

201 Kimberly Lane, 161, 141, & 139 Miles Lane

Biological Report

Santa Cruz County, Watsonville, CA

APNs: 016-111-44, 016-491-01,
016-491-02, 016-491-03



Prepared for

MidPen Housing Corporation
275 Main Street, Suite 204
Watsonville, CA 95076

Prepared by

Ecological Concerns Incorporated
125 Walk Circle
Santa Cruz, CA 95060

REVISED

June 10, 2019



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INTRODUCTION

Project Location

The proposed project occurs on four parcels located in the City of Watsonville, Santa Cruz County, CA. Figure 1 provides the project location, while Figure 2 shows the four parcels included in this study.

The project APNs are: 016-111-44, 016-491-01, 016-491-02, and 016-491-03.

Site Description

The proposed project will occur on an approximately 4.8 acre site. The western section of the site is developed, with a vacant lot and several structures. The site slopes down from west to east until it flattens out into a low point where an intermittent stream runs approximately from north to south. From the stream going east, the flat area eventually begins rising. Figure 3 provides an aerial photo of the site with elevation contours.

Project Description

MidPen Housing and Encompass Community Services propose to develop on four parcels located in the City of Watsonville. Figure 4 shows the proposed site plan.

Purpose of Report

This report is meant to meet the requirements of the City of Watsonville for a Biological Report on the parcels proposed for development. As such it identifies potential impacts to rare, sensitive, and/or endangered species and habitats that occur or may occur at the proposed project location. Proposed mitigations to bring impacts to a less than significant level are included in this report. Impact analysis is based on the proposed site plan included within this report. Changes to the site plan may change the conclusions drawn herein.

Report Revision History

Several other versions of this report have been developed based on changes to the plan sheets, including reports dated January 11, May 15, and May 22, 2019. This report includes an analysis for the site plan developed on June 4, 2019 (Figure 4). This report therefore supersedes all earlier reports and is the current document for the project.

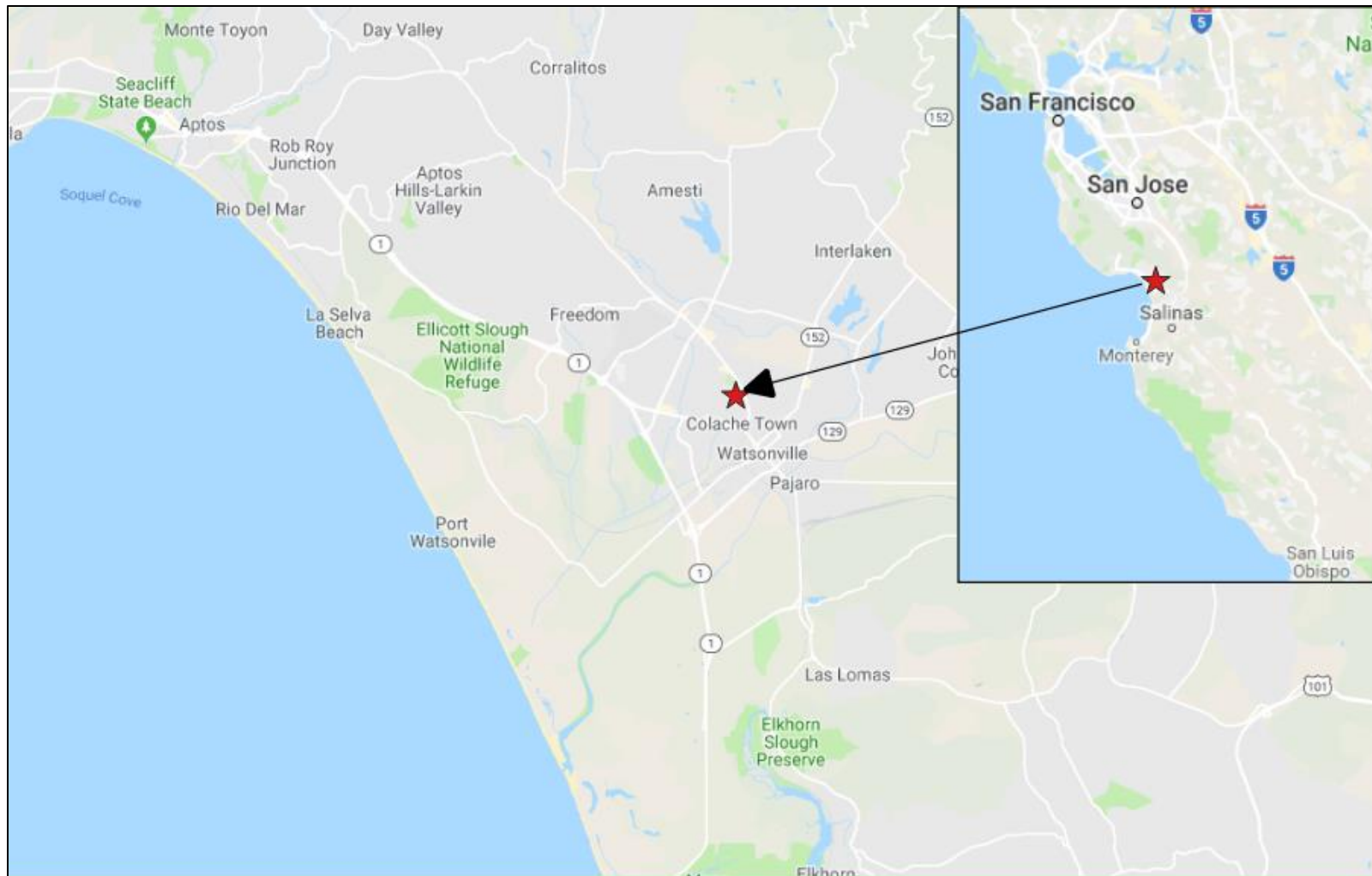


Figure 1: Project Location

Watsonville, Santa Cruz County, California

APNs: 016-111-44, 016-491-01, 016-491-02, 016-491-03

Source Data: Google Maps, ECI



Ecological Concerns Inc.

Ecological Assessments | Habitat Restoration | California Native Plants
 121 West Oakdale, Santa Cruz, CA 95061 | Phone: (573) 454-0000 | Fax: (573) 454-1000
www.ecologicalconcerns.com



Figure 2: Study Area over Aerial Photo
 Watsonville, Santa Cruz County, California
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 Source Data: Google Sattellite, Santa Cruz County APN, ECI



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 125 Walk Circle, Santa Cruz CA 95060 Office: (831) 455-0656 Fax: (831) 457-1605
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Figure 3: Topography of Study Area

Watsonville, Santa Cruz County, California

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Source Data: Google Satellite, Santa Cruz County APN, Santa Cruz County Contour



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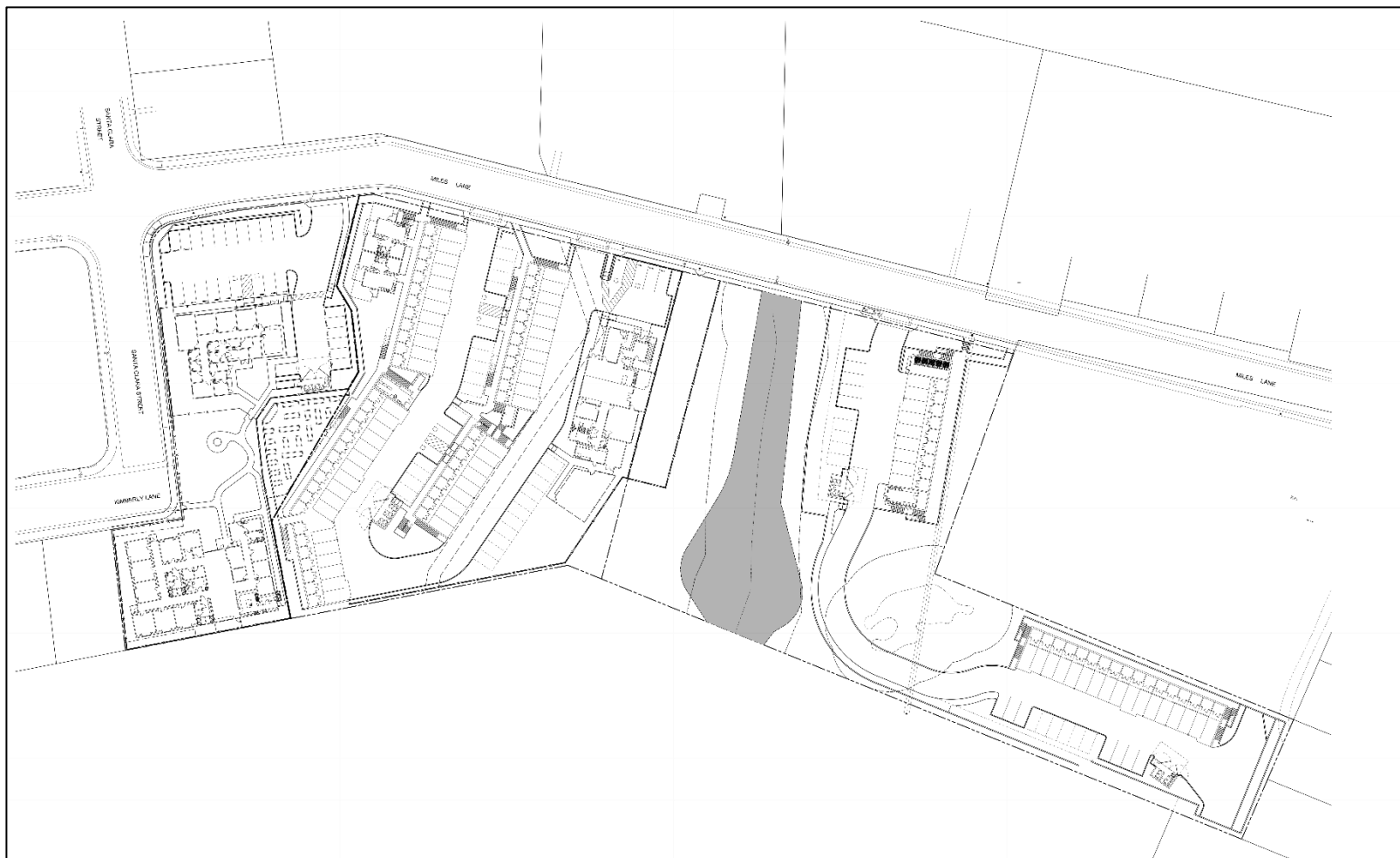


Figure 4: Proposed Site Plan, June 4, 2019 (Developed by: Wald Runkle & Dost Architects LLC)

Watsonville, Santa Cruz County, California

APNs: 016-111-44, 016-491-01, 016-491-02, 016-491-03

METHODS

Prior to conducting field studies, a background literature search was conducted to determine which special-status plant and wildlife species have potential to inhabit the study area based on documented occurrences, range distribution and suitable habitat. The primary sources for this search included the California Natural Diversity Data Base (CNDDDB) and the United States Fish and Wildlife Service (USFWS) records for the Watsonville West and surrounding USGS 7.5' quadrangles (CDFW 2018a; USFWS 2018a).

The Special Animals List and the Special Plant List maintained by the CDFW was used to determine the current regulatory status for each special-status species known from the region (CDFW 2018b, CDFW 2018c).

The initial list was refined to remove species that are documented in the general region but are not expected to occur on the study area due to range limitation or extirpation, or due to a lack of suitable habitats from the study area. The suitability of the site for special-status plants and vertebrates was assessed based on known habitat requirements for each species, the habitats present on the site and surrounding lands beyond the study area, regional locality records, and knowledge of the target species.

For purposes of this assessment, special-status species are defined to include the following: species listed by the USFWS as Threatened or Endangered; species for which USFWS has sufficient information to list as Endangered or Threatened but listing is precluded (Candidate Species); those species for which a proposed rule to list as Endangered or Threatened has been published by USFWS (Proposed species); species listed by USFWS as Birds of Conservation Concern (in Region 32); species listed by the California Fish and Game Commission as Threatened or Endangered and those species that are Candidates for listing as Threatened or Endangered; species designated by the CDFW as Species of Special Concern; and species listed as "fully protected" in the California Fish and Game Code.

In addition, certain animals that meet the criteria for endangered, threatened or rare species included in Section 15830 of the CEQA Guidelines were also considered. This includes those species listed as Medium and High Priority by the Western Bat Working Group (WBWG), those listed as Rare Plant Ranking 1A (Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere) 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), 2A (Plants Presumed Extirpated in California, But Common Elsewhere), and 2B (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) by the California Native Plant Society (CNPS), and those considered locally rare by the Santa Cruz Chapter of CNPS.

The study area was determined in the field to encompass the areas impacted by the proposed work, and the surrounding habitat. The boundaries of the Study Area are provided in Figure 2 and Figure 3.

On June 6 and 8, Joe Rigney from ECI visited the study area in order to evaluate the impacts to habitat, and rare, sensitive, and endangered species that potentially occur on the site. Additional field work, the results of which are considered in this report, occurred on November 26 as part of the *Preliminary Wetland Delineation Report* (ECI 2018) developed for this project, performed by Joe Rigney and Casey Stewman at ECI. Joe Rigney performed an additional site visit to verify habitats on December 7, 2018.

All photos included in this report were taken during the site visits, as noted.

All plant species names are consistent with the Second Edition Jepson Manual (Baldwin *et. al.* 2012). Additional resources used for plant identification include *Annotated Checklist of Vascular Plants of Santa Cruz County, California* (Neubauer 2013), the CalFlora database (CalFlora 2018), and the Jepson Manual eFlora (Jepson Flora Project 2018).

GPS data was collected using a Trimble GeoXT field unit at submeter accuracy. All data was collected in WGS 1984 reference. Data was entered into QGIS software for analysis. Habitat areas were determined based on a combination of field observations and aerial photo analysis. The development envelope of the proposed project was determined by digitizing the edges of all boundaries shown on the site plan.

Topographic maps were obtained digitally from the U.S. Geological Survey at <https://store.usgs.gov/map-locator>.

RESULTS

Habitat Areas

Several habitat areas were observed on the site, based on vegetation features, as indicated in Table 1. A discussion of the specific habitat areas is provided below. Figure 5 shows habitat locations observed within the project area.

Table 1: Dominant Species within Habitat Areas		
Habitat Area	Acres	Associated Species
Annual Grassland	1.28	<i>Avena fatua</i> , <i>Raphanus sativus</i>
Coast Live Oak	0.16	<i>Quercus agrifolia</i>
Developed	1.53	Ornamental landscaping, impervious surfaces
Harding Grass	0.88	<i>Phalaris aquatica</i>
Himalayan Blackberry	0.17	<i>Rubus armeniacus</i>
Intermittent Stream	0.07	<i>Typha</i> sp., <i>Scirpus microcarpus</i> ,
Ruderal	0.12	<i>Potentilla</i> sp.
Seep Wet Meadow	0.05	<i>Juncus effusus</i> , <i>Oenanthe sarmentosa</i>
Tall Fescue	0.18	<i>Festuca arundinacea</i>
Willow Woodland	0.32	<i>Salix laevigata</i> , <i>Salix lasiolepis</i> , <i>Salix babylonica</i> , <i>Rubus armeniacus</i> , <i>Hedera helix</i>



Figure 5: Habitats Observed in Study Area

Watsonville, Santa Cruz County, California

APNs: 016-111-44, 016-491-01, 016-491-02, 016-491-03

Source Data: Google Satellite, Santa Cruz County APN, Santa Cruz County Contour, ECI



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Coast Live Oak

Quercus agrifolia Woodland Alliance

Four small patches of *Quercus agrifolia* (coast live oak) are found in the study area. One small tree is growing on the far eastern section of the project, and one medium sized tree is found growing adjacent to the willow habitat. The total area of oaks is 0.16 acres. The understory is poorly developed and consisted primarily of non-native annual grasses, likely due to the small size of the patches and the long-term human activities in the area. The three oaks in the south-western part of the project were multi-stemmed at the base and were fairly large.



Photo 1: *Q. agrifolia* growing adjacent to willows (June 6, 2018)



Photo 2: Small oak grove on southwest section of study area (December 7, 2018)



Photo 3: Small oak grove on southwest section of study area (December 7, 2018)

Developed

No alliance

Two parcels in the study area (016-491-01 and 016-491-02) contain a 1.53 acre area made up of developed sites, with several houses, a warehouse, and associated ornamental landscaping. Defining the actual boundary of the developed area was difficult because ornamental landscaping activities seemed to be occurring outside of the boundaries of yards associated with the houses as defined by fences, best judgement was used as to the areas receiving active ornamental landscape management of some form. No native habitats occur within this area.



Photo 4: Transition area between developed area and non-native annual grassland (December 7, 2018)



Photo 5: Warehouse at corner of Miles Ln. and Santa Clara St.

Harding Grass

Phalaris aquatica - *Phalaris arundinacea* Herbaceous Semi-Natural Alliance

The low elevation section of the study area within APN 06-491-03 is dominated by a thickly growing mat of *Phalaris aquatica* (*Harding grass*), a non-native perennial grass. *Rubus armeniacus* (Himalayan blackberry) grows sporadically within the dominant *P. aquatica*. A smaller patch of this alliance was also observed on the hillside on the eastern portion of the study area.



Photo 6: *P. aquatica* growing in the lower elevation areas (the intermittent stream is on the far left of the photo) (June 6, 2018)

Himalayan Blackberry

Rubus armeniacus - *Sesbania punicea* - *Ficus carica* Shrubland Semi-Natural Alliance

Thick patches of *R. armeniacus* are found scattered throughout the study area, in particular on the edge of the willow habitat areas. These patches intergrade with adjacent habitat, so for instance some *R. armeniacus* is found growing as a thick understory in the willow habitat. The areas identified as this habitat are completely dominated by the species and do not have a significant component of other plants.



Photo 7: *R. armeniacus* growing next to *Salix* sp. and *P. aquaticus* (June 6, 2018)



Photo 8: *R. armeniacus* growing next to *Salix* sp. and non-native annual grassland (June 6, 2018)



Photo 9: *R. armeniacus* patch on eastern section of property (June 8, 2018)

Intermittent Stream

Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance

An intermittent stream runs through the western section of APN 016-491-03. The slow moving water is dominated by *Typha* sp. (cat tail), with other plants present including *R. armeniacus*, *Potentilla* sp. (cinquefoil), *Scirpus microcarpus* (panicled bulrush), and *Rumex* sp. (dock). The downstream end is largely devoid of vegetation but has an overstory of *Salix laevigata* (red willow). The channel itself is deeply incised with little bank formation, and is unusually straight, indicating that it was likely dug through the property at some point in the past. The channel ends in a storm water structure that causes water to backup into the channel and pool during the summer months. This structure also acts as a barrier to animals such as frogs and fish.

Two previous reports developed for this site called this feature a “Watsonville Slough Channel” (OEI 2003a, OEI 2003b). ECI disagrees with this determination, based upon 1) U.S. Geological Survey Topographic Maps, 2) observations made on the site, and 3) professional best judgement. This reasoning is described below. It should be noted that while these previous reports called the area a slough channel, no analysis or justification for this determination is provided within the report.

USGS topographic maps for the site from 2018 and 1954 are provided in Figures 6 and 7 below. The 2018 map shows that the slough stops south of Crespi Ave, thus before the project location. While some small blue dots indicating some presence of water on the site are evident, it is difficult to determine exactly what this symbol represents. Based on the presence of similar symbols south of the project site, ECI assumes the symbol indicates a marsh land. Looking at the historic topographic map from 1954, it is evident that the line for Harkin’s Slough also ends south of the project site, in a similar location to the 2018 map. At this time, the water feature was clearly indicated as an intermittent stream where it crosses the property boundary. In both cases, Harkin’s Slough is clearly not shown to cross the property boundary.

ECI noted that the upper water source appeared to be intermittent, running primarily in the winter and spring. The lower section of the channel is impounded by a stormwater feature, which causes water to backup into the stream channel (See Photo 12). This artificial structure may give the impression that the area is an arm of the slough, when in fact any standing water in the channel is caused by this structure, not by the hydrology of the slough.

Given that the feature is fed by an intermittent stream, and that the buildup of water, if present during the dry season, is due to an artificial structure, ECI determined that the best description of this feature is as an intermittent stream. It may be the case that the feature could equally be described as an “emergent wetland,” however since these wetlands typically lack flowing water, and since water is clearly flowing through the system through much of the year, ECI believes intermittent stream is more appropriate

a description than emergent wetland. It should be noted, however, that the results of this report would not change if the naming of this feature were changed in this way.

This habitat is considered sensitive habitat, and is protected by a riparian setback as defined under City of Watsonville Municipal Code section 7-6.152. This feature has been determined to be an Army Corps of Engineers (ACOE) jurisdictional wetland under Section 404 of the Federal Clean Water Act (ECI 2018) and may also be subject to California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB) jurisdiction.

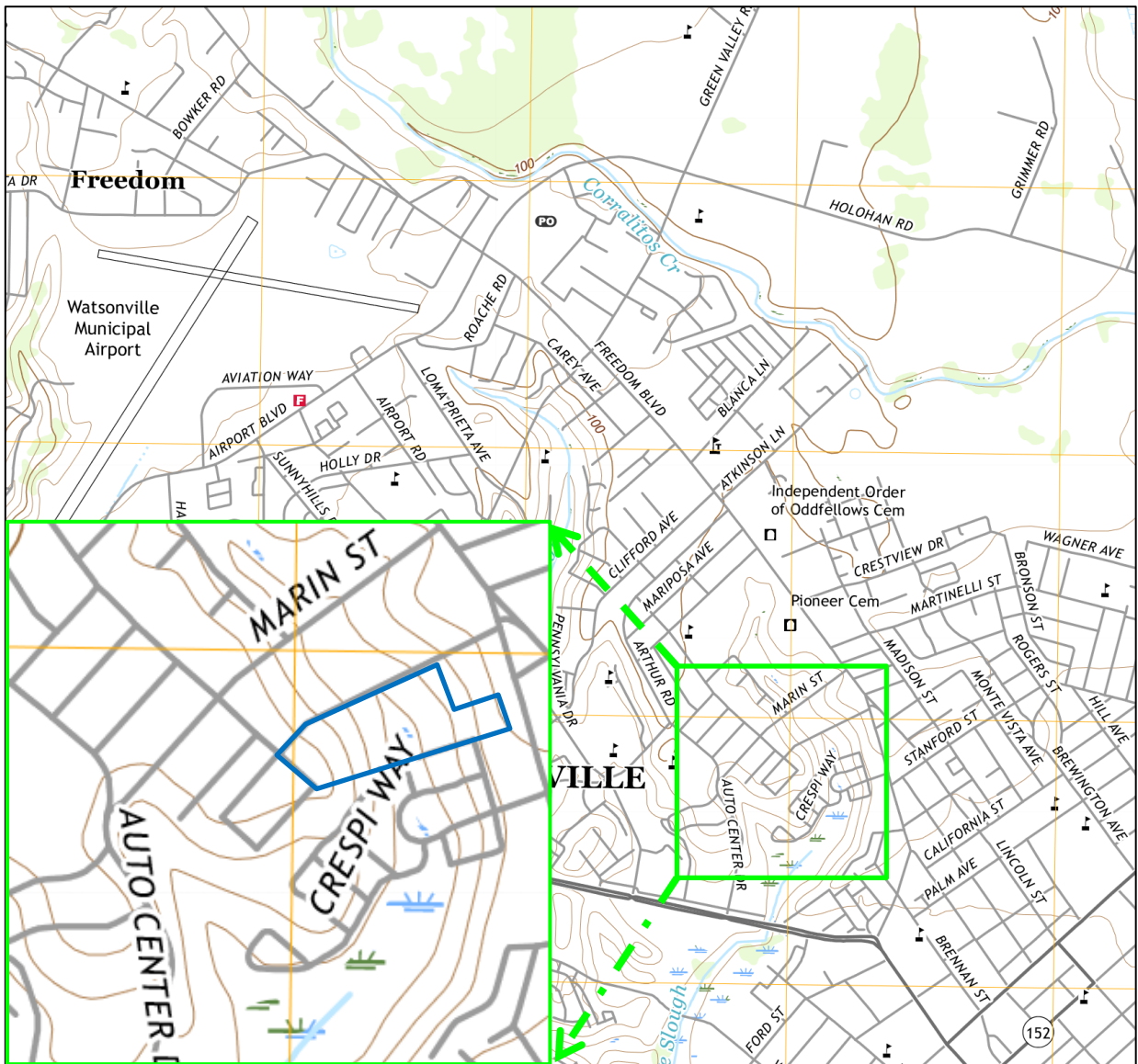


Figure 6: U.S.G.S. Topographic Map from 2018 (USGS 2018)

Note small blue marks within the project area, possibly indicative of a marsh; also note that thick blue line of Harkin's Slough ends before Crespi Way.

□ Project Area (approximate)

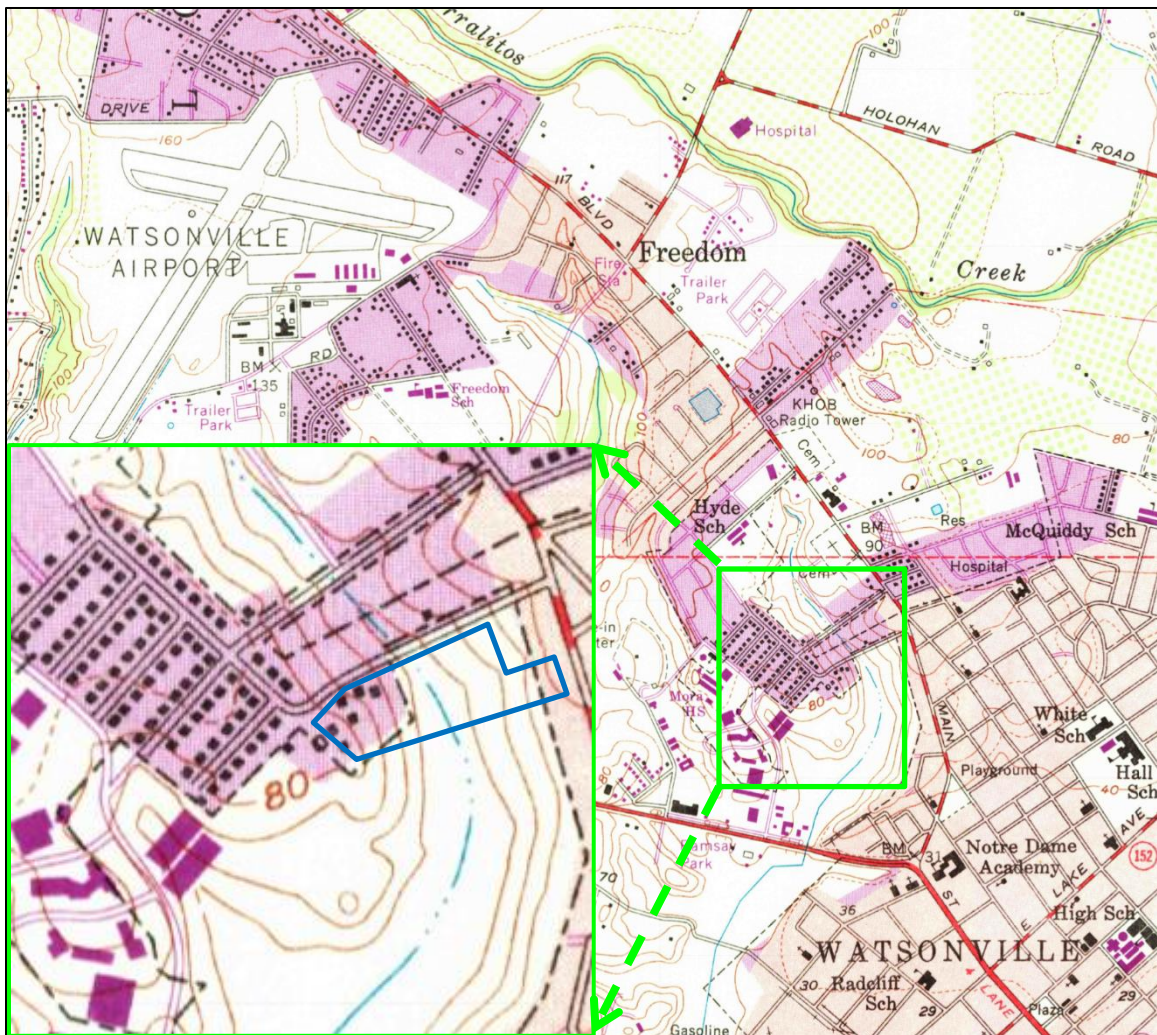


Figure 7: U.S.G.S. Topographic Map from 1954 (USGS 1954)

Note small intermittent stream marks within the project area; also note that solid blue line of Harkin's Slough ends before project area.

Project Area (approximate)



Photo 10: Intermittent stream (June 6, 2018)



Photo 11: Intermittent stream beneath willows (December 7, 2018)



Photo 12: Storm water structure at outfall of intermittent stream (December 7, 2018)

Non-native Annual Grassland

Avena (barbata, fatua) Herbaceous Semi-Natural Alliance

The hillsides on both sides of the study area are dominated by 1.28 acres of non-native annual grassland, dominated by *Avena fatua* (wild oat) and *Raphanus sativus* (wild radish). A small patch of *Festuca perennis* (wild rye) was growing in a disturbed area on the north central portion of the grassland. This species appeared to have been seeded there as part of erosion control measures.



**Photo 13: Non-native annual grassland on eastern arm of study area
(December 7, 2018)**



Photo 14: Non-native annual grassland on western side of study area (December 7, 2018)



Photo 15: *F. perennis* on western central portion of study area (June 6, 2018)

Ruderal

No alliance

APN 016-111-44 consists of a vacant lot covered in ruderal vegetation, including non-native annual grasses (unidentified), *Plantago lanceolata* (English plantain), and *R. armeniacus*. This area appears to have been significantly disturbed in the recent past, possibly even graded.



Photo 16: Ruderal habitat area (December 7, 2018)

Seep Wetland

Juncus effusus Herbaceous Alliance

Oenanthe sarmentosa Herbaceous Alliance

A hillside seep feeds a 0.05 acre wet meadow. The seep begins on the hillside on the eastern portion of the study area and spreads out into the flatter section of the property. The meadow is dominated by *Juncus effusus* (common rush) and *Oenanthe sarmentosa* (water parsley). During the initial site visit, the possibility that the seep could potentially be caused by a leaking water pipe was raised, as ECI has seen this situation on other sites. On December 4, 2018, a ground penetrating radar study was performed that found no evidence of pipe in the area (see Appendix A).

This habitat is considered sensitive habitat, and is protected by a riparian setback as defined under City of Watsonville Municipal Code section 7-6.152. . Additionally, this feature has been determined to potentially be an ACOE jurisdictional wetland under Section 404 of the Federal Clean Water Act (ECI 2018) and may also be subject to CDFW and RWQCB jurisdiction.



Photo 17: Seep meadow (December 7, 2018)

Tall Fescue

Agrostis (gigantea, stolonifera) - Festuca arundinacea Herbaceous Semi-Natural Alliance

The area adjacent to the seep meadow is dominated by *Festuca arundinacea* (tall fescue). This plant has nearly 100% cover in the area.



Photo 18: *F. arundinacea* around seep meadow (June 8, 2018)

Willow Woodland

Salix lasiolepis Shrubland Alliance

Salix laevigata Woodland Alliance

The southern central portion of the property is dominated by *Salix* species. Where the intermittent stream exits the study area to the south, a thick over story of large *S. laevigata* (red willow) trees grow with *R. armeniacus* and *Hedera helix* (English ivy) in the understory. To the west of this, and up the hillside, a patch of *S. lasiolepis* (arroyo willow) is found with *R. armeniacus* in the understory. A single *S. babylonica* (weeping willow) is growing to the east of the *S. laevigata*. This is a non-native tree, and though included in the Willow Woodland, it is not considered a sensitive habitat and has been identified separately in the habitat map (Figure 5). The rest of the willow woodland is considered sensitive habitat.



Photo 19: *S. laevigata* with *H. helix* (December 7, 2018)



Photo 20: *S. lasiolepis* on hillside (December 7, 2018)



Photo 21: *S. babylonica* (June 8, 2018)

Plants

Table 2 lists all vascular plant species identified on the site. Due to the timing of the plant survey, several species, particularly annual grassland species, could not be identified. It is expected that a spring survey would include several additional species not included in Table 2.

Table 2: Plant species observed in study area			
Family	Species Name	Common Name	Native
Asteraceae	<i>Artemisia biennis</i>	Biennial Wormwood	N
Poaceae	<i>Avena fatua</i>	Oat Grass	N
Poaceae	<i>Bromus diandrus</i>	Ripgut brome	N
Onagraceae	<i>Clarkia sp.</i>	Clarkia	Y
Convolvulaceae	<i>Convolvulus arvensis</i>	Bindweed	N
Poaceae	<i>Festuca arundinacea</i>	Tall Fescue	N
Poaceae	<i>Festuca perennis</i>	Rye Grass	N
Araliaceae	<i>Hedera helix</i>	English Ivy	N
Asteraceae	<i>Helminthotheca echioides</i>	Bristly Ox-tongue	N
Juncaceae	<i>Juncus effusus</i>	Bog Rush	Y
Malvaceae	<i>Malva parviflora</i>	Cheeseweed	N
Apiaceae	<i>Oenanthe sarmentosa</i>	Water Parsley	Y
Poaceae	<i>Phalaris aquatica</i>	Harding Grass	N
Plantaginaceae	<i>Plantago lanceolata</i>	English Plantain	N
Rosaceae	<i>Potentilla sp.</i>	Cinquefoil	Y
Fagaceae	<i>Quercus agrifolia</i>	Coast Live Oak	Y
Brassicaceae	<i>Raphanus sativus</i>	Wild Radish	N
Rosaceae	<i>Rubus armeniacus</i>	Himalayan Blackberry	N
Polygonaceae	<i>Rumex occidentalis</i>	Western Dock	Y
Polygonaceae	<i>Rumex sp.</i>	Dock	?
Salicaceae	<i>Salix babylonica</i>	Weeping Willow	N
Salicaceae	<i>Salix laevigata</i>	Red Willow	Y
Salicaceae	<i>Salix lasiolepis</i>	Arroyo Willow	Y
Cyperaceae	<i>Scirpus microcarpus</i>	Panicled bulrush	Y
Typhaceae	<i>Typha sp.</i>	cat-tail	?

Figure 8 provides an aerial image showing the locations of all known rare and sensitive plants within a 10 mile radius of the study area, as found in the CNDDDB (CDFW 2018a). Table 3 provides a listing of all of these species, including the likely potential that the plants are found onsite.

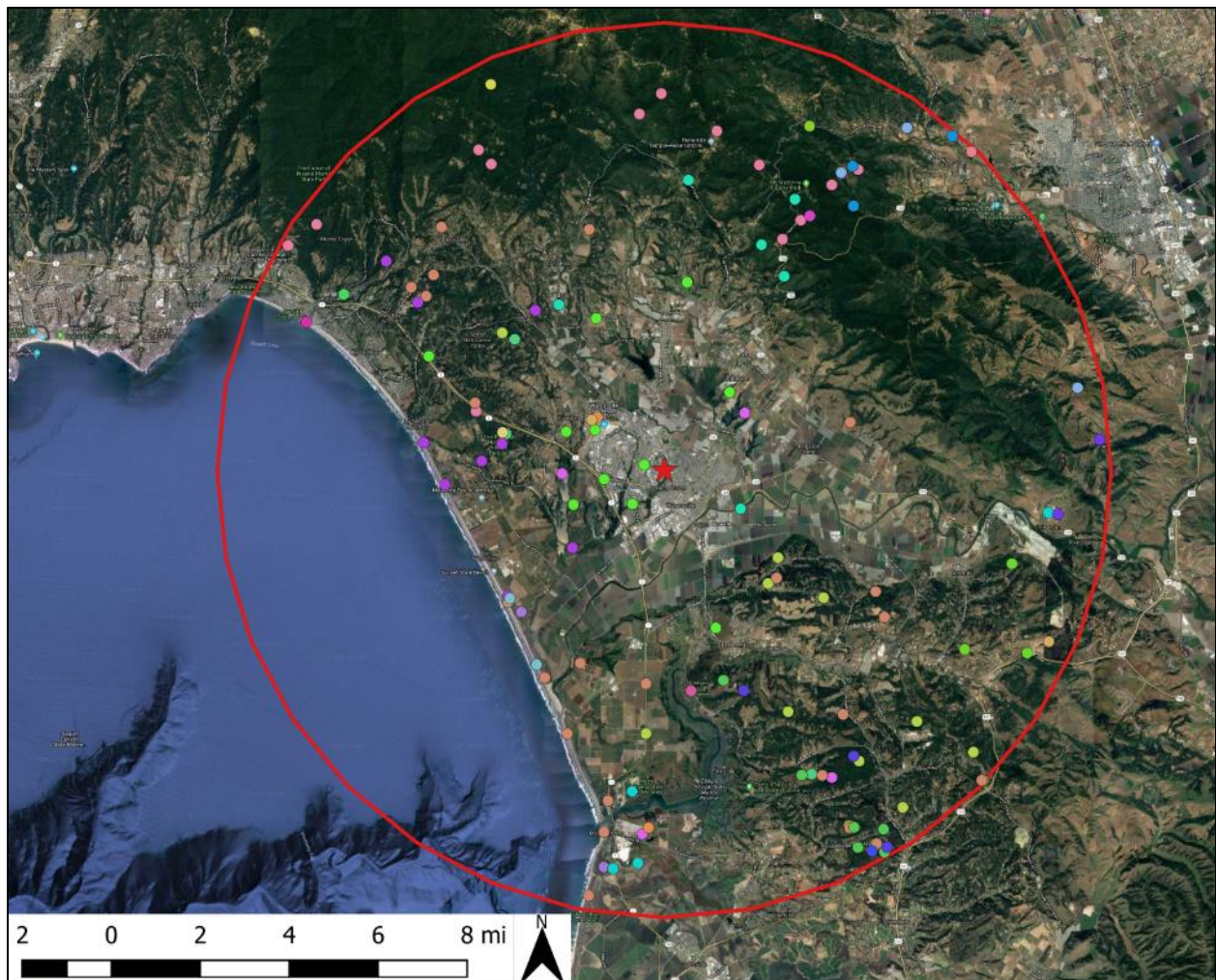
Thirty plant species were considered based on the CNDDDB listings. Of these, two are considered as having the potential to occur onsite due to the presence of grasslands and one due to the presence of wetland seep habitat:

- *Holocarpha macradenia* (Santa Cruz tarplant)
- *Plagiobothrys chorisianus* var. *chorisianus* (Choris' popcornflower)
- *Trifolium buckwestiorum* (Santa Cruz clover)

None of these species were observed during the June site visit (when their phenology would have allowed for identification), and so therefore it is concluded that no rare plants are present on the site.

Table 3: Sensitive Plant Species found within a ten-mile radius of proposed project, as found in the CNDDDB (CDFW 2018a)			
Scientific Name	Common Name	Status*	Potential Presence Onsite
Arctostaphylos andersonii	Anderson's manzanita	1B.2	Not present – no habitat, maritime chaparral
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	FS, 1B.2	Not present – no habitat, maritime chaparral
Arctostaphylos pajaroensis	Pajaro manzanita	FS, 1B.1	Not present – no habitat, maritime chaparral
Castilleja rubicundula var. rubicundula	pink creamsacs	FS, 1B.2	Not present – no habitat, serpentine
Centromadia parryi ssp. congdonii	Congdon's tarplant	FS, 1B.1	Not present – no habitat, alkaline grasslands
Chorizanthe pungens var. pungens	Monterey spineflower	FT, 1B.2	Not present – no habitat, sandy
Chorizanthe robusta var. robusta	robust spineflower	FE, FS, 1B.1	Not present – no habitat, sandy
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	FS, CE, 1B.1	Not present – no habitat, sandy
Dudleya abramsii ssp. setchellii	Santa Clara Valley dudleya	FE, 1B.1	Not present – no habitat, serpentine
Ericameria fasciculata	Eastwood's goldenbush	FS, 1B.1	Not present – no habitat, maritime chaparral
Erysimum ammophilum	sand-loving wallflower	FS, 1B.2	Not present – no habitat, sandy
Fritillaria liliacea	fragrant fritillary	FS, 1B.2	Not present – no habitat, serpentine
Gilia tenuiflora ssp. arenaria	Monterey gilia	FE, CT, 1B.2	Not present – no habitat, sandy
Hoita strobilina	Loma Prieta hoita	1B.1	Not present – no habitat, serpentine
Holocarpha macradenia	Santa Cruz tarplant	FT, CE, 1B.1	Low – not observed in annual grassland
Horkelia cuneata var. sericea	Kellogg's horkelia	FS, 1B.1	Not present – no habitat, sandy
Lasthenia californica ssp. macrantha	perennial goldfields	1B.2	Not present – coastal bluff/dune/scrub
Lessingia micradenia var. glabrata	smooth lessingia	1B.2	Not present – no habitat, serpentine
Malacothamnus arcuatus	arcuate bush-mallow	1B.2	Not present – no habitat, maritime chaparral
Monolopia gracilens	woodland woollythreads	1B.2	Not present – no habitat, serpentine
* Status Definitions <div> FEDERAL FE = Listed as “Endangered” FT = Listed as “Threatened” FS = Listed as “Sensitive” by the Bureau of Land Management </div> <div> STATE CE = Listed as “Endangered” CT = Listed as “Threatened” </div> <div> OTHER CNPS RANK 1B = Rare, threatened, or endangered in California and elsewhere THREAT 0.1 = Seriously threatened in California THREAT 0.2 = Fairly threatened in California THREAT 0.3 = Not very threatened in California </div>			

Table 3: Sensitive Plant Species found within a ten-mile radius of proposed project, as found in the CNDDDB (CDFW 2018a)			
Scientific Name	Common Name	Status*	Potential Presence Onsite
Or U.S. Forest Service			
Pedicularis dudleyi	Dudley's lousewort	FS, 1B.2	Not present – no habitat, maritime chaparral
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	1B.2	Not present – no habitat, maritime chaparral
Piperia yadonii	Yadon's rein orchid	1B.1	Not present – no habitat, maritime chaparral, closed-cone coniferous forest
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	1B.2	Not present – no habitat, coastal terrace prairie
Plagiobothrys diffusus	San Francisco popcornflower	CE, 1B.1	Low – not observed in annual grassland
Puccinellia simplex	California alkali grass	1B.2	Not present – no habitat, vernal pool
Rosa pinetorum	pine rose	1B.2	Not present – no habitat, closed-cone coniferous forest
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	FS, 1B.2	Not present – no habitat, serpentine
Trifolium buckwestiorum	Santa Cruz clover	FS, 1B.1	Low – no habitat, gravelly, coastal terrace prairie
Trifolium hydrophilum	saline clover	1B.2	Not present – none observed in wetlands, no vernal pool habitat on site
<p>* Status Definitions</p> <div> <div> <p>FEDERAL</p> <p>FE = Listed as “Endangered”</p> <p>FT = Listed as “Threatened”</p> <p>FS = Listed as “Sensitive” by the Bureau of Land Management Or U.S. Forest Service</p> </div> <div> <p>STATE</p> <p>CE = Listed as “Endangered”</p> <p>CT = Listed as “Threatened”</p> </div> <div> <p>OTHER</p> <p>CNPS RANK</p> <p>1B = Rare, threatened, or endangered in California and elsewhere</p> <p>THREAT 0.1 = Seriously threatened in California</p> <p>THREAT 0.2 = Fairly threatened in California</p> <p>THREAT 0.3 = Not very threatened in California</p> </div> </div>			



★ Project Location	● <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	● <i>Malacothamnus arcuatus</i>
□ 10 Mile Radius	● <i>Dudleya abramsii</i> ssp. <i>setchellii</i>	● <i>Monolopia gracilens</i>
CNDDDB_Plants	● <i>Ericameria fasciculata</i>	● <i>Pedicularis dudleyi</i>
● <i>Arctostaphylos andersonii</i>	● <i>Erysimum ammophilum</i>	● <i>Penstemon rattanii</i> var. <i>kleei</i>
● <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	● <i>Fritillaria liliacea</i>	● <i>Piperia yadonii</i>
● <i>Arctostaphylos pajaroensis</i>	● <i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	● <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>
● <i>Castilleja rubicundula</i> var. <i>rubicundula</i>	● <i>Hoita strobilina</i>	● <i>Plagiobothrys diffusus</i>
● <i>Centromadia parryi</i> ssp. <i>congdonii</i>	● <i>Holocarpha macradenia</i>	● <i>Puccinellia simplex</i>
● <i>Chorizanthe pungens</i> var. <i>pungens</i>	● <i>Horkelia cuneata</i> var. <i>sericea</i>	● <i>Rosa pinetorum</i>
● <i>Chorizanthe robusta</i> var. <i>robusta</i>	● <i>Lasthenia californica</i> ssp. <i>macrantha</i>	● <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>
	● <i>Lessingia micradenia</i> var. <i>glabrata</i>	● <i>Trifolium buckwestiorum</i>
		● <i>Trifolium hydrophilum</i>

Figure 8: Sensitive Plants within a Ten Mile Radius (CDFW 2018a)

Watsonville, Santa Cruz County, California

APNs: 016-111-44, 016-491-01, 016-491-02, 016-491-03



Ecological Concerns Inc.

Ecological Landscapes | Habitat Restoration | California Native Plants
122 Webb Circle, Santa Cruz, CA 95060 Office: (831) 455-3056 Fax: (831) 457-1036
www.ecologicalconcerns.com

Data Sources: Google Satellite, California Natural Diversity Database, ECI Data

Wildlife

Twenty-nine special-status wildlife species were documented in the CNDDDB within ten miles of the study area, as indicated in Figure 9 (CDFW 2018a). The study area is not located within any designated critical habitat for federally-listed wildlife species (USFWS 2018b). No special status species were observed during the site visits.

Two sensitive animal species are considered to be potentially present due to the presence of habitat used by the species:

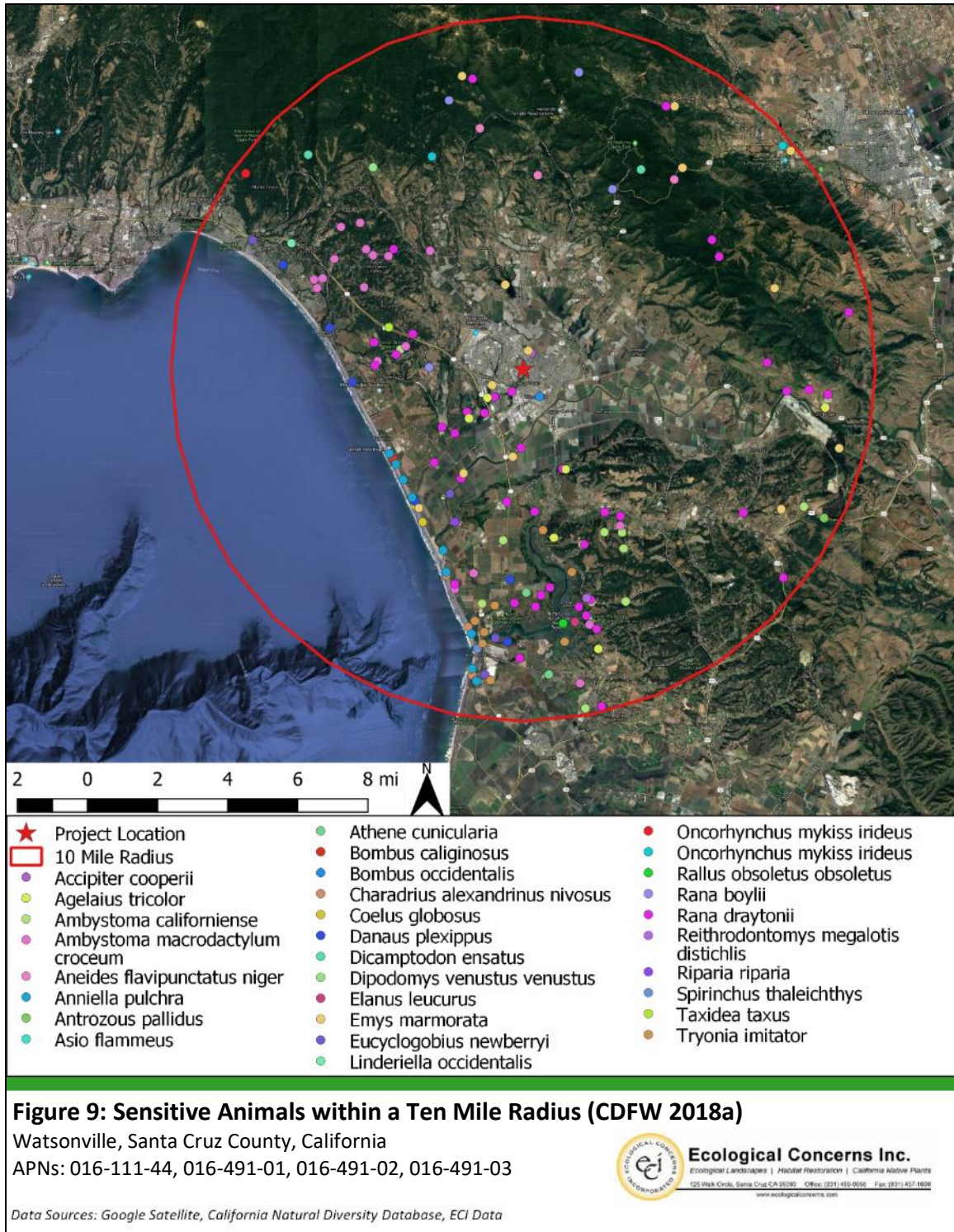
- *Accipiter cooperii* (Cooper's hawk)
- *Elanus leucurus* (white-tailed kite)

These two species are analyzed below. The remaining special-status wildlife species were considered absent or to have a low potential to inhabit the study area and are not discussed further (Table 4).

Table 4:Sensitive Animal Species found within a ten-mile radius of proposed project, as found in the CNDDDB (CDFW 2018a)			
Scientific Name	Common Name	Listing Status*	Potential Presence Onsite
MAMMALS			
<i>Antrozous pallidus</i>	pallid bat	FS, SSC, WBWG-H	Low – habitat area poor quality due to urbanization
<i>Dipodomys venustus venustus</i>	Santa Cruz kangaroo rat	LI	Not present – no habitat, sandhills
<i>Reithrodontomys megalotis distichlis</i>	Salinas harvest mouse	LI	Not present – no habitat, salt marsh
<i>Taxidea taxus</i>	American badger	SSC	Not present – insufficient contiguous habitat to support species
BIRDS			
<i>Accipiter cooperii</i>	Cooper's hawk	WL	Possible – nests in oak woodland
<i>Agelaius tricolor</i>	tricolored blackbird	FS, BCC, SSC, NABCI-R	Not present – none observed
<i>Asio flammeus</i>	short-eared owl	SSC	Not present – insufficient contiguous habitat to support species
<i>Athene cunicularia</i>	burrowing owl	FS, BCC, SSC	Not present – insufficient contiguous habitat to support species
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	BCC, SSC, NABCI-R	Not present – no habitat, sand beaches
<i>Elanus leucurus</i>	white-tailed kite	FS, FP	Possible – nests in oak woodland
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	FE, CE, FP, NABI-R	Not present – no habitat, marsh
<i>Riparia riparia</i>	bank swallow	FS, CT	Not present – none observed
*LISTING CODES			
Federal	State	Other	
FE = Federal Endangered	FP = Fully Protected	AFS = American Fisheries Society	
FT = Federal Threatened	CE = California Endangered	E = Endangered	
FS = Listed as “Sensitive” by the	CT = California Threatened	T = Threatened	
Bureau of Land Management	CC= California Candidate	NABCI = North American Bird Conservation Initiative	
Or U.S. Forest Service	SSC = Species of Special Concern	R = Extremely High Vulnerability	
BCC = USFWS Bird of	WL = CDFW Watchlist	WBWG = Western Bat Working Group	
Conservation Concern	LI = Listed in CNDDDB	H = High Priority	

Table 4:Sensitive Animal Species found within a ten-mile radius of proposed project, as found in the CNDDB (CDFW 2018a)			
Scientific Name	Common Name	Listing Status*	Potential Presence Onsite
REPTILES			
Anniella pulchra	northern California legless lizard	FS, SSC	Not present – no habitat, sand dunes
Emys marmorata	western pond turtle	FS, SSC	Low – habitat present, but area insufficient to support isolated population, passage blocked by storm water structure, no basking habitat
AMPHIBIANS			
Ambystoma californiense	California tiger salamander	FT, CT, WL	Not present – no habitat, vernal pools
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	FE, CE, FP	Not present – only known from a few select locations; no upland habitat
Aneides flavipunctatus niger	Santa Cruz black salamander	SSC	Not present – deeply incised waterway is poor habitat
Dicamptodon ensatus	California giant salamander	SSC	Not present – no habitat, forests
Rana boyliei	foothill yellow-legged frog	FS, CC, SSC	Not present – no known populations in Watsonville Slough
Rana draytonii	California red-legged frog	FT	Not present – habitat present, but area insufficient to support isolated population, passage blocked by storm water structure, no basking habitat
*LISTING CODES			
Federal	State	Other	
FE = Federal Endangered	FP = Fully Protected	AFS = American Fisheries Society	
FT = Federal Threatened	CE = California Endangered	E = Endangered	
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Table 4: Sensitive Animal Species found within a ten-mile radius of proposed project, as found in the CNDDB (CDFW 2018a)			
Scientific Name	Common Name	Listing Status*	Potential Presence Onsite
Conservation Concern	LI = Listed in CNDDB	H = High Priority	
FISH			
<i>Eucyclogobius newberryi</i>	tidewater goby	FE, SSC, AFS-E	Not present – no habitat, brackish waters
<i>Oncorhynchus mykiss</i>	steelhead	FT, AFS-T	Not present – no known population in slough, passage blocked by storm water structure
<i>Spirinchus thaleichthys</i>	longfin smelt	CT, SSC	Not present – no habitat, estuaries
INVERTEBRATES			
<i>Bombus caliginosus</i>	obscure bumble bee	LI	Low – none observed
<i>Bombus occidentalis</i>	western bumble bee	FS	Low – none observed
<i>Coelus globosus</i>	globose dune beetle	LI	Not present – no habitat, sand dunes
<i>Linderiella occidentalis</i>	California linderiella	LI	Not present – no habitat, vernal pools
<i>Tryonia imitator</i>	mimic tryonia	LI	Not present – no habitat, marsh
<i>Danaus plexippus</i>	monarch	FS	Low – none observed
*LISTING CODES			
Federal	State	Other	
FE = Federal Endangered	FP = Fully Protected	AFS = American Fisheries Society	
FT = Federal Threatened	CE = California Endangered	E = Endangered	
FS = Listed as “Sensitive” by the	CT = California Threatened	T = Threatened	
Bureau of Land Management	CC= California Candidate	NABCI = North American Bird Conservation Initiative	
Or U.S. Forest Service	SSC = Species of Special Concern	R = Extremely High Vulnerability	
BCC = USFWS Bird of	WL = CDFW Watchlist	WBWG = Western Bat Working Group	
Conservation Concern	LI = Listed in CNDDB	H = High Priority	
		M = Medium Priority	
		LM = Low-Medium Priority	



Accipiter cooperii (Cooper's Hawk)

CDFW Watch List

Cooper's hawk is a medium sized raptor that ranges across North America (NGS 1983). Breeding typically occurs in mature broadleaf or coniferous forests from early April to June, with molting typically beginning in late June (Bent 1937, Brown and Amadon 1968). While some populations require large tracts of land, others have been observed using small woodlots and forest tracts, including within urban/suburban areas where the bird appears to be tolerant of human activities (Hennessy 1978, Herron et al. 1985, Campbell et al 1990, Peterjohn and Rice 1991, Rosenfield et al. 1991).

A single record for this species was found within a ten mile radius in the CNDDDB at Crestview Park, urban park in the Watsonville city limits less than one half mile from the project site. It is possible that *A. cooperii* uses the project site for foraging, and it may also use the oak trees onsite for nesting.

Elanus leucurus (White-tailed Kite)

USFWS Bird of Conservation Concern; California Fully Protected.

The white-tailed kite is a medium-sized raptor that occupies low-elevation grassland, agricultural, wetland, oak woodland and oak savanna habitats (Dunk 1995). The species is distributed throughout the coastal foothills and valleys along the entire length of the state, throughout the Central Valley, and into the foothills of the Sierra Nevada (Dunk 1995). The species hunts mostly by flying over open country, pausing frequently to hover and study the ground; on sighting prey, it dives, catching prey in its talons (Kaufman 1996). Nest site is in top of tree, usually 20-50' above ground, sometimes higher or lower depending on available sites. Live-oak often chosen as nest site. Nest (built by both sexes) is a good-sized platform of sticks and twigs, lined with grasses, weeds, and moss. The bird feeds on mostly small rodents that are active by day in open country, particularly voles and house mice (Dunk 1995). Other items in diet, mostly of minor importance, include pocket gophers, harvest mice, rats, shrews, young rabbits, sometimes birds. Rarely may eat snakes, lizards, frogs, large insects (Kaufman 1996)

A single record for this species was found within a ten mile radius in the CNDDDB at the Elkor Slough Reserve, about 7 miles from the project site. It is possible that *E. leucurus* uses the project site for foraging, and it may also use the oak trees onsite for nesting.

Summary of Special Status Species Potentially Onsite

Thirty plant species were considered as part of this study. Three species were considered to have potential habitat onsite. No special status plant species have been observed, nor are any likely to be present in the study area.

Twenty-nine wildlife species were considered as part of this study. Of these two (*A. cooperii*, and *E. leucurus*) are considered to potentially utilize habitat within the project area. Table 5 summarizes the potential habitat use of the site by these two species.

Table 5: Summary of Potential Habitat Use by Sensitive Wildlife Species		
Species Name	Common Name	Potential Habitat Use
<i>Accipiter cooperii</i>	Cooper's Hawk	May use grassland for foraging or oaks for nesting
<i>Elanus leucurus</i>	White-tailed Kite	May use grassland for foraging or oaks for nesting

IMPACT ANALYSIS

Thresholds of Significance

The thresholds of significance presented in Appendix G of the CEQA Guidelines (AEP 2018) were used to evaluate project impacts and to determine if implementation of the proposed project would pose significant impacts to biological resources.

For this analysis, significant impacts are those that substantially affect either:

- A species (or its habitat) identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS
- Federal or state protected wetlands as defined by Section 404 of the Clean Water Act or by the Porter-Cologne Act, respectively
- Movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation plan, or other approved local, regional or state habitat conservation plan.

It should be noted that the presentation of significance of impacts and potential mitigations is for discussion purposes only. The final determination for thresholds of significance, significance of impacts, and appropriate mitigation measures is made by the Lead Agency, as defined under CEQA. For this project, the Lead Agency is presumed to be the City of Watsonville.

Regulatory Context

Federal Clean Water Act / California Porter-Cologne Act

The ACOE is responsible under Section 404 of the Clean Water Act to regulate the discharge of fill material into the waters of the United States and their lateral limits, including streams that are tributaries to navigable waters and their adjacent wetlands. The lateral limits of jurisdiction for a non-tidal stream are measured at the line of ordinary high water or the limit of adjacent wetlands.

An area is determined to be a wetland if three elements are present: 1) soils that store water, which are called “hydric;” 2) wetland hydrology, such as standing or flowing water; and 3) plants that are associated with wet conditions. All three of these conditions must be present in order for ACOE to take permit jurisdiction over a project.

The RWQCB regulates discharge into state waters under the Porter-Cologne Act and under Section 401 of the Federal Clean Water Act. Any project that requires a Section 404 Permit will also require a Section 401 Certification.

Projects that do not require a 404 permit may also be subject to regulation under the Porter-Cologne Act. One example are projects that impact waters or wetlands of the state that are not under AOC jurisdiction. Another example are construction projects, which are subject to permit requirements setup under the National Pollution Discharge Elimination System, which manages potential project impacts due to erosion. Projects larger than 1 acre in size typically require the implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Federal Migratory Treaty Bird Act / California Fish and Game Code Sections 3503 & 3515

The Federal Migratory Bird Treaty Act regulates or prohibits taking, killing, and possession of migratory bird species and their nests as listed in Title 50 Code of Federal Regulation (CFR) Section 10.13. Bird species and their nests are also protected under Sections 3515 of the California Fish and Game Code. Members of the orders Falconiformes and Strigiformes (birds-of-prey) are protected under California Fish and game Code Section 3503.

California Lake and Streambed Alteration Agreement

Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state.

A project that requires a 1602 Permit must receive a Lake and Streambed Alteration Agreement, issued by CDFW. In order to notify the CDFW, the project owner must submit a complete notification package and fee to CDFW regional office that serves the county where the activity will take place. After CDFW receives a complete notification package, it will determine whether a Lake or Streambed Alteration Agreement is needed. An agreement will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an agreement is required, CDFW will conduct an onsite inspection, if necessary, and submit a draft agreement. The draft agreement will include measures to protect fish and wildlife resources while conducting the project. After receiving the draft agreement, the applicant has 30 calendar days to notify CDFW whether the measures in the draft agreement are acceptable. If they agree with the measures included in the draft agreement, they will need to sign the agreement and submit it to CDFW. If they disagree with any measures in the draft agreement, they must notify CDFW in writing and specify the measures that are not acceptable. Upon written request, CDFW will meet with the applicant within 14 calendar days of receiving the request to resolve the disagreement. If the applicant fails to respond, in writing, within 90 calendar days of receiving the draft agreement, CDFW may withdraw that agreement.

City of Watsonville Municipal Code Section 7-6.152

Watsonville Municipal Code section 7-6.152 states:

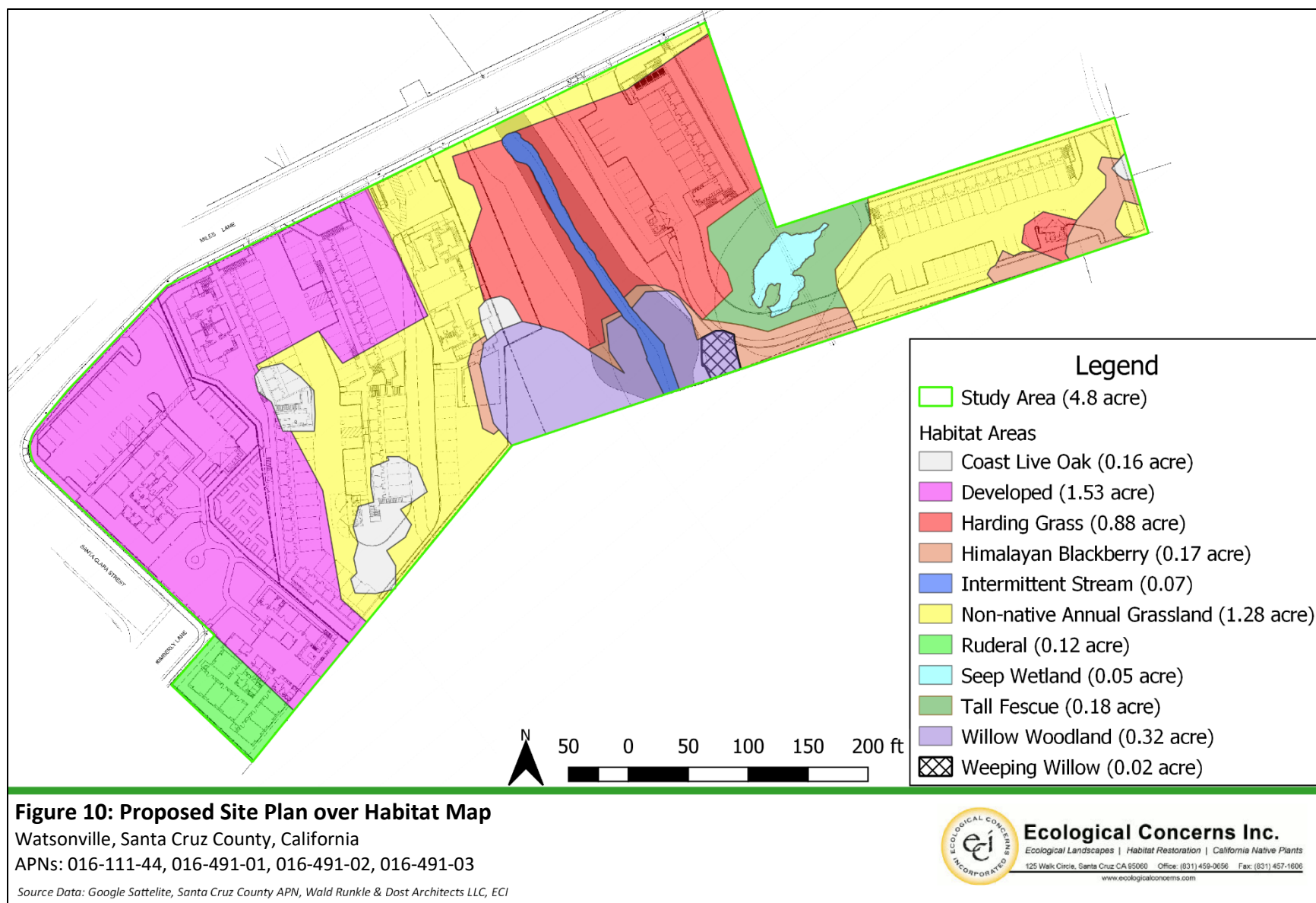
“Riparian corridor” shall mean those areas which fall into one of the following three (3) categories:

- a) An area extending fifty (50') feet, measured horizontally, from each side of a perennial stream. Distance shall be measured from the top of the existing bankfull flowline;*
- b) An area extending thirty (30') feet, measured horizontally, from each side of an intermittent stream. Distance shall be measured from the top of the existing bankfull flowline; or*
- c) An area extending thirty (30') feet from the high water mark of a marsh or a natural body of standing water.*

Habitat Impacts

Three habitat areas identified in Figure 4 are considered sensitive: Intermittent Stream, Seep Wetland, and Willow Woodland. However, it should be noted that the section of Willow Woodland dominated by non-native *S. babylonica* is not considered sensitive. Figure 10 shows the site plan (Figure 4) onto the habitat map overlaid (Figure 5). Based on the development envelope as presented in the site plan, impacts to specific habitat were calculated, as presented in Table 6.

Table 6: Approximate Habitat Impact Areas		
Habitat	Area Impacted	
	Square Feet	Acres
Coast Live Oak	6,948	0.160
Developed	66,527	1.527
Harding Grass	20,245	0.465
Himalayan Blackberry	4,315	0.099
Non-native Annual Grassland	51,435	1.181
Ruderal	5,057	0.116
Seep Wetland	36	0.001
Tall Fescue	1,525	0.035
Willow Riparian	1,816	0.042
Weeping Willow	72	0.002



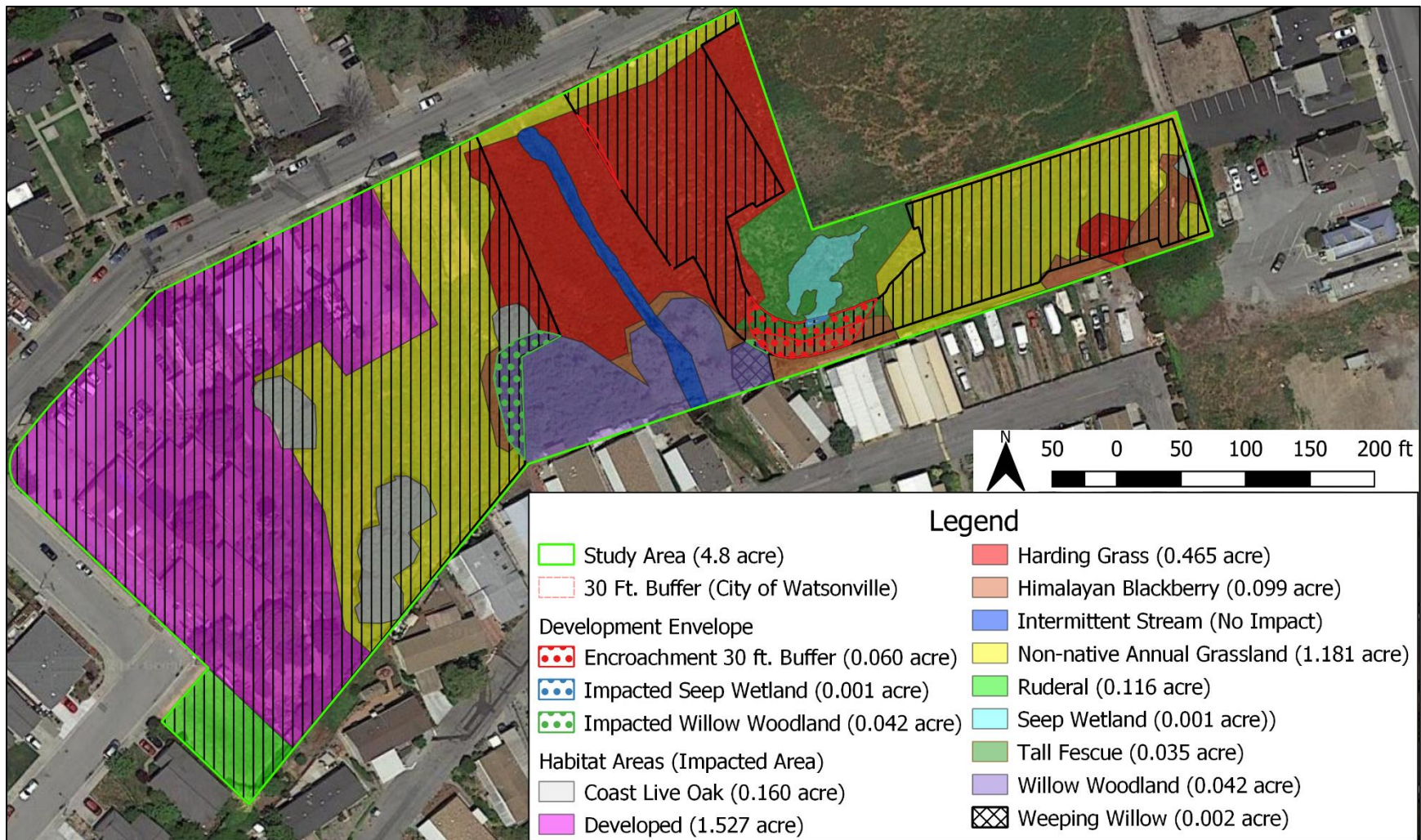


Figure 11: Impacts from Proposed Development

Watsonville, Santa Cruz County, California

APNs: 016-111-44, 016-491-01, 016-491-02, 016-491-03

Source Data: Google Satellite, Santa Cruz County APN, Wald Runkle & Dost Architects LLC, ECI



Ecological Concerns Inc.

Ecological Landscapes | Habitat Restoration | California Native Plants
125 Walk Circle, Santa Cruz CA 95060 Office: (831) 459-0656 Fax: (831) 457-1606
www.ecologicalconcerns.com

Seep Wetland (Federal and State Jurisdiction)

As indicated in Table 6 and Figure 11, direct impacts due to removal of seep wetland habitat are anticipated due to building the access road. These impacts are subject to the jurisdiction of ACOE, CDFW, or RWQCB. As indicated in Table 7, a total of 0.001 acres (36 sq. ft.) are anticipated to be removed. This is considered a potentially significant impact.

Removal of 0.001 acres (36 sq. ft.) of seep wetland is a potentially significant impact.

Willow Woodland (State Jurisdiction)

As indicated in Table 6, a 0.042 acre section of the Willow Woodland will be removed by the proposed development envelope. Of this, 0.002 acres are on the *S. babylonica* that is growing on the site, as indicated in Figures 10 and 11. As this is a non-native species this is not considered a significant impact. However, the removal of 0.040 acres of willow woodland habitat dominated by *S. lasiolepis* is potentially significant. This removal may require a Lake and Streambed Alteration Agreement from CDFW.

Removal of 0.040 acre Willow Woodland habitat area is a potentially significant impact.

Impacts in 30 ft. Buffer (City of Watsonville Jurisdiction)

Two features within the study area fall under the City of Watsonville's definition of "Riparian corridor" (see page 40):

1. Intermittent Stream (definition b) – requires 30 ft. buffer from top of existing bankfull flowline
2. Seep Wetland (definition c) – requires 30 ft. buffer from standing water

These features are shown in Figures 5 and 10, and the features with the required 30 ft. buffer are shown in Figure 11.

Table 8 and Figure 11 show the areas of encroachment that the proposed development will have into the 30 ft. buffer. As shown in Table 8, two different project elements will be responsible for this encroachment: the road that connects the two buildings on the eastern portion of the property, and the trail easement that is required by the City of Watsonville as part of this project. As indicated in Table 8, the total encroachment will be 0.060 acres.

The City considers trails to be a passive rather than active use within riparian corridors, and so the building of a trail within the 30 ft. buffer is an acceptable use under the City's General Plan (City of Watsonville 1994, pg. 103). Therefore, 0.014 acres of encroachment into the 30 ft. buffer is not considered potentially significant.

Encroachment into 0.014 acres of the 30 ft. Riparian Buffer by the trail easement is less than significant.

Table 8: Encroachment into 30 Ft. Riparian Buffer (City of Watsonville Defined)			
Project Element	Habitat Buffer	Square Feet	Acres
Access Road	Seep Wetland	2,027	0.046
Trail Easement	Seep Wetland	394	0.009
Trail Easement	Intermittent Creek	215	0.005
Total		2,636	0.060

The additional 0.046-acre impact into the 30 ft. riparian buffer by the access road is not considered part of the trail easement, and so would require a approval from the City. This encroachment into the buffer will only impact non-native habitat which in and of itself is not considered sensitive. However, the requirement that a local variance be included due to the encroachment is considered potentially significant.

Encroachment into 0.046 acres of the 30 ft. Riparian Buffer by the access road is a potentially significant Impact.

Plant Impacts

No impacts to sensitive plants are expected from the proposed project.

Animal Impacts

Bird Impacts (Federal and State Jurisdiction)

Grasslands on the site might be used by two sensitive raptor species for foraging. However, since the birds would not be resident there, and other habitat areas exist nearby, removal of this habitat would not significantly impact these species.

Removal of potential foraging habitat for sensitive raptor species is less than significant.

Oak trees on the site could be used by two sensitive bird species as nesting habitat. Furthermore, removal of nests from other habitat areas would likely be in violation of the Migratory Bird Act and/or California Fish and Game Code, which is a potentially significant impact.

Removal of active bird nests is a potentially significant impact.

Summary of Potentially Significant Impacts

Table 9 provides a summary of potentially significant impacts identified in this report to sensitive habitats and species. Recommended mitigations to bring these impacts to a less-than-significant level are provided in **PROPOSED MITIGATIONS** below.

Table 9: Summary of Potentially Significant Impacts	
Impacted Element	Potentially Significant Impacts
Riparian Buffer	Encroachment into 0.046 acres of 30 ft. buffer by access road
Seep Wetland	Development within 0.001 acre (36 sq. ft.) of seep wetland habitat by access road
Willow Woodland Habitat	Removal of 0.040 acres of habitat
Nesting Birds	Removal of habitat containing active nests

PROPOSED MITIGATIONS

The following Mitigation Measures are recommended in order to bring project impacts to a less-than-significant level.

Wetland Habitat

BIO-1. Prior to grading, sturdy construction fencing shall be placed along the development boundaries and no construction activities shall be allowed outside of those boundaries. A qualified biologist shall confirm the extent to which jurisdictional wetlands will be impacted by the project. The biologist shall provide a written report, including photos, to the City of Watsonville, and, to the extent required by project permits, to the Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife no more than 30 days after this visit.

BIO-2a. The project owner shall develop and implement a Habitat Restoration Plan to be submitted and approved by the City of Watsonville prior to the issuance of final grading plans to mitigate for direct impacts to the willow riparian and seep wetland habitats.

BIO-2b. In order to mitigate for 0.040 acres removal of willow riparian habitat the Habitat Restoration Plan shall provide a minimum of 0.120 acres (a 3:1 ratio) of habitat restoration and enhancement the site.

BIO-2c. In order to mitigate for 0.042 acres encroachment into the 30 ft. buffer the Habitat Restoration Plan shall provide a minimum of 0.042 acres (a 1:1 ratio) of habitat restoration and enhancement the site.

BIO-2d. The Habitat Restoration Plan shall provide a minimum 108 sq. ft. (a 3:1 ratio for the seep wetland impacted area) of wetland creation adjacent to and contiguous with the existing seep wetland. In the event that the area of seep wetland to be impacted is determined to be greater than 36 sq. ft. as a result of implementation of BIO-1, then the Restoration Plan shall be amended to ensure that a minimum 3:1 ratio of replacement to impacted wetland shall be achieved.

BIO-2e. The plan shall include performance criteria against which to measure the project's success, a minimum of five years of maintenance and monitoring shall be included in order to demonstrate attainment of the performance criteria, and yearly status reports to be submitted to the City of Watsonville, and, to the extent required by project permits, to the Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife no later than December 31 of the year that monitoring occurred.

BIO-2f. Upon the successful completion of the maintenance and monitoring period for the seep wetland, a Wetland Delineation utilizing standard Army Corps of Engineers protocols shall be performed to verify that the minimum 3:1 ratio of replacement to impacted wetland has been attained. In the event that less than 3:1 ratio has been attained, additional wetland creation shall be required to attain the ratio. The Wetland Delineation Report shall be submitted to the City of Watsonville, and, to the extent required by project permits, to the Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife no more than 90 days after completion of the delineation of the created wetland.

Wildlife

BIO-3a. Nesting Bird Surveys. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds, a focused survey for active nests of such birds shall be conducted by a qualified biologist within seven (7) days prior to the beginning of project-related activities. The results of the survey shall be sent to the City of Watsonville prior to the start of project activities. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. Nesting seasons are typically defined as followed: i) March 15 to August 30 for smaller bird species such as passerines; ii) February 15 to August 30 for raptors.

BIO-3b. Active Nest Buffer. Owner shall designate active nest sites as "Ecologically Sensitive Areas" (ESA) and protect the nest (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site.

- Buffer distances for bird nests should be site specific and an appropriate distance, as determined by the qualified biologist. The buffer distances should be specified to protect the bird's normal bird behavior to prevent nesting failure or abandonment.
- The qualified biologist shall have authority to order the cessation of all nearby project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.
- Typical protective buffers between each identified nest site and the construction site are as follows: 1) 300 feet for hawks, owls, and eagles; 2) 50 feet for passerines.
- The qualified biologist shall monitor the behavior of the birds (e.g., adults and young, when present) at the nest site to ensure that they are not disturbed by project activities.
- Nest monitoring shall continue during project work until the young have fully fledged, are no longer being fed by the parents, and have completely left the nest site; as determined by the qualified biologist.
- No habitat removal or modification shall occur within the ESA-fenced nest zone until the young have fully fledged and will no longer be adversely affected by the project.

Coordination of Mitigation Measures with Future Voluntary Enhancement Efforts

It is ECI's understanding the MidPen Housing, the City of Watsonville, and Watsonville Wetlands Watch intend to collaborate on future enhancements within the wetland outside of and beyond the mitigation requirements of this plan. These future enhancements include converting the upper portion of the intermittent stream wetland habitat from a deep incised channel into a broader wetland that will allow for the creation and restoration of increased seasonal wetland habitat on the site.

It has been determined that the upstream portion of the intermittent stream provides the best opportunity for this voluntary restoration effort. For this reason, all mitigations involving the habitat restoration shall occur, to the greatest extent possible in the lower reach of the intermittent stream.

CONCLUSION

The proposed project has potentially significant impacts to sensitive habitat and species. Implementation of the proposed mitigations should bring all of those impacts to a less-than-significant level.

LEGAL DISCLAIMER

Because final land use decisions are determined by the appropriate management agencies, Ecological Concerns Incorporated makes no claims, either explicit or implicit, concerning the final determination of the necessity or adequacy of any actions to be taken as part of the mitigation for this site. While every attempt has been made to identify and mitigate for impacts caused by the proposed project, new observations and changing conditions on the project site may cause changes to the final determination.

The findings presented herein are for information purposes only and do not represent a formal interpretation of State, Federal or County laws or ordinances pertaining to permitting actions within sensitive habitat or endangered species habitat. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

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APPENDIX A: GROUND PENETRATING RADAR INVESTIGATION AROUND SEEP



GPR Site Investigation Around Seep

Site Location: Miles Lane Watsonville, CA

Date of Data Collection: 12/4/2018

Date of Data Processing: 12/4/2018

Site Description and Procedures: Thick grass, uneven surface, and wet soil prevented full complete proper scans to be conducted. GPR cart scans were conducted around seep location to identify any possible water line that may be the source of seepage.

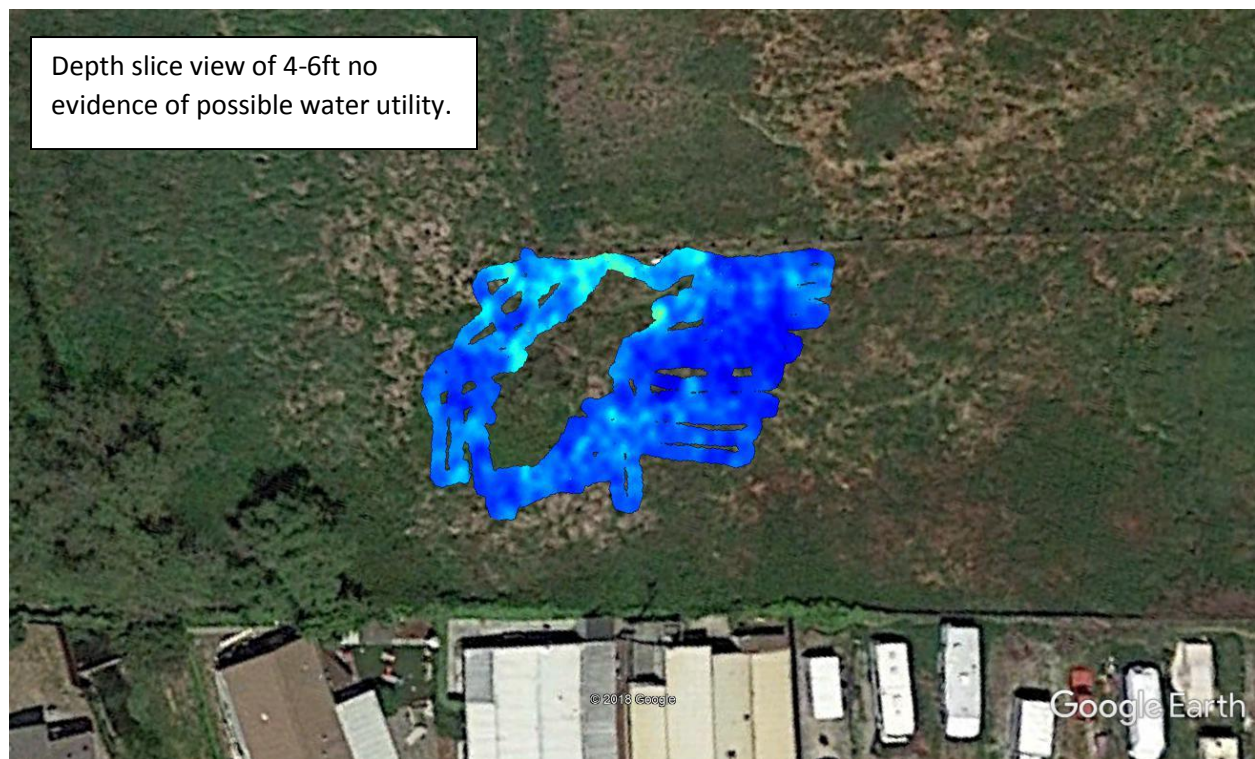
GPS tracking display for GPR cart:

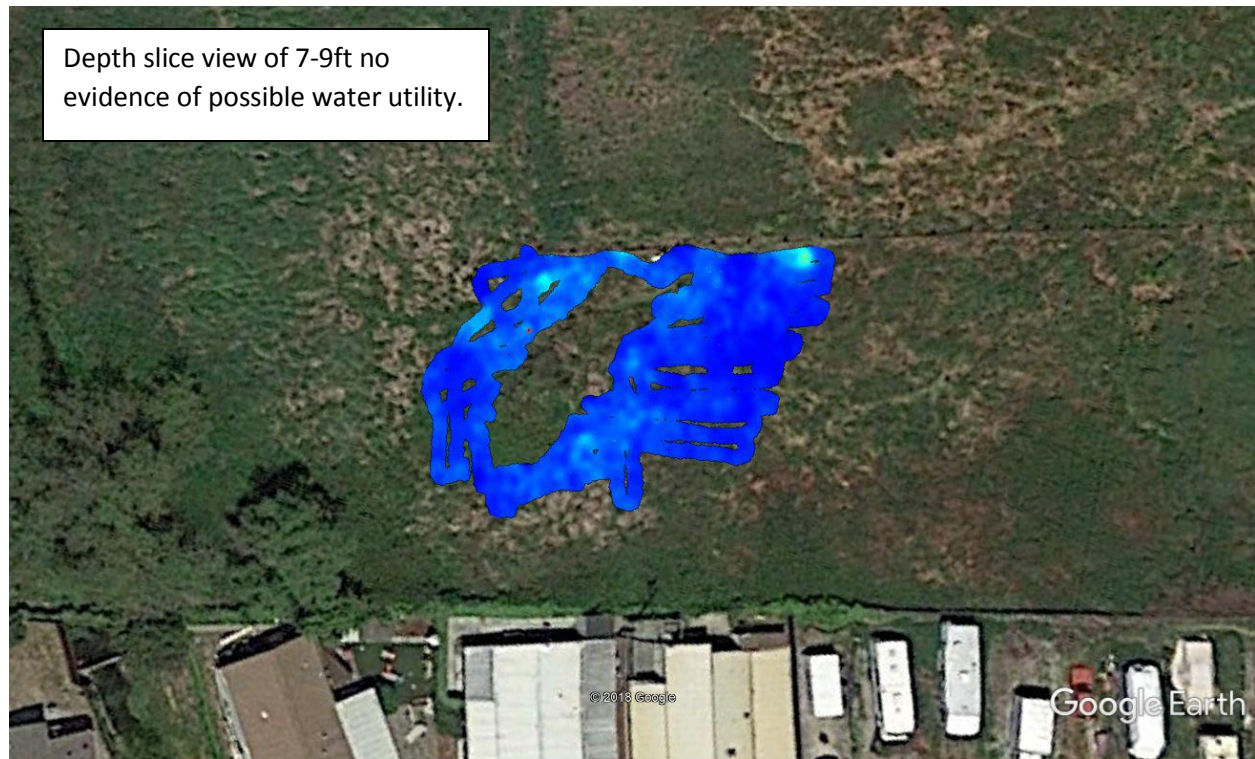


Green lines represent GPS tracking of data collection around seep location (area scanned).



Processed Data Depth Slices:





Data processed shows no evidence of possible water utility within investigated area. Magnetometer scans were also conducted around seep area and no metallic signatures were detected.

