Appendix C
Biological Resources Assessment

Dudek 2022

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MEMORANDUM

To:	Eric Martin, District Engineer, Northstar Community Services District
From:	Allie Sennett, Dudek
Subject:	Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project in Placer County, California
Date:	March 8, 2022 (updated January 23, 2023)
cc:	Mike Henry, Dudek
Attachment(s):	Figures 1-6 A - Photo Log B - Database Queries

1 Introduction

This report presents the results of a biological resources assessment conducted by Dudek for the Northstar Community Services District Wood Energy System Project (project) in Placer County, California. The purpose of this assessment was to identify and evaluate biological resource issues and potential constraints to future development posed by such resources, including potential permitting and regulatory requirements. This memorandum includes: a description of the methods used to conduct the assessment; a description of existing habitat conditions on the site; and an analysis of special-status plant and wildlife species and other sensitive biological resources potentially present, including aquatic resources and sensitive natural communities.

The proposed project involves demolishing an existing building near the Northstar Fire Department station and constructing a wood energy utility facility and pipeline to distribute heat to buildings in the Village at Northstar. The project site is located southwest of State Route (SR) 267 and on the north side of North Star Drive within the community of North Star (*Figure 1, Project Location*). The site is situated in Township 17 North, Range 17 East, Section 32 of the U.S. Geological Survey Martis Peak, California 7.5-minute quadrangle. The approximate center of the project site corresponds to 39.281271° north and -120.119848° west (decimal degrees). The biological study area analyzed herein is 5.33 acres and consists of all potential areas of ground disturbance, including a 30-foot wide corridor approximately centered on the proposed pipeline alignment (*Figure 2, Project Site*).

2 Methods

Dudek searched the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife Service (USFWS) Inventory for Planning and Consultation (IPaC) database, and California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants data for records of special-status species occurrences in the vicinity of the project site.

Dudek biologist Allie Sennett conducted a general reconnaissance survey of the project site on December 8, 2021. The purpose of the survey was to assess current conditions and evaluate the potential for the project site to support sensitive natural communities, special-status plant and wildlife species, and jurisdictional aquatic resources.

3 Results

Site Description

The 5.33-acre biological study area encompassing the project site is located within the northern high Sierra Nevada. Elevation on the project site ranges from approximately 6,200 to 6,380 feet above mean sea level. Topography consists of moderately sloping valleys and hillsides. The region surrounding the project site receives approximately 30 inches of precipitation and 8 inches of snowfall annually. Average temperatures range from approximate 28 to 60 degrees Fahrenheit (WRCC 2021).

Soils and Hydrology

There are four soil types mapped on the project site: Fugawee-Tahoma complex, 2 to 30 percent slopes; Jorge very stony sandy loam, 30 to 50 percent slopes; Jorge-Cryumbrepts, wet-Tahoma complex, 2 to 30 percent slopes; and Jorge-Tahoma complex, 2 to 30 percent slopes (USDA 2021a) (*Figure 3, Project Soils*). The Jorge-Tahoma complex is the only hydric soil[1] onsite; however, this mapping unit is limited to hardscape and landscaped areas within The Village at Northstar (USDA 2021b).

The project site is located within the Truckee River and Prosser Creek watershed, which drains approximately 195 square miles in Placer and Nevada counties (Hydrological Unit Code 1605010202). The USFWS National Wetlands Inventory identifies two aquatic resources on or adjacent to the project site: one freshwater pond at the northern extent of the project site and one freshwater forested/shrub wetland near the southeastern extent of the site (USFWS 2021) (*Figure 4, Hydrologic Setting*). According to Federal Emergency Management Agency (FEMA) Flood Zone data, the project site is not within a 100-year floodplain (FEMA 2021). Surface run-off on the project site is generally directed to constructed roadside ditches and other stormwater conveyance systems, as well as one tributary to West Martis Creek at the southeastern extent of the project site.

Vegetation Communities and Land Cover Types

The project site consists of three vegetation communities or other land cover types (in order of dominance onsite): developed, mixed coniferous forest, and riparian scrub adjacent to a perennial pond and an unnamed tributary to West Martis Creek (*Figure 5a and 5b, Field-Verified Land Covers*). Representative photos of each vegetation community or land cover type are included in Attachment A.

The developed land cover is the dominant land cover mapped on the project site. This land cover includes a mix of hardscaped and landscaped areas, including Northstar Drive, paved driveways, parking lots, buildings, and disturbed road shoulders.

[1] Hydric soils are often associated with aquatic resources, such as wetlands, streams, and floodplains.

Mixed conifer forest is uncommon and limited to the undeveloped uplands on either side of the perennial creek in the southeastern portion of the project site. This vegetation community is dominated by Jeffrey pine (*Pinus jeffreyi*) and white fir (*Abies concolor*), with a lesser abundance of lodgepole pine (*Pinus contorta*) and western white pine (*Pinus monticola*). Shrubs are generally sparse to absent in this community, and the herbaceous layer is variable, with areas supporting annual grasses or little to no vegetation where the pine duff layer is thick below the canopy.

Riparian scrub was observed growing along the perennial pond and southeast bank of the perennial creek on the project site. Near the perennial creek, this natural community occurs south of a metal fence that spans the creek and was not accessible during the survey. Other riparian vegetation is present occasionally along the banks of the creek, but there is no defined riparian corridor associated with the creek at this location. Riparian vegetation in this community includes willow (*Salix* sp.), thinleaf alder (*Alnus incana* ssp. *tenuifolia*), Sierra gooseberry (*Ribes roezlii*), and Bolander's sedge (*Carex bolanderi*).

Jurisdictional Aquatic Resources

Dudek documented one perennial creek (tributary to West Martis Creek) and two upland ditches on the project site, as well as one perennial pond adjacent to the project site (*Figure 5a and 5b, Field-Verified Land Cover*). Of these features, the perennial pond and creek are anticipated to meet the criteria to be considered jurisdictional aquatic resources under federal and state jurisdiction. Ditches that do not carry relatively permanent flows and are excavated in uplands for the purpose of diverting run-off from dry or developed land are not considered jurisdictional waters of the U.S. [33 CFR 328.3(b)(3)(i)]. Findings with regard to federal jurisdiction are preliminary until verified by the Sacramento District of the U.S. Army Corps of Engineers (USACE).

Special-Status Plant and Wildlife Resources

Special-Status Plants

Results of the CNDDB, IPaC, and CNPS searches identified 25 special-status plant species that are known to occur in the project site region, including 9 plant species documented within 5 miles of the site (*Figure 6, CNDDB Occurrences*). The perennial pond could support special-status wetland plants, such as woolly-fruited sedge (*Carex lasiocarpa*), but potentially suitable habitat associated with this feature (i.e., exposed pond margins) is limited and located outside of the project site. Therefore, all of the 25 plant species were determined to have a low potential to occur or are not expected to occur due to the lack of suitable habitat within the project site, the lack of documented occurrences near the project site, and/or the site being outside of the species' known geographic or elevation range; these species are identified in Attachment B, but not addressed further in this report.

Special-Status Wildlife

Results of the CNDDB and IPaC searches identified 17 special-status wildlife species that are known to occur in the project site region, including 10 wildlife species documented within 5 miles of the site (*Figure 6, CNDDB Occurrences*). All of the 17 wildlife species were determined to have a low potential to occur or are not expected to occur due to the lack of suitable habitat or the presence of very low quality habitat within or adjacent to the project site, the lack of documented occurrences near the project site, and/or the site being outside of the species' known geographic range; these species are identified in Attachment B, but not addressed further in this report.

Nesting Birds and Raptors

The project site provides suitable nesting habitat for numerous local and migratory bird or raptor species protected by the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CDFG). Specifically, shrubs, open habitat, and human-made structures and buildings on the project site provide suitable nesting habitat. Multiple common bird species were detected during the field survey. No active or inactive bird nests were observed, but a focused survey for nests was not conducted. Additionally, the survey took place outside of the bird breeding season, when nests are typically unused in the project site region.

4 Conclusions

The following biological resource constraints have been identified on or adjacent to the project site: jurisdictional aquatic resources (i.e., pond and tributary to West Martis Creek) and nesting birds and raptors.

Jurisdictional Aquatic Resources

Dudek documented one perennial creek and two upland ditches on the project site, as well as one perennial pond with riparian vegetation adjacent to the site. Of these, the pond and creek are anticipated to meet the criteria to be considered jurisdictional aquatic resources subject to federal and state regulation, and riparian vegetation is subject to state jurisdiction. Ditches that do not carry relatively permanent flows and are excavated in uplands for the purpose of diverting run-off from dry or developed land are not considered jurisdictional waters of the U.S. [33 CFR 328.3(b)(3)(i)]. Findings with regard to federal jurisdiction are preliminary until verified by the Sacramento District of the USACE.

The perennial pond is located at least 25 feet from the proposed limits of disturbance. Dudek understands that current project design does not propose direct impacts to the pond or adjacent riparian vegetation. However, indirect impacts to the pond and adjacent riparian vegetation would be considered a significant impact under CEQA and could occur if ground disturbance is proposed uphill of or in close proximity to these resources. Dudek recommends installing exclusion fencing, flagging, or similar between the pond/riparian vegetation and the limits of disturbance during construction. Appropriate best management practices, such erosion control and spill prevention measures should also be implemented at this location during construction.

Dudek recommends that eventual project implementation avoid impacts to the perennial creek where possible. Impacts to jurisdictional aquatic resources would be considered a significant impact under CEQA and would also require aquatic resource permits from the USACE, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife, as well as a Preliminary or Approved Jurisdictional Delineation from the USACE to verify aquatic resources mapped onsite within federal jurisdiction. In addition, compensatory mitigation, such as purchasing mitigation credits from an agency-approved mitigation bank or paying an agency-approved in-lieu fee, may be required for permanent impacts to aquatic resources to ensure no net loss of these resources.

Nesting Birds and Raptors

Eventual project implementation has the potential to impact nesting birds and raptors protected by the federal MBTA and CFGC. To avoid impacting active nests, Dudek recommends conducting ground-disturbance outside of the nesting season (September through March). If not feasible, Dudek recommends implementing the following measures to avoid or minimize impacts to nesting birds.

- A qualified biologist shall conduct a pre-construction survey for nesting birds no more than two days prior to any vegetation or structure removal or ground-disturbing activities conducted during the nesting season (March through August). The survey should cover the limits of construction and suitable nesting habitat within 500 feet for raptors and 100 feet for other nesting birds, as feasible and accessible.
- If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance buffer from the active nest. The buffer distance will typically range from 50 to 500 feet, and should be determined based on factors such as the species of bird, topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule. Limits of construction to avoid active nests should be established in the field with flagging, fencing, or other appropriate barriers and should be maintained until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist.
- If vegetation removal activities are delayed, additional nest surveys should be conducted such that no more than 7 days elapse between the survey and vegetation removal activities.
- If an active nest is identified in or adjacent to the construction zone after construction has started, work in the vicinity of the nest should be halted until the qualified biologist can provide appropriate avoidance and minimization measures to ensure that the nest is not disturbed by construction. Appropriate measures may include a no-disturbance buffer until the birds have fledged and/or full-time monitoring by a qualified biologist during construction activities conducted near the nest.

5 References

FEMA (Federal Emergency Management Agency). FEMA's National Flood Hazard Layer (NFHL) Viewer. Accessed December 2021. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html.

USDA. 2021a. Web Soil Survey for Placer County. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed December 2021. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USDA. 2021b. List of Hydric Soils. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed December 2021. https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/.

USFWS. 2021. “The National Wetlands Inventory.” Accessed December 2021. fws.gov/wetlands/NWI/index.html.

Western Regional Climate Center (WRCC). 2021. Truckee RS, California (049043). Monthly Climate Summary. Accessed December 2021. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9043.

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Figures 1-6

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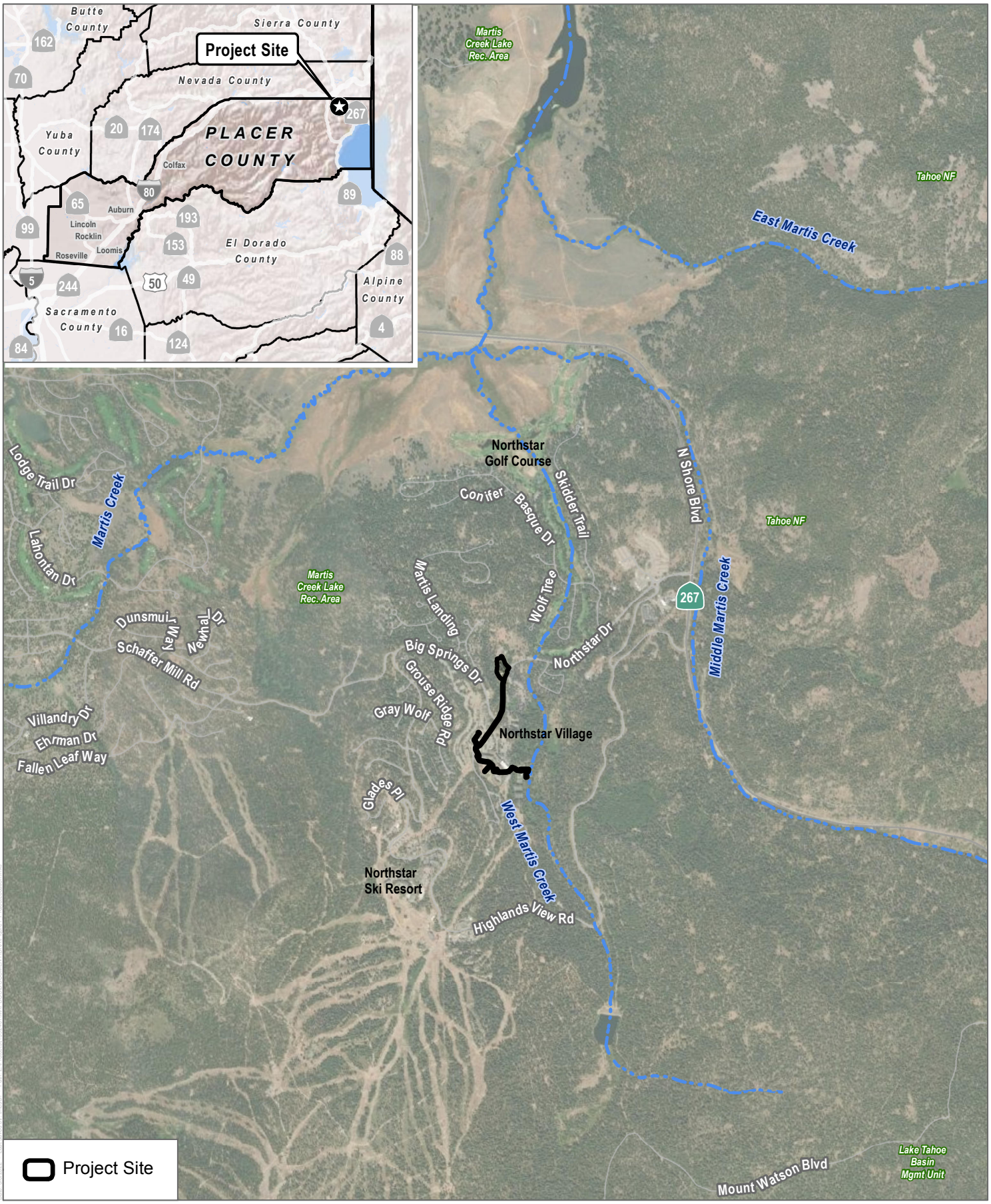

SOURCE: ESRI Imagery 2021, Open Street Map 2019

DUDEK

0 1,500 3,000 Feet

FIGURE 1

Project Location

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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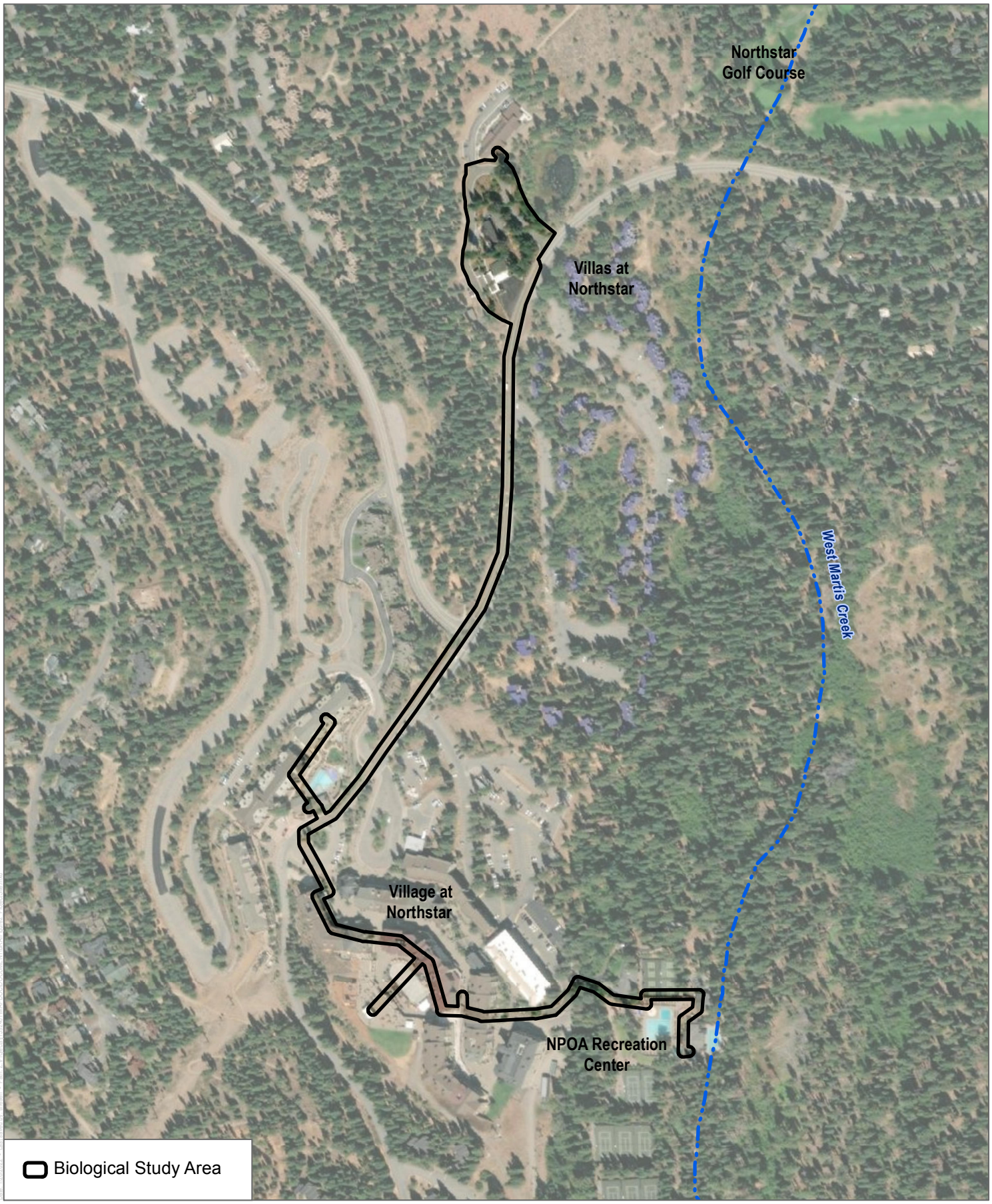

SOURCE: ESRI Imagery 2021, Open Street Map 2019

DUDEK

0 200 400 Feet

FIGURE 2

Project Site

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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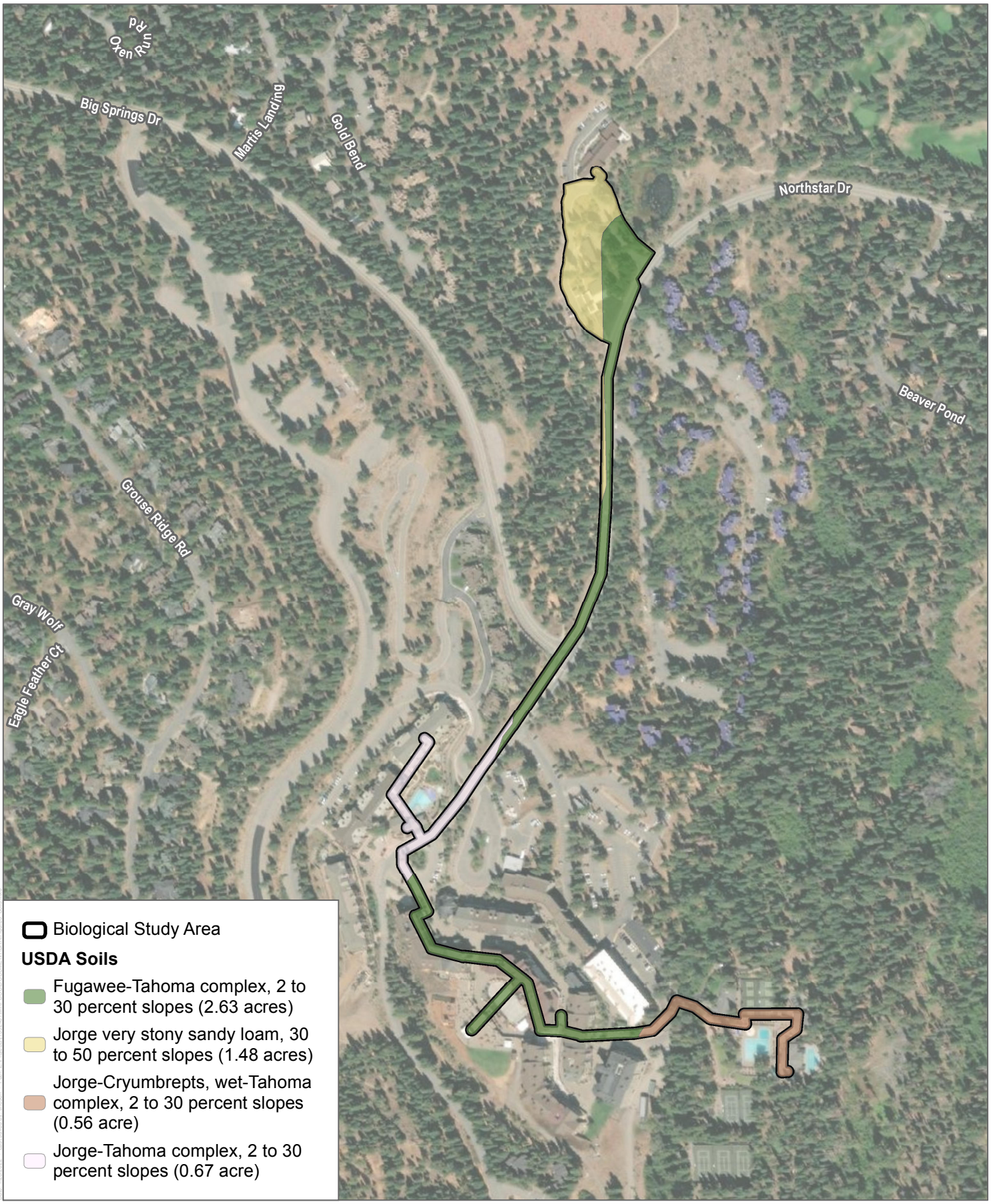

SOURCE: ESRI Imagery 2021, Open Street Map 2019, USDA 2009

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FIGURE 3

Project Soils

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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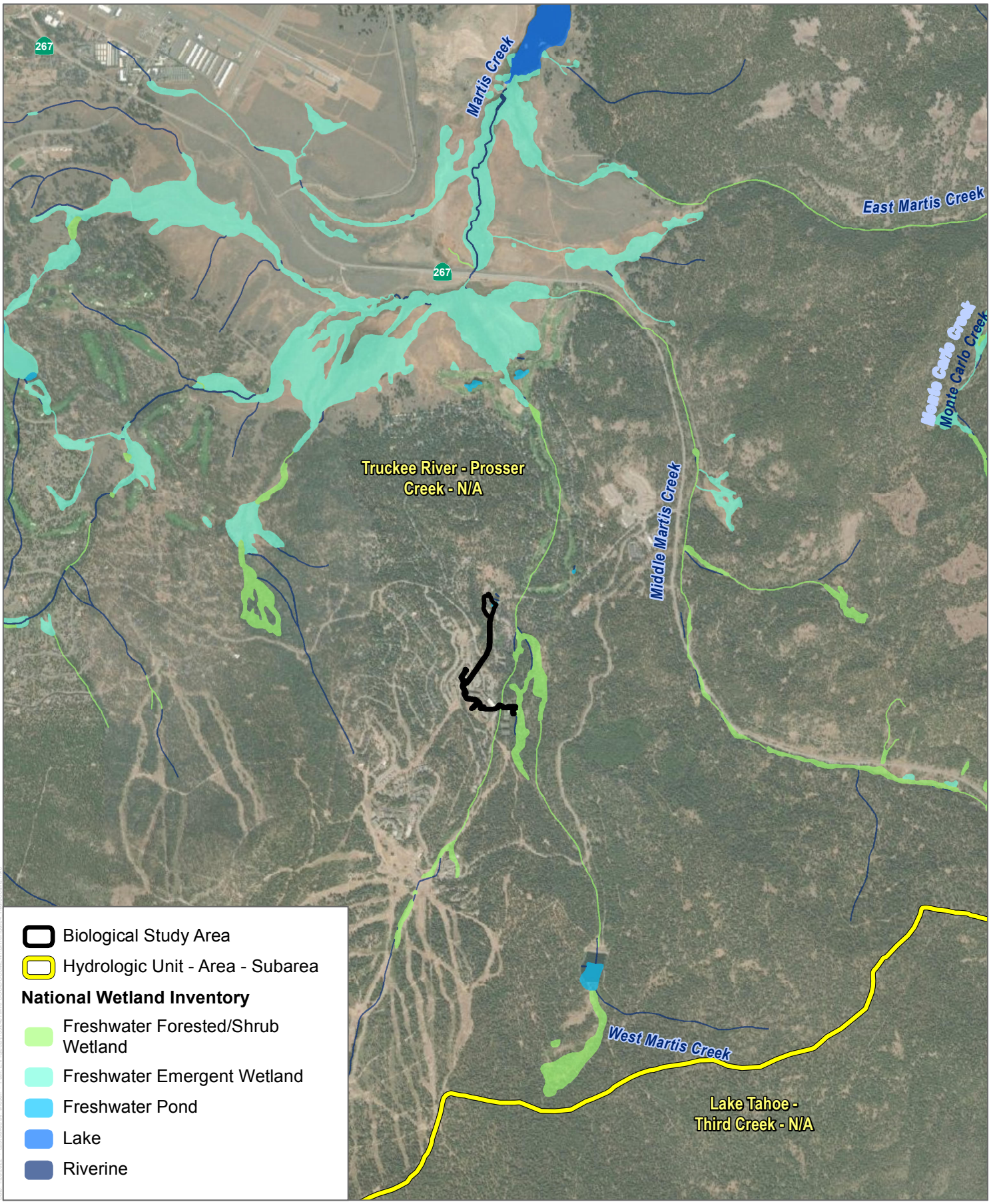

SOURCE: ESRI Imagery 2021, USFWS 2019, USGS 2019

DUDEK

0 1,500 3,000 Feet

FIGURE 4

Hydrologic Setting

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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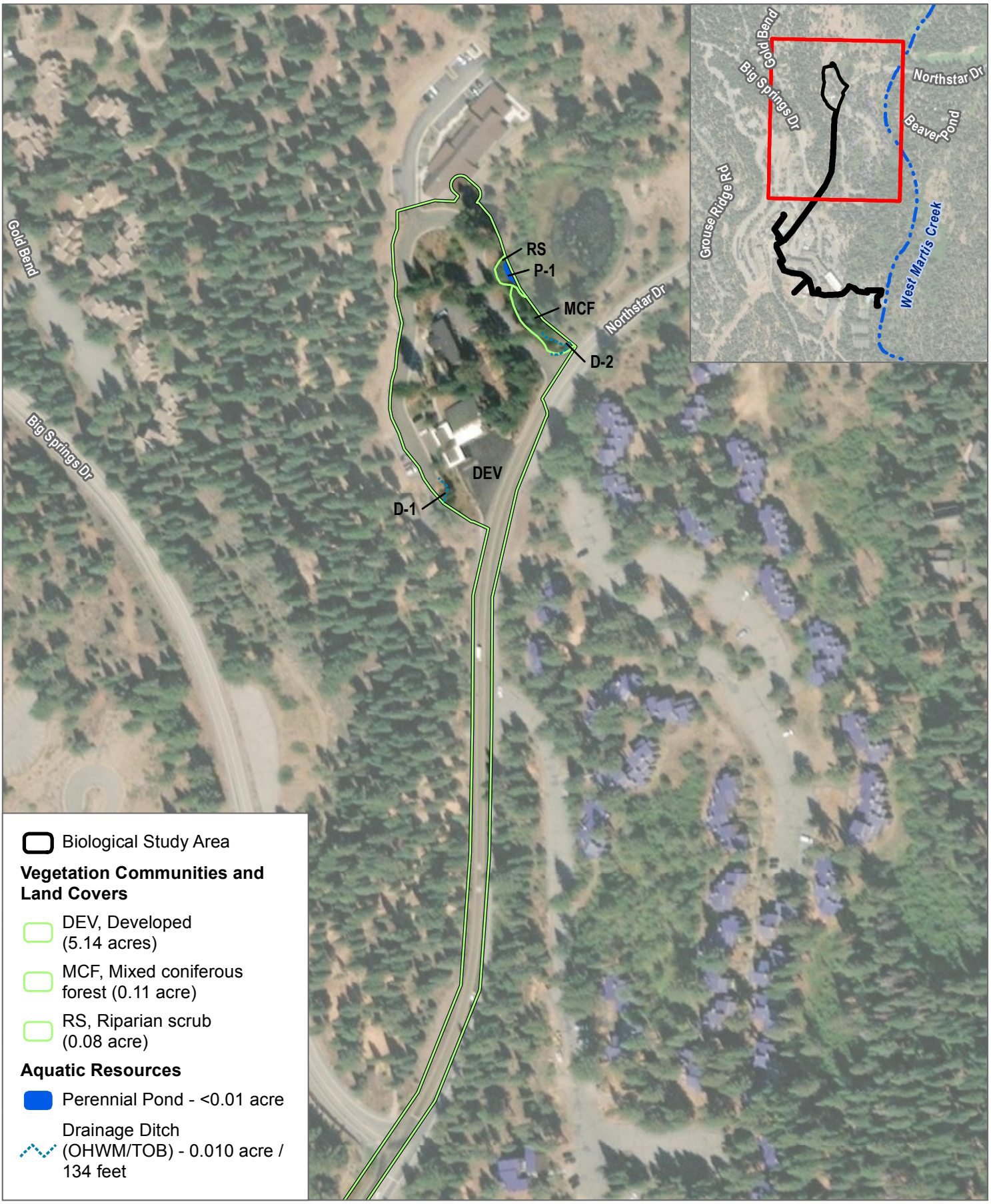

SOURCE: ESRI Imagery 2021, Open Street Map 2019

DUDEK

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FIGURE 5A

Field-Verified Land Covers

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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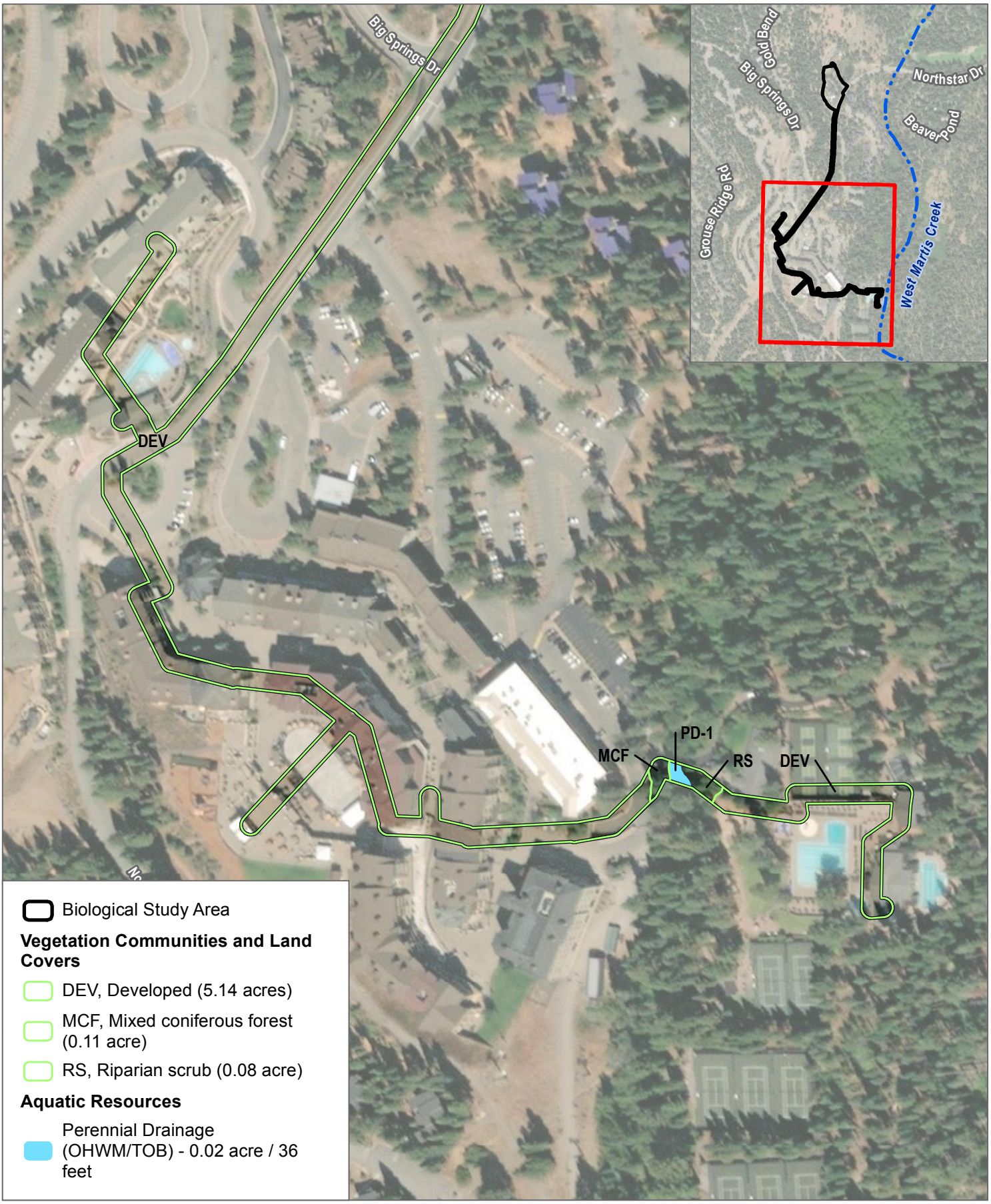

SOURCE: ESRI Imagery 2021, Open Street Map 2019

DUDEK

0 100 200 Feet

FIGURE 5B

Field-Verified Land Covers

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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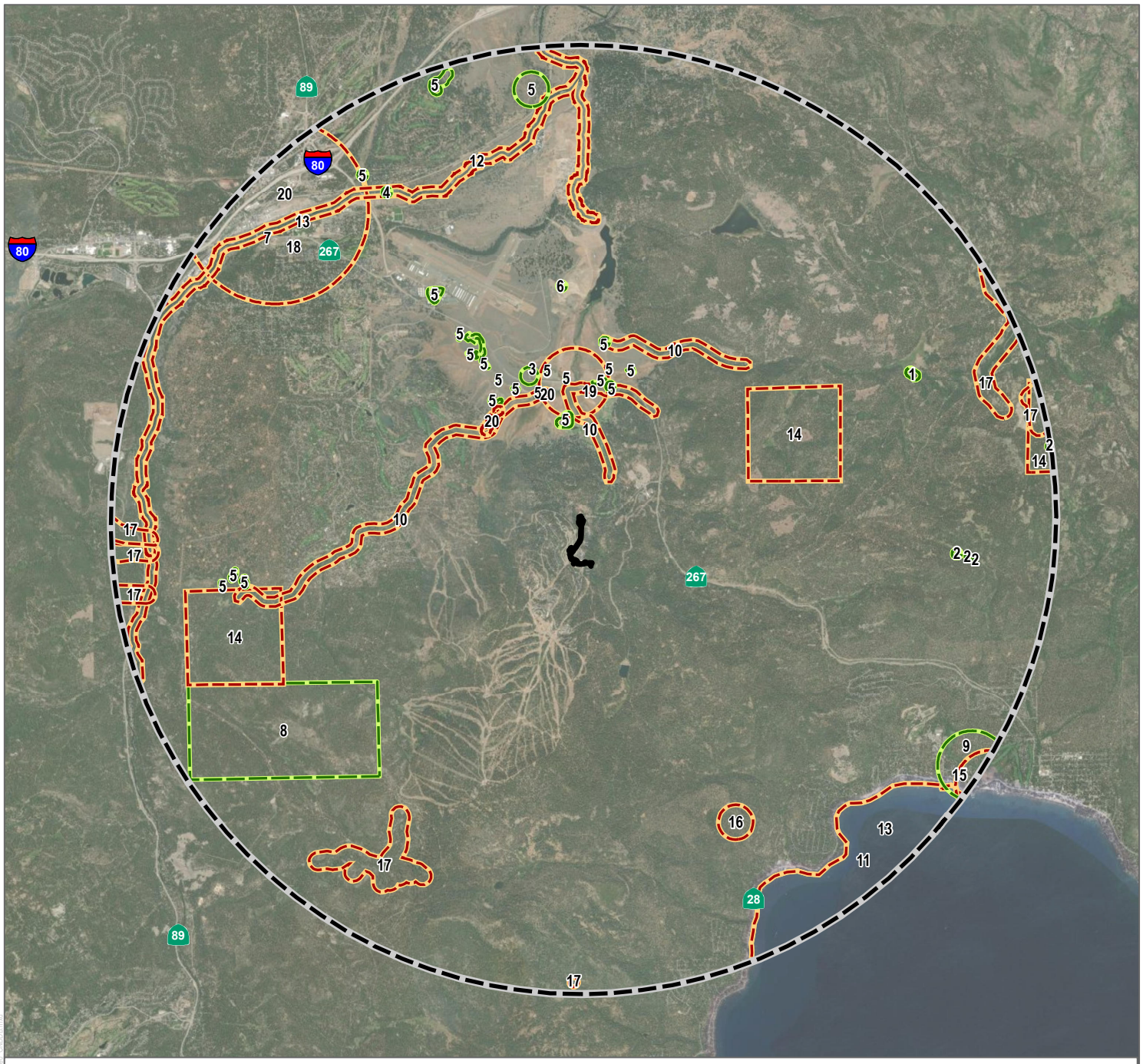

SOURCE: ESRI Imagery 2021, CDFW 2021

DUDEK

0 0.75 1.5 Miles

FIGURE 6

CNDDB Occurrences

Biological Resources Assessment for the Northstar Community Services District Wood Energy System Project

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Attachment A

Photo Log

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Photo 1. View facing southeast at an upland ditch near the northern extent of the project site.

Photo 2. View of managed forest habitat just east of the North Star Fire Station.

Photo 3. View facing northwest at an upland ditch located northeast of the North Star Fire Station.

Photo 4. View facing south near the intersection of North Star Drive and Big Springs Drive.

Photo 5. View facing south at mixed coniferous forest habitat both sides a perennial creek near the southern extent of the project site.

Photo 6. View facing northeast at two pedestrian bridges spanning a perennial creek near the southern extent of the project site.

Photo 7. View facing south at the perennial creek upstream of the pedestrian bridges and fence.

Photo 8. View facing north at the perennial creek downstream of the pedestrian bridges.

Attachment B

Database Queries

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Mt. Rose NW (3911948) OR Mt. Rose (3911938) OR Marlette Lake (3911928) OR Hobart Mills (3912042) OR Boca (3912041) OR Kings Beach (3912021) OR Martis Peak (3912031) OR Tahoe City (3912022))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Ambystoma macrodactylum sigillatum southern long-toed salamander	AAAAA01085	None	None	G5T4	S3	SSC
Antigone canadensis tabida greater sandhill crane	ABNMK01014	None	Threatened	G5T5	S2	FP
Aplodontia rufa californica Sierra Nevada mountain beaver	AMAFA01013	None	None	G5T3T4	S2S3	SSC
Arabis rigidissima var. demota Galena Creek rockcress	PDBRA061R1	None	None	G3T3Q	S1	1B.2
Artemisia tripartita ssp. tripartita threetip sagebrush	PDAST0S1S2	None	None	G5T4T5	S2	2B.3
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Botrychium ascendens upswept moonwort	PPOPH010S0	None	None	G3	S2	2B.3
Botrychium crenulatum scalloped moonwort	PPOPH010L0	None	None	G4	S3	2B.2
Botrychium lunaria common moonwort	PPOPH01080	None	None	G5	S2	2B.3
Botrychium minganense Mingan moonwort	PPOPH010R0	None	None	G5	S3	2B.2
Capnia lacustra Lake Tahoe benthic stonefly	IIPLE03200	None	None	G1	S1	
Carex davyi Davy's sedge	PMCYP033H0	None	None	G3	S3	1B.3
Carex lasiocarpa woolly-fruited sedge	PMCYP03720	None	None	G5	S2	2B.3
Carex limosa mud sedge	PMCYP037K0	None	None	G5	S3	2B.2
Catostomus lahontan Lahontan mountain sucker	AFCJC02330	None	None	GNR	S2	SSC
Cryptochia excella Kings Canyon cryptochian caddisfly	IITRI11010	None	None	G1G2	S1S2	
Desmona bethula amphibious caddisfly	IITRI77010	None	None	G2G3	S2S3	
Drosera anglica English sundew	PDDRO02010	None	None	G5	S2	2B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ecclisomyia bilera Kings Creek ecclysomyian caddisfly	IITRI12010	None	None	G1G2	S1S2	
Empidonax traillii willow flycatcher	ABPAE33040	None	Endangered	G5	S1S2	
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eriogonum umbellatum var. torreyanum Donner Pass buckwheat	PDPGN086U9	None	None	G5T2	S2	1B.2
Fen Fen	CTT51200CA	None	None	G2	S1.2	
Glyceria grandis American manna grass	PMPOA2Y080	None	None	G5	S3	2B.3
Goeracea oregona Sagehen Creek goeracean caddisfly	IITRI0X010	None	None	G3	S1S2	
Great Basin Cutthroat Trout/Paiute Sculpin Stream Great Basin Cutthroat Trout/Paiute Sculpin Stream	CARC2320CA	None	None	GNR	SNR	
Great Basin Sucker/Dace/Redside Stream With Cutthroat Trout Great Basin Sucker/Dace/Redside Stream With Cutthroat Trout	CARC2331CA	None	None	GNR	SNR	
Gulo gulo wolverine	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Helisoma newberryi Great Basin rams-horn	IMGASM6020	None	None	G1	S1S2	
Ivesia sericoleuca Plumas ivesia	PDROS0X0K0	None	None	G2	S2	1B.2
Juncus luciensis Santa Lucia dwarf rush	PMJUN013J0	None	None	G3	S3	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lepidostoma ermanae Cold Spring caddisfly	IITRI01050	None	None	G1G2	S1S2	
Lepus americanus tahoensis Sierra Nevada snowshoe hare	AMAEB03012	None	None	G5T3T4Q	S2	SSC
Lepus townsendii townsendii western white-tailed jackrabbit	AMAEB03041	None	None	G5T5	S3?	SSC
Lithobates pipiens northern leopard frog	AAABH01170	None	None	G5	S2	SSC
Margaritifera falcata western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
Martes caurina sierrae Sierra marten	AMAJF01014	None	None	G4G5T3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Meesia triquetra three-ranked hump moss	NBMUS4L020	None	None	G5	S4	4.2
Meesia uliginosa broad-nerved hump moss	NBMUS4L030	None	None	G5	S3	2B.2
Myotis volans long-legged myotis	AMACC01110	None	None	G4G5	S3	
Ochotona princeps schisticeps gray-headed pika	AMAEA0102L	None	None	G5T4	S2S4	
Oncorhynchus clarkii henshawi Lahontan cutthroat trout	AFCHA02081	Threatened	None	G5T3	S2	
Pekania pennanti Fisher	AMAJF01020	None	None	G5	S2S3	SSC
Potamogeton epihydrus Nuttall's ribbon-leaved pondweed	PMPOT03080	None	None	G5	S2S3	2B.2
Prosopium williamsoni mountain whitefish	AFCHA03060	None	None	G5	S3	SSC
Rana sierrae Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S1	WL
Rhamnus alnifolia alder buckthorn	PDRHA0C010	None	None	G5	S3	2B.2
Rorippa subumbellata Tahoe yellow cress	PDBRA270M0	None	Endangered	G1	S1	1B.1
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Sidalcea multifida cut-leaf checkerbloom	PDMAL110G0	None	None	G3	S2	2B.3
Siphateles bicolor pectinifer Lahontan Lake tui chub	AFCJB1303P	None	None	G4T3	S1S2	SSC
Sphaeralcea munroana Munro's desert mallow	PDMAL140F0	None	None	G4	S1	2B.2
Stuckenia filiformis ssp. alpina northern slender pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
Stygobromus lacicolus Lake Tahoe amphipod	ICMAL05970	None	None	G1	S1	
Stygobromus sheldoni Sheldon's amphipod	ICMAL05A40	None	None	G1	S1	
Stygobromus tahoensis Lake Tahoe stygobromid	ICMAL05A70	None	None	G1	S1	

Record Count: 59

California Native Plant Society

Search Results

36 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [**3911948:3911938:3911928:3912042:3912041:3912021:3912031:3912022:3912032**]

▲ SCIENTIFIC NAME	COMMON NAME	FED LIST	STATE LIST	STATE RANK	CA RARE PLANT RANK
Agrostis humilis	mountain bent grass	None	None	S2	2B.3
Arabis rigidissima var. *demota*	Galena Creek rockcress	None	None	S1	1B.2
Artemisia tripartita ssp. *tripartita*	threetip sagebrush	None	None	S2	2B.3
Astragalus whitneyi var. *lenophyllus*	woolly-leaved milk-vetch	None	None	S4	4.3
Botrychium ascendens	upswept moonwort	None	None	S2	2B.3
Botrychium crenulatum	scalloped moonwort	None	None	S3	2B.2
Botrychium minganense	Mingan moonwort	None	None	S3	2B.2
Bruchia bolanderi	Bolander's bruchia	None	None	S3	4.2
Carex davyi	Davy's sedge	None	None	S3	1B.3
Carex lasiocarpa	woolly-fruited sedge	None	None	S2	2B.3
Carex limosa	mud sedge	None	None	S3	2B.2
Cryptantha glomeriflora	clustered-flower cryptantha	None	None	S4	4.3
Drosera anglica	English sundew	None	None	S2	2B.3
Erigeron petrophilus var. *sierrensis*	northern Sierra daisy	None	None	S4	4.3
Eriogonum umbellatum var. *torreyanum*	Donner Pass buckwheat	None	None	S2	1B.2
Eriophorum gracile	slender cottongrass	None	None	S4	4.3
Eurybia merita	subalpine aster	None	None	SH	2B.3
Glyceria grandis	American manna grass	None	None	S3	2B.3
Hackelia amethystina	amethyst stickseed	None	None	S4	4.3
Ivesia sericoleuca	Plumas ivesia	None	None	S2	1B.2
Juncus hemiendytus var. *abjectus*	Center Basin rush	None	None	S4	4.3
Juncus luciensis	Santa Lucia dwarf rush	None	None	S3	1B.2
Lomatium grayi	Gray's lomatium	None	None	S1S2	2B.3
Meesia triquetra	three-ranked hump moss	None	None	S4	4.2
Meesia uliginosa	broad-nerved hump moss	None	None	S3	2B.2
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	None	None	S2S3	2B.2
Potamogeton robbinsii	Robbins' pondweed	None	None	S3	2B.3
Primula pauciflora	beautiful shootingstar	None	None	S3	4.2
Rhamnus alnifolia	alder buckthorn	None	None	S3	2B.2
Rorippa subumbellata	Tahoe yellow cress	None	CE	S1	1B.1
Scutellaria galericulata	marsh skullcap	None	None	S2	2B.2
Sidalcea multifida	cut-leaf checkerbloom	None	None	S2	2B.3
Solidago lepida var. *salebrosa*	Rocky Mountains Canada goldenrod	None	None	S1	3.2

Sphaeralcea munroana	Munro's desert mallow	None	None	S1	2B.2
Stellaria obtusa	obtuse starwort	None	None	S4	4.3
Stuckenia filiformis ssp. *alpina*	northern slender pondweed	None	None	S2S3	2B.2

Showing 1 to 36 of 36 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 18 January 2023].

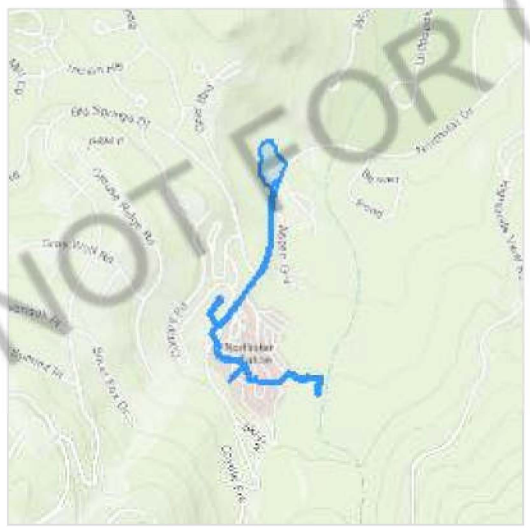
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Placer County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Sierra Nevada Red Fox Vulpes vulpes necator No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4252	Endangered

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog Rana sierrae Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9529	Endangered

Fishes

NAME	STATUS
Lahontan Cutthroat Trout Oncorhynchus clarkii henshawi Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3964	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Black-throated Gray Warbler *Dendroica nigrescens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jul 20
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

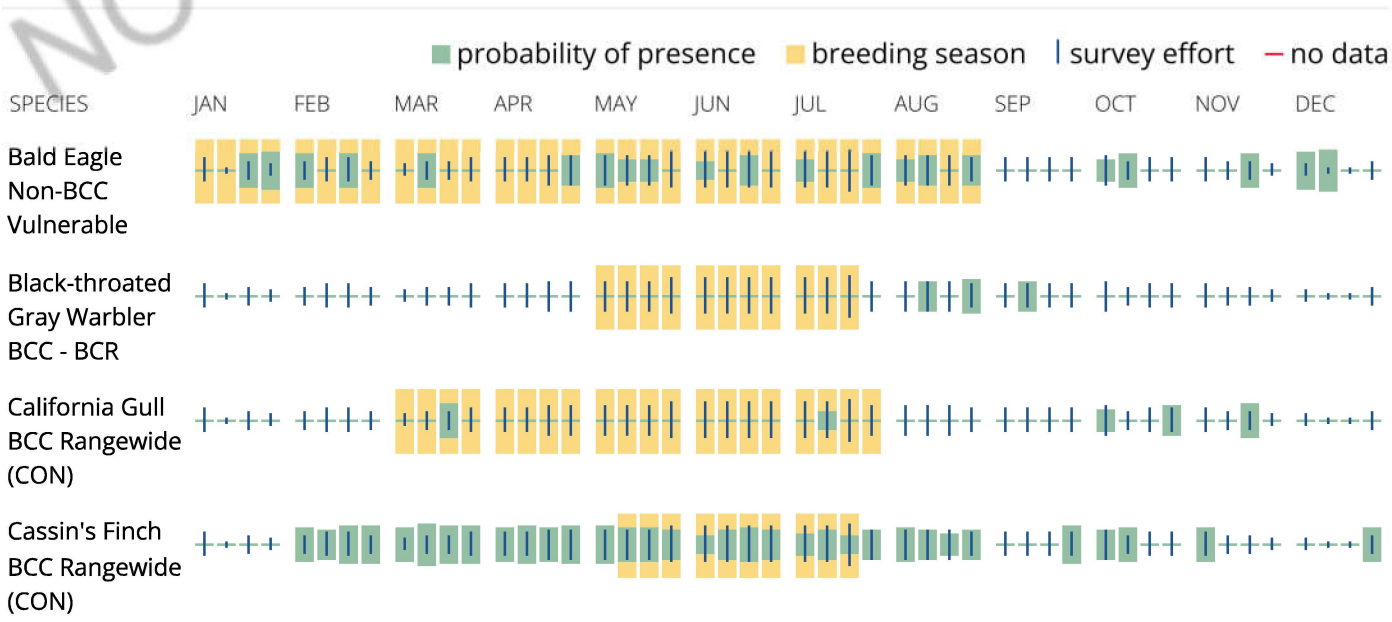
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

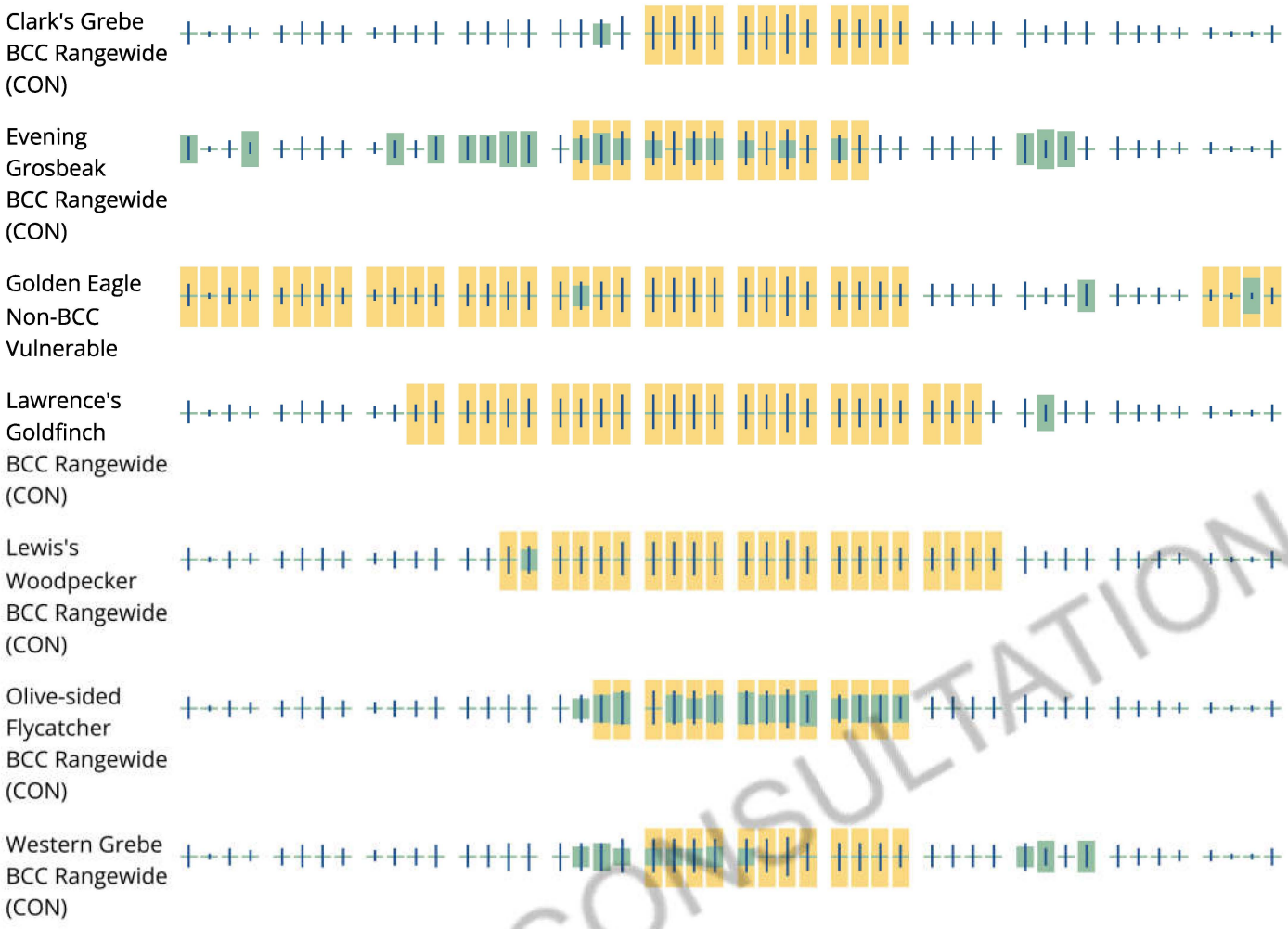
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.