

A Biological Assessment for the Hedding Parcel, Humboldt County, CA
APN 311-221-026-000



Prepared for

Ryan Hedding
7035 Tompkins Hill Road
Loleta, CA 95503
APN 311-221-026-000

Prepared by

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February 2023

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1.0 Introduction

This biological assessment has been prepared for the Ryan Hedding property at 7035 Tompkins Hill Road, Loleta, CA 95503, in response to a Notice of Violation received from the Humboldt County Planning Department.

Through obligations of environmental review under the California Environmental Quality Act (CEQA), biological assessments are required by Humboldt County for building permits for development that may impact sensitive species or habitats.

This report references the sensitive fish, wildlife, and botanical species potentially affected on the Hedding property.

2.0 Site Description

The Hedding parcel, APN 311-221-026-000, is approximately 32 acres in size, oriented north to south, with an existing residence and garage on a large clearing at the northern end of the property. The parcel is bisected from east to west by Willow Brook creek, which drains to Humboldt Bay ~ 1.5 miles to the west. A second garage, the subject of the violation notice, is located approximately 75 meters to the east of the main residence, on a flat area likely long established as part of an early logging operation. The appendix G map was provided to show the garage building adjacent to the unnamed tributary of Willow Brook creek. The distance between the edge of the building and the creek is approximately 36'. The initial analysis of the creek in January of this year indicated it was likely an intermittently flowing creek which dried up during the summer months in a typical year.

An additional field visit on July 5th surveyed a longer portion of the creek and discovered the creek is fed by springs, and likely flows throughout the year, with the possible exception of drought years. This creek, although small in size, is a perennial flowing creek. The minimum setback distance under Humboldt County code from a perennial creek under the Streamside Management Area regulations is 100' (Code 314-61.1.7.6.2.1 - One hundred (100) feet, measured as the horizontal distance from the top of bank or edge of riparian drip-line whichever is greater on either side of perennial streams).

The forested habitat on the Hedding parcel consists primarily of the Redwood (*Sequoia sempervirens*) Forest Alliance, with much of the forest young to mid-aged. Other tree species include Douglas Fir (*Pseudotsuga menziesii*), Sitka Spruce (*Picea sitchensis*) Grand Fir (*Abies grandis*), Red Alder (*Alnus rubra*) and Tanoak (*Notholithocarpus densiflorus*). The shrub layer consists primarily of Sword Fern (*Polystichum munitum*).

2.1 Purpose and Need

This assessment is being conducted as a response to a Notice of Violation received from the Humboldt County Planning Department dated January 10, 2023, regarding a large garage building built within the Streamside Management Area (SMA) of an adjacent creek, an un-named tributary to Willow Brook creek (Appdx. G). The violation notices reference Humboldt County code 331-14, Grading Without Permits; and code 314-61.1, Development Within a Streamside Management Area.

Downed vegetation clearing was also conducted alongside Willow Brook creek (photos 14-26), and the resulting piles of vegetation and debris that were created are currently located within the 100' SMA. Downed trees from storm damage in January 2023 were also cut and removed from areas that blocked the access road (photos 12, 13). Several conifer trees adjacent to the SMA also had branches trimmed as well (photo 30). The extent of Willow Brook creek is shown in Appdx. F.

3.0 Sensitive and Protected Species

The Federal Endangered Species Act (FESA) of 1973 is intended to protect and recover imperiled animal and plant species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (Service) and the Commerce Department's National Marine Fisheries Service (NMFS). Under the ESA, species may be listed as either endangered, threatened, or as a candidate for listing. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. Candidate species are currently under review for a proposed listing.

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected, or preserved. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or as a proposed candidate species.

CDFW has also developed a list of "Species of Special Concern" (SSC) that includes species whose populations, reproductive capacity, or habitat may be declining, as well as a number of "fully protected" species, listed by the state before CESA was enacted into law.

The Migratory Bird Treaty Act of 1918 (Canada, Mexico, Japan Russia) also

extends federal protections to all nesting birds, regardless of sensitive status. Nesting adults, eggs, and young are protected by this treaty.

The scoping list was created thru a California Natural Diversity Database species summary query from the Fields Landing 7.5-min quadrangle map and the adjacent quad maps as well as a biological desk review of listed and sensitive species inhabiting Northern California coastal forests.

4.0 Potential Sensitive Species Scoping List (Animal and Plant)

Scientific Name	Common Name	Federal Status	State Status	CDFW	Occur?
Amphibians					
<i>Ascaphus truei</i>	Pacific tailed frog	None	None	SSC	U
<i>Rana boylei</i>	foothill yellow-legged frog	None	Endangered	SSC	p
<i>Rana aurora</i>	Northern red-legged frog	Threatened	None	SSC	p
<i>Rhyacotriton variegatus</i>	southern torrent salamander	None	None	SSC	U
<i>Emys marmorata</i>	western pond turtle	None	None	SSC	p
<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	U
Avian Species					
<i>Brachyramphus marmoratus</i>	marbled murrelet	Threatened	Endangered	-	U
<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	Endangered	FP	p
<i>Circus hudsonius</i>	northern harrier	None	None	SSC	L
<i>Falco peregrinus anatum</i>	peregrine falcon	Delisted	Delisted	FP	U
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened	Endangered	-	U
<i>Elanus leucurus</i>	white-tailed kite	None	None	FP	L
<i>Progne subis</i>	purple martin	None	None	SSC	L
<i>Riparia riparia</i>	bank swallow	None	Threatened	-	U
<i>Chaetura vauxi</i>	vaux's swift	None	None	SSC	U
<i>Charadrius montanus</i>	mountain plover	None	None	SSC	U
<i>Charadrius nivosus nivosus</i>	western snowy plover	Threatened	None	SSC	N
<i>Coturnicops noveboracensis</i>	yellow rail	None	None	SSC	U
<i>Agelaius tricolor</i>	tricolored blackbird	None	Threatened	SSC	p
<i>Icteria virens</i>	yellow breasted chat	None	None	SSC	L
<i>Setophaga petechia</i>	yellow warbler	None	None	SSC	L
<i>Empidonax trailii</i>	willow flycatcher	None	Endangered	-	U
<i>Ammodramus savannarum</i>	grasshopper sparrow	None	None	SSC	U
<i>Passerculus sandwichensis alaudinus</i>	bryant's savannah sparrow	None	None	SSC	U
<i>Pelecanus occidentalis californicus</i>	california brown pelican	Delisted	Delisted	FP	N
<i>Asio flammeus</i>	short-eared owl	None	None	SSC	U
<i>Strix occidentalis caurina</i>	northern spotted owl	Threatened	Threatened	-	U

Aquatic Species					
<u><i>Eucyclogobius newberryi</i></u>	tidewater goby	Endangered	None	-	N
<u><i>Spirinchus thaleichthys</i></u>	longfin smelt	Candidate	Threatened	-	N
<u><i>Entosphenus tridentatus</i></u>	Pacific lamprey	None	None	SSC	U
<u><i>Lampetra richardsoni</i></u>	western brook lamprey	None	None	SSC	U
<u><i>Oncorhynchus kisutch pop. 4</i></u>	coho salmon - central California coast ESU	Endangered	Endangered	-	P
<u><i>Oncorhynchus clarkii clarkii</i></u>	coast cutthroat trout	None	None	SSC	P
<u><i>Oncorhynchus mykiss irideus pop. 48</i></u>	steelhead - No. California DPS summer run	Threatened	Endangered	-	U
<u><i>Oncorhynchus mykiss irideus pop. 49</i></u>	steelhead - No. California DPS winter run	Threatened	None	-	P
<u><i>Oncorhynchus tshawytscha</i></u>	chinook salmon - california coastal ESU	Threatened	None	-	P
Insect Species					
<u><i>Bombus occidentalis</i></u>	western bumble bee	None	Candidate-End.	-	L
<u><i>Danaus plexippus plexippus pop. 1</i></u>	monarch - California wintering population	Candidate	None	-	N
Mammal Species					
<u><i>Arborimus pomo</i></u>	Sonoma tree vole	None	None	SSC	L
<u><i>Martes caurina</i></u>	Pine Marten	None	None	-	U
<u><i>Pekania pennanti</i></u>	Fisher	None	None	SSC	L
<u><i>Antrozous pallidus</i></u>	pallid bat	None	None	SSC	U
<u><i>Corynorhinus townsendii</i></u>	townsend's big-eared bat	None	None	SSC	L
Plants Species					
				CNPS rank	
<u><i>Layia carnosa</i></u>	beach layia	Threatened	Endangered	1b.1	N
<u><i>Erysimum menziesii</i></u>	Menzies Wallflower	Endangered	Endangered	1b.1	U
<u><i>Astragalus pycnostachyus</i></u>	coastal marsh milk-vetch	None	None	1b.2	U
<u><i>Erythronium revolutum</i></u>	coast fawn lily	None	None	2b.2	L
<u><i>Lilium occidentale</i></u>	western lily	Endangered	Endangered	1b.1	L
<u><i>Sidalcea malviflora ssp. patula</i></u>	siskiyou checkerbloom	None	None	1b.2	U
<u><i>Sidalcea oregana ssp. eximia</i></u>	coast checkerbloom	None	None	1b.2	P
<u><i>Montia howellii</i></u>	Howell's montia	None	None	2b.2	P
<u><i>Clarkia amoena ssp. whitneyi</i></u>	Whitney's farewell-to-spring	None	None	1b.1	U
<u><i>Oenothera wolfii</i></u>	Wolf's evening-primrose	None	None	1b.1	U
<u><i>Castilleja ambigua var. humboldtensis</i></u>	Humboldt bay owl's clover	None	None	1b.2	P
<u><i>Castilleja litoralis</i></u>	Oregon coast paintbrush	None	None	2b.2	P
<u><i>Chloropyron maritimum ssp. palustre</i></u>	Point reyes salty birds-beak	None	None	1b.2	P
<u><i>Collinsia corymbosa</i></u>	round headed collinsia	None	None	1b.2	U

CDFW - FP=Fully Protected; SSC=Sensitive Species of Concern

Occur? - N=No; U=Unlikely; P=Possible; L=Likely

CNPS - 1b=Plants rare, threatened, or endangered in California and elsewhere

2b=Plants rare, threatened, or endangered in California but more common elsewhere

.1=Seriously threatened in California

.2=Moderately threatened in California

5.0 Results

All field data was recorded by Wildlife Biologist Brit O'Brien on January 26th, 2023, using a 100' measuring tape for all distance measurements and a Theodolite application for measuring slope, elevation, and GPS locations. Leica binoculars (10 x 42) were used to identify any wildlife sightings. Portions of all aquatic and terrestrial habitats within the Hedding parcel were assessed. Larger trees and snags were examined for potential raptor nests.

No mammals, fish or amphibians were observed during the field assessment. Five bird species were heard or seen: American robin (*Turdus migratorius*), Steller's Jay (*Cyanocitta stelleri*), Northern flicker (*Colaptes auratus*) Pacific Wren (*Troglodytes pacificus*), and Turkey Vulture (*Cathartes aura*).

5.1 Marbled Murrelet

The mixed Redwood Forest on the parcel consists of trees generally of a 40-to-60-year range, and very few branches would likely meet the minimum size needed as a nest platform for Marbled murrelets, which is described in the survey protocol as a branch with an approximately 4-inch dbh platform, and which nearly always includes a layer of moss or debris as nesting material. Close observation of trees with larger branches did not reveal any significant potential nesting habitat for Marbled Murrelets (Photos 11, 27-29).

5.2 Northern Spotted Owl

Historical survey information indicates the presence of two NSO Activity Centers near the Hedding parcel. One NSO Activity Center (AC) is located approximately 0.4 miles to the north, and another AC is located approximately 1 mile to the east (Appdx. E).

The Arcata Fish and Wildlife Office (AFWO) has provided a 2006 guidance document regarding disturbance from any noise-generating activities, "Estimating the effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California." The document provides likely disturbance distances to nesting owls, based on ambient sound levels at the site, the use of specific equipment, and visual line-of-sight distance to potential NSO nests.

A review of the document suggests that scenario 3 under appendix B, the Northern

Spotted Owl Sound and Visual Harassment Decision Support Tool, best reflects the likely ambient sound conditions at the Hedding property. Under this scenario, "The existing environment is characterized by the near absence of sounds associated with human activities and is typified by natural background sounds found in the species habitat (e.g., bird calls, light breezes through vegetation, distant stream flow). Human-generated sound is non-existent or very distant and makes no measurable contribution to ambient sound level at the site." The typical action-generated sounds under this scenario could include "larger gas-powered engines, large generators, amplified music, ATVs, and small trucks at moderate speed on improved trails, and large chainsaws." This scenario 3 closely approximates or exceeds the likely ambient background noise at the Hedding parcel, and the potential action-generated noise from typical activities.

Under scenario 3 and with low ambient sounds at the site, the predicted auditory disturbance distance that may impact nesting Spotted Owls at the Hedding parcel is 300 meters; with moderate ambient sounds at the site, the auditory disturbance distance is only 100 meters. The visual line-of sight disturbance distance for nests is a maximum 100 meters, or less if vegetation obscures a view of the nest.

As the Hedding property is a minimum of 0.4 miles (~640 meters) distant, neither of these ACs are close enough to be impacted from any construction or typical activities conducted on the parcel.

5.3 Nesting Birds/Raptor Nests

Although significant vegetation trimming and removal was conducted along Willow Brook creek, no significant vegetation alteration or removal appears to have occurred at the garage building site when constructed. The canopy surrounding the garage building site and the lower Willow Brook creek area was scanned for potential raptor nests. None were observed on or adjacent to the Hedding parcel (Photos 11, 27-29). The tree trimming and storm damage vegetation removal along the Willow Brook creek stream occurred this winter and could not impact nesting birds directly. The vegetation clearing and trimming likely reduced potential nesting habitat on the Hedding parcel, but much forested habitat remains available for nesting, and no significant impacts to nesting birds or raptors should be expected from the vegetation trimming/removal.

5.4 Sensitive Mammals

Forest carnivores (Fisher, Pacific marten) do not likely occur in forested habitats on the Hedding property. As older forests with complex canopies are preferred denning areas for these species, the mid to younger-aged forest on the Hedding parcel likely does not provide suitable habitat for natal dens. Foraging opportunities remain available to carnivores on the Hedding parcel.

The Sonoma Tree Vole is a primarily arboreal species that may occur on the Hedding parcel. Some trees located along Willow Brook creek had significant branches trimmed; it is unknown if Sonoma tree vole individuals or habitat was impacted by the vegetation trimming.

No sensitive bat species are likely to use the forest habitat on this parcel, as most of the forest is not mature enough to provide bark crevices or significant cavities as roosting habitat. Any bats discovered roosting in buildings should not be disturbed; contact a wildlife relocation service for removal.

5.5 Sensitive Fish and Amphibians

The garage building site is approximately 36' to the west from the perennial unnamed tributary to Willow Brook creek, and the slope between the building site and the creek is well vegetated and will provide good infiltration for any precipitation runoff from the site (photos 3-5). No fish species are likely to be harmed by any runoff from the garage building site. This tributary to Willow Brook creek appears to flow throughout the year; however, due to low flow, it does not likely support sensitive amphibian species in the stretch adjacent to the garage building site (photos 5-7).

The vegetation clearing adjacent to Willow Brook creek likely removed potential overwintering habitat for some amphibian species. The banks of Willow creek remain mostly unaffected from the vegetation clearing. Potentially occurring amphibians such as Yellow-legged frogs, Western Pond turtles, and California Giant salamanders may use upland habitats for foraging or overwintering. Some of these species can travel hundreds of meters for dispersal, so the remaining uncleared areas along Willow Brook creek may provide sufficient habitat for overwintering species of amphibians.

5.6 Sensitive Invertebrates

The western bumblebee's potential habitat was likely not impacted, as the winter season inhibits foraging by bees. Vegetation restoration alongside Willow creek may increase foraging opportunities for bumblebee species.

5.7 Sensitive Plants

The garage building construction occurred on a flat where previous uses (likely logging deck) had compacted the soils and likely reduced plant diversity. No sensitive habitats for plants were observed adjacent to the building, and it is unlikely sensitive plants were lost due to construction of the garage building.

Clearing adjacent to Willow Brook creek has removed areas of natural vegetation. Replanting with native species will help stabilize the soils and increase the natural plant succession at the cleared sites.

6.0 Recommendations

Although the unpermitted garage building was built within the 100' Streamside Management Area, historical imagery acquired from Google Earth shows that the site where the building was constructed had been cleared and used as an outside storage area since at least January of 2005 (Appdx. H,I) and subsequent imagery indicates that no significant vegetation was removed for the building construction (photos 2-4,8,9). The flat that the building is constructed on was likely used for a previous logging operation that compacted the ground which likely reduced any plant diversity. This building does not currently contribute sediment or pollution to the creek, and a potential violation remedy such as removing the building would likely cause significant, though potentially short-term, impacts to the creek, such as increased siltation, pollution, and potential invasive species introduction. Based on the site visit on January 26 of this year, no sensitive habitats were discovered or were impacted from the building construction. Therefore, it is strongly recommended that the building be allowed to remain in place, subject to permitting, to reduce potential impacts from removal.

The vegetation clearing and debris piles created within the Willow Brook creek SMA have created the potential for significant erosion into the creek. To avoid further potential harm to Willow Brook creek, an experienced restoration professional should be contracted to develop a restoration plan to restore the cleared locations within the SMA. Any recommended erosion control Best Management Practices (BMPs, ex. straw waddles, silt fence) should be installed before any significant precipitation occurs on the site. Native plants should be used to stabilize stream banks where necessary.

Storm damaged trees placed adjacent to the driveway should remain in place if possible to minimize further ground disturbance and potential erosion.

Consider conducting nesting bird surveys if any significant vegetation removal is planned within the nesting bird season (generally March 1 - August 31). If necessary, use appropriate distance buffers for any discovered active bird nests.

Based on this assessment, the garage building will very likely not significantly impact the perennial tributary creek adjacent to the garage building on the Hedding parcel. An effective restoration plan for Willow Brook creek will re-establish streamside vegetation and prevent significant impacts from erosion and siltation to the creek and downstream aquatic habitats.

7.0 References

California Department of Fish and Wildlife, Natural Diversity Database. January 2023. Special Animals List. Periodic publication. 66 pp.

California Department of Fish and Wildlife. 2023. Natural Diversity Database BIOS Viewer. January 2023 Report.

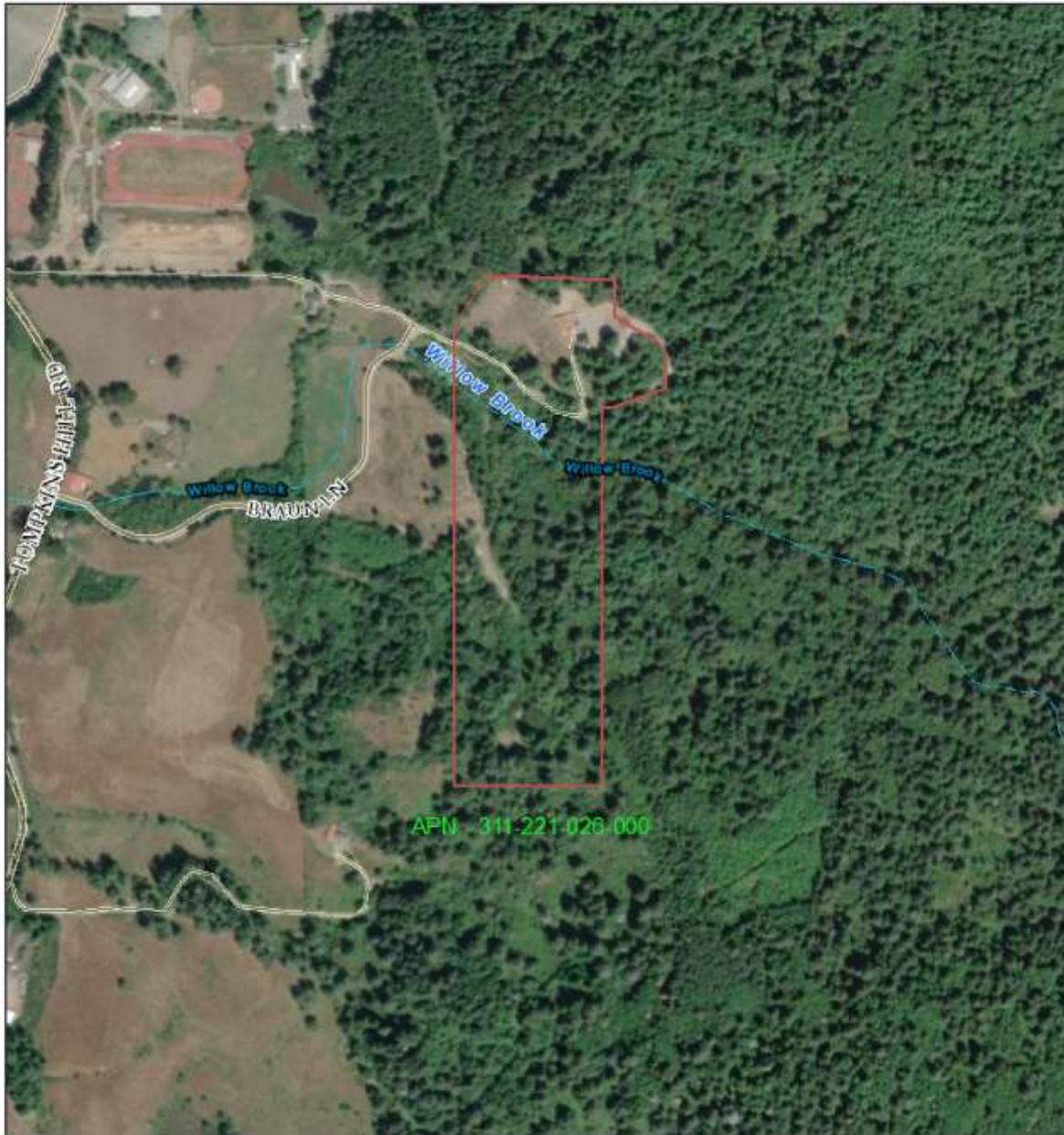
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Ingles, L.G. 1965. Mammals of the Pacific States: California, Oregon, Washington. Stanford University Press, Stanford, CA.

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8.0 Appendices



Hedding Parcel Photo Imagery
Humboldt County Planning and Building Department

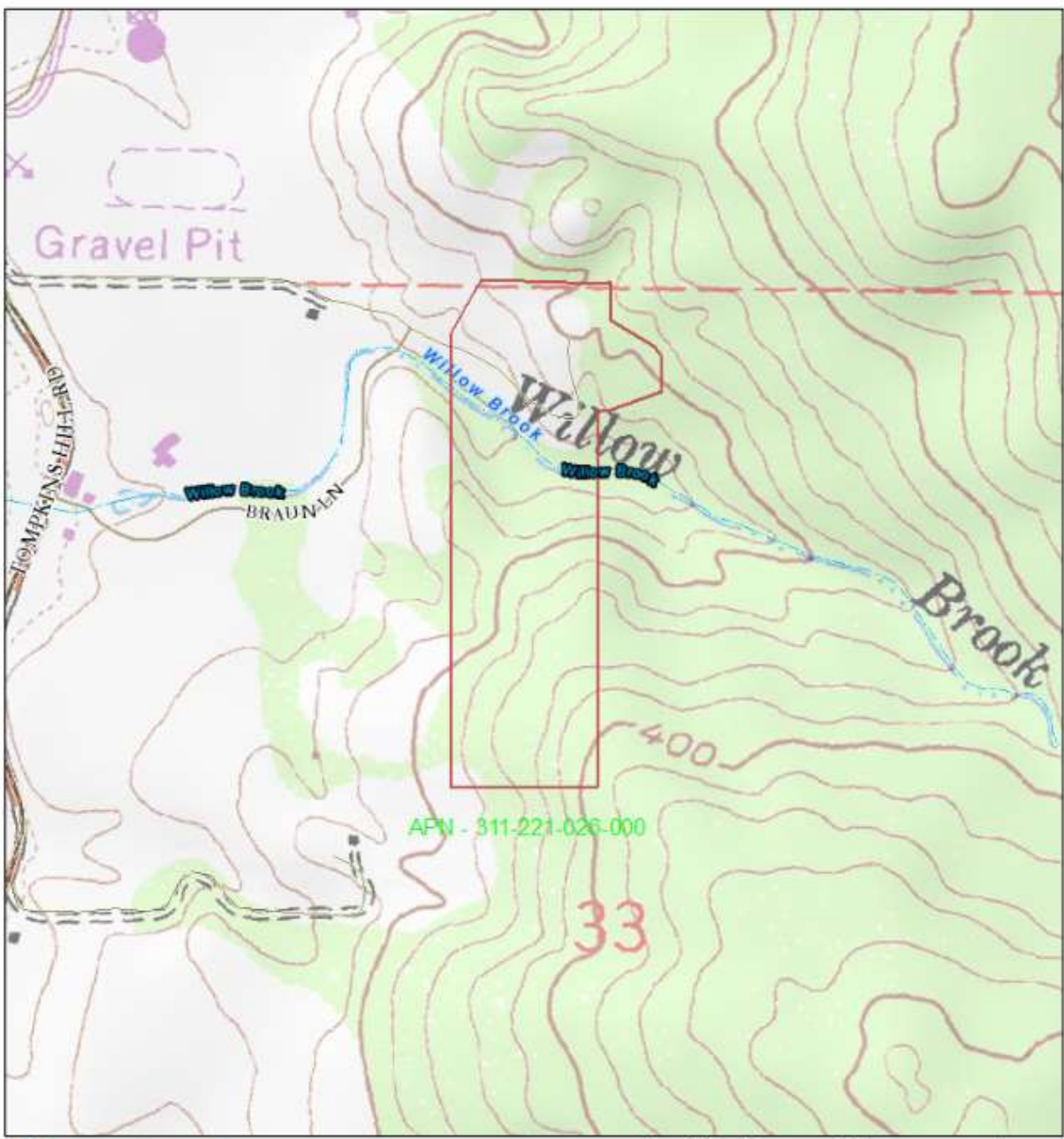
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Map Disclaimer: While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.
Source: Humboldt County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

RF= 1:9,028 1 in = 752 ft

<p>Lines</p> <ul style="list-style-type: none"> — Override 1 <p>Highways and Roads</p> <ul style="list-style-type: none"> — Principal Arterials — Minor Arterials — Major Collectors 	<ul style="list-style-type: none"> — Minor Collectors — Local Roads — Private or Unclassified — Major River or Stream 	<p>Blue Line Streams</p> <ul style="list-style-type: none"> — Perennial 1-3 — Perennial >4 — Intermittent — Subsurface 	<ul style="list-style-type: none"> — City Boundary — Counties
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A. Parcel Photo of Hedding Property



Hedding Parcel Topo Imagery
 Humboldt County Planning and Building Department

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0 0.05 0.1 0.2 mi
 0 0.05 0.1 0.2 mi
 RF= 1:9,028 1 in = 752 ft

Legend

Lines	Minor Collectors	Blue Line Streams	City Boundary
Override 1	Local Roads	Perennial 1-3	Counties
Highways and Roads	Private or Unclassified	Perennial >4	Image
Principal Arterials	Major River or Stream	Intermittent	Red: Band_1
Minor Arterials	Subsurface		Green: Band_2
Major Collectors			Blue: Band_3

B. Hedding Parcel Topo Map

OBC – Hedding Parcel – APN 143-211-30

C. CNDDDB Scoping List of Potentially Occurring Sensitive Species

Scientific Name	Common Name	Federal Status	State Status	CDFW	Occur?
Amphibians					
<i>Ascaphus truei</i>	Pacific tailed frog	None	None	SSC	U
<i>Rana boylei</i>	foothill yellow-legged frog	None	Endangered	SSC	P
<i>Rana aurora</i>	Northern red-legged frog	Threatened	None	SSC	P
<i>Rhyacotriton variegatus</i>	southern torrent salamander	None	None	SSC	U
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<i>Progne subis</i>	purple martin	None	None	SSC	L
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<u><i>Danaus plexippus plexippus pop. 1</i></u>	monarch - California wintering population	Candidate	None	-	N
<u>Mammal Species</u>					
<u><i>Arborimus pomo</i></u>	Sonoma tree vole	None	None	SSC	L
<u><i>Martes caurina</i></u>	Pine Marten	None	None	-	U
<u><i>Pekania pennanti</i></u>	Fisher	None	None	SSC	L
<u><i>Antrozous pallidus</i></u>	pallid bat	None	None	SSC	U
<u><i>Corynorhinus townsendii</i></u>	townsend's big-eared bat	None	None	SSC	L
<u>Plants Species</u>					
<u><i>Layia carnosa</i></u>	beach layia	Threatened	Endangered	1b.1	N
<u><i>Erysimum menziesii</i></u>	Menzies Wallflower	Endangered	Endangered	1b.1	U
<u><i>Astragalus pycnostachyus</i></u>	coastal marsh milk-vetch	None	None	1b.2	U
<u><i>Erythronium revolutum</i></u>	coast fawn lily	None	None	2b.2	L
<u><i>Lilium occidentale</i></u>	western lily	Endangered	Endangered	1b.1	L
<u><i>Sidalcea malviflora ssp. patula</i></u>	siskiyou checkerbloom	None	None	1b.2	U
<u><i>Sidalcea oregana ssp. eximia</i></u>	coast checkerbloom	None	None	1b.2	P
<u><i>Montia howellii</i></u>	Howell's montia	None	None	2b.2	P
<u><i>Clarkia amoena ssp. whitneyi</i></u>	Whitney's farewell-to-spring	None	None	1b.1	U
<u><i>Oenothera wolfii</i></u>	Wolf's evening-primrose	None	None	1b.1	U
<u><i>Castilleja ambigua var. humboldtensis</i></u>	Humboldt bay owl's clover	None	None	1b.2	P
<u><i>Castilleja litoralis</i></u>	Oregon coast paintbrush	None	None	2b.2	P
<u><i>Chloropyron maritimum ssp. palustre</i></u>	Point reyes salty birds-beak	None	None	1b.2	P
<u><i>Collinsia corymbosa</i></u>	round headed collinsia	None	None	1b.2	U

CDFW - FP=Fully Protected; SSC=Sensitive Species of Concern

Occur? - N=No; U=Unlikely; P=Possible; L=Likely

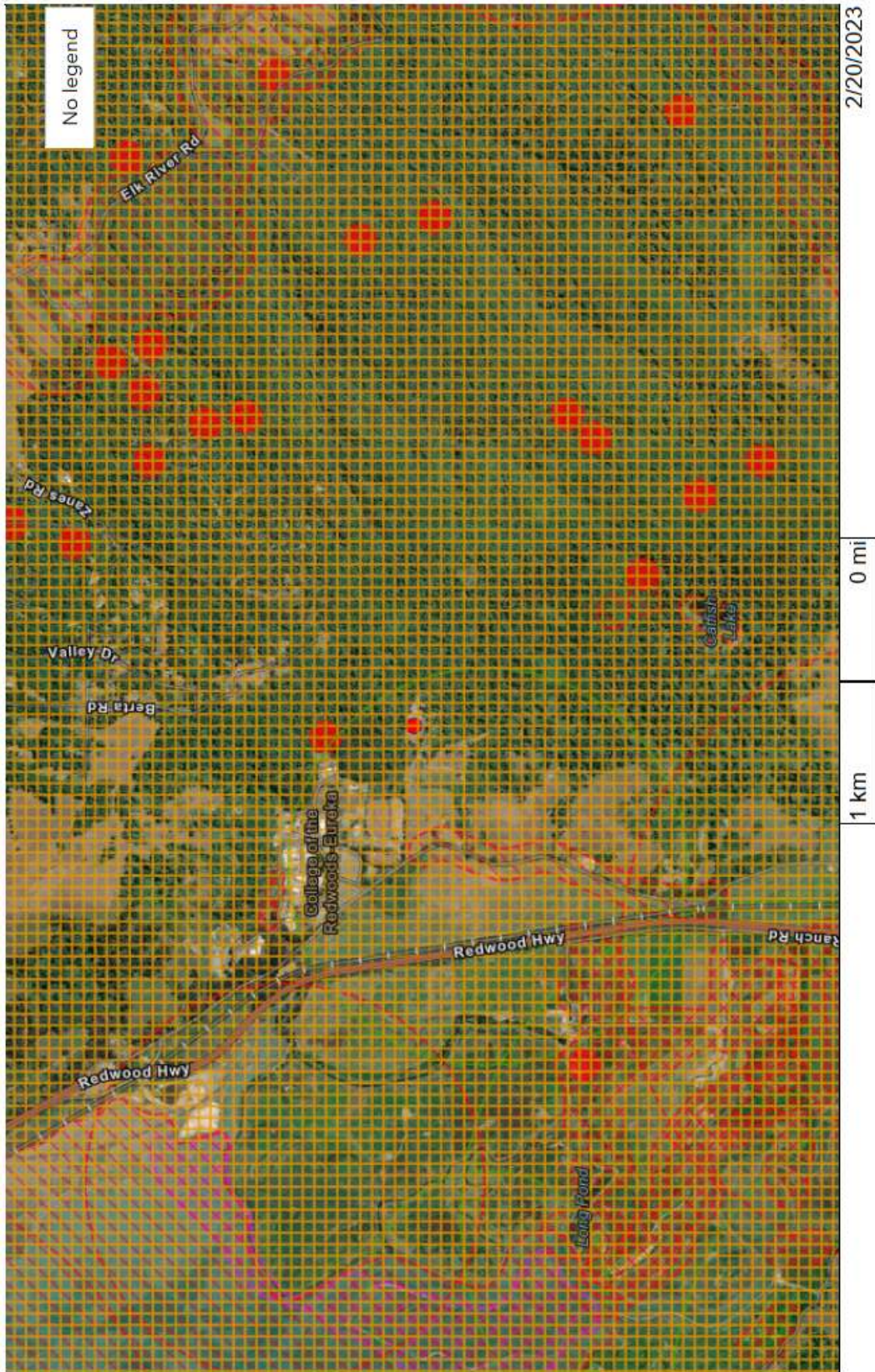
CNPS - 1b=Plants rare, threatened, or endangered in California and elsewhere

2b=Plants rare, threatened, or endangered in California but more common elsewhere

.1=Seriously threatened in California

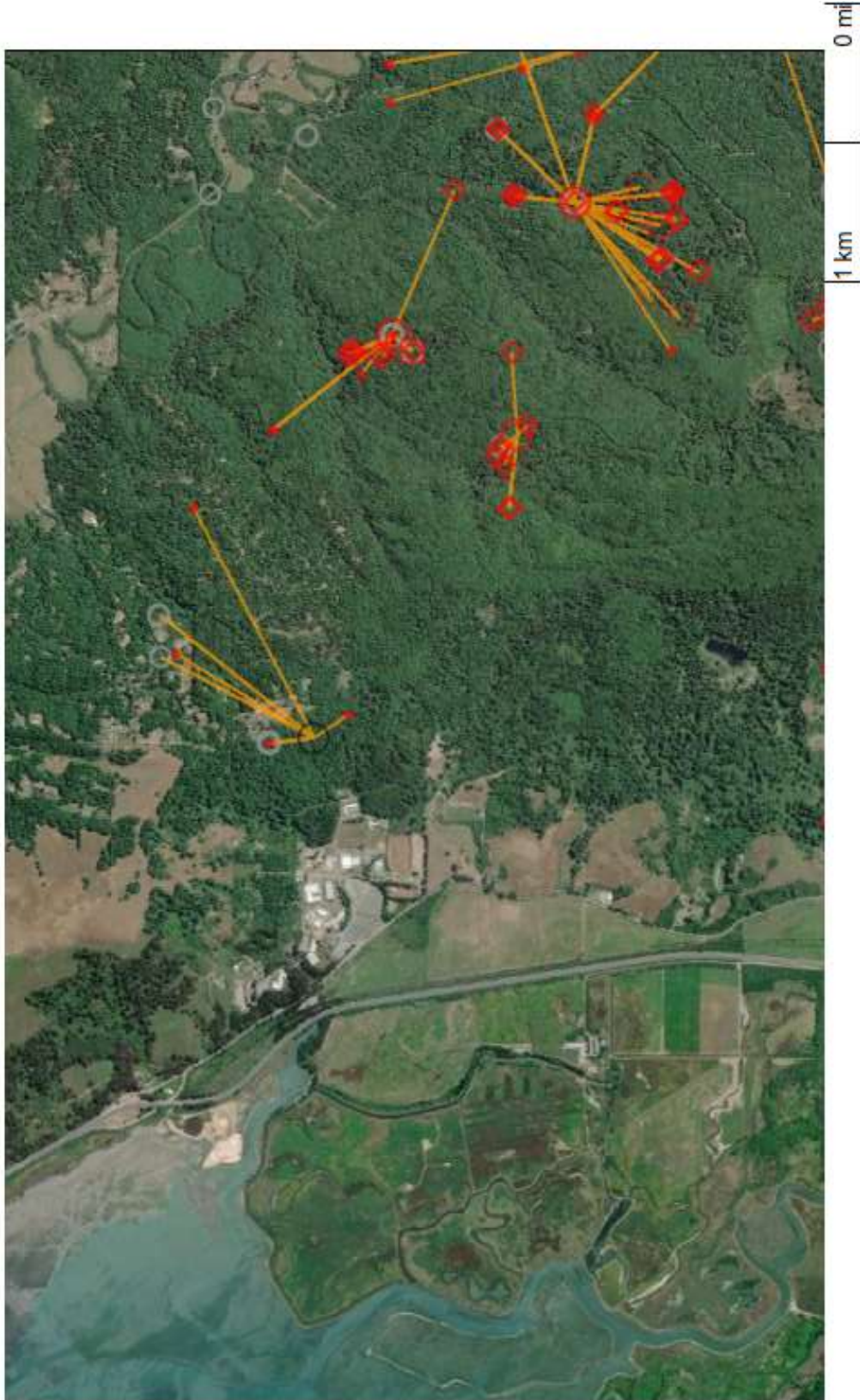
.2=Moderately threatened in California

Natural Diversity Database Map - Hedding Parcel



D. Natural Diversity Database Map of Sensitive Species Surrounding the Hedding Parcel

Nearest Northern Spotted Owl Activity Centers to Hedding Property



E. Nearest Northern Spotted Owl Activity Centers

OBC – Hedding Parcel – APN 143-211-30

Aquatic Habitat at Heddingger Parcel



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

- February 20, 2023
- Wetlands**
- Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine

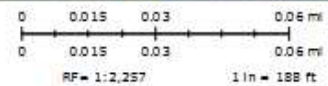
F. National Wetlands Inventory - Nearest Stream/Wetland to Heddingger Site

OBC – Heddingger Parcel – APN 143-211-30



Tributary to Willow Brook - Hedding

Humboldt County Planning and Building Department




2/20/2023, 4:28:52 PM

Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

Source: NRCS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Lines

 Override 1

 Streamside Management Areas

G. Location of Willow Brook creek Tributary Adjacent to Garage Building Site (~ 36')

OBC – Hedding Parcel – APN 143-211-30



H. Historical Imagery of the Heddinger Garage Building Site from 2005



I. Historical Imagery of the Heddinger Garage Building Site from 2013

J. Photos of the Hedding Parcel



1. West Side of Garage Building at Hedding Property



2. East Side of Garage Building at Hedding Property



3. Forest Habitat Between Class III Creek and Garage Building



4. Habitat Adjacent to Class III Tributary Creek



5. Class III creek Tributary of Willow Brook creek



6. Forest Habitat on Parcel East of the Building Site



7. Douglas Fir Trees on Parcel East of Building Site



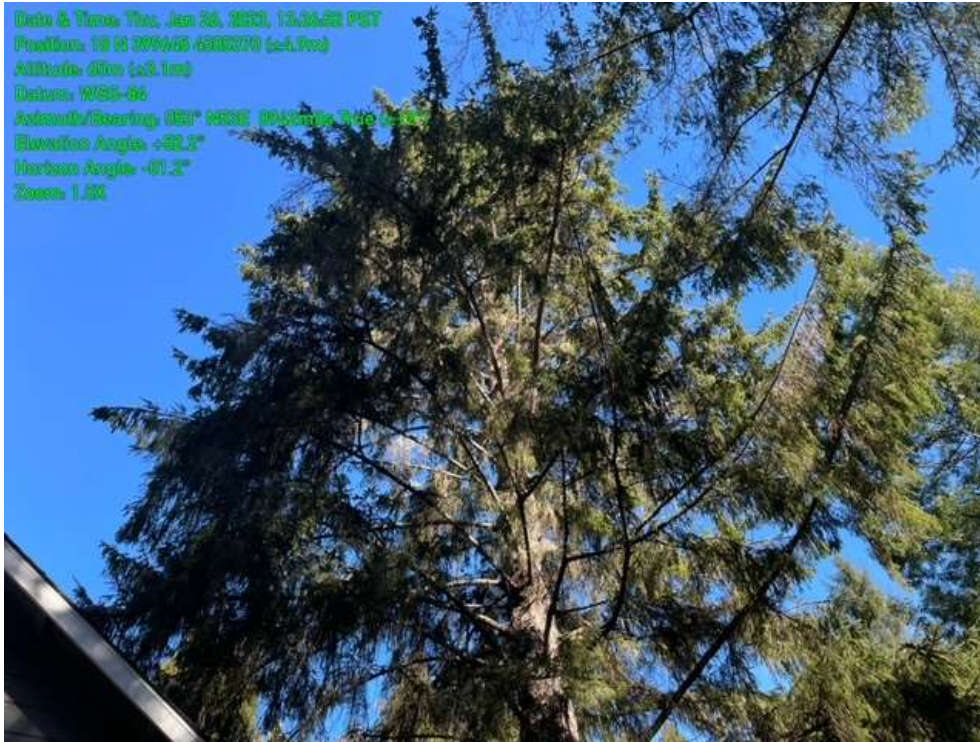
8. View of Southeast Corner of Hedding Garage Building



9. View North Adjacent to Heddinger Garage Building and Tributary to Willow Brook creek



10. Trunk of Large Spruce Adjacent to Garage Building



11. Canopy of Large Spruce Adjacent to Garage Building



12. Tree Storm Damage



13. Trees Removed for Storm Damage



14. Willow Brook creek with Vegetation Clearing



15. Tree Removal at Willow Brook creek



16. Cleared Vegetation at Willow Brook creek



17. Stumps From Tree Removal at Willow Brook creek



18. Willow Brook creek



19. Cleared Vegetation Pile



20. Road Access to Willow Brook creek



21. Banks of Willow Brook creek



22. Cleared Area Adjacent to Willow Creek



23. Area Cleared of Vegetation Along Willow Brook creek



24. Pile of Cleared Vegetation



25. Cleared Area Adjacent to Willow Brook creek



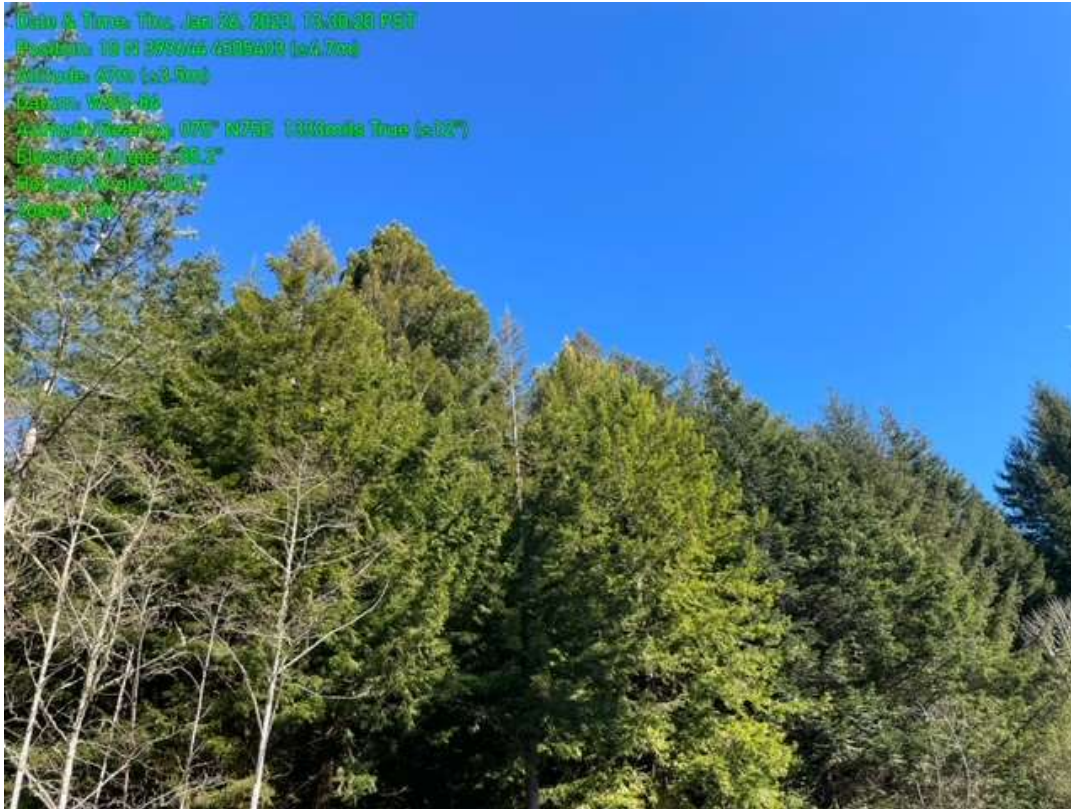
26. Pile of Cleared Vegetation adjacent to Willow Brook creek



27. Canopy Adjacent to the Garage Building (1)



28. Canopy Adjacent to Garage Building (2)



29. Canopy Adjacent to Heddinger Garage Building



30. Trees adjacent to Willow Brook creek with Trimmed Branches.