



## MEMORANDUM

Date: August 24, 2023

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Burgess Land Capability Challenge  
744 Chapel Lane, Placer County, California  
APN: 094-251-009; TRPA File #: LCAP2023-0051

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Proposed Action:

Hearings Officer review and approve the proposed Land Capability Challenge.

Staff Recommendation:

Staff recommends the TRPA Hearings Officer approve the land capability challenge on the subject parcel. The challenge changes Class 5- 6,980 sq. ft. (67 percent of parcel) and Class 3 3,420 sq. ft. (33 percent of parcel), to Class 6- 7,664 sq. ft. (74 percent of parcel) and Class 4- 2,736 sq. ft. (26 percent of parcel).

Background:

The subject parcel is shown as Class 5 and Class 3 on TRPA Land Capability Overlay Maps (aka Bailey Land Capability maps). The Soil Conservation Service *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974) places the subject parcel primarily in TdD- Tallac, gravelly coarse sandy loam, 5 to 15 percent mapunit with a small portion of TeE- Tallac gravelly coarse sandy loam, 15 to 30 percent mapunit. A land capability verification completed in 2023 verified the parcel as Class 5 and Class 3. The updated *Soil Survey of Tahoe Basin Area, California and Nevada* (NRCS, 2007) maps this parcel as 7182- Paige medial sandy loam, 15 to 30 percent slopes and part 7172- Kneeridge gravelly sandy loam, 5 to 15 percent slopes. This parcel has a geomorphic mapping of E1 for Moraine land, Undifferentiated (Moderate hazard lands). The Tallac soils have a gravelly coarse sandy loam surface texture. Subsurface textures are gravelly coarse sandy loam and very cobbly sandy loam. They are skeletal soils (greater than 35% rock fragments in the particle control section) and do not have argillic soil development. A weakly silica-cemented duripan occurs at depths of 40 to 70 inches.

A land capability challenge (LCAP2023-0051) was filed by Gary Furumoto on behalf of the owners James and Michelle Burgess on March 17, 2023. TRPA contractor, Marchel Munnecke, visited the site on June 12, 2023, and described one soil pit.

Findings:

One soil pit was excavated by backhoe to 62 inches. The pit was in the south side of the parcel, approximately 10 feet south of the southeast corner of the garage. The soil formed in volcanic

colluvium over glacial outwash and potentially old sandy beach deposits. This soil is characterized by a gravelly sandy loam surface texture, with loamy sand, gravelly loamy sand, extremely gravelly sand, and sand subsurface textures. A silica cemented horizon was not observed in the pit. This soil is classified as a Sandy, mixed, frigid, Typic Humixerepts. This soil is very deep, somewhat excessively drained, and is a member of Soil Hydrologic Group A. The vegetation on this parcel is primarily white fir forest including a few Jeffrey pine, sugar pine and incense-cedar trees. There is almost no understory vegetation, with uniform cover of litter and duff. The pit was located in the Class 6 area south of the driveway. A portion of the parcel has slopes between 16 to 30 percent. An additional pit was not described in the Class 4 area, due to the similar landform and vegetation characteristics and limited size.

In the *Soil Survey of Tahoe Basin Area, California-Nevada* (Rogers, 1974), the Tallac soil is described as having a root restrictive silica cemented layer between 40 to 60 inches. A silica cemented layer was not observed in this soil. The texture of this soil is coarser than the Tallac soil, has fewer rock fragments in the particle control section, and potentially has old sandy beach deposits in the lower horizons. This soil differs from the Inville and Jabu soils because it lacks argillic soil development. This soil differs from the Elmira and Gefo soils because it has volcanic colluvium over outwash and beach deposits. This soil differs from the Jorge and Tahoma soils because it lacks argillic soil development, and it has glacial and beach deposit material. Therefore, this soil is dissimilar to any soils mapped in the 1974 Soil Survey of the Tahoe Basin and is an unnamed soil (XXX).

This soil is dissimilar to the Paige and Kneeridge soils mapped on this parcel in the 2007 Soil Survey. It differs from the Kneeridge and Paige soils because it has coarser textures and potentially influenced by sandy beach deposits. In addition, it differs from the Paige soils because dense till was not observed.

Using Table 4 in the Land Capability Classification of Lake Tahoe Basin, California-Nevada, and based on slopes on this parcel, the Land Capability is mapped as Class 6- XXX 0 to 16 percent slopes and Class 4- XXX 16-30 percent slopes.

The table below summarizes the changes in land capability as concluded by this land capability challenge.

<b>Land Capability District</b>	<b>Area (sq. ft.) 2023 LCV</b>	<b>Area (sq. ft.) 2023 LCC</b>
Class 5 (TdD, 5 to 15 % slopes)	6,980	0
Class 3 (TeE), 15 to 30 % slopes)	3,420	0
Class 6 (XXX, 0 to 16 % slopes)	0	7,664
Class 4 (XXX, 16 to 30 % slopes)	0	2,736
<b>Total Parcel Area</b>	<b>10,400</b>	<b>10,400</b>

This memorandum was jointly prepared by Senior Planner, Julie Roll. If you have questions on this Hearings Officer item, please contact Julie Roll, 775-589-5247, or email at [jroll@trpa.gov](mailto:jroll@trpa.gov).

### BAILEY LAND CAPABILITY CHALLENGE FINDINGS

<b>Site Information</b>	
<b>Assessor's Parcel Numbers: (APN)</b>	094-251-009
<b>TRPA File No. / Submittal Date:</b>	LCAP2023-0051/ 3/17/2023
<b>Owner or Applicant:</b>	James and Michelle Burgess
<b>Address:</b>	PO Box 328, Tahoe City, CA 96145

<b>Environmental Setting</b>	
<b>Bailey Soil Mapping Unit<sup>1</sup> / Hydrologic Soil Group (HSG) / Land Class / Geomorphic Hazard Unit</b>	TdD, Tallac, gravelly coarse sandy loam, 5 to 15 percent mapunit with a small portion of TeE, gravelly coarse sandy loam, 15 to 30 percent mapunit / HSG C/ E1- Moraine lands (Moderate hazard lands)
<b>Soil Parent Material</b>	Volcanic colluvium over glacial and lacustrine deposits.
<b>Slopes and Aspect</b>	14 to 23 percent slopes; facing to the east.
<b>Elevation and Datum</b>	6,394 to 6,500, Approximate from Google Earth
<b>Rock Outcrops and Surface Configuration</b>	NA
<b>SEZ and Hydrology Source</b>	NA
<b>Vegetation</b>	The vegetation on this parcel is primarily a white fir forest with a few Jeffrey pine, sugar pine and incense-cedar, and almost no understory vegetation.
<b>Ground Cover Condition</b>	Good (vegetation 60 %, duff/mulch 70% cover)
<b>Site Features</b>	Residence, AC driveway and walkways, deck, shed, and rock structures.

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<sup>1</sup> TRPA currently relies upon the Soil Survey of Tahoe Basin, California-Nevada (Rogers and Soil Conservation Service, 1974), which the Bailey Land Capability system is predicated upon.

<b>Field Investigation and Procedures</b>	
<b>Consultant and Address</b>	Marchel Munnecke PO Box 1015 Twin Bridges, CA 95735
<b>TRPA Staff Field Dates</b>	June 12, 2023
<b>SEZ Mapping / NRCS Hydric Soil</b>	No SEZ on this parcel or in the immediate vicinity
<b>Number of Soil Pits or Auger Holes and Description Depth</b>	1 pit excavated by backhoe to 60 inches.
<b>Additional or Repetitive TRPA Sample Locations</b>	NA
<b>Representative Soil Profile Descriptions</b>	See attachment B- Soil Description
<b>Areas Not Examined</b>	Residence, AC driveway and walkways, deck, shed, and rock structures.

<b>TRPA Findings</b>	
<b>2006 Soil Survey Map Unit</b>	7182- Paige medial sandy loam, 15 to 30 percent slopes and part 7172- Kneeridge gravelly sandy loam, 5 to 15 percent slopes.
<b>Consultant Soil Mapping Determination and Rationale</b>	<p>This parcel was determined to be Class 6- XXX 0-16 percent slopes and Class 4-XXX 16 to 30 percent slopes.</p> <p>In the <i>Soil Survey of Tahoe Basin Area, California-Nevada</i> (Rogers, 1974), the Tallac soil is described as having a root restrictive silica cemented layer between 40 to 60 inches. A silica cemented layer was not observed in this soil. The texture of this soil is coarser than the Tallac soil, has fewer rock fragments in the particle control section, and potentially has old sandy beach deposits in the lower horizons. This soil differs from the Inville and Jabu soils because it lacks argillic soil development. This soil differs from the Elmira and Gefo soils because it has volcanic colluvium over outwash and beach deposits. This soil differs from the Jorge and Tahoma soils because it lacks argillic soil development, and it has glacial and beach deposit material. Therefore, this soil is dissimilar to any soils mapped in the 1974 Soil Survey of the Tahoe Basin and is an unnamed soil (XXX).</p>

	This soil is dissimilar to the Paige and Kneeridge soils mapped on this parcel in the 2007 Soil Survey. It differs from the Kneeridge and Paige soils because it has coarser textures and potentially influenced by sandy beach deposits. In addition, it differs from the Paige soils because dense till was not observed.
<b>Slope Determination</b>	13 to 20 percent slopes.
<b>TRPA Conclusion(s)</b>	TRPA concurs with consultants' determination and rationale above.
<b>Applicable Area</b>	See site topo for soil delineations.

Attachments:

- A. Parcel Map with Soil Map Units Delineated
- B. Soil Description
- C. Site Photographs

Attachment A  
Parcel Map with Soil Map Units Delineated



**REFERENCES**

R1) PLAT OF CATHEDRAL FOREST, RECORDED MAY 21, 1983, IN BOOK H OF MAPS, AT PAGE 12, OFFICIAL RECORDS OF PLACER COUNTY, STATE OF CALIFORNIA.

**NOTES**

- 1) THIS SHEET IS PROVIDED FOR INFORMATION ONLY, SHOWING EXISTING CONDITIONS AT THE TIME OF SURVEY AND NOT A PART OF DESIGN REVIEW.
- 2) FIELD WORK WAS PERFORMED ON JANUARY 21, 2021
- 3) EASEMENTS MAY EXIST THAT ARE NOT SHOWN HEREON
- 4) THIS IS NOT A BOUNDARY SURVEY. BOUNDARY SHOWN BY RECORD INFORMATION.
- 5) 0'-6" OF SNOW ON GROUND AT TIME OF FIELD SURVEY. FEATURES MAY EXIST NOT SHOWN HEREON THAT WERE OBSCURED DURING FIELD SURVEY.
- 6) ONLY TREES 4" DBH AND LARGER WERE LOCATED DURING THIS FIELD SURVEY.

**SITE INFORMATION:**

A.P.N. 094-251-009-000  
744 CHAPEL LANE  
TAHOE CITY, CALIFORNIA  
LOT 19 OF THE PLAT OF CATHEDRAL FOREST (R1)  
10,400 SQ. FT., 0.238 ACRE

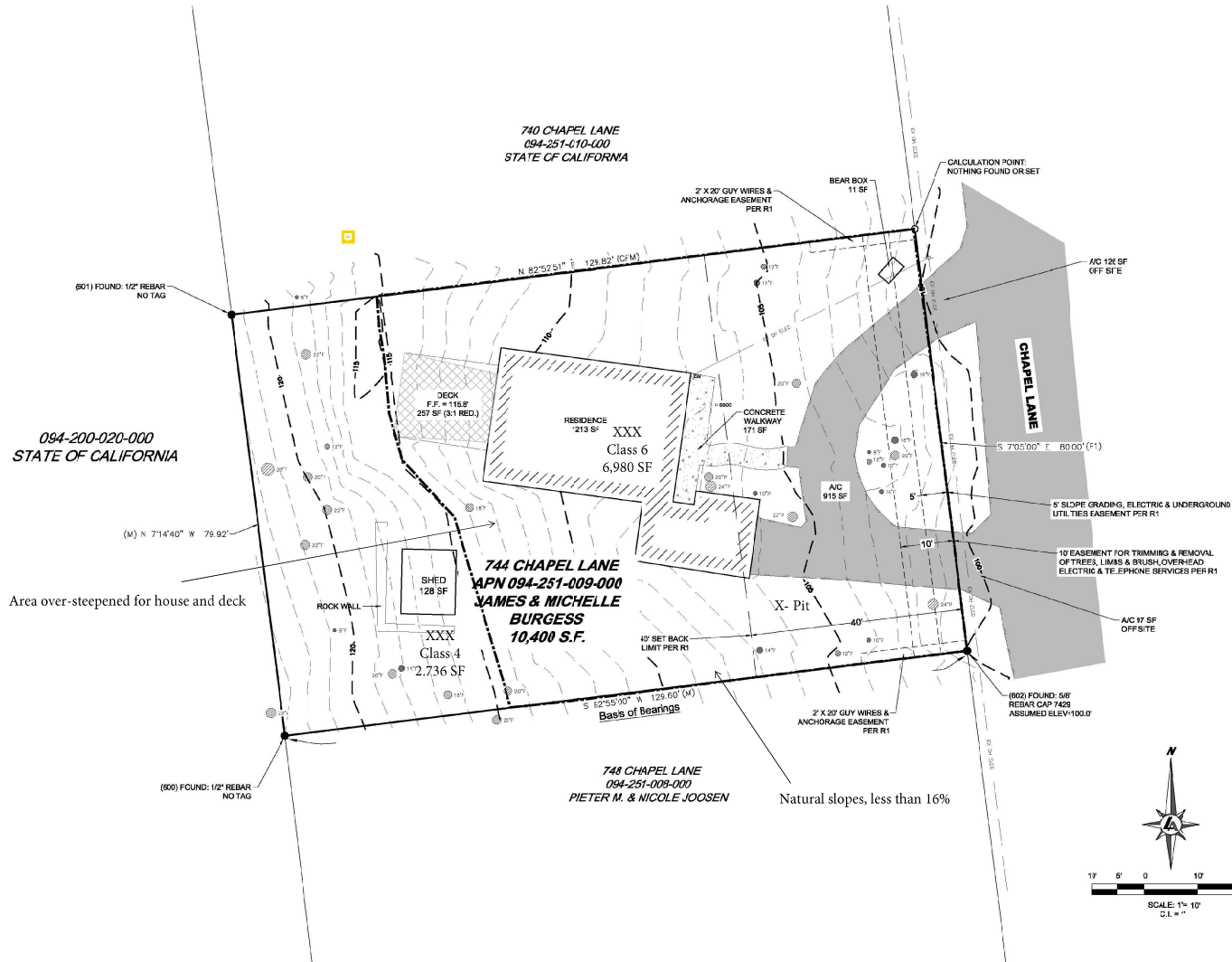
**PROPERTY OWNER:**

JAMES & MICHELLE BURGESS  
744 CHAPEL LANE  
TAHOE CITY, CA 96145

M. Munnecke  
LCC  
8-31-2023

**COVERAGE**

A.P.N. 094-251-009-000	
<b>PARCEL AREA</b>	= 10,400 s.f.
<b>ON SITE</b>	
BUILDING	= 1213 s.f.
ASPHALT	= 915 s.f.
CONCRETE	= 171 s.f.
DECK W/ 3:1 RED.	= 257 s.f.
BEAR BOX	= 11 s.f.
NOT A PART	128 s.f.
<b>GRAND TOTAL</b>	= 2695 s.f.
<b>OFF SITE</b>	
ASPHALT	= 223 s.f.
<b>GRAND TOTAL</b>	= 223 s.f.



**LEGEND:**

- (M) MEASURED COURSE AND DISTANCE
- (R) PER REFERENCED DOCUMENT
- (CFM) CALCULATED FROM MEASURED
- EXISTING OVERHEAD ELECTRIC LINE
- EDGE OF PAVEMENT
- CONCRETE
- AS PAVING
- UTILITY POLE
- ELECTRIC METER
- SANITARY SEWER CLEANOUT
- TREE P = PINE
- FOUND PROPERTY CORNER AS NOTED
- CALCULATION POINT, NOTHING FOUND OR SET
- P.U.E. PUBLIC UTILITY EASEMENT
- F.F. FINISHED FLOOR ELEVATION

**PROJECT CONTROL**

POINT	NOR'TH	EAST	ELEVATION	DESCRIPTION
600	1344.6788	937.5729	123.00	1/2" REBAR NO TAG
601	1423.9600	947.4950	121.53	1/2" REBAR NO TAG
602	1360.6502	1086.1837	300.00	5/8" REBAR CAP 7429

**BASIS OF BEARINGS**

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE SOUTHERLY LINE OF LOT 19 PER THE PLAT OF CATHEDRAL FOREST, BETWEEN FOUND MONUMENTS AS SHOWN (S 12° 55' 00" W).

ALL DIMENSIONS ON THIS MAP ARE GROUND DISTANCES.

**BASIS OF ELEVATIONS**

DATUM: ASSUMED  
PROJECT BENCHMARK = 802  
HAVING AN ELEVATION OF 100.00'

LAND CAPABILITY CHALLENGE  
FILE LCAP2023-0051

JAMES & MICHELLE BURGESS  
744 CHAPEL LANE  
EXISTING CONDITION  
COVERAGE & TOPOGRAPHIC MAP  
TAKHOE CITY  
PLACER COUNTY  
CALIFORNIA

REV.	DATE	DESCRIPTION
1		ISSUED - ADD DITCH & ROCK WALL

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**V1.0**

DRAWN BY: DDW/ADG  
DESIGNED BY:  
CHECKED BY: RRB  
JOB NO.: 10260.000

Attachment B  
Soil Description



**James and Michelle Burgess Land Capability Challenge**  
**August 31, 2023, Hearing Officer Meeting**

744 Chapel Lane,  
Tahoe City, Placer County, CA 96145  
APN 094-251-009-000, LCAP2023-0051

**Soil Profile Descriptions**

**Marchel Munnecke**

**Field Date: 6-12-2023**



**Pit 095-251-009-000:**

**Soil Classification:** Sandy, mixed, frigid Typic Humixerpts. A laboratory test would be needed to verify if this soil has enough volcanic ash to be an andisol. It would then be medial, mixed, frigid Humic Vitrixerands. Soils in this area in the 2007 Soil Survey were mapped as andisols.

**Soil Series:** XXX- Class-6, 0 to 16 percent slopes and XXX Class 4, 16 to 30 percent slopes

**Drainage Class:** Somewhat excessively drained

**Hydrologic Group:** A

**Parent Material:** Colluvium and residuum from volcanic parent material over glacial out wash and old sandy beach deposits.

**Slope:** 15 %    **Aspect:** East

## Description:

- Oi 0 to 1 inches; mulch and conifer needles; clear smooth boundary.
- A1 1 to 3 inches; gravelly sandy loam, very dark brown (7.5YR 2.5/2) moist; moderate fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine to fine roots; many very fine to fine irregular pores; 25 percent gravels; clear smooth boundary.
- A2 3 to 11 inches; loamy sand, dark brown (7.5YR 3/2) moist; moderate medium granular structure; soft, very friable, nonsticky and nonplastic; many very fine to coarse roots; many very fine to fine irregular pores; 10 percent gravels; gradual wavy boundary.
- Bw1 11 to 24 inches; loamy sand, dark brown (7.5YR 3/3) moist; moderate medium subangular blocky structure; soft, very friable; nonsticky and nonplastic; many fine to medium roots; many very fine and fine irregular pores; 10 percent gravel and 2 percent cobbles; gradual wavy boundary.
- Bw2 24 to 41 inches; gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; weak medium angular blocky structure; soft, very friable, moderately sticky and moderately plastic; common fine to medium roots; many very fine and fine irregular pores; 45 percent gravel; clear wavy boundary.
- 1C 41 to 54 inches; very gravelly sand, dark brown (10YR 3/3) moist; massive; moderately hard, firm, nonsticky and nonplastic; few fine roots; many very fine and fine irregular pores; 55 percent gravel; clear wavy boundary.
- 2C 54 to 59 inches; sand, very dark greyish brown (2.5Y 3/2) moist; single grain; loose, loose, nonsticky and nonplastic; few fine roots; many very fine and fine irregular pores; 10 percent gravel; clear wavy boundary.
- 3C 59 to 62 inches; extremely gravelly sand, dark yellowish brown (10YR 3/4) moist; single grain; moderately hard, firm, nonsticky and nonplastic; few fine roots; many very fine and fine irregular pores; 65 percent gravel.

Attachment C  
Site Photographs

**PHOTOGRAPHS (Addendum to APN 094-251-009, August 31, 2023, Staff Summary)**



Photo 1 – a. Soil pit. Photo 1- b. Looking southwest from Chapel Road towards residence.



Photo 2 – a. View across pit to west- northwest. Photo 2- b. View of rear deck looking south. Class 4 area above, to right of deck.

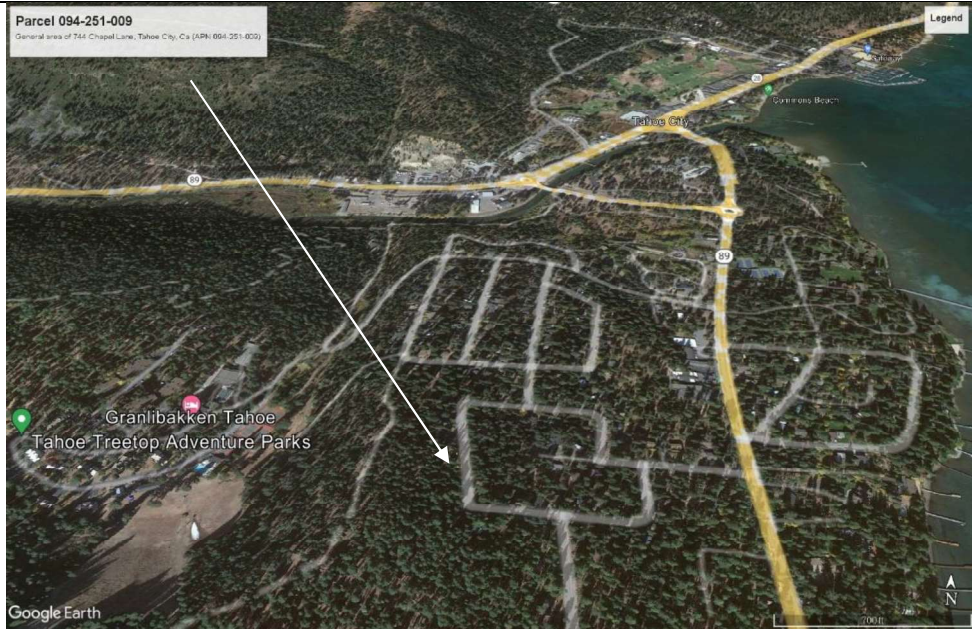
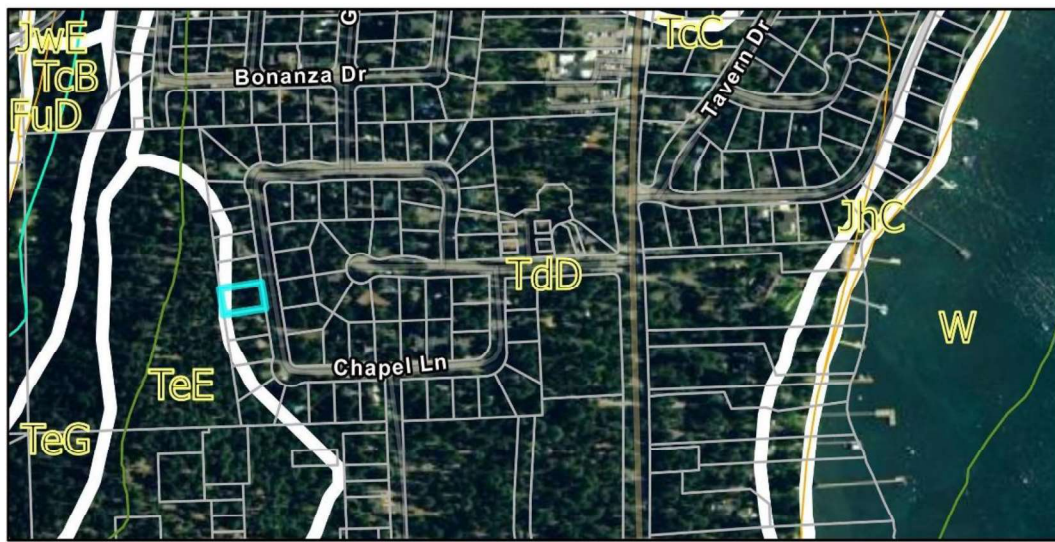


Image 1. General area map of 744 Chapel Lane, Tahoe City, CA.



Source: Esri, USDA FSA, Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, HERE,

Image 1— ESRI map of parcel (094-251-009, in blue) with the 1974 Soil Survey mapunit delineations in white.