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NORTH TAHOE SHARED-USE TRAIL – Segment 1
BOTANICAL BASELINE REPORT

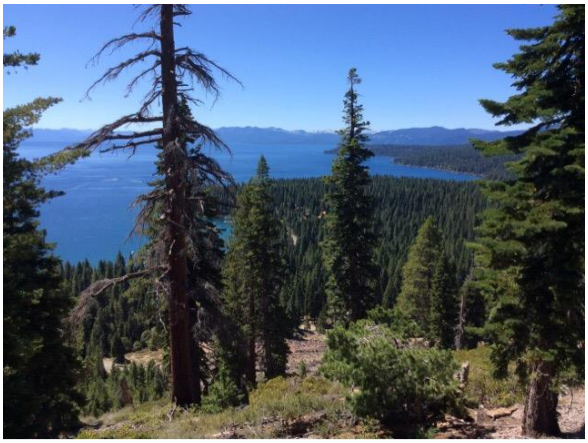

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TABLE OF CONTENTS

TABLE OF CONTENTS i
LIST OF APPENDICES i
1.0 INTRODUCTION 1
2.0 BACKGROUND 2
2.1 Project Location 2
3.0 RECORDS AND INFORMATION SEARCHES 3
4.0 FIELD ASSESSMENT AND SURVEYS 4
5.0 ASSESSMENT OF HABITAT TYPES 5
6.0 SPECIAL STATUS SPECIES 7
7.0 SUMMARY 8
8.0 REFERENCES 9

LIST OF APPENDICES

Appendix A: Tables
Table 1: Special Status Plant Species List and Habitat Analysis
Table 2: Plant Species Identified Within Biological Survey Area, August 2019

Appendix B: Figures
Figure 1 Project Area Map
Figure 2 Vegetation Communities Map
Figure 3 Final Vegetation Base Map

1.0 INTRODUCTION

The purpose of this document is to conduct an initial baseline assessment for botanical resources that satisfies the U.S. Fish and Wildlife Service (USFWS), United States Forest Service (USFS) Lake Tahoe Basin Management Unit (LTBMU), Tahoe Regional Planning Agency (TRPA), California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS) requirements to determine potential project effects on botanical special status species for Segment 1 of the North Tahoe Shared-Use Trail (project). Furthermore, the Botanical Baseline Report will provide the project proponent with relevant resources as they pertain to special status plant species and communities within the project's area of potential effect (APE), as well as guide the decision-making process during project design. This assessment summarizes the literature review and research findings, field assessment data, and potential impacts to special status species in the Lake Tahoe Basin within and adjacent to the APE. For the purposes of this assessment, the term special status species encompasses those designated as federally threatened and endangered species by the United States Fish and Wildlife Service (USFWS); those designated as state endangered, threatened, or rare by the State of California; USFS LTBMU Sensitive Species; Plants listed by the California Native Plant Society with rare plant ranks 1 or 2; and TRPA special interest species.

2.0 BACKGROUND

The North Tahoe Shared-Use Trail – Segment 1 project (project) will construct a regional trail connecting the communities of Tahoe Vista and Carnelian Bay, California. The project will provide public access to existing recreational trails, enhance accessibility to public land, provide educational and recreational opportunities, and provide a non-motorized transportation alternative for visitors and residents. Additionally, the project will enhance the safety of bicyclists and connect residential neighborhoods to commercial, tourism, and recreational facilities.

The trail will begin at Carnelian Bay Avenue on the west end and will terminate at a junction with the existing Pine Drop Trail within the North Tahoe Regional Park in Tahoe Vista.

The project will be on federal forest lands managed by the United States Forest Service, open space parcels managed by the North Tahoe Public Utility District (NTPUD) and will utilize one existing public easement through a private parcel.

2.1 Project Location

The project is located in the North Lake Tahoe area of Placer County, California. The project is located in Sections 10 and 11 in Township 16 North and Range 17 East of the Mt. Diablo Meridian which may be found on the following U.S. Geological Survey 7.5-minute quadrangle maps: *Martis Peak* and *Kings Beach* in Placer County, California. It is within two TRPA Priority Watersheds: Carnelian Canyon (Priority three), and Tahoe Vista (Priority three).

The project encompasses 2.52 miles of the trail alignment. The trail will begin at Carnelian Bay Avenue on the west end and terminate near the northeast corner of the North Tahoe Public Utility District (NTPUD) managed North Tahoe Regional Park in Tahoe Vista, California (**Figure 1**). The project is primarily located in wildland adjacent to rural development with a regional park in the eastern section.

The biological survey area is the same as the project APE and includes a corridor that extends 60-feet on either side of the trail centerline with a wider corridor where the trail terminates at the North Tahoe Regional Park to accommodate a paved pad with a kiosk; the total area of this survey area is approximately 39 acres.

Area plans are considered land use and zoning guidance documents for both the TRPA and the County. The APE is included within the Placer County Tahoe Basin Area Plan (Placer County 2017). Land use in the eastern portion of the APE is designated under the "recreation" subdistrict with the western section of the APE designated as "conservation".

3.0 RECORDS AND INFORMATION SEARCHES

A literature and database review were conducted to identify existing botanical information within and adjacent to the APE. This review assisted with the determinations contained in this document. All the references utilized for this assessment are listed in Section 8.0. The most relevant searches, reviews, and requests are listed below.

Agency/Entity	Date	Information Received
United States Fish and Wildlife Service (USFWS)	7/20/20	• Federally Protected Species List for threatened, endangered, candidate, de-listed, and special concern species (USFWS 2020)
United States Forest Service (USFS) Lake Tahoe Basin Management Unit (LTBMU)	7/1/2020	• Lake Tahoe Basin Management Unit Sensitive Species (USDA 2020)
United States Forest Service (USFS)	8/19/2019	• CALVEG GIS layers (USDA 2009)
California Department of Fish and Wildlife (CDFW)	8/19/2019	• California Natural Diversity Database (CNDDB 2019) • State of California Endangered, Threatened, and Rare Plants of California List (CDFW 2019)
California Native Plant Society (CNPS)	7/1/2020	• Inventory of Rare and Endangered Plants of California (CNPS 2020)
Tahoe Regional Planning Agency (TRPA)	7/1/20	• TRPA Threshold Evaluation Report (TRPA 2015) • TRPA Special Interest Species Data (TRPA 2020)

4.0 FIELD ASSESSMENT AND SURVEYS

A botanical survey was conducted by NCE biologist Mack Casterman on August 30, 2019, on July 8, 2020 and on October 23, 2020. The methods used for the NCE botanical surveys were similar to the CNPS methodology. These methods include conducting walking transect surveys across the survey area to identify plant communities and habitat types that may support special status species. In addition, the survey focused on plant identification to a level that allowed for the determination of rarity and listing status. During field surveys, the phenology of vegetation on site was appropriate for identification of special status species. Therefore, the timing was appropriate for presence/absence surveys of the special status plant species assessed during the evaluation. The proposed trail alignment along with a 60-foot buffer on either side was traversed and all plant species observed, and habitat types encountered were documented during the survey. Plant species documented within the survey area are listed in **Appendix A, Table 2**. The survey area is illustrated in **Figure 1**. No special status plant species were encountered during field surveys. CNDDB records show an occurrence for wooly fruited sedge (*Carex* lasiocarpa) from 2002 approximately one-half mile to the south-east of the eastern boundary of the trail alignment (**Figure 3**).

The mapped Classification and Assessment with Landsat of Visible Ecological Groupings (CALVEG) Alliances were found to be consistent with the project location, and the results of the field survey.

5.0 ASSESSMENT OF HABITAT TYPES

Vegetation types were initially identified with the CALVEG GIS data (USDA 2009) and then verified based on the NCE reconnaissance field survey. Vegetation types found within the survey area are typical of those found in the Lake Tahoe Basin. The APE is composed mainly of sierran mixed conifer and Jeffrey pine forest that is fragmented by urban land classification and pockets of montane chaparral and perennial grasslands (**Figure 2**). Unless otherwise noted, the descriptions below are taken from the USFS North Sierran Ecological Province Vegetation Descriptions (USDA 2008). It should be noted that vegetation community data presented **Figure 2** are intended for planning purposes at a scale of 1:24,000; therefore, although this figure is a useful tool to determine the general location and types of vegetation communities found within the project area, data cannot be interpreted on a parcel basis at this scale.

Mixed Conifer – Pine Alliance (CALVEG Code: MP, CWHR Code: SMC)
The mixed conifer – pine alliance occurs on western and eastern slopes of the Northern Sierras at elevations between 1,900 to 7,800 feet on mesic soils. It is defined by the presence of conifer species such as ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), Douglas fir (*Pseudotsuga menziesii*), white fir (*Abies concolor*), and sugar pine (*Pinus lambertiana*), and the absence or only trace amounts of Jeffrey Pine (*Pinus jeffreyi*). This alliance is the most common alliance within the APE.

Jeffrey Pine Alliance (CALVEG Code: JP, CWHR Code: JPN)
The Jeffrey pine alliance can be found in eastside northern Sierra Nevada habitats up to an elevation of about 7,300 feet. This alliance grows in xeric micro-environments on granitic outcrops or on glaciated soils such as tills and outwash deposits. It is prominent in the Sierra Valley and Carson Range Subsections on the east side of the range. This forest is tall and open and is dominated by Jeffrey pine (*Pinus jeffreyi*) with a sparse understory of chaparral or sagebrush shrubs and young trees. The understory may include white fir (*Abies concolor*), greenleaf manzanita (*Arctostaphylos patula*), mountain whitethorn (*Ceanothus cordulatus*), wax currant (*Ribes cereum*), and mountain sagebrush (*Artemisia tridentata* ssp. *vaseyana*). Lodgepole pine (*Pinus contorta* ssp. *murrayana*) can be found in areas that collect more moisture (Holland 1986). This alliance is mapped throughout the APE.

Montane Chaparral (CALVEG Code: CG, CWHR Code: MCP)
Montane chaparral within the APE characterized by Greenleaf manzanita in close proximity to the mixed conifer and Jeffrey pine alliances. Other mid-montane shrubs may be minimally present in this alliance, including deerbrush (*Ceanothus intergerrimus*), Snowbrush (*Ceanothus velutinus*), and bush chinquapin (*Chrysolepis sempervirens*). This alliance has been mapped at elevations between 5,000 to 8,800 feet.

Perennial Grasslands (CALVEG Code: HM, CWHR Code: PGS)
Perennial grasslands have been mapped sparsely in fourteen subsections of the Sierran zone at elevations between 2,000 – 9,400 feet. This type is a form of dry to moist grassland in which it is difficult to determine species composition without detailed onsite surveys. Some of these areas are currently being used for livestock pasture and are a mix of perennial and annual grasses and legumes that vary according to management practices. Perennial bunchgrasses introduced from Eurasia such as desert, tall, and intermediate wheatgrasses (*Agropyron desertorum, Elytrigia pontica, Elytrigia intermedia*), in addition to tall fescue (*Festuca arundinacea*), clover (*Trifolium* spp.), needlegrass (*Achnatherum* spp.), squirreltail

(*Elymus elymoides*), rock cress (*Arabis* spp.), monardella (*Monardella* spp.), buckwheat (*Eriogonum* spp.), cheatgrass (*Bromus tectorum*) and others generally found in northern California may be included in the mixture. Mules-ears (*Wyethia mollis*) are a typical associate towards the east. This Alliance is often associated with moist openings in Red Fir (*Abies magnifica*) forests.

Urban or Developed (CALVEG Code: UB, CWHR Code: URB)
The urban or developed category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways or city parks. Areas mapped as urban or developed exist throughout the APE but are primarily located along the roads and developed areas in the eastern portion of the APE. Furthermore, the entire APE can be described as a mix of forested vegetation within urban development.

6.0 SPECIAL STATUS SPECIES

This assessment considers the potential effects of the project on species protected under the USFWS, State of California, and TRPA that may occur in or adjacent to the APE. These species are presented in **Table 1**, which includes the name, regulatory status, habitat requirements, identification period, potential for occurrence in the APE, and survey results. This analysis was based on the literature and database reviews and the field surveys.

Based on the database research and reconnaissance-level survey, it is unlikely that the project improvements will directly impact the special status species listed below.

Modeled habitat for USFS sensitive species exists within the APE and that data is included on **Figure 3**. There are nine recorded USFS modeled habitats within the project vicinity: *Arabis rectissima* var. simulans, *Peltigera hydrothyria*, *Lewisia kelloggii*, *Botrychium* spp., *Epilobium howelii*, *Bruchia bolanderi*, *Meesia blandowii*, *Eriogonum umbellatum* var. *torreyanum*, *and Helodium blandowii.* These species were not observed within the survey area and their probability for occurrence ranges from unlikely to potential. Please refer to **Figure 3** for a visual reference and **Table 1** for more details. The eastern portion of the APE has been impacted by urbanization, existing trail systems, and ongoing disturbance caused by recreation. No special status species were observed within the survey area during the surveys.

7.0 SUMMARY

The APE represents a typical wildland/urban interface environment found within the Lake Tahoe Basin. The project encompasses 2.52 miles of trail alignment while the APE/biological survey area is approximately 39 acres. Dominant vegetation is primarily Sierran mixed conifer with Jeffrey pine and developed areas in the eastern portion of the APE.

No special status plant species were encountered in the APE during the botanical field survey and no recorded occurrences of special status plant species within the APE were found during database research. Plant species observed within the APE during the survey are listed in **Appendix A, Table 2**.

Existing disturbed areas and roads were utilized whenever possible when designing the trail alignment thereby minimizing the potential for impacts to botanical resources. Restoring eroding or degraded areas to minimize sediment and pollutants from entering Lake Tahoe will be incorporated into the trail design. The project will not change the use of the site or surrounding area.

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APPENDIX A

Tables

Table 1. Special Status Species List and Habitat.

Species	Regulatory Status				Habitat Requirements	Identification Period	Potential for Occurrence in the APE and Results of Survey
	Federal	State	TRPA	CNPS			
Arabis rectissima* var. *simulans Washoe tall rockcress	FSI				Dry, sandy, granitic or andesitic soil on mostly gentle slopes of all aspects, in full or filtered sunlight within mature, open Jeffrey pine forests. Often in areas of very light and recovered disturbances. Elevation range 6,000 to 7,400 feet.	May to July	**Potential**. USFS modeled habitat exists within the APE for this species. Not encountered.
Arabis rigidissima* var. *demota Galena Creek rockcress	FSS		SI	1B.2	Broad-leaved upland forests, upper montane coniferous forests on rocky substrates. Known in CA from only two occurrences near Martis Peak and in NV from eleven occurrences in the Carson Range. Elevation range 7,398 to 8,398 feet.	August	**Unlikely.** Outside of elevation range and site lacks suitable habitat.
Boechera tiehmii Tiehm's rockcress	FSS			1B.3	Alpine boulder and rock field (granitic). Elevation range 9,744 to 11,777 feet.	July to August	**Unlikely.** Outside of elevation range.
Botrychium ascendens Upswept moonwort	FSS			2B.3	Wet or moist soils in lower montane coniferous forests, such as along the edges of lakes and streams. Elevation range 4,950 to 6,039 feet.	Fertile early July to early September	**Unlikely.** Site lacks suitable habitat. Not encountered.
Botrychium crenulatum Scalloped moonwort	FSS			2B.2	Lower montane coniferous forests, meadows and seeps, marshes and swamps. Elevation range 4,950 to 10,800 feet.	Fronds mature June to September	**Unlikely.** Site lacks suitable habitat. Not encountered.
Botrychium lineare Slender moonwort	FSS			1B.1	Meadows and seeps in upper montane coniferous forest, often in disturbed areas. Elevation range 8,000 to 8,500 feet.	Unknown	**Unlikely.** Outside of elevation range and site lacks suitable habitat.
Botrychium lunaria Slender moonwort	FSS			2B.3	Meadows and seeps in subalpine and upper montane coniferous forest. Elevation range 6,500 to 11,200 feet.	Unknown	**Unlikely.** Outside of elevation range and site lacks suitable habitat.

Botrychium minganense Mingan moonwort	FSS			2B.2	Wet or moist soils in lower montane coniferous forests, such as along the edges of lakes and streams. Elevation range 4,950 to 6,039 feet.	Fronds mature June to September	**Unlikely.** Site lacks suitable habitat. Not encountered.
Botrychium montanum Western goblin	FSS			2B.1	Lower montane coniferous forest, meadows and swamps, upper montane coniferous forest. Elevation range 4,800 to 7,200 feet.	July to September	**Unlikely.** Site lacks suitable habitat.
Bruchia bolanderi Bolander's bruchia	FSS			4.2	Meadows in mixed conifer and subalpine communities, streams and wet meadows, from 5,577 to 9,186 feet.	Moss	**Unlikely.** Site lacks suitable habitat. Not encountered.
Carex davyi Davy's sedge				1B.3	Perennial herb that prefers subalpine and upper montane coniferous forests between 5,000 to 10,500 feet.	May to August	**Unlikely.** Site lacks suitable habitat. Not encountered.
Carex lasiocarpa Woolly-fruited sedge				2B.3	Perrennial rhizomatous herb that prefers freshwater wetland habitat including bogs, fens and marshes and swamps. Elevation range is between 5,500 to 6,900 feet.	June to July	**Unlikely.** Site lacks suitable habitat. Not encountered.
Carex limosa Mud sedge				2B.2	Perennial rhizomatous herb that prefers bogs, fens, meadows, seeps, marshes, swamps, and both lower and upper montane coniferous forests. Elevation range is between 3,900 and 8,900 feet.	June to August	**Unlikely.** Site lacks suitable habitat. Not encountered.
Draba asterophora* var. *asterophora Tahoe draba	FSS		SI	1B.2	Alpine boulder and rock fields in crevices, and open talus slopes of decomposed granite in subalpine coniferous forests. Elevation range 8,325 to 11,670 feet.	July to September	**Unlikely.** Outside of elevation range.
Draba asterophora* var. *macrocarpa Cup Lake draba			SI	1B.1	Alpine boulder and rock fields in shade of granitic rocks in subalpine coniferous forest. Elevation range 8,202 to 9,235 feet.	July to August	**Unlikely.** Outside of elevation range and site lacks suitable habitat.
Drosera anglica English sundew				2B.3	Bogs and fens, meadows and seeps. Elevation 4,265 to 7,400 feet.	June to September	**Unlikely.** Site lacks suitable habitat.
Epilobium howellii	FSS			4.3	Meadows and seeps in upper montane	July to	**Potential.** Modeled habitat occurs

Subalpine fireweed					coniferous forests. Elevation range 6,600 to 8,910 feet.	August	within APE, but site is outside of elevation range and site lacks suitable habitat. Not encountered during surveys.
Erigeron eatonii* var. *nevadincola Nevada Daisy				2B.3	Great Basin Scrub, lower montane coniferous forest, pinyon and juniper woodland. Elevation range 4,600 to 9,500 feet.	May to September	**Unlikely.** Site lacks suitable habitat.
Erigeron miser Starved daisy	FSS			1B.3	Upper montane coniferous forest on rocky substrates. Elevation Range 6,000 to 8,600 feet.	June to October	**Unlikely.** Site lacks suitable habitat.
Eriogonum umbellatum* var. *torreyanum Donner Pass buckwheat	FSS			1B.2	Volcanic and rocky soils, meadows and seeps in upper montane coniferous forest. Elevation range between 6,000 and 8,600 feet.	July to September	**Potential.** USFS modeled habitat occurs within APE. Not encountered during survey.
Glyceria grandis American manna grass				2B.3	Perennial rhizomatous herb that prefers bogs, fens, meadows, seeps, marshes, and swamps along stream banks, or lake margins. Elevation range is from 50 to 6,500 feet.	June to August	**Potential.** May occur. Not encountered.
Helodium blandowii Blandow's bog-moss	FSS			2B.3	Bogs and fens that are not too rich in iron. Elevation range 6,562 to 8,859 feet.	Moss	**Unlikely.** Site lacks suitable habitat.
Hulsea brevifolia Short-leaved hulsea	FSS			1B.2	Upper and lower montane coniferous forest on granitic or volcanic, gravelly or sandy soils. Elevation range 4,900 to 10,500 feet.	May to August	**Potential.** May occur. Not encountered.
Ivesia sericoleuca Plumas ivesia				1B.2	Great Basin Scrub, lower montane coniferous forest, meadows and seeps, vernal pools. Elevation 4,300 to 7,300 feet.	May to October	**Unlikely.** Site lacks suitable habitat.
Juncus luciensis Santa Lucia dwarf rush				1B.2	Chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools	April to July	**Unlikely.** Site lacks suitable habitat.
***Lewisia kelloggii* ssp.**	FSS			3.2	Ridge tops or flat open spaces with widely	June to July	**Potential.** May occur as it has USFS

hutchisonii Hutchison's lewisia					spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.		modeled habitat within APE; however, it was not encountered.
Lewisia kelloggii* ssp. *kelloggii Kellogg's lewisia	FSS			3.2	Ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil. Elevation range 5,000 to 7,000 feet.	June to July	**Potential.** May occur as it has USFS modeled habitat within APE; however, it was not encountered.
Lewisia longipetala Long-petaled lewisia	FSS		SI	1B.3	Alpine boulder and rock fields in subalpine coniferous forests. Elevation range 8,325 to 9,740 feet.	June to August	**Unlikely.** Outside of elevation range.
Meesia triquetra Three-ranked hump-moss	FSS			4.2	Bogs and fens, meadows and seeps in montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	**Unlikely.** Site lacks suitable habitat.
Meesia uliginosa Broad-nerved hump-moss	FSS			2B.2	Bogs and fens, meadows and seeps in montane coniferous forests. Elevation range 4,290 to 8,250 feet.	Moss	**Unlikely.** Site lacks suitable habitat.
Peltigera hydrothyria Veined water lichen	FSS				Mixed coniferous forests, bogs, fens, wet meadows, seeps, and clear, cold streams. Elevation range 4,000 to 8,000 feet.	Lichen	**Unlikely.** Site lacks suitable habitat. Not encountered.
Potamogeton epihydrus *Nuttall's ribbon-leaved pondweed*				2B.2	Shallow freshwater marshes and swamps. Elevation range 1,210 to 7,200 feet.	May to August	**Unlikely.** Site lacks suitable habitat.
Potamogeton robbinsii *Robbins' pondweed*				2B.3	This perennial rhizomatous herb prefers marshes and swamps (deep water, lakes). Elevation range 5,000 to 8,530 feet.	July to August	**Unlikely.** Site lacks suitable habitat.
Rhamnus alnifolia Alder buckthorn				2B.2	Lower montane coniferous forest, meadows and seeps, riparian scrub, upper montane coniferous forest. Elevation 4,500 to 7,000 feet.	May to July	**Unlikely.** Site lacks suitable habitat.
Rorippa subumbellata	FSS		SI	1B.1/ SE	Shoreline supporting decomposed granitic soils; known only from the shoreline of Lake	Blooms May to	**Unlikely.** Outside of elevation range and site lacks suitable habitat.

Tahoe yellow cress					Tahoe. Elevation range 6,210 to 6,230 feet.	September	
Scutellaria galericulata Marsh skullcap				2B.2	Perennial rhizomatous herb that prefers lower montane coniferous forests, meadows, seeps, marshes, and swamps. Elevation range from 0 to 6,800 feet.	June to September	**Unlikely.** Site lacks suitable habitat.
Sidalcea multifida Cut-leaf checkerbloom				2B.3	Great Basin scrub, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland. Elevation range from 5,700 to 9,200 feet.	May to September	**Unlikely.** Site lacks suitable habitat
Sphaeralcea munroana Munro's desert mallow				2B.2	Great basin scrub. Elevation range from 6,500 to 6,600	May to June	**Unlikely.** Site lacks suitable habitat.
Stuckenia filiformis Slender-leaved pondweed				2B.2	Perennial rhizomatous herb that prefers marshes, swamps, and a variety of shallow freshwater habitats. Elevation range from 980 to 7,000 feet.	May to July	**Unlikely.** Site lacks suitable habitat.

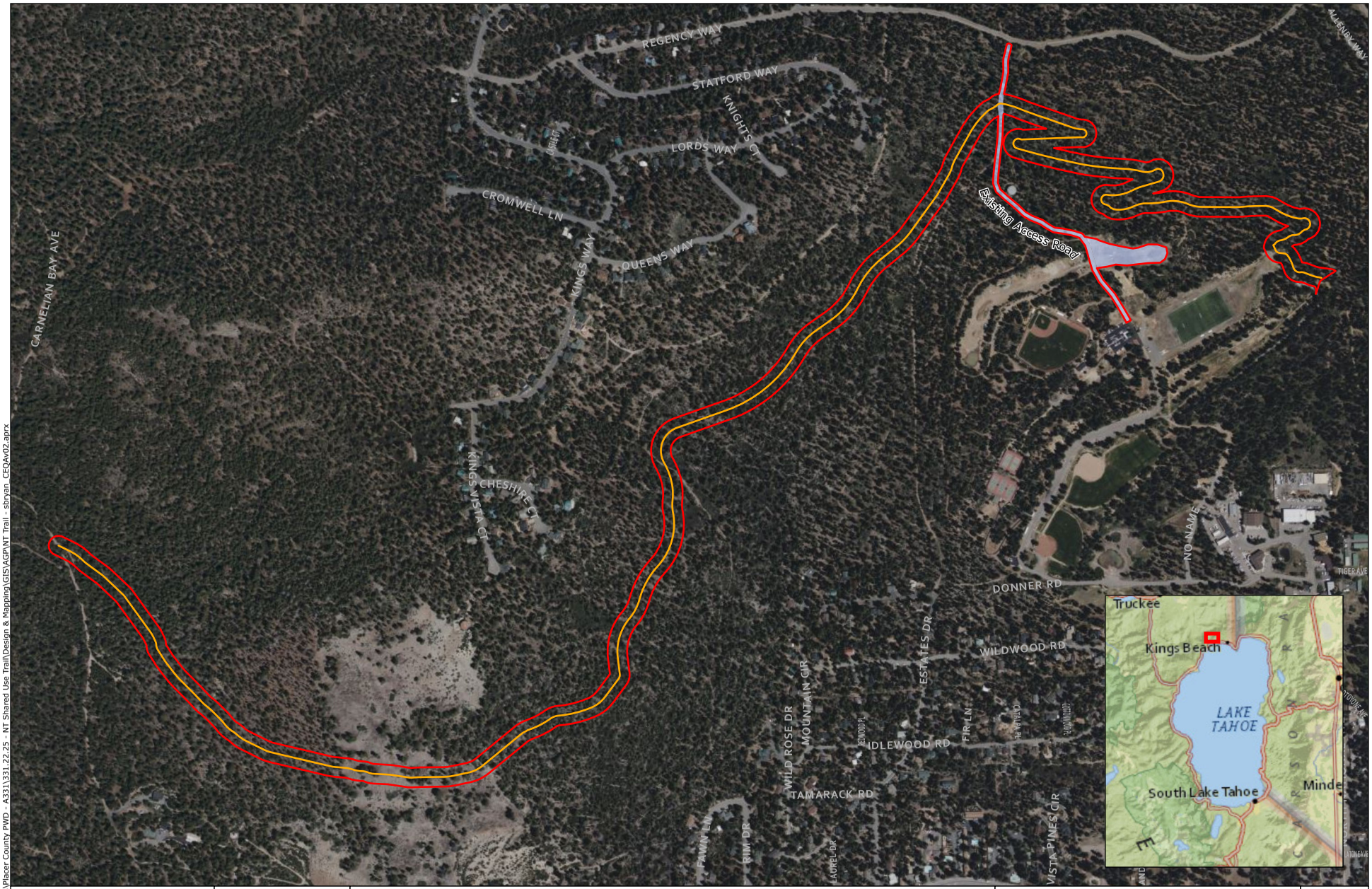
Federally Listed Species (Federal): FE = Federally Endangered FT = Federally Threatened FD = Federally Delisted PT = Proposed Threatened FCE = Federally Endangered Candidate FPD = Proposed for Delisting	US Forest Service LTBMU (Federal): FSS = Forest Service LTBMU Sensitive FSI = Forest Service LTBMU Species of Interest California State Listed Species (CA): SE = State Endangered ST = State Threatened SR = State Rare SC = State Candidate	California Native Plant Society (CNPS) List Categories: 1 = Rare in California and elsewhere 2 = Rare in California, but not elsewhere A = Presumed extirpated or extinct B = Rare, threatened, or endangered 3 = Plants about which we need more information 4 = Plants of limited distribution
	Tahoe Regional Planning Agency (TRPA): SI = TRPA Special Interest Species	CNPS Threat Code Extensions: .1 = Seriously endangered in California (Over 80% of occurrences threatened) .2 = Fairly endangered in California (20-80% occurrences threatened) .3 = Not very endangered in California (<20% of occurrences threatened)

Table 2. Plant Species Identified Within Biological Survey Area, August 2019, July 2020		
Scientific Name	**Common Name**	**Native: Y, N**
Achillea millefolium	Yarrow	Y
Abies concolor	White fir	Y
Agrostis oregonensis	Oregon bentgrass	Y
Arctostaphylos patula	Green leaf manzanita	Y
Artemesia tridentata	Sagebrush	Y
Boechera rectissima var. *rectissima*	Bristly leaf rockcress	Y
Bromus tectorum	Cheatgrass	N
Calocedrus decurrens	Incense Cedar	Y
Carex athrostachya	Slender beak sedge	Y
Carex rossii	Ross sedge	Y
Ceanothus prostrates	Pinemat	Y
Ceanothus velutinus	Tobacco brush	Y
Cercocarpus betuloides	Mountain mahogany	Y
Chaenactis douglasii	Chaenactis	Y
Chrysolepis sempervirens	Sierra chinquapin	Y
Dactylis glomerata	Orchard grass	N
Elymus elymoides	Squirrel tail grass	Y
Elymus glaucus	Blue wildrye	Y
Elymus repens	Quack grass	N
Epilobium minutum	Minute willowherb	Y
Eriogonum nudum	Naked buckwheat	Y
Eriogonum umbellatum	Many flowered buckwheat	Y
Galium bifolium	Low mountain bedstraw	Y
Gayophytum diffusum	Spreading groundsmoke	Y
Juncus sp.	Rush	Y
Keckiella lemmonii	Bush beardtongue	Y
Lepidium latifolium	Perennial Pepperweed	N
Linium lewisii	Lewis' flax	Y
Lotus cornicalatus	Bird's foot trefoil	N
Penstemon roezlii	Regel's mountain penstemon	Y
Pinus jeffreyi	Jeffrey pine	Y
Pinus lambertiana	Sugar pine	Y
Populus tremuloides	Quaking aspen	Y
Potentilla recta	Sulpher cinquefoil	N
Prunus emarginata	Bitter cherry	Y
Pterospora andromedea	Pine drops	Y
Purshia tridentata	Antelope bush	Y
Pyrola picta	White veined shinleaf	Y
Quercus vacciniifolia	Huckleberry oak	Y

Ribes cereum	Wax currant	Y
Rosa woodsii	Woods' rose	Y
Rumex crispus	Curly dock	N
Salix lasiolepis	Arroyo willow	Y
Stipa occidentalis	Western needle grass	Y
Sumphoricarpos albus	Common snowberry	Y

APPENDIX B

Figures



Legend

- APE (Area of Potential Effect)
- Trail Alignment
- Construction Access and Staging

North Tahoe Shared-Use Trail - Segment 1

Project Area Map

N

1in = 1,000ft

0 500 1,000 ft.

FIGURE 1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap; NCE 2021	331.22.25	mcasterman/drios	7/10/20	11/4/2021	drios

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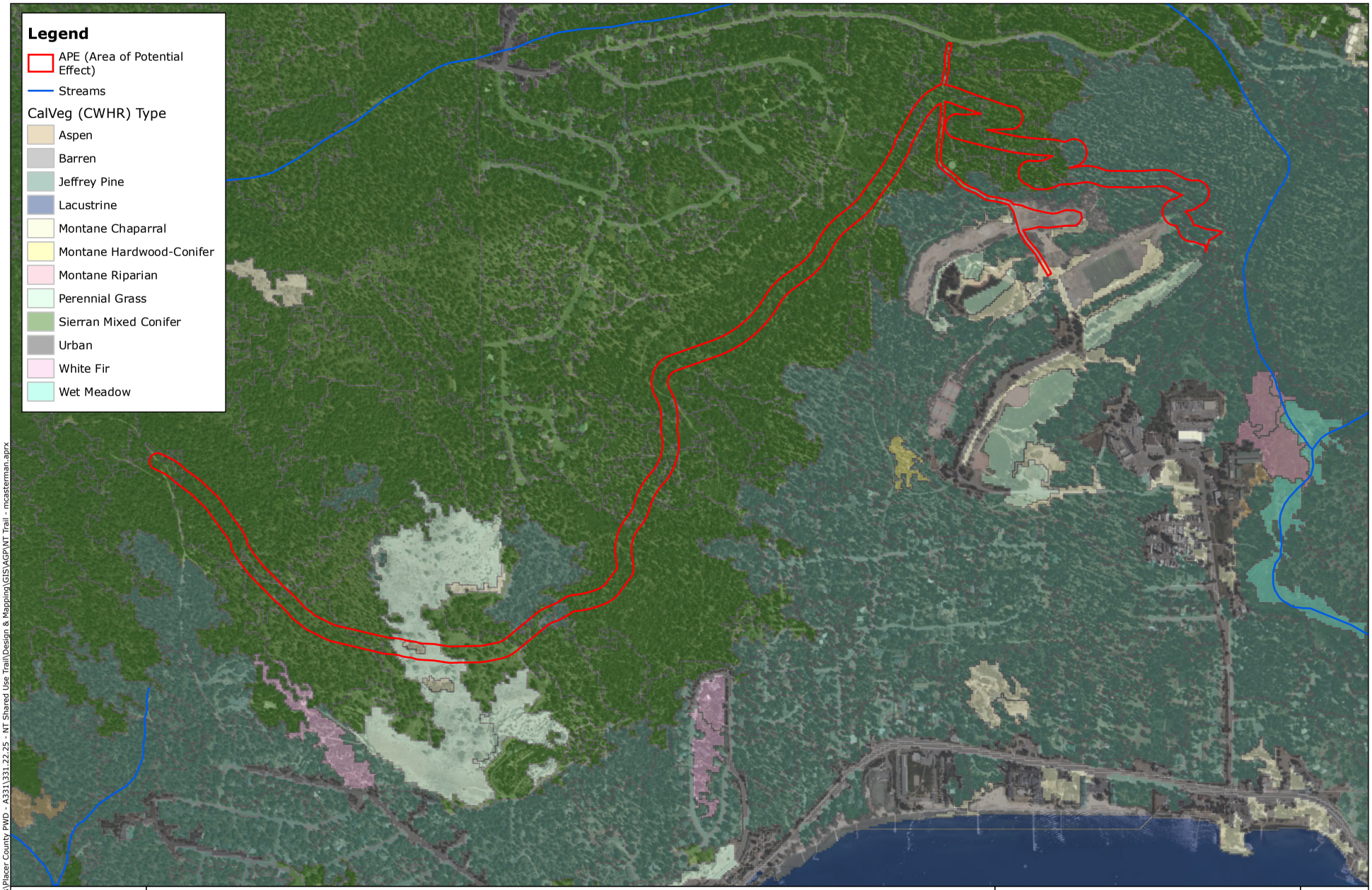

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NCE

North Tahoe Shared Use Trail

Vegetation Communities Map

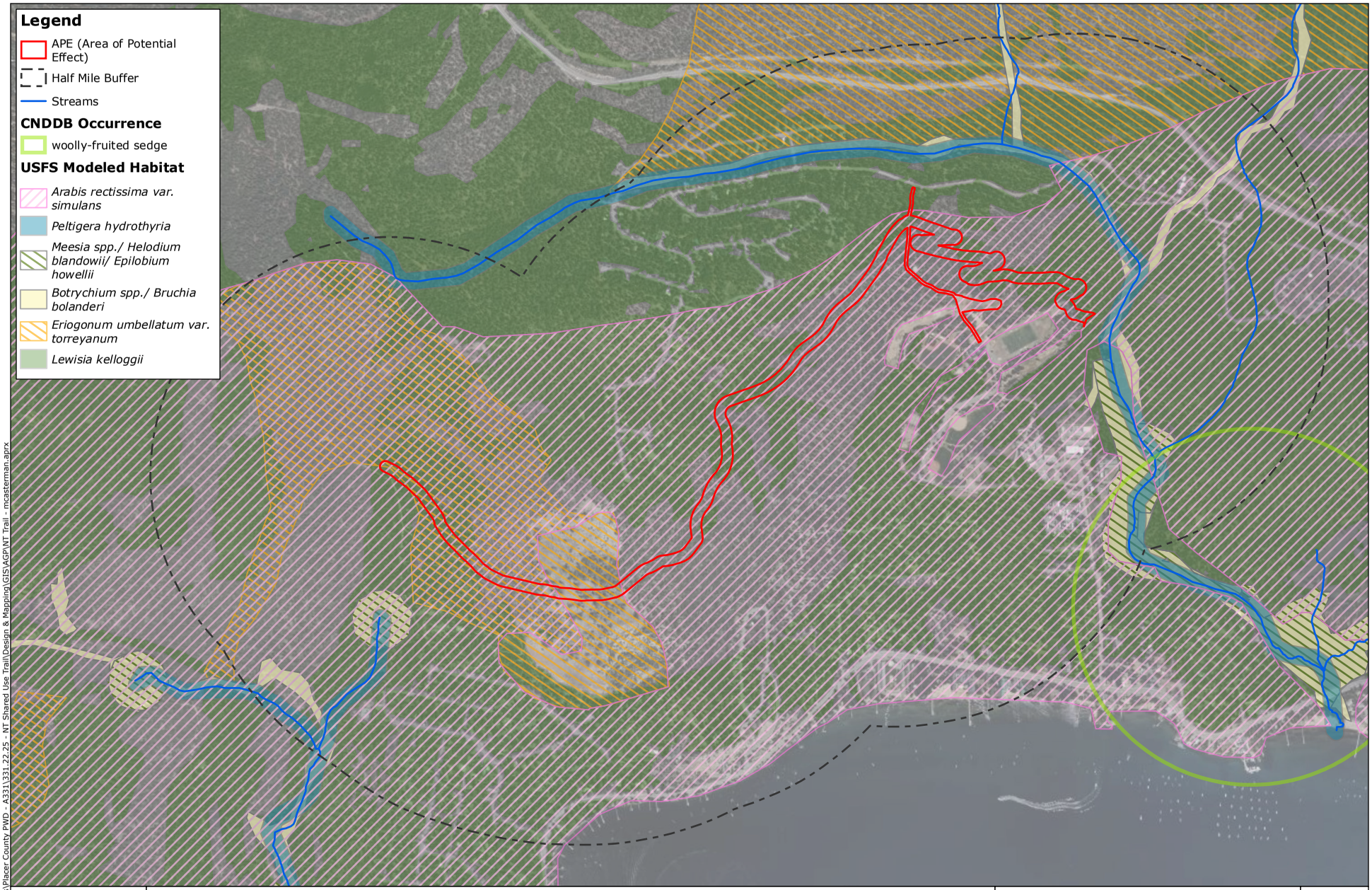
N

1in = 1,000ft

0 500 1,000 ft.

FIGURE 2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap, CDFW	331.22.25	mcasterman	7/15/20	10/28/21	drios



North Tahoe Shared Use Trail

Vegetation Basemap

N

1in = 1,500ft

0 750 1,500 ft.

FIGURE 3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap, TRPA, CNDDB, USFS	331.22.25	mcasterman	7/15/20	10/28/21	drios

Document Path: P:\Active Projects\Placer County PWD - A331\331.22.25 - NT Shared Use Trail\Design & Mapping\GIS\AGP\NT Trail - mcasterman.aprx