



October 3, 2019

Doug and Heather Hayden  
710 Colleen Drive  
San Jose, CA 95123

**RE: Land Cover Verification, Cinnabar Hills Road Property, San Jose, Santa Clara County, CA (APN 742-02-006)**

Dear Mr. and Mrs. Hayden:

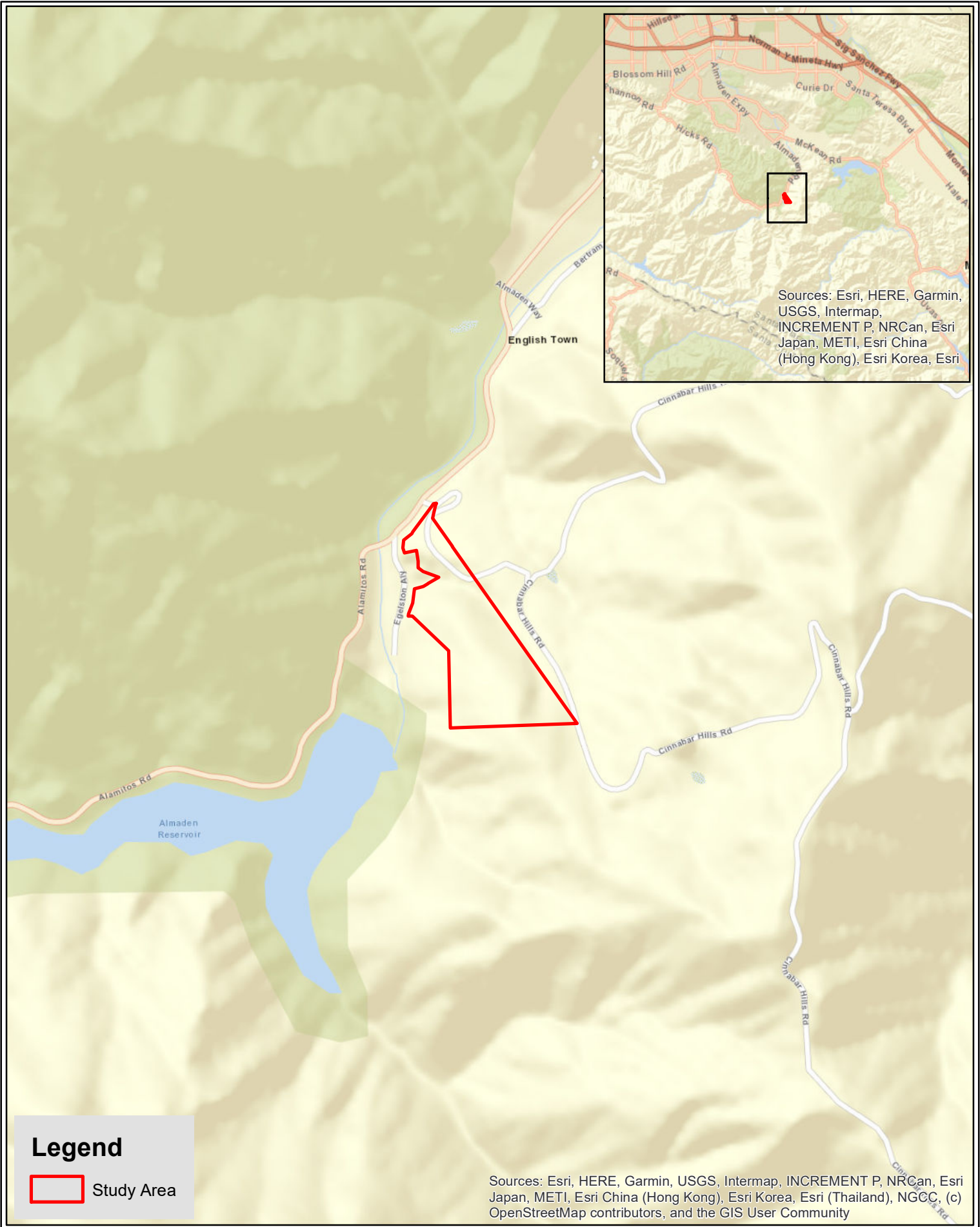
This letter report summarizes the results of a Land Cover Verification conducted for your ~24-acre property located on Cinnabar Hills Road, northeast of Almaden Reservoir, in unincorporated San Jose, Santa Clara County, California (APN 742-02-006) (Figure 1). The proposed project on the southern portion of the property consists of construction of a single-family residence and associated infrastructure, including a ~600-foot driveway, as shown on preliminary site plans prepared by D&Z Design Associates, Inc. Though only a small portion of the property is proposed for development, the “study area” for the Land Cover Verification includes the entire property.

The study area is located within the permit area for the Santa Clara Valley Habitat Plan (Habitat Plan) (ICF International 2012), and therefore Habitat Plan Land Cover Verification methods and nomenclature are used in this report. This report is restricted to the Land Cover Verification only. No other biological or regulatory issues are addressed.


## **1.0 METHODS**

Prior to the field visit, a background literature search was conducted to document habitat conditions on and adjacent to the study area. The primary sources for the background literature search included the Santa Clara Valley Habitat Agency Geobrowser (Geobrowser) (Santa Clara Valley Habitat Agency 2019), California Natural Diversity Database (CNDDB) (CDFW 2019), National Wetlands Inventory (NWI) (USFWS 2019), National Hydrography Dataset (NHD) (USGS 2019), Web Soil Survey (NRCS 2019), topographic maps (USGS 2016), geologic data (California Geological Survey 2010; Dibblee and Minch 2005), and aerial photographs.

The Land Cover Verification field visit was conducted on October 2, 2019. The study area was traversed on foot and land cover types observed in the field were compared to mapping in the Geobrowser. A minimum mapping unit of ~0.25-acre was used for field mapping for most land cover types, with a minimum mapping unit of ~0.1-acre used for sensitive land cover types. Where land cover types observed on the ground differed from those mapped in the Geobrowser, correct land cover types were either mapped on the ground with a Trimble GPS unit or drawn onto an orthophoto in the field based on variations in texture, color, and structure observable on the orthophoto, and subsequently digitized using ArcGIS mapping software. Recent ground disturbance and vegetation removal are present in some portions of the study area, including the proposed building envelope, making vegetation identification and mapping difficult in these



**Legend**

 Study Area

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Mapscale: 1:12,000

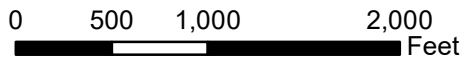


Figure 1. Study area locality map.

areas. For disturbed areas, aerial imagery, in conjunction with observation of adjacent undisturbed vegetation, was used to map pre-disturbance vegetation. The property boundary was downloaded from the Santa Clara County parcel layer as an ArcGIS shapefile obtained from the County website.

## **2.0 STUDY AREA**

### **2.1 Topography, Geology, and Soils**

The study area for the Land Cover Verification covers ~23.5-acres<sup>1</sup> and is located along Cinnabar Hills Road, northeast of Almaden Reservoir, in unincorporated San Jose, Santa Clara County (Figure 1). The study area is mostly undeveloped, with the exception of a paved access road near the northern property entrance and a network of dirt roads and trails scattered throughout the property. Photographs of the study area are included in Appendix A.

The study area is located in the eastern foothills of the Santa Cruz Mountains between ~550 and ~1,000-foot elevation (NAVD 88), in mountainous terrain that slopes toward the north (Figure 2; USGS 2016). The study area was previously mapped, at a broad scale, as primarily underlain by Jurassic to Cretaceous sandstone and mudstone, with the southeastern corner underlain by Jurassic to Cretaceous greenstone and basalt (California Geological Survey 2010). More detailed geologic mapping of the Santa Teresa Hills 7.5' topographic quadrangle (Dibblee and Minch 2005) identifies greenstone across most of the study area, with landslide deposits in the northwest corner, and a small area of serpentinite near the southern study area boundary.

Two soil types have been mapped on the study area (NRCS 2019):

560—Katykat-Mouser-Sanikara complex, 30 to 50 percent slopes

561—Footpath-Mouser complex, 30 to 50 percent slopes

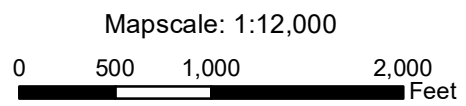
Katykat-Mouser-Sanikara complex, 30 to 50 percent slopes, consists of 40 percent Katykat and similar soils, 35 percent Mouser and similar soils, 15 percent Sanikara and similar soils, and 10 percent minor components. The Katykat component is well drained, derived from colluvium from sandstone or mudstone and/or residuum weathered from mudstone or sandstone, and is found on mountains. A typical profile consists of loam from 1 to 18 inches, gravelly loam from 18 to 37 inches, and gravelly sandy clay loam from 37 to 63 inches. The depth to water table is >80 inches, and the depth to a restrictive feature (densic material) is 39 to 60 inches. The Mouser component is well drained, derived from colluvium from sandstone, and is found on hillslopes and mountains. A typical profile consists of gravelly sandy loam from 1 to 6 inches, very gravelly loam from 6 to 9 inches, and gravelly loam from 9 to 60 inches. The depth to water table and a restrictive feature is >80 inches. The Sanikara component is well drained, derived from colluvium from graywacke and/or residuum weathered from graywacke, and is found on hillslopes and mountains. A typical profile consists of gravelly sandy loam from 1 to 5 inches, very gravelly loam from 5 to 12 inches, and bedrock from 12 to 22 inches. The depth

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<sup>1</sup> Study area acreage is based on the Santa Clara County parcel layer ArcGIS shapefile, though the Geobrowser lists the parcel at 24-acres.



Figure 2. Topographic map of the study area.  
 Data Source: USGS Santa Teresa Hills 7.5' quad (USGS 2016).



to water table is >80 inches, and the depth to a restrictive feature (lithic bedrock) is 10 to 20 inches.

Footpath-Mouser complex, 30 to 50 percent slopes, consists of 40 percent Footpath and similar soils, 30 percent Mouser and similar soils, 15 percent Katykat and similar soils, and 15 percent minor components. The Footpath component is well drained, derived from colluvium from greenstone and/or residuum weathered from greenstone, and is found on hillslopes and mountains. A typical profile consists of gravelly coarse sandy loam from 1 to 3 inches, gravelly loam from 3 to 12 inches, extremely paragravelly silty clay loam from 12 to 35 inches, and bedrock from 35 to 60 inches. The depth to water table is >80 inches, and the depth to a restrictive feature (paralithic bedrock) is 20 to 40 inches. The Mouser and Katykat soils are described above.

A soil map of the study area is included in Appendix B.

## **2.2 Hydrology**

The study area is moderately to steeply sloped and appears generally well drained. No drainages, streams, or wetlands have been mapped on the study area in the Geobrowser (Santa Clara Valley Habitat Agency 2019), the NHD (USGS 2019), or the USGS Santa Teresa Hills 7.5' topographic quadrangle (USGS 2016). A Riverine Wetland was mapped in the NWI (USFWS 2019) in a drainage flowing northwest in the northern portion of the study area.

The principal hydrologic sources for the study area are direct precipitation, surface sheet flow and shallow sub-surface flow from surrounding uplands, and drainage through two unnamed ephemeral stream channels. The southernmost channel on the study area (referred to as Stream 1 in this report) generally corresponds to the Riverine Wetland in the NWI mapping discussed above. This channel is ~3 to ~6-feet wide, enters the southern portion of the study area as a small tributary, drains northbound off the study area to a confluence with a larger channel, then reenters the study area, draining toward the northwest. The northernmost channel (referred to as Stream 2 in this report) on the study area is ~1 to ~2-feet wide, emerges below a dirt road, and drains northwest off the study area. Both channels presumably discharge eventually into Alamos Creek below Almaden Reservoir.

## **2.3 Habitat Agency Geobrowser Mapping**

The study area covers ~23.5-acres. According to the Geobrowser (Santa Clara Valley Habitat Agency 2019), the study area is located within the Habitat Plan Area but outside of the Urban Service Area. The study area is not located within any Wildlife Survey Areas, but most of the study area (20.4-acres) is located within a Plant Survey Area. A potential Serpentine Fee Zone is located along the southern study area boundary, but the Geobrowser does not list any Serpentine Fee Zone acreage (presumably because of the very small portion of the Serpentine Fee Zone polygon entering the study area). One land cover type was mapped on the study area in the Geobrowser: Coast Live Oak Forest and Woodland (23.5-acres).

### 3.0 **RESULTS AND RECOMMENDATIONS**

#### 3.1 **Field Verified Land Cover Types**

Based on the background literature review and field verification, six Habitat Plan land cover types are present on the study area: Blue Oak Woodland, Coast Live Oak Forest and Woodland, Mixed Serpentine Chaparral, Serpentine Bunchgrass Grassland, Serpentine Rock Outcrop, and Rural-Residential (Figure 3). These land cover types are discussed below, summarized in Table 1, and are shown on photographs in Appendix A. Final permanent and temporary ground disturbance impacts will be determined by the project engineer and are not included in this report.

**Table 1. Habitat Plan land cover types present on the study area.**

<b>Habitat Plan Land Cover Type</b>	<b>Acreage on the Study Area</b>
Blue Oak Woodland	8.11-acre
Coast Live Oak Forest and Woodland	13.52-acre
Mixed Serpentine Chaparral	0.96-acre
Serpentine Bunchgrass Grassland	0.31-acre
Serpentine Rock Outcrop	0.17-acre
Rural-Residential	0.44-acre
<b>Total</b>	<b>23.51-acre</b>

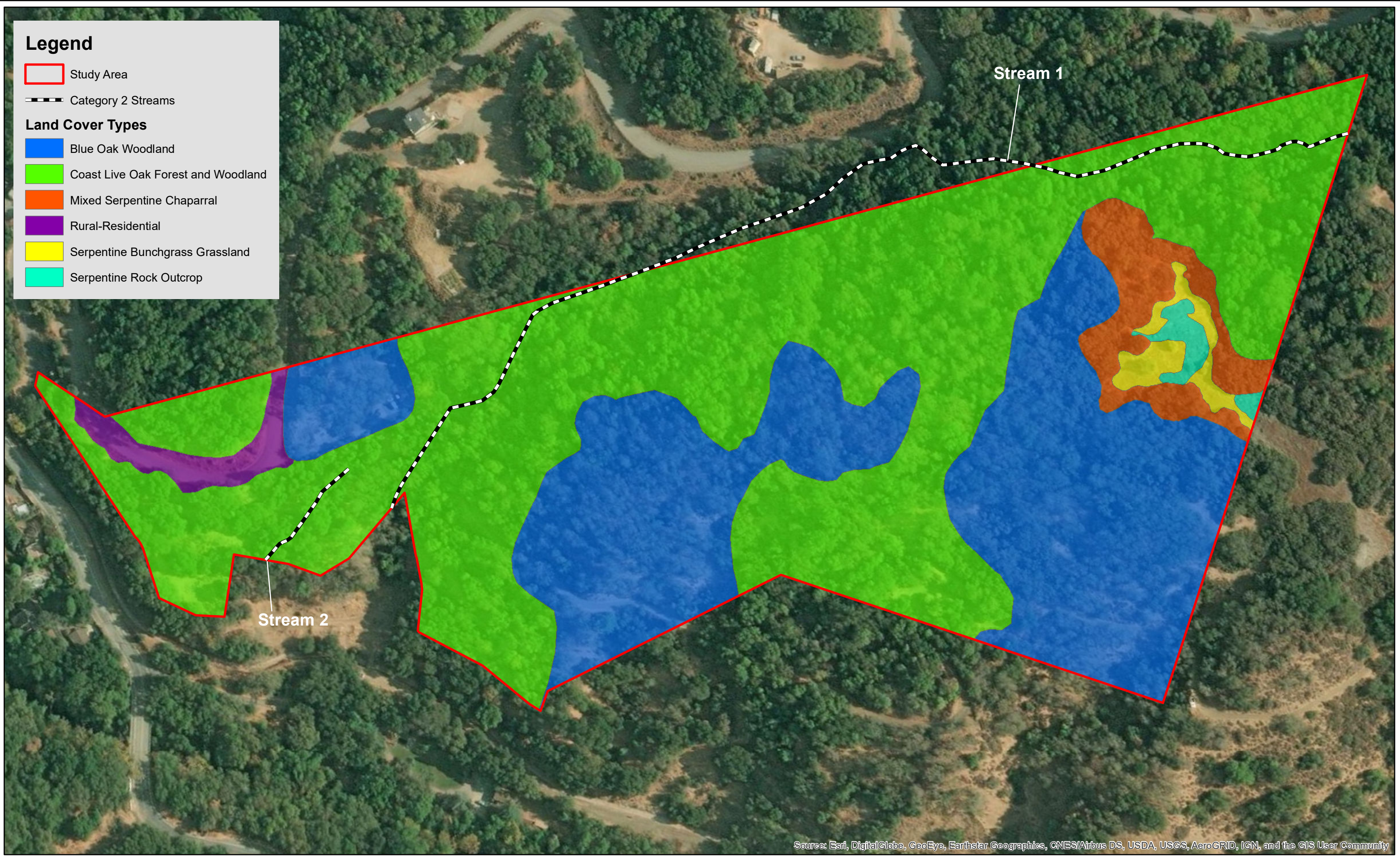
#### ***Blue Oak Woodland***

Blue Oak Woodland covers 8.11-acres on the study area (Figure 3; Appendix A-1). Blue Oak Woodland is dominated by a canopy of blue oak (*Quercus douglasii*<sup>2</sup>), with an understory of shrubs and herbaceous species, including toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), big-berry manzanita (*Arctostaphylos glauca*), California sagebrush (*Artemisia californica*), sticky monkeyflower (*Diplacus aurantiacus*), red berry (*Rhamnus crocea*), deerweed (*Acmispon glaber*), yarrow (*Achillea millefolium*), soap plant (*Chlorogalum pomeridianum*), clematis (*Clematis* sp.), blue wildrye (*Elymus glaucus*), slender wild oat (*Avena barbata*), soft chess (*Bromus hordeaceus*), riggut brome (*Bromus diandrus*), and Italian thistle (*Carduus pycnocephalus*).

#### ***Coast Live Oak Forest and Woodland***

Coast Live Oak Forest and Woodland covers 13.52-acres on the study area (Figure 3; Appendix A-2). Coast Live Oak Forest and Woodland is dominated by coast live oak (*Quercus agrifolia*) and California bay (*Umbellularia californica*). Valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), and California buckeye (*Aesculus californica*) are occasionally present in the canopy, but at insufficient densities to map separately as Mixed Oak Woodland. The understory consists of shrubs and herbaceous species, including toyon, poison oak, sticky monkeyflower, soap plant, coyote brush (*Baccharis pilularis*), California blackberry (*Rubus ursinus*), honeysuckle (*Lonicera hispidula*), Pacific snakeroot (*Sanicula*

<sup>2</sup> Botanical nomenclature follows Baldwin et al. (2012) and the Jepson Flora Project (2019).



**Legend**

- Study Area
- Category 2 Streams
- Land Cover Types**
- Blue Oak Woodland
- Coast Live Oak Forest and Woodland
- Mixed Serpentine Chaparral
- Rural-Residential
- Serpentine Bunchgrass Grassland
- Serpentine Rock Outcrop

Stream 1

Stream 2

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Mapscale: 1:1,600

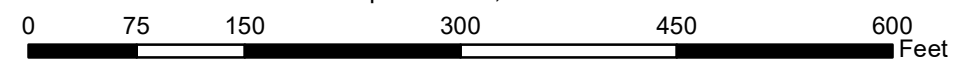


Figure 3. Land cover types on the Cinnabar Hills Road study area (APN 742-02-006), San Jose.



Map Prepared by: T. Mahony  
 Map Date: 10/3/19  
 Orthophoto Date: 11/14/18

*crassicaulis*), iris (*Iris* sp.), wild pea (*Lathyrus vestitus*), maidenhair (*Adiantum jordanii*), wood fern (*Dryopteris arguta*), yerba buena (*Clinopodium douglasii*), and torilis (*Torilis arvensis*).

### ***Mixed Serpentine Chaparral***

Mixed Serpentine Chaparral covers 0.96-acre along the southern study area boundary (Figure 3; Appendix A-3), and was mapped to correspond to Chaparral growing on serpentinite, as mapped in Dibblee and Minch (2005) and observed on the ground during the Land Cover Verification. Mixed Serpentine Chaparral consists of a dense shrubland dominated by big-berry manzanita, with occasional toyon, leather oak (*Quercus durata*), golden yarrow (*Eriophyllum confertiflorum*), and melic grass (*Melica* sp.), along with occasional species described below for Serpentine Bunchgrass Grassland.

### ***Serpentine Bunchgrass Grassland***

Serpentine Bunchgrass Grassland covers 0.31-acre along the southern study area boundary (Figure 3; Appendix A-4), and was mapped to correspond to native grassland growing on serpentinite, as mapped in Dibblee and Minch (2005) and observed on the ground during the Land Cover Verification. Serpentine Bunchgrass Grassland is dominated by native grasses and forbs, including melic grass, soap plant, purple needle grass (*Stipa pulchra*), lessingia (*Lessingia* sp.), elegant brodiaea (*Brodiaea elegans*), wild carrot (*Daucus pusillus*), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* sp.). Non-native grasses are present in disturbed areas, including soft chess, slender wild oat, and red brome (*Bromus madritensis* subsp. *rubens*). Ground disturbance in Serpentine Bunchgrass Grassland made vegetation identification difficult in some areas (Appendix A-5), and adjacent undisturbed vegetation and aerial imagery were used to map the extent of this land cover on the study area.

### ***Serpentine Rock Outcrop***

Serpentine Rock Outcrop covers 0.17-acre on the study area (Figure 3; Appendix A-6). Serpentine Rock Outcrop occurs intermixed with Serpentine Bunchgrass Grassland, and was mapped where rock outcrops occur within Serpentine Bunchgrass Grassland. The Habitat Plan specifies no minimum mapping unit for Serpentine Rock Outcrop, and best efforts were made to map distinct outcrops separately from Serpentine Bunchgrass Grassland, but these areas overlap and distinct boundaries are lacking. Serpentine Rock Outcrop consists primarily of bare rock outcrops, with occasional species present from surrounding Serpentine Bunchgrass Grassland. Ground disturbance in Serpentine Rock Outcrop land cover made identification of rock outcrops difficult in some areas (Appendix A-5), and adjacent undisturbed habitat and aerial imagery were used to map the extent of this land cover on the study area.

### ***Rural-Residential***

The Rural-Residential land cover type covers 0.44-acre and occurs in the northern portion of the study area along and adjacent to the paved access road (Figure 3; Appendix A-7). Rural-Residential land cover includes the paved road and adjacent ruderal areas with bare ground or non-native grasses and forbs adapted to disturbance, including slender wild oat, soft chess,



ripigut brome, Italian thistle, orchard grass (*Dactylis glomerata*), and yellow star-thistle (*Centaurea solstitialis*).

### 3.2 Category 2 Streams

Two ephemeral drainage channels (referred to as Stream 1 and Stream 2 in this report and on Figure 3) were observed on the study area. Stream 1 enters the southern portion of the study area as a small tributary (~2 to ~3-feet wide) (Appendix A-8), drains northbound off the study area to a confluence with a larger channel, then reenters the study area, draining toward the northwest in a deeply incised channel (~5 to ~6-feet wide) (Appendix A-9). Stream 1 has a bed, bank, and Ordinary High Water Mark (OWHM), and appears to support ephemeral hydrology, though it could potentially flow intermittently during the rainy season.

Stream 2 is ~1 to ~2-feet wide, emerges below a dirt road, and drains northwest off the study area (Figure 3; Appendix A-10). Stream 2 supports a weak bed, bank, and OWHM and appears to support ephemeral hydrology, likely only flowing during significant rain events.

Both streams presumably discharge eventually into Alamitos Creek below Almaden Reservoir.

According to the Habitat Plan (ICF International 2012), Category 2 streams are defined as follows: *“This stream type may not have sufficient flow to support covered species and riparian habitat. These streams include all ephemeral streams and some intermittent stream reaches. These reaches provide minimum support of water-quality functions and primary breeding habitat for covered species. Category 2 streams are not specifically mapped as part of the Habitat Plan. They include both identified streams (named creeks and USGS blue-line creeks) that are not classified as Category 1 streams and other unmapped streams that meet the “Criteria to Verify or Identify a Watercourse.”*

Since both streams are: (1) hydrologically connected to a waterway; (2) are located within a defined channel that includes a bed and bank and exhibit features that indicate actual or potential sediment movement; and (3) occupy a specific topographic position, Streams 1 and 2 on the study area could qualify as Category 2 streams according to the definition in the Habitat Plan (ICF International 2012).

According to the Habitat Plan, for areas outside the Urban Service Area (which includes the study area): *“As described above for required setbacks “Inside the Urban Service Area,” the setback for all Category 2 streams is 35 feet regardless of location or slope. If the site supports riparian vegetation, the setback will extend from the riparian edge plus a 35-foot buffer.”*

Since riparian vegetation is lacking along both streams, a 35-foot setback would likely apply from the top-of-bank. According to the Habitat Plan: *“Unless a covered activity meets the “Exemption” criteria or is granted a stream setback exception ... implementation of covered activities is prohibited within the stream setback ... Project proponents of projects located outside the urban service area must ensure that the development area does not encroach into the stream setback unless an exemption or an exception is applied.”*

Figure 3 shows the approximate location of Streams 1 and 2. If any work is proposed in the vicinity of Streams 1 and 2, the top-of-bank (which can be derived from the topographic survey or mapped in the field) should be included on the site plan, along with a 35-foot setback.

### 3.3 Plant Survey Area

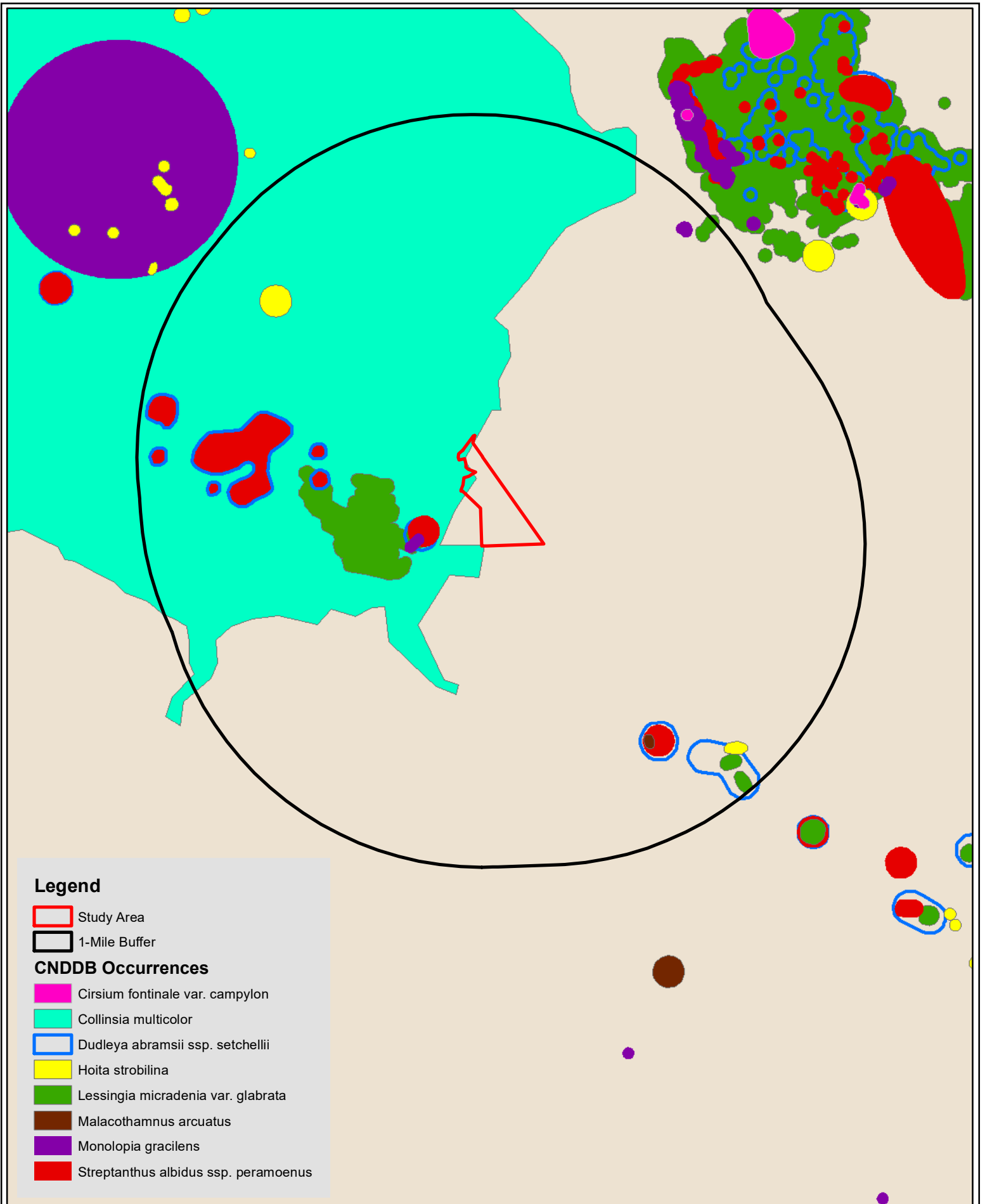
Most of the study area is mapped as a Plant Survey Area in the Geobrowser. No Habitat Plan covered species were mapped on the study area in the CNDDDB (CDFW 2019), but one special-status plant species, San Francisco collinsia (*Collinsia multicolor*), was mapped in a broad polygon immediately west of the study area, extending onto a small portion of the northwestern corner of the study area (Figure 4). In addition, several Habitat Plan covered species—including Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), smooth lessingia (*Lessingia micradenia* var. *glabrata*), and most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*)—were mapped ~0.2-miles west of the study area in the CNDDDB.

Due to the presence of Mixed Serpentine Chaparral, Serpentine Bunchgrass Grassland, and Serpentine Rock Outcrop land cover types on the study area, botanical surveys would typically be required under the Habitat Plan. The presence of Serpentine Bunchgrass Grassland would trigger surveys for the following plant species: smooth lessingia (blooms Jul–Sep; uncommon Oct–Nov); fragrant fritillary (*Fritillaria liliacea*) (blooms Feb–Apr); Metcalf Canyon jewelflower (*Streptanthus albidus* ssp. *albidus*) (blooms Apr–Jul); most beautiful jewelflower (blooms Mar–Jun); Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*) (blooms Apr–Jul); and coyote ceanothus (*Ceanothus ferrisiae*) (blooms Jan–May) (ICF International 2012). The presence of Serpentine Rock Outcrop would also trigger surveys for Santa Clara Valley dudleya (blooms Apr–Jul).

No botanical surveys were conducted on the study area during the October 2, 2019 field visit, and the field visit occurred outside the typical blooming/survey period for most Habitat Plan covered species. A species of *Lessingia*, which may be smooth lessingia (a Habitat Plan covered species described above) was observed in Mixed Serpentine Chaparral, Serpentine Bunchgrass Grassland, and Serpentine Rock Outcrop land cover types during the October 2, 2019 field visit. This species should be identified (and mapped, as appropriate) during future botanical surveys. The timing of the botanical surveys should coincide with the blooming period of the Habitat Plan covered species described above.

### 4.0 LIMITATIONS

The results of this report are based on conditions observed at the time of the field visit and my interpretation of those conditions. Plants that are dominant at the time of this report may shift in importance depending on rainfall conditions and season, or population shifts, extirpations, and natural recruitment over time. This report is restricted to the Habitat Plan Land Cover Verification. No other biological issues are addressed. Regulatory agencies make the final determination (subject to judicial review) regarding biological resource issues on the study area. This report should be submitted to Santa Clara County planning staff for review and concurrence. This report does not constitute authorization to conduct the project, and all



**Legend**

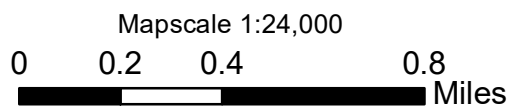
- Study Area
- 1-Mile Buffer

**CNDDDB Occurrences**

- Cirsium fontinale* var. *campylon*
- Collinsia multicolor*
- Dudleya abramsii* ssp. *setchellii*
- Hoita strobilina*
- Lessingia micradenia* var. *glabrata*
- Malacothamnus arcuatus*
- Monolopia gracilens*
- Streptanthus albidus* ssp. *peramoenus*

Figure 4. CNDDDB map of special-status plant occurrences in the study area region.

Data Source: CNDDDB (CDFW 2019).



necessary permits and approvals should be obtained from regulatory agencies prior to project implementation.

Once final permanent and temporary impacts have been determined for the project, impacts to each land cover type should be calculated by the project engineer so the County can determine any impact fees associated with the project. Please contact me if you have questions or need additional information.

Sincerely,



Tom Mahony, MS, PWS  
Principal/Plant Ecologist  
Certified Professional Wetland Scientist #2567

## **5.0 REFERENCES**

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.

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**APPENDIX A. PHOTOGRAPHS OF THE STUDY AREA.**



Appendix A-1. Blue Oak Woodland dominated by blue oak.



Appendix A-2. Coast Live Oak Forest and Woodland dominated by coast live oak and California bay.



Appendix A-3. Mixed Serpentine Chaparral dominated by big-berry manzanita.



Appendix A-4. Serpentine Bunchgrass Grassland dominated by native grasses and forbs.



Appendix A-5. Recently disturbed area in Serpentine Bunchgrass Grassland and Serpentine Rock Outcrop land cover.



Appendix A-6. Serpentine Rock Outcrop land cover.



Appendix A-7. Rural-Residential land cover along access road.



Appendix A-8. Upper reach of Stream 1, a Category 2 stream, looking upstream.





Appendix A-9. Lower reach of Stream 1, a Category 2 stream, looking downstream.



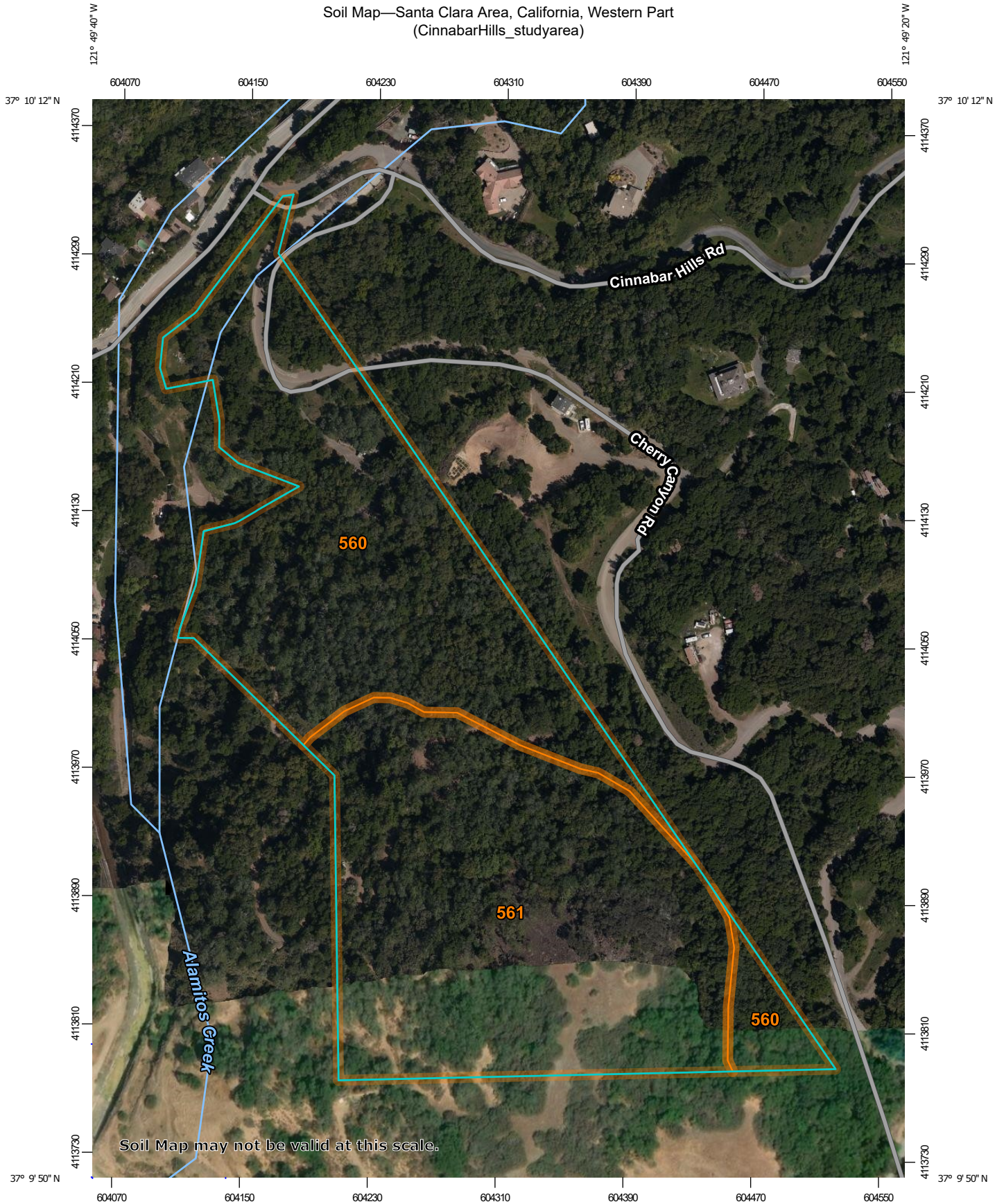
Appendix A-10. Stream 2, a Category 2 stream, looking upstream.

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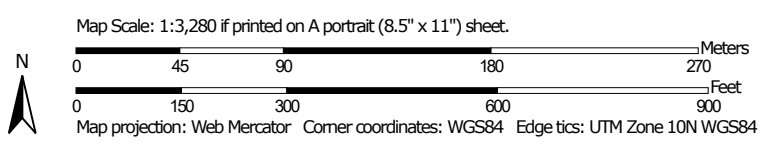
APPENDIX B

**SOIL MAP OF THE STUDY AREA**

Soil Map—Santa Clara Area, California, Western Part  
(CinnabarHills\_studyarea)



Soil Map may not be valid at this scale.



## 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: Santa Clara Area, California, Western Part  
Survey Area Data: Version 8, Sep 16, 2019

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

Date(s) aerial images were photographed: Mar 16, 2017—Apr 23, 2019

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
560	Katykat-Mouser-Sanikara complex, 30 to 50 percent slopes	11.5	48.9%
561	Footpath-Mouser complex, 30 to 50 percent slopes	12.0	51.1%
<b>Totals for Area of Interest</b>		<b>23.5</b>	<b>100.0%</b>