

Appendix H

Supporting Information for the Biological Resources: Terrestrial Section

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Appendix H

Attachment 1 – Biological Memorandum

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Denise Duffy & Associates, Inc.

PLANNING AND ENVIRONMENTAL CONSULTING

MEMORANDUM

Date: March 19, 2015

To: Bob Holden, MRWPCA

From: Erin Harwayne, DD&A
Shaelyn Hession, DD&A

Subject: Pure Water Monterey Groundwater Replenishment Project – Revisions to the Reclamation Ditch at Davis Road Source Water Diversion Site and Blanco Drain Pipeline Source Water Diversion Site

The purpose of this memorandum is to identify any additional impacts to biological resources not previously considered, as a result of the revisions to the Project Study Area at the Reclamation Ditch at Davis Road Source Water Diversion Site (revised diversion site) and Blanco Drain Pipeline Source Water Diversion Site (revised pipeline site).

Revised Reclamation Ditch at Davis Road Source Water Diversion Site

The proposed revised diversion site is located along the Reclamation Ditch, east of North Davis Road in Salinas, California, approximately 105 feet downstream of the location originally proposed (Figure 1). The revised diversion site includes approximately 0.06 acre of aquatic habitat and 0.11 acre ruderal/developed habitat initially evaluated as part of the Reclamation Ditch Affected Reach. An additional area of approximately 0.79 acre of ruderal/developed/agriculture habitat is now included as part of the revised site.

Given the proximity of the revised site to the location originally proposed, the habitat present within the revised site, and that a portion of the site had previous been evaluated and considered, no additional impacts to biological resources beyond impacts previously considered are expected as a result of the revision to the Project Study Area.

Revised Blanco Drain Pipeline Source Water Diversion Site

The revision to the Project Study Area as part of the revised pipeline site includes the addition of approximately 5.8 acres to the Project Study Area, east of the Treatment Facilities at the Regional Treatment Plant (Figure 2). The revised pipeline site includes approximately 0.6 acre of non-native grassland, and 5.2 acres of ruderal/developed habitat. Most of the grassland included in the revised pipeline site is a continuation of grassland areas for which impacts were considered as part of the original Blanco Drain Diversion Site.

Given the proximity of the revised pipeline site to areas considered as part of the original Project Study Area, and the habitat present within the revised pipeline site, no additional impacts to biological resources beyond impacts previously considered are expected as a result of the revision.

If you have any questions or comments regarding this memorandum, please feel free to contact Erin Harwayne or Shaelyn Hession at (831) 373-4341.

Appendix H

Attachment 2 – California Natural Diversity Database RareFind Occurrence Report

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad is (Moss Landing (3612177) or Marina (3612167) or Seaside (3612157) or Monterey (3612158) or Prunedale (3612176) or San Juan Bautista (3612175) or Natividad (3612165) or Salinas (3612166) or Spreckels (3612156) or Soberanes Point (3612148) or Mt. Carmel (3612147) or Soquel (3612188) or Watsonville East (3612186) or Watsonville West (3612187) or Chualar (3612155) or Carmel Valley (3612146))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|--|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <i>Accipiter cooperii</i> Cooper's hawk | ABNKC12040 | None | None | G5 | S4 | WL |
| <i>Agelaius tricolor</i> tricolored blackbird | ABPBXB0020 | None | Endangered | G2G3 | S1S2 | SSC |
| <i>Agrostis lacuna-vernalis</i> vernal pool bent grass | PMPOA041N0 | None | None | G1 | S1 | 1B.1 |
| <i>Allium hickmanii</i> Hickman's onion | PMLIL02140 | None | None | G2 | S2 | 1B.2 |
| <i>Ambystoma californiense</i> California tiger salamander | AAAAA01180 | Threatened | Threatened | G2G3 | S2S3 | SSC |
| <i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander | AAAAA01082 | Endangered | Endangered | G5T1T2 | S1S2 | FP |
| <i>Anniella pulchra nigra</i> black legless lizard | ARACC01011 | None | None | G3G4T2T3Q | S2 | SSC |
| <i>Anniella pulchra pulchra</i> silvery legless lizard | ARACC01012 | None | None | G3G4T3T4Q | S3 | SSC |
| <i>Antrozous pallidus</i> pallid bat | AMACC10010 | None | None | G5 | S3 | SSC |
| <i>Aquila chrysaetos</i> golden eagle | ABNKC22010 | None | None | G5 | S3 | FP |
| <i>Arctostaphylos andersonii</i> Anderson's manzanita | PDERI04030 | None | None | G2 | S2 | 1B.2 |
| <i>Arctostaphylos edmundsii</i> Little Sur manzanita | PDERI04260 | None | None | G2? | S2? | 1B.2 |
| <i>Arctostaphylos hookeri ssp. hookeri</i> Hooker's manzanita | PDERI040J1 | None | None | G3T2 | S2 | 1B.2 |
| <i>Arctostaphylos montereyensis</i> Toro manzanita | PDERI040R0 | None | None | G2? | S2? | 1B.2 |
| <i>Arctostaphylos pajaroensis</i> Pajaro manzanita | PDERI04100 | None | None | G1 | S1 | 1B.1 |
| <i>Arctostaphylos pumila</i> sandmat manzanita | PDERI04180 | None | None | G1 | S1 | 1B.2 |
| <i>Arctostaphylos regismontana</i> Kings Mountain manzanita | PDERI041C0 | None | None | G2 | S2 | 1B.2 |
| <i>Asio flammeus</i> short-eared owl | ABNSB13040 | None | None | G5 | S3 | SSC |
| <i>Astragalus tener var. tener</i> alkali milk-vetch | PDFAB0F8R1 | None | None | G2T2 | S2 | 1B.2 |



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|--|--------------|----------------|----------------------|-------------|------------|--------------------------------|
| <i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch | PDFAB0F8R2 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| <i>Athene cunicularia</i> burrowing owl | ABNSB10010 | None | None | G4 | S3 | SSC |
| <i>Bryoria spiralifera</i> twisted horsehair lichen | NLTEST5460 | None | None | G3 | S1S2 | 1B.1 |
| <i>Buteo regalis</i> ferruginous hawk | ABNKC19120 | None | None | G4 | S3S4 | WL |
| <i>Buteo swainsoni</i> Swainson's hawk | ABNKC19070 | None | Threatened | G5 | S3 | |
| <i>California macrophylla</i> round-leaved filaree | PDGER01070 | None | None | G2 | S2 | 1B.1 |
| <i>Castilleja ambigua</i> var. <i>insalutata</i> pink Johnny-nip | PDSCR0D403 | None | None | G4T1 | S1 | 1B.1 |
| <i>Central Dune Scrub</i> Central Dune Scrub | CTT21320CA | None | None | G2 | S2.2 | |
| <i>Central Maritime Chaparral</i> Central Maritime Chaparral | CTT37C20CA | None | None | G2 | S2.2 | |
| <i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant | PDAST4R0P1 | None | None | G3T2 | S2 | 1B.1 |
| <i>Charadrius alexandrinus nivosus</i> western snowy plover | ABNNB03031 | Threatened | None | G3T3 | S2 | SSC |
| <i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower | PDPGN040M2 | Threatened | None | G2T2 | S2 | 1B.2 |
| <i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower | PDPGN040Q2 | Endangered | None | G2T1 | S1 | 1B.1 |
| <i>Cicindela ohlone</i> Ohlone tiger beetle | IICOL026L0 | Endangered | None | G1 | S1 | |
| <i>Clarkia jolonensis</i> Jolon clarkia | PDONA050L0 | None | None | G2 | S2 | 1B.2 |
| <i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh | CTT52410CA | None | None | G3 | S2.1 | |
| <i>Coastal Brackish Marsh</i> Coastal Brackish Marsh | CTT52200CA | None | None | G2 | S2.1 | |
| <i>Coelus globosus</i> globose dune beetle | IICOL4A010 | None | None | G1G2 | S1S2 | |
| <i>Collinsia multicolor</i> San Francisco collinsia | PDSCR0H0B0 | None | None | G2 | S2 | 1B.2 |
| <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> seaside bird's-beak | PDSCR0J0P2 | None | Endangered | G5T2 | S2 | 1B.1 |
| <i>Corynorhinus townsendii</i> Townsend's big-eared bat | AMACC08010 | None | Candidate Threatened | G3G4 | S2 | SSC |



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <i>Cypseloides niger</i> black swift | ABNUA01010 | None | None | G4 | S2 | SSC |
| <i>Danaus plexippus</i> monarch butterfly | IILEPP2010 | None | None | G5 | S3 | |
| <i>Delphinium californicum ssp. interius</i> Hospital Canyon larkspur | PDRAN0B0A2 | None | None | G3T3 | S3 | 1B.2 |
| <i>Delphinium hutchinsoniae</i> Hutchinson's larkspur | PDRAN0B0V0 | None | None | G2 | S2 | 1B.2 |
| <i>Delphinium umbraculorum</i> umbrella larkspur | PDRAN0B1W0 | None | None | G3 | S3 | 1B.3 |
| <i>Dipodomys venustus venustus</i> Santa Cruz kangaroo rat | AMAFD03042 | None | None | G4T1 | S1 | |
| <i>Elanus leucurus</i> white-tailed kite | ABNKC06010 | None | None | G5 | S3S4 | FP |
| <i>Emys marmorata</i> western pond turtle | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| <i>Eremophila alpestris actia</i> California horned lark | ABPAT02011 | None | None | G5T3Q | S3 | WL |
| <i>Ericameria fasciculata</i> Eastwood's goldenbush | PDAST3L080 | None | None | G2 | S2 | 1B.1 |
| <i>Eriogonum nortonii</i> Pinnacles buckwheat | PDPGN08470 | None | None | G2 | S2 | 1B.3 |
| <i>Erysimum ammphilum</i> sand-loving wallflower | PDBRA16010 | None | None | G2 | S2 | 1B.2 |
| <i>Erysimum menziesii</i> Menzies' wallflower | PDBRA160R0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| <i>Eucyclogobius newberryi</i> tidewater goby | AFCQN04010 | Endangered | None | G3 | S2S3 | SSC |
| <i>Euphilotes enoptes smithi</i> Smith's blue butterfly | IILEPG2026 | Endangered | None | G5T1T2 | S1S2 | |
| <i>Falco mexicanus</i> prairie falcon | ABNKD06090 | None | None | G5 | S4 | WL |
| <i>Fritillaria liliacea</i> fragrant fritillary | PMLIL0V0C0 | None | None | G2 | S2 | 1B.2 |
| <i>Gilia tenuiflora ssp. arenaria</i> Monterey gilia | PDPLM041P2 | Endangered | Threatened | G3G4T2 | S2 | 1B.2 |
| <i>Helminthoglypta sequoicola consors</i> redwood shoulderband | IMGASC2421 | None | None | G2T1 | S1 | |
| <i>Hesperocyparis goveniana</i> Gowen cypress | PGCUP04031 | Threatened | None | G1 | S1 | 1B.2 |
| <i>Hesperocyparis macrocarpa</i> Monterey cypress | PGCUP04060 | None | None | G1 | S1 | 1B.2 |



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California Natural Diversity Database



| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <i>Holocarpha macradenia</i> Santa Cruz tarplant | PDAST4X020 | Threatened | Endangered | G1 | S1 | 1B.1 |
| <i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia | PDROS0W043 | None | None | G4T2 | S2? | 1B.1 |
| <i>Lasiurus cinereus</i> hoary bat | AMACC05030 | None | None | G5 | S4 | |
| <i>Lasthenia conjugens</i> Contra Costa goldfields | PDAST5L040 | Endangered | None | G1 | S1 | 1B.1 |
| <i>Layia carnosa</i> beach layia | PDAST5N010 | Endangered | Endangered | G2 | S2 | 1B.1 |
| <i>Legenere limosa</i> legenere | PDCAM0C010 | None | None | G2 | S2 | 1B.1 |
| <i>Lindieriella occidentalis</i> California lindieriella | ICBRA06010 | None | None | G2G3 | S2S3 | |
| <i>Lupinus tidestromii</i> Tidestrom's lupine | PDFAB2B3Y0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| <i>Malacothamnus palmeri</i> var. <i>involucratus</i> Carmel Valley bush-mallow | PDMAL0Q0B1 | None | None | G3T3Q | S3 | 1B.2 |
| <i>Malacothamnus palmeri</i> var. <i>palmeri</i> Santa Lucia bush-mallow | PDMAL0Q0B5 | None | None | G3T2Q | S2 | 1B.2 |
| <i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley malacothrix | PDAST660C2 | None | None | G5T2 | S2 | 1B.2 |
| <i>Microseris paludosa</i> marsh microseris | PDAST6E0D0 | None | None | G2 | S2 | 1B.2 |
| <i>Monardella sinuata</i> ssp. <i>nigrescens</i> northern curly-leaved monardella | PDLAM18162 | None | None | G3T2 | S2 | 1B.2 |
| <i>Monolopia gracilens</i> woodland woollythreads | PDAST6G010 | None | None | G2G3 | S2S3 | 1B.2 |
| Monterey Cypress Forest Monterey Cypress Forest | CTT83150CA | None | None | G1 | S1.2 | |
| Monterey Pine Forest Monterey Pine Forest | CTT83130CA | None | None | G1 | S1.1 | |
| Monterey Pygmy Cypress Forest Monterey Pygmy Cypress Forest | CTT83162CA | None | None | G1 | S1.1 | |
| Northern Bishop Pine Forest Northern Bishop Pine Forest | CTT83121CA | None | None | G2 | S2.2 | |
| Northern Coastal Salt Marsh Northern Coastal Salt Marsh | CTT52110CA | None | None | G3 | S3.2 | |
| <i>Oceanodroma homochroa</i> ashy storm-petrel | ABNDC04030 | None | None | G2 | S2 | SSC |
| <i>Oncorhynchus mykiss irideus</i> steelhead - central California coast DPS | AFCHA0209G | Threatened | None | G5T2T3Q | S2S3 | |



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <i>Oncorhynchus mykiss irideus</i> steelhead - south/central California coast DPS | AFCHA0209H | Threatened | None | G5T2Q | S2 | SSC |
| <i>Optioservus canus</i> Pinnacles optioservus riffle beetle | IICOL5E020 | None | None | G1 | S1 | |
| <i>Pedicularis dudleyi</i> Dudley's lousewort | PDSCR1K0D0 | None | Rare | G2 | S2 | 1B.2 |
| <i>Pelecanus occidentalis californicus</i> California brown pelican | ABNFC01021 | Delisted | Delisted | G4T3 | S3 | FP |
| <i>Penstemon rattanii</i> var. <i>kleei</i> Santa Cruz Mountains beardtongue | PDSCR1L5B1 | None | None | G4T2 | S2 | 1B.2 |
| <i>Pentachaeta bellidiflora</i> white-rayed pentachaeta | PDAST6X030 | Endangered | Endangered | G1 | S1 | 1B.1 |
| <i>Phrynosoma blainvillii</i> coast horned lizard | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| <i>Pinus radiata</i> Monterey pine | PGPIN040V0 | None | None | G1 | S1 | 1B.1 |
| <i>Piperia yadonii</i> Yadon's rein orchid | PMORC1X070 | Endangered | None | G2 | S2 | 1B.1 |
| <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower | PDBOR0V061 | None | None | G3T2Q | S2 | 1B.2 |
| <i>Plagiobothrys uncinatus</i> hooked popcornflower | PDBOR0V170 | None | None | G2 | S2 | 1B.2 |
| <i>Potentilla hickmanii</i> Hickman's cinquefoil | PDROS1B0U0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| <i>Rallus longirostris obsoletus</i> California clapper rail | ABNME05016 | Endangered | Endangered | G5T1 | S1 | FP |
| <i>Ramalina thrausta</i> angel's hair lichen | NLLEC3S340 | None | None | G5 | S2? | 2B.1 |
| <i>Rana boylei</i> foothill yellow-legged frog | AAABH01050 | None | None | G3 | S2S3 | SSC |
| <i>Rana draytonii</i> California red-legged frog | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| <i>Reithrodontomys megalotis distichlis</i> Salinas harvest mouse | AMAFF02032 | None | None | G5T1 | S1 | |
| <i>Riparia riparia</i> bank swallow | ABPAU08010 | None | Threatened | G5 | S2 | |
| <i>Rosa pinetorum</i> pine rose | PDROS1J0W0 | None | None | G2Q | S2 | 1B.2 |
| <i>Sidalcea malachroides</i> maple-leaved checkerbloom | PDMAL110E0 | None | None | G3 | S3 | 4.2 |
| <i>Spirinchus thaleichthys</i> longfin smelt | AFCHB03010 | Candidate | Threatened | G5 | S1 | SSC |



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|--------------|----------------|--------------|-------------|------------|--------------------------------|
| <i>Stebbinsoseris decipiens</i> Santa Cruz microseris | PDAST6E050 | None | None | G2 | S2 | 1B.2 |
| <i>Taricha torosa</i> Coast Range newt | AAAAF02032 | None | None | G4 | S4 | SSC |
| <i>Taxidea taxus</i> American badger | AMAJF04010 | None | None | G5 | S3 | SSC |
| <i>Thaleichthys pacificus</i> eulachon | AFCHB04010 | Threatened | None | G5 | S3 | SSC |
| <i>Thamnophis hammondi</i> two-striped garter snake | ARADB36160 | None | None | G4 | S3S4 | SSC |
| <i>Tortula californica</i> California screw moss | NBMUS7L090 | None | None | G2? | S2 | 1B.2 |
| <i>Trifolium buckwestiorum</i> Santa Cruz clover | PDFAB402W0 | None | None | G2 | S2 | 1B.1 |
| <i>Trifolium hydrophilum</i> saline clover | PDFAB400R5 | None | None | G2 | S2 | 1B.2 |
| <i>Trifolium polyodon</i> Pacific Grove clover | PDFAB402H0 | None | Rare | G1 | S1 | 1B.1 |
| <i>Trifolium trichocalyx</i> Monterey clover | PDFAB402J0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| <i>Trimerotropis infantilis</i> Zayante band-winged grasshopper | IIORT36030 | Endangered | None | G1 | S1 | |
| <i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail) | IMGASJ7040 | None | None | G2 | S2 | |
| Valley Needlegrass Grassland Valley Needlegrass Grassland | CTT42110CA | None | None | G3 | S3.1 | |
| <i>Vireo bellii pusillus</i> least Bell's vireo | ABPBW01114 | Endangered | Endangered | G5T2 | S2 | |

Record Count: 117

Appendix H

Attachment 3 – List of Special-Status Plant and
Wildlife Species Known or with the Potential to
Occur in the Vicinity of the Project Study Area

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Table A: Special-Status Species Table for the Pure Water Monterey GWR Project

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|---|--|
| MAMMALS | | | |
| <i>Antrozous pallidus</i> Pallid bat | --/SSC/-- | Occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California. Most common in open, dry habitats with rocky areas for roosting. Day roosts include caves, crevices, mines, and occasionally hollow trees and buildings. Seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Similar structures are used for night roosting and will also use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. | High: The pallid bat may roost in trees within the Project Study Area, most likely coast live oak trees and riparian forest, and may forage over non-native grasslands, central coastal scrub, and central maritime chaparral habitats. Therefore, it may occur at the Salinas Treatment Facility site, Blanco Drain site, Product Water Conveyance: RUWAP and Coastal alignment options, Injection Well Facilities site, CalAm Distribution System: Monterey Pipeline, and the three Affected Reaches. Project components contain little to no habitat to support day roosts. |
| <i>Corynorhinus townsendii</i> Townsend's big-eared bat | --/SC/-- | Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees. | High: Suitable night roost habitat present at component sites with trees (Salinas Pump Station, Salinas Treatment Facility, Blanco Drain Diversion, Product Water Conveyance: RUWAP and Coastal Alignment Options and Booster Stations, Injection Well Facilities, and CalAm Distribution System: Monterey Pipeline). Project components contain little to no habitat to support day roosts. |
| <i>Dipodomys venustus venustus</i> Santa Cruz kangaroo rat | --/CNDDDB/-- | Common permanent residents of chaparral and foothill woodland habitats within the Santa Cruz Mountains from 0-1799 meters. Use well-drained loam or sandy loam soils for burrowing. Burrows are typically shallow (2-20 inches below the surface) and simple with a main chamber and few escape chambers. | Unlikely: Project Study Area is not located with the Santa Cruz Mountains. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|--|--|
| <i>Lasiurus cinereus</i> Hoary bat | --/CNDDDB/-- | Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees. | <p>High: The hoary bat may roost in within the Project Study Area, most likely coast live oak trees and riparian forest, and may forage over the open habitats, including non-native grasslands, central coastal scrub, and central maritime chaparral habitats. Therefore, it may occur at the Product Water Conveyance: RUWAP and Coastal alignment options, Injection Well Facilities site, and the three Affected Reaches</p> <p>There is a high potential for hoary bat to forage and roost within these habitats, but maternity roosts are unlikely to occur.</p> |
| <i>Neotoma macrotis luciana</i> Monterey dusky-footed woodrat | --/SSC/-- | Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats. | <p>High: Suitable habitat is present within the oak woodland, coastal scrub, and maritime chaparral habitats within the Project Study Area. Woodrat nests were observed during surveys in 2014. The riparian habitat at Roberts Lake and the coastal scrub near the Intake Wells Site are likely not dense enough to provide woodrat habitat and the species is unlikely to occur there.</p> |
| <i>Reithrodontomys megalotis distichlis</i> Salinas harvest mouse | --/CNDDDB/-- | Known only to occur from the Monterey Bay region. Occurs in fresh and brackish water wetlands, and probably in the adjacent uplands around the mouth of the Salinas River. | <p>High: Three CNDDDB occurrences of this species are recorded within the Project Study Area, near Seaside Marina, and Armstrong Ranch. Suitable habitat present within and surrounding emergent wetland areas at Robert's Lake and Locke Paddon Lake and at the potential emergent wetland near the Intake Wells Site.</p> |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|--|--|
| <i>Sorex ornatus salarius*</i> Monterey ornate shrew | --/SSC/-- | Mostly moist or riparian woodland habitats, and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs. | Moderate: Marginal quality habitat is present within the Project Study Area near Locke Paddon Lake, Robert's Lake, and the potential emergent wetland near the Intake Wells Site. The CNDDDB does not report any occurrences within the 10 Quads analyzed; however Figure B-18 in the Fort Ord HMP identifies portions of the Project Study Area as containing potential habitat for this species and this species is known to occur within the vicinity of the Project Study Area (Bolster, 1998). |
| <i>Taxidea taxus</i> American badger | --/SSC/-- | Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds. | High: One CNDDDB occurrence of this species is recorded within the Project Study Area, near Seaside and Sand City. However, this is a historic occurrence and the area has since been developed. Suitable habitat within the Project Study Area is present within the non-native grassland and ruderal habitats near Armstrong Ranch and the Terminal Reservoir site. |
| BIRDS | | | |
| <i>Accipiter cooperii</i> Cooper's hawk | --/WL/-- | Resident throughout most of the wooded portion of the state. Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. Seldom found in areas without dense tree stands, or patchy woodland habitats. | Moderate: Possible nesting and foraging habitat is present within the Project Study Area |
| <i>Agelaius tricolor</i> Tricolored blackbird | --/SSC/-- | Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats. | High: The CNDDDB reports an occurrence of this species at Locke Paddon Lake. |
| <i>Aquila chrysaetos</i> Golden eagle | --/FP/-- | Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees. | Low: Foraging habitat is present within the Project Study Area |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|--|---|
| <i>Asio flammeus</i> Short-eared owl | --/SSC/-- | Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California. | Unlikely: This species does not breed within Monterey County and only low quality overwintering habitat is present within the Project Study Area. The Project is unlikely to impact this species, as overwintering habitat is not typically protected. |
| <i>Athene cunicularia</i> Burrowing owl | --/SSC/-- | Year round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available. | High: Three CNDDDB occurrences of this species are recorded within the Project Study Area. Suitable habitat is present within the non-native grassland habitat at Armstrong Ranch and the Terminal Reservoir site. |
| <i>Buteo regalis</i> Ferruginous hawk | --/CNDDDB/-- | An uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges and a fairly common winter resident of grassland and agricultural areas in southwestern California. Frequent open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California. | High: A CNDDDB occurrence of this species is recorded within the Project Study Area near Armstrong Ranch. However, this species does not breed in California and is therefore unlikely to be impacted by the Project. |
| <i>Charadrius alexandrius nivosus</i> Western snowy plover | FT/SSC/-- | Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting. | Unlikely: Three CNDDDB occurrences are recorded within portions of the Project Study Area. No suitable habitat for this species is present within the Project Study Area. However, suitable habitat is present immediately adjacent to the Project Study Area at the southern end of Fort Ord, near the Highway One Fremont Street Exit in Seaside (Seaside occurrence). |
| <i>Cypseloides niger</i> Black swift | --/SSC/-- | Regularly nests in moist crevices or caves on sea cliffs above the surf, or on cliffs behind or adjacent to waterfalls in deep canyons. Forages widely over many habitats. | Unlikely: No suitable habitat present within the Project Study Area. The nearest CNDDDB occurrence is approximately five miles from the Project Study Area. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|--|--|
| <i>Elanus leucurus</i> White-tailed kite | --/FP/-- | Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands. | High: Appropriate nesting and foraging habitat present within the Project Study Area, particularly within the vicinity of Armstrong Ranch. The nearest CNDDDB occurrence is approximately seven miles from the Project Study Area; however, an occurrence is also known within Armstrong Ranch, immediately adjacent to the Project Study Area. |
| <i>Eremophila alpestris actia</i> California horned lark | --/WL/-- | Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground. | High: A CNDDDB occurrence of this species is recorded within the Project Study Area near Armstrong Ranch in Marina. Suitable habitat is present within the Project Study Area within the non-native grassland habitat at Armstrong Ranch and the Terminal Reservoir site. |
| <i>Falco mexicanus</i> Prairie falcon | --/WL/-- | Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Uses open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops. | Low: May forage within Project Study Area, near Armstrong Ranch. No suitable nesting habitat is present within the Project Study Area and is therefore unlikely to be impacted by the Project. The nearest CNDDDB occurrence is within the Spreckels Quad (exact occurrence location information not available). |
| <i>Oceanodroma homochroa</i> Ashy storm petrel | --/SSC/-- | Tied to land only to nest, otherwise remains over open sea. Nests in natural cavities, sea caves, or rock crevices on offshore islands and prominent peninsulas of the mainland. | Unlikely: No suitable habitat present within the Project Study Area. |
| <i>Pelecanus occidentalis californicus</i> California brown pelican | FD/SD,FP/-- | Found in estuarine, marine subtidal, and marine pelagic waters along the California coast. Usually rests on water or inaccessible rocks, but also uses mudflats, sandy beaches, wharfs, and jetties. | Unlikely: Only low quality habitat is present within the Project Study Area. |
| <i>Rallus longirostris obsoletus</i> California clapper rail | FE/SE,FP/-- | Occur within a range of salt and brackish marshes. | Unlikely: Only low quality habitat is present within the Project Study Area. This species is now likely restricted to the San Francisco Bay area. Occurrences have been recorded at Elkhorn Slough; however this species has not been observed there since the 1980s. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|---|---|
| <i>Riparia riparia</i> Bank swallow | --/ST/-- | Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes. | Unlikely: No suitable habitat present within the Project Study Area. The nearest CNDDB occurrence is approximately 3 miles from the Project Study Area. An occurrence of this species was also reported by California State Parks in 2008 on Fort Ord, approximately 2,000 feet from the Project alignment. |
| <i>Vireo bellii pusillus</i> Least Bell's vireo | FE/SE/-- | Riparian habitats. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage. | Unlikely: Only low quality habitat is present within the Project Study Area. Considered extirpated in northern Monterey County. |
| REPTILES AND AMPHIBIANS | | | |
| <i>Ambystoma californiense</i> California tiger salamander | FT/ST/-- | Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources. | Unlikely: No breeding habitat is present within the Project Study Area. Several breeding locations are known within Fort Ord; however all of these are located 2.0 miles or greater from the Project Study Area, outside of the known dispersal range for this species. A tiger salamander breeding site is also known within Armstrong Ranch, approximately 300 feet from the Project Study Area, and suitable upland habitat is present within the Project Study Area in this area. However, it was determined through genetic testing that the tiger salamander population at this location was non-native. |
| <i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander | FE/SE/-- | Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir, and wet meadows. This is an isolated subspecies which occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation. | Unlikely: No breeding habitat is present on the Project Study Area. The nearest CNDDB occurrence is approximately five miles Project Study Area, outside of the potential dispersal range for this species. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|--|---|
| <i>Anniella pulchra</i> California legless lizard (includes <i>A. p. nigra</i> and <i>A. p. pulchra</i> as recognized by the DFG) | --/SSC/-- | Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas. | High: Suitable habitat present within any of the undeveloped areas of the Project Study Area. The CNDDDB reports occurrences within six of the 10 Quads analyzed. Additionally, a specific occurrence is reported within the Project Study Area in Marina, near the Fort Ord Natural Reserve (FONR). Figure B-16 in the Fort Ord HMP identifies portions of the Project Study Area as containing potential habitat for this species. |
| <i>Emys marmorata</i> Western pond turtle | --/SSC/-- | Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks. | High: Suitable habitat is present within the Project Study Area near Locke Paddon Lake and Robert's Lake. The nearest CNDDDB occurrence is less than 100 feet from the Project Study Area. |
| <i>Phrynosoma blainvillii</i> Coast horned lizard | --/SSC/-- | Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands. | Present: Two CNDDDB occurrences of this species are recorded within the Project Study Area near Armstrong Ranch. Additionally, this species was observed within the Terminal Reservoir site on Fort Ord. Suitable habitat is present within the Project Study Area near Armstrong Ranch, throughout Fort Ord, and on the dunes near the Intake Wells Site. |
| <i>Rana boylii</i> foothill yellow-legged frog | --/SSC/-- | Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water. | Unlikely: No habitat is present within the Project Study Area |
| <i>Rana draytonii</i> California red-legged frog | FT/SSC/-- | Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows. | High: The nearest CNDDDB occurrence is located approximately one mile from the Project Study Area along the Salinas River. CRLF were observed breeding at this location in 2009. Appropriate breeding habitat also includes Robert's Lake and Locke Paddon Lake; although these resources are likely outside of the dispersal range for CRLF. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|---|---|
| <i>Taricha torosa</i> Coast Range newt | --/SSC/-- | Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoir. | Moderate: Aestivation habitat is present within the Project Study Area. |
| <i>Thamnophis hammondi</i> Two-striped garter snake | --/SSC/-- | Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation. | High: Suitable habitat is present within the Project Study Area near Locke Paddon Lake and Robert's Lake. The nearest CNDDDB occurrence is approximately 10 miles from the Project Study Area. |
| INVERTEBRATES | | | |
| <i>Cicindela ohlone</i> Ohlone tiger beetle | FE/CNDDDB/-- | Coastal terraces with remnant stands of open native grassland with clay or sandy soils. Hunt, breed, and dig small vertical burrows along sunny single-track trails and dirt roads (maintained by cattle, hikers, etc.) in coast terrace meadows that still support native grasses. Current range from the City of Scotts Valley to the eastern edge of the City of Santa Cruz. | Unlikely: Project Study Area is outside of the known current range. |
| <i>Coelus globosus</i> Globose dune beetle | --/CNDDDB/-- | Coastal dunes. These beetles are primarily subterranean, tunneling through sand underneath dune vegetation. | Unlikely: Suitable habitat is present within the foredune habitat adjacent to the Project Study Area. The nearest CNDDDB occurrence is approximately 1,000 feet from the Project Study Area, near the Highway 1 Fremont Street Exit in Seaside. This species is restricted to the foredunes within 100 feet of the wave wash zone. It has not been collected from Monterey beaches for many years, and may have been extirpated in the Project vicinity (Doyen, 1976). |
| <i>Danaus plexippus</i> Monarch butterfly | --/CNDDDB/-- | Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine, and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well. | High: A CNDDDB occurrence of this species is reported within the Project Study Area, located within the Eucalyptus grove across from the Naval Post-graduate School in Monterey. No other suitable habitat is present within the Project Study Area. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|---|---|
| <i>Euphilotes enoptes smithi</i> Smith's blue butterfly | FE/CNDDDB/-- | Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are <i>Eriogonum latifolium</i> and <i>E. parvifolium</i> . | High: The CNDDDB reports an occurrence of this species that ranges from Seaside to Monterey and includes portions of the Project Study Area. Additionally, the CNDDDB reports an occurrence immediately adjacent to the Project Study Area, near the proposed intake wells location. The host plants for this species were identified within the Project Study Area, at the Intake Wells Site, Fort Ord Dunes State Park, Armstrong Ranch, Sand City, and near the Naval Post-Graduate School in the City of Monterey. |
| <i>Helminthoglypta sequoicola</i> <i>consors</i> Redwood shoulderband snail | --/CNDDDB/-- | Known only from the south slope of San Juan grade, near foot, 8 miles northwest of Salinas. | Unlikely: The only known occurrence of this species is not near the Project Study Area. |
| <i>Linderiella occidentalis</i> California linderiella | --/CNDDDB/-- | Ephemeral ponds with no flow. Generally associated with hardpans. | Unlikely: No suitable habitat present within the Project Study Area. |
| <i>Optioservus canus</i> Pinnacles optioservus riffle beetle | --/CNDDDB/-- | Species of this genus generally prefer gravelly or rocky streams and some often occur on moss covered rocks. Both adults and larvae crawl on rocks and gravel mostly in riffle areas. | Unlikely: No suitable habitat present within the Project Study Area. |
| <i>Trimerotropis infantilis</i> Zayante band-winged grasshopper | FE/CNDDDB/-- | Open sandy areas with sparse, low annual and perennial herbs on high ridges with sparse ponderosa pine. Often occurs with Ben Lomond wallflower. Restricted to sand parkland habitat found on ridges and hills within the Zayante sandhills habitat in Santa Cruz County. Flight season extends from late May through August. | Unlikely: No suitable habitat present within the Project Study Area. |
| <i>Tryonia imitator</i> Mimic tryonia (=California brackishwater snail) | --/CNDDDB/-- | Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types. Tolerant of a wide range of salinities. | Moderate: Habitat is present within Roberts Lake and the Old Salinas River Channel. There are no occurrences known for Roberts lake and the habitat present is marginal. A historic CNDDDB occurrence is present within the Affected Reaches Project Study Area in the Old Salinas River Channel; however, this occurrence is from 1981 and presence at this location is listed as extirpated. The nearest modern CNDDDB occurrence is approximately 0.5 miles from the Project Study Area within Elkhorn Slough. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|---|---|
| PLANTS | | | |
| <i>Agrostis lacuna-vernalis</i> Vernal pool bent grass | --/CNDDDB/1B | Vernal pool mima mounds at elevations of 115-145 meters. Annual herb in the Poaceae family; blooms April-May. Known only from Butterfly Valley and Machine Gun Flats of Ft. Ord National Monument. | Unlikely: No suitable habitat present within the Project Study Area and not identified during focused botanical surveys in 2014. |
| <i>Allium hickmanii</i> Hickman's onion | --/CNDDDB/1B | Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous herb in the Alliaceae family; blooms March-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Artcostaphylos andersonii</i> Anderson's manzanita | --/CNDDDB/1B | Openings and edges of broadleaved upland forest, chaparral, and north coast coniferous forest at elevations of 60-760 meters. Evergreen shrub in the Ericaceae family; blooms November-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Artcostaphylos edmundsii</i> Little Sur manzanita | --/CNDDDB/1B | Coastal bluff scrub and chaparral on sandy soils at elevations of 30-105 meters. Evergreen shrub in the Ericaceae family; blooms November-April. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i> Hooker's manzanita | --/CNDDDB/1B | Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June. | Present: Observed near CSUMB and the Naval Post-Graduate School in the City of Monterey during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Arctostaphylos montereyensis</i> Toro manzanita | --/CNDDDB/1B | Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Arctostaphylos pajaroensis</i> Pajaro manzanita | --/CNDDDB/1B | Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Arctostaphylos pumila</i> Sandmat manzanita | --/CNDDDB/1B | Closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May. | Present: Observed at the Terminal Reservoir Site, throughout Fort Ord Dunes State Park, and within Sand City during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Artcostaphylos regismontana</i> Kings mountain manzanita | --/CNDDDB/1B | Broadleaved upland forest, chaparral, and north coast coniferous forest on granitic or sandstone souls at elevations between 305-730 meters. Evergreen shrub in the Ericaceae family; blooms January-April | Unlikely: Project Study Area is outside of the species elevation range |
| <i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch | --/CNDDDB/1B | Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|---|--|
| <i>Astragalus tener</i> var. <i>titi</i> Coastal dunes milk-vetch | FE/SE/1B | Coastal bluff scrub on sandy soils, coastal dunes, and mesic areas of coastal prairie at elevations of 1-50 meters. Annual herb in the Fabaceae family; blooms March-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Bryoria spiralis</i> Twisted horsehair lichen | --/CNDDDB/1B | California North Coast coniferous forest at an elevation of 0 – 30 meters. Often found on conifers, including <i>Picea sitchensis</i> , <i>Pinus contorta</i> var. <i>contorta</i> , <i>Pseudotsuga menziesii</i> , <i>Abies grandis</i> , and <i>Tsuga heterophylla</i> . Fruticose lichen in the Parmeliaceae family. | Unlikely: No suitable habitat present within the Project Study Area. |
| <i>California macrophylla</i> Round-leaved filaree | --/CNDDDB/1B | Cismontane woodland and valley and foothill grassland on clay soils at elevations of 15-1200 meters. Annual herb in the Geraniaceae family; blooms March-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Castilleja ambigua</i> var. <i>insalutata</i> Pink Johnny-nip | --/CNDDDB/1B | Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Ceanothus cuneatus</i> ssp. <i>rigidus</i> Monterey ceanothus | --/CNDDDB/4 | Closed cone coniferous forest, chaparral, and coastal scrub on sandy soils at elevations of 3-200 meters. Evergreen shrub in the Rhamnaceae family; blooms February-April. | Present: Observed at the Terminal Reservoir and ASR System sites and within Fort Ord Dunes State Park during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant | --/CNDDDB/1B | Valley and foothill grassland on alkaline soils at elevations of 1-230 meters. Annual herb in the Asteraceae family; blooms June-November. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower | FT/CNDDDB/1B | Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-June. | Present: Observed throughout Fort Ord, near Armstrong Ranch, and on the dunes at the Injection Well Facilities site during focused botanical surveys in 2009, 2010, and 2014. May also be present within the staging areas (further surveys needed in these areas). |
| <i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower | FE/CNDDDB/1B | Openings in cismontane woodland, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Clarkia jolonensis</i> Jolon clarkia | --/CNDDDB/1B | Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Collinsia multicolor</i> San Francisco collinsia | --/CNDDDB/1B | Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Scrophulariaceae family; blooms March-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|---|--|
| <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> Seaside bird's-beak | --/SE/1B | Closed-cone coniferous forests, chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Hemiparasitic, annual herb in the Scrophulariaceae family; blooms April-October. | Present: Observed at the Terminal Reservoir Site during focused botanical surveys in 2010. |
| <i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur | --/CNDDDB/1B | Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Delphinium hutchinsoniae</i> Hutchinson's larkspur | --/CNDDDB/1B | Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Delphinium umbraculorum</i> Umbrella larkspur | --/CNDDDB/1B | Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Ericameria fasciculata</i> Eastwood's goldenbush | --/CNDDDB/1B | Closed-cone coniferous forest, maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October. | Present: Observed at the Terminal Reservoir ASR System sites on Fort Ord during focused botanical surveys in 2010. |
| <i>Eriogonum nortonii</i> Pinnacles buckwheat | --/CNDDDB/1B | Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Erysimum ammophilum</i> Sand-loving (coast) wallflower | --/CNDDDB/1B | Maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June. | Present: Observed within the Project Study Area at the Intake Wells Site, at the Terminal Reservoir Site, at the southern end of the Fort Ord Dunes State Park, and on the dunes near Window on the Bay Waterfront Park during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Erysimum menziesii</i> Menzies' wallflower | FE/SE/1B | Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Fritillaria liliacea</i> Fragrant fritillary | --/CNDDDB/1B | Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentine, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|--|---|
| <i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Monterey (sand) gilia | FE/ST/1B | Maritime chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June. | Present: Observed within the Project Study Area at the Intake Wells Site, Terminal Reservoir Site, and at the southern end of the Fort Ord Dunes State Park during focused botanical surveys in 2010. |
| <i>Hesperocyparis goveniana</i> Gowen cypress | FT/CNDDDB/1B | Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68. | Not Present: Not identified during focused botanical survey in 2009, 2010, and 2014. Project Study Area is outside of currently known range for this species. |
| <i>Hesperocyparis macrocarpa</i> Monterey cypress | --/CNDDDB/1B | Closed-cone coniferous forest at elevations of 10-30 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Cypress Point in Pebble Beach and Point Lobos State Park; widely planted and naturalized elsewhere. | Not Present: Project Study Area is outside of currently known range for this species. Although several individuals of this species were observed within the Project Study Area, these individuals are planted specimens or volunteers from planted specimens and are not considered special-status. Therefore, no natively occurring Monterey cypress trees are present within the Project Study Area. |
| <i>Holocarpha macradenia</i> Santa Cruz tarplant | FT/SE/1B | Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia | --/CNDDDB/1B | Closed-cone coniferous forests, maritime chaparral, and openings in coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September. | Present: Observed within the Fort Ord Dunes State Park area and near Armstrong Ranch during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Lasthenia conjugens</i> Contra Costa goldfields | FE/CNDDDB/1B | Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Layia carnosa</i> Beach layia | FE/SE/1B | Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Legenere limosa</i> Legenere | --/CNDDDB/1B | Vernal pools and wetlands at elevations of 1-880 meters. Annual herb in the Campanulaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|--|--|
| <i>Lupinus tidestromii</i> Tidestrom's lupine | FE/SE/1B | Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June. Only Monterey County plants are state-listed Endangered as var. <i>tidestromii</i> . | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Malacothamnus palmeri</i> var. <i>involucratus</i> Carmel Valley bush-mallow | --/CNDDDB/1B | Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Deciduous shrub in the Malvaceae family; blooms May-August. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Malacothamnus palmeri</i> var. <i>palmeri</i> Santa Lucia bush-mallow | --/CNDDDB/1B | Chaparral on rocky soils at elevations of 60-360 meters. Deciduous shrub in the Malvaceae family; blooms May-July. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley malacothrix | --/CNDDDB/1B | Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December (uncommon in March). | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Microseris paludosa</i> Marsh microseris | --/CNDDDB/1B | Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grasslands at elevations of 3-300 meters. Perennial herb in the Asteraceae family; blooms April-June (July). | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Monardella sinuata</i> ssp. <i>nigrescens</i> Northern curly-leaved monardella | --/CNDDDB/1B | Closed-cone coniferous forest, chaparral, coastal dunes, coastal prairie, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-305 meters. Annual herb in the Lamiaceae family; blooms May-September. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Monolopia gracilens</i> Woodland woollythreads | --/CNDDDB/1B | Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Pinus radiata</i> Monterey pine | --/--/1B | Closed-cone coniferous forest at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA, at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas. | Present: Several Monterey pine trees are present within the Project Study Area; however, the majority of these individuals are planted specimens or volunteers from planted specimens and are not considered special-status. The only special-status individual of this species is located within the Presidio of Monterey. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|--|---------------------------------|--|---|
| <i>Pedicularis dudleyi</i> Dudley's lousewort | --/SR/1B | Maritime chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland at elevations of 60-900 meters. Perennial herb in the Orbanhaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Penstemon rattanii</i> var. <i>kleei</i> Santa Cruz Mountains beardtongue | --/CNDDDB/1B | Chaparral and lower montane and North Coast coniferous forests at elevations of 400-1100 meters. Perennial herb in the Plantaginaceae family; blooms May-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Pentachaeta bellidiflora</i> White-rayed pentachaeta | FE/SE/1B | Cismontane woodland and valley and foothill grasslands, often on serpentinite soils, at elevations of 35-620 meters. Annual herb in the Asteraceae family; blooms March-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Piperia yadonii</i> Yadon's rein orchid | FE/CNDDDB/1B | Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms May-August. | Present: One individual was observed immediately adjacent to the Project Study Area along Divarty Street on Fort Ord during focused botanical surveys in 2010. |
| <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower | --/CNDDDB/1B | Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Plagiobothrys uncinatus</i> Hooked popcornflower | --/CNDDDB/1B | Chaparral, cismontane woodlands, and valley and foothill grasslands on sandy soils at elevations of 300-760 meters. Annual herb in the Boraginaceae family; blooms April-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Potentilla hickmanii</i> Hickman's cinquefoil | FE/SE/1B | Coastal bluff scrub, closed-cone coniferous forests, vernal mesic meadows, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Ramalina thrausta</i> Angel's hair lichen | --/CNDDDB/2B | Found in California North Coast coniferous forest at an elevation of 75 - 430 meters. Found on dead twigs, other lichen, and on <i>Alnus rubra</i> , <i>Calocedrus decurrens</i> , <i>Pseudotsuga menziesii</i> , <i>Quercus garryana</i> , and <i>Rubus spectabilis</i> . It has also been found growing on and amid <i>Ramalina menziesii</i> and <i>Usnea</i> spp. Fruticose lichen in the Ramalinaceae family. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014 |
| <i>Rosa pinetorum</i> Pine rose | --/CNDDDB/1B | Closed-cone coniferous forest at elevations of 2-300 meters. Shrub in the Rosaceae family; blooms May-July. Possible hybrid of <i>R. spithamea</i> , <i>R. gymnocarpa</i> , or others; further study needed. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |

| Species | Status (USFWS/ CDFW/CNPS) | General Habitat | Potential Occurrence within Project Study Area |
|---|---------------------------------|--|--|
| <i>Sidalcea malachroides</i> Maple-leaved checkerbloom | --/CNDDDB/4 | Broadleaved upland forest, coastal prairie, coastal scrub, north coast coniferous forest, and riparian woodlands, often in disturbed areas, at elevations of 2-700 meters. Perennial herb in the Malvaceae family; blooms April-August. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Stebbinsoseris decipiens</i> Santa Cruz microseris | --/CNDDDB/1B | Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Tortula californica</i> California screw moss | --/CNDDDB/1B | Valley and foothill grassland and chenopod scrub on sandy soils at elevations of 10-1460. Moss in the Pottiaceae family. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Trifolium buckwestiorum</i> Santa Cruz clover | --/CNDDDB/1B | Broadleaved upland forest, cismontane woodland, and margins of coastal prairie on gravelly soils at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Trifolium hydrophilum</i> Saline clover | --/CNDDDB/1B | Marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Trifolium polyodon</i> Pacific Grove clover | --/SR/1B | Closed-cone coniferous forest, coastal prairie, meadows and seeps, and mesic areas in valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |
| <i>Trifolium trichocalyx</i> Monterey clover | FE/SE/1B | Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June. | Not Present: Not identified during focused botanical surveys in 2009, 2010, and 2014. |

STATUS DEFINITIONS

U.S. Fish and Wildlife Service (USFWS)

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = federal Candidate under the federal Endangered Species Act
FD = delisted under the federal Endangered Species Act
-- = no listing

California Department of Fish and Wildlife (CDFW)

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = state Candidate under the California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
SD = delisted under the California Endangered Species Act
SSC = California Department of Fish and Wildlife Species of Special Concern

FP = California Fully Protected Animal

-- = no listing

WL = California Department of Fish and Wildlife Watch List

CNDDDB = This designation is being assigned to animal species that are not assigned any of the other status designations defined in this table. These animal species are included in the DFG's CNDDDB "Special Animals" list (2010), which includes all taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special-status species." The CDFG considers the taxa on this list to be those of greatest conservation need.

California Native Plant Society (CNPS)

1B = List 1B species; Rare, Threatened or Endangered in California and elsewhere

2 = List 2 species; Rare, Threatened, or Endangered in California, but more common elsewhere

3 = List 3 species; plants about which more information is needed

4 = List 4 species; plants of limited distribution (CNPS Watch List)

-- = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys

High = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of suitable habitat conditions

Moderate = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of marginal habitat conditions within the site

Low = species known to occur in the vicinity from the CNDDDB or other documentation; lack of suitable habitat or poor quality

Unlikely = species not known to occur in the vicinity from the CNDDDB or other documentation, no suitable habitat is present within the site

Not Present = species was not observed during surveys

* = Bold text indicates Fort Ord HMP species

Appendix H

Attachment 4 – Wildlife Species Observed within the Project Study Area

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Wildlife Species Observed Within and Immediately Adjacent to the Monterey Peninsula Groundwater Replenishment Project

| Scientific Name | Common Name |
|-----------------------------------|--------------------------------|
| Mammals | |
| <i>Mephitis mephitis</i> | Skunk |
| <i>Neotoma fuscipes luciana</i> | Monterey dusky-footed woodrat* |
| <i>Otospermophilus beecheyi</i> | California ground squirrel |
| <i>Peromyscus</i> sp. | Mouse |
| <i>Sylvilagus bachmani</i> | Brush rabbit |
| Birds | |
| <i>Agelaius phoeniceus</i> | Red-wing blackbird |
| <i>Anas platyrhynchos</i> | Mallard |
| <i>Anas strepera</i> | Gadwall |
| <i>Ardea herodias</i> | Great blue heron |
| <i>Branta canadensis</i> | Canada goose |
| <i>Calidris pusilla</i> | Semipalmated sandpiper |
| <i>Callipepla californica</i> | California Quail |
| <i>Calypte anna</i> | Anna's hummingbird |
| <i>Carduelis psaltria</i> | Lesser goldfinch |
| <i>Cathartes aura</i> | Turkey vulture |
| <i>Chamaea fasciata</i> | Wrentit |
| <i>Charadrius vociferus</i> | Killdeer |
| <i>Cistothorus palustris</i> | Marsh wren |
| <i>Colaptes auratus</i> | Northern Flicker |
| <i>Corvus brachyrhynchos</i> | American crow |
| <i>Elanus leucurus</i> | White-tailed kite** |
| <i>Euphagus cyanocephalus</i> | Brewer's blackbird |
| <i>Fulica americana</i> | American Coot |
| <i>Haemorhous mexicanus</i> | House finch |
| <i>Himantopus mexicanus</i> | Black-necked stilt |
| <i>Hirundo rustica</i> | Barn Swallow |
| <i>Limnodromus</i> sp. | Dowitcher |
| <i>Melospiza melodia</i> | Song sparrow |
| <i>Mergus merganser</i> | Common merganser |
| <i>Nycticorax nycticorax</i> | Black-crowned night heron*** |
| <i>Oxyura jamaicensis</i> | Ruddy duck |
| <i>Passer domesticus</i> | House sparrow |
| <i>Phalacrocorax penicillatus</i> | Brandt's cormorant |
| <i>Pipilo maculatus</i> | Spotted towhee |
| <i>Poecile rufescens</i> | Chestnut-backed chickadee |
| <i>Recurvirostra americana</i> | American avocet |
| <i>Sayornis nigricans</i> | Black phoebe |
| <i>Spizella pusilla</i> | Field sparrow |
| <i>Sturnella neglecta</i> | Western meadowlark |

Wildlife Species Observed Within and Immediately Adjacent to the Monterey Peninsula Groundwater Replenishment Project

| Scientific Name | Common Name |
|---|------------------------------|
| <i>Sturnus vulgaris</i> | European Starling |
| <i>Tachycineta bicolor</i> | Tree swallow |
| <i>Toxostoma redivivum</i> | California thrasher |
| <i>Troglodytes aedon</i> | House wren |
| <i>Turdus migratorius</i> | American robin |
| <i>Zenaida macroura</i> | Mourning dove |
| <i>Zonotrichia leucophrys</i> | White-crowned sparrow |
| Reptiles & Amphibians | |
| <i>Crotalus oreganus oreganus</i> | Northern Pacific rattlesnake |
| <i>Elgaria multicarinata multicarinata</i> | California alligator lizard |
| <i>Pituophis catenifer catenifer</i> | Pacific gopher snake |
| <i>Sceloporus occidentalis bocourtii</i> | Coast range fence lizard |
| Notes | |
| *Several nests observed **Observed overhead and adjacent to project site ***Observed overhead and adjacent to source water diversion site | |

Appendix H

Attachment 5 – Avian Species that maybe found within Non-Native Grassland Habitat

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THE BIRDS OF FORT ORD EAST OF ROUTE 1

Revised 5 Feb 07

David Styer with historic data provided by Don Roberson

An asterisk (*) after a bird's name means that the species was probably breeding, or confirmed breeding on Fort Ord east of Route 1. This list is based almost entirely on my own inventories. These have taken place during the following time periods: 25 Feb - 16 Jun 96, 9 Jul - 16 Aug 97, 27 Jun - 16 Aug 98, 27 Jul - 19 Aug 99, 7 Jun - 28 Jun 00, 5 Feb 01 - 3 Mar 01, 17 Sep 01 - 2 Nov 01, 13 Dec - 31 Dec 01, and most of 2002 and 2003. In 2004–2006 only the more outstanding sightings were noted. The few records based on other people's sightings are noted. All collective references to Christmas Bird Counts (CBCs) refer to the nine Monterey CBCs provided by Roberson. This count takes place in a 15-mile diameter circle that includes the southwest portion of Ft. Ord.

- | | | |
|----|-------------------|--|
| 1. | Cackling Goose | 1 record: 1 seen by D. Roberson's CBC group on 29 Dec 00. |
| 2. | Canada Goose* | Seen in small numbers. Nested, but unsuccessfully in 2002. Successfully nested at Machine Gun Flats in 2005. |
| 3. | Wood Duck | The first record was 5 males at Boy Scout Lake on 12 Oct 05. Some were seen there until 7 Dec 05. |
| 4. | Gadwall* | The first record was five seen on 8 Aug 98 on a vernal pond. Expected in small numbers. In 2002 there were 3 records from 12 Mar to 24 Mar, and 5 records from 29 Aug to 29 Oct, all at Mudhen Lake. Seen in January and December in 2003. Nested on Machine Gun Flats in 2005; young noted on 22 May 05. |
| 5. | American Wigeon | Winter visitor. A pair was on Mudhen Lake on 18 Feb 01; 3 were there on 23 Mar 02, and 1 to 2 pairs were there from 23 Nov 02 through 31 Jan 03. Seen regularly at the vernal pools 29 Jan 05 through 2 Apr 05. Also, seen regularly at Boy Scout Lake Nov and Dec 05, with approximately 10 there on 13 Dec. |
| 6. | Mallard* | Seen on ponds through year. Young seen on Mudhen Lake 6 Jun 96 and on Boy Scout Pond on 2 Jun 96. Young seen on several ponds in 1998. One hundred to three hundred regularly visited Mudhen Lake in the fall of 2001. There were 87 visiting the vernal pool at Machine Gun Flats on 2 Mar 04. Bill Collins saw around 500 on the pond behind Range 37 in the fall of 2000. Ronnie L. Ryno found young at Mudhen Lake on 9 Jun 89 during the Monterey County Breeding Bird Atlas project. |
| 7. | Cinnamon Teal | First record: 1 male on the pond behind Range 37 on 31 Mar 96. Two spent most of Aug 99 on Fox Pond. There were several records in Mar 05, and 3 were on Mudhen Lake on 21 Jul 05. In early 2006 they were seen on Boy Scout Lake: 2 on 24 Jan and 4 on 21 Feb. |
| 8. | Northern Shoveler | A pair was at Mudhen Lake on 29 Oct 01, 6 were there 6 Oct 02 and 3 were there on 25 Oct 05. |
| 9. | Northern Pintail | First record: 3 females on Mudhen Lake on 22 Oct 01. Six were there, including a male, on 2 Nov 01, 2 were there on 22 Oct 02, and a pair was at Boy Scout Lake on 13 Dec 05. |

10. Green-winged Teal
A pair was at Mudhen Lake from 30 Mar to 7 Apr 96. They visited Mudhen Lake in early Nov 02, and 20 were there on 5 Nov 02. On 12 Dec 05 19 males were on Mudhen Lake. The next day a flock of 35 (males and females) were on Boy Scout Lake. They were seen there in dwindling numbers up until 21 Feb 06.
11. Redhead
A male was seen at Mudhen Lake from 13 Dec 01 through 4 Feb 02.
12. Ring-necked Duck
An occasional fall and winter visitor. 1st record: 1 male in holding pond near west end of Eucalyptus Rd. on 28 Jun 98. There were 5 females on Mudhen Lake on 20 and 27 Nov, and 1 male there on 1 Dec 06. Notably, Bill Collins saw around 35 in the pond behind Range 37 in the fall of 2000.
13. Greater Scaup
1 record: 1 female in the holding pond at the west end of Eucalyptus Road on 26 Oct 01.
14. Bufflehead
One female spent the entire summer of 1998 on the same pond (see ring-necked Duck). 2 females were on the same pond in Jan 03. A pair was on Machine Gun Flats on 22 Feb 05.
15. Common Goldeneye
Seen in winter 1996 on above-mentioned pond before inventory started, and in Dec 01.
16. Hooded Merganser
2 records: One immature male on Mudhen Lake 25 Feb - 24 Mar 96, and 1 female on Mudhen Lake on 24 Nov 06.
17. Common Merganser
1 record: seen in the Salinas River on 30 Apr 05.
18. Ruddy Duck
Occasional visitor. 2 males on the vernal pool on Machine Gun Flats on 17 Jul 98, and 1 female on the Catfish Pond on 18 Oct 02. Two females spent much of Dec 05 on Mudhen Lake. A resident of Mudhen Lake beginning 9 Oct 06.
19. Wild Turkey*
Seen irregularly during the inventory. Dick Pitschka and I saw 3 adult females and 7 young across Jacks Road from Mudhen Lake on 21 Jun 00. Noticeably more common by 2001 than in the past. In 2003 and 2004, 2 or 3 flocks of up to 20 were seen, and they continue to have young.
20. California Quail*
Seen, except in the most open grassland, throughout Ft. Ord, throughout the inventory. Possibly increasing: in 1996 most coveys with 10 or fewer birds. In 2001 many coveys with 10 to 20 birds. They continue roughly the same size through 2006. I have been told that coveys with a 100 California Quail were common in the past.
21. Loon species
2 flew over the BLM office area on 2 Nov 01.
22. Pied-billed Grebe*
Seen throughout the year on permanent ponds. In 1996 and 1997 young produced only on Mudhen Lake. In 1998 young were produced on at least four vernal ponds.
23. Eared Grebe
2 records: 1 stayed at the holding pond on the west end of Eucalyptus Road from 4 Oct to 11 Oct 01, and 1 was on Mudhen lake from 15 Nov 05 through 29 Nov 05.

- | | | |
|-----|--------------------------|---|
| 24. | Double-crested Cormorant | Winter visitor to Mudhen Lake. Seen late December through March, irregularly until May. Up to 5 have been seen at once. On 30 Nov 06 30 flew over Mudhen Lake. |
| 25. | American Bittern | 1 record: 1 seen at Mudhen Lake on and around 7 Aug 99. |
| 26. | Great Blue Heron | One or two regularly visit the permanent ponds. |
| 27. | Great Egret | Occasional visitor to the permanent ponds. 1 frequently seen at the dwindling Mudhen Lake in 2003. One at a puddle in East Garrison on 22 Mar 05 was a surprise. |
| 28. | Green Heron | 4 records prior to 2006: 1 seen by Sam Fitton on 6 Apr 98, 1 seen at Mudhen Lake 11 Jun 02, 1 seen by Steve Moore at the pond on Crescent Bluff Road on 25 Apr 03, and 1 flew from Toro Creek Pond on 7 Jul 05. Bruce Gerow saw them regularly at the mouth of El Toro Creek, just off Ft. Ord. There were 5 records at Mudhen Lake and Boy Scout Lake in 2006. |
| 29. | Turkey Vulture | Seen throughout Ft. Ord throughout the year, although uncommon in the backcountry in the fall. Possibly breeding, but not confirmed, although evidence continues to build. Numbers on CBCs have increased almost steadily from 1 in 1984 to 17 in 2001. |
| 30. | Osprey | 1 st record: 1 eating on top of high-tension tower by Range 45 on 6 Apr 96. 1 flew over Mudhen Lake on 19 Oct 01. In 2002 Osprey were seen on 4 Jan, 8 Jan, and 11 Apr. In 2003 there were 3 records: 1 on 3 Jan at Mudhen Lake, 1 in April flying over Ingman Court, and 1 on 3 May at El Toro Creek. Again, one was seen at Mudhen Lake on 3 Jan 04. |
| 31. | White-tailed Kite* | Seen in small numbers (1 or 2) over grasslands and vernal pools. In the spring of 1998 Roberto Maceira saw approximately 10 spending the day by one pool, and in the summer of 2006 Tim Buhl saw a group of 11, including young. |
| 32. | Bald Eagle | An immature bird was seen at Mudhen Lake in the spring of 1999. On 4 Mar 02 Bill Collins saw 1 subadult on Machine Gun Flats. |
| 33. | Northern Harrier | A winter resident on the grasslands, and an occasional migrant elsewhere. 1 to 3 are usually seen in grasslands. One summer record: 1 on 8 Jul 98. |
| 34. | Sharp-shinned Hawk | Fairly common fall migrant, arriving in Sep, and uncommon spring migrant. Also seen on 1 and 2 Aug 99. A winter resident in 2003 and 2004. |
| 35. | Cooper's Hawk* | Seen throughout the inventory, and widely, but thinly spread over Ft. Ord. |
| 36. | Red-shouldered Hawk* | Common year-round in the "front" of Ft. Ord, near housing. Seen less in other locations. Ronnie L Ryno observed an occupied nest near Mudhen Lake 16 Apr 86. |

37. Red-tailed Hawk*
Seen throughout Ft. Ord throughout the year. Eleven Red-tailed Hawks wheeling over the BLM office on 25 Jul 98 was an extraordinary sight. Nests are seen regularly; for example, Ronnie L. Ryno saw on occupied nest on 16 Apr 86. Usually around 10 are seen on CBCs, but on 28 Dec 84 there were 25 counted.
38. Ferruginous Hawk
2 records: Don Roberson saw one in the Grasslands on 28 Dec 84, and I saw 1 near Imjin Rd. on 14 Apr 02.
39. Golden Eagle
1st record: 1 over grassland, Oil Well Rd., on 6 Apr 96. An uncommon fall migrant, rare in other seasons. Seen in February, March, and September in 2003. One was seen on the CBC on 29 Dec 00, and on Lightfighter Road during the CBC on 27 Dec 05.
40. Crested Caracara
1 record: Tim Buhl saw 1 fly across Highway 1 on 11 Sep 06.
41. American Kestrel*
Seen throughout the year. Perhaps 4 to 8 pairs breed on Ft. Ord. Especially visible on the grasslands. On the 9 CBCs the low count was 4 and the high count was 14.
42. Merlin
Uncommon migrant or winter visitor: 1 was seen near Laguna Seca during the CBC on 27 Dec 89. 1 at Machine Gun Flats on 9 Mar 96 and on 11 Jan 02, 1 on First Ave. on 19 Oct 01, 1 at Parker Flats on 30 Dec 03, and 1 by Fox Pond on 9 Dec 04. 1 was seen at El Toro Creek on 26 Feb 05, and another was seen at Machine Gun Flats on 25 Mar 05.
43. Peregrine Falcon
One seen circling over First Ave. on 4 Oct 01.
44. Prairie Falcon
3 records: 1 seen at Machine Gun Flats on 19 Oct 01, 1 seen by Bill Reese on 27 Dec 04, and 1 was seen flying over Old Reservation Rd. on 30 Aug 06.
45. Virginia Rail
1 record: 1 first heard on 28 Oct responded repeatedly to a taped call on 30 Oct 06.
46. Sora
Few records: 1 on pond behind Range 37 on 31 Mar 96; 1 seen on Mudhen Lake on 1 and 2 Mar 01, and 1 was at the Catfish Pond much of Oct 04. They were heard from 21 Oct to 13 Nov 06 on Mudhen Lake, with a maximum of 3 heard on 26 Oct.
47. Common Moorhen
2 records of single individuals on Mudhen Lake: on 23 Oct 01, and seen from 16 Oct to 23 Oct 06.
48. American Coot*
In 1996 common through April, then most gone. Approximately 2 young produced in 1996 and 1997. In 1998 seen in summer on at least 6 ponds, with at least 25 young produced. In the dry year, 2001, only a pair at the Catfish Pond produced young (5). By summer 2004 all ponds except the Catfish Pond had dried, so Coots could only be seen there. Coots returned to the refilled Mudhen Lake by 25 Mar 05, and approximately 40 were seen there on 14 Nov 06.

49. Killdeer
Seen at Mudhen Lake through Mar 96, but not later that year. Up to 8 seen at the vernal pool behind the BLM buildings in July and August of 1998. Larger numbers, e.g., 26 on 11 Dec 02, seen in fall or winter in fields such as Parker Flats.
50. Spotted Sandpiper
1 record: 2 in breeding plumage at Fox Pond on 4 Jul 98.
51. Solitary Sandpiper
3 records: 1 bird at vernal pond behind BLM headquarters on 1 Aug 98, 1 at the Catfish Pond on 29 Jul 03, and there was also 1 on the Salinas River at the mouth of El Toro Creek on 3 May 03.
52. Greater Yellowlegs
2 March records in 1996: 6 on Reserve 12 on 9 Mar and 1 heard at Mudhen Lake on 24 Mar. Seen visiting the mud-flats behind the BLM buildings in July and August of 1998, at Fox Pond in Aug 99, 3 on Machine Gun Flats on 11 Jan 02. Visited Mudhen Lake and Machine Gun Flats in March, April, October, and November in 2003. There were 14 on Machine Gun Flats on 2 Mar 04, and 22 on 14 Mar 05. 1 flew over South Boundary Road during the CBC on 29 Dec 00.
53. Whimbrel
1 record: on 29 Jul 03 one flew over me on Parker Flats Road, and circled around and called.
54. Western Sandpiper
1 record: 1 at Fox Pond on 14 Aug 99.
55. Least Sandpiper
1 stayed at Fox Pond in 1999. First record: 31 Jul 99. Mary Paul saw 2 at Boy Scout Lake on 19 Dec 05, and 1 was seen at the pond by Riso Ridge Road on 13 Nov 06.
56. Long-billed Dowitcher
Visitors to Fox Pond in 1999. I saw 1 on 5 Aug, the first record, and 10 or more on 18 Aug.
57. Wilson's Snipe
Steve Moore and Suzy Worcester have seen several at vernal pools; e.g., they saw 1 at Twin Pond on 6 Apr 03. In 2004 there was 1 at Machine Gun Flats on 22 Apr, and there were 2 at the Catfish Pond on 16 and 21 Oct. 3 records in 2005: 10 were counted at Machine Gun Flats on 29 Jan, 2 at Mudhen Lake on 29 Oct, and 1 at Toro Creek Pond on 23 Nov. One was at Machine Gun Flats on 23 Jan 06.
58. Wilson's Phalarope
First record: 1 immature bird on pond behind BLM office on 2 Aug 98. There were 3 on Fox Pond in Aug 99.
59. Red-necked Phalarope
3 on the pond on Reserve 5 on 26 Jul 97, up to 19 on Fox Pond in Aug 99, and up to 6 on Mudhen Lake in Aug 06.
60. Red Phalarope
1 record: 1 seen by Bill Reese's CBC group on Mudhen Lake on 27 Dec 05.
61. Mew Gull
1 record: a large and varied group of gulls were on top of the Commissary building during the CBC count on 28 Dec 84, when Ft. Ord was an active military base. There were 130 of these gulls.
62. California Gull
Several are regularly seen flying over Ft. Ord and visiting such places as Burger King in fall and winter. Don Roberson saw 1105 on the commissary roof during the CBC on 28 Dec 84.
63. Herring Gull
1 record: 38 on 28 Dec 84 (see comment at Mew Gull).

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| 64. | Thayer's Gull | 1 record: 1 adult on 28 Dec 84 (see comment at Mew Gull). |
| 65. | Western Gull | 2 records: Don Roberson counted 159 on the Commissary roof during the 28 Dec 84 CBC, and a flock of approximately 6 were seen flying over CSUMB on 19 Jul 98. |
| 66. | Glaucous-winged Gull | 1 record: 1 on 28 Dec 84 (see comment at Mew Gull). |
| 67. | Black-legged Kittiwake | 1 record: an exhausted individual found by Shirley Tudor in the Inland Ranges on 25 Feb 11. |
| 68. | Elegant Tern | 2 records: Sam Fitton heard 1 on 26 Jul 97, and Bruce Gerow heard 1 on 1 Aug 98. |
| 69. | Rock Pigeon* | In spite of being common in the housing areas of Ft. Ord, they are infrequently seen in the interior backcountry. There are a few records each year. |
| 70. | Band-tailed Pigeon | Chuck Haugen had seen them along El Toro Creek. Charlie Saunders and I saw 5 on 18 Mar 03 flying over Trail 22. Following that, I saw 24 on 9 May, 7 on 16 Jun, and 3 on 11 Nov 03. In 2006 there were 6 at the BLM Offices on 4 Jan, 10 at Engineer Canyon Road on 8 Mar, and 30 down from Mudhen Lake on 5 Apr. Fifteen were seen on the CBC on 27 Dec 96. |
| 71. | Eurasian Collared-Dove | |
| 72. | Mourning Dove* | Seen, usually 1 to 4 at a time, throughout the inventory and in all areas. On 24 Jul 97, Robin Whatley and I counted over 60 in one spot along Oil Well Road, and I saw approximately 60 by Eucalyptus Road on 15 Oct 06. Less common in the dry years of 2002 and 2003, but a flock of 30 was seen in the grasslands on 2 Dec 03. |
| 73. | Greater Roadrunner* | Few records: near Mudhen Lake: 1 heard on 6 Apr 96 and 1 heard on 2 Nov 01. Also seen by Barloy Canyon Road and Trail 22 in the spring of 2002. People have said they see them down Crescent Bluff Road, and Engineering Canyon Road. Steve Moore and Eric Morgan independently saw 1 at Machine Gun Flats on 19 Apr 03, our only 2003 record. A Roadrunner on Eucalyptus Road entertained the volunteers on 18 May 04. Tammy Jakl saw 1 on Trail 10 on 26 Oct 05. Ronnie Ryno saw 1 near Mudhen Lake on 16 Apr 89. Don Roberson saw 2 on the CBC on 28 Dec 84, and 1 on the CBC on 28 Dec 99. |
| 74. | Barn Owl* | Resident, but few seen. In Aug 98 they were found to come out at dusk over the grasslands at Skyline and Oil Well Roads, and hover like Red-tailed Hawks. [Id. aided by Sam Fitton.] In Jul 06 Wendi Wendt showed us a cliff-side nest with 4 young. |
| 75. | Western Screech-Owl* | Resident. Seen once or twice each year, including an adult and 1 young on 26 Jul 97. |
| 76. | Great Horned Owl* | A permanent resident, and breeding bird, seen throughout Ft. Ord. At least 5 pairs live in the vicinity of Eucalyptus Road. Mark Littlefield observed a nest with young on 25 Feb 91. |

77. Burrowing Owl
Jack Massera reported that they used to live in the grasslands. Bruce Delgado saw 2 in Nov 97. The Fittons and I looked for them on 15 Aug 98, and we found pellets that were no more than a week old [fida Sam Fitton]. The volunteer group saw 1 on 4 Feb 03 near the corner of Skyline and Guidotti Roads. In late Oct 05 Jessie Quinn saw 3 or 4, and Phil Smith found 1 that stood by its hole under a Coyote Brush bush. Smith reported at least 12 on a subsequent trip that winter (2005-06). Observed on the 1993, 1994, 1998, 2005, and 2006 CBCs.
78. Common Poorwill*
In the chaparral throughout the inventory. Infrequently calls in July and August. Heard calling as early as 31 Jan 03. In fall they are seen but not heard. Late records: 6 on 20 Oct 01, and 4 on 28 Oct 06.
79. Vaux's Swift
80. White-throated Swift
Appears to be nesting under the highway bridges adjacent to Ft. Ord. Seen widely over Ft. Ord on 19 Feb 01, as in a migration. Seen throughout the year, but usually scarce in winter. One was seen on the CBC of 29 Dec 94. They were common on the Reservation Road bridge over El Toro Creek in the fall of 2006, with at least 28 seen on 16 Nov, and seen until my last trip to the area on 24 Dec.
81. Anna's Hummingbird*
One to several seen everywhere except pure grassland throughout the year. Most actively breeding in winter. Ronnie Ryno saw an occupied nest on 8 May 89, and I watched nest activity at the BLM office area from 5 Jan to 16 Feb 06. Usually between 40 and 70 individuals have been counted on the CBCs, but 179 were noted on the 1984 CBC.
82. Rufous Hummingbird
Bruce Gerow said that a big migratory wave of Rufous Hummingbirds passed through Ft. Ord in April 1989.
83. Allen's Hummingbird*
Seen at BLM compound in 1996 and at the Catfish Pond from 16 Mar to 8 Jun 03, and again in 2004, starting 15 Feb. In 2004, also noted in the BLM office area on 11 Feb, and along El Toro Creek on 10 Mar.
84. Belted Kingfisher
One or two seem to visit Ft. Ord regularly, except during the breeding season. Seen most regularly at Mudhen Lake. They are more regular, and possibly nesting, in the Salinas River area, a region not inventoried prior to 2006.
85. Lewis's Woodpecker
From 20 Dec 93 to 6 May 94 there were "dozens" on eastern Ft. Ord. For example, 5 were seen on the CBC on 28 Dec 93. [See Don Roberson, *Monterey Birds*, 2nd Edition, 2002.] Tim Buhl saw 1 at the Catfish Pond on 2 Oct 03. It was still there the next day.
86. Acorn Woodpecker*
In 1996 most individuals were along El Toro Creek. In 1998 there was a small colony next to Mudhen Lake. In the falls of 2001 and 2005, strong acorn years, Acorn Woodpeckers were widely distributed all over Ft. Ord. One to five could be seen in many places. By the end of the dry, low yield year, 2002, Acorn Woodpeckers were again scarce on Ft. Ord, with a total of 2 at Mudhen Lake.

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| 87. | Red-breasted Sapsucker | 3 records of 1 near Mudhen Lake: 7 Apr 96, 12 Nov 02, and 21 Oct 06. In 2003 there were 3 records of 1 in the BLM office area: 4 Mar, 18 Mar, and 31 Dec. Not seen on CBCs. |
| 88. | Nuttall's Woodpecker* | Seen in oak trees throughout the year. Usually just 1 or 2 seen. Perhaps more easily seen in sycamore trees along El Toro Creek. Anywhere from 1 to 8 have been seen on CBCs. |
| 89. | Downy Woodpecker* | Thinly spread over riparian locations throughout the year. At most 2 have been seen on any CBC, but the count circle excludes most of the riparian areas of Ft. Ord. |
| 90. | Hairy Woodpecker* | Widely distributed on Ft. Ord in very small numbers. For example, a pair can usually be seen at Mudhen Lake. Much more widely distributed in the fall of 2001. At most 3 have been noted on any CBC. |
| 91. | Northern Flicker* | Seen throughout oak savannah throughout the inventory. Up to 10 seen per field trip. From 10 to 20 have been noted on most CBCs. |
| 92. | Olive-sided Flycatcher* | Uncommon spring migrant; 3 records of 1 each: on Crescent Bluff Rd. on 28 Apr 96, at El Toro Creek on 7 May 02, and Machine Gun Flats on 14 May 03. In 2004 through 2006 a pair nested in the BLM office area. On 13 Jul 04 an adult was seen with 2 fledglings. |
| 93. | Western Wood-Pewee | 4 records: 1 seen at the camp ground by West Camp Street on 15 Aug 99, and 1 May 03 (singing), 2 at the BLM office area on 8 May 03, and Bruce Gerow saw 1 at Mudhen Lake on 21 Apr 04. |
| 94. | Gray Flycatcher | 1 record: Jane Styer and I saw one near Skyline Road on 2 May 03. |
| 95. | Pacific-slope Flycatcher* | Summer resident in trees in riparian locations. First spring record: 17 Mar 04. In 1998 nested under eaves at front entrance to BLM main building. The latest annual record was 1 seen 27 Sep 01. Early arrival in 2004 with 3 March records; and in 2005 with arrival noted on 25 Mar. |
| 96. | Black Phoebe* | 1 or 2 pairs are seen at most riparian locations throughout the year. On CBCs prior to 1999 fewer than 8 individuals were noted per count; from 1999 on 10 or more have been noted per count |
| 97. | Say's Phoebe | Winter resident on grasslands: last seen on 7 May 02. First fall record: 10 Sep 02. Usually fewer than 5 seen on one field trip. Usually 5 to 15 individuals have been seen per CBC. |
| 98. | Ash-throated Flycatcher* | Summer resident throughout oak-chaparral. First spring record: 2 Apr 05. Infrequently seen in August. Latest record: 13 Aug 02. |
| 99. | Cassin's Kingbird | Bruce Gerow saw 1 very vocal bird on Ft. Ord near the Toro Estates Entrance from 19 to 21 May 01. Another vocal bird was seen at Boy Scout Lake on 19 Aug 05. |

100. Western Kingbird*
1 or 2 pairs breed on the grasslands near El Toro Creek. The 1st spring records are usually in early April. Seen on 27 Mar 04. A “fall” migrant was on Machine Gun Flats on 2 Aug 99. Bruce Gerow confirmed breeding in 2001.
101. Loggerhead Shrike
Not seen in 1996. Uncommon, but widely distributed in somewhat open areas since then.
102. Hutton’s Vireo*
Year-round resident in the Coast Live Oaks. When they are singing I can usually detect 1 to 4 individuals in one place. Most CBCs have recorded between 2 and 7 individuals.
103. Warbling Vireo*
Likely breeding in dense willow locations. Seen only in spring, and in drier years likely only a migrant. Earliest records: 27 Apr 02, 21 Apr 04, and 18 Apr 05. I was surprised that there was one at the Dam Crossing on 22 Jun 04.
104. Steller’s Jay
Usually associated with El Toro Creek community, first recorded on Ft. Ord on 27 Jul 97. Widely distributed over Ft. Ord in the fall of 2001, a good acorn year. Noted around Mudhen Lake in November and December 05.
105. Western Scrub-Jay*
Highly visible common bird throughout the oak-chaparral throughout the inventory. The CBCs have recorded between 32 and 90 individuals.
106. American Crow*
Although abundant in the housing areas on Ft. Ord, it is uncommon in the backcountry. The CBCs have recorded between 16 and 90 individuals.
107. Common Raven
Infrequent visitor. Bruce Gerow saw two fly over the vicinity of Mudhen Lake in the spring of 1999. From then through 2003 I have widely scattered records: 10 Jun 00, 21 Oct 01, 3 May 02, 8 Aug 02, 17 Nov 02, 21 May 03, and 11 Sep 03. The six records in 2004 of up to 5 individuals suggest a population increase. In 2005 there were 4 records, and in 2006 there were 11 records of 1 to 4 individuals.
108. Horned Lark*
Seen in high grassland throughout the year. Young birds observed in June and July. They appear to be much more common in winter. They were uncommon in 2002. Five of the 9 CBCs have recorded no Horned Larks. The 28 Dec 93 CBC recorded 69 larks, far more than any other Ft. Ord count.
109. Purple Martin
1 record: four flew west over Mudhen Lake on 14 Aug 99.
110. Tree Swallow*
Seen at ponds in small numbers. In 1996 first seen on 9 Mar, in 2001 on 12 Feb, in 2002 on 8 Feb, and in 2003 on 9 Mar. In July/August inventories, not seen in 1997, and last seen on 12 Jul 98, 1 Oct 01, 15 Jun 02, and 8 Jun 03. A possible migration peak in April. Three were seen on the 29 Dec 98 CBC.

111. Violet-green Swallow* At ponds in small numbers during the winter/spring inventory of 1996. Early record: 10 Feb 01. Around 60 birds seen on 2 Mar 01. Rarely seen in summer. In 2002 seen regularly from 6 Mar until 11 Jun, but not otherwise. In 2003 and 2004 seen until mid-June, probably nesting in a cliff face on Barloy Canyon Road. Also, 4 seen on the 29 Dec 98 CBC, and 3 were at Mudhen Lake on 30 Dec 03.
112. Northern Rough-winged Swallow Seen in small numbers from early March (5 Mar 02) to early July (8 Jul 98). Seen as early as 12 Feb 01.
113. Cliff Swallow* Summer resident. Until 2003 the early inventory date was 2 May 02. In 2003 approximately 50 were flying along El Toro Creek on 6 Apr, and in 2004 they were seen as early as 15 Mar. The most common swallow into August. Not seen in Sep 01, and last seen on 7 Aug 02, 12 Aug 03, and 19 Aug 05.
114. Barn Swallow* Summer resident with nests observed. Usually first seen in March. One individual was seen on 20 Jan 06. Seen over the grasslands as well as over ponds. The 20 Barn Swallows seen over the vernal pond behind the BLM office appeared migratory. In Aug 04 a flock settled around the corner of Eucalyptus and Parker Flats Roads. Approximately 60 were seen there on the 20th. Some last records for the year are: 22 Sep 01, 12 Sep 02, and 12 Aug 03. One was seen on the 29 Dec 98 CBC.
115. Chestnut-backed Chickadee* Seen throughout the inventory in scattered localities where there are oak trees. Up to 10 may be seen in a given location. The 1993 CBC reported 43 individuals, but the count has usually seen fewer than 15.
116. Oak Titmouse* Common in the oaks and riparian woods throughout the year. Usually fewer than 10 are seen. The 1993 CBC reported 54 titmice, all other CBCs found 17 or fewer individuals.
117. Bushtit* Common throughout the year wherever there are trees or chaparral. Usually seen in flocks (of up to 30 birds). Usually 100–200 are seen during CBCs, but 326 were counted on 28 Dec 84.
118. Red-breasted Nuthatch Infrequent winter resident, noted on several CBCs.: 1 in '96, 2 on the golf course in '98, 3 in '00, and 1 seen near BLM office on 28 Dec 01. A small “wave” came through in the fall of 2004, with the 1st heard in Coast Live Oaks on 29 Sep., and one wintered in the BLM office area and was last seen on 30 Apr 05.
119. White-breasted Nuthatch 5 records: 1 or 2 in the Valley Oaks near El Toro Creek on 27 Jul 97, 15 Aug 99, and 28 Oct 03; one was seen near El Toro Creek on 18 Sep 01. One was in the Coast Live Oaks at Boy Scout Lake on 16 Nov 05
120. Pygmy Nuthatch* 1 record prior to 2006: Don Roberson saw 2 on the golf course on the CBC on 28 Dec 99. On 6 Mar 06 a pair was seen mating in the pine planting along South Boundary Road. On 5 Jun they were seen feeding fledglings in the same location.

121. Brown Creeper
Uncommon winter resident. They have been seen at the golf course on several CBCs: 1998, 2000, and 2005. There was 1 at BLM offices from 11 Dec 02 until 28 Jan 03.
122. Rock Wren
One was in an eroded area not far from the top of Oil Well Road, seen on 21 and 27 Oct 01.
123. Bewick's Wren*
Common in the trees, brush, and chaparral throughout the inventory. During the height of song one may hear roughly 10 singing. On CBCs anywhere from the teens to the 30s have usually been recorded. On 28 Dec 93 52 were counted.
124. House Wren*
Seen in riparian locations from March until July. Latest records: 19 Aug 99, 13 Oct 02, and 17 Oct 06. Less frequent, and last noted on 17 May, in the dry year 2004.
125. Marsh Wren
One singing on Mudhen Lake 25 Feb to 2 Mar 01, and 1 at the Catfish Pond in the fall (8 Oct) of 2002, in Mar 03, and Oct 04. Previously seen by Bill Collins in the pond near Range 36. They were seen at Mudhen Lake from 26 Oct to 15 Dec 06, with a maximum of 4 seen on 13 Dec.
126. Golden-crowned Kinglet
Few winter records. There were 2 noted on the golf course on the 1998 CBC. Seen in Dec 01 until 10 Mar 02. Not seen again until 12 Dec 02.
127. Ruby-crowned Kinglet
Winter resident in trees. Last seen on 6 Apr 96, 12 Apr 02, and 6 Apr 03. Main fall arrival in early October, e.g. 3 Oct 02, 6 Oct 03. Usually fewer than 10 are seen, but in the fall of 2006 up to 30 could be seen at a single place. Usually 15–30 are seen on the CBCs.
128. Blue-gray Gnatcatcher*
Recorded from 30 Mar 96 and 10 Mar 02 through spring in oak-chaparral areas. Last records: 7 Jul 98, 19 Aug 99, 2 seen in chaparral on the 2001 CBC, and 20 Aug 02. Robert Horn saw 1 near Creekside on 1 Nov 03.
129. Western Bluebird*
Seen throughout the year, although recorded on a minority of the stops. The flocks usually have 5 or fewer individuals. Bluebirds may have become more common on Ft. Ord between 1996 and 2006.
130. Mountain Bluebird
7 seen on Camp Ord on 3 Jan 37. [See Don Roberson, *Monterey Birds*, 2nd Edition, 2002.]
131. Townsend's Solitaire
1 record: 1 seen and photographed by the BLM Office on 22 Oct 07.
132. Swainson's Thrush
First heard singing in dense willows along Crescent Bluff Road on 4 May 96. Heard singing on 8 and 16 Jun 96 near Guidotti Gate. Migrant heard singing on 14 May 02. In 2003 a May migrant. Noted 23 to 30 Apr 05. Just 1 or 2 seen per day.
133. Hermit Thrush
Widely spread fall records of 1 to 3 birds starting 18 Oct 01, 13 Oct 02, and 14 Oct 03. A winter resident; most have left by the end of February. Sporadic records up to 6 Apr (2003). A surprising 9 seen at once at the Huffman Tank on 23 Nov 02. On the 9 CBCs a high of 22 were counted on 28 Dec 99 and a low of 3 were noted on 27 Dec 96.

134. American Robin* A few present in certain locations, e.g. Mudhen Lake, and the BLM compound. Seen throughout the year. On 15 Aug 98 there was a "fall" flock of ten by the BLM office. Only 1 record from 18 Sep through 18 Oct 01. After that, more frequently seen. In 2003 seen on 6 Jun, and not again until 7 Nov. On 3 Feb 04 there was a winter flock of 32 at the corner of Eucalyptus and Barloy Canyon Roads. An outstanding record was the 1190 counted on the 1994 CBC.
135. Varied Thrush Seen by Don Roberson at Lower Pilarcitos Pond on 2 CBCs: 1 seen on 28 Dec 92 and 3 seen on 28 Dec 99. Also seen, 1 each, on 24 Nov and 25 Dec 06 at the BLM office area, and on 1 Dec 06 near Lower Pilarcitos Pond. The 24 Nov and 1 Dec birds were singing.
136. Wrentit* Seen (heard) throughout the chaparral throughout the year.
137. Northern Mockingbird* Small numbers usually seen near housing areas, but also seen around trees or shrubs in the grasslands.
138. Brown Thrasher 1 seen near Mudhen Lake on 14 Oct 84. [See Don Roberson, *Monterey Birds*, 2nd Edition, 2002.]
139. California Thrasher* Seen (heard) throughout the chaparral throughout the year, but with lower frequency than the Wrentit.
140. European Starling Seen in many locations throughout the year. Common along El Toro Creek; however, infrequently seen at many places. In 2006 they were more common throughout Ft. Ord.
141. American Pipit Winter visitor: 7 at Fox Pond on 14 Feb 01; 39 not far from the top of Oil Well Road on 17 Feb 01. In 2003 last seen on 21 Mar, and in 2004 on 12 Apr.
142. Cedar Waxwing Winter resident. First fall record: 10 seen on 3 Oct 01. On 26 Feb 01 there were 44 by El Toro Creek. Late records: on 7 May 02 there were about 10 by El Toro Creek, and on 25 May 03 there were 32 in the same location; in 2004 there were 50 seen on 19 May and 7 seen on 4 Jun. In 2005 seen mainly in April. Seen just 3 times in 2006.
143. Phainopepla 2 seen along Crescent Bluff Road on 12 Apr 02. Reported by Chuck Haugen in July 2002. Up to 3 seen visiting elderberries along El Toro Creek on 25 and 26 Jul 02. Next seen 28 and 29 Sep 06, when 2 visited an elderberry on the corner of Eucalyptus and Barloy Canyon Roads. Previously reported by Bruce Gerow as a non-breeding visitor during the Monterey Breeding Bird Atlas project.
144. Orange-crowned Warbler* First annual records: 9 Mar 96, 1 Mar 01, 9 Mar 03, 15 Feb 04, 18 Feb 05. On 9 Mar 03, 16 were heard singing. Frequently recorded in chaparral/oaks from 14 Apr on. Infrequently recorded in July and August. In 2001 a noticeable fall migration in September and October, and 2 were seen on 1 Nov. In 2003 later individuals included 1 on 22 Oct and 1 on 4 Dec, both near water. They have been seen on approximately half of the CBCs.
145. Nashville Warbler Migrant. 1st record: 1 at El Toro Creek on 17 Sep 01. Other records of 1 individual from 6 to 9 Oct 01, 11 Mar 03, and 21 Apr 03.

146. Northern Parula 1 sure record: 1 on 5 Oct 01 on 7th Street. Also, likely an immature female seen on Parker Flats Cutoff on 27 Oct 02.
147. Yellow Warbler Spring records: 1 heard near Mudhen Lake on 21 Apr 96, and ones seen on 14 May and 16 May 02, 17 Apr 03, and 17 and 25 Apr 04. In 2001 one to three were regularly seen from mid-September to mid-October.
148. Yellow-rumped Warbler Winter resident. Peak on 6 Apr 96, and last seen on 20 Apr 96 and 12 Apr 02. First seen on 27 Sep 01, 1 Oct 02, and 26 Sep 06. Also, there was an isolated record of 1 on Ingman Ct. on 15 Aug 02. Nearly all are of the Audubon's race. I saw 1 bird of the Myrtle race on 2 Nov 01, and 2 on 19 Nov 03. On 9 CBCs a low of 27 were seen in 1989 and a high of 104 were seen in 1993. The 1993 CBC count included 12 of the Myrtle race.
149. Black-throated Gray Warbler 4 spring records: 20 Apr, 28 Apr, 4 May 96, and 28 Apr 03. A female was seen on the golf course during the CBC on 29 Dec 98.
150. Townsend's Warbler Winter resident. Earliest fall record 20 Sep 01. Seen through February in 2001. Six or fewer seen per field trip. Spring records: a female seen on 1 Jun 96 and 3 males on 23 Mar 02; in 2003 seen from 9 Mar until 8 May. On 9 CBCs fewer than 10 were noted on 4 years, and more than 10 on 5 years, with a maximum of 33 in 1993.
151. Hermit Warbler 3 records, all at the BLM office area: 1 on 5 May 03, 5 seen on 8 May 03, and 1 on 28 Apr 05.
152. Black-and-white Warbler 1 record: 1 seen by Don Roberson on the 28 Dec 84 CBC.
153. MacGillivray's Warbler In the spring of 1999 Bruce Gerow encountered a singing male in the chaparral on Crescent Bluff.
154. Common Yellowthroat* Probably to be found all year at the corner of Barloy Canyon and Eucalyptus Roads and/or Mudhen Lake prior to the 2003 burn. In 2003 not seen in these areas following the July fire. In the dry year of 2004, just a few records from 21 Apr to 30 Jun. Mainly noted around Mudhen Lake in 2006.
155. Wilson's Warbler* Summer resident some years along upper El Toro Creek. Earliest records: 7 Apr 96 and 27 Mar 04. Latest record: 2 Aug 97. A migratory flock of 10 at the BLM office on 8 May 03 was unusual.
156. Yellow-breasted Chat 1 record: 1 heard singing in a tangle along Crescent Bluff Rd. on
157. Western Tanager Spring migrants recorded on 4 May and 1 Jun 96, and from 1 to 8 May 03. In 2005 the early record was 24 Apr, and by 30 Apr a flock of 3 was seen. Two flocks noted in May 03, with a maximum of 10 at the BLM office on the 8th. Fall migrants on 25 Jul to 2 Aug 98, and until 20 Sep 01. A late bird was seen near Parker Flats Cut-off on 29 Oct 05.
158. [Green-tailed Towhee 1 seen on 28 Feb 02 on Parker Flats Road near Eucalyptus Road. Efforts to find the bird later failed.]

159. Spotted Towhee* A permanent resident seen throughout the chaparral. In comparison with the California Towhee, this bird is more restricted in habitat and fewer are seen.
160. California Towhee* Common throughout the year, and widely distributed. Seen on virtually all trips, although not in large flocks. On 9 CBCs a low of 18 were seen in 1989 and a high of 63 were noted in 1993.
161. Rufous-crowned Sparrow* In April of 2000 Sam Fitton found 2 singing by the big washout into Mudhen Lake. One was still there at least as late as 21 Jun 00. Seen along Barloy Canyon Road on 9 and 14 May 02, and from 13 Feb until 18 Mar in 2003.
162. Chipping Sparrow* 1 record prior to 2004: 2 at the campground on Watkins Gate Rd. on 11 May 03. Regularly seen in the burn area in the spring of 2004, with nesting probable. Seen there again in 2005.
163. Lark Sparrow* Seen all year, but infrequently in the winter. Most commonly seen in the grasslands, but also apparently breeding in or near the chaparral areas. Regularly seen at the BLM compound.
164. (Bell's) Sage Sparrow* Resident. Thinly spread over the burned chaparral areas. I likely overlooked them before Bruce Gerow pointed out that they were there. My first record: 4 Jul 98. Birds with young fledgling seen on 3 Jul 06. Don Roberson noted between 1 and 4 individuals on the CBCs in 1993, 1996, 1998, and 2000.
165. Savannah Sparrow Winter resident in the grasslands. Approximately 60 seen high in the grasslands on 17 Dec 06. Last spring record: 28 Apr 96. First fall records: 26 Sep 01, and 22 Oct 02.
166. Grasshopper Sparrow* Breeding bird of the grasslands. First seen on 14 Apr 96, on 27 Apr 02, on 21 Mar 03, on 9 Mar 04, and 16 Mar 05. Approximately 30 singing birds detected in 1996, 5 or 6 of these were on Machine Gun Flats. Bird in juvenal plumage seen on 16 Jun 96. Seen until the end of the inventory in 1996. There were 35 or more singing birds on Ft. Ord in Jun 00. There were likely as many in Jun 02, but likely fewer in 2003.
167. Fox Sparrow Winter resident, but much more common in fall. First noted in chaparral on 5 Oct 01, 1 Oct 02, 30 Sep 03, and 29 Sep 05. Last seen on 25 Jan 02 and 14 Mar 03. Usually 1 or 2 seen, but 10 to 20 were at the Huffman Tank on 29 Oct 02. 84 were seen on the 28 Dec 84 CBC. All Fox Sparrows seen have been of the 'Sooty' race.
168. Song Sparrow* There are 2 to 6 individuals at nearly every pond throughout the inventory.
169. Lincoln's Sparrow Mostly a spring and fall migrant, but few recorded per year. The 2 that Sam Fitton and I saw at Fox Pond on 11 Aug 99 were unusually early.
170. White-throated Sparrow 1 record: 1, perhaps immature, at Mudhen Lake 15 Oct 01.
171. Harris's Sparrow One immature seen on Trail 22 on 16 Jan and 25 Jan 02.

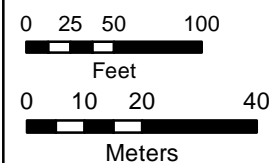
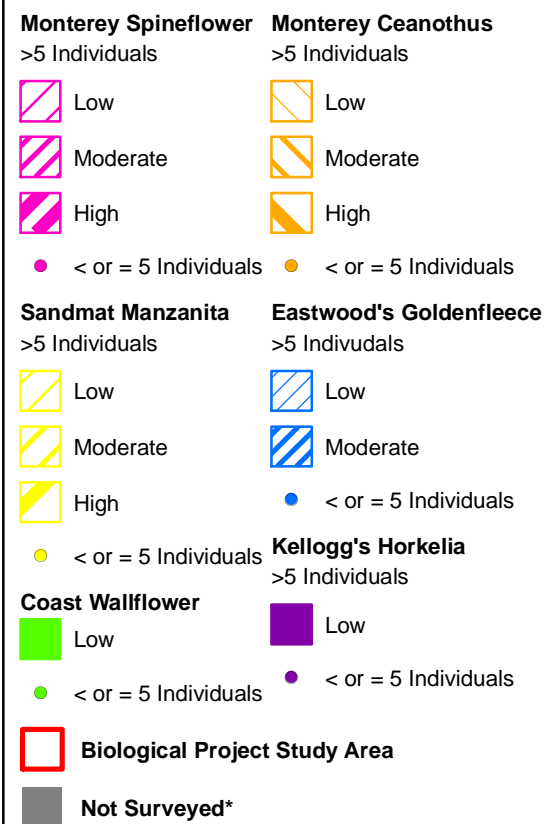
172. White-crowned Sparrow Winter resident in backcountry Ft. Ord. Last seen on 29 Apr 05. Earliest fall record: 2 at Fox Pond on 13 Aug 99. In the fall of 2001 the main migration arrived by 26 Sep. I usually record fewer than 10, but I saw approximately 50 along El Toro Creek on 30 Nov 03.
173. Golden-crowned Sparrow Common winter resident, October through April. Last seen on 21 Apr 96, and on 2 May 02. Seen in good numbers, around 20, by 5 Oct 01 (and 6 Oct 03). First noted in fall on 1 Oct 02 and 30 Sep 03.
174. Dark-eyed Junco* Common breeding bird in oak woods and at the BLM compound. Seen throughout the year. In 2003 flocks of 50 were seen in October, but in other seasons 20 or fewer were seen.
175. Black-headed Grosbeak* Summer resident near Guidotti Gate. Seen as early as 16 Apr 02 and 7 Apr 03, and as late as 1 Aug 99.
176. Lazuli Bunting* 4 records prior to 2002: 28 Apr 96, 4 May 96, and 28 Jun 98, 1 Aug 99. The June record was of a singing male at Mudhen Lake. Strong migration in 2002, seen from 23 Apr to 25 May, with a peak of around 15 seen on 7 May. Weak migration in 2003, seen from 1 May until 6 Jun. A strong migration again in 2004; noted 19 Apr to 30 Jun, with around 30 individuals in the burn area alone. Probable breeding in the burn area followed the migration. In 2006 they probably bred in the 2005 burn area off Parker Flats Road.
177. Red-winged Blackbird* Concentrated near ponds and also seen elsewhere throughout the year, although scarce in August, except, possibly, at the roost at the pond on Watkins Gate Road near West Camp Street.
178. Tricolored Blackbird* The known colony on Oil Well Road has been active most years. The colony has maintained over 50 birds. On 26 Jul 98 I watched them come to feed at the play fields of El Toro Creek community. Ten or more visit the Equestrian Center in winter. They were seen there up to 28 Feb 02. 120 were counted on the 27 Dec 89 CBC, and 200 on the 28 Dec 93 CBC.
179. Western Meadowlark* Small numbers on grassland and Machine Gun Flats in the spring and summer. Larger, more widespread groups of up to 50 seen in the fall and winter. Usually seen in double digits on the CBCs; a low of 8 was seen on the 29 Dec 01 count, and a high of 323 on 28 Dec 93.
180. Brewer's Blackbird* Present throughout the inventory. Especially common at the BLM compound, prior to the fall of 2001. Common in residential areas. 850 were noted on the 27 Dec 89 CBC.
181. Brown-headed Cowbird 5 records: 22 Mar 96, 30 May 02, 23 May 03, 29 Apr and 30 Apr 05.
182. Hooded Oriole* Added to inventory on 11 Jul 98. Sam Fitton pointed out that they were near El Toro Creek. I found at least 3 pairs breeding in Fan Palms in El Toro community, and using Ft. Ord to feed. They continue to be seen only in this area.

183. Bullock's Oriole* Summer resident. Earliest records: 20 Apr 02 and 2 Apr 03. Breeding along El Toro Creek, and possibly other riparian areas with tall (Eucalyptus) trees. Not seen after mid-August. Bruce Gerow noted especially large numbers of both oriole species nesting in the El Toro Creek area in 2001.
184. Purple Finch* Present in the oaks and at the BLM compound throughout the inventory. Usually no more than 5, but sometimes 10 or 20 are in a flock.
185. House Finch* Seen in small numbers throughout Ft. Ord throughout the inventory. Seen at the BLM compound in larger numbers. Abundant in the housing areas of Ft. Ord.
186. Pine Siskin* At BLM compound from first inventory until 2001. However, not encountered in the fall (inventory in 2001). Seen Jan 02 through 23 Apr 02, and then gone: perhaps sensitive to drought. In the drought year of 2003 seen only from 23 Jan to 28 Apr. No Siskins noted in the dry year of 2004, and a few were noted in 2005 or 2006.
187. Lesser Goldfinch* Seen throughout the inventory wherever there are trees. Uncommon in the backcountry in the dry season of 2002. Hardly seen after Jul 03, another dry season, and in 2006 not noted after 7 Dec.
188. Lawrence's Goldfinch* Seen at the BLM compound and in riparian locations in the chaparral. First seen on 24 Mar 96. Not seen at all in 1998. In 2000 last seen on 15 Jun. The 2002 records span 14 Apr to 20 Aug. In 2003 just 2 records of 2 each on 23 May and 16 Jun. The year 2004 was a strong one with records regularly from 19 Apr to 10 Sep, especially in the burn area where they probably bred. Two fall records: 2 near El Toro Creek on 27 Oct 01, and 1 at recent burn on 19 Oct 06.
189. American Goldfinch Fall and winter resident. 1st record: approximately 50 near El Toro Creek on 9 Feb 01. Smaller numbers seen in fall starting 24 Oct 01, 22 Oct 03, and 1 Nov 05. Usually the first fall records are in October.
190. House Sparrow* Common in the housing areas on Ft. Ord. Barely seen in Backcountry Ft. Ord.

Appendix H

Attachment 6 – Rare Plants

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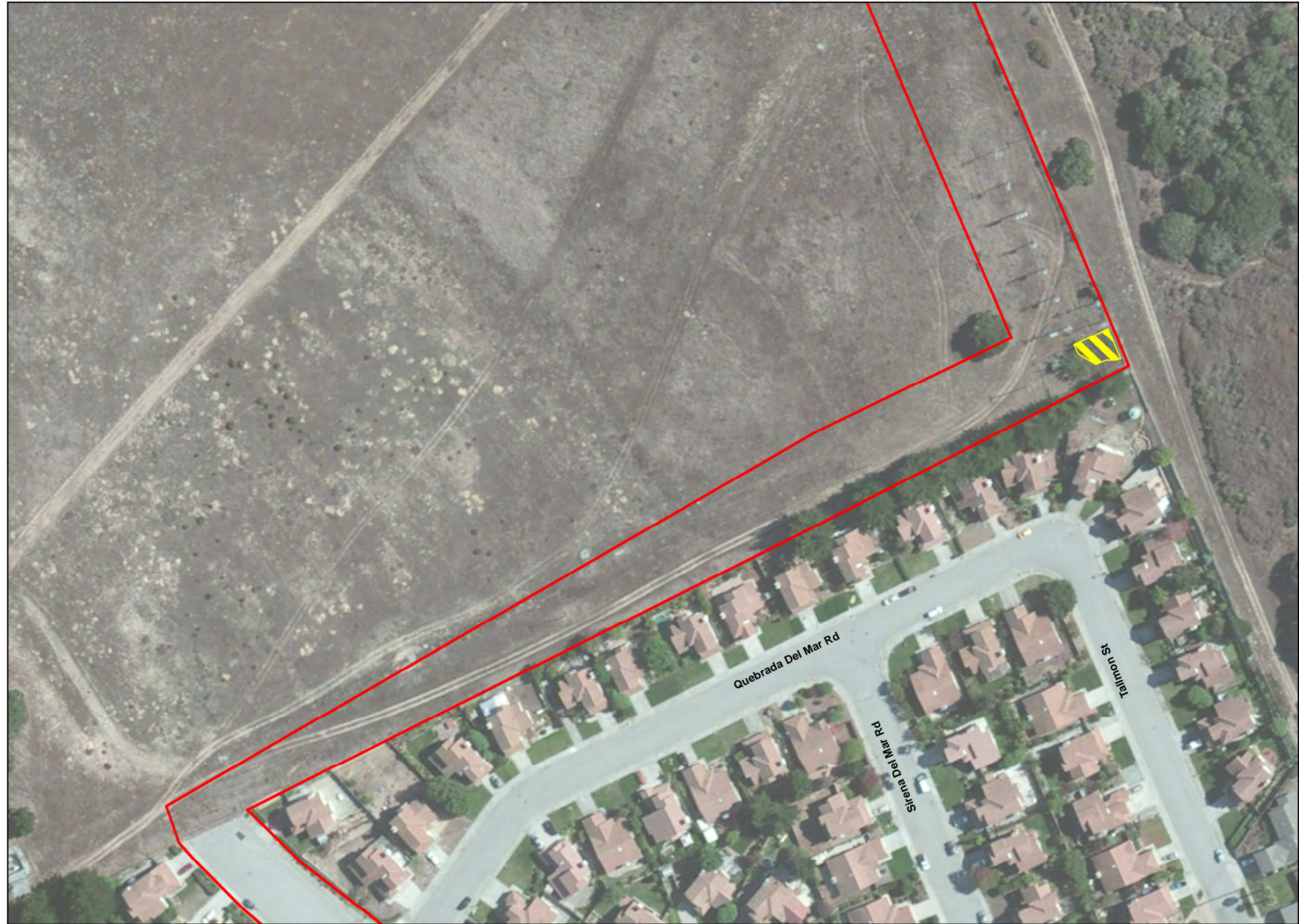
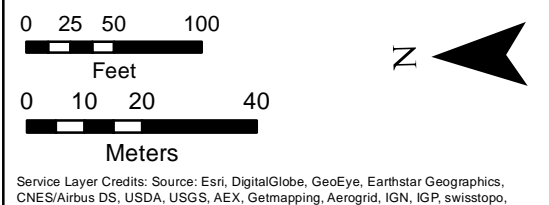
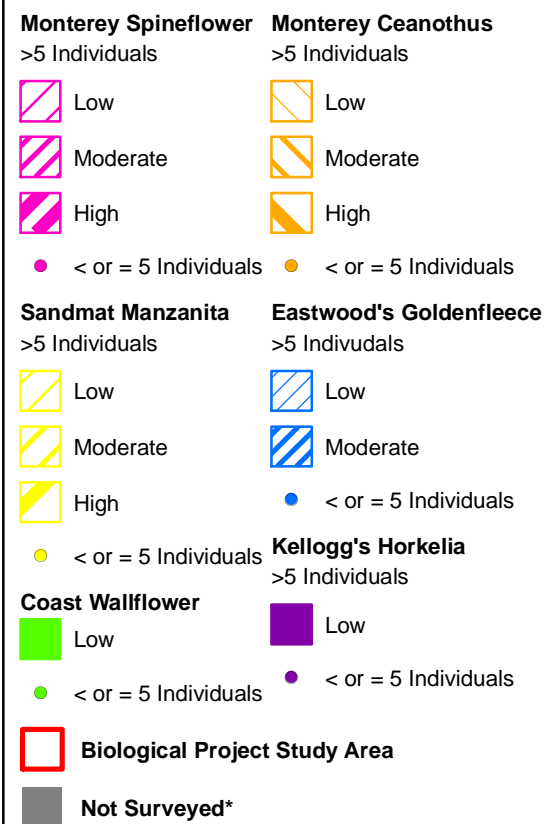
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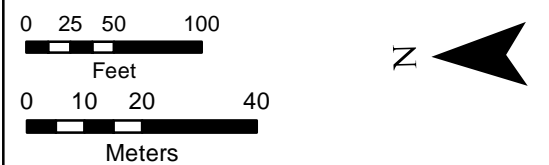
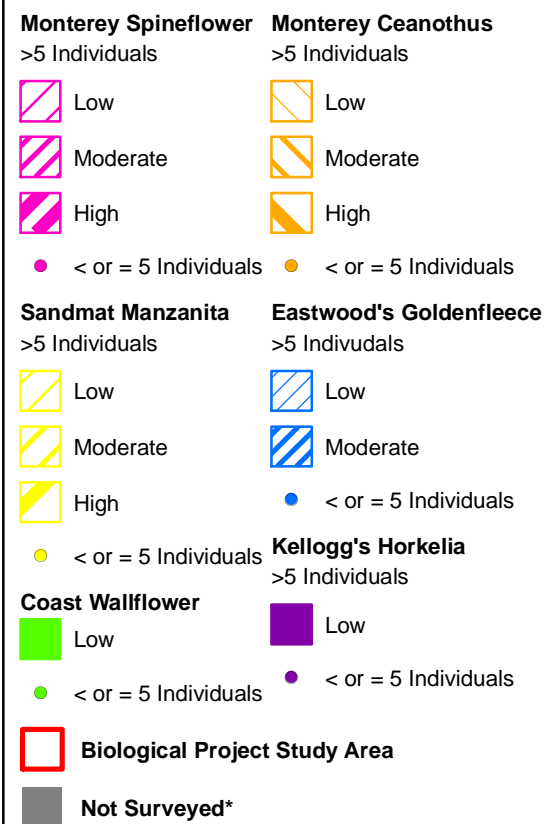
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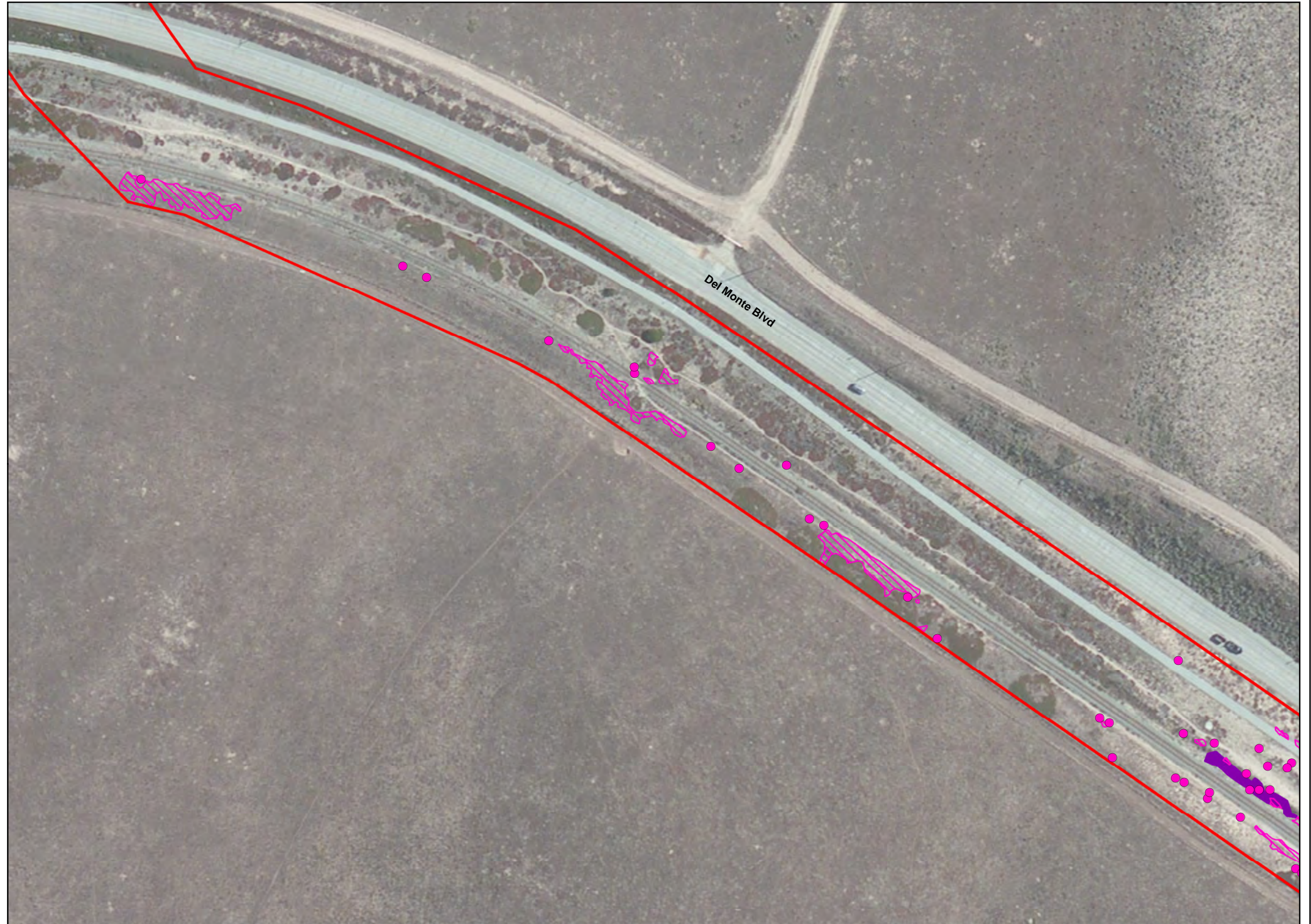
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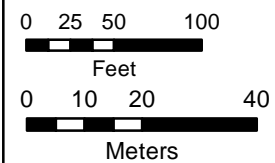
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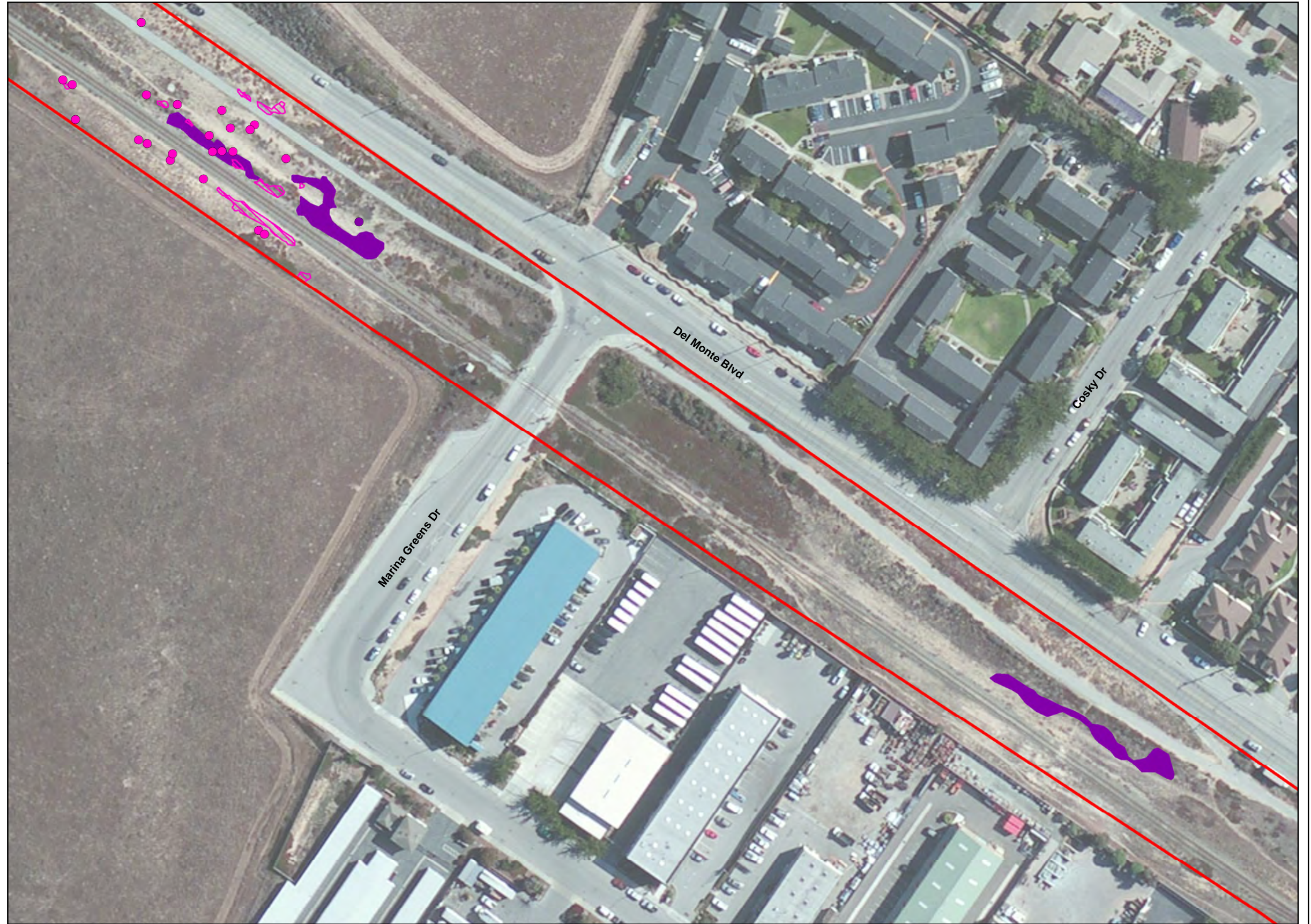
*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



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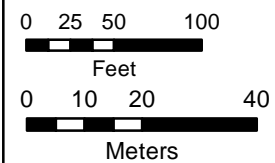
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- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



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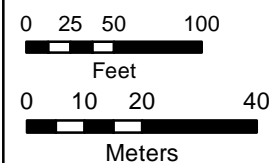
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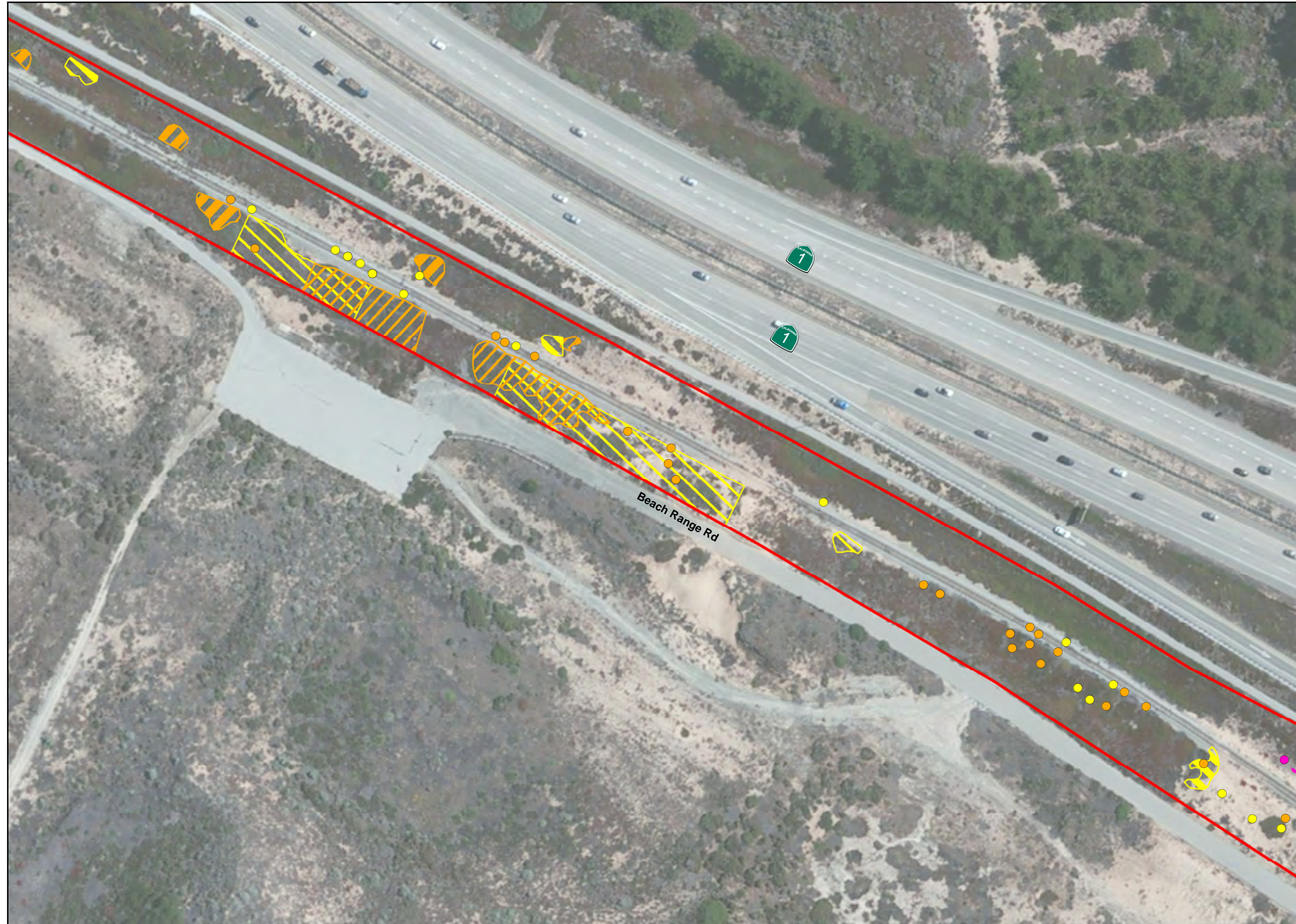
*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



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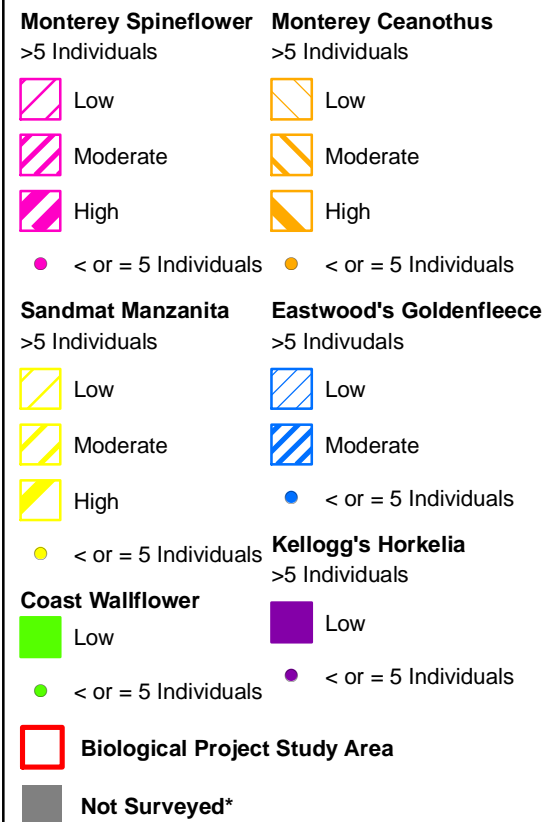
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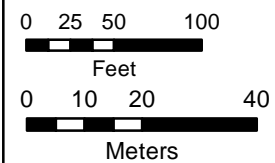
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*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| < or = 5 Individuals | < or = 5 Individuals |
| Biological Project Study Area | |
| Not Surveyed* | |



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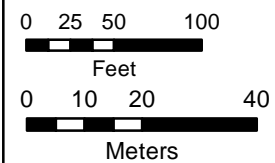
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8

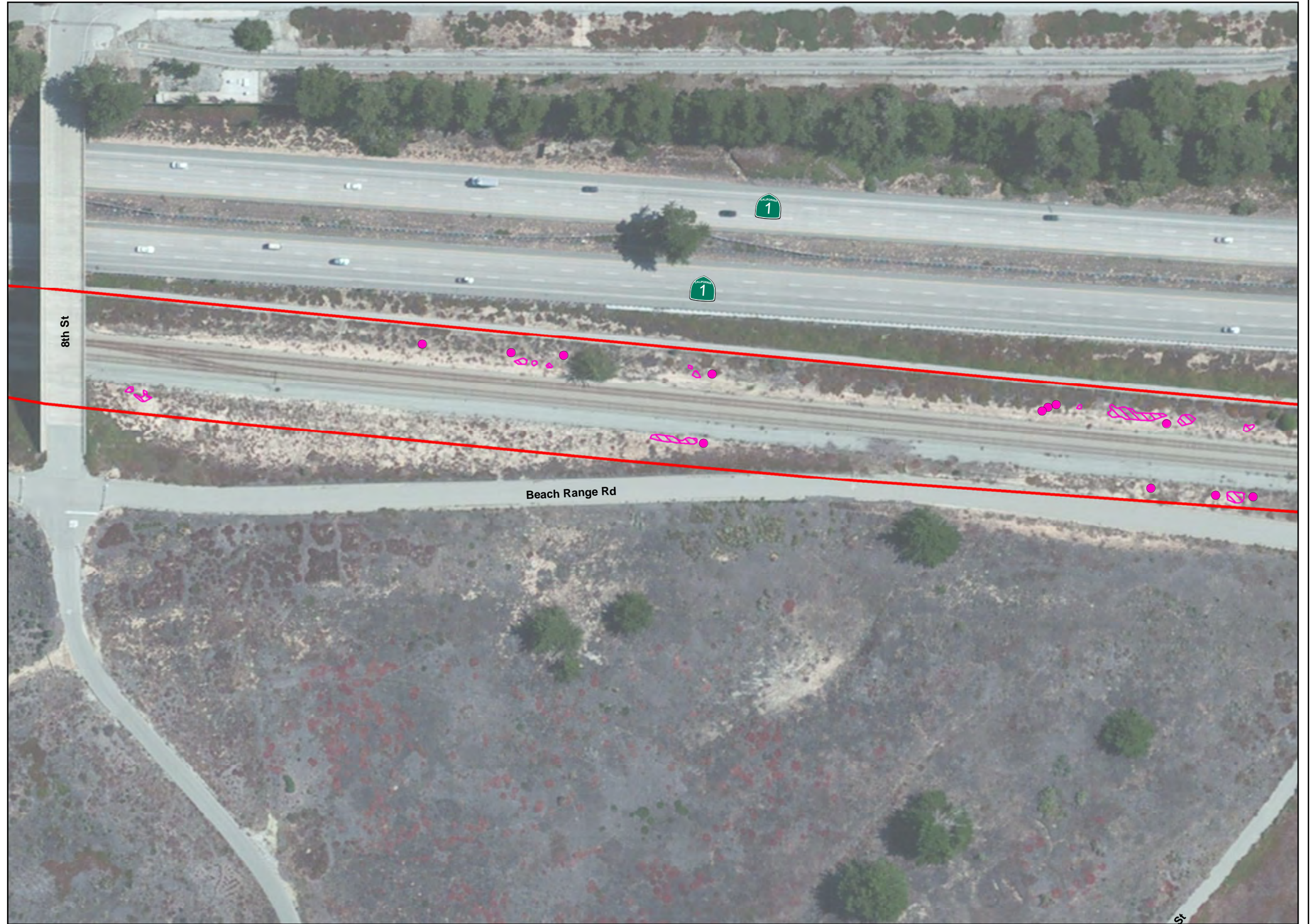
*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



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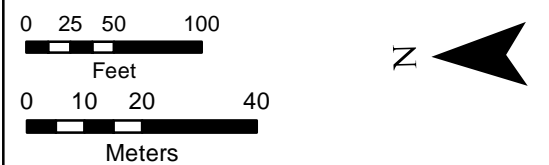
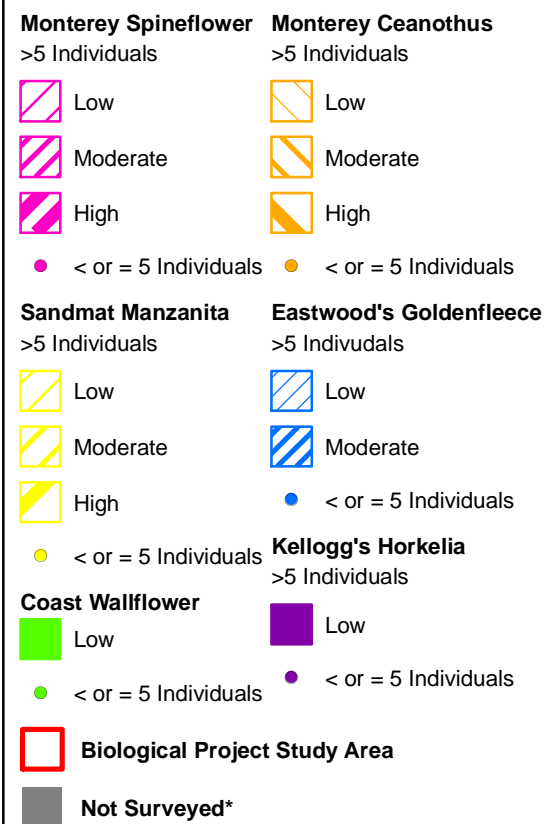
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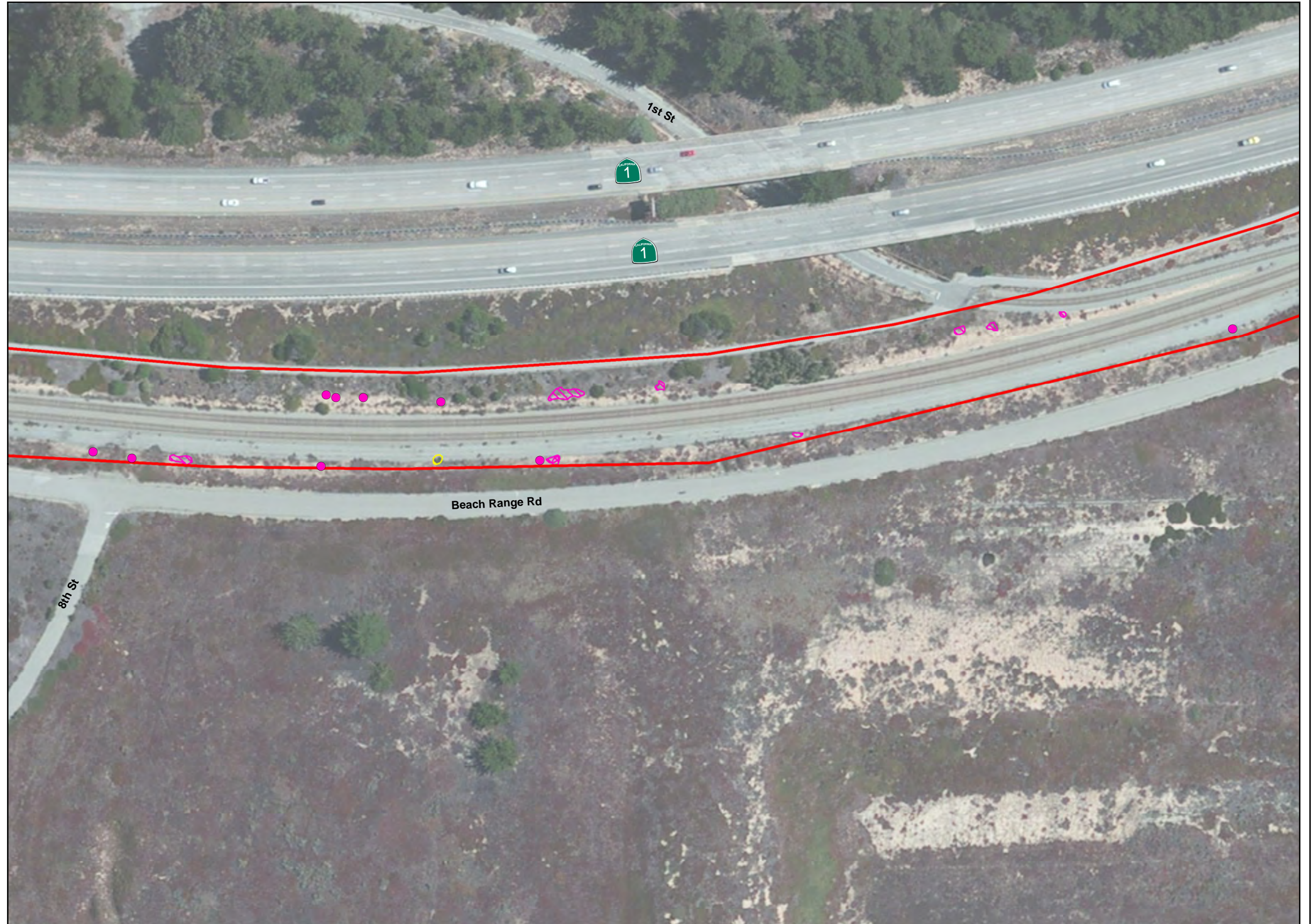
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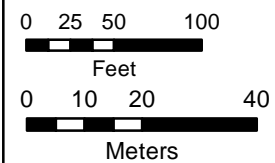
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*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



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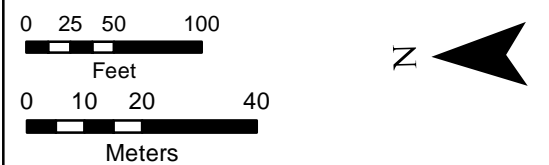
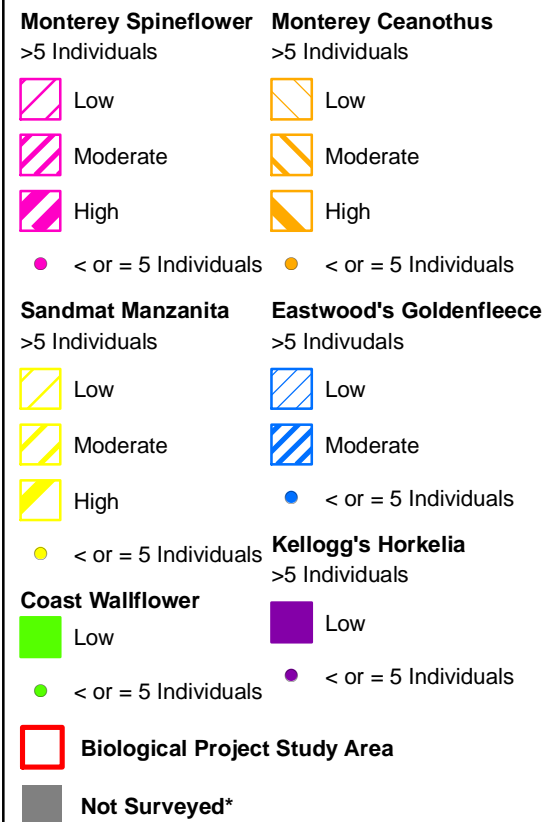
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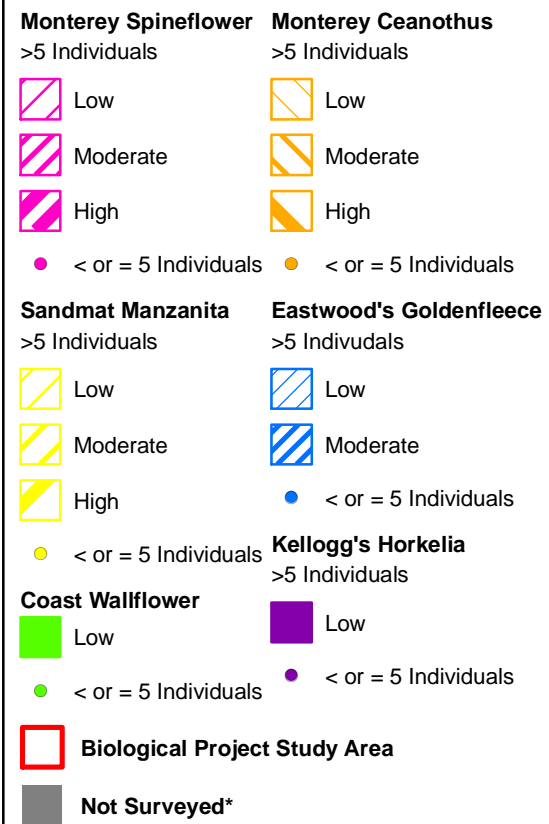
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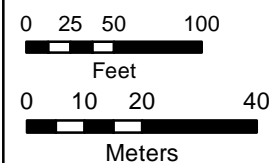
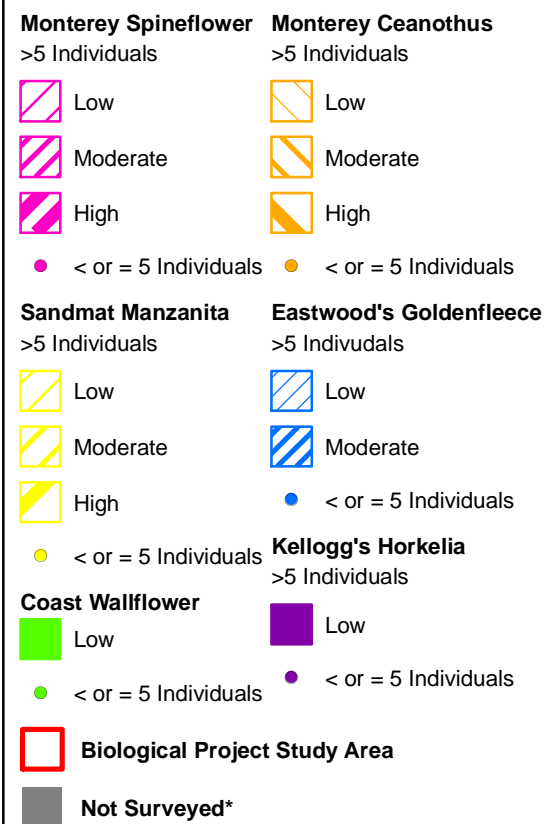
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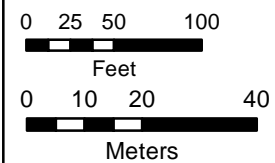
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Page
14

*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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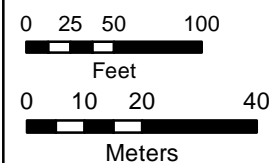
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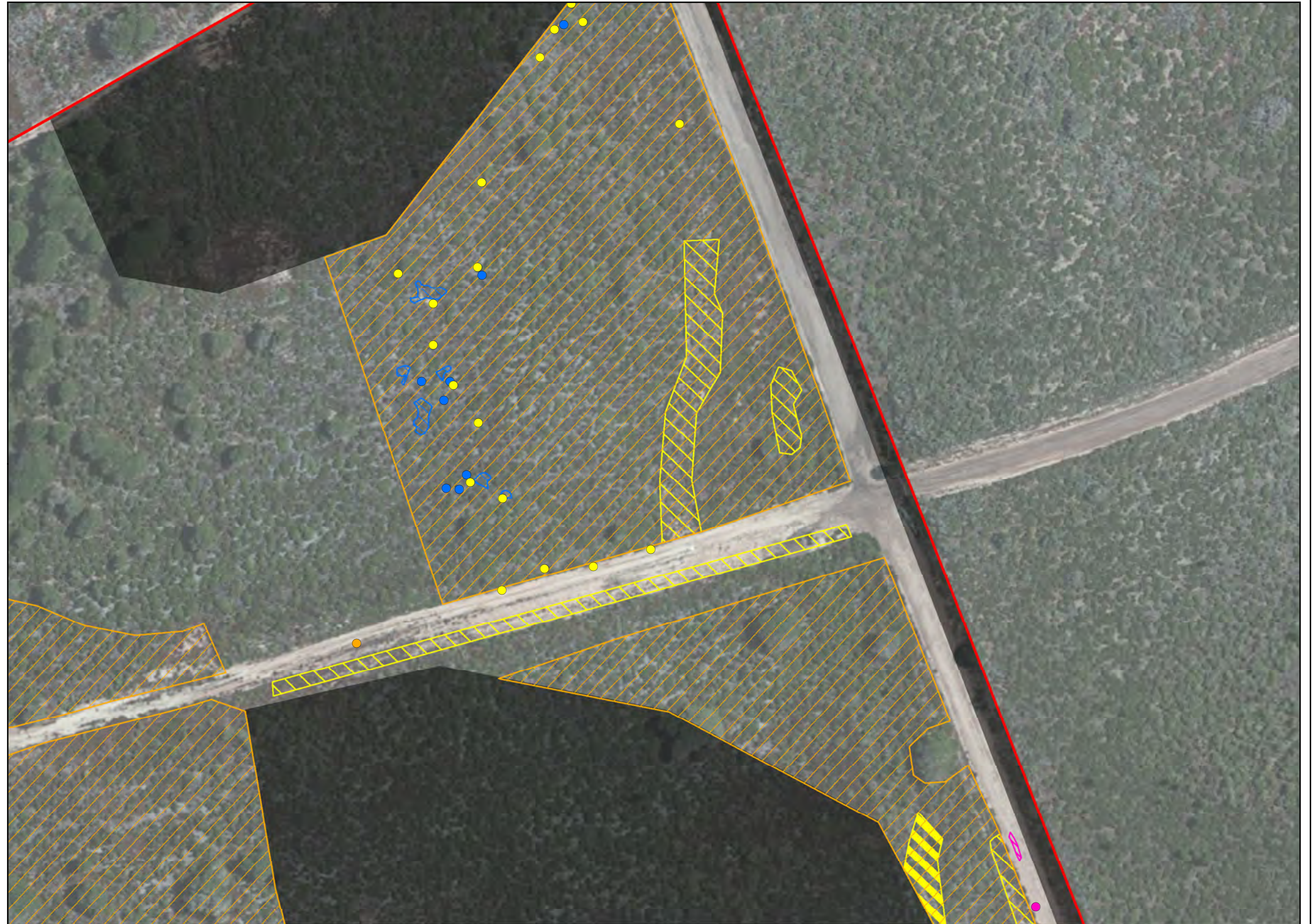
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- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Plants Within GWR PIA - 16**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Plant Booklet 20150212.mxd

Date: 2/19/2015

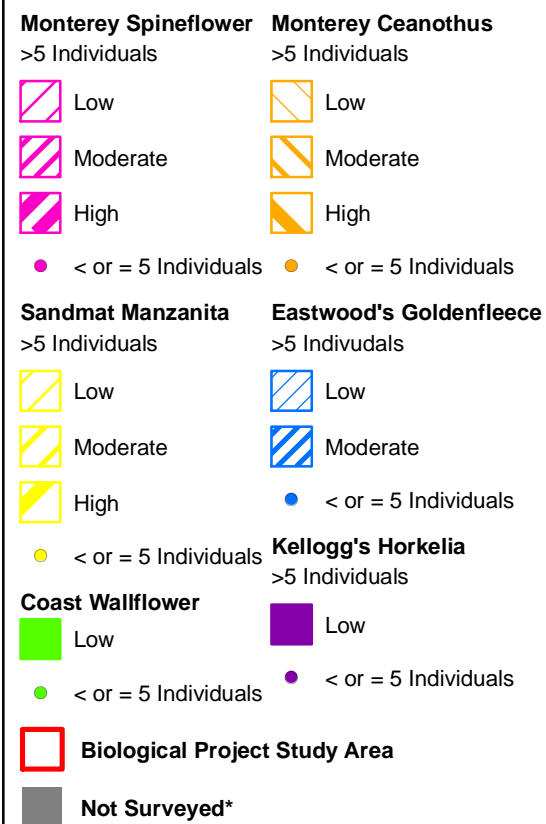
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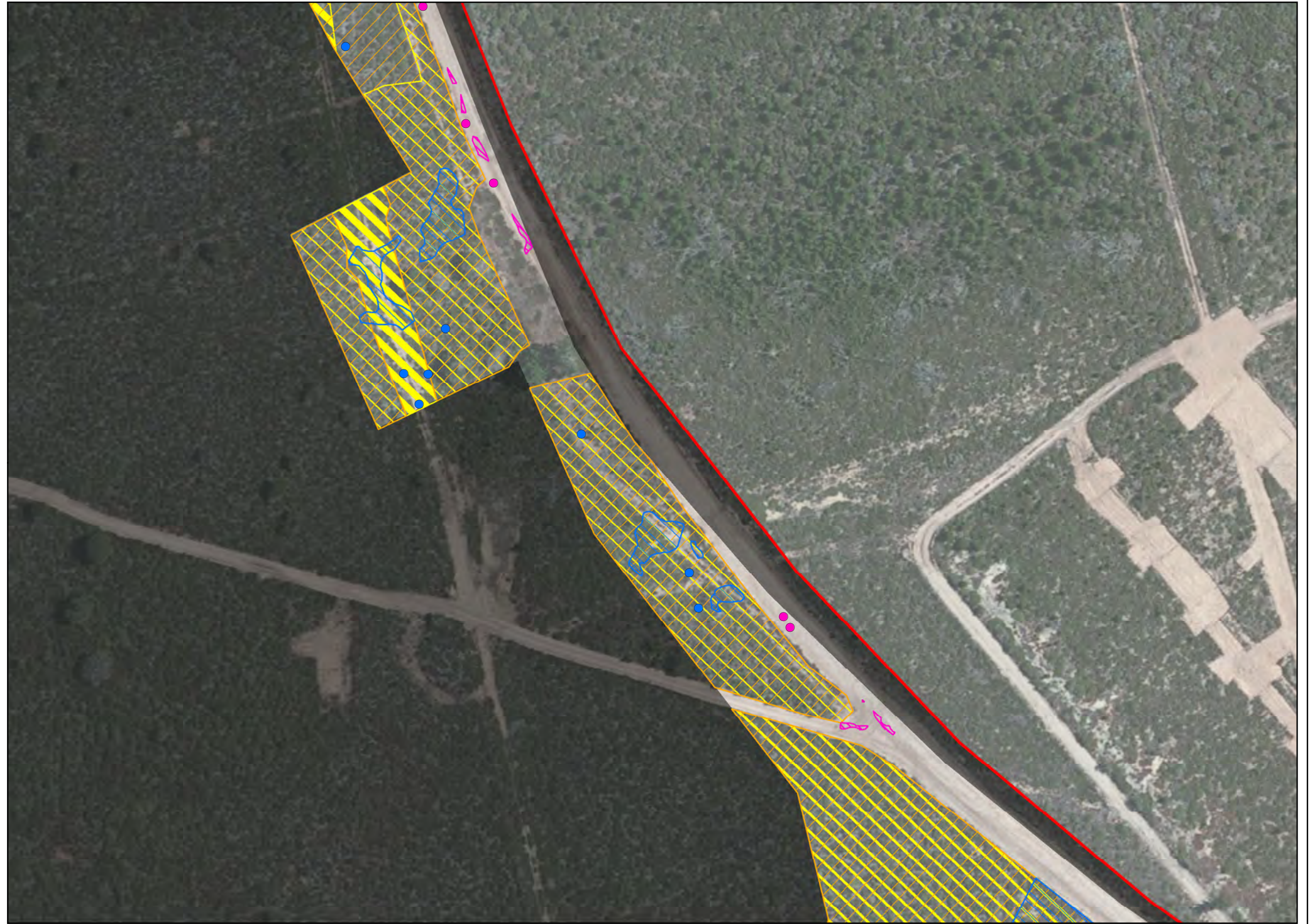
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Page
16

*Maps show where rare plants were found in the surveyed areas



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Plants Within GWR PIA - 17**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Plant Booklet 20150212.mxd

Date: 2/19/2015

Scale: 1 in = 110 feet

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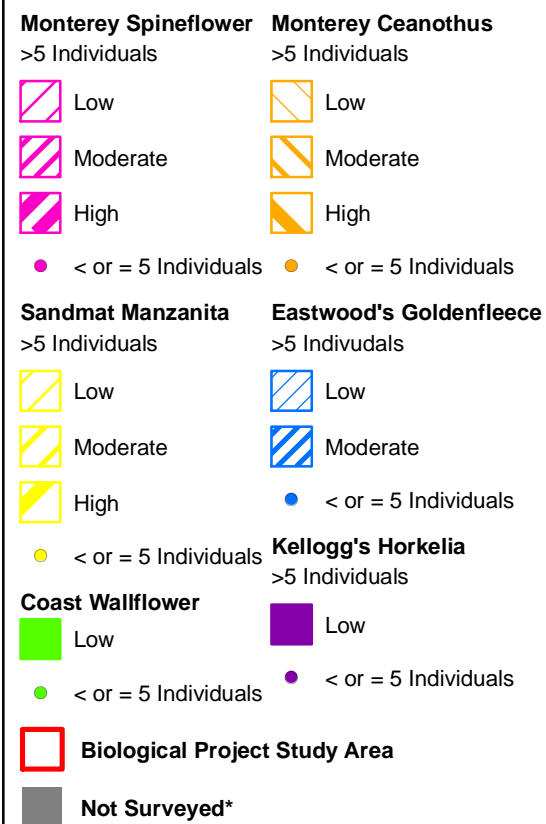
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Page
17

*Maps show where rare plants were found in the surveyed areas



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Plants Within GWR PIA - 18**

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Date: 2/19/2015

Scale: 1 in = 110 feet

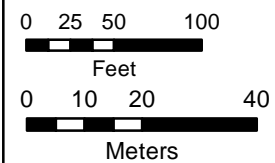
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|--|--|
| | Monterey San Jose |
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| | Environmental Consultants Resource Planners |
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Page 18

*Maps show where rare plants were found in the surveyed areas



- | | |
|---|--|
| Monterey Spineflower >5 Individuals | Monterey Ceanothus >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | High |
| < or = 5 Individuals | < or = 5 Individuals |
| Sandmat Manzanita >5 Individuals | Eastwood's Goldenfleece >5 Individuals |
| Low | Low |
| Moderate | Moderate |
| High | < or = 5 Individuals |
| < or = 5 Individuals | Kellogg's Horkelia >5 Individuals |
| Coast Wallflower | Low |
| Low | < or = 5 Individuals |
| < or = 5 Individuals | |
| Biological Project Study Area | |
| Not Surveyed* | |



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Plants Within GWR PIA - 19**

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Date: 2/19/2015

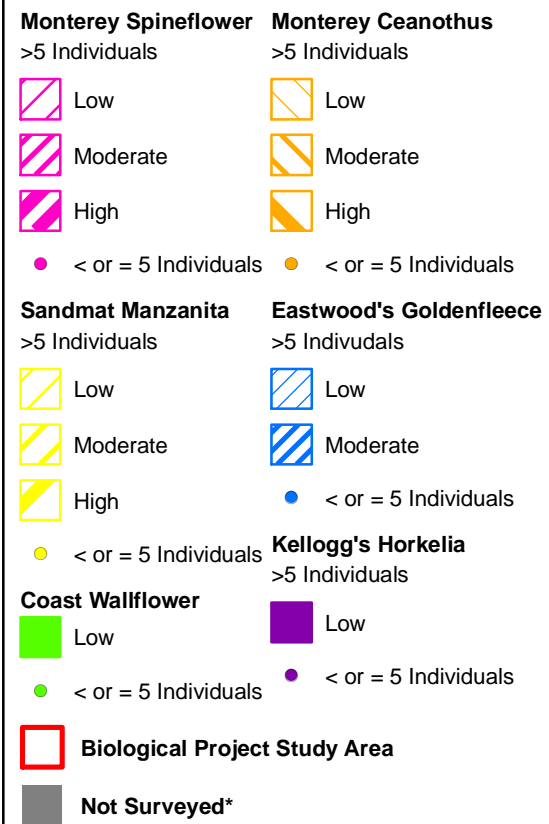
Scale: 1 in = 110 feet



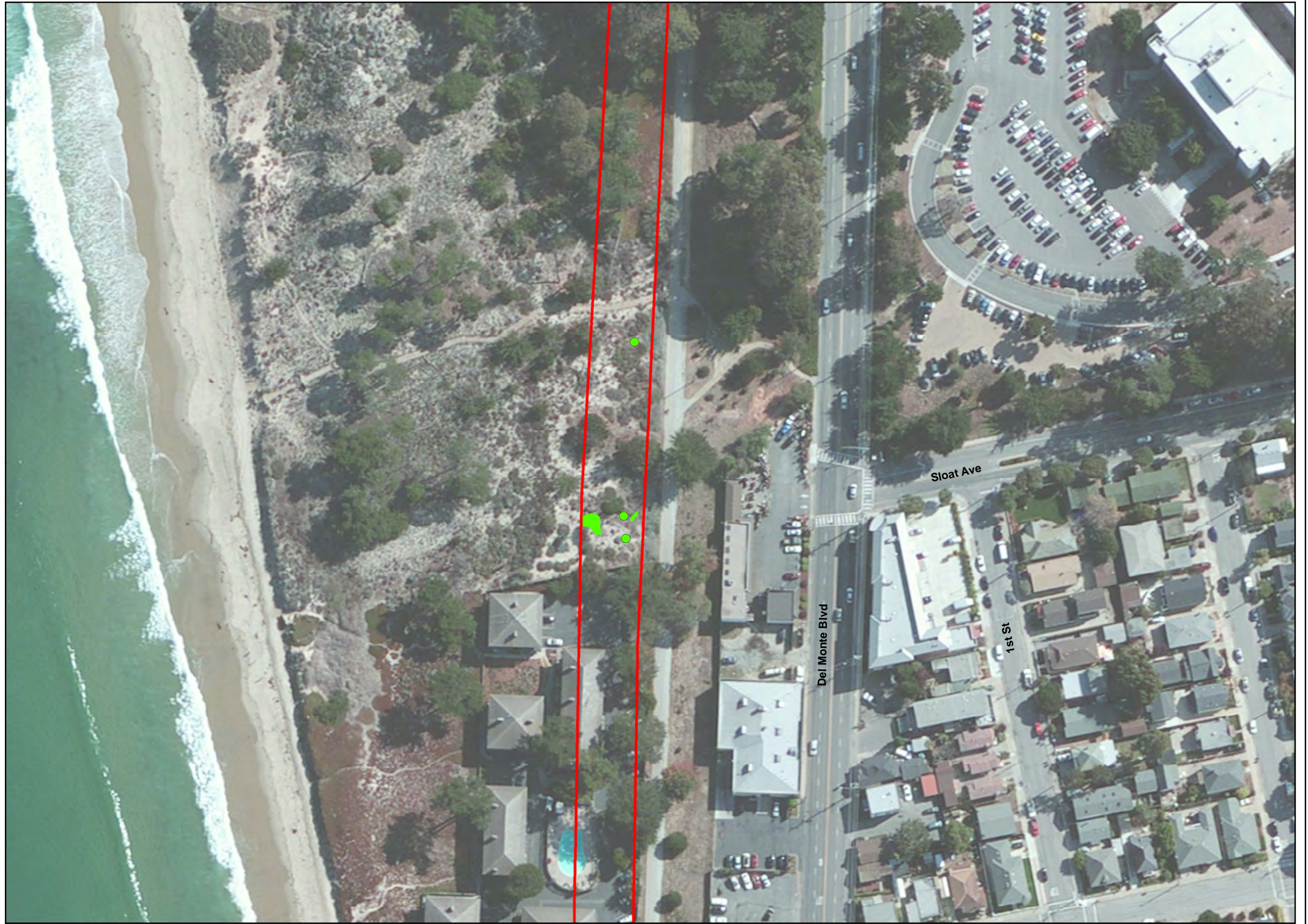
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Page
19

*Maps show where rare plants were found in the surveyed areas



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Title: **Rare Plants Within GWR PIA - 20**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Plant Booklet 20150212.mxd

Date: 2/19/2015

Scale: 1 in = 110 feet

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Page
20

*Maps show where rare plants were found in the surveyed areas

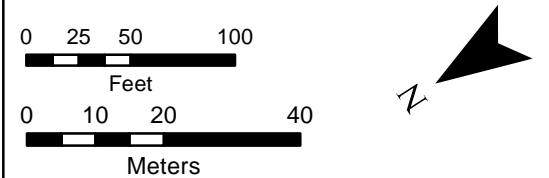
Appendix H

Attachment 7 – Rare Wildlife Habitat

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- Smith's Blue Butterfly Habitat**
Dune Buckwheat (*Eriogonum parvifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Coast Buckwheat (*Eriogonum latifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Monarch Butterfly Habitat**
- Eucalyptus (*Eucalyptus globulus*)
- Biological Project Study Area***



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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| Title: | Rare Wildlife Habitat Within GWR PIA - 1 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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*Maps show where rare wildlife habitat was found in the surveyed areas




Smith's Blue Butterfly Habitat


Dune Buckwheat (*Eriogonum parvifolium*)

 > 5 Individuals


 < or = 5 Individuals

Coast Buckwheat (*Eriogonum latifolium*)

 > 5 Individuals

 < or = 5 Individuals

Monarch Butterfly Habitat

 Eucalyptus (*Eucalyptus globulus*)

 **Biological Project Study Area***

0 25 50 100

Feet

0 10 20 40

Meters

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Wildlife Habitat Within GWR PIA - 2**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd

Date: 2/19/2015

Scale: 1 in = 92 feet



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Page
2


*Maps show where rare wildlife habitat was found in the surveyed areas




Smith's Blue Butterfly Habitat


Dune Buckwheat (*Eriogonum parvifolium*)

 > 5 Individuals


 < or = 5 Individuals

Coast Buckwheat (*Eriogonum latifolium*)

 > 5 Individuals

 < or = 5 Individuals

Monarch Butterfly Habitat

 Eucalyptus (*Eucalyptus globulus*)

 **Biological Project Study Area***

0 25 50 100

Feet

0 10 20 40

Meters

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Wildlife Habitat Within GWR PIA - 3**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd

Date: 2/19/2015

Scale: 1 in = 92 feet



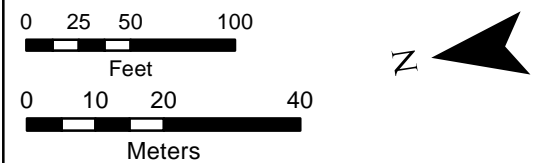
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Page
3

*Maps show where rare wildlife habitat was found in the surveyed areas



- Smith's Blue Butterfly Habitat**
Dune Buckwheat (*Eriogonum parvifolium*)
■ > 5 Individuals
● < or = 5 Individuals
- Coast Buckwheat (*Eriogonum latifolium*)
■ > 5 Individuals
● < or = 5 Individuals
- Monarch Butterfly Habitat**
■ Eucalyptus (*Eucalyptus globulus*)
□ Biological Project Study Area*



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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| Title: | Rare Wildlife Habitat Within GWR PIA - 4 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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*Maps show where rare wildlife habitat was found in the surveyed areas



Smith's Blue Butterfly Habitat


Dune Buckwheat (*Eriogonum parvifolium*)

 > 5 Individuals


 < or = 5 Individuals

Coast Buckwheat (*Eriogonum latifolium*)

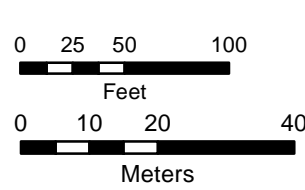
 > 5 Individuals

 < or = 5 Individuals

Monarch Butterfly Habitat

 Eucalyptus (*Eucalyptus globulus*)

 **Biological Project Study Area***



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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|--------|---|
| Title: | Rare Wildlife Habitat Within GWR PIA - 5 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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*Maps show where rare wildlife habitat was found in the surveyed areas



- Smith's Blue Butterfly Habitat**
Dune Buckwheat (*Eriogonum parvifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Coast Buckwheat (*Eriogonum latifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Monarch Butterfly Habitat**
- Eucalyptus (*Eucalyptus globulus*)
- Biological Project Study Area***




Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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|--------|---|
| Title: | Rare Wildlife Habitat Within GWR PIA - 6 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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*Maps show where rare wildlife habitat was found in the surveyed areas



Smith's Blue Butterfly Habitat

Dune Buckwheat (*Eriogonum parvifolium*)

- > 5 Individuals
- < or = 5 Individuals

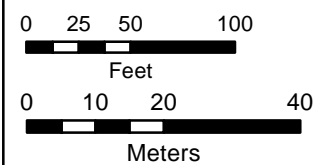
Coast Buckwheat (*Eriogonum latifolium*)

- > 5 Individuals
- < or = 5 Individuals

Monarch Butterfly Habitat

Eucalyptus (*Eucalyptus globulus*)

Biological Project Study Area*



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, ...



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|--------|---|
| Title: | Rare Wildlife Habitat Within GWR PIA - 7 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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| Date: | 2/19/2015 |
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*Maps show where rare wildlife habitat was found in the surveyed areas



- Smith's Blue Butterfly Habitat**
Dune Buckwheat (*Eriogonum parvifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Coast Buckwheat (*Eriogonum latifolium*)
- > 5 Individuals
 - < or = 5 Individuals
- Monarch Butterfly Habitat**
- Eucalyptus (*Eucalyptus globulus*)
- Biological Project Study Area***



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Rare Wildlife Habitat Within GWR PIA - 8**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd

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*Maps show where rare wildlife habitat was found in the surveyed areas




Smith's Blue Butterfly Habitat


Dune Buckwheat (*Eriogonum parvifolium*)

 > 5 Individuals


 < or = 5 Individuals

Coast Buckwheat (*Eriogonum latifolium*)

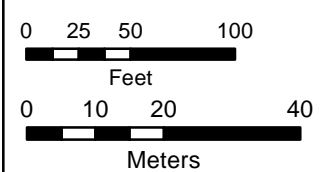
 > 5 Individuals

 < or = 5 Individuals

Monarch Butterfly Habitat

 Eucalyptus (*Eucalyptus globulus*)

 Biological Project Study Area*




Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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|--------|---|
| Title: | Rare Wildlife Habitat Within GWR PIA - 9 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Rare Wildlife Habitat Booklet 20150218.mxd |

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| Date: | 2/19/2015 |
| Scale: | 1 in = 92 feet |



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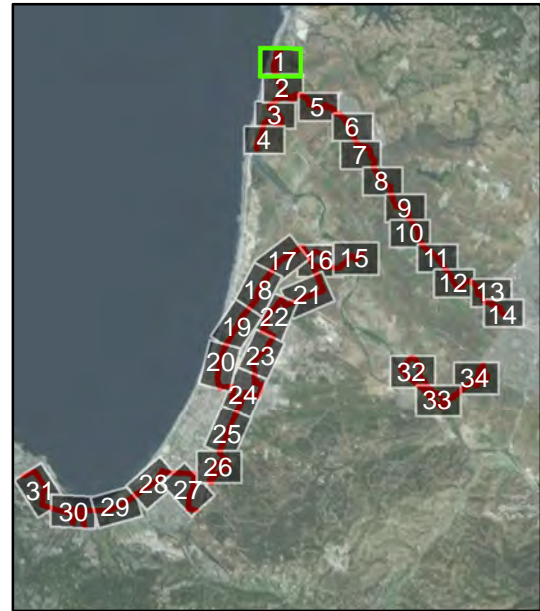
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*Maps show where rare wildlife habitat was found in the surveyed areas

Appendix H

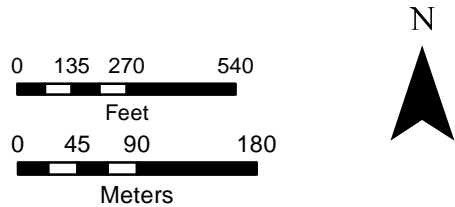
Attachment 8 – Habitat Classification

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- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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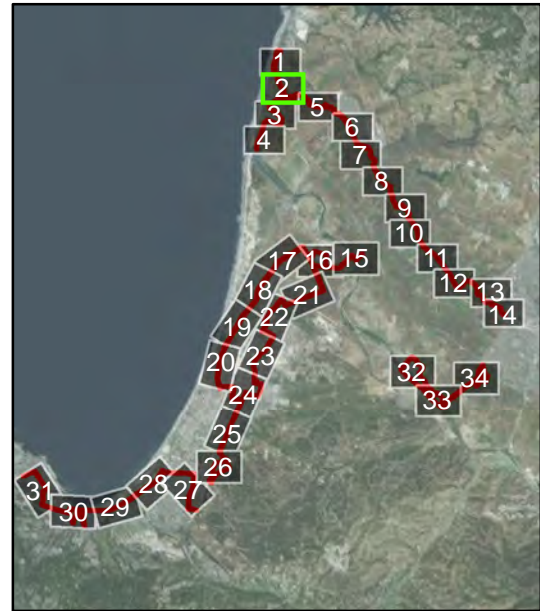
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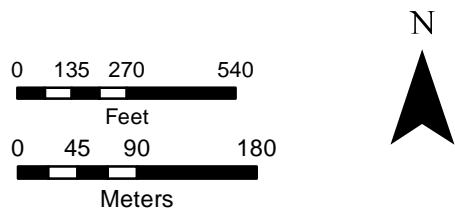
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1

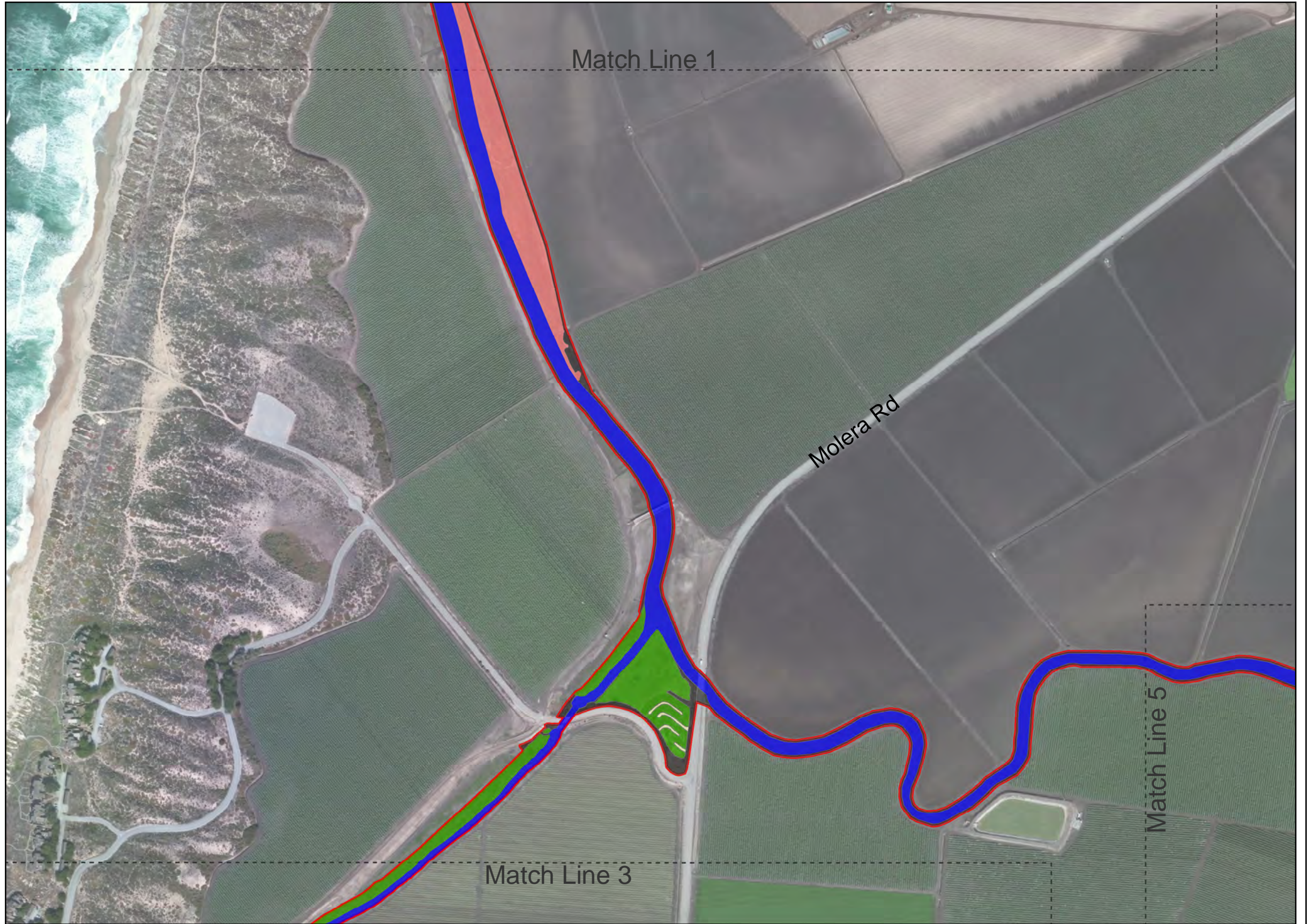


- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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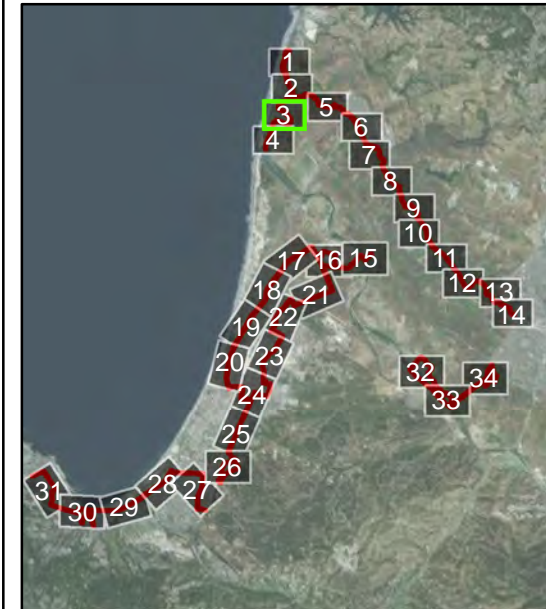
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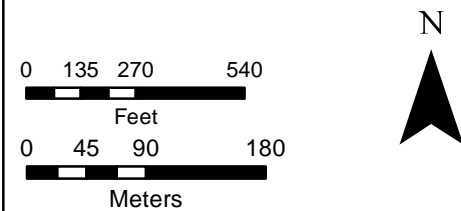
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Page
2



- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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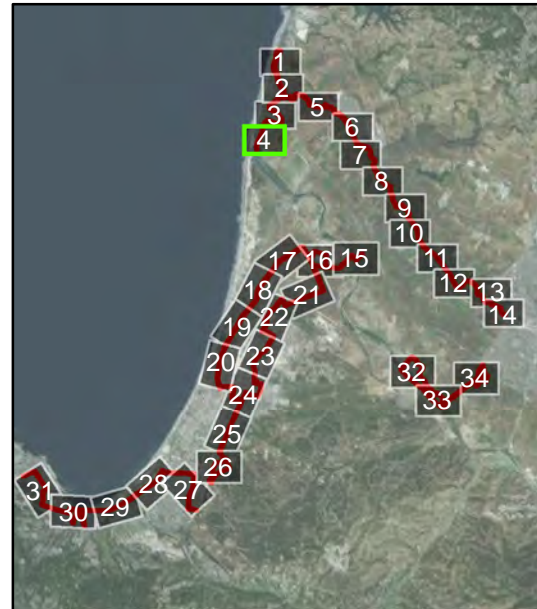
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Date: 3/23/2015

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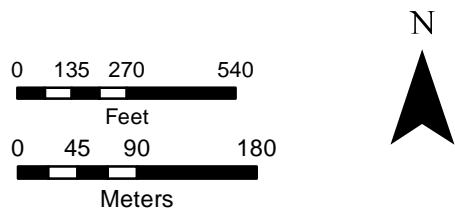


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- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 4**

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- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 5**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd

Date: 3/23/2015

Scale: 1 in = 480 feet



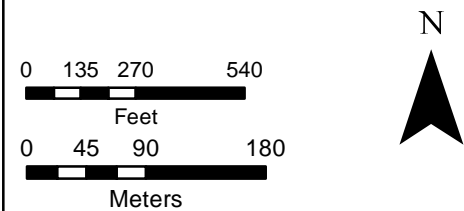
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Page
5



- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,

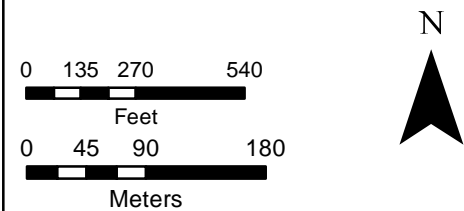


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| <p>Title: Habitat Classsification Within GWR PIA - 6</p> | <p>Date: <u>3/23/2015</u></p> | <div data-bbox="2091 1780 2237 1901" data-label="Image"> </div> <p>Denise Duffy and Associates, Inc. Environmental Consultants Resource Planners 947 Cass Street, Suite 5 Monterey, CA 93940 (831) 373-4341</p> | <p>Page 6</p> |
| <p>File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd</p> | <p>Scale: <u>1 in = 480 feet</u></p> | | |



- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 7**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd

Date: 3/23/2015

Scale: 1 in = 480 feet

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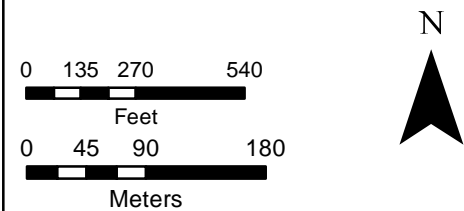
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Page
7

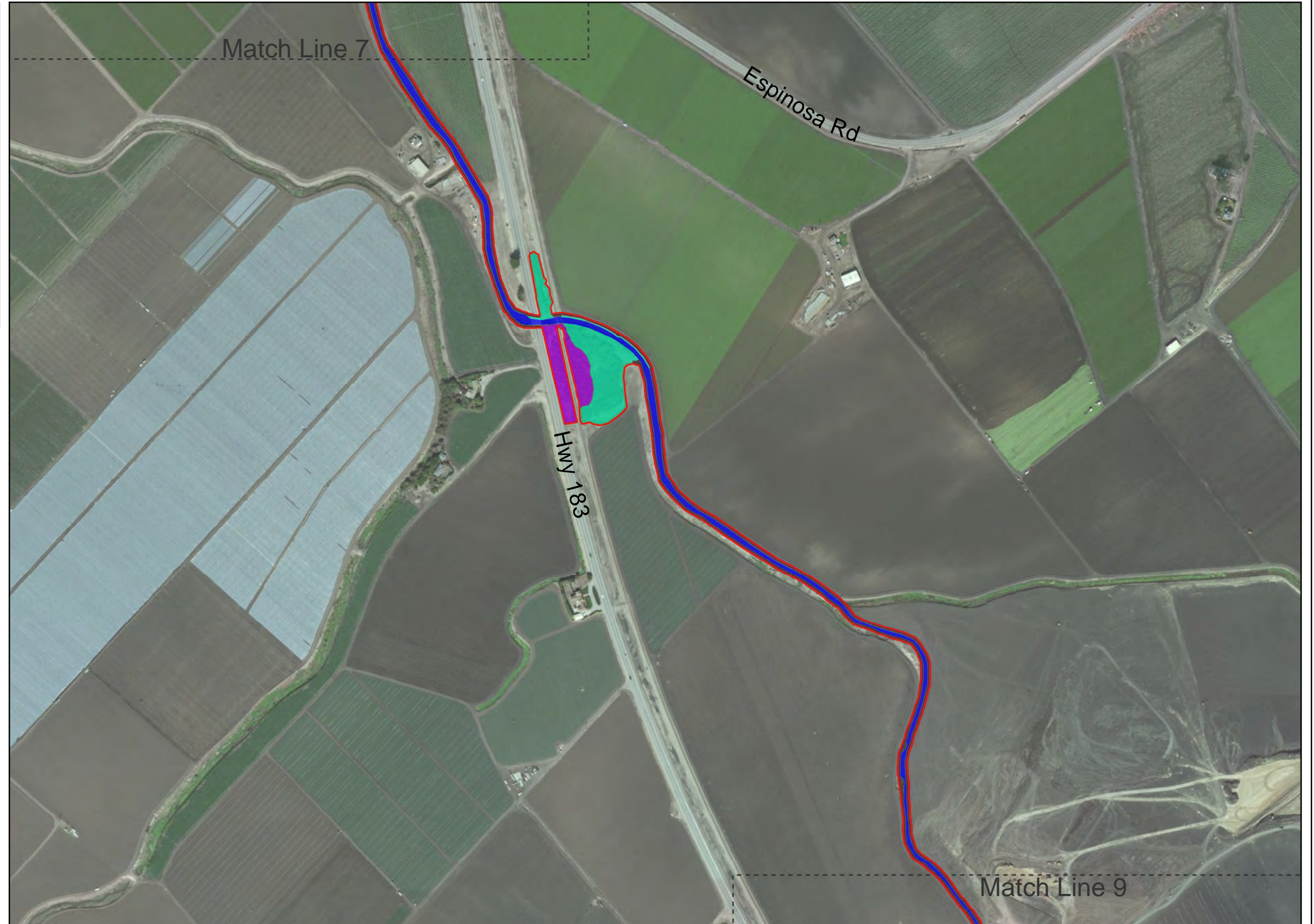


- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
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- Wastewater Ponds
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* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 8**

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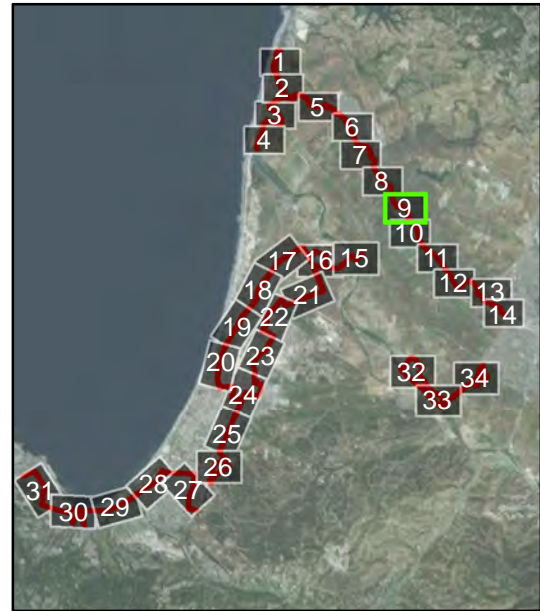
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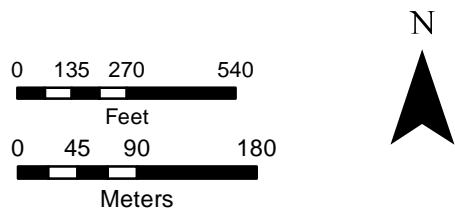
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- Aquatic*
- Coastal Scrub
- Dune Scrub*
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- Wastewater Ponds
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* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 9**

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Date: 3/23/2015

Scale: 1 in = 480 feet



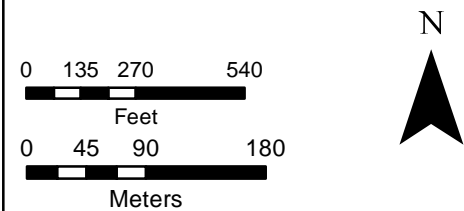
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Page
9



- Aquatic*
- Coastal Scrub
- Dune Scrub*
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- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



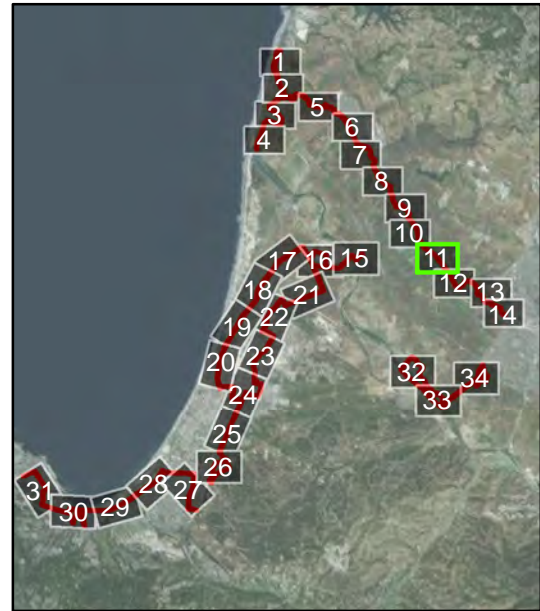
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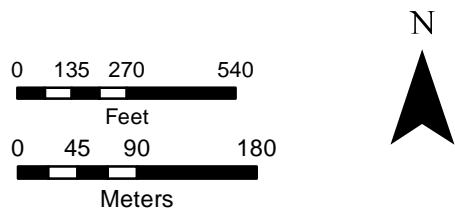
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|  | Monterey San Jose Denise Duffy and Associates, Inc. Environmental Consultants Resource Planners 947 Cass Street, Suite 5 Monterey, CA 93940 (831) 373-4341 | Page 10 |
| | | |



- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
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- Non-native Grassland
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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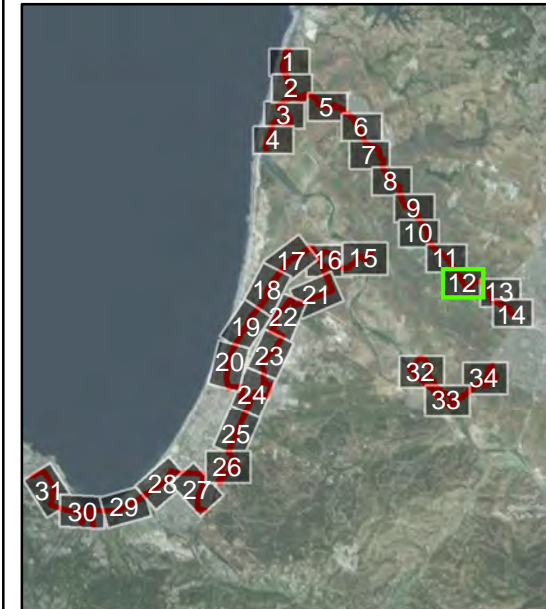
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Date: 3/23/2015

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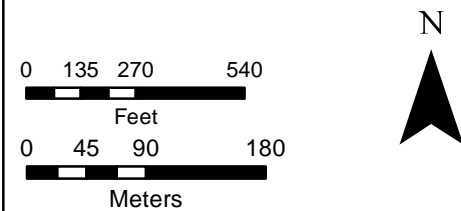


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- Aquatic*
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* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 12**

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Date: 3/23/2015
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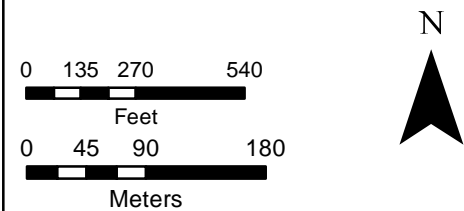
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Page
12



- Aquatic*
- Coastal Scrub
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* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 13**

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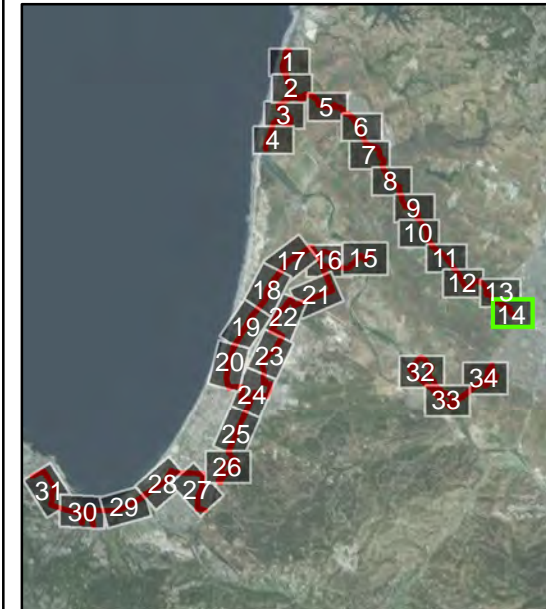
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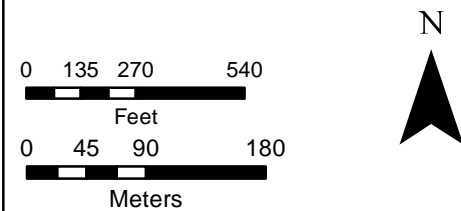
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Page
13



- Aquatic*
- Coastal Scrub
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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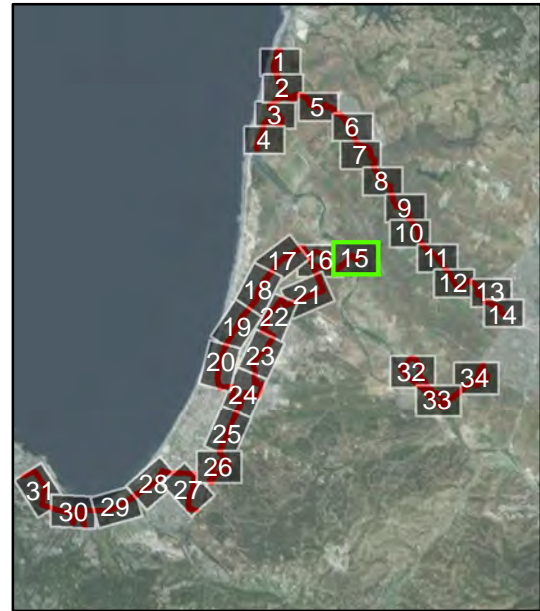
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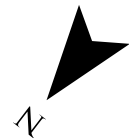
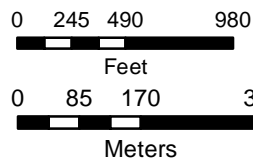
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Page
14



- Aquatic*
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classification Within GWR PIA - 15**

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Date: 3/23/2015

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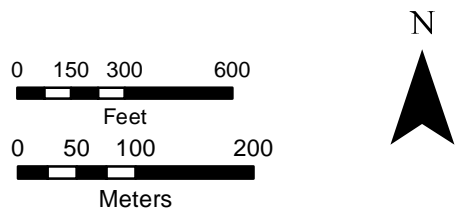
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Page
15



- Aquatic*
- Coastal Scrub
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Title: **Habitat Classsification Within GWR PIA - 16**

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Date: 3/23/2015

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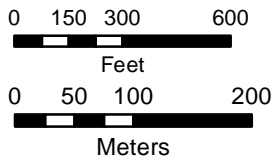


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- Aquatic*
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,

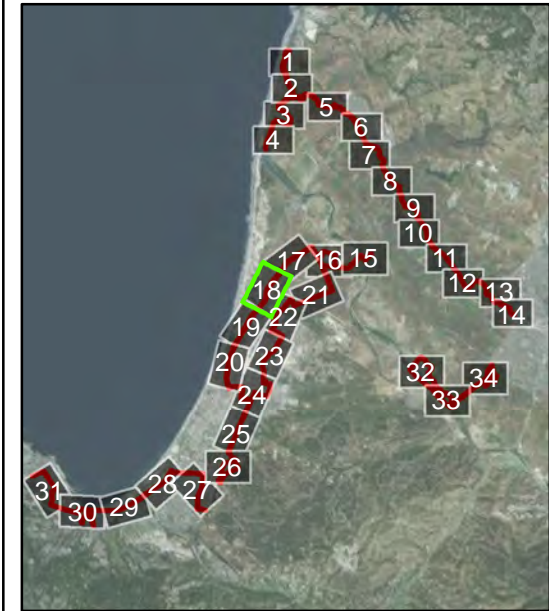


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| Title: Habitat Classsification Within GWR PIA - 17 | |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd |

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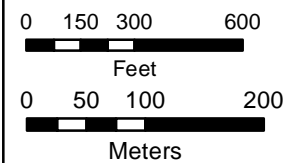


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- Aquatic*
- Coastal Scrub
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 18**

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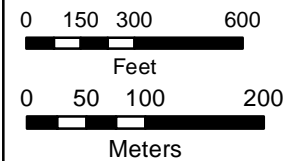


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- Aquatic*
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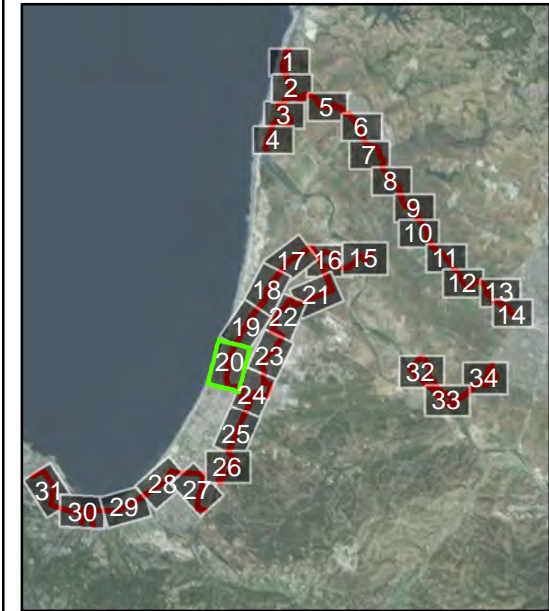
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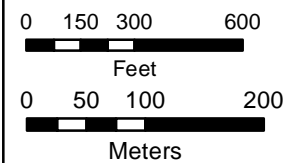
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Page
19



- Aquatic*
- Coastal Scrub
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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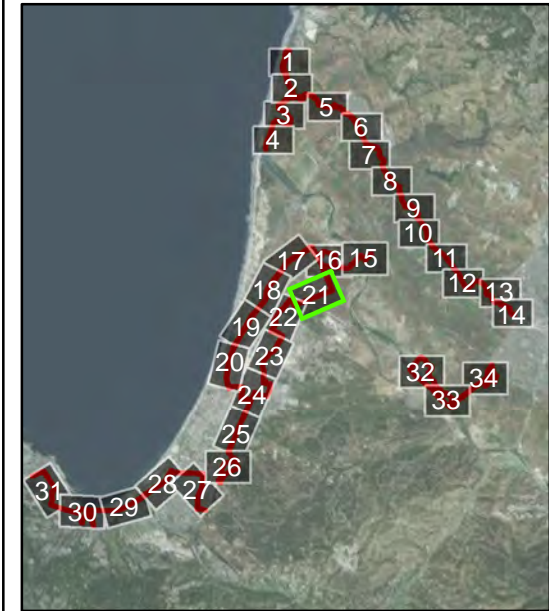
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Scale: 1 in = 530 feet



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Page
20



- Aquatic*
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



Title: **Habitat Classsification Within GWR PIA - 21**

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Date: 3/23/2015

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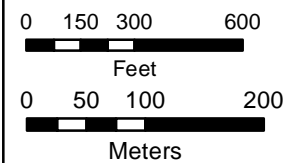
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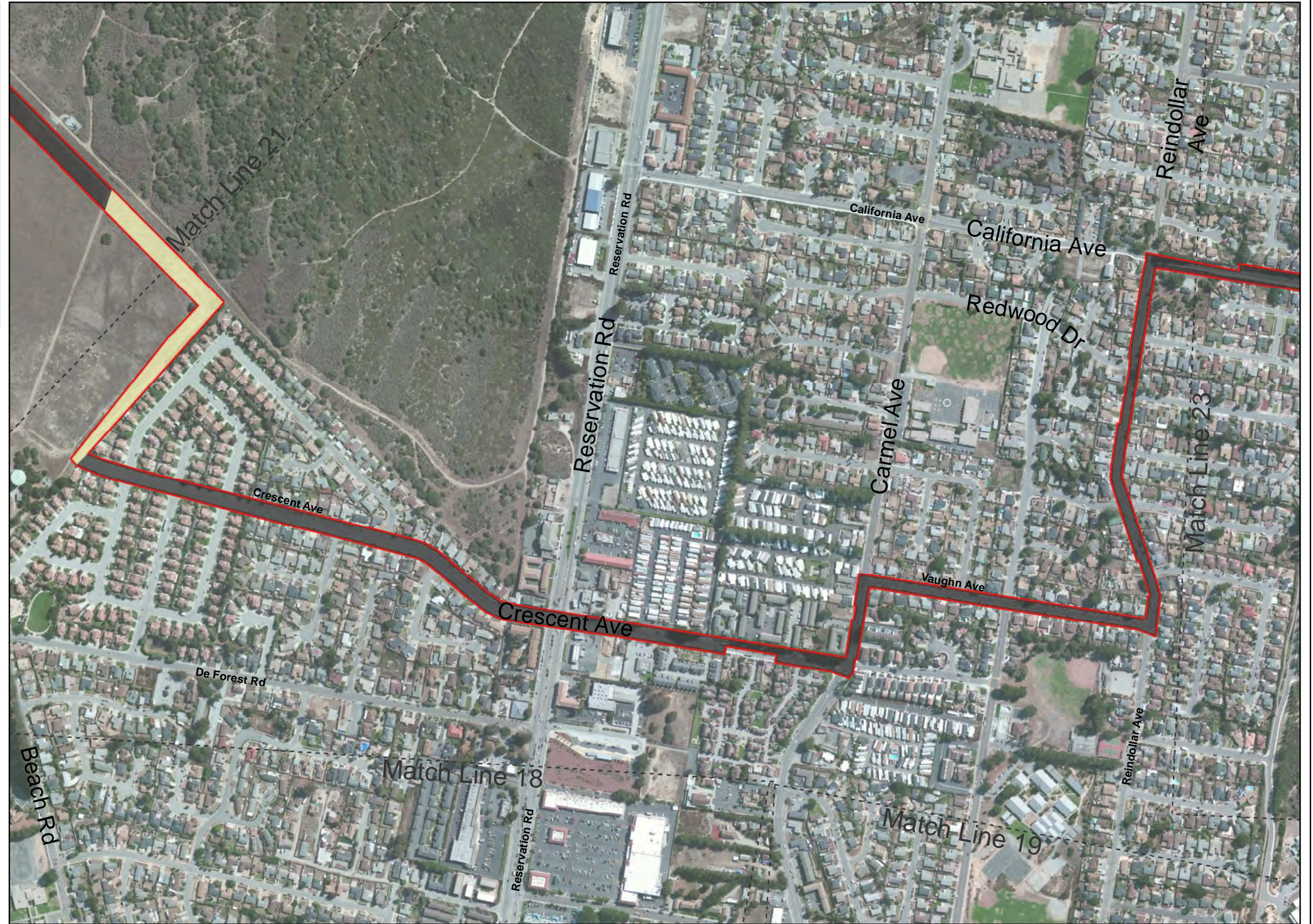


- Aquatic*
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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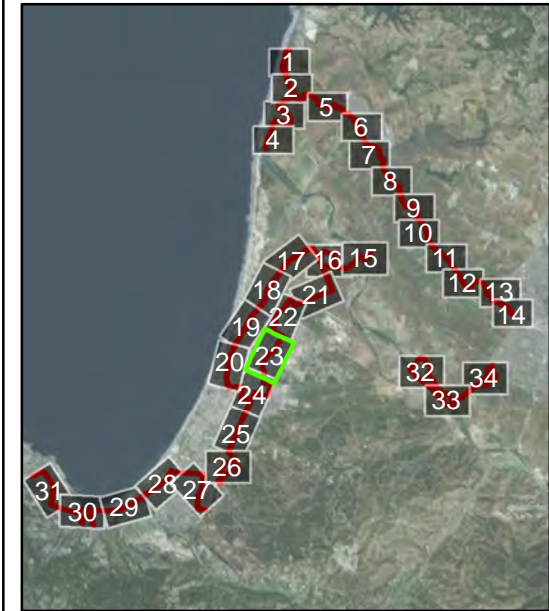
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Scale: 1 in = 530 feet



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Page
22



- Aquatic*
- Coastal Scrub
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Title: **Habitat Classsification Within GWR PIA - 23**

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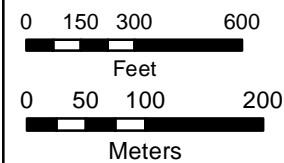
Page

23



- Aquatic*
- Coastal Scrub
- Dune Scrub*
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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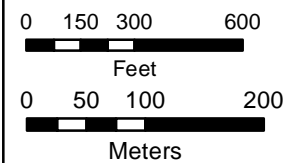
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24



- Aquatic*
- Coastal Scrub
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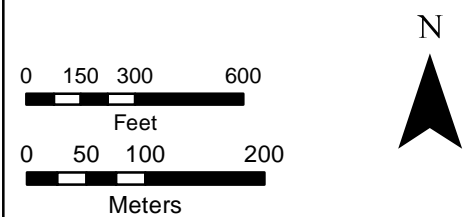


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- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat




Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,



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|---|
| <p>Title: Habitat Classsification Within GWR PIA - 26</p> |
| <p>File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd</p> |

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| <p>Date: 3/23/2015</p> |
| <p>Scale: 1 in = 530 feet</p> |

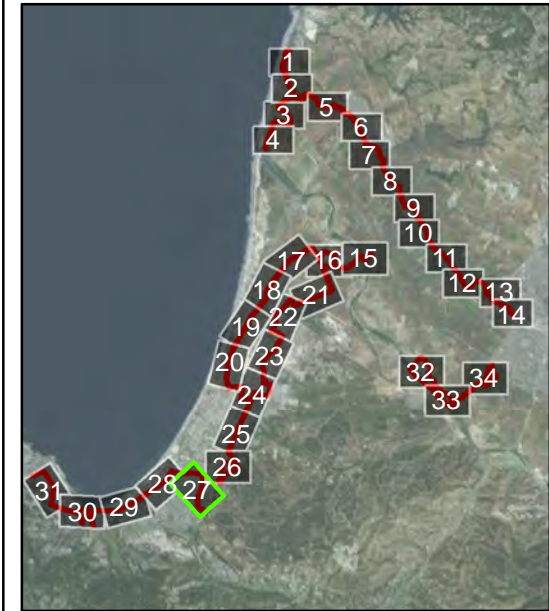


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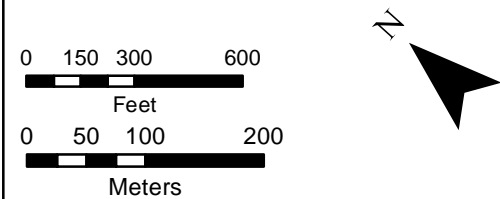
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(831) 373-4341



- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
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* Sensitive Habitat



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,

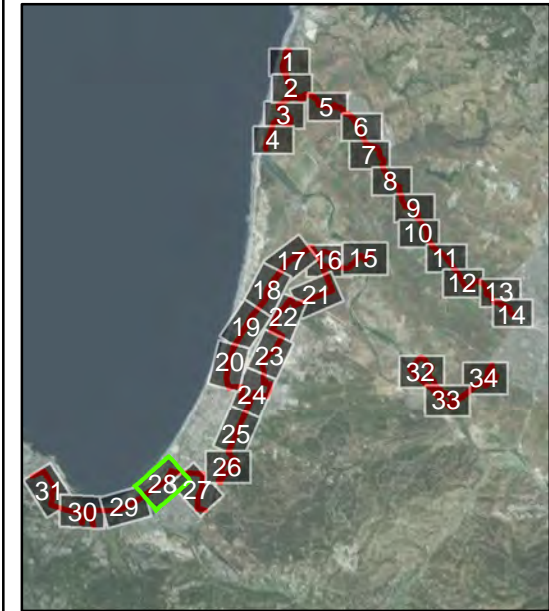


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| Title: | Habitat Classsification Within GWR PIA - 27 |
| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd |

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| Scale: | 1 in = 530 feet |

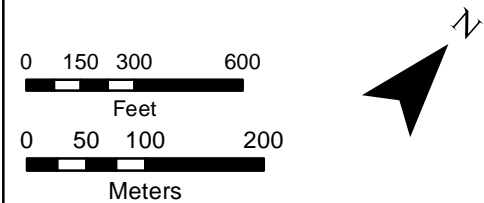


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- Aquatic*
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- Wastewater Ponds
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* Sensitive Habitat



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Title: **Habitat Classsification Within GWR PIA - 28**

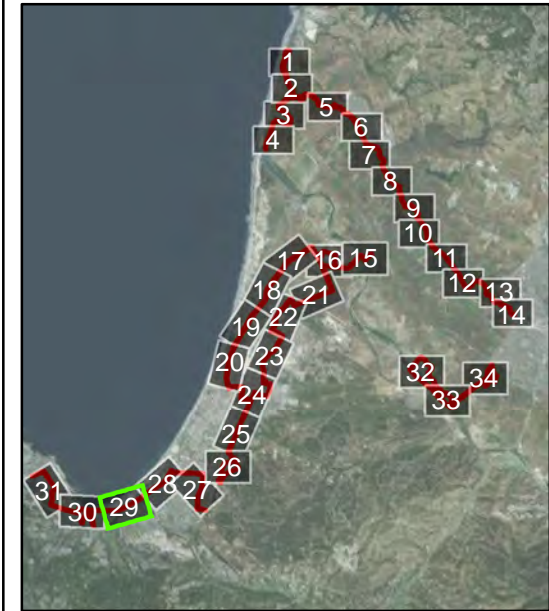
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Date: 3/23/2015

Scale: 1 in = 530 feet

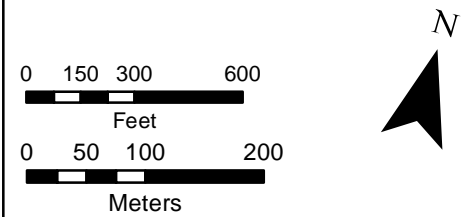


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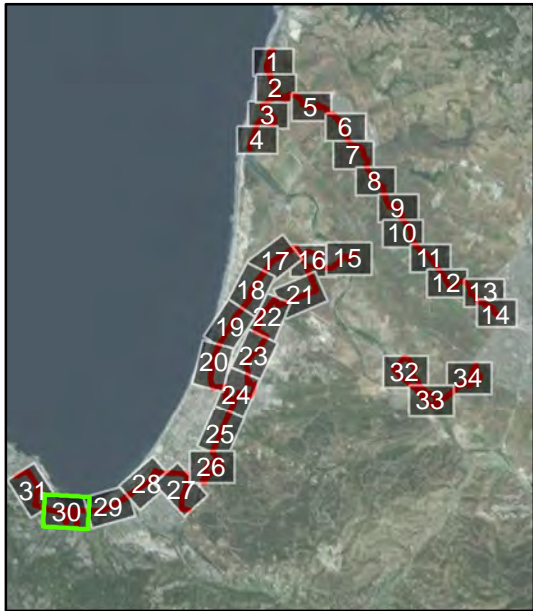
- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
- Biological Project Study Area

* Sensitive Habitat



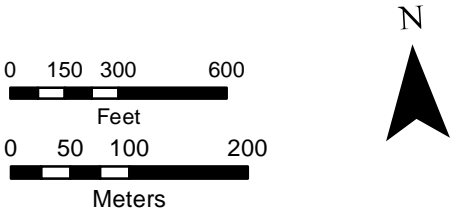
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo,





- Aquatic*
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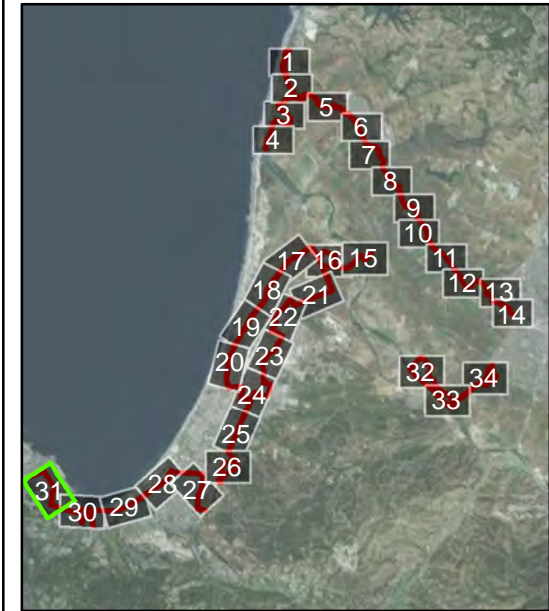


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| File: | C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd |

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| Date: | 3/23/2015 |
| Scale: | 1 in = 530 feet |

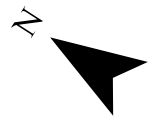
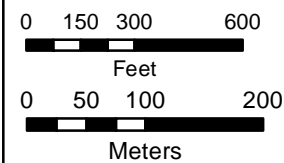


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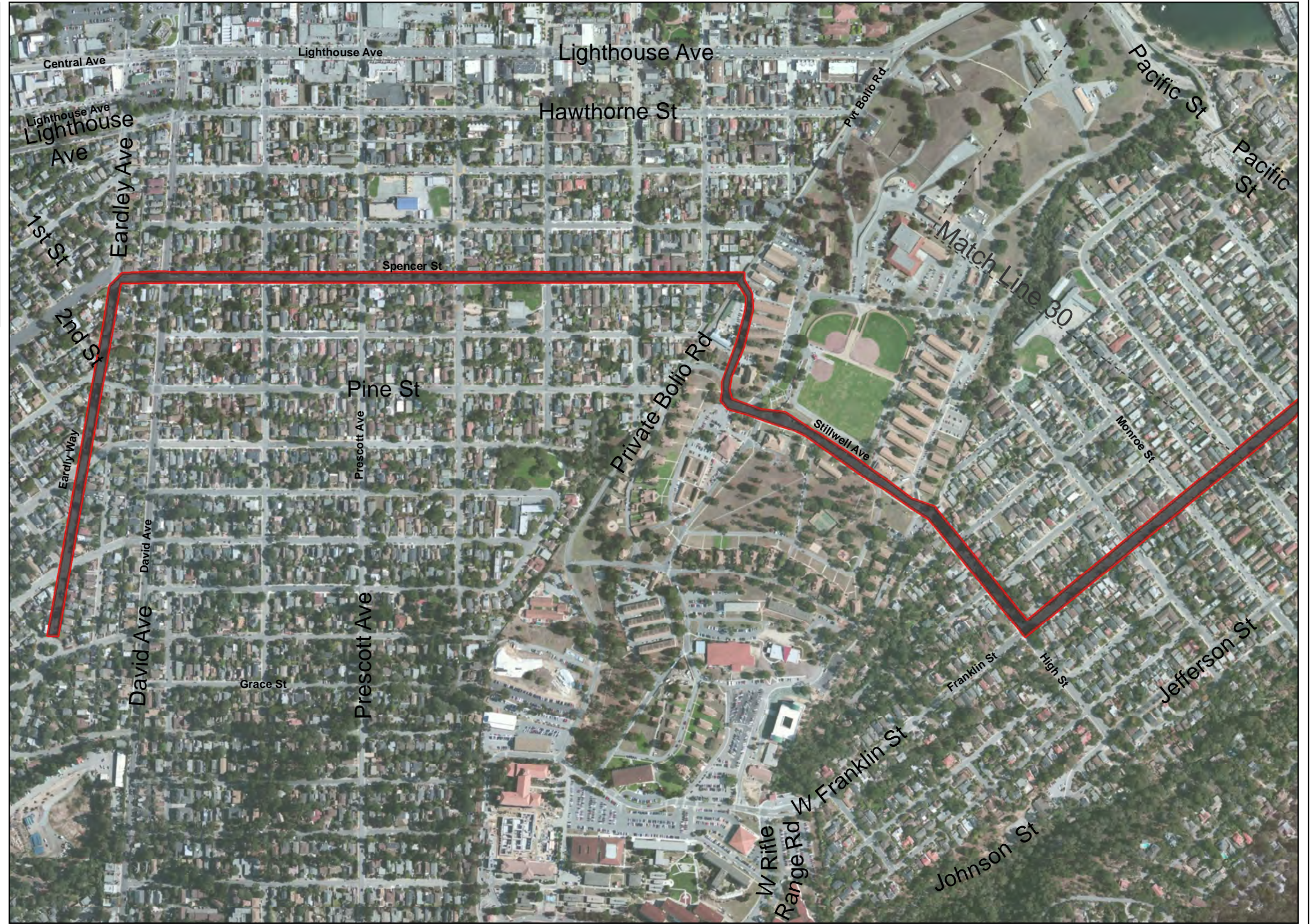


- Aquatic*
- Coastal Scrub
- Dune Scrub*
- Emergent Wetland*
- Eucalyptus Grove
- Maritime Chaparral*
- Non-native Grassland
- Oak Woodland
- Riparian*
- Ruderal/Developed/Active Agriculture
- Salt Marsh Wetland*
- Wastewater Ponds
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Title: **Habitat Classsification Within GWR PIA - 31**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd

Date: 3/23/2015

Scale: 1 in = 530 feet



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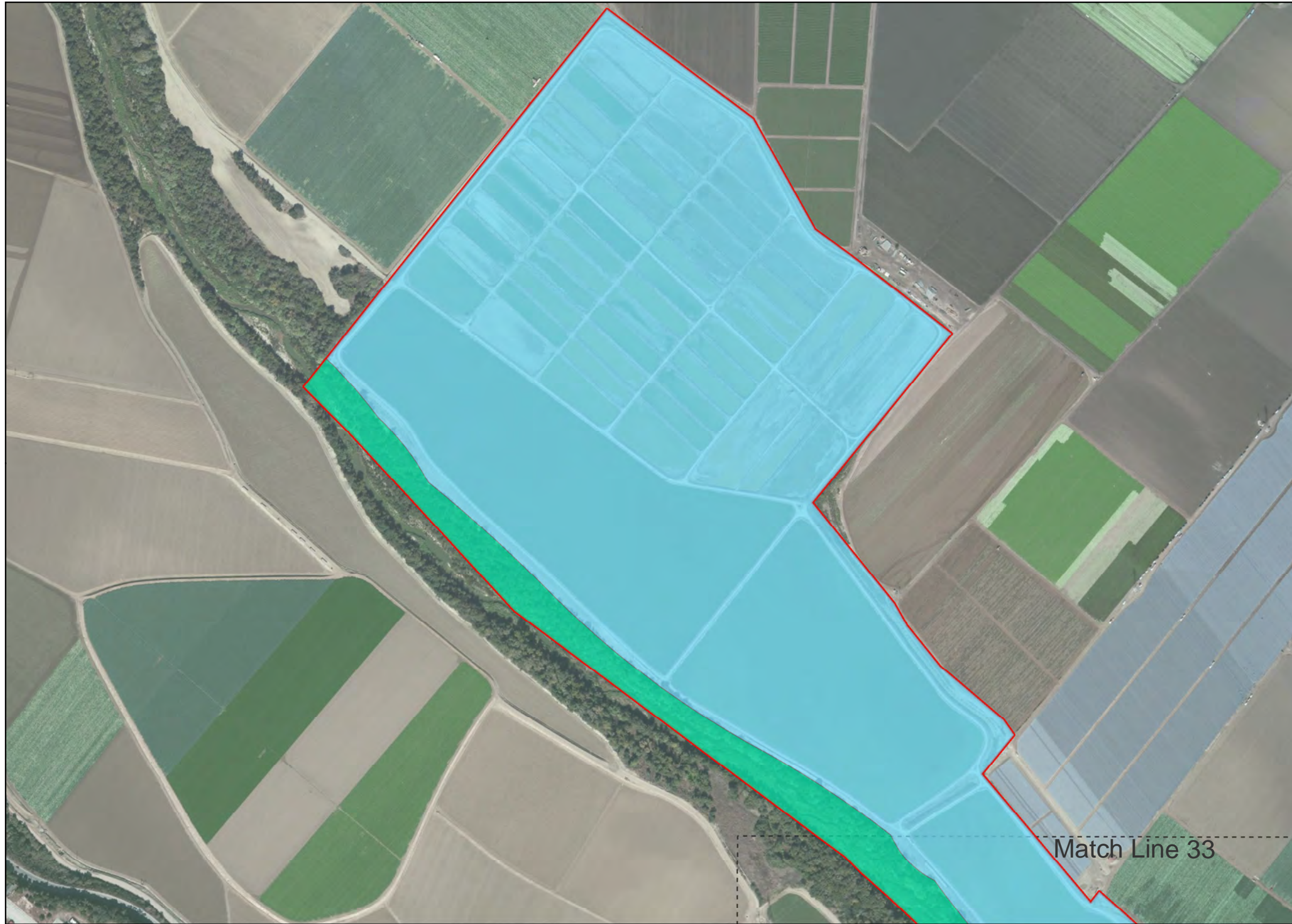


- Aquatic*
- Coastal Scrub
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- Wastewater Ponds
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Title: **Habitat Classsification Within GWR PIA - 32**

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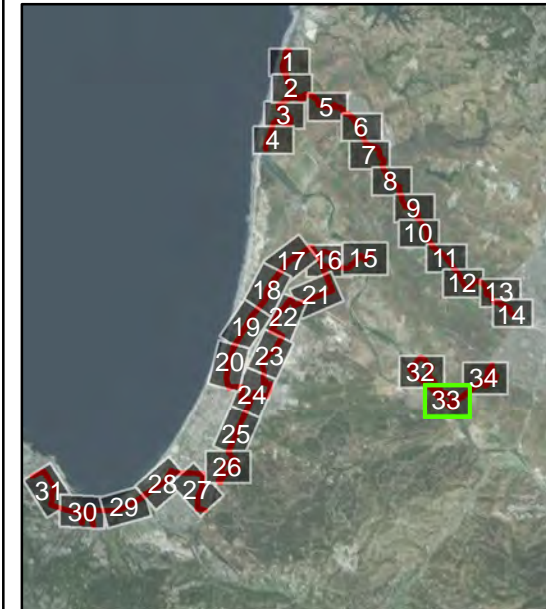
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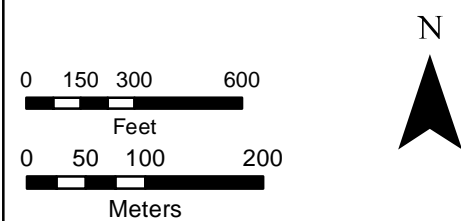
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Page
32

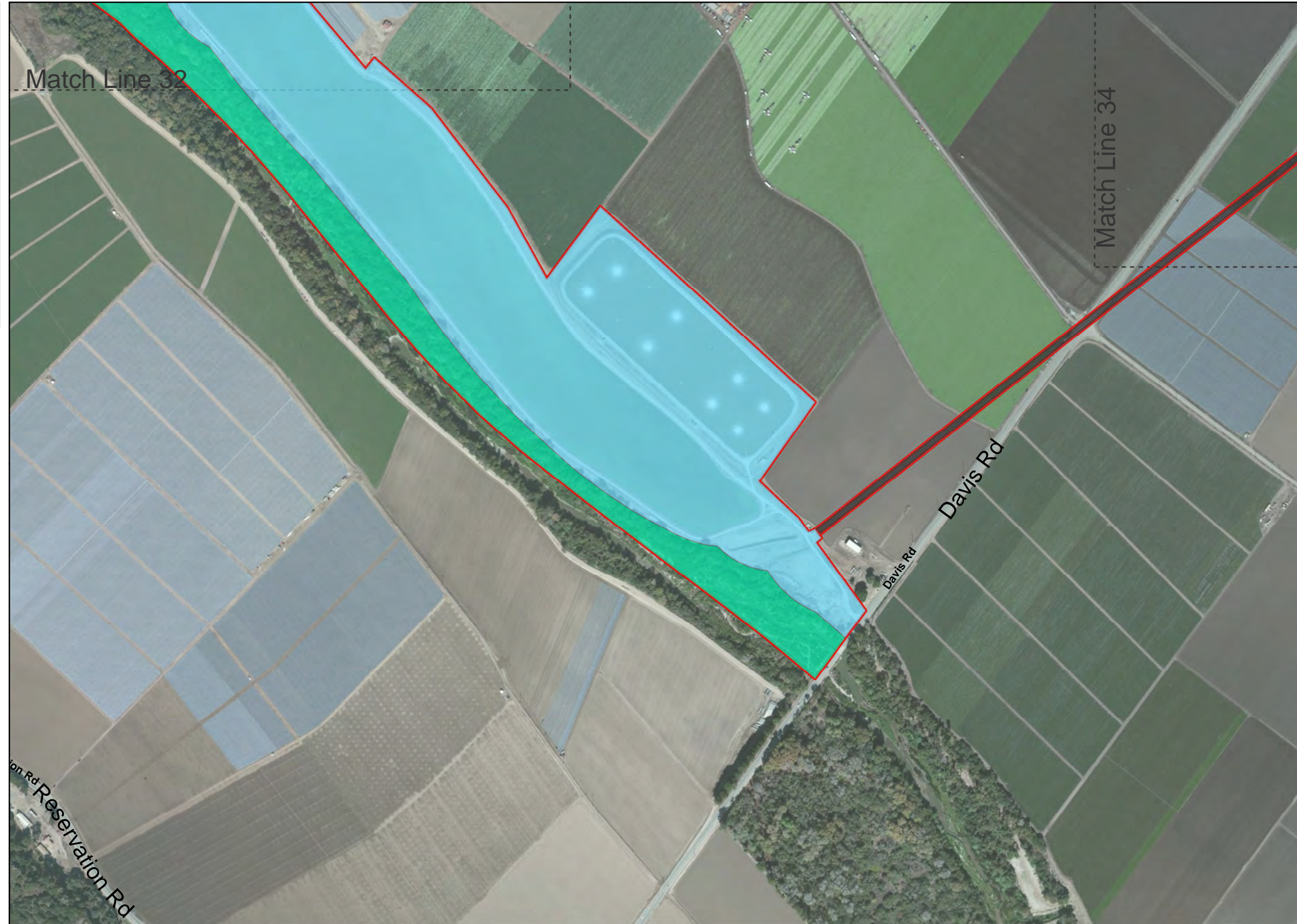


- Aquatic*
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Title: **Habitat Classsification Within GWR PIA - 33**

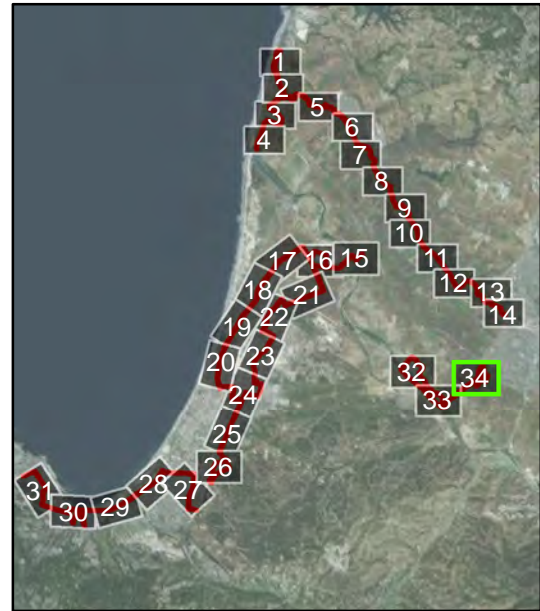
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Title: **Habitat Classsification Within GWR PIA - 34**

File: C:\GIS\GIS_Projects\2013-13 GWR\Final Products\BIO\Habitat Booklet 20150323a.mxd

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