF #2652
Hohman and Associates Forestry Consultants
PO Box 733, Hydesville CA. 95547

Joint Timber Management Guide

Property Owner: **Carol Morris, AP# 208-142-035**
M5 Land and Cattle LLC, AP# 208-142-033

Prepared By: **Hohman and Associates Forestry Consultants**
PO Box 733, Hydesville CA. 95547

BACKGROUND and GENERAL LOCATION

The Joint Timber Management Plan (JTMP) is for a proposed lot line adjustment for parcel numbers 208-142-035 and 208-142-033 in effort to resolve a dispute between Carol Morris and her ex-husband Bob Morris. Simply stated Carol will transfer a portion of her land to Bob in exchange for a logical portion of his land which happens to include the front yard, parking area and driveway to Carols house. Both parcels contain portions which are zoned timberland production (TPZ).

Humboldt County Code 324-5.5(a) states:

> Subdivisions containing land zoned Timberland Preserve (TPZ) must comply with the requirements of Government Code 51119.5.

California Government Code 51119.5 states:

> Parcels zoned as timberland production under this chapter may not be divided into parcels containing less than 160 acres unless the original owner prepares a joint timber management plan prepared or approved as to content by a registered professional forester for the parcels to be created. The joint timber management plan shall provide for the management and harvesting of timber by the original and any subsequent owners, and shall be recorded with the county recorder as a deed restriction on all newly created parcels.

Humboldt County General Plan: Appendix B. Glossary and Definitions

> **Lot Line Adjustment.** The adjustment of a common lot line or lot lines between two or more existing adjacent parcels, where the land(s) taken from one or more parcels is added to an adjacent parcel or parcels, and where a greater number of parcels than originally existed is not thereby created.

The parcels (208-142-035 and 208-142-033) are both zoned Agriculture Exclusive (AE) and Timberland Production Zone (TPZ). The parcels are accessed from and located on the east side of the paved county road, Alderpoint Road approximately 8 road miles south of Bridgeville. The parcels are located in portions of Sections 8 and 9, Township 1 South, Range 4 East, Humboldt Baseline and Meridian on the Larabee Valley 7.5' USGS Quadrangle in Humboldt County.

OBJECTIVE

The proposed JTMP shall be a "Timber Management Guide" for forest management of the two parcels to demonstrate that timber management is feasible on each separate parcel and independent of the other parcel. The allocation of acreage of the proposed lot line adjustment is illustrated in the tables below.

Carol Morris, AP# 208-142-035	Timber (TPZ)	Non-Timber (AE)	TOTAL
Current (acres/relative percent occupancy)	106 / 90%	12 / 10%	118
Proposed Exchange (acres/relative percent occupancy)	34 / 79%	9 / 21%	43
Difference (+/- acres)	-72	-3	-75

M5 Land and Cattle LLC, AP# 208-142-033	Timber (TPZ)	Non-Timber (AE)	TOTAL
Current (acres/relative percent occupancy)	35 / 34%	68 / 66%	103
Proposed Exchange (acres/relative percent occupancy)	107 / 60%	71 / 40%	178
Difference (+/- acres)	+72	+3	+75

The timber management goal shall be to achieve maximum sustained production of high quality timber products, while retaining aesthetic, recreational, wildlife, watershed and fisheries qualities. The timbered area of the parcels is currently a well stocked Douglas-fir dominated stand and future management/harvest options shall be consistent with current State(Forest Practice Act and Rules) and County(zoning, General Plan and Codes) law. The Z'Berg-Nejedly Forest Practice Act establishes regulations for the growth, harvesting, management, and restocking of timberlands. Both parcels currently meet the timber stocking standards set forth in Section 4561 of the Public Resources Code and the Forest Practice Rules adopted by the state Board of Forestry for the district in which the parcels are located. The retention of aesthetic, recreational, wildlife, and watershed and fisheries qualities shall be met by following the California Forest Practice Rules. The long-term management objective for the timbered areas on either parcel is to have fully stocked stands and balance growth and harvest over time to obtain a sustainable periodic return.

PHYSICAL DESCRIPTION

Geology- The Larabee watershed is underlain by Franciscan Central Belt sandstone and mélange. The immediate slopes of Mill Creek and its named tributaries are best described as inner gorge. Across the balance of both parcels, no other unstable areas were observed. Areas within the parcels which meet the definition of "unstable area" per 14 CCR 895.1 shall limit the use of heavy equipment to existing skid trails and truck roads. Care shall be taken to avoid dumping excessive fill and spoils within these areas. Large scale removal of vegetation within and surrounding these features is discouraged and should be reviewed by a licensed geologist prior to operations within the areas.

Soils- Review of the Natural Resource Conservation Service (NRCS) Web Soil Survey, soil polygons on the parcels are very similar to County parcel zoning (TPZ and AE). The timbered areas (TPZ zoning) are Tannin-Wohly complex 9 to 30 percent slopes, map unit symbol 407. The parent material is colluvium derived from mudstone and/or sandstone. The soil has moderate permeability and is well drained. Its suitability for timber production is rated moderate. The grasslands (AE zoning) are Yorknorth-Witherell complex, 15 to 30 percent slopes, map unit symbol 655. The parent material is colluvium derived from sandstone and/or earthflow deposits derived from schist. The soil has low permeability and is moderately well drained. Its suitability for timber production is rated moderate. The estimated surface soil erosion hazard rating for these soils is high. Both parcels are suited for timber production and are considered site Class III timberland.

Topography- Both parcels have a predominately south aspect where observed, slopes across both parcels range from flat to 65%, with the average ranging from 30-45 percent. Existing skid trails provide good access to timber where short pitches exceed 50 percent. Both parcels independent of each other as a result of the lot line adjustment can be easily accessed and yarded with ground based equipment. Given the existing skid trail system, no new significant skid trail construction would be anticipated. Elevation of the parcels ranges from approximately 1200 feet (366m) to 1800 feet (549m).

VEGETATION AND STAND CONDITIONS

The timbered area of the parcels is a Douglas-fir forest type. The timbered portion is a closed canopy, open understory, Douglas-fir/tanoak dominated stand with an estimated 10% herbaceous layer. Minor components of planted knob cone pine and live oak occur outside the stream zones. The larger stream corridors are dominated by typical riparian hardwood species (i.e., red alder, big leaf maple, bay laurel). Canopy closure is relatively high across all Class I and II watercourses and is estimated to average 70-90%. Referencing *A Guide to Wildlife Habitats of California*, the habitat type is the Douglas-fir type and would type out as a 4D, generally characterized as small trees 11-24" DBH with 60-100% canopy closure.

Across both parcels, the average total stand basal area per acre ranges from 193ft^2 to 247ft^2. Douglas-fir is the dominant conifer species with basal area per acre ranging from 93ft^2 to 153ft^2. Tanoak and other hardwood species make up the balance of the remaining basal area. The average dominant/codominant Douglas-fir age is

41 years with an average height of 92 feet. Last 10 years radial growth ranged from 1.3" to 2.4" with an average of 1.8". Referencing Bulletin #201, the average site index ranges from 140 to 150 with a site class of III.

Stand History- Both parcels were a part of the timber harvest plan 1-01-156HUM. All that could be gleaned from the closed file is the harvest method was Alternative Prescription and Shelterwood Removal. The plan area was noted as "stocked" with a completion date of 10/24/2002. Almost 20 years later, the area has responded relatively well with a closed canopy condition across most of the area. Canopy closure has significantly limited the recruitment of any younger conifer stocking, competing hardwoods and understory brush species across most of the area.

Current Stand Description- The timbered areas across both parcels is relatively homogenous and the difference in basal area is likely the effect of harvest intensity from the last harvest. The below tables summarize the more detailed stand tables provided as attachments at the end of this report.

AP# 208-142-033 (year 2020)

Species	Mean DBH (inches)	Basal Area (ft^2/ac)	Trees/acre	Volume/acre*
Douglas-fir	14.8	93	95	14,013
Tan Oak	16.3	40	31	1,159
Other Hardwoods	15.8	60	39	
TOTAL	15.7	193	165	

*Volume/acre: Douglas-fir-gross board feet (Scribner), tanoak-gross cubic feet.

AP# 208-142-035 (year 2020)

Species	Mean DBH (inches)	Basal Area (ft^2/ac)	Trees/acre	Volume/acre*
Douglas-fir	17.3	153	96	24,846
Tan Oak	14.0	67	73	1,350
Other Hardwoods	13.4	27	24	
TOTAL	15.8	247	194	

*Volume/acre: Douglas-fir-gross board feet (Scribner), tanoak-gross cubic feet.

Future Growth- The overall growth of conifer for the parcels is estimated at approximately 3.1 percent per year. Humboldt County Code 324-5.5(c) states:

The timber management plan must be updated at five- (5) year intervals.

The tables below summarize growth estimates out to 10 years with no harvest. The more detailed stand growth tables are provided as attachments at the end of this report.

AP# 208-142-033 (year 2030)

Species	Mean DBH (inches)	Basal Area (ft^2/ac)	Trees/acre	Volume/acre*
Douglas-fir	16.7	114	87	23,266
Tan Oak	16.9	30	22	893
Other Hardwoods	16.6	65	38	
TOTAL	17.0	209	147	

*Volume/acre: Douglas-fir-gross board feet (Scribner), tanoak-gross cubic feet.

AP# 208-142-035 (year 2030)

Species	Mean DBH (inches)	Basal Area (ft^2/ac)	Trees/acre	Volume/acre*
Douglas-fir	19.3	183	91	38,733
Tan Oak	14.6	51	52	1,075
Other Hardwoods	14.1	29	24	
TOTAL	17.5	263	167	

*Volume/acre: Douglas-fir-gross board feet (Scribner), tanoak-gross cubic feet.

Volume Determination- The Scribner board foot volumes were calculated using Wensel and Krumland's board foot volume equation coefficients from the publication *Volume and Taper Relationships for Redwood, Douglas-fir, and Other Conifers in California's North Coast* (University of California, Bulletin 1907). Taper determined from Wensel, L. C. & Krumland, B. E. 1983. Tree Taper Models for Major Commercial California Conifers. Krumland, B. E. & Wensel, L. C. 1978. Volume & Taper Relationships for Redwood, Douglas Fir and Other Conifers in the North Coast of California.

Cruise Methodology- Non-timbered areas, young plantations and Class I and II WLPZs were not sampled for reasons of bias or overriding prescriptive management of the Forest Practice Rules (i.e., Watercourse and Lake Protection measures 14 CCR 916). The timbered areas were sample cruised with a 40BAF. The nearest dominant/codominate conifer from plot center was bored for age and last 10 years growth. A 1/100 acre plot for regeneration was also established.

SILVICULTURE

The timing and harvest are dependent on current log markets and availability of merchantable size timber. The forest landowners should seek professional guidance concerning forest management decisions to take advantage of the best information on current practices and markets. Given the current stocking levels, a pallet of several viable options are available. This document shall not limit those options which are appropriate for on-the-ground conditions and allowed by the Forest Practice Rules.

The stands would benefit from a near-future harvest or adjustment focusing on sanitation/salvage, thinning from below and lastly spacing of residuals. For these small parcels, unevenaged management (selection/group selection) is recommended as the best option. The goal of unevenaged management is the establishment of a well stocked stand of various age classes and permits the periodic harvest of individual or small groups of trees to realize the yield and continually establish a new crop. During the decision making process of selecting a silvicultural method(s), proposed harvest areas should be thoroughly evaluated as to whether limitations and minimum requirements can be met.

Harvest Methods- The past yarding method was ground-based. The division of the lot line adjustment continues to facilitate tractor yarding because the existing truck road bisects the southern portion of AP# 208-142-035 and the northern portion of AP# 208-142-033. With this, either parcel can be yarded independently of each other.

CONSERVATION and PROTECTION MEASURES

Roads- Access to appurtenant roads are gained from the paved county road, Alderpoint Road. Roads and landings within the parcels were established for prior timber harvest operations and ranching. These roads are well constructed and require relatively little blade work to be usable for log trucks. The watercourse crossings are in place and functional. Tractor crossings will be evaluated on an "as-needed" basis at the time of harvest and will meet the requirements set forth in the California Forest Practice Rules. The roads should be maintained and the drainage structures & facilities checked during peak flows when most road failures occur.

Soil Conservation- Soil is the basic resource that allows a forest to grow, and measures should be taken now and in the future to protect this resource. Soil erosion potential is increased with concentration of runoff on bare mineral soil. Dispersion of water from roads is the key to limiting erosion after logging. Erosion control structures and facilities should be checked during storm flows to ensure that they are of adequate size to carry flow and are free of debris. Predetermined skid roads can greatly reduce erosion potential by decreasing the amount of land that is roaded; these trails should be of moderate grade and be well water barred at conclusion of operations.

Fire Risk- The risk of wild land fire is greatly increased during the late summer months and during active timber operations. All harvest operations should be conducted within all State fire rules and regulations. Timber operators will be instructed to take extra fire precautions especially in the proximity of any structures. Accumulations of slash from logging and brush raking operations should be piled and burned when safe. Those portions of the Forest Practice Rules which addresses hazard reduction, treatment of slash and fire prevention shall be observed.

Pest and Disease- Sudden Oak Death was first reported in 1995 in Mill Valley (Marin County) on tanoak. Since that time, the pathogen has been confirmed on various native hosts in fifteen coastal California counties. The California State Board of Forestry and Fire Protection has approved the establishment of a Zone of Infestation (ZOI) for Sudden Oak Death (SOD) covering all portions of those infested counties. The parcels lie within Humboldt County a listed county within the ZOI. At this time, SOD has not yet been found near the parcels. Timber operations will comply with California Forest Practice Rules regarding SOD. Pursuant to 14 CCR 917.9(a)

[All Districts], the RPF shall identify feasible measures to mitigate adverse infestation or infection impacts from timber operations (PCR 4527).

Fish and Wildlife- There appears to be a normal, healthy population of wildlife within the parcels. By creating a healthier, vigorous stand with the management objective to balance growth and harvest over time the owner will enhance the wildlife habitat by providing biodiversity throughout the stands. The areas containing maturing saw timber would provide cover and any recently harvested areas will supply browse and foraging habitat. The parcels will be surveyed and consultations conducted regarding listed endangered or threatened species if necessary for compliance with State and Federal laws prior to timber operation. These species may include the Northern Spotted Owl or other endangered or threatened species, Board sensitive species and species of special concern.

Watershed and On-Site Watercourses- The parcels lie within the Mill Creek CalWatershed (1111.130202) which is listed as impaired. Coursing through both parcels, Mill Creek is a fish bearing stream. Both parcels have domestic water supply intakes from another landowner. Watercourse and lake protection zone measures required by the Forest Practices Rules will be applied to protect the beneficial uses of water.

MANAGEMENT PLAN UPDATES

Humboldt County Code 324-5.5(c) states:

> The timber management plan must be updated at five- (5) year intervals.

It is highly advised that the Joint Timber Management Guide be updated on a periodical basis, to revise growth predictions and specific changes to the timberland. Updates should include recommendations to improve the current stand conditions such as commercial thinning or salvage operations, and treatments for pre-commercial stands such as pre-commercial thinning and brush control. The forest landowners are advised to retain professional guidance concerning forest management decisions to take advantage of the best information on current practices and markets. Meeting the objectives of the landowners is a necessary function of these updates and their participation is encouraged.

MANAGEMENT COST

Cost that will be incurred for management activities could include but are not necessarily limited to the following: road maintenance, surveying, forest protection, tree planting, timber stand improvement, harvest plan preparation and related harvesting cost. These costs will not necessarily coincide with revenues received from harvests. Landowners should be prepared for these costs that are necessary to maintain a productive, healthy forest ecosystem.

LEGAL REQUIRMENTS

The landowner should be aware that harvest activities will require a State approved Timber Harvest Plan (THP) or equivalent document and that all timber operations are subject to regulations included in the Forest Practice Act and the current California Forest Practice Rules.

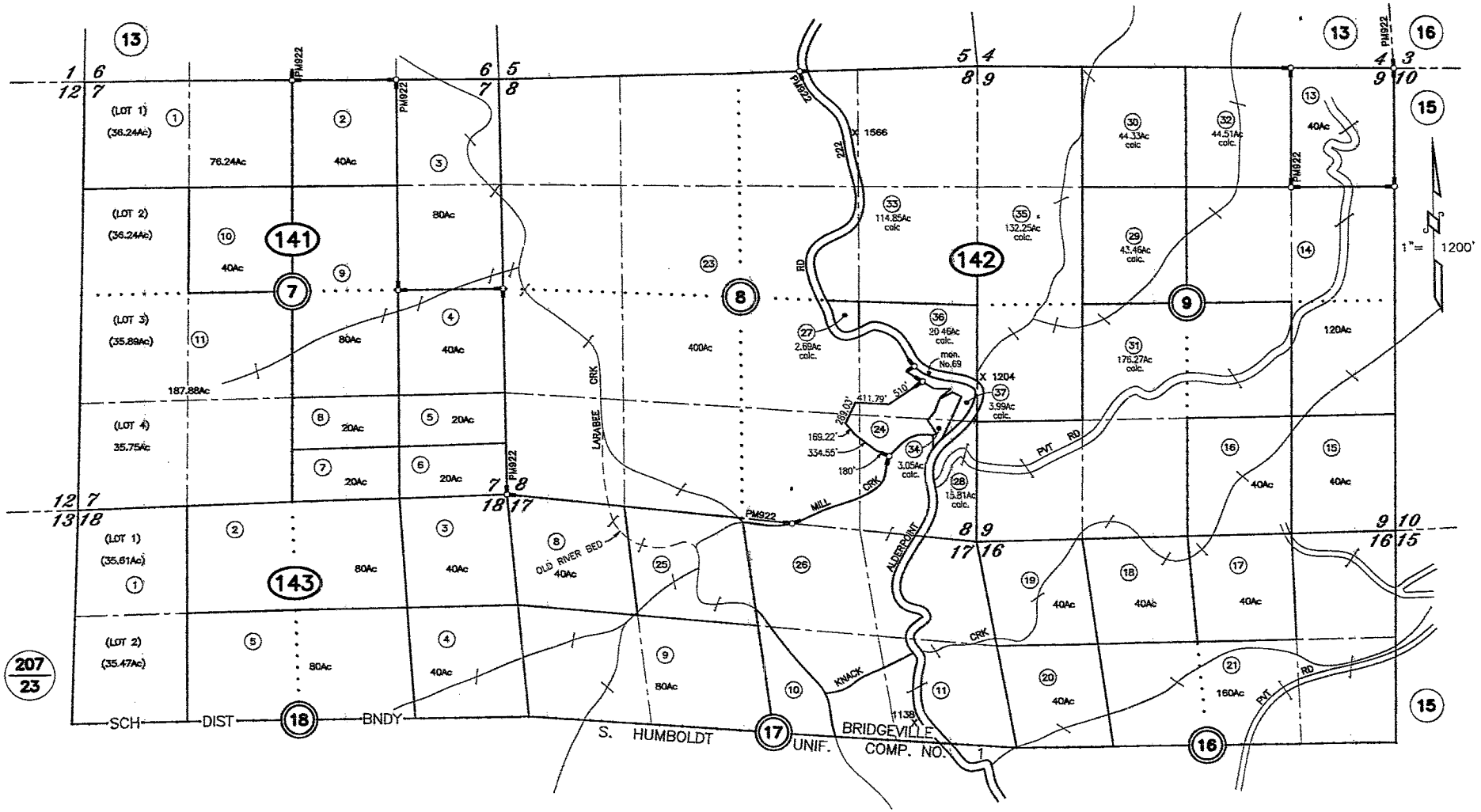
CONCLUSION

Referencing Humboldt County General Plan 4.6.3 Goals and Policies;

> lot line adjustments of TPZ parcels may be approved in order to consolidate logical timberland management units or facilitate clustered residential development. Such adjustments shall be in keeping with the spirit and intent of TPZ and shall not result in a net reduction of the area of TPZ available for forest management unless a finding is made by the Board of Supervisors that it is in the public interest.

The JTMP demonstrates that the TPZ portions within the lot line adjustment for parcels 208-142-035 and 208-142-033 can be managed as separate long-term management units with the objective to balance growth and harvest over time to obtain a sustainable periodic return. The lot line adjustment does not result in a reduction of land zoned TPZ, merely shifts acreage allocation between the landowners.

SECS 7,8 & 9 & N1/2 OF SECS 16,17 & 18 T1S R4E H.B.& M. 208–14



PM922 of PM Bk 8, Pg 44
RS, Bk 63 of surveys, Pgs 9–12
RS, Bk 64 of surveys, Pgs 138–139

ASSESSOR'S PARCEL MAP

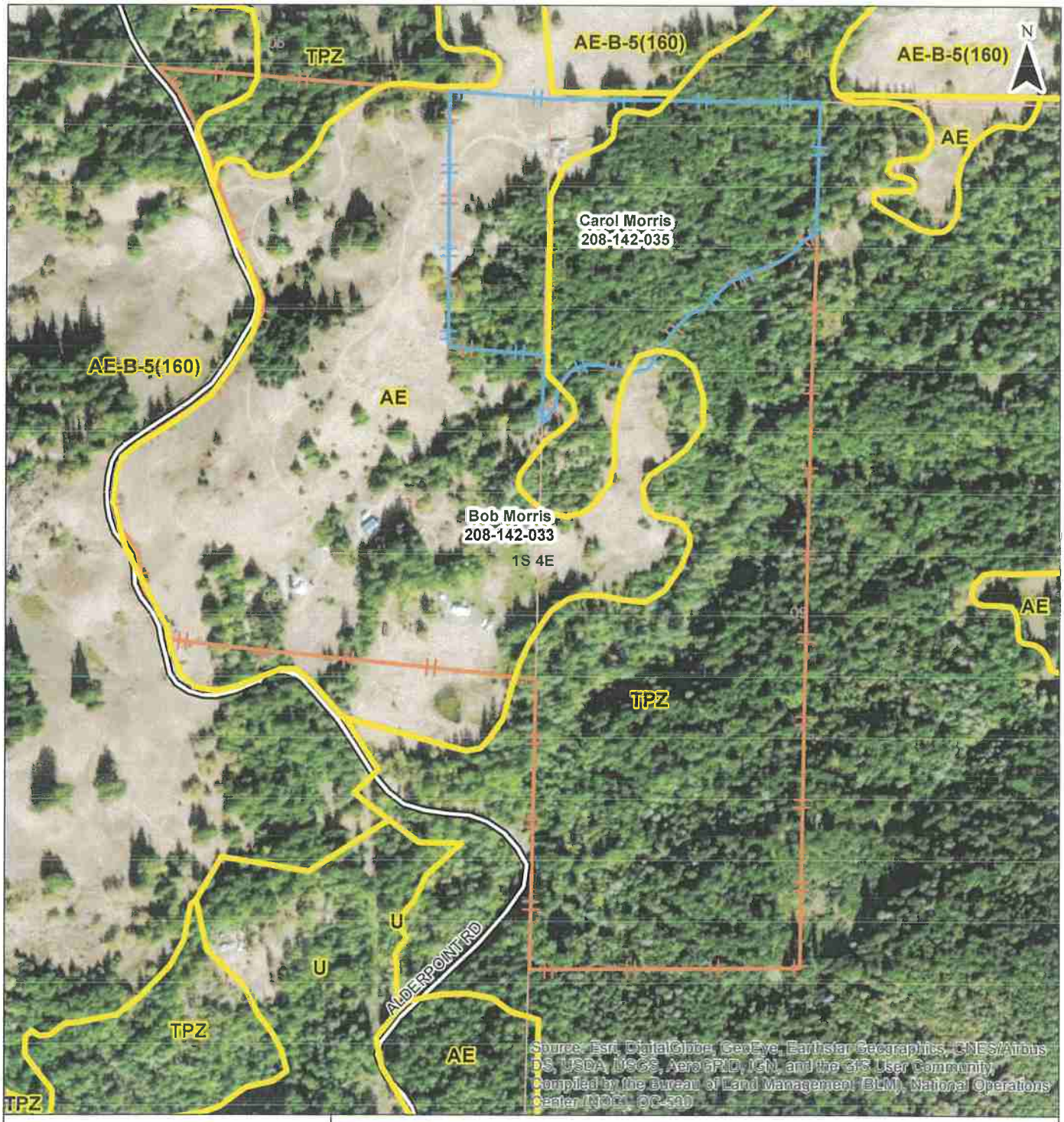
1 THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY
2 NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN
3. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES

NOTE – Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 208, Pg.14
County of Humboldt, CA.

300' 600' 1200'

4 Jan 22, 2009



Morris JTMP
Zoning Map

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

Zoning
County Road
Carrol Morris Boundary
Bob Morris Boundary

0 305 610 1,220 Feet

Contour Interval: 40'
1 inch = 667 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020

PARCELQUEST
LIST 1
DETAIL

☑ 1 Property Address: BLOCKSBURG CA 95514

Ownership

County:	**HUMBOLDT, CA**
Assessor:	**MARI WILSON, ASSESSOR**
Parcel # (APN):	**208-142-033-000**
Parcel Status:	**ACTIVE**
Owner Name:	**M5 LAND AND CATTLE LLC**
Mailing Address:	**39960 ALDERPOINT RD BLOCKSBURG CA 95514**
Legal Description:	

Assessment

Total Value:	**$595,843**	Use Code:	**7005**	Use Type:	**TIMBER PRESERVE**
Land Value:	**$316,334**	Tax Rate Area:	**060-000**	Zoning:	**AE;TPZ**
Impr Value:	**$279,509**	Year Assd:	**2019**	Census Tract:	**109.02/1**
Other Value:		Property Tax:	**$6,182.40**	Price/SqFt:	
% Improved:	**46%**	Delinquent Yr:			
Exempt Amt:		HO Exempt:	**N**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:	**08/15/2005**			**08/15/2005**
Document Number:	**2005R27384**			**2005R27384**
Document Type:	**GRANT DEED**			
Transfer Amount:	**$141,000**			
Seller (Grantor):	**MORRIS ROBERT E & CAROL**			

Property Characteristics

Bedrooms:		Fireplace:	Units:
Baths (Full):		A/C:	Stories:
Baths (Half):		Heating:	Quality:
Total Rooms:		Pool:	Building Class:
Bldg/Liv Area:		Park Type:	Condition:
Lot Acres:	**81.000**	Spaces:	Site Influence:
Lot SqFt:	**3,528,360**	Garage SqFt:	Timber Preserve:
Year Built:			Ag Preserve:
Effective Year:			

PARCELQUEST
LIST 1
DETAIL

☑ 1 Property Address: BLOCKSBURG CA 95514

Ownership

County:	**HUMBOLDT, CA**
Assessor:	**MARI WILSON, ASSESSOR**
Parcel # (APN):	**208-142-035-000**
Parcel Status:	**ACTIVE**
Owner Name:	**MORRIS CAROL L**
Mailing Address:	**PO BOX 1212 WEAVERVILLE CA 96093**
Legal Description:	**W 1/2 OF NW 1/4 & NW 1/4 OF SW 1/4 SEC 9 T1SR4E**

Assessment

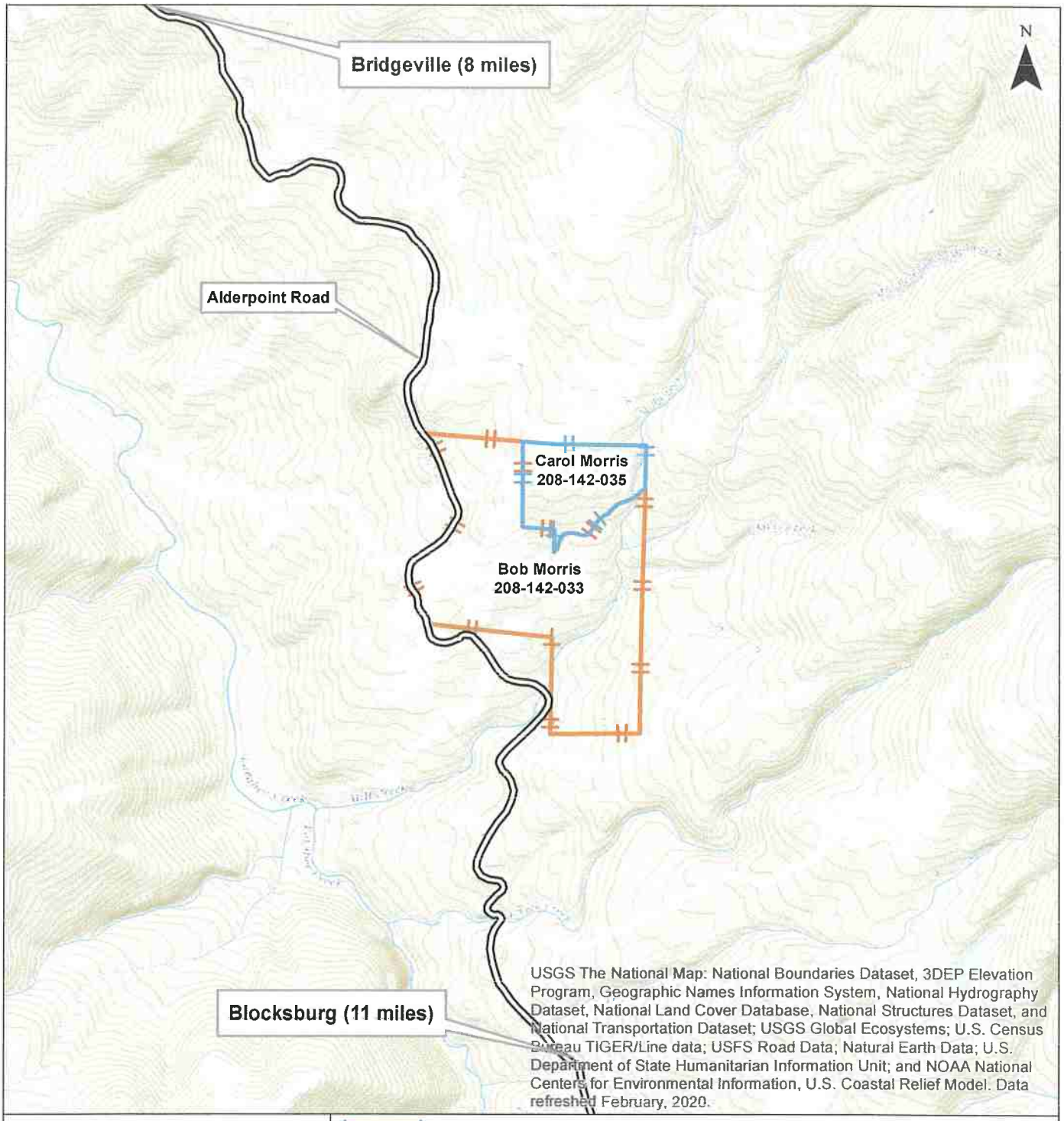
Total Value:	**$770,684**	Use Code:	**7005**	Use Type:	**TIMBER PRESERVE**
Land Value:	**$80,085**	Tax Rate Area:	**060-000**	Zoning:	**AE;TPZ**
Impr Value:	**$690,599**	Year Assd:	**2019**	Census Tract:	**109.02/1**
Other Value:		Property Tax:	**$7,902.76**	Price/SqFt:	
% Improved:	**89%**	Delinquent Yr:			
Exempt Amt:	**$7,000**	HO Exempt:	**Y**		

Sale History

	Sale 1	Sale 2	Sale 3	Transfer
Document Date:				**01/14/2014**
Document Number:				**2014R00898**
Document Type:				
Transfer Amount:				
Seller (Grantor):				

Property Characteristics

Bedrooms:	**3**	Fireplace:	**2**	Units:	
Baths (Full):	**2**	A/C:		Stories:	**1.0**
Baths (Half):	**2**	Heating:		Quality:	**8.0**
Total Rooms:	**8**	Pool:		Building Class:	**D**
Bldg/Liv Area:	**3,286**	Park Type:	**DETACHED GARAGE**	Condition:	
Lot Acres:	**121.000**	Spaces:		Site Influence:	
Lot SqFt:	**5,270,760**	Garage SqFt:	**864**	Timber Preserve:	
Year Built:	**2006**			Ag Preserve:	
Effective Year:	**2006**				



Morris JTMP
General Location Map

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

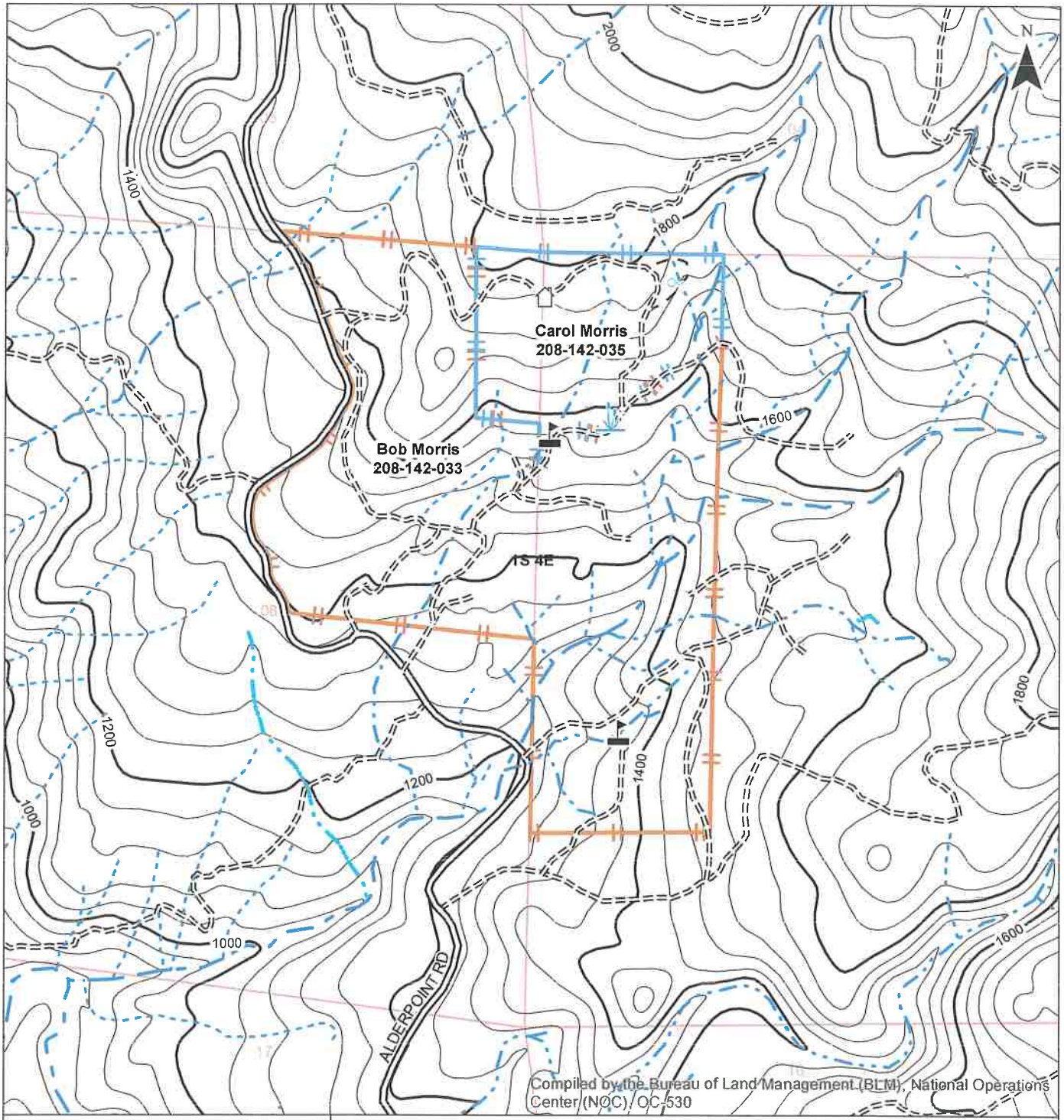
Carrol Morris Boundary

Bob Morris Boundary

0 900 1,800 3,600 Feet

Contour Interval: 40'
1 inch = 2,000 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020



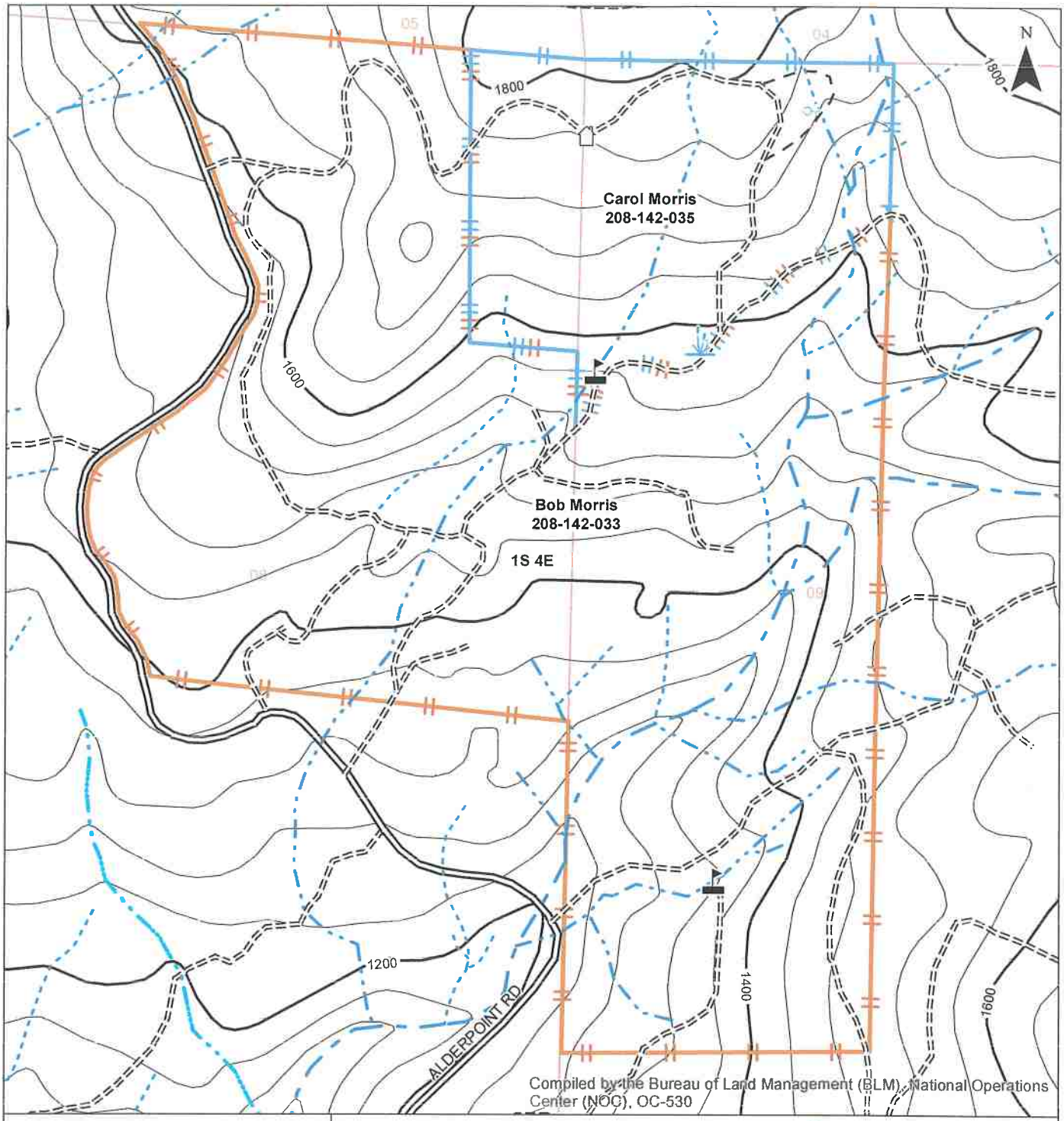
Morris JTMP
Features Map

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

DWS
Wet Area
Spring
House
Class I Stream
Class II Stream
Class III Stream
Unclassified Class I or II
Unclassified Class II or III
Access Road
Tractor Roads
County Road
Extra Roads
Carrol Morris Boundary
Bob Morris Boundary

0 460 920 1,840 Feet
Contour Interval: 40'
1 inch = 1,000 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020



Morris JTMP
Detail Map
APN# 208-142-033

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

DWS
Wet Area
Spring
House
Class I Stream
Class II Stream
Class III Stream
Unclassified Class II or III
Access Road
Tractor Roads
County Road
Extra Roads
Carrol Morris Boundary
Bob Morris Boundary

0 270 540 1,080 Feet
Contour Interval: 40'
1 inch = 583 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020

Morris JTMP
Detail Map
APN# 208-142-033

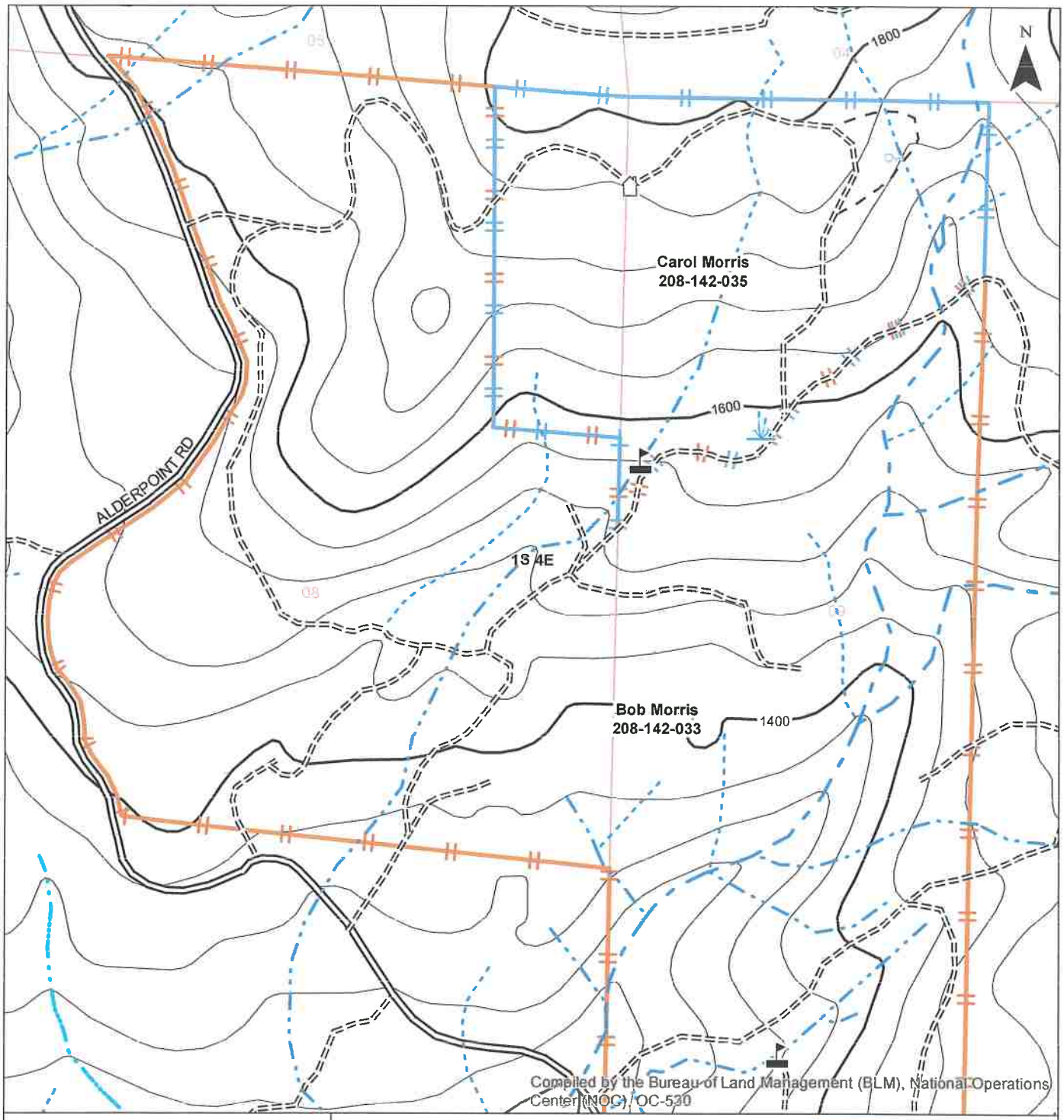
Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

- DWS
- Wet Area
- Spring
- House
- Class I Stream
- Class II Stream
- Class III Stream
- Unclassified Class II or III
- Access Road
- Tractor Roads
- County Road
- Extra Roads
- Carrol Morris Boundary
- Bob Morris Boundary

0 270 540 1,080 Feet 1 inch = 583 feet

Contour Interval: 40'

Hohman And Associates Forestry Consultants
Date: 5/15/2020



Morris JTMP
Detail Map
APN# 208-142-035

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

- DWS
- Wet Area
- Spring
- House
- Class I Stream
- Class II Stream
- Class III Stream
- Unclassified Class II or III
- Access Road
- Tractor Roads
- County Road
- Extra Roads
- Carrol Morris Boundary
- Bob Morris Boundary

0 230 460 920 Feet

Contour Interval: 40'
1 inch = 500 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020

Morris JTMP
Detail Map
APN# 208-142-035

Section 8 & 9; T1S; R4E; HB&M; Humboldt County
Located on the Larabee Valley 7.5' USGS Quadrangle

- DWS
- Wet Area
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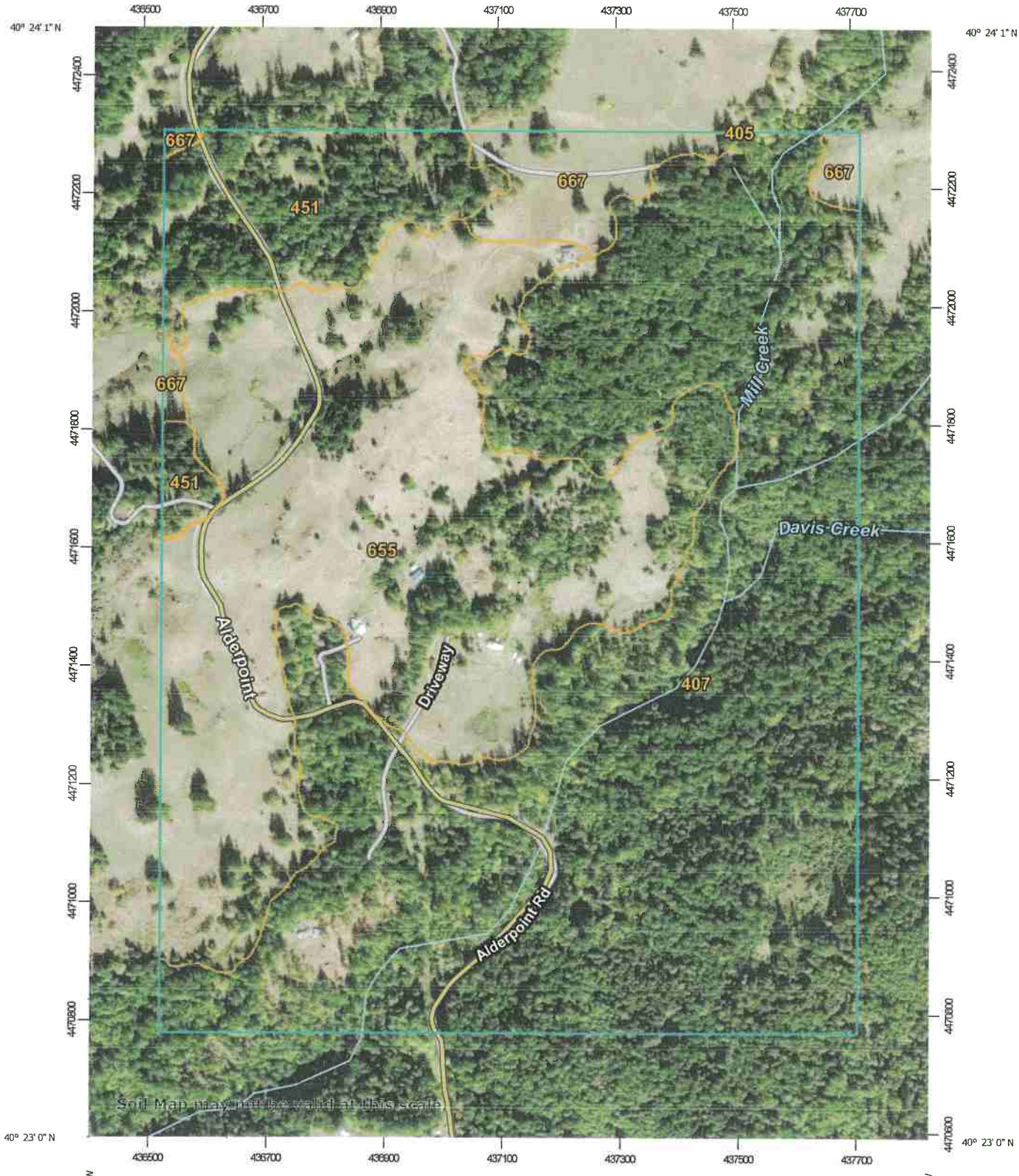
- Carrol Morris Boundary
- Bob Morris Boundary

0 230 460 920 Feet
Contour Interval: 40'
1 inch = 500 feet

Hohman And Associates Forestry Consultants
Date: 5/15/2020

Soil Map—Humboldt County, South Part, California
(Morris JTMP)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Humboldt County, South Part, California
Survey Area Data: Version 8, Sep 17, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 30, 2014—Nov 6, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
405	Tannin-Wohly-Rockyglen complex, 30 to 50 percent slopes	0.0	0.0%
407	Tannin-Wohly complex, 9 to 30 percent slopes	238.8	53.3%
451	Burgsblock-Coolyork-Tannin complex, 15 to 30 percent slopes	35.2	7.9%
655	Yorknorth-Witherell complex, 15 to 30 percent slopes	156.1	34.9%
667	Dryfield-Yorknorth-Witherell complex, 5 to 30 percent slopes	17.7	4.0%
Totals for Area of Interest		**447.8**	**100.0%**

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand	**33**			Design	**40 BAF**		Source	**Cruise**		Current	**Cruised**	
Unit	**Morris JTMP**			Plots	**Varies by Species**		Cruise	**2020**		Inv Yr	**2019**	
Area	**106.40**	Maj Sp	**DF**	SI	**123**		Calib	**SWO ORGANON**		Crs Yr	**2020**	Tot Age **48**
QMDS	**14.7**	QMD	**16.1 ±**				Strata					BH Age **41**
Notes	**Species sampled different intensities.**											

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	**15.7**			**73.2**	**1,568m**	**1,491m**	**1,404m**	**468,571**	**431,868**	**394,829**	**9,239.2**	
Per Acre		**163.9**	**193.3**		**14,736**	**14,013**	**13,191**	**4,404**	**4,059**	**3,711**	**86.8**	
SE	**11%**	**29%**	**11%**		**37%**	**38%**	**39%**	**38%**	**40%**	**40%**	**37%**	
95% CI												
CV	**0.11**	**0.29**	**0.11**		**0.37**	**0.38**	**0.39**	**0.38**	**0.40**	**0.40**	**0.4**	

Douglas Fir Site Index **123.00** QMD **15.2 ±** Plots **6** Trees **14**

8	8.0	38.2	13.3	52.5	1,055	709	687	264	161	156	6.4
10	10.0	12.2	6.7	103.0	1,163	1,091	1,059	270	243	236	3.6
12	12.0	8.5	6.7	107.0	1,136	1,054	1,022	276	249	242	3.9
14	14.0	6.2	6.7	65.0	612	538	431	152	128	102	4.1
16	16.0	4.8	6.7	83.0	843	787	629	196	177	142	4.4
18	18.0	11.3	20.0	98.8	2,784	2,739	2,651	628	608	588	13.9
20	20.0	9.2	20.0	109.8	4,040	4,011	3,721	794	776	717	14.5
22	22.0	2.5	6.7	127.0	1,475	1,467	1,423	290	286	277	5.0
28	28.0	1.6	6.7	128.0	1,629	1,617	1,568	276	271	263	5.6
Total	**14.8**			**91.7**	**1,567,952**	**1,490,992**	**1,403,557**	**334,556**	**308,540**	**289,820**	**6,534.3**
Per Acre		**94.5**	**93.3**		**14,736**	**14,013**	**13,191**	**3,144**	**2,900**	**2,724**	**61.4**
SE	**16%**	**46%**	**33%**		**37%**	**38%**	**39%**	**35%**	**37%**	**38%**	**32%**
95% CI											

Other Hardwood Site Index **100.00** QMD **16 ±** Plots **6** Trees **9**

12	12.0	8.5	6.7	47.7
14	14.0	12.5	13.3	55.0
18	18.0	7.5	13.3	50.0
20	20.0	3.1	6.7	50.0
22	22.0	5.1	13.3	60.0
24	24.0	2.1	6.7	60.0
Total	**15.8**			**52.6**
Per Acre		**38.7**	**60.0**	
SE	**12%**	**48%**	**54%**	
95% CI				

Sitka Spruce Site Index **100.00** QMD **±** Plots **6** Trees **0**

Total	
Per Acre	
SE	
95% CI	

Tanoak Site Index **100.00** QMD **16.5 ±** Plots **6** Trees **6**

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 33					Design 40 BAF			Source Cruise			Current Cruised		
Unit Morris JTMP					Plots Varies by Species			Cruise 2020			Inv Yr 2019		
Area 106.40	Maj Sp DF		SI 123		Calib SWO ORGANON			Crs Yr 2020			Tot Age 48		
QMDS 14.7	QMD 16.1 ±				Strata						BH Age 41		
Notes Species sampled different intensities.													
DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons	
Total	15.7			73.2	1,568m	1,491m	1,404m	468,571	431,868	394,829	9,239.2		
Per Acre		163.9	193.3		14,736	14,013	13,191	4,404	4,059	3,711	86.8		
SE	11%	29%	11%		37%	38%	39%	38%	40%	40%	37%		
95% CI													
CV	0.11	0.29	0.11		0.37	0.38	0.39	0.38	0.40	0.40	0.4		

Tanoak			Site Index	**100.00**	QMD **16.5 ±**		Plots **6**		Trees **6**
10	10.0	12.2	6.7	65.0	210	164	164	3.2	
12	12.0	8.5	6.7	45.0	151	134	134	3.4	
18	18.0	3.8	6.7	72.3	222	212	169	4.2	
22	22.0	2.5	6.7	81.0	242	232	185	4.6	
24	24.0	2.1	6.7	84.9	251	240	192	4.8	
28	28.0	1.6	6.7	60.0	184	177	142	5.2	
Total	**16.3**			**66.0**	**134,015**	**123,328**	**105,010**	**2,704.9**	
Per Acre		**30.7**	**40.0**		**1,260**	**1,159**	**987**	**25.4**	
SE	**34%**	**69%**	**68%**		**71%**	**74%**	**70%**	**73%**	
95% CI									

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand	**33**				Design	**40 BAF**	Source	**Cruise**	Current	**Cruised**
Unit	**Morris JTMP**				Plots	**Varies by Species**	Cruise	**2020**	Inv Yr	**2019**
Area	**106.40**	Maj Sp	**DF**	SI **123**	Calib	**SWO ORGANON**	Crs Yr	**2020**	Tot Age	**48**
QMDS	**14.7**	QMD	**16.1 ±**		Strata				BH Age	**41**
Notes	**Species sampled different intensities.**									

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	**15.7**			**73.2**	**1,568m**	**1,491m**	**1,404m**	**468,571**	**431,868**	**394,829**	**9,239.2**	
Per Acre		**163.9**	**193.3**		**14,736**	**14,013**	**13,191**	**4,404**	**4,059**	**3,711**	**86.8**	
SE	**11%**	**29%**	**11%**		**37%**	**38%**	**39%**	**38%**	**40%**	**40%**	**37%**	
95% CI												
CV	**0.11**	**0.29**	**0.11**		**0.37**	**0.38**	**0.39**	**0.38**	**0.40**	**0.40**	**0.4**	
All Species												
8	8.0	38.2	13.3	52.5	1,055	709	687	264	161	156	0.0	
10	10.0	24.4	13.3	84.0	1,163	1,091	1,059	479	407	400	0.0	
12	12.0	25.5	20.0	66.6	1,136	1,054	1,022	428	384	376	0.0	
14	14.0	18.7	20.0	60.0	612	538	431	152	128	102	0.0	
16	16.0	4.8	6.7	83.0	843	787	629	196	177	142	0.0	
18	18.0	22.6	40.0	73.7	2,784	2,739	2,651	850	820	758	0.0	
20	20.0	12.2	26.7	79.9	4,040	4,011	3,721	794	776	717	0.0	
22	22.0	10.1	26.7	89.3	1,475	1,467	1,423	532	517	462	0.0	
24	24.0	4.2	13.3	72.5				251	240	192	0.0	
28	28.0	3.1	13.3	94.0	1,629	1,617	1,568	460	448	405	0.0	
Total	**15.7**			**73.2**	**1,567,952**	**1,490,992**	**1,403,557**	**468,571**	**431,868**	**394,829**	**9,239.2**	
Per Acre		**163.9**	**193.3**		**14,736**	**14,013**	**13,191**	**4,404**	**4,059**	**3,711**	**86.8**	
SE		**29%**	**11%**		**37%**	**38%**	**39%**	**38%**	**40%**	**40%**	**37%**	
CI												

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 33					Design 40 BAF			Source Cruise			Current Grown	
Unit Morris JTMP					Plots 6			Cruise 2020			Inv Yr 2030	
Area 106.40	Maj Sp DF	SI 123			Calib SWO ORGANON			Crs Yr 2020			Tot Age 59	
QMDS 16.1	QMD 17.4 ±5.2				Strata						BH Age 52	
Notes												

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	17.0			83.1	2,516m	2,475m	2,325m	593,226	567,248	537,580	10,481.8	
Per Acre		146.7	208.6		23,645	23,266	21,847	5,575	5,331	5,052	98.5	
SE	10%	26%	8%		36%	36%	37%	35%	36%	37%	34%	
95% CI	6.6	126.6	57.6		28,489	28,211	27,368	6,633	6,424	6,307	113.4	
CV	0.23	0.63	0.20		0.88	0.88	0.91	0.87	0.88	0.91	0.8	

Douglas Fir Site Index **123.00** QMD **17.2 ±7.9** Plots **6** Trees **521**

8	9.2	32.6	15.0	64.1	1,590	1,445	1,402	373	306	297	7.7
10	11.3	11.1	7.7	123.5	1,574	1,497	1,452	371	345	335	4.3
12	13.5	8.0	8.0	127.5	1,773	1,756	1,703	400	386	375	4.9
14	15.8	6.1	8.2	80.3	1,032	974	779	235	215	172	5.4
16	17.8	4.7	8.1	101.7	1,383	1,383	1,106	297	292	233	5.6
20	20.2	11.2	25.0	117.2	4,714	4,674	4,523	950	930	900	18.3
22	22.5	9.1	25.2	129.8	6,599	6,589	6,083	1,180	1,168	1,076	19.3
24	24.8	2.5	8.4	145.9	2,523	2,507	2,432	423	417	405	6.7
30	30.8	1.6	8.0	146.7	2,457	2,440	2,367	385	379	368	7.1
Total	**16.7**			**109.3**	**2,515,855**	**2,475,486**	**2,324,537**	**490,878**	**472,236**	**442,569**	**8,427.2**
Per Acre		**86.9**	**113.7**		**23,645**	**23,266**	**21,847**	**4,614**	**4,438**	**4,159**	**79.2**
SE	**15%**	**44%**	**32%**		**36%**	**36%**	**37%**	**35%**	**35%**	**36%**	**32%**
95% CI	**8.6**	**128.2**	**123.7**		**28,489**	**28,211**	**27,368**	**5,378**	**5,228**	**5,055**	**85.3**

Other Hardwood Site Index **100.00** QMD **16.8 ±7** Plots **6** Trees **230**

12	12.8	8.3	7.5	49.0
14	14.8	12.3	14.7	56.2
18	18.8	7.5	14.4	50.7
20	20.7	3.0	7.1	50.6
22	22.7	5.0	14.1	60.6
24	24.7	2.1	7.0	60.5
Total	**16.6**			**53.6**
Per Acre		**38.3**	**64.8**	
SE	**12%**	**48%**	**53%**	
95% CI	**6.6**	**61.6**	**116.6**	

Tanoak Site Index **100.00** QMD **17.1 ±18.7** Plots **6** Trees **129**

10	10.7	8.6	5.3	68.0	173	144	144	2.6
12	12.7	5.9	5.2	46.7	121	110	110	2.8
18	18.6	2.6	5.0	73.8	168	160	160	3.2
22	22.5	1.8	4.9	82.2	180	173	173	3.4
24	24.5	1.5	4.9	85.9	185	178	178	3.6
28	28.4	1.1	4.8	60.5	134	129	129	3.8
Total	**16.9**			**67.8**	**102,348**	**95,012**	**95,012**	**2,054.6**
Per Acre		**21.5**	**30.1**		**962**	**893**	**893**	**19.3**
SE	**32%**	**69%**	**67%**		**70%**	**72%**	**72%**	**72%**
95% CI	**18.3**	**49.8**	**68.3**		**2,266**	**2,150**	**2,150**	**46.8**

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 33					Design 40 BAF			Source Cruise			Current Grown	
Unit Morris JTMP					Plots 6			Cruise 2020			Inv Yr 2030	
Area 106.40 Maj Sp DF SI 123					Calib SWO ORGANON			Crs Yr 2020			Tot Age 59	
QMDS 16.1 QMD 17.4 ±5.2					Strata						BH Age 52	
Notes												
DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	17.0			83.1	2,516m	2,475m	2,325m	593,226	567,248	537,580	10,481.8	
Per Acre		146.7	208.6		23,645	23,266	21,847	5,575	5,331	5,052	98.5	
SE	10%	26%	8%		36%	36%	37%	35%	36%	37%	34%	
95% CI	6.5	126.6	57.6		28,489	28,211	27,368	6,633	6,424	6,307	113.4	
CV	0.23	0.63	0.20		0.88	0.88	0.91	0.87	0.88	0.91	0.8	
All Species												
8	9.2	32.6	15.0	64.1	1,590	1,445	1,402	373	306	297	0.0	
10	11.0	19.7	13.0	95.8	1,574	1,497	1,452	544	489	479	0.0	
12	13.0	22.3	20.7	74.4	1,773	1,756	1,703	521	496	484	0.0	
14	15.3	18.4	22.9	68.2	1,032	974	779	235	215	172	0.0	
16	17.8	4.7	8.1	101.7	1,383	1,383	1,106	297	292	233	0.0	
18	18.7	10.1	19.3	62.2				168	160	160	0.0	
20	20.5	14.2	32.1	83.9	4,714	4,674	4,523	950	930	900	0.0	
22	22.6	15.9	44.2	90.9	6,599	6,589	6,083	1,360	1,341	1,249	0.0	
24	24.7	6.1	20.3	97.4	2,523	2,507	2,432	609	595	582	0.0	
28	28.4	1.1	4.8	60.5				134	129	129	0.0	
30	30.8	1.6	8.0	146.7	2,457	2,440	2,367	385	379	368	0.0	
Total	**17.0**			**83.1**	**2,515,855**	**2,475,486**	**2,324,537**	**593,226**	**567,248**	**537,580**	**10,481.8**	
Per Acre		**146.7**	**208.6**		**23,645**	**23,266**	**21,847**	**5,575**	**5,331**	**5,052**	**98.5**	
SE		**26%**	**8%**		**36%**	**36%**	**37%**	**35%**	**36%**	**37%**	**34%**	
CI		**126.6**	**57.6**		**28,489**	**28,211**	**27,368**	**6,633**	**6,424**	**6,307**	**113.4**	

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 35				Design	40 BAF		Source	Cruise		Current	Cruised
Unit	Morris JTMP			Plots	Varies by Species		Cruise	2020		Inv Yr	2019
Area	34.00	Maj Sp	DF	SI	123	Calib	SWO ORGANON		Crs Yr	2020	Tot Age	46
QMDS	15.3	QMD	16.3 ±			Strata					BH Age	35
Notes	Species sampled different intensities.											

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	15.8			77.1	862,886	844,772	807,523	227,280	214,191	205,320	5,069.0	
Per Acre		193.7	246.7		25,379	24,846	23,751	6,685	6,300	6,039	149.1	
SE	9%	22%	12%		34%	34%	34%	21%	22%	22%	19%	
95% CI												
CV	0.09	0.22	0.12		0.34	0.34	0.34	0.21	0.22	0.22	0.2	

Douglas Fir Site Index **123.00** QMD **17.7 ±** Plots **6** Trees **23**

10	10.0	24.4	13.3	59.0	1,116	1,047	943	295	257	231	7.1
12	12.0	17.0	13.3	72.5	1,422	1,294	1,256	359	314	305	7.7
16	16.0	19.1	26.7	109.3	5,041	4,928	4,781	1,070	1,028	998	17.5
18	18.0	11.3	20.0	102.5	3,123	3,022	2,931	683	648	629	13.9
22	22.0	12.6	33.3	102.3	5,719	5,654	5,398	1,125	1,098	1,048	25.2
24	24.0	8.5	26.7	107.7	5,047	4,997	4,847	955	935	907	21.0
26	26.0	1.8	6.7	105.0	1,185	1,179	1,144	224	222	215	5.4
32	32.0	1.2	6.7	120.0	1,482	1,480	1,332	249	248	223	6.0
64	64.0	0.3	6.7	110.0	1,244	1,244	1,120	199	199	179	8.1
Total	**17.3**			**90.7**	**862,886**	**844,772**	**807,523**	**175,441**	**168,297**	**161,007**	**3,806.1**
Per Acre		**96.3**	**153.3**		**25,379**	**24,846**	**23,751**	**5,160**	**4,950**	**4,735**	**111.9**
SE	**13%**	**29%**	**30%**		**34%**	**34%**	**34%**	**33%**	**33%**	**33%**	**32%**
95% CI											

Other Hardwood Site Index **100.00** QMD **13.7 ±** Plots **6** Trees **4**

12	12.0	17.0	13.3	79.4
16	16.0	4.8	6.7	50.0
22	23.0	2.3	6.7	50.0
Total	**13.4**			**75.6**
Per Acre		**24.1**	**26.7**	
SE	**11%**	**67%**	**74%**	
95% CI				

Sitka Spruce Site Index **100.00** QMD **±** Plots **6** Trees **0**

Total	
Per Acre	
SE	
95% CI	

Tanoak Site Index **100.00** QMD **14.3 ±** Plots **6** Trees **10**

8	8.0	19.1	6.7	45.0	155	82	82	2.8
10	10.0	12.2	6.7	37.0	129	101	101	3.2
14	14.0	24.9	26.7	45.3	603	561	561	14.9
16	16.0	9.5	13.3	49.1	321	304	273	7.9
18	18.0	7.5	13.3	48.8	317	302	286	8.4

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 35 | Design 40 BAF | Source Cruise | Current Cruised
Unit Morris JTMP | Plots Varies by Species | Cruise 2020 | Inv Yr 2019
Area 34.00 | Maj Sp DF | SI 123 | Calib SWO ORGANON | Grs Yr 2020 | Tot Age 46
QMDS 15.3 | QMD 16.3 ± | Strata | BH Age 35
Notes Species sampled different intensities.

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	15.8			77.1	862,886	844,772	807,523	227,280	214,191	205,320	5,069.0	
Per Acre		193.7	246.7		25,379	24,846	23,751	6,685	6,300	6,039	149.1	
SE	9%	22%	12%		34%	34%	34%	21%	22%	22%	19%	
95% CI												
CV	0.09	0.22	0.12		0.34	0.34	0.34	0.21	0.22	0.22	0.2	

Tanoak Site Index 100.00 QMD 14.3 ± Plots 6 Trees 10

Total	**14.0**			**46.8**	**51,839**	**45,894**	**44,314**	**1,262.9**
Per Acre		**73.4**	**66.7**		**1,525**	**1,350**	**1,303**	**37.1**
SE	**18%**	**80%**	**70%**		**69%**	**68%**	**69%**	**69%**
95% CI								

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand	**35**			Design	**40 BAF**		Source	**Cruise**		Current	**Cruised**	
Unit	**Morris JTMP**			Plots	**Varies by Species**		Cruise	**2020**		Inv Yr	**2019**	
Area	**34.00**	Maj Sp	**DF** SI **123**	Calib	**SWO ORGANON**		Crs Yr	**2020**		Tot Age	**46**	
QMDS	**15.3**	QMD	**16.3 ±**	Strata						BH Age	**35**	
Notes	**Species sampled different intensities**											

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	**15.8**			**77.1**	**862,886**	**844,772**	**807,523**	**227,280**	**214,191**	**205,320**	**5,069.0**	
Per Acre		**193.7**	**246.7**		**25,379**	**24,846**	**23,751**	**6,685**	**6,300**	**6,039**	**149.1**	
SE	**9%**	**22%**	**12%**		**34%**	**34%**	**34%**	**21%**	**22%**	**22%**	**19%**	
95% CI												
CV	**0.09**	**0.22**	**0.12**		**0.34**	**0.34**	**0.34**	**0.21**	**0.22**	**0.22**	**0.2**	
All Species												
8	8.0	19.1	6.7	45.0				155	82	82	0.0	
10	10.0	36.7	20.0	48.0	1,116	1,047	943	424	358	333	0.0	
12	12.0	34.0	26.7	76.0	1,422	1,294	1,256	359	314	305	0.0	
14	14.0	24.9	26.7	45.3				603	561	561	0.0	
16	16.0	33.4	46.7	69.5	5,041	4,928	4,781	1,391	1,332	1,271	0.0	
18	18.0	18.9	33.3	75.6	3,123	3,022	2,931	1,000	950	915	0.0	
22	22.5	14.9	40.0	76.1	5,719	5,654	5,398	1,125	1,098	1,048	0.0	
24	24.0	8.5	26.7	107.7	5,047	4,997	4,847	955	935	907	0.0	
26	26.0	1.8	6.7	105.0	1,185	1,179	1,144	224	222	215	0.0	
32	32.0	1.2	6.7	120.0	1,482	1,480	1,332	249	248	223	0.0	
64	64.0	0.3	6.7	110.0	1,244	1,244	1,120	199	199	179	0.0	
Total	**15.8**			**77.1**	**862,886**	**844,772**	**807,523**	**227,280**	**214,191**	**205,320**	**5,069.0**	
Per Acre		**193.7**	**246.7**		**25,379**	**24,846**	**23,751**	**6,685**	**6,300**	**6,039**	**149.1**	
SE		**22%**	**12%**		**34%**	**34%**	**34%**	**21%**	**22%**	**22%**	**19%**	
CI												

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand 35 | Design 40 BAF | Source Cruise | Current Grown
Unit Morris JTMP | Plots 6 | Cruise 2020 | Inv Yr 2030
Area 34.00 | Maj Sp DF | SI 123 | Calib SWO ORGANON | Grs Yr 2020 | Tot Age 57
QMDS 17.0 | QMD 18 ±5.7 | Strata | BH Age 46
Notes

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	17.5			89.7	1,337m	1,317m	1,261m	294,562	282,638	272,373	5,724.9	
Per Acre		166.1	262.7		39,337	38,733	37,089	8,664	8,313	8,011	168.4	
SE	10%	18%	13%		34%	34%	34%	25%	26%	26%	21%	
95% CI	5.8	100.6	116.3		44,777	44,507	42,837	7,146	7,183	6,919	121.5	
CV	0.24	0.44	0.32		0.83	0.84	0.84	0.60	0.63	0.63	0.5	

Douglas Fir Site Index 123.00 QMD 19.7 ±8.3 Plots 6 Trees 546

10	11.0	21.0	13.9	67.6	1,376	1,162	1,046	355	283	255	7.7
12	13.2	15.7	15.0	85.0	2,059	2,008	1,948	481	454	440	9.1
16	17.9	18.7	32.6	130.0	7,609	7,418	7,196	1,581	1,520	1,475	22.5
20	20.2	11.2	24.9	121.8	5,283	5,251	5,094	1,030	1,010	980	18.2
24	24.4	12.6	41.0	123.1	9,238	9,168	8,753	1,688	1,658	1,584	32.5
26	26.7	8.5	33.0	128.7	8,080	8,053	7,811	1,425	1,411	1,368	27.3
28	28.7	1.8	8.1	126.1	1,961	1,947	1,889	332	327	317	6.9
34	34.4	1.2	7.7	139.8	2,163	2,157	1,941	340	337	304	7.1
64	64.9	0.3	6.7	130.9	1,568	1,567	1,411	238	238	214	8.1
Total	**19.3**			**107.8**	**1,337,463**	**1,316,923**	**1,261,017**	**253,961**	**246,095**	**235,830**	**4,739.3**
Per Acre		**90.9**	**182.9**		**39,337**	**38,733**	**37,089**	**7,469**	**7,238**	**6,936**	**139.4**
SE	**13%**	**28%**	**30%**		**34%**	**34%**	**34%**	**33%**	**34%**	**34%**	**31%**
95% CI	**8.3**	**86.3**	**184.7**		**44,777**	**44,507**	**42,837**	**8,307**	**8,181**	**7,898**	**147.5**

Other Hardwood Site Index 100.00 QMD 14.3 ±5.6 Plots 6 Trees 142

12	12.7	16.6	14.6	81.2							
16	16.7	4.7	7.2	50.7							
22	23.6	2.3	7.0	50.4							
Total	**14.1**			**77.1**							
Per Acre		**23.7**	**28.7**								
SE	**10%**	**67%**	**74%**								
95% CI	**4.8**	**53.6**	**71.4**								

Tanoak Site Index 100.00 QMD 14.8 ±7.8 Plots 6 Trees 309

8	8.6	13.4	5.5	47.4				132	84	84	2.4
10	10.6	8.5	5.3	38.6				106	87	87	2.6
14	14.6	17.5	20.4	46.5				470	440	440	11.6
16	16.6	6.7	10.0	50.2				246	233	233	6.1
18	18.5	5.3	10.0	49.7				241	230	230	6.4
Total	**14.6**			**48.2**				**40,601**	**36,543**	**36,543**	**985.6**
Per Acre		**51.5**	**51.1**					**1,194**	**1,075**	**1,075**	**29.0**
SE	**17%**	**80%**	**71%**					**70%**	**68%**	**68%**	**69%**
95% CI	**8.4**	**138.8**	**121.8**					**2,795**	**2,476**	**2,476**	**67.5**

Hohman Forest Inventory
Stand Table

Monday, May 11, 2020

Stand	**35**			Design	**40 BAF**		Source	**Cruise**		Current	**Grown**	
Unit	**Morris JTMP**			Plots	**6**		Cruise	**2020**		Inv Yr	**2030**	
Area	**34.00**	Maj Sp	**DF** SI **123**	Calib	**SWO ORGANON**		Crs Yr	**2020**		Tot Age	**57**	
QMDS	**17.0**	QMD	**18 ±5.7**	Strata						BH Age	**46**	
Notes												

DBH Class	Avg DBH	TPA	BA	Tot Ht	Board Total	Board Gross	Board Net	Cubic Total	Cubic Gross	Cubic Net	Carbon Tons	User Tons
Total	**17.5**			**89.7**	**1,337m**	**1,317m**	**1,261m**	**294,562**	**282,638**	**272,373**	**5,724.9**	
Per Acre		**166.1**	**262.7**		**39,337**	**38,733**	**37,089**	**8,664**	**8,313**	**8,011**	**168.4**	
SE	**10%**	**18%**	**13%**		**34%**	**34%**	**34%**	**25%**	**26%**	**26%**	**21%**	
95% CI	**6.8**	**100.6**	**116.3**		**44,777**	**44,507**	**42,837**	**7,146**	**7,183**	**6,919**	**121.5**	
CV	**0.24**	**0.44**	**0.32**		**0.83**	**0.84**	**0.84**	**0.60**	**0.63**	**0.63**	**0.5**	
All Species												
8	8.6	13.4	5.5	47.4				132	84	84	0.0	
10	10.8	29.5	19.1	53.1	1,376	1,162	1,046	461	370	342	0.0	
12	13.0	32.3	29.6	83.1	2,059	2,008	1,948	481	454	440	0.0	
14	14.6	17.5	20.4	46.5				470	440	440	0.0	
16	17.0	30.2	49.8	77.0	7,609	7,418	7,196	1,827	1,753	1,708	0.0	
18	18.5	5.3	10.0	49.7				241	230	230	0.0	
20	20.2	11.2	24.9	121.8	5,283	5,251	5,094	1,030	1,010	980	0.0	
22	23.6	2.3	7.0	50.4							0.0	
24	24.4	12.6	41.0	123.1	9,238	9,168	8,753	1,688	1,658	1,584	0.0	
26	26.7	8.5	33.0	128.7	8,080	8,053	7,811	1,425	1,411	1,368	0.0	
28	28.7	1.8	8.1	126.1	1,961	1,947	1,889	332	327	317	0.0	
34	34.4	1.2	7.7	139.8	2,163	2,157	1,941	340	337	304	0.0	
64	64.9	0.3	6.7	130.9	1,568	1,567	1,411	238	238	214	0.0	
Total	**17.5**			**89.7**	**1,337,463**	**1,316,923**	**1,261,017**	**294,562**	**282,638**	**272,373**	**5,724.9**	
Per Acre		**166.1**	**262.7**		**39,337**	**38,733**	**37,089**	**8,664**	**8,313**	**8,011**	**168.4**	
SE		**18%**	**13%**		**34%**	**34%**	**34%**	**25%**	**26%**	**26%**	**21%**	
CI		**100.6**	**116.3**		**44,777**	**44,507**	**42,837**	**7,146**	**7,183**	**6,919**	**121.5**	

STATEMENT OF CONTINGENT AND LIMITING CONDITIONS CONCERNING THE PREPARATION AND USE OF THE MORRIS JOINT TIMBER MANAGEMENT PLAN

Prepared by Hohman & Associates

1. This information has been prepared for the sole use of the **Landowner of Record,** for the express purpose of submitting the document to the local county planning department.

2. Hohman and Associates does not assume any liability for use of this information by any party other than the owner or their agent.

3. The assessment presented in this report should be viewed and considered in light of the time spent observing the property and the methodologies used. The assessment may differ from those made by others or from the results of interpretation and assessment protocols.

4. Hohman and Associates did not conduct an investigation on a legal survey of the property.

5. The information is based upon conditions apparent to Hohman and Associates at the time the work was done. This report is time sensitive and provides current conditions as per the date of this document.

6. All future work on site shall be through **approved permits** with local state or county agencies.

7. Hohman and Associates shall not be responsible for the supervision of mitigation operations following approval of the conversion plan.

Registered Professional Forester: Stephen Hohman RPF #2652

Signature: Stephen Hohman Date: 5-20-2020