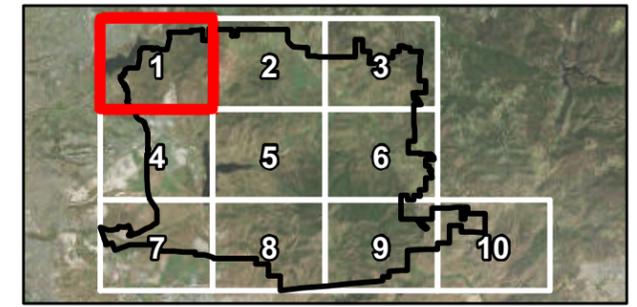
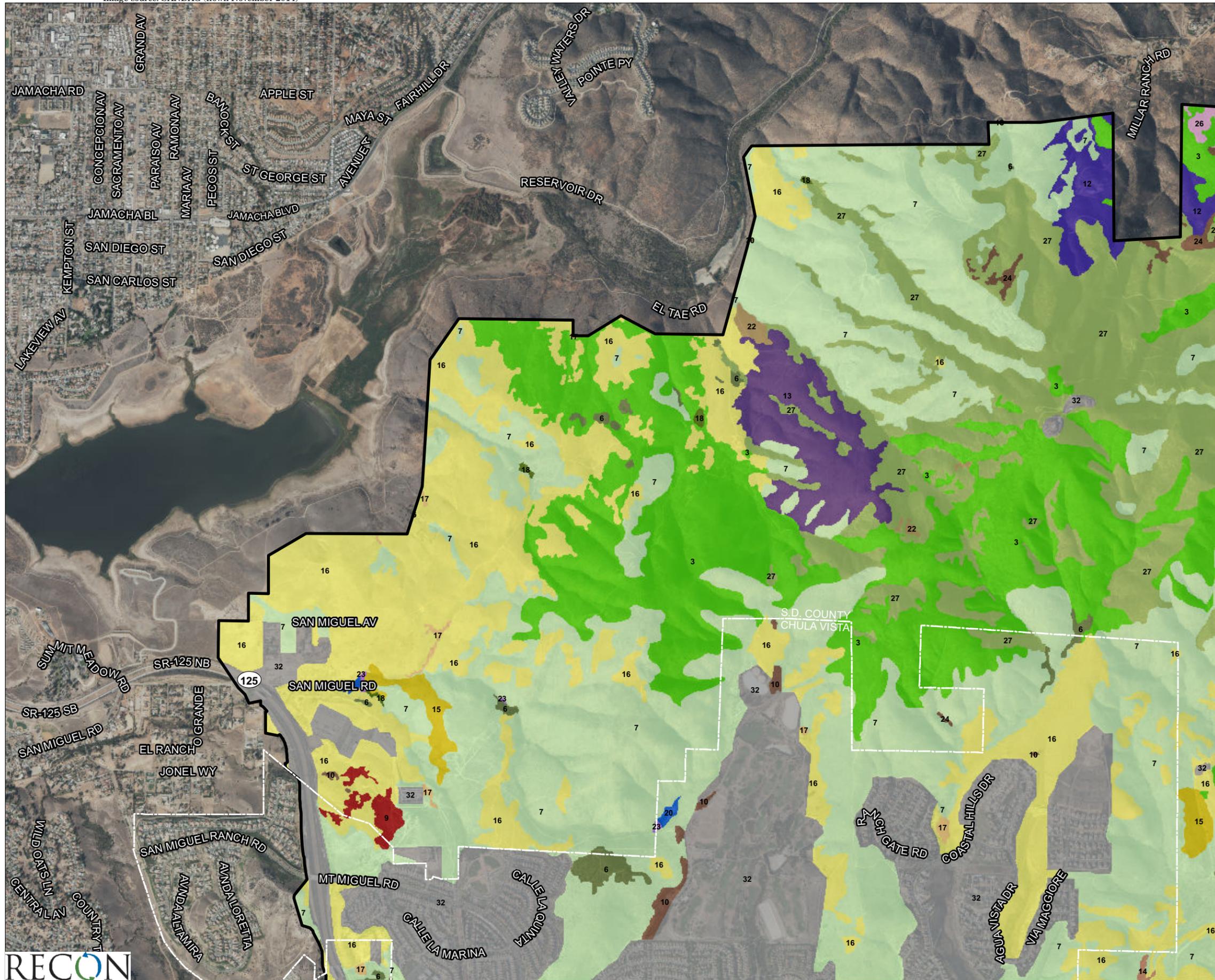


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- 2-1 to 2-10: Species Observations
- 3-1 to 3-10: Federally and State-listed Threatened and Endangered Species and MSCP Covered Species
- 4: USFWS Critical Habitat
- 5: Potential Jurisdictional Resources
- 6: Soil Erodibility
- 7: Slope
- 8: Potential Land Use Conflicts

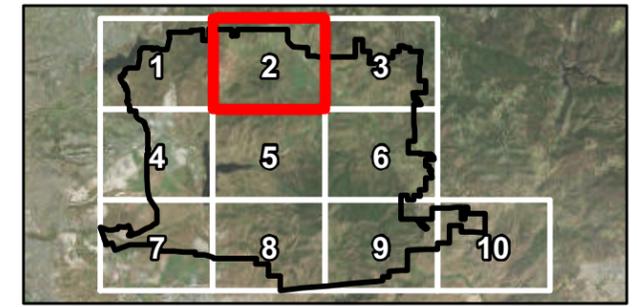
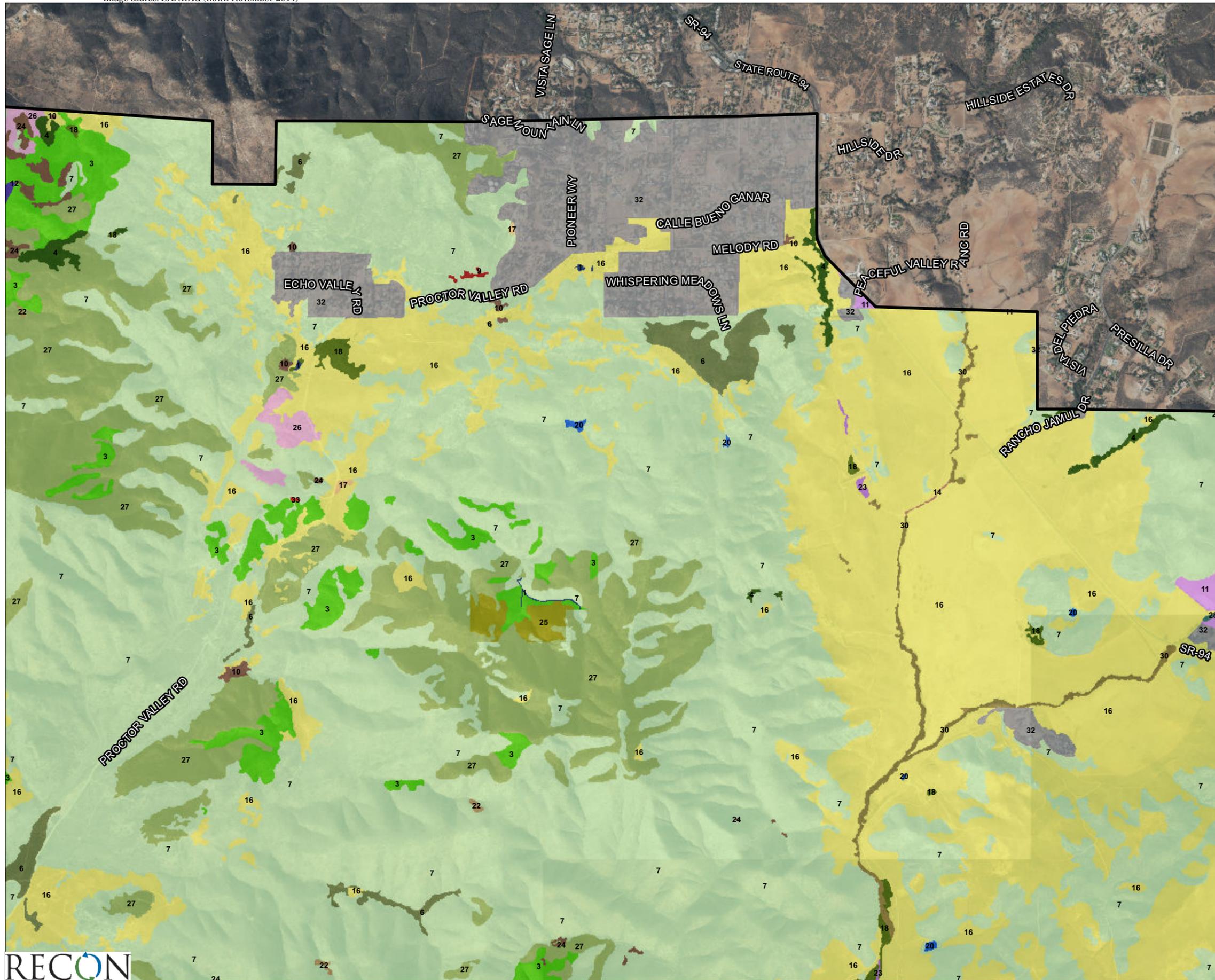
## Otay Ranch Preserve Trail Alignment Study Area – Preliminary Environmental Assessment and Constraints Review



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 1 - Alkali Seep
  - 3 - Chamise Chaparral
  - 5 - Coastal Scrub
  - 7 - Diegan Coastal Sage Scrub
  - 9 - Disturbed Habitat
  - 10 - Eucalyptus Woodland
  - 12 - Mafic Southern Mixed Chaparral
  - 13 - Maritime Succulent Scrub
  - 14 - Mule Fat Scrub
  - 15 - Native Grassland
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 18 - Non-Native Riparian
  - 20 - Open Water
  - 22 - Scrub Oak Chaparral
  - 23 - Southern Arroyo Willow Riparian Forest
  - 24 - Southern Coast Live Oak Riparian Forest
  - 26 - Southern Maritime Chaparral
  - 27 - Southern Mixed Chaparral
  - 30 - Southern Riparian Woodland
  - 32 - Urban/Developed



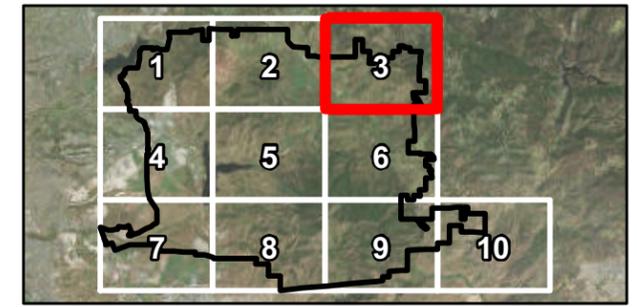
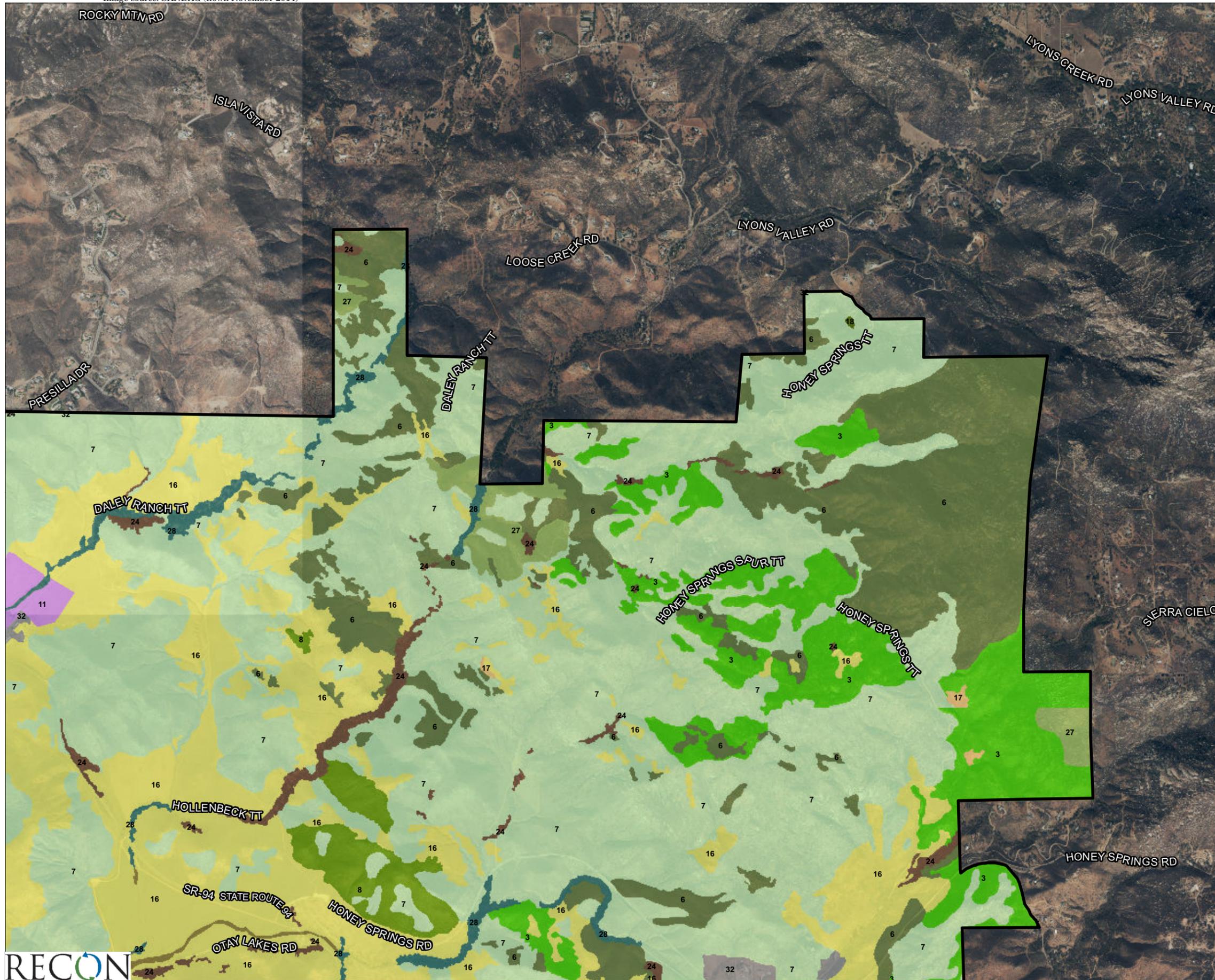
**FIGURE 1-1**  
Vegetation Communities



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 1 - Alkali Seep
  - 3 - Chamise Chaparral
  - 4 - Coast Live Oak Woodland
  - 5 - Coastal Scrub
  - 7 - Diegan Coastal Sage Scrub
  - 9 - Disturbed Habitat
  - 10 - Eucalyptus Woodland
  - 11 - General Agriculture
  - 12 - Mafic Southern Mixed Chaparral
  - 14 - Mule Fat Scrub
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 18 - Non-Native Riparian
  - 20 - Open Water
  - 22 - Scrub Oak Chaparral
  - 23 - Southern Arroyo Willow Riparian Forest
  - 24 - Southern Coast Live Oak Riparian Forest
  - 25 - Southern Interior Cypress Forest
  - 26 - Southern Maritime Chaparral
  - 27 - Southern Mixed Chaparral
  - 28 - Southern Riparian Forest
  - 30 - Southern Riparian Woodland
  - 32 - Urban/Developed
  - 33 - Vernal Pool



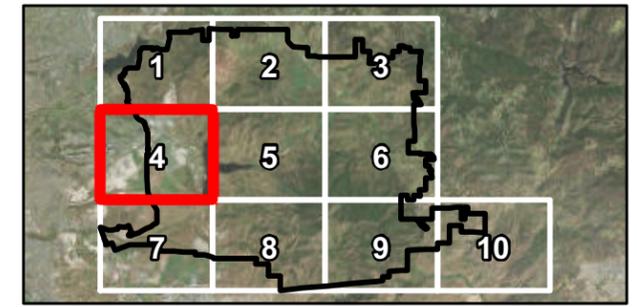
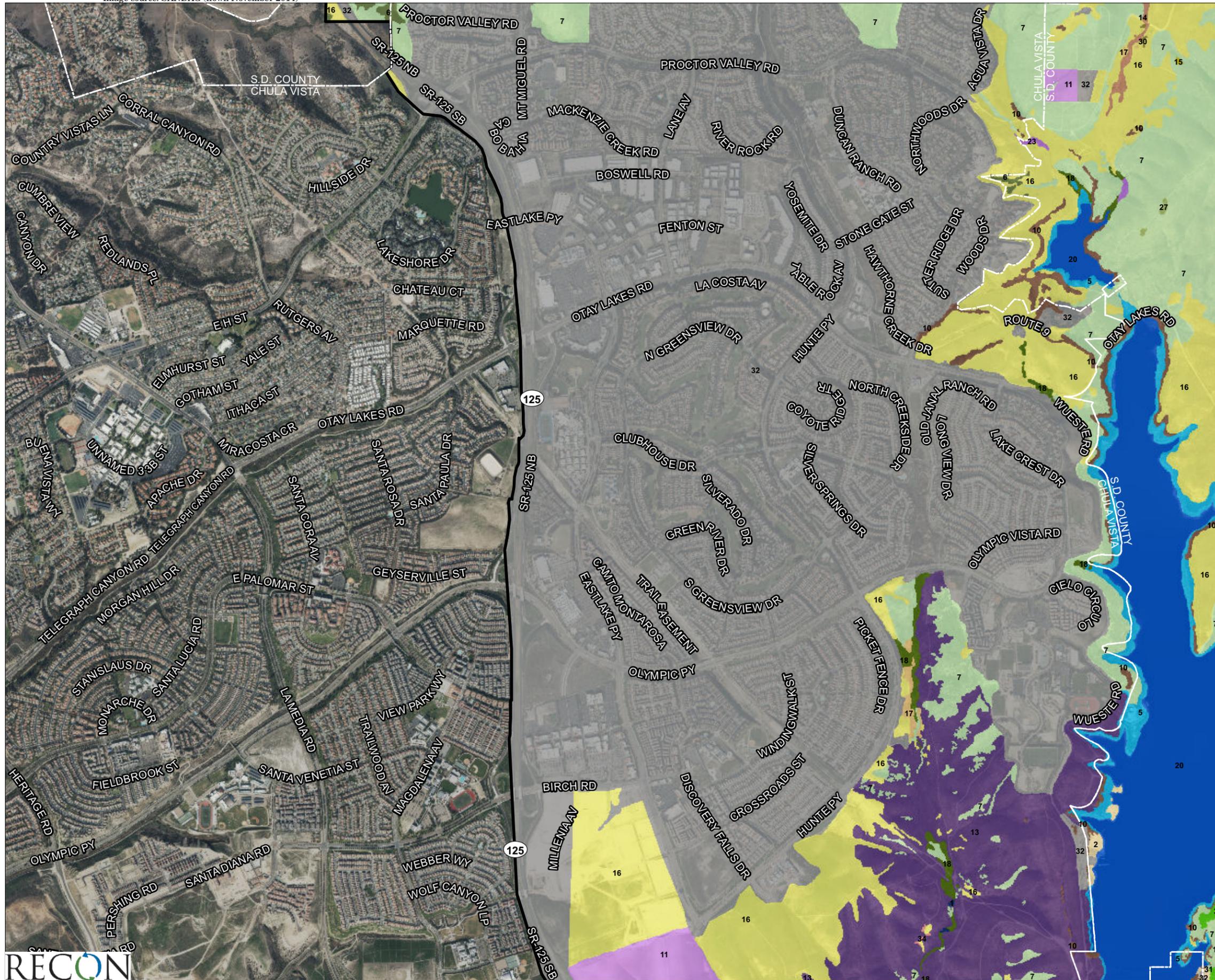
**FIGURE 1-2**  
Vegetation Communities



-  Otay Trail Study Area
- Vegetation Communities (Holland/Oberbauer)**
-  3 - Chamise Chaparral
-  5 - Coastal Scrub
-  7 - Diegan Coastal Sage Scrub
-  8 - Diegan Coastal Sage Scrub: Coastal form
-  11 - General Agriculture
-  16 - Non-Native Grassland
-  17 - Non-Native Grassland: Broadleaf-Dom.
-  18 - Non-Native Riparian
-  24 - Southern Coast Live Oak Riparian Forest
-  27 - Southern Mixed Chaparral
-  28 - Southern Riparian Forest
-  30 - Southern Riparian Woodland
-  32 - Urban/Developed



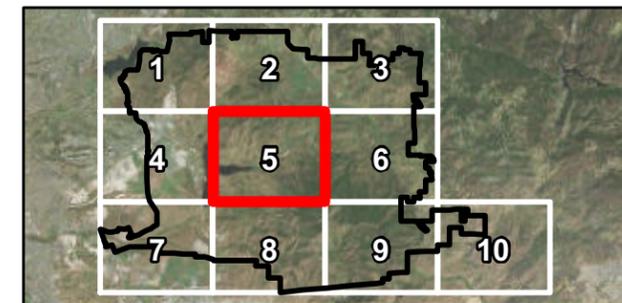
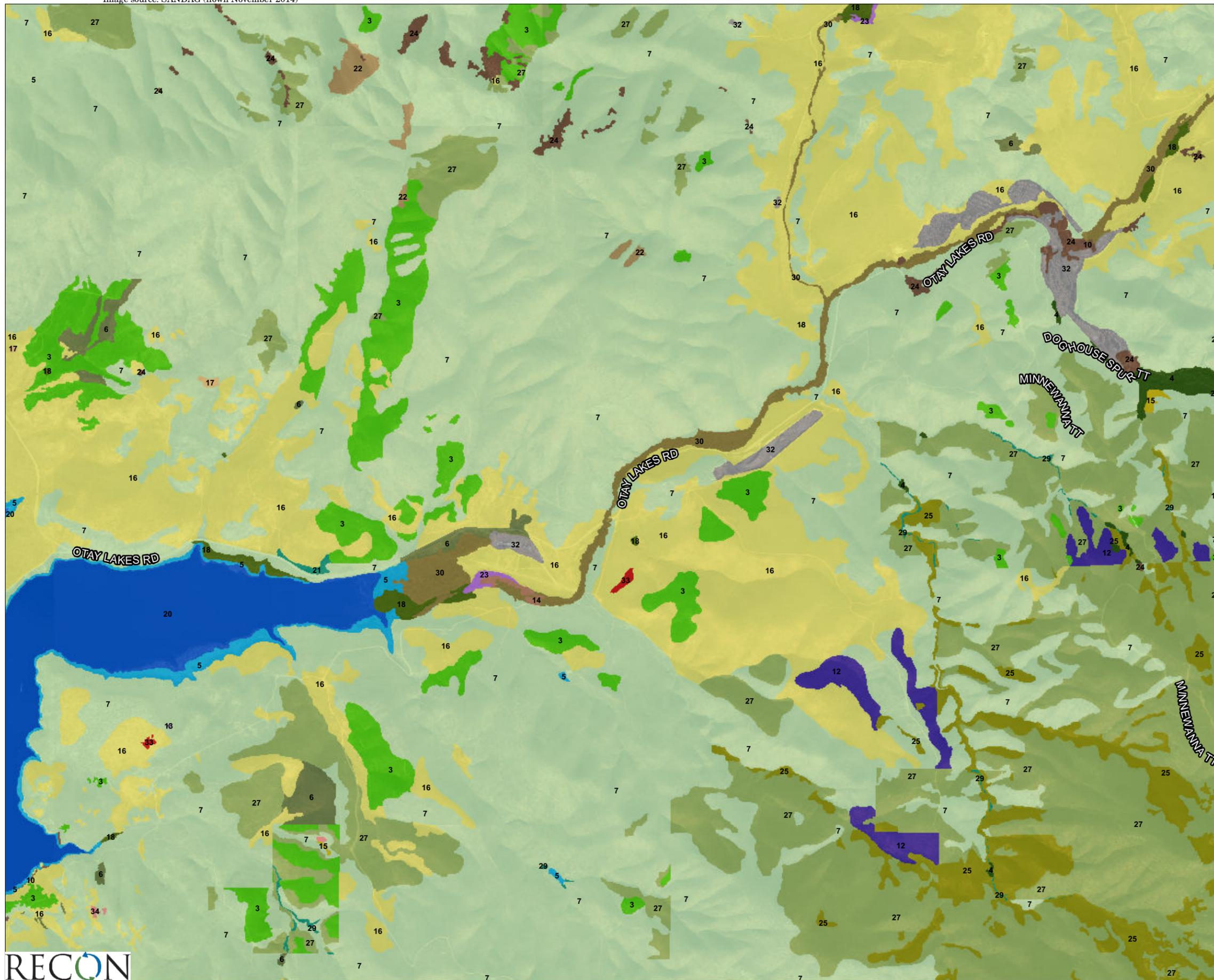
**FIGURE 1-3**  
Vegetation Communities



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 1 - Alkali Seep
  - 2 - Beach
  - 3 - Chamise Chaparral
  - 5 - Coastal Scrub
  - 6 - Coastal and Valley Freshwater Marsh
  - 7 - Diegan Coastal Sage Scrub
  - 10 - Eucalyptus Woodland
  - 11 - General Agriculture
  - 13 - Maritime Succulent Scrub
  - 14 - Mule Fat Scrub
  - 15 - Native Grassland
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 18 - Non-Native Riparian
  - 20 - Open Water
  - 23 - Southern Arroyo Willow Riparian Forest
  - 27 - Southern Mixed Chaparral
  - 30 - Southern Riparian Woodland
  - 31 - Unvegetated Habitat
  - 32 - Urban/Developed
  - 34 - Wildflower Field



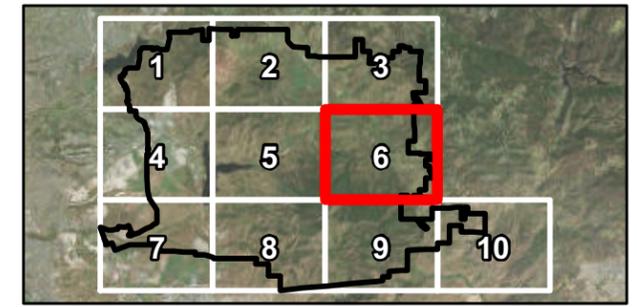
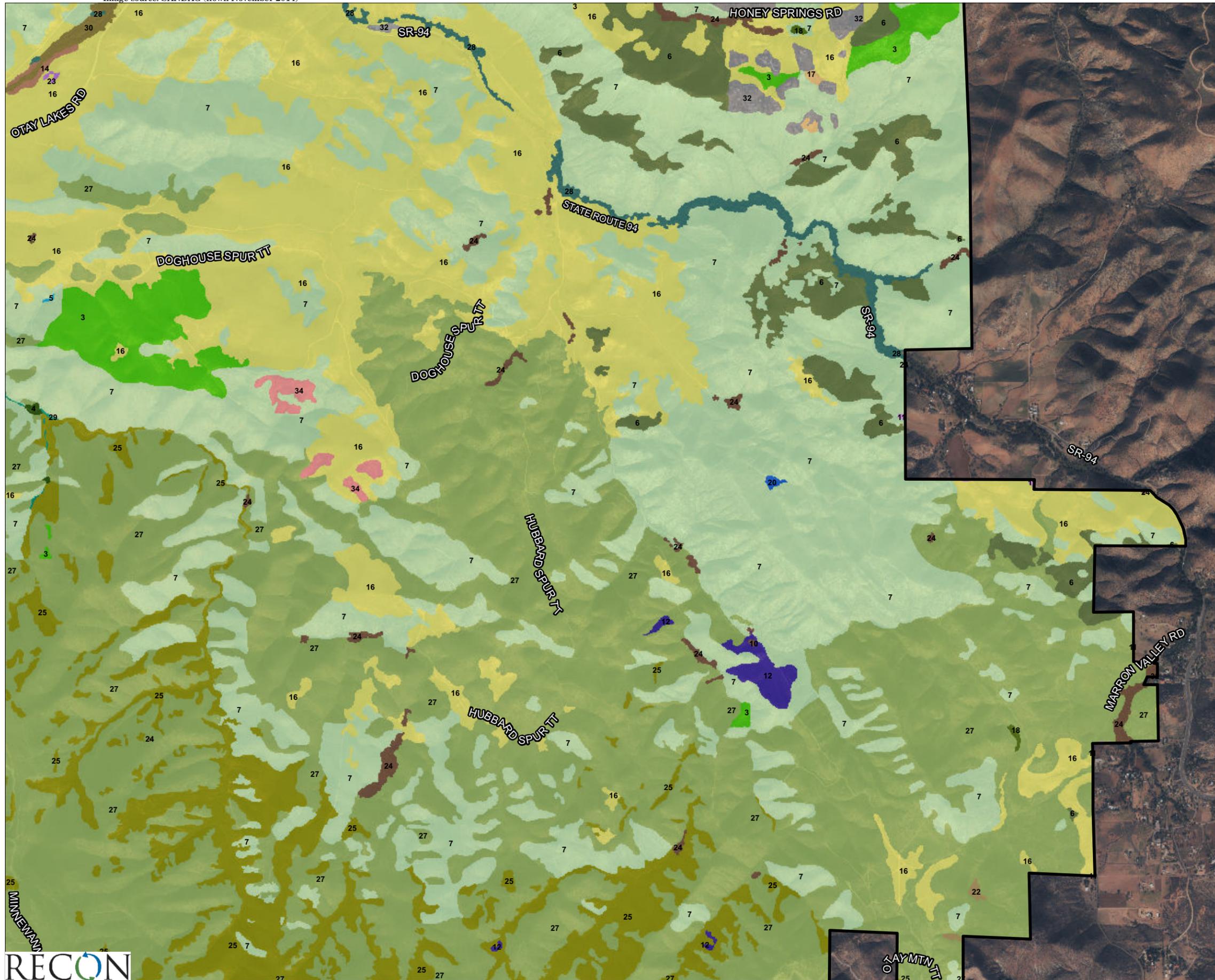
**FIGURE 1-4**  
Vegetation Communities



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 3 - Chamise Chaparral
  - 4 - Coast Live Oak Woodland
  - 5 - Coastal Scrub
  - 6 - Coastal and Valley Freshwater Marsh
  - 7 - Diegan Coastal Sage Scrub
  - 10 - Eucalyptus Woodland
  - 12 - Mafic Southern Mixed Chaparral
  - 13 - Maritime Succulent Scrub
  - 14 - Mule Fat Scrub
  - 15 - Native Grassland
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 18 - Non-Native Riparian
  - 20 - Open Water
  - 21 - Riparian Scrubs
  - 22 - Scrub Oak Chaparral
  - 23 - Southern Arroyo Willow Riparian Forest
  - 24 - Southern Coast Live Oak Riparian Forest
  - 25 - Southern Interior Cypress Forest
  - 27 - Southern Mixed Chaparral
  - 29 - Southern Riparian Scrub
  - 30 - Southern Riparian Woodland
  - 32 - Urban/Developed
  - 33 - Vernal Pool
  - 34 - Wildflower Field



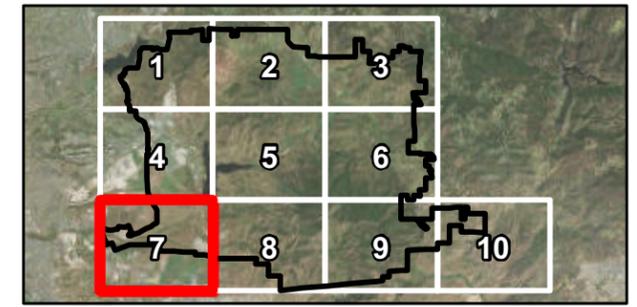
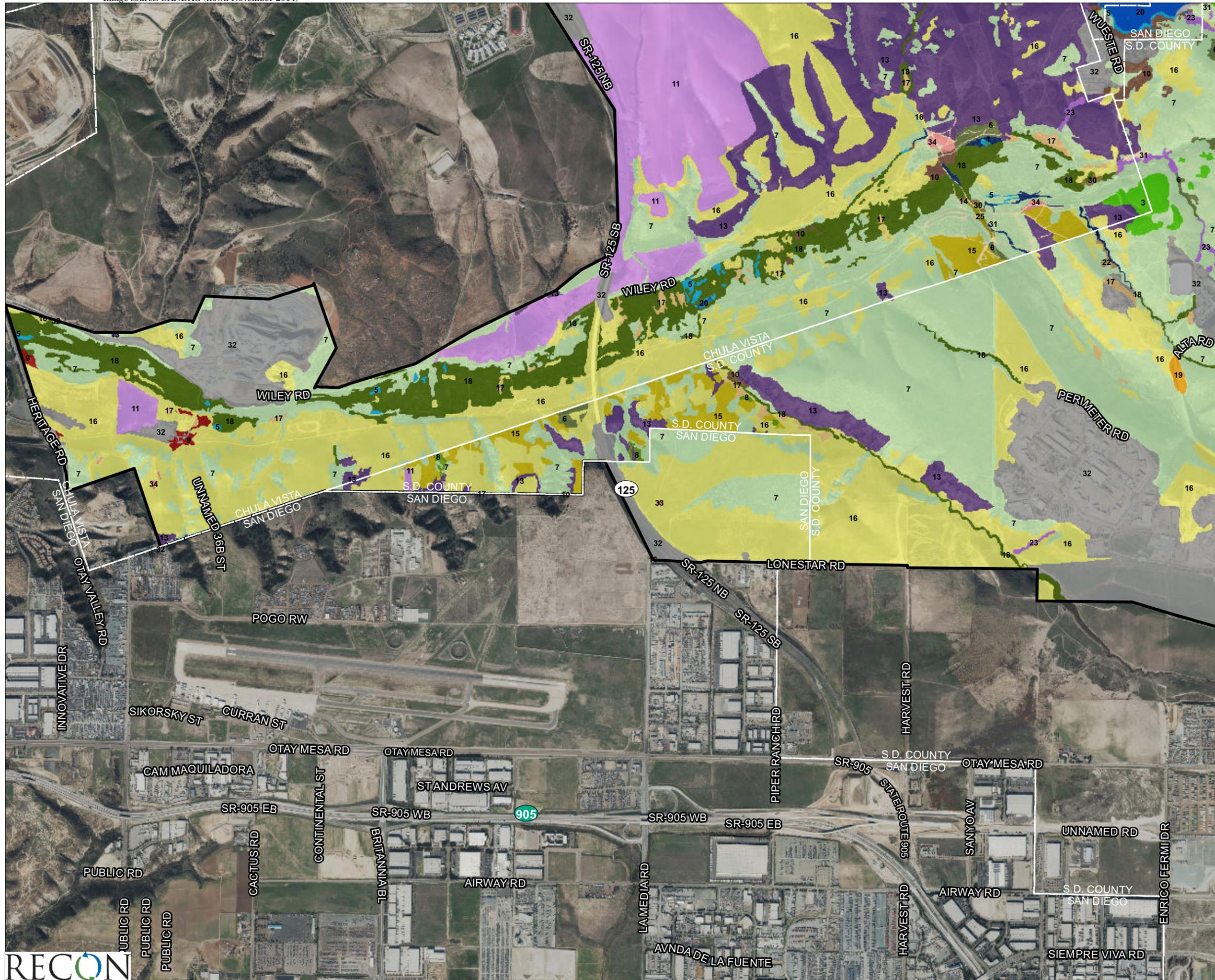
**FIGURE 1-5**  
Vegetation Communities



- Otay Trail Study Area
- Vegetation Communities (Holland/Oberbauer)**
- 3 - Chamise Chaparral
- 4 - Coast Live Oak Woodland
- 5 - Coastal Scrub
- 6 - Coastal and Valley Freshwater Marsh
- 7 - Diegan Coastal Sage Scrub
- 10 - Eucalyptus Woodland
- 11 - General Agriculture
- 12 - Mafic Southern Mixed Chaparral
- 14 - Mule Fat Scrub
- 16 - Non-Native Grassland
- 17 - Non-Native Grassland: Broadleaf-Dom.
- 18 - Non-Native Riparian
- 20 - Open Water
- 22 - Scrub Oak Chaparral
- 23 - Southern Arroyo Willow Riparian Forest
- 24 - Southern Coast Live Oak Riparian Forest
- 25 - Southern Interior Cypress Forest
- 27 - Southern Mixed Chaparral
- 28 - Southern Riparian Forest
- 29 - Southern Riparian Scrub
- 30 - Southern Riparian Woodland
- 32 - Urban/Developed
- 34 - Wildflower Field



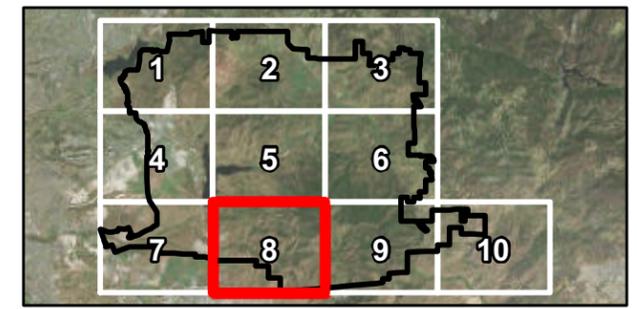
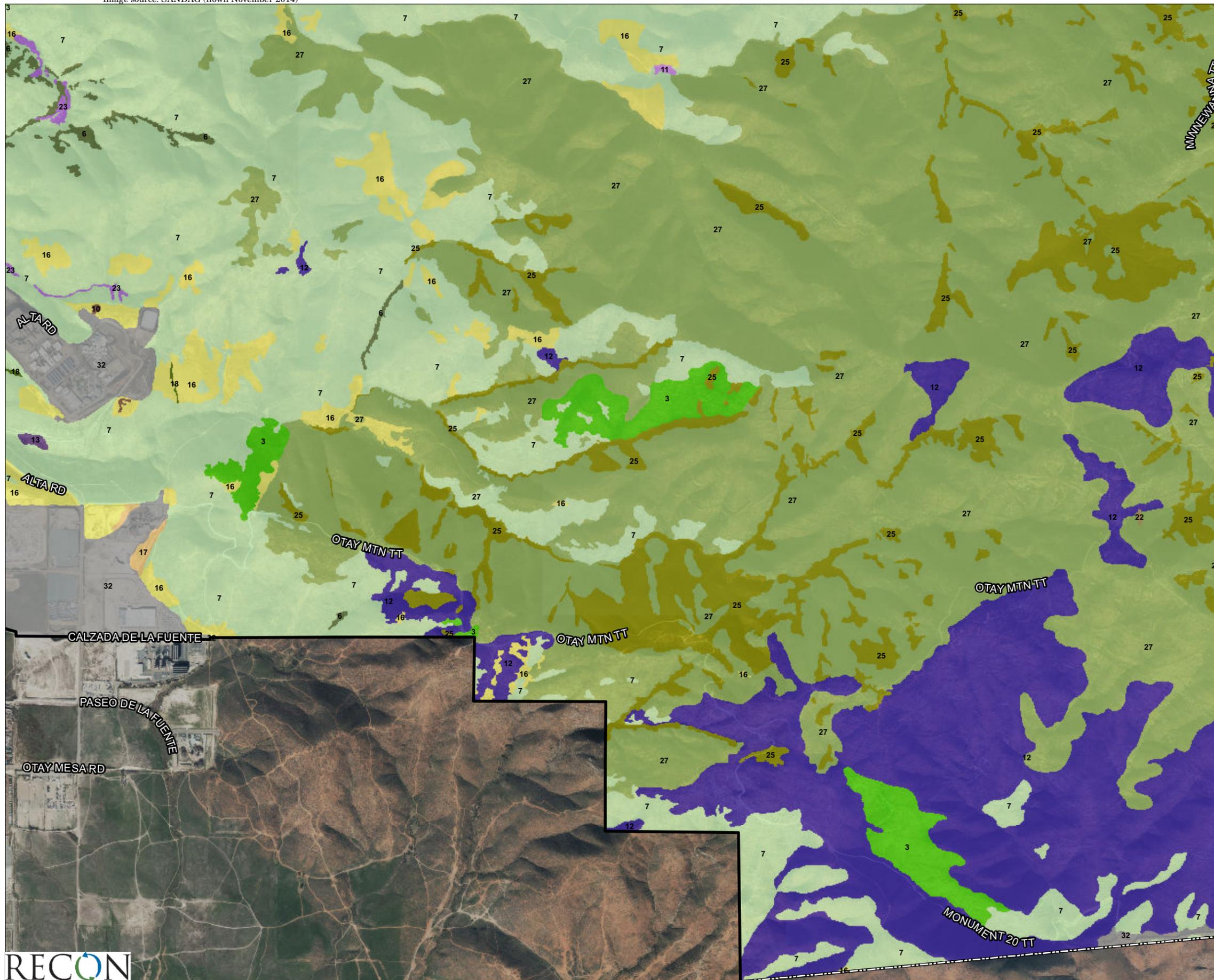
**FIGURE 1-6**  
Vegetation Communities



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 1 - Alkali Seep
  - 3 - Chamise Chaparral
  - 5 - Coastal Scrub
  - 6 - Coastal and Valley Freshwater Marsh
  - 7 - Diegan Coastal Sage Scrub
  - 8 - Diegan Coastal Sage Scrub: Coastal form
  - 9 - Disturbed Habitat
  - 10 - Eucalyptus Woodland
  - 11 - General Agriculture
  - 13 - Maritime Succulent Scrub
  - 14 - Mule Fat Scrub
  - 15 - Native Grassland
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 18 - Non-Native Riparian
  - 19 - Non-Native Vegetation
  - 20 - Open Water
  - 22 - Scrub Oak Chaparral
  - 23 - Southern Arroyo Willow Riparian Forest
  - 25 - Southern Interior Cypress Forest
  - 30 - Southern Riparian Woodland
  - 31 - Unvegetated Habitat
  - 32 - Urban/Developed
  - 33 - Vernal Pool
  - 34 - Wildflower Field



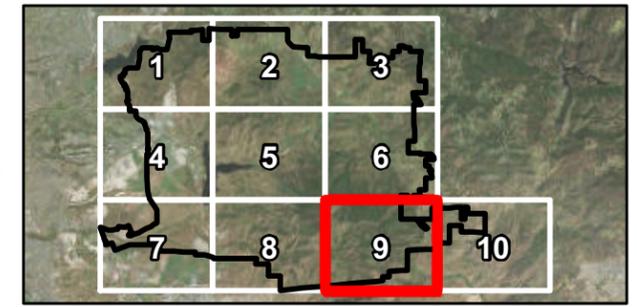
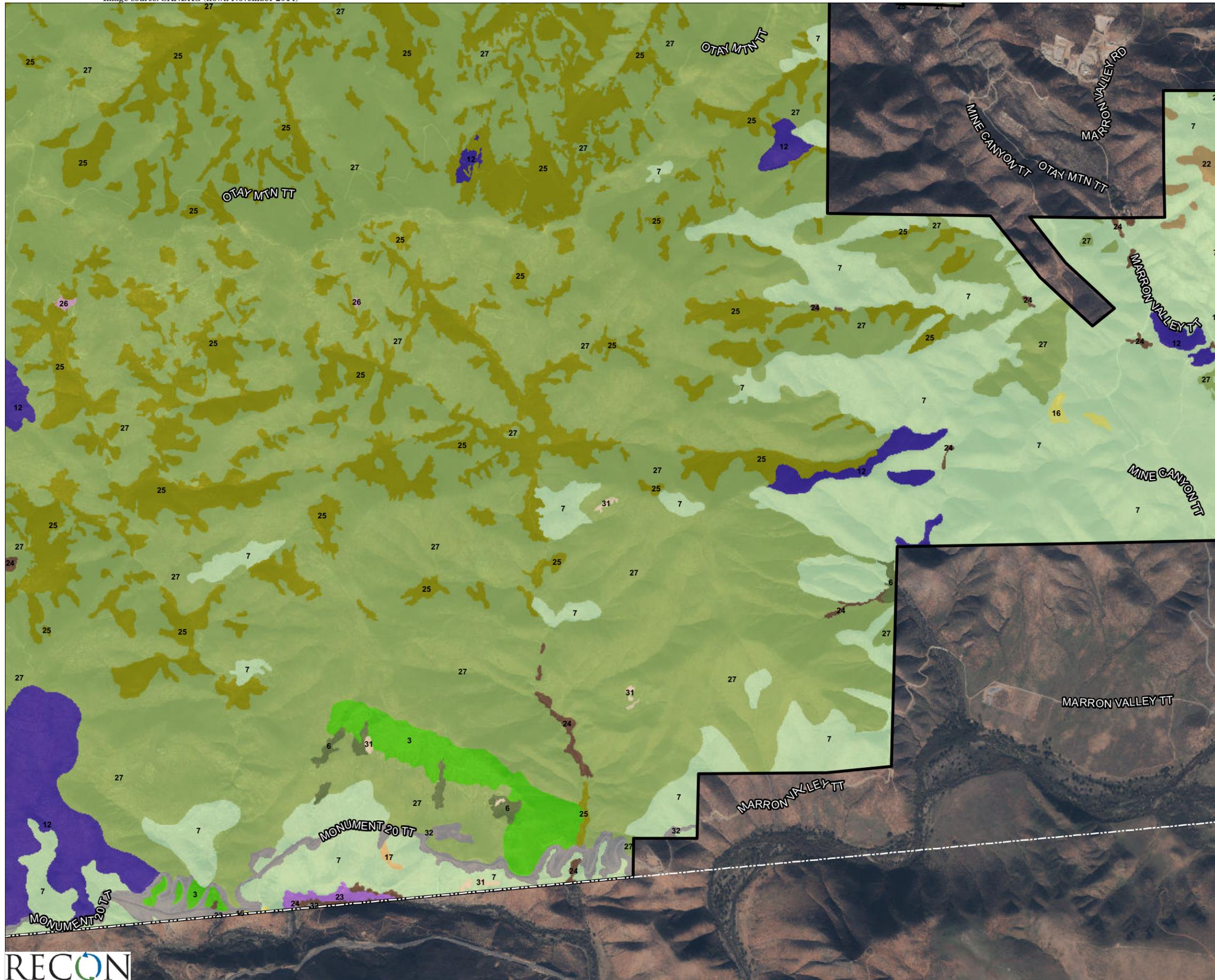
**FIGURE 1-7**  
Vegetation Communities



- Otay Trail Study Area
- Vegetation Communities (Holland/Oberbauer)**
- 3 - Chamise Chaparral
- 5 - Coastal Scrub
- 7 - Diegan Coastal Sage Scrub
- 10 - Eucalyptus Woodland
- 11 - General Agriculture
- 12 - Mafic Southern Mixed Chaparral
- 13 - Maritime Succulent Scrub
- 16 - Non-Native Grassland
- 17 - Non-Native Grassland: Broadleaf-Dom.
- 18 - Non-Native Riparian
- 22 - Scrub Oak Chaparral
- 23 - Southern Arroyo Willow Riparian Forest
- 24 - Southern Coast Live Oak Riparian Forest
- 25 - Southern Interior Cypress Forest
- 27 - Southern Mixed Chaparral
- 32 - Urban/Developed



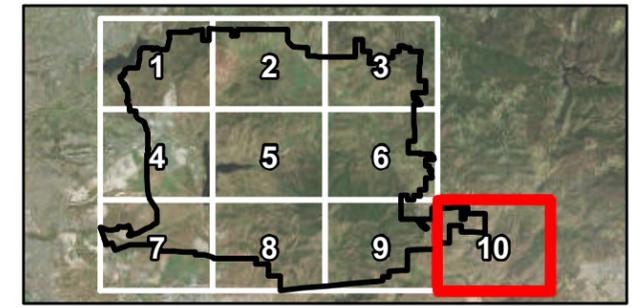
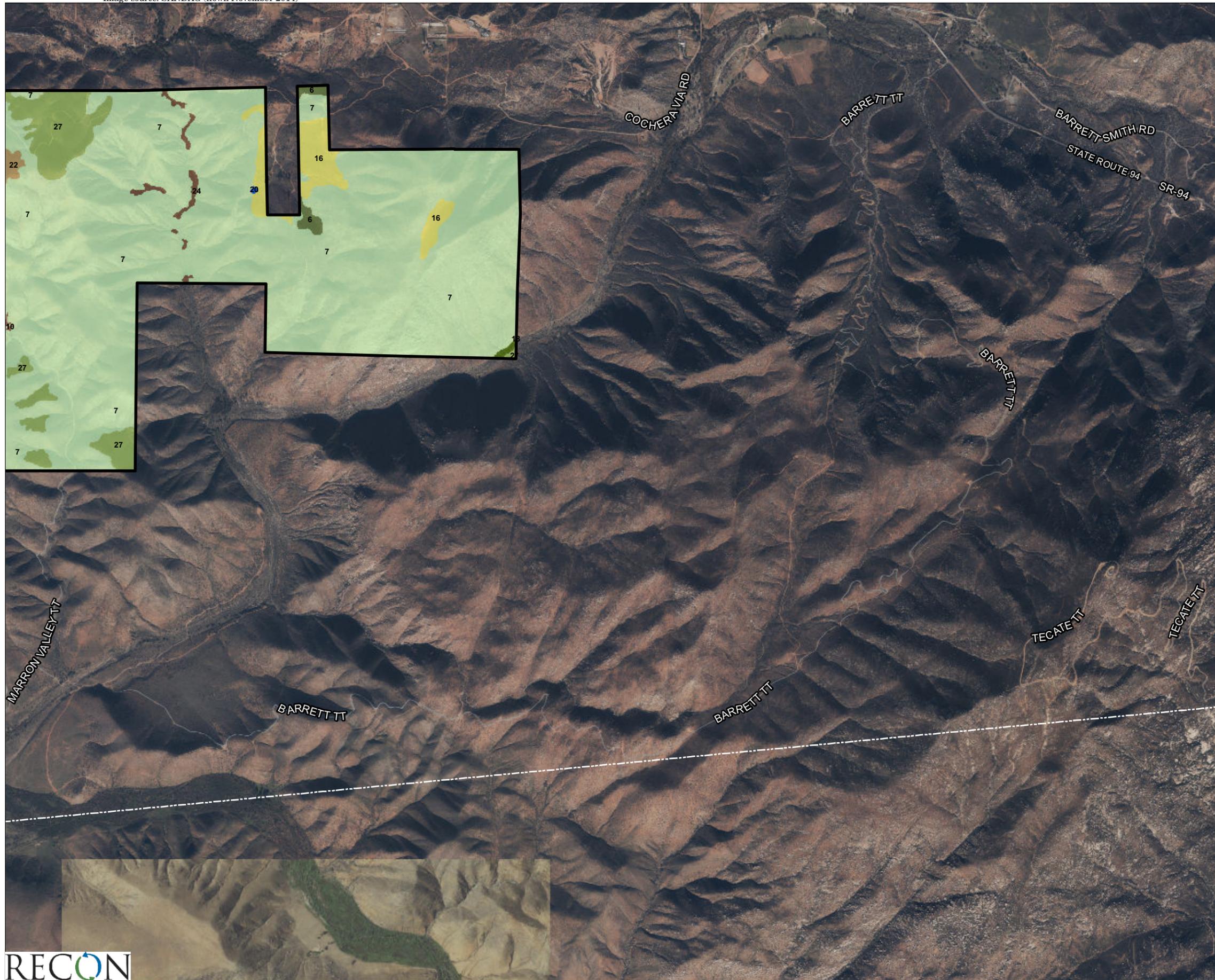
**FIGURE 1-8**  
Vegetation Communities



- Otay Trail Study Area  
**Vegetation Communities (Holland/Oberbauer)**
- 3 - Chamise Chaparral
  - 5 - Coastal Scrub
  - 7 - Diegan Coastal Sage Scrub
  - 10 - Eucalyptus Woodland
  - 12 - Mafic Southern Mixed Chaparral
  - 16 - Non-Native Grassland
  - 17 - Non-Native Grassland: Broadleaf-Dom.
  - 22 - Scrub Oak Chaparral
  - 23 - Southern Arroyo Willow Riparian Forest
  - 24 - Southern Coast Live Oak Riparian Forest
  - 25 - Southern Interior Cypress Forest
  - 26 - Southern Maritime Chaparral
  - 27 - Southern Mixed Chaparral
  - 31 - Unvegetated Habitat
  - 32 - Urban/Developed



**FIGURE 1-9**  
Vegetation Communities



-  Otay Trail Study Area
- Vegetation Communities (Holland/Oberbauer)**
-  5 - Coastal Scrub
-  7 - Diegan Coastal Sage Scrub
-  10 - Eucalyptus Woodland
-  16 - Non-Native Grassland
-  18 - Non-Native Riparian
-  20 - Open Water
-  22 - Scrub Oak Chaparral
-  24 - Southern Coast Live Oak Riparian Forest
-  27 - Southern Mixed Chaparral

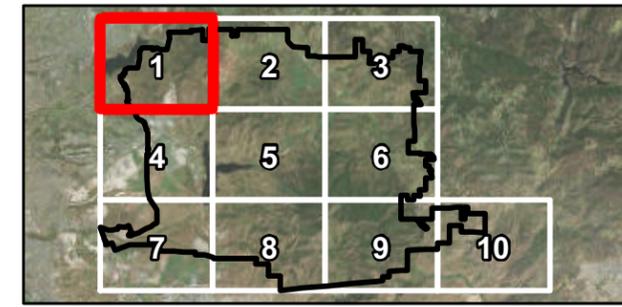
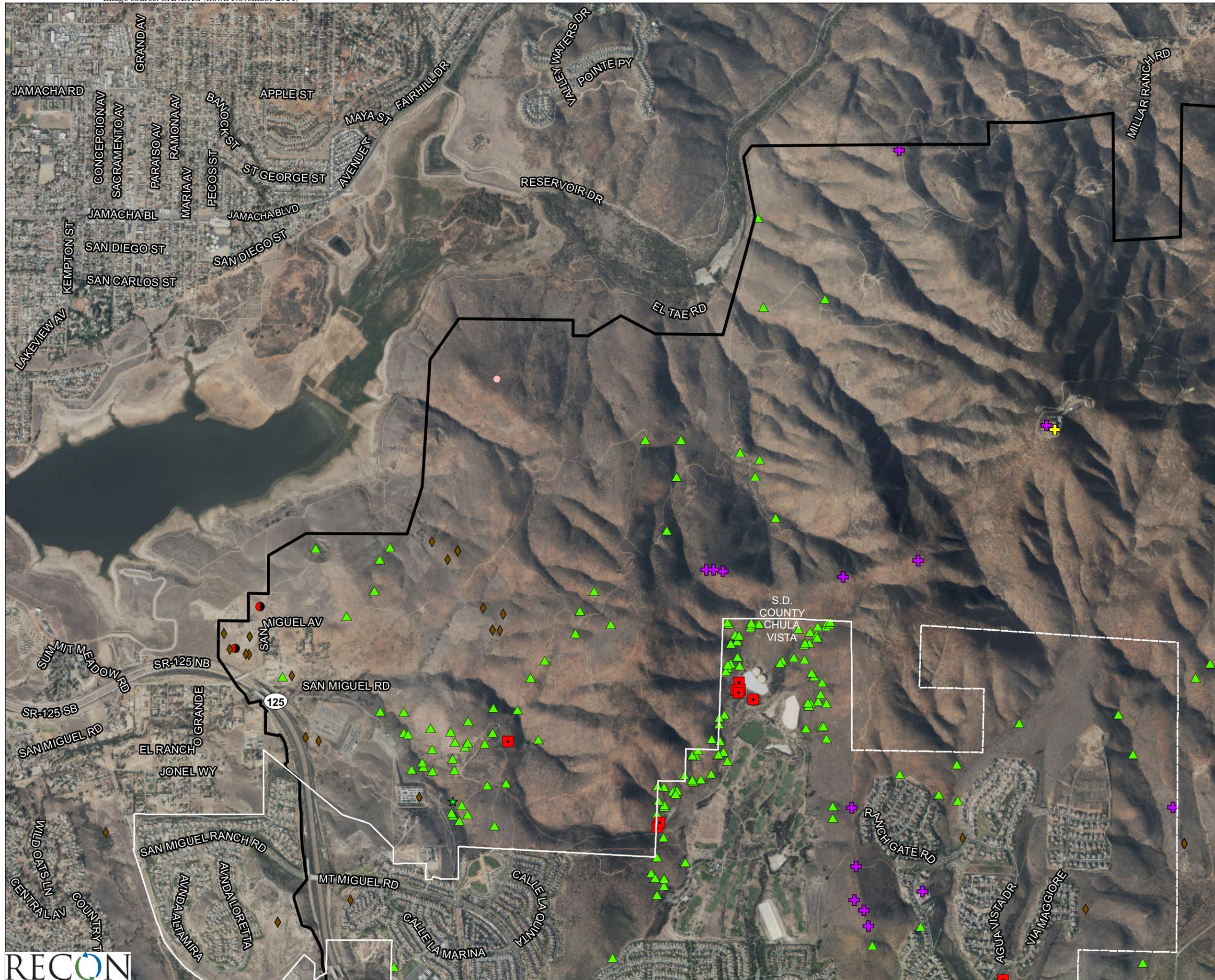


**FIGURE 1-10**  
Vegetation Communities

# Legend

## Species (Number of Observations)

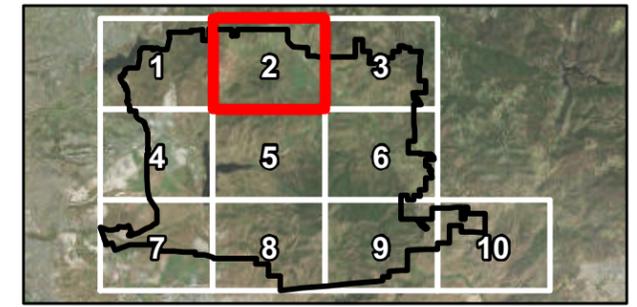
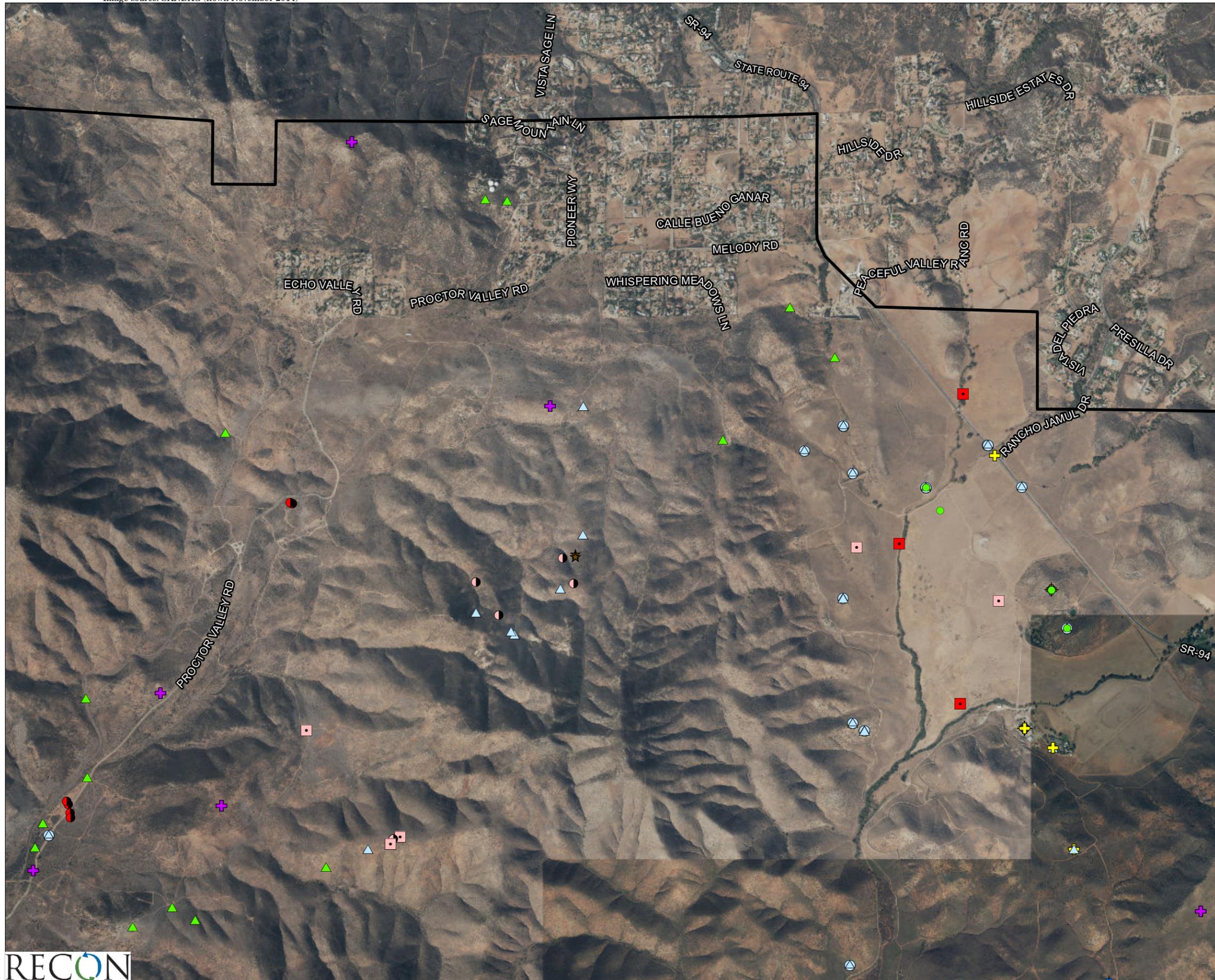
- American Badger (1)
- American Kestrel (6)
- American Peregrine Falcon (1)
- Ash-throated Flycatcher (3)
- Ashy Spike-moss (424)
- Belding's Orange-throated Whiptail (293)
- Bell's Sage Sparrow (45)
- Bell's Sparrow (3)
- Big Free-tailed Bat (1)
- Bigfoot Water Clover (1)
- Black-tailed Jackrabbit (8)
- Blue Streamwort (26)
- Brewer's Calandrinia (2)
- Brewer's Redmaids (2)
- Brittlebush (1)
- California Adder's Tongue (10)
- California Adolphia (5)
- California Horned Lark (2)
- California Mustard (6)
- California Red Legged Frog (1)
- Chaparral Rein-orchid (21)
- Chocolate Lily (1)
- Cleveland's Bush Monkeyflower (7)
- Coast Barrel Cactus (382)
- Coast Horned Lizard (280)
- Coast Live Oak (1)
- Coast Patch Nosed Snake (23)
- Coastal Cactus Wren (453)
- Coastal California Gnatcatcher (1,473)
- Coastal Rosy Boa (26)
- Common Barn Owl (2)
- Common Goldfields (168)
- Cooper's Hawk (26)
- Cooper's Rein Orchid (2)
- Coronado Skink (290)
- Coulter's Matilija Poppy (2)
- Coulter's Saltbush (1)
- Decumbent Goldenbush (151)
- Delicate Clarkia (41)
- Desert Fragrance (4)
- Desert Woodrat (3)
- Dot-seed Plantain (697)
- Dulzura Kangaroo Rat (21)
- Dun Skipper (2)
- Dunn's Mariposa Lily (104)
- Encinitas Baccharis (2)
- Engelmann Oak (53)
- Fairy Shrimp (6)
- Farinose Ground Pink (95)
- Felt-leaved Monardella (5)
- Fish's Milkwort (5)
- Gander's Pitcher Sage (89)
- Golden Eagle (31)
- Golden-rayed Pentachaeta (21)
- Golden-spined Cereus (3)
- Graceful Tarplant (26)
- Granite Spiny Lizard (18)
- Grasshopper Sparrow (64)
- Greater Roadrunner (3)
- Greater Western Mastiff Bat (6)
- Green Heron (1)
- Harbison's Dun Skipper (12)
- Horned Lark (3)
- Humboldt's Lily (7)
- Jennifer's Monardella (46)
- Knotweed Spineflower (2)
- Least Bell's Vireo (1,781)
- Least Bittern (4)
- Light-footed Ridgway's Rail (2)
- Loggerhead Shrike (9)
- Long Eared Myotis (26)
- Mexican Flannelbush (19)
- Mountain Lion (3)
- Munz's Sage (138)
- Northern Harrier (28)
- Nuttall's Scrub Oak (5)
- Occellated Humboldt Lily (17)
- Orcutt's Birds-beak (1)
- Orcutt's Brodiaea (39)
- Otay Manzanita (60)
- Otay Mesa Mint (1)
- Otay Mountain Hosackia (12)
- Otay Mountain Lotus (9)
- Otay Tarplant (80)
- Otay-Lilac (20)
- Owl's Clover (1)
- Pallid bat (9)
- Palmer's Goldenbush (8)
- Palmer's Grapplinghook (145)
- Pocketed Free-tailed Bat (36)
- Purple Owl's-clover (120)
- Purple Stemodia (2)
- Quino Checkerspot Butterfly (675)
- Red Diamond Rattlesnake (92)
- Red Shouldered Hawk (2)
- Red-tailed Hawk (15)
- Rein Orchid (18)
- Riverside Fairy Shrimp (4)
- Robinson Peppergrass (17)
- Rosy Boa (16)
- Rush Like Bristleweed (8)
- San Diego Ambrosia (2)
- San Diego Barrel Cactus (468)
- San Diego Black-tailed Jackrabbit (204)
- San Diego Bur-Sage (6)
- San Diego Button Celery (42)
- San Diego County Needlegrass (58)
- San Diego County Viguiera (496)
- San Diego Desert Woodrat (21)
- San Diego Fairy Shrimp (70)
- San Diego Goldenstar (199)
- San Diego Marsh-elder (184)
- San Diego Needlegrass (114)
- San Diego Ring-necked Snake (1)
- San Diego Sagewort (15)
- San Diego Sedge (38)
- San Diego Thornmint (20)
- San Diego Viguiera (161)
- San Miguel Savory (15)
- Seaside Cistanthe (1)
- Small-flowered Microseris (7)
- Small-flowered Morning Glory (46)
- Small-leaved Rose (2)
- Snake Cholla (156)
- South Coast Saltbush (19)
- Southern California Rufous-crowned Sparrow (297)
- Southern Grasshopper Mouse (1)
- Southern Mountain Misery (15)
- Southern Mule Deer (122)
- Southwestern Spiny Rush (84)
- Spiny Redberry (23)
- Spiny Rush (32)
- Spreading Navarretia (3)
- Summer Holly (28)
- Tecate Cypress (198)
- Thorne's Hairstreak (1)
- Thread-leaved Bird's Beak (21)
- Tidy-tips (1)
- Tiger Whiptail (9)
- Townsend's Big-eared Bat (9)
- Two-striped Gartersnake (122)
- Variegated Dudleya (183)
- Versatile Fairy Shrimp (1)
- Water Jacket (1)
- Western Bluebird (2)
- Western Burrowing Owl (31)
- Western Dichondra (103)
- Western Rd Bat (7)
- Western Small-footed Myotis (38)
- Western Spadefoot Toad (121)
- Western Spleenwort (3)
- Western Whiptail (448)
- White-tailed Kite (16)
- Willowy Monardella (4)
- Woolly Chaparral Pea (17)
- Yellow Warbler (15)
- Yellow-breasted Chat (23)
- Yuma Myotis (58)



 Otay Trail Study Area



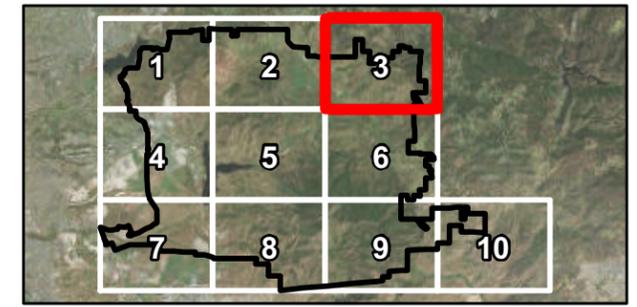
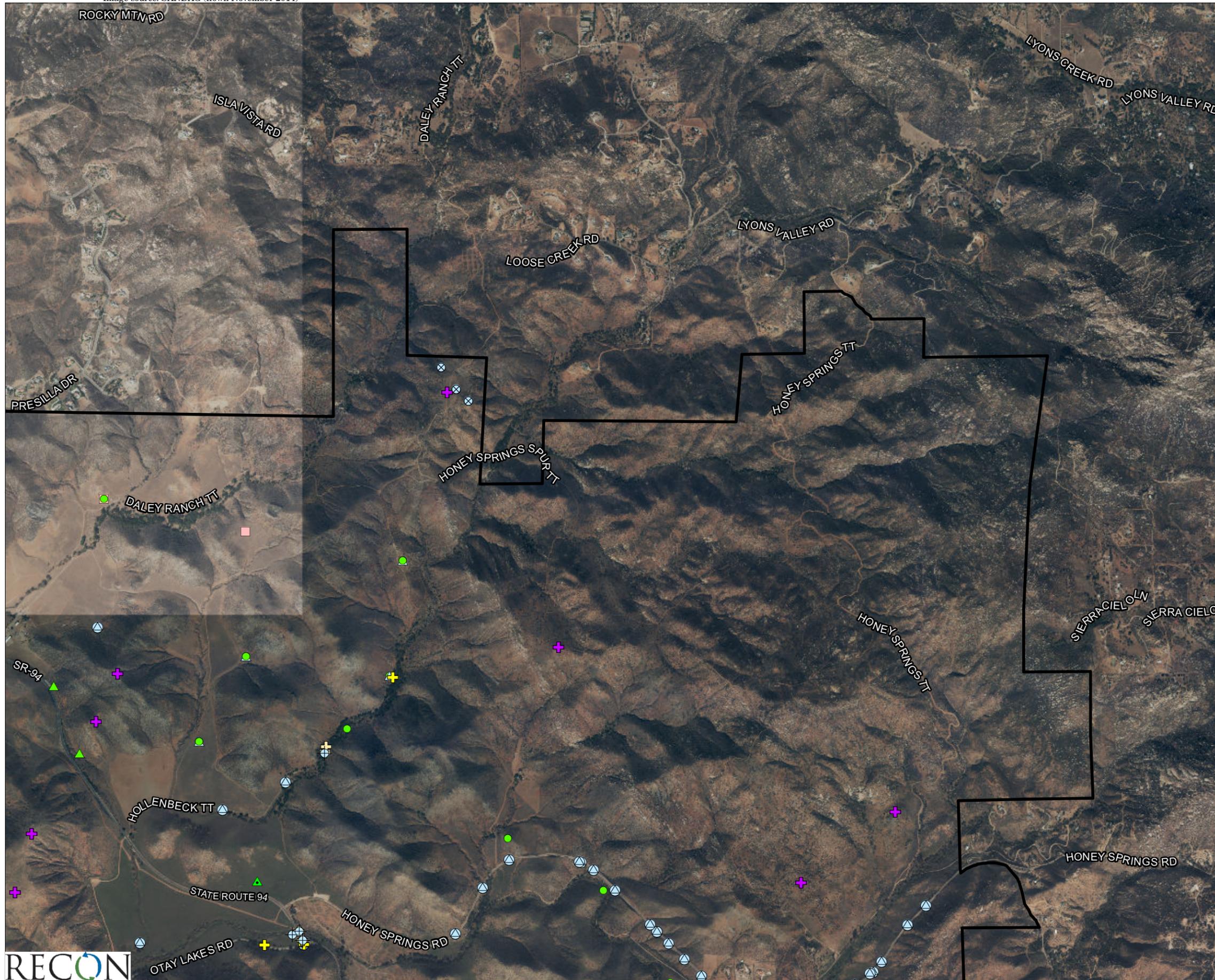
**FIGURE 2-1**  
Species Observations



 Otay Trail Study Area



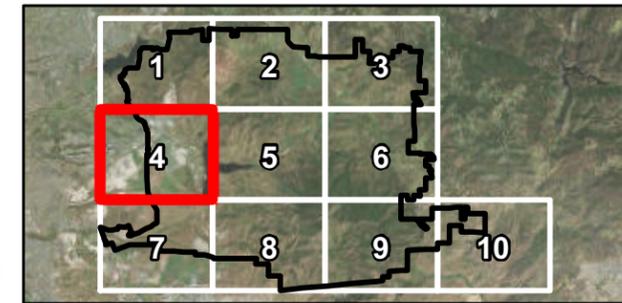
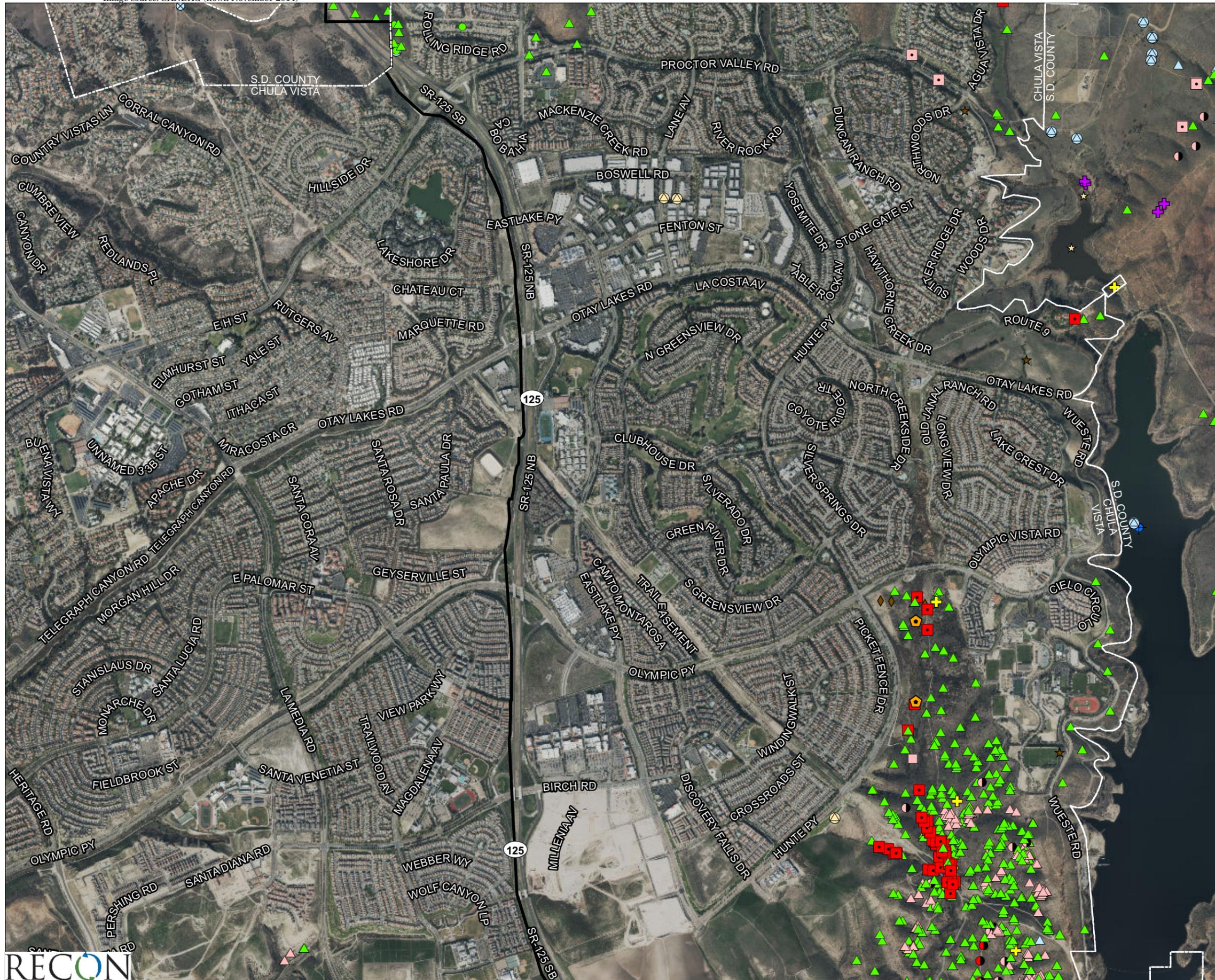
FIGURE 2-2  
Species Observations



□ Otay Trail Study Area



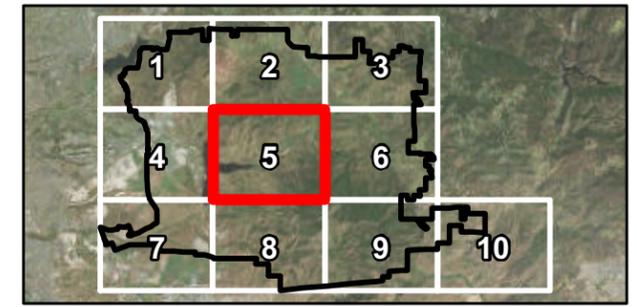
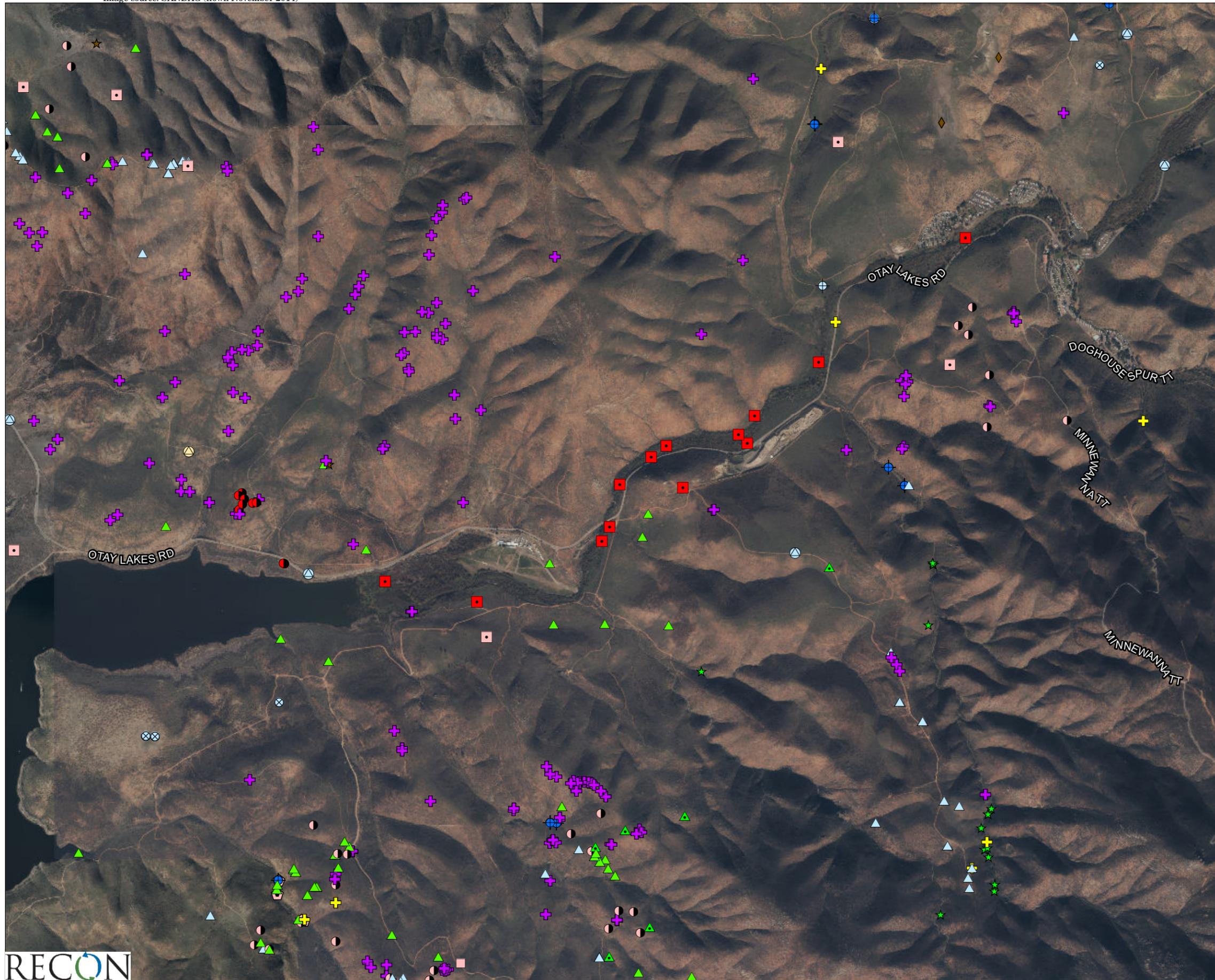
FIGURE 2-3  
Species Observations



 Otay Trail Study Area



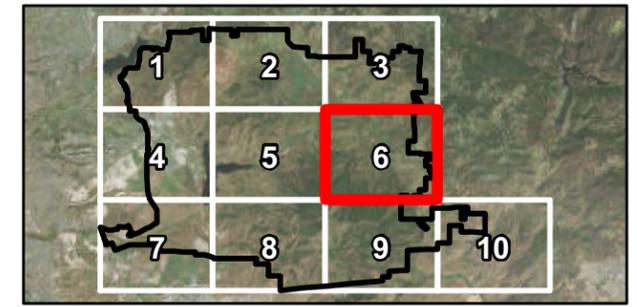
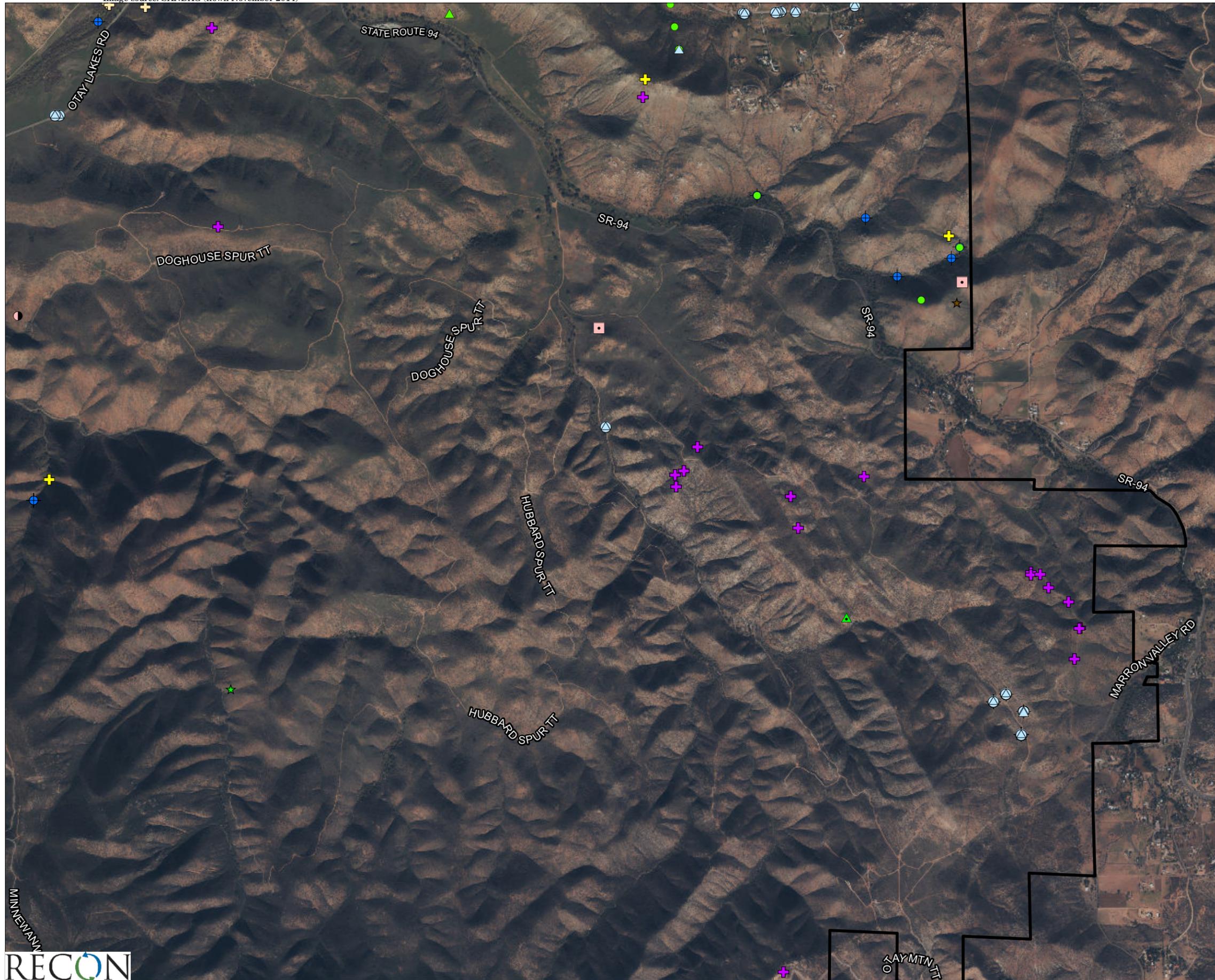
**FIGURE 2-4**  
Species Observations



□ Otay Trail Study Area



FIGURE 2-5  
Species Observations



□ Otay Trail Study Area

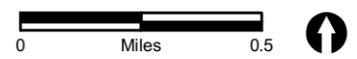
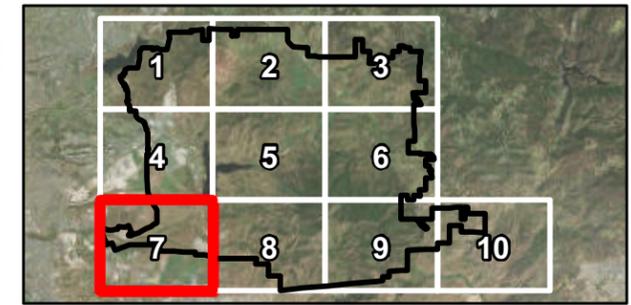
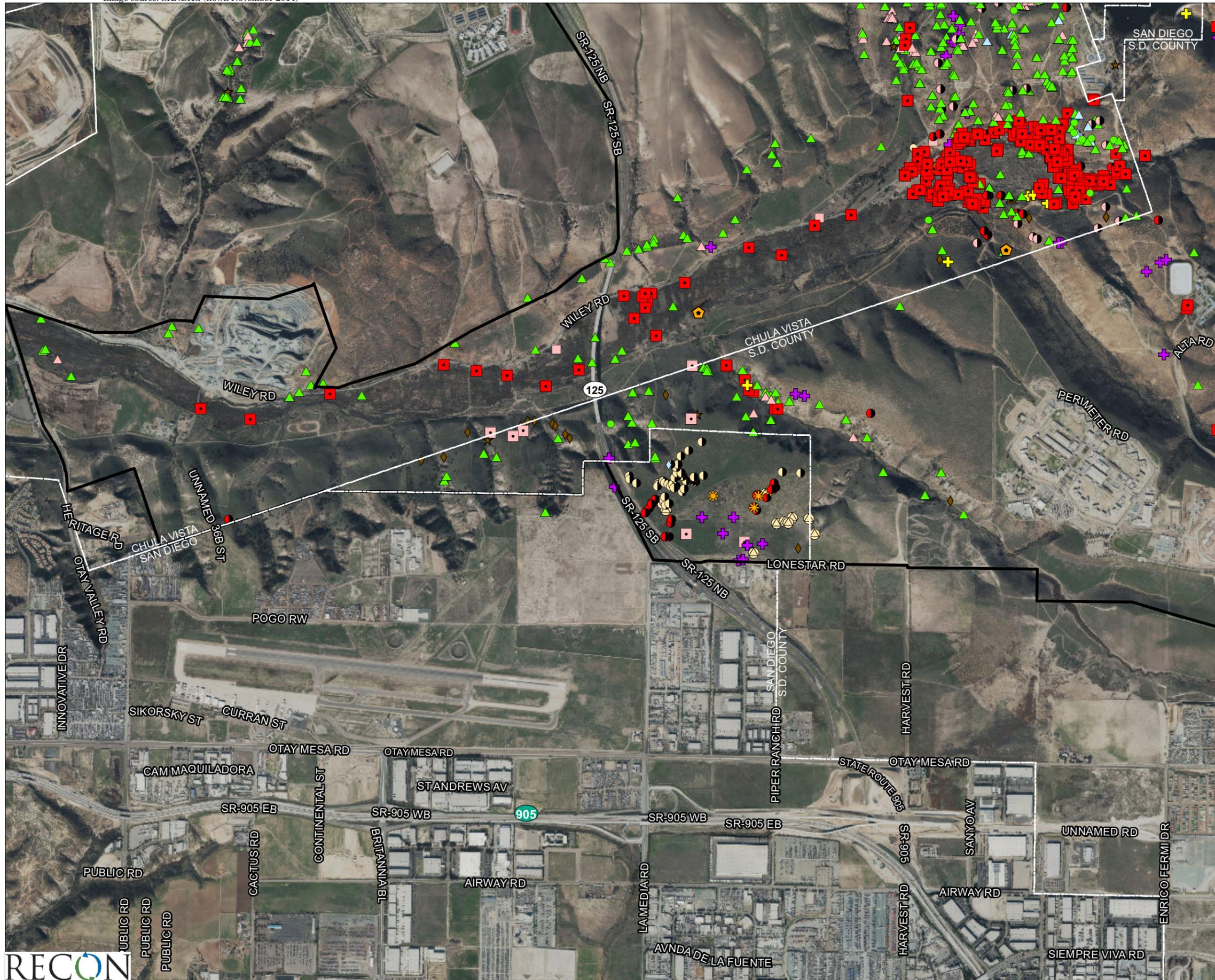


FIGURE 2-6  
Species Observations

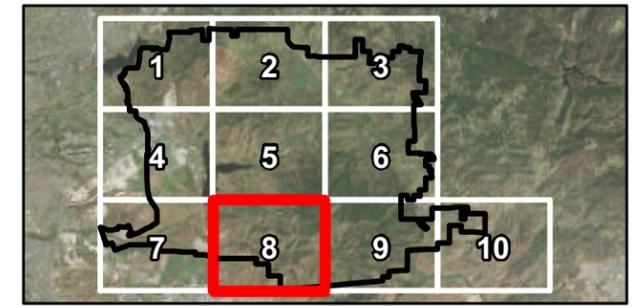
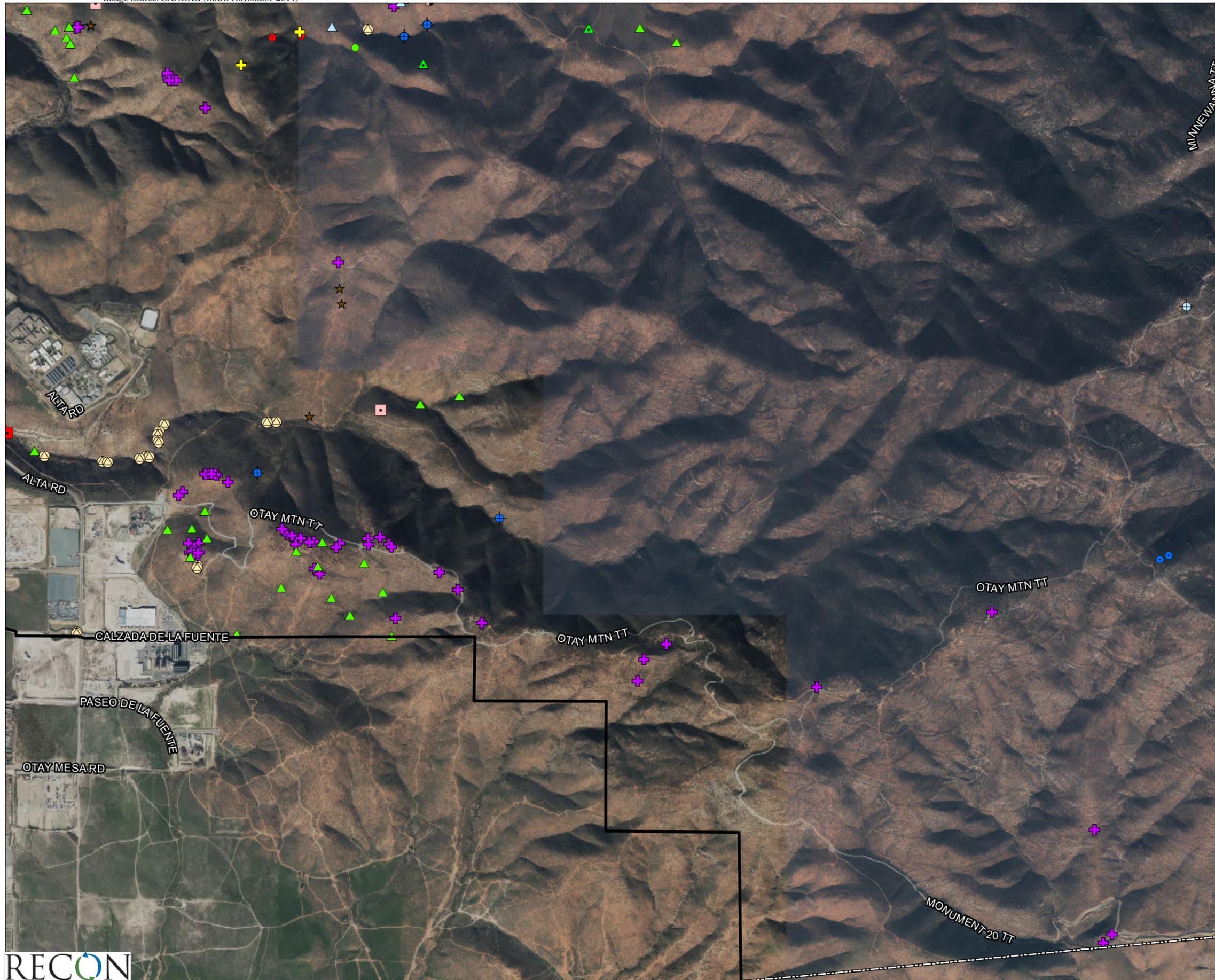


□ Otay Trail Study Area



FIGURE 2-7  
Species Observations

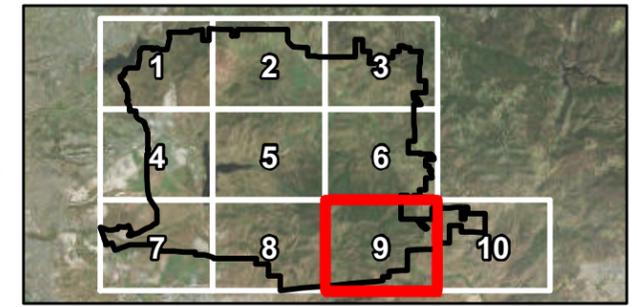
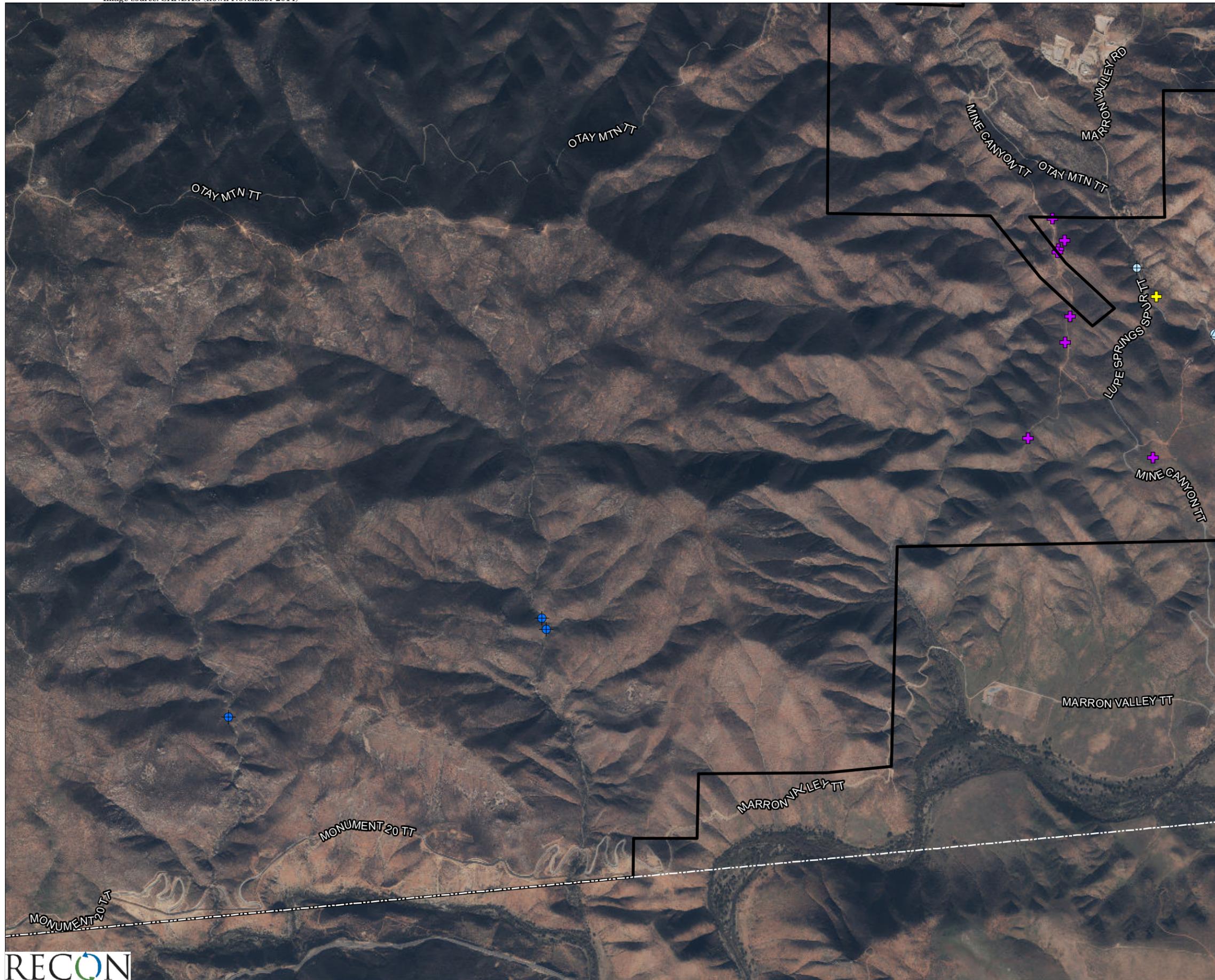
Image source: SANDAG (flown November 2014)



□ Otay Trail Study Area



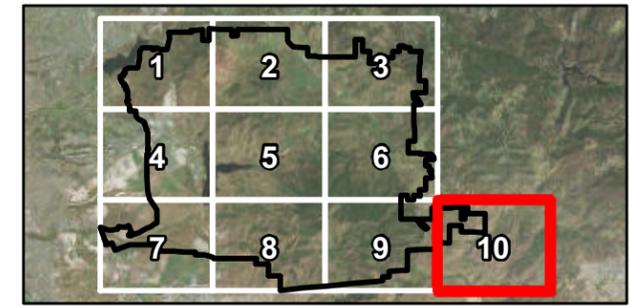
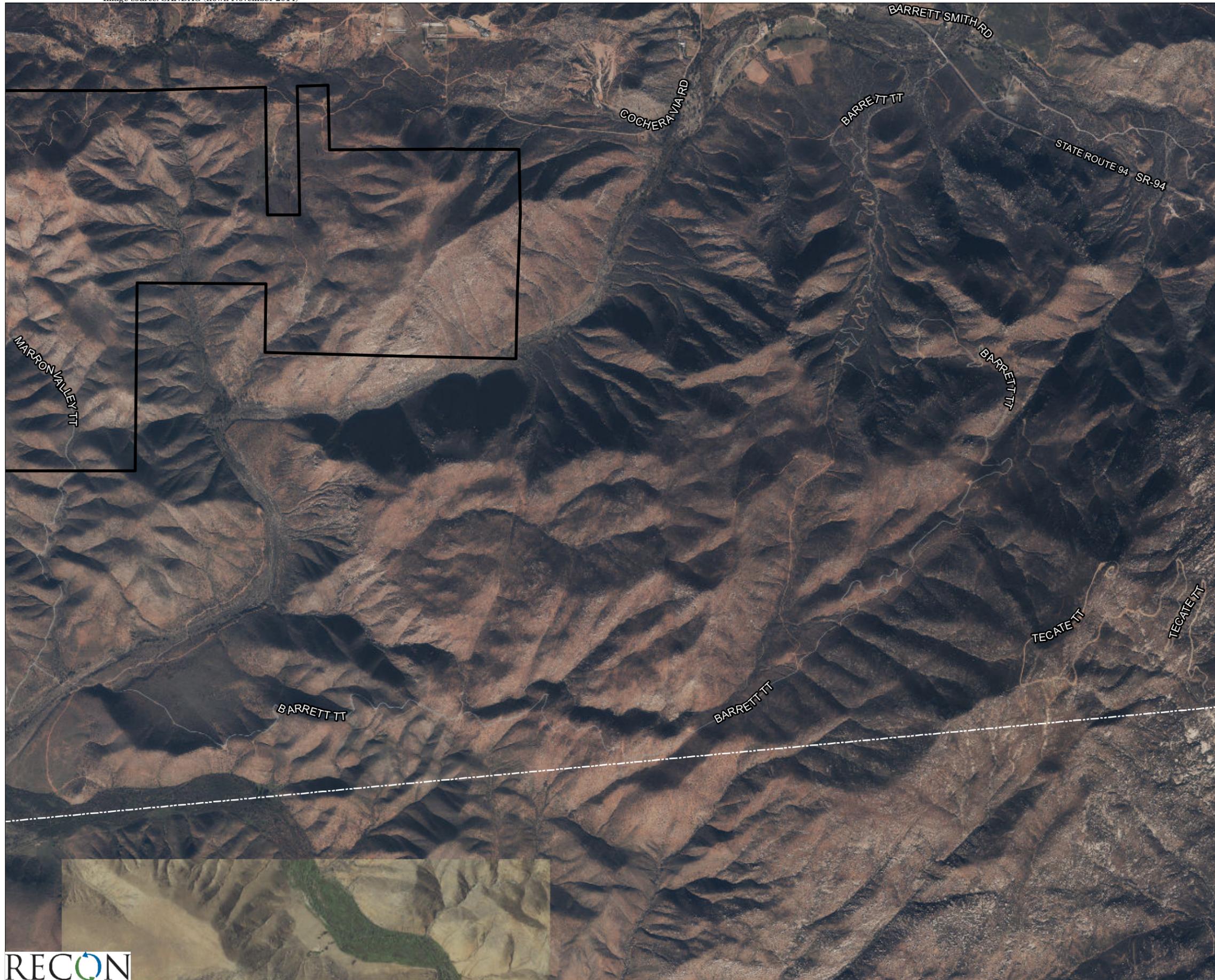
FIGURE 2-8  
Species Observations



□ Otay Trail Study Area



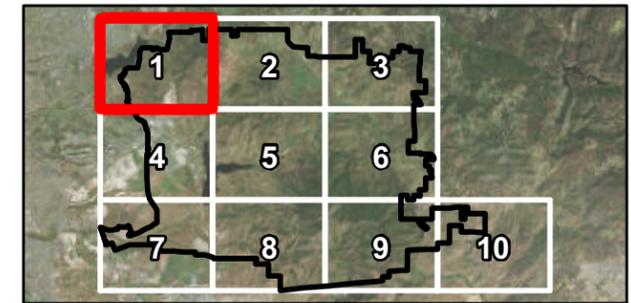
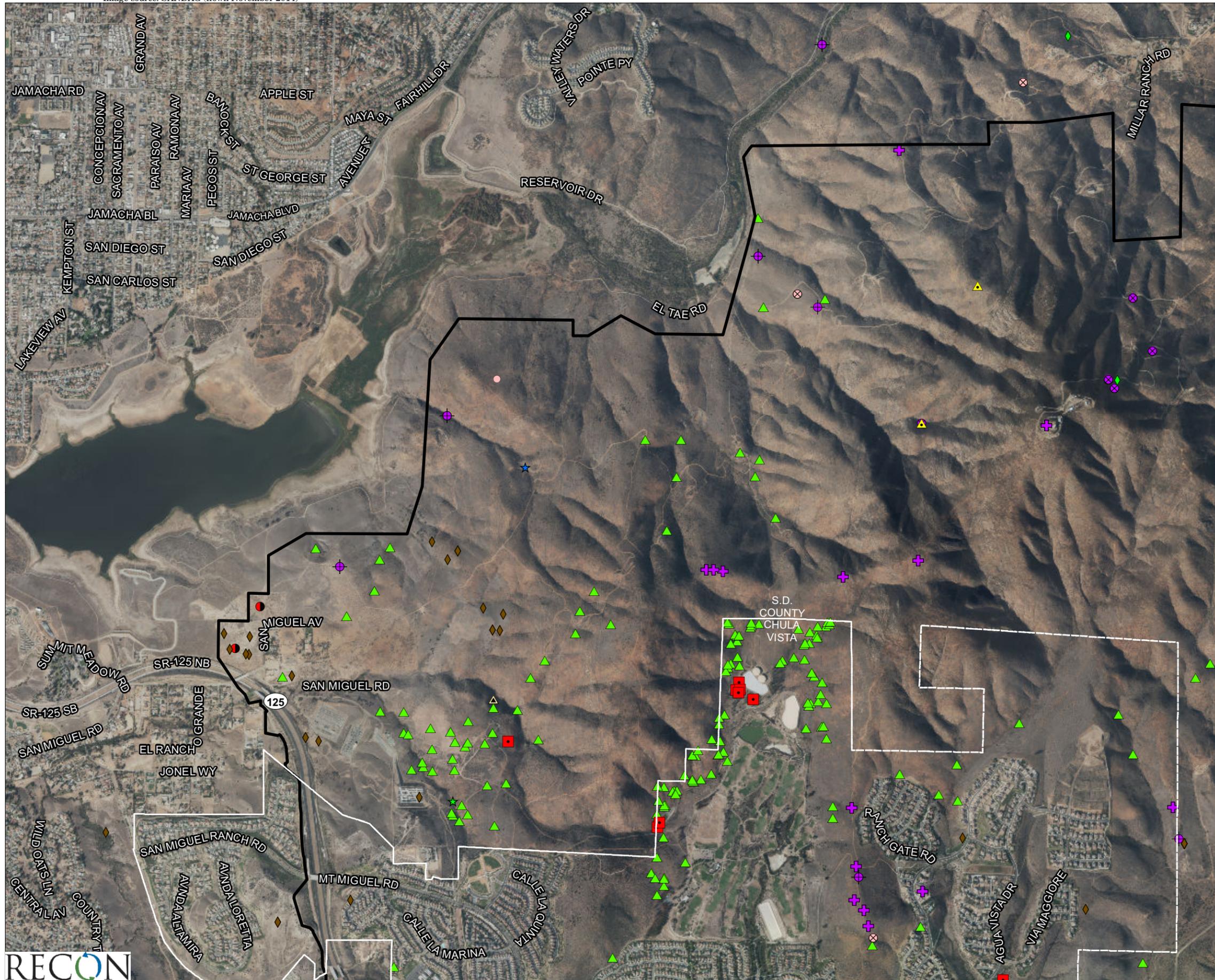
FIGURE 2-9  
Species Observations



 Otay Trail Study Area



FIGURE 2-10  
Species Observations



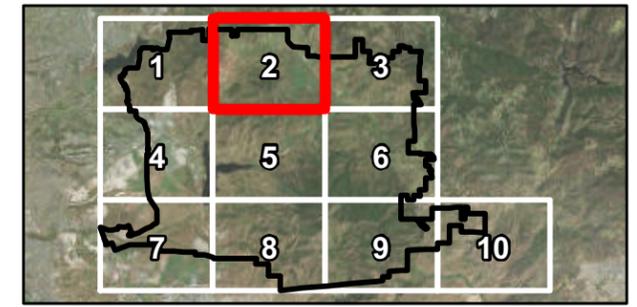
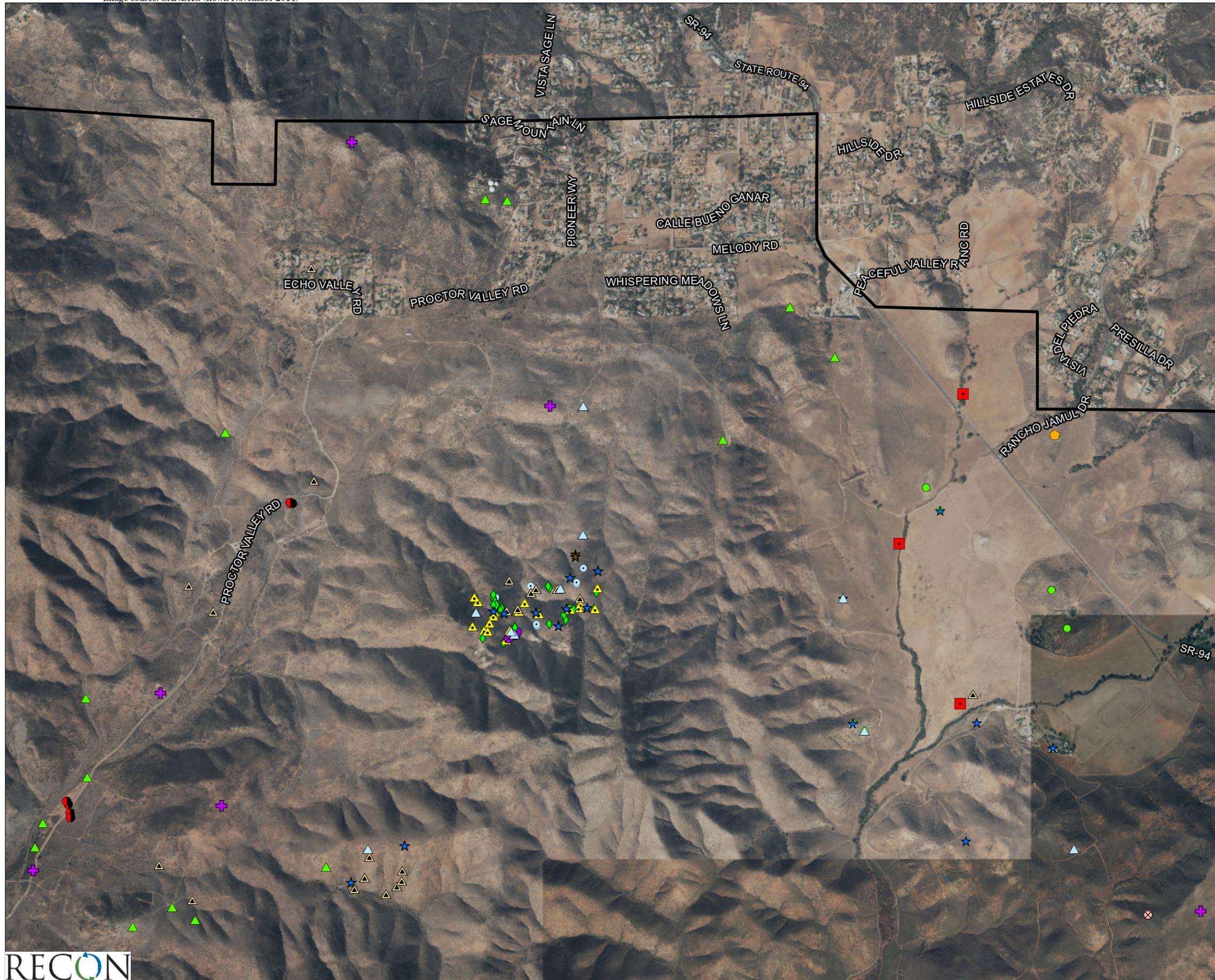
□ Otay Trail Study Area

**Species**

- American Badger
- ▲ Coastal California Gnatcatcher
- ▲ Gander's Pitcher Sage
- Least Bell's Vireo
- ★ Mexican Flannelbush
- ◆ Otay Manzanita
- ◆ Otay Tarplant
- ⊕ Quino Checkerspot Butterfly
- San Diego Fairy Shrimp
- ⊗ San Diego Goldenstar
- ⊗ San Diego Thornmint
- ⊗ San Miguel Savory
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer
- ⊕ Variegated Dudleya



**FIGURE 3-1**  
 Federally and State-listed Threatened and Endangered Species and MSCP Covered Species



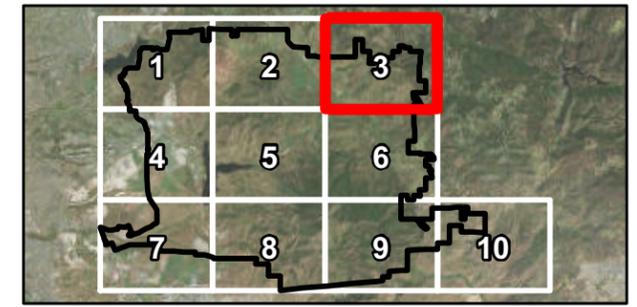
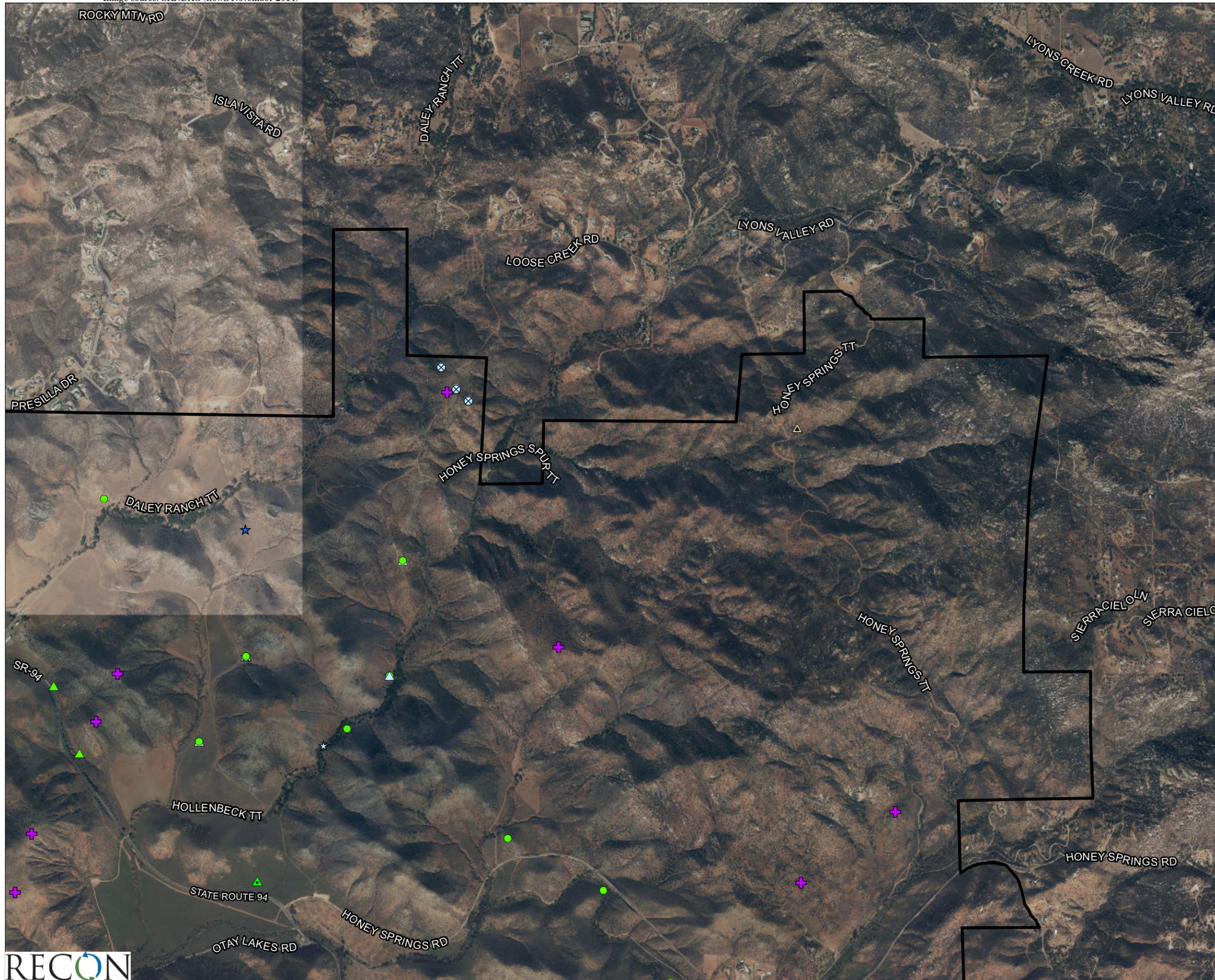
□ Otay Trail Study Area

**Species**

- Belding's Orange-throated Whiptail
- ▲ Coast Horned Lizard
- ▲ Coastal California Gnatcatcher
- ◆ Cooper's Hawk
- Dunn's Mariposa Lily
- ▲ Gander's Pitcher Sage
- Least Bell's Vireo
- ★ Northern Harrier
- ◆ Otay Manzanita
- ✚ Quino Checkerspot Butterfly
- San Diego Fairy Shrimp
- ⊗ San Diego Goldenstar
- ✚ San Miguel Savory
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer



**FIGURE 3-2**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



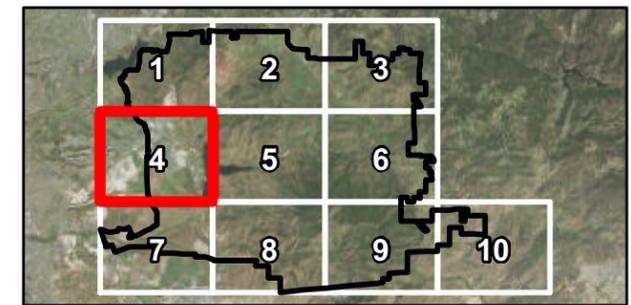
□ Otay Trail Study Area

**Species**

- Belding's Orange-throated Whiptail
- △ Coast Horned Lizard
- ▲ Coastal California Gnatcatcher
- ▲ Golden Eagle
- ☆ Mountain Lion
- ✚ Quino Checkerspot Butterfly
- ⊗ San Diego Thornmint
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer



**FIGURE 3-3**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



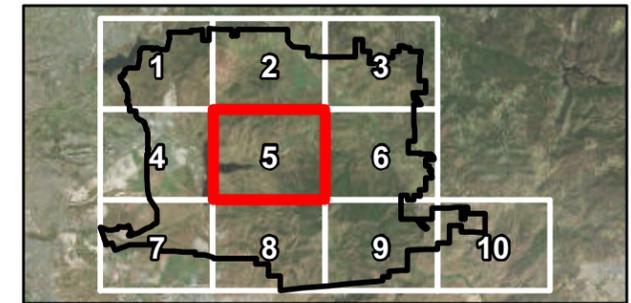
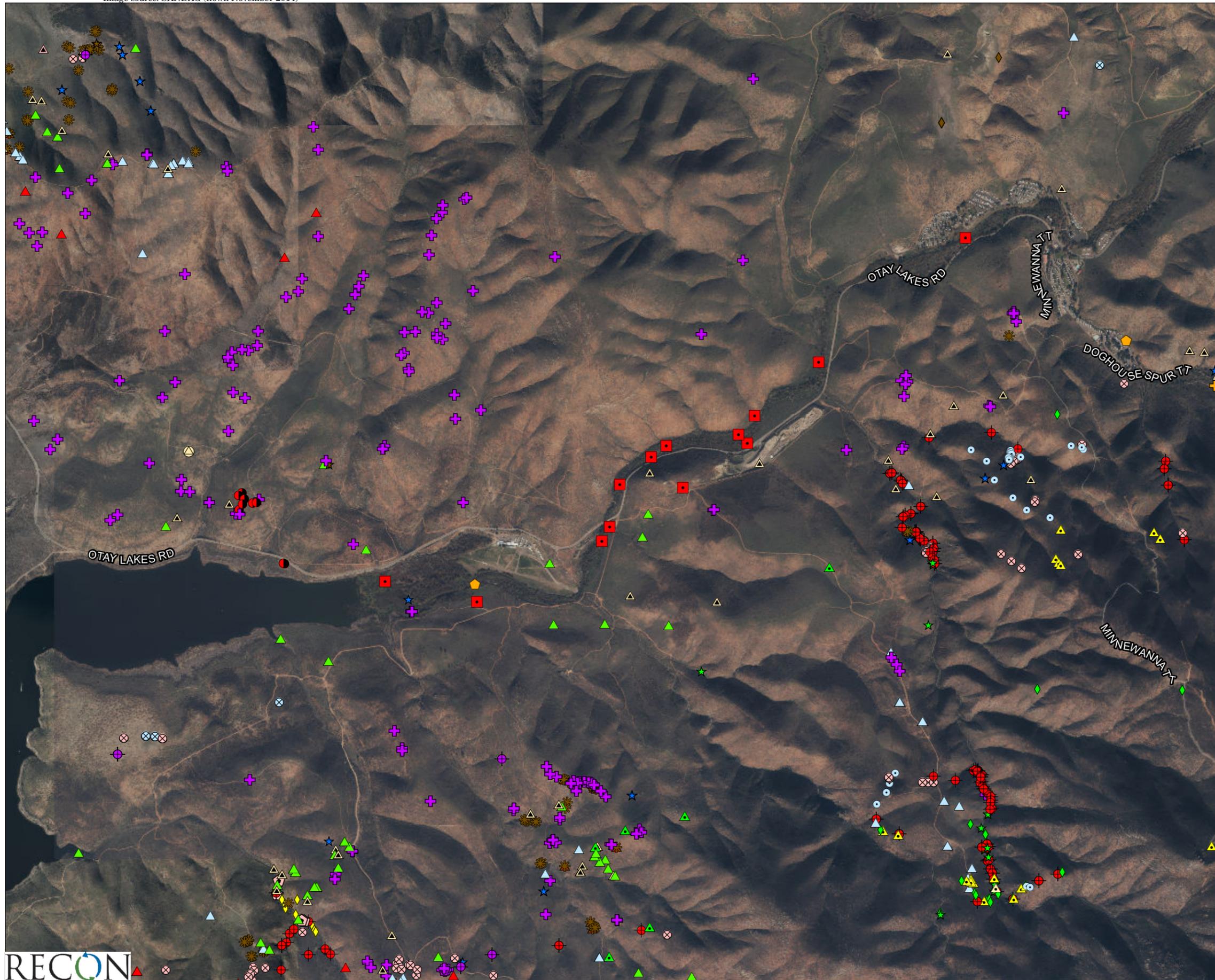
□ Otay Trail Study Area

**Species**

- Belding's Orange-throated Whiptail
- ▲ Coast Barrel Cactus
- ▲ Coast Horned Lizard
- ▲ Coastal Cactus Wren
- ▲ Coastal California Gnatcatcher
- ◆ Cooper's Hawk
- Least Bell's Vireo
- ★ Light-footed Ridgway's Rail
- ★ Northern Harrier
- ◆ Orcutt's Birds-beak
- ◆ Otay Tarplant
- ✚ Quino Checkerspot Butterfly
- ✱ San Diego Barrel Cactus
- San Diego Fairy Shrimp
- ⊗ San Diego Goldenstar
- ⊗ San Diego Thornmint
- ▲ Snake Cholla
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer
- ✚ Variegated Dudleya
- Western Burrowing Owl



**FIGURE 3-4**  
 Federally and State-listed Threatened and Endangered Species and MSCP Covered Species



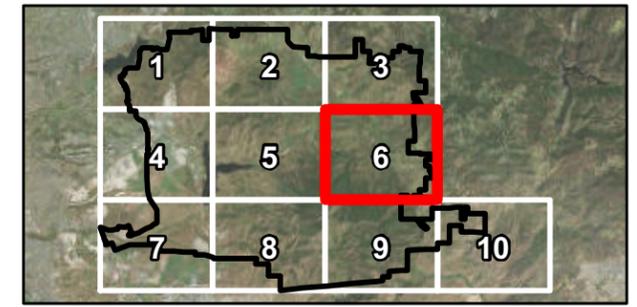
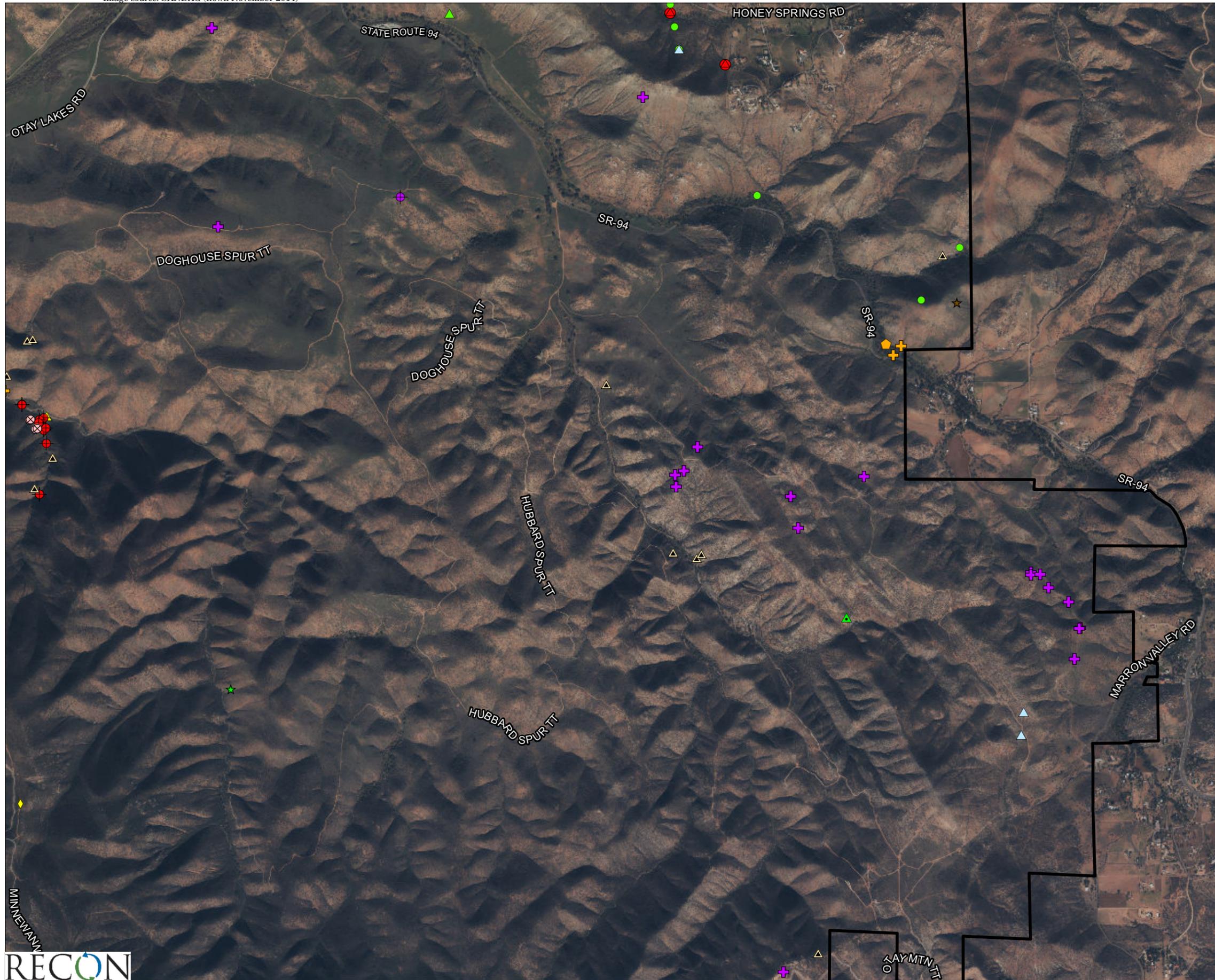
□ Otay Trail Study Area

**Species**

- ▲ Coast Barrel Cactus
- ▲ Coast Horned Lizard
- ▲ Coastal California Gnatcatcher
- ◆ Cooper's Hawk
- Dunn's Mariposa Lily
- ▲ Felt-leaved Monardella
- ▲ Gander's Pitcher Sage
- ▲ Golden Eagle
- Least Bell's Vireo
- ★ Mexican Flannelbush
- ★ Mountain Lion
- ★ Northern Harrier
- ◆ Orcutt's Brodiaea
- ◆ Otay Manzanita
- ◆ Otay Tarplant
- ✚ Palmer's Goldenbush
- ✚ Quino Checkerspot Butterfly
- ✱ San Diego Barrel Cactus
- San Diego Fairy Shrimp
- ⊗ San Diego Goldenstar
- ⊗ San Diego Thornmint
- ▲ Snake Cholla
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer
- Tecate Cypress
- ✚ Variegated Dudleya
- ⊗ Western Burrowing Owl
- ⊗ Willowy Monardella



**FIGURE 3-5**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



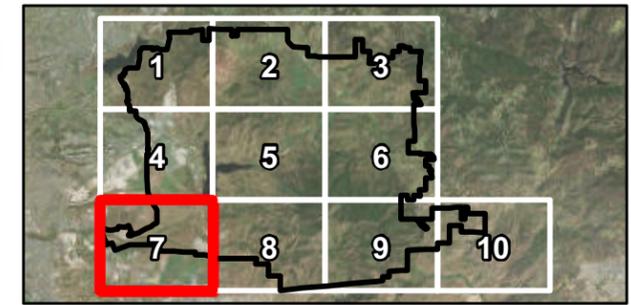
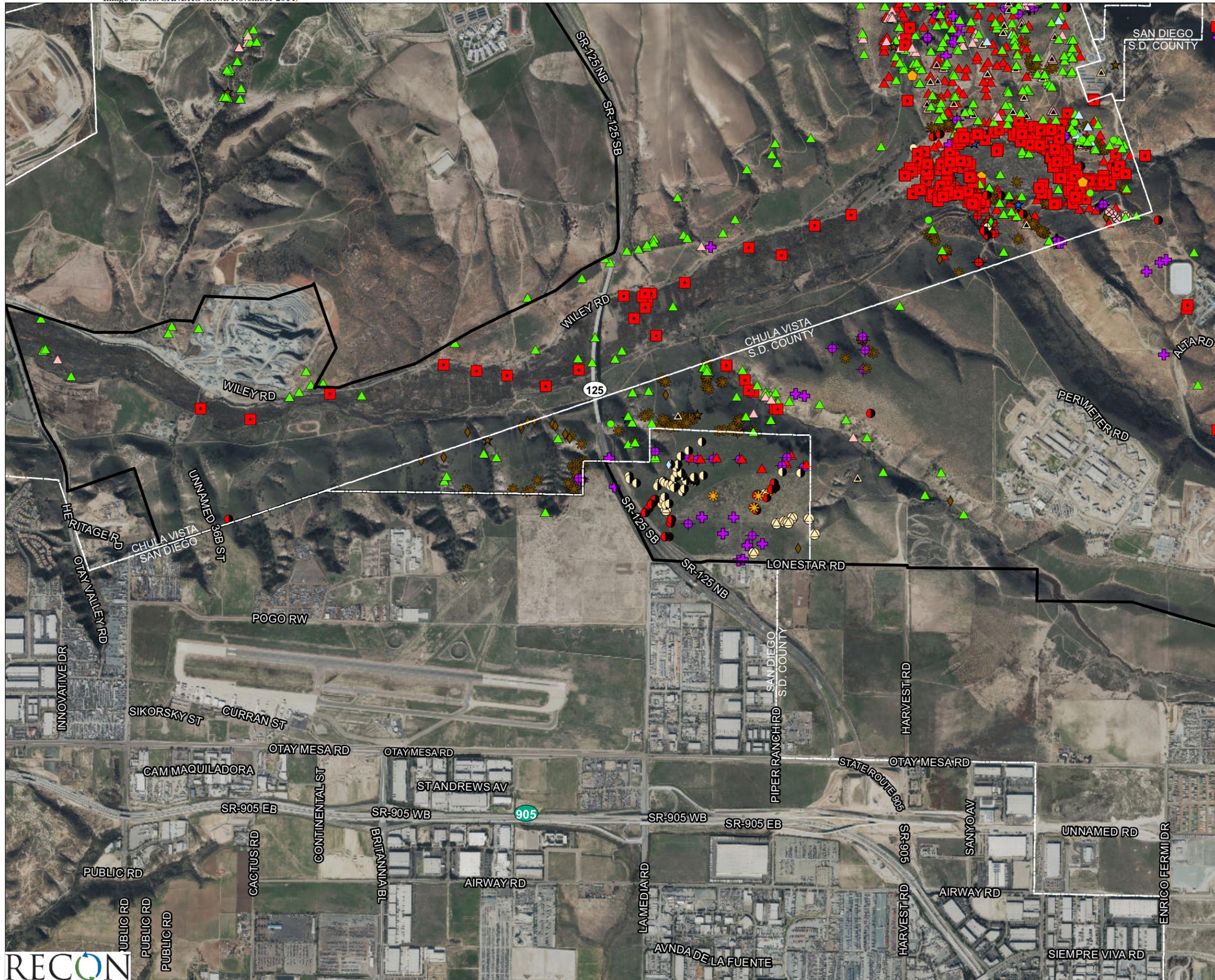
□ Otay Trail Study Area

**Species**

- Belding's Orange-throated Whiptail
- ▲ Coast Horned Lizard
- ▲ Coastal California Gnatcatcher
- ◆ Cooper's Hawk
- ▲ Gander's Pitcher Sage
- ▲ Golden Eagle
- ★ Mexican Flannelbush
- ★ Northern Harrier
- ◆ Orcutt's Brodiaea
- ✚ Palmer's Goldenbush
- ✚ Quino Checkerspot Butterfly
- ⊗ San Diego Goldenstar
- ▲ Southern California Rufous-crowned Sparrow
- Tecate Cypress
- ✚ Variegated Dudleya
- Western Bluebird



**FIGURE 3-6**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



□ Otay Trail Study Area

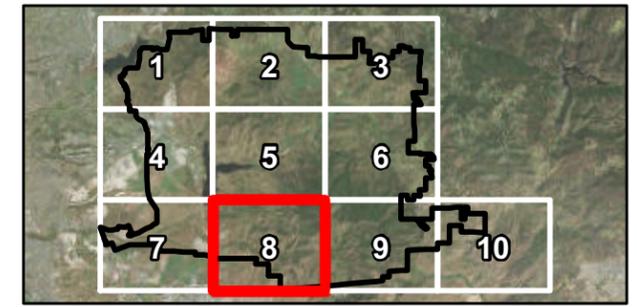
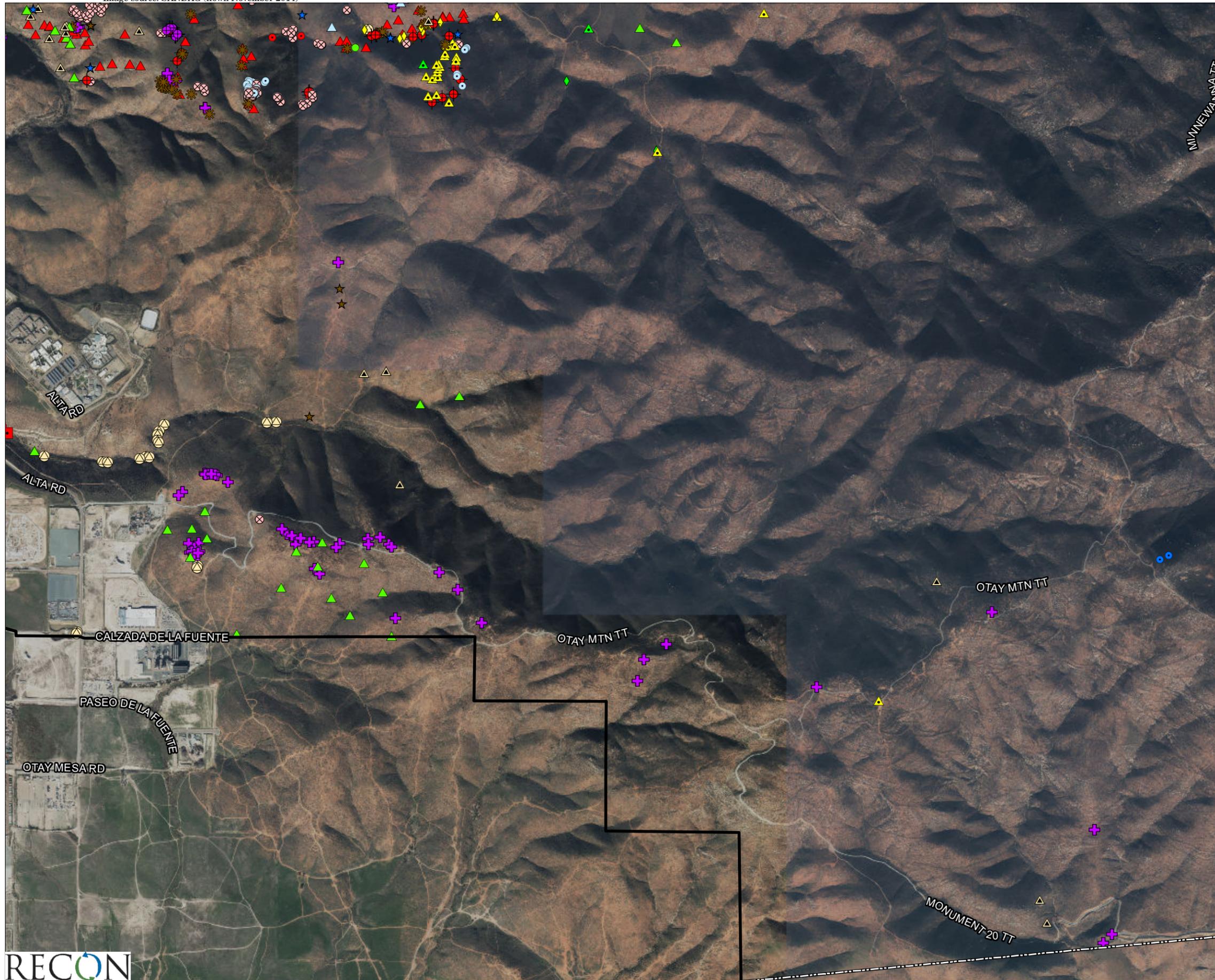
**Species**

- American Peregrine Falcon
- Belding's Orange-throated Whiptail
- ▲ Coast Barrel Cactus
- ▲ Coast Horned Lizard
- ▲ Coastal Cactus Wren
- ▲ Coastal California Gnatcatcher
- Cooper's Hawk
- Least Bell's Vireo
- ★ Northern Harrier
- ◆ Otay Manzanita
- ◆ Otay Mesa Mint
- ◆ Otay Tarplant
- ✚ Quino Checkerspot Butterfly
- ✱ Riverside Fairy Shrimp
- ✱ San Diego Barrel Cactus
- San Diego Button Celery
- San Diego Fairy Shrimp
- ⊗ San Diego Goldenstar
- ▲ Snake Cholla
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer
- ▲ Spreading Navarretia
- Tecate Cypress
- ⊗ Thorne's Hairstreak
- ✚ Variegated Dudleya
- Western Burrowing Owl



**FIGURE 3-7**  
 Federally and State-listed Threatened and Endangered Species and MSCP Covered Species

Image source: SANDAG (flown November 2014)



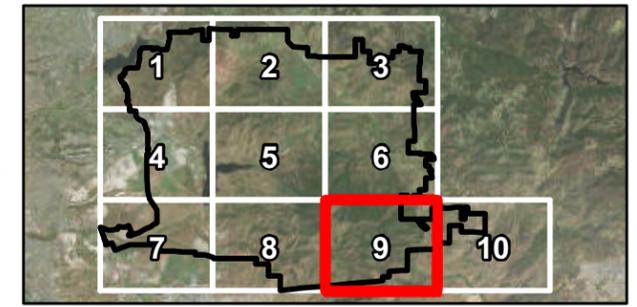
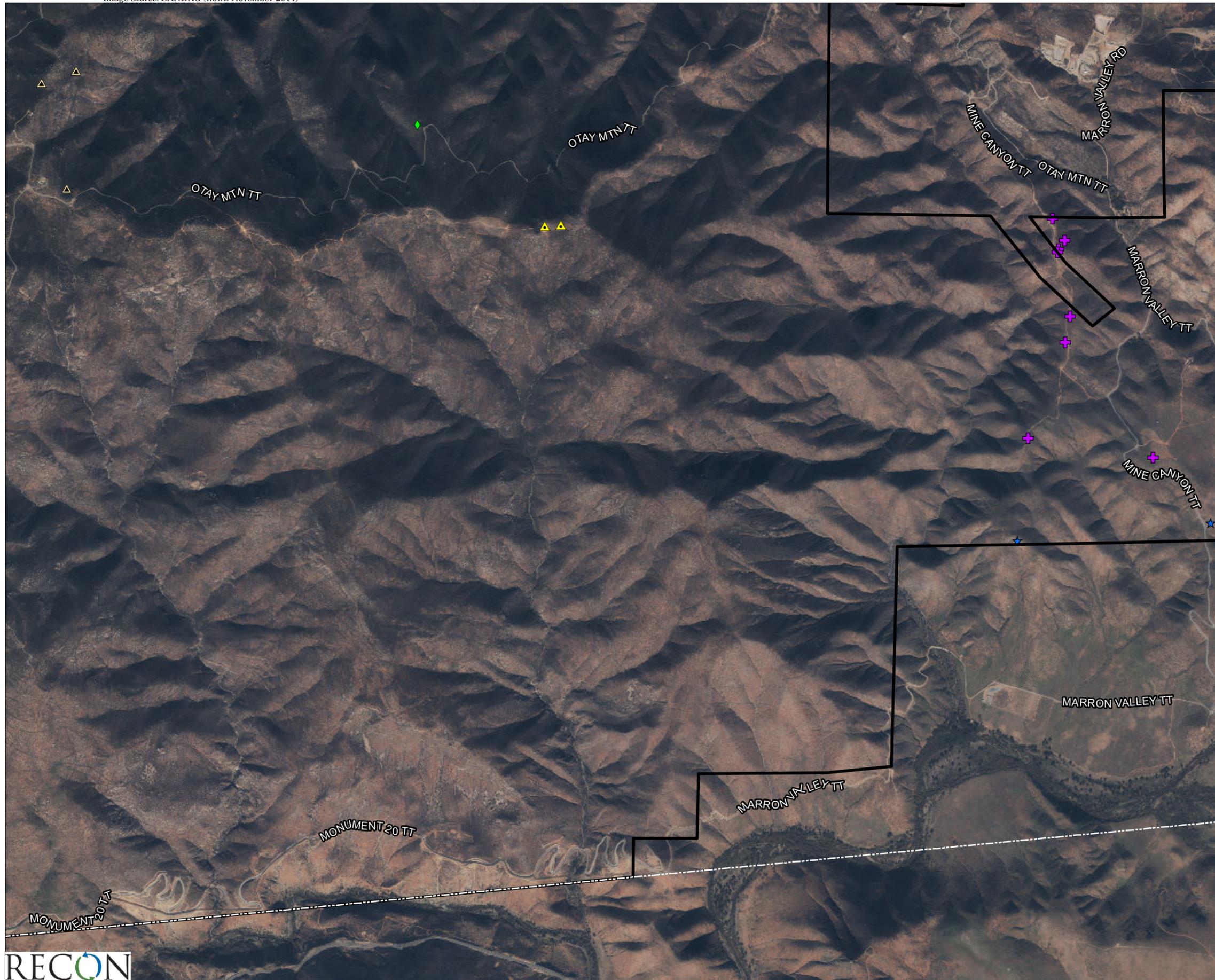
□ Otay Trail Study Area

**Species**

- Belding's Orange-throated Whiptail
- ▲ Coast Barrel Cactus
- ▲ Coast Horned Lizard
- ▲ Coastal California Gnatcatcher
- Dunn's Mariposa Lily
- Encinitas Baccharis
- ▲ Gander's Pitcher Sage
- ▲ Golden Eagle
- Least Bell's Vireo
- ★ Northern Harrier
- ◆ Orcutt's Brodiaea
- ◆ Otay Manzanita
- ✚ Quino Checkerspot Butterfly
- ✱ San Diego Barrel Cactus
- ⊗ San Diego Goldenstar
- Small-leaved Rose
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer
- Tecate Cypress
- ✚ Variegated Dudleya
- Western Burrowing Owl



**FIGURE 3-8**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



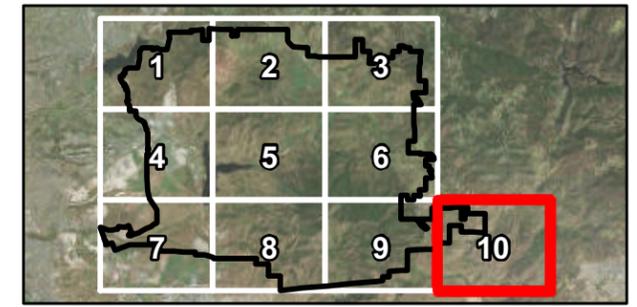
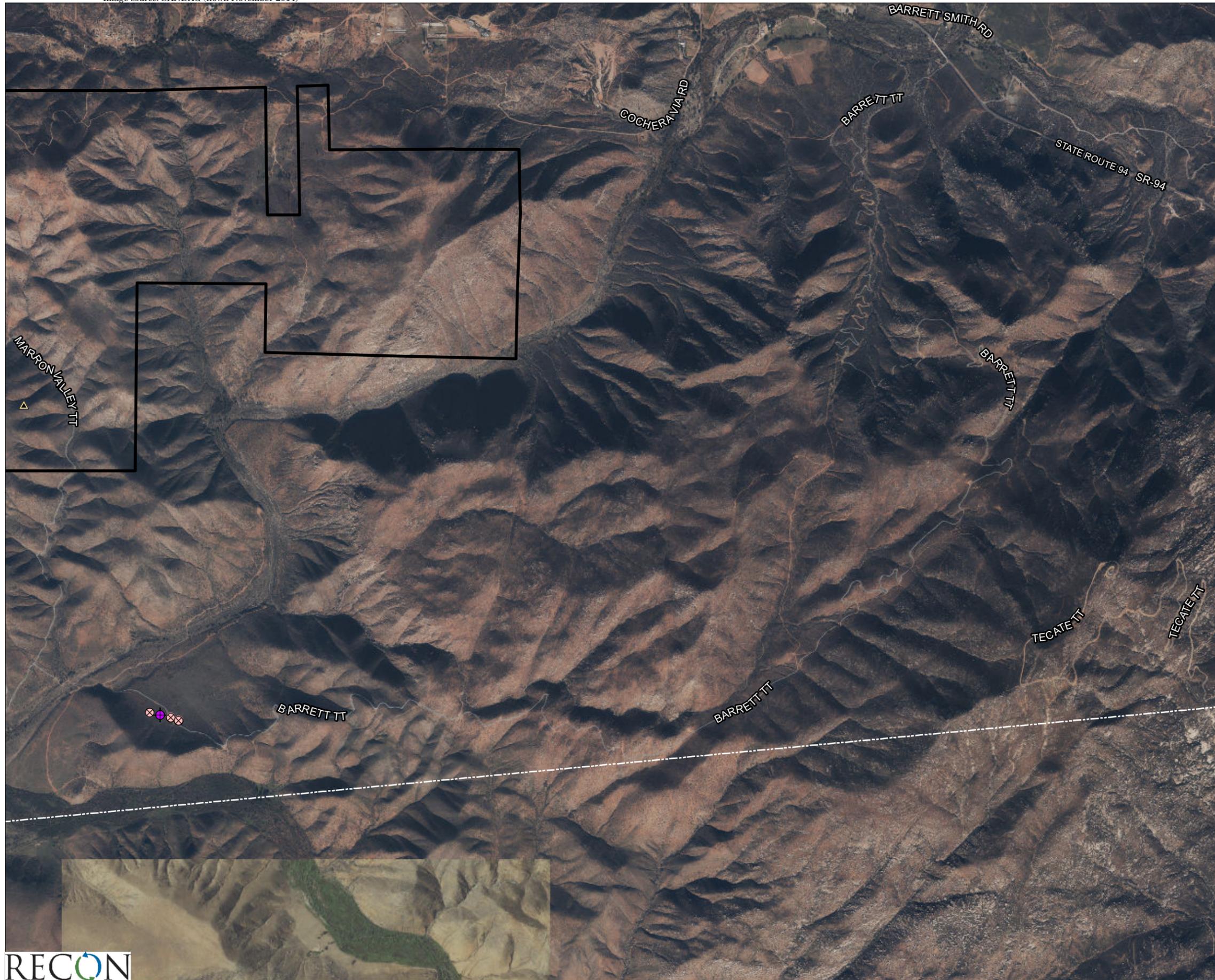
□ Otay Trail Study Area

**Species**

- ▲ Felt-leaved Monardella
- ▲ Gander's Pitcher Sage
- ◆ Otay Manzanita
- ✚ Quino Checkerspot Butterfly
- ▲ Southern California Rufous-crowned Sparrow
- ★ Southern Mule Deer



**FIGURE 3-9**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



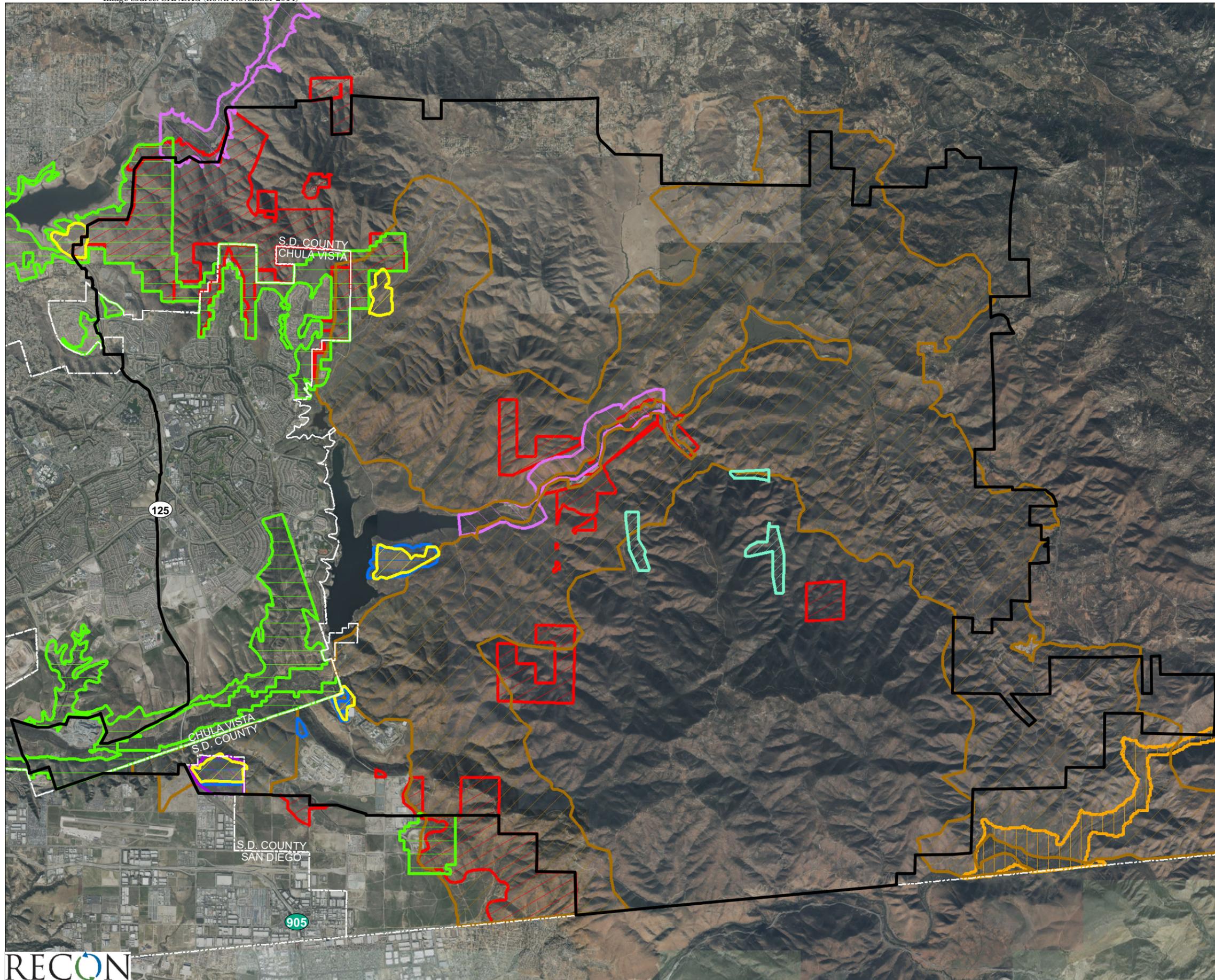
□ Otay Trail Study Area

**Species**

- ⊗ San Diego Goldenstar
- ▲ Southern California Rufous-crowned Sparrow
- ◆ Variegated Dudleya



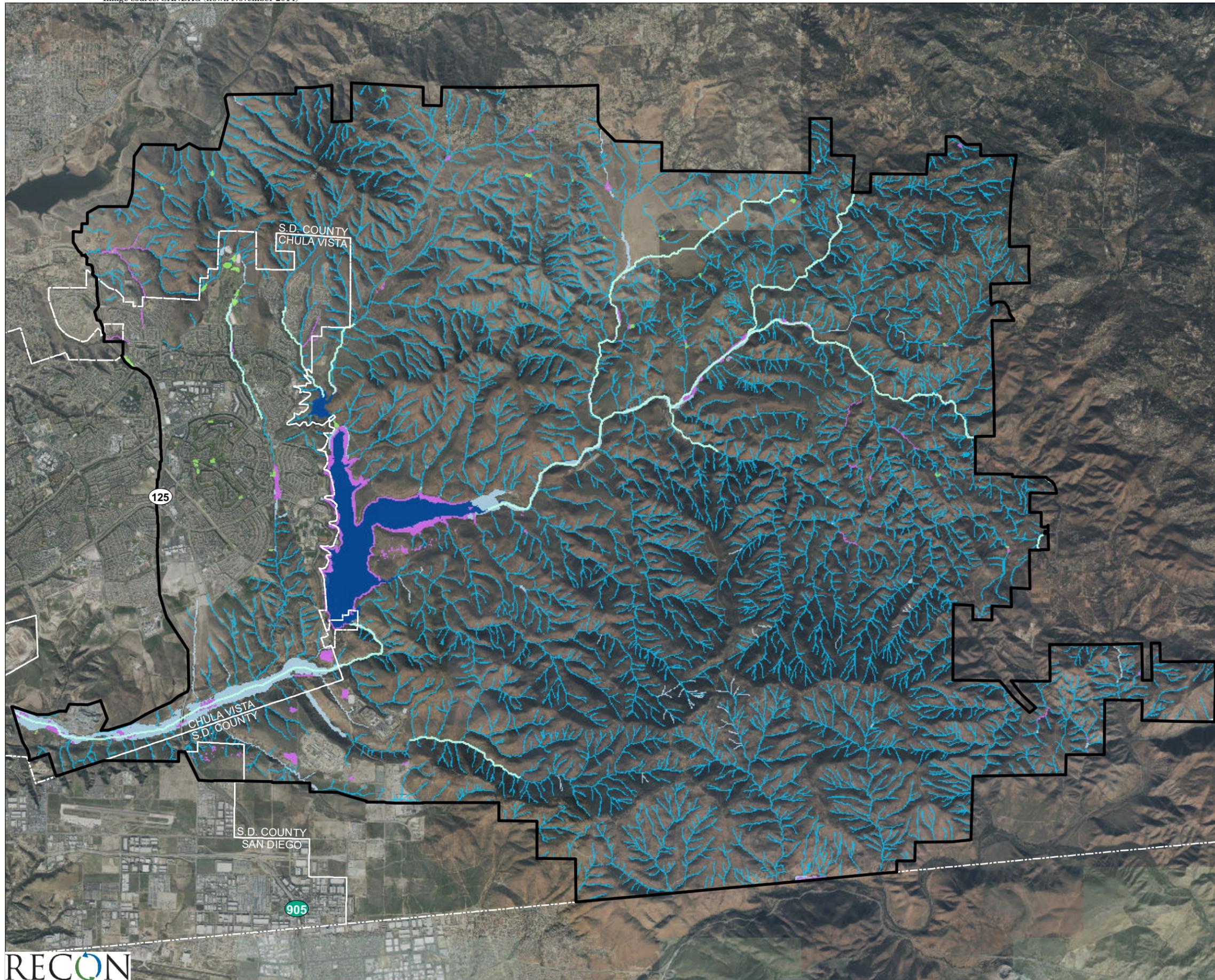
**FIGURE 3-10**  
 Federally and State-listed Threatened  
 and Endangered Species  
 and MSCP Covered Species



- Otay Trail Study Area
- Final Critical Habitats**
- Arroyo Toad
- Coastal California Gnatcatcher
- Least Bell's Vireo
- Mexican Flannelbush
- Otay Tarplant
- Quino Checkerspot Butterfly
- Riverside Fairy Shrimp
- San Diego Fairy Shrimp
- Spreading Navarretia



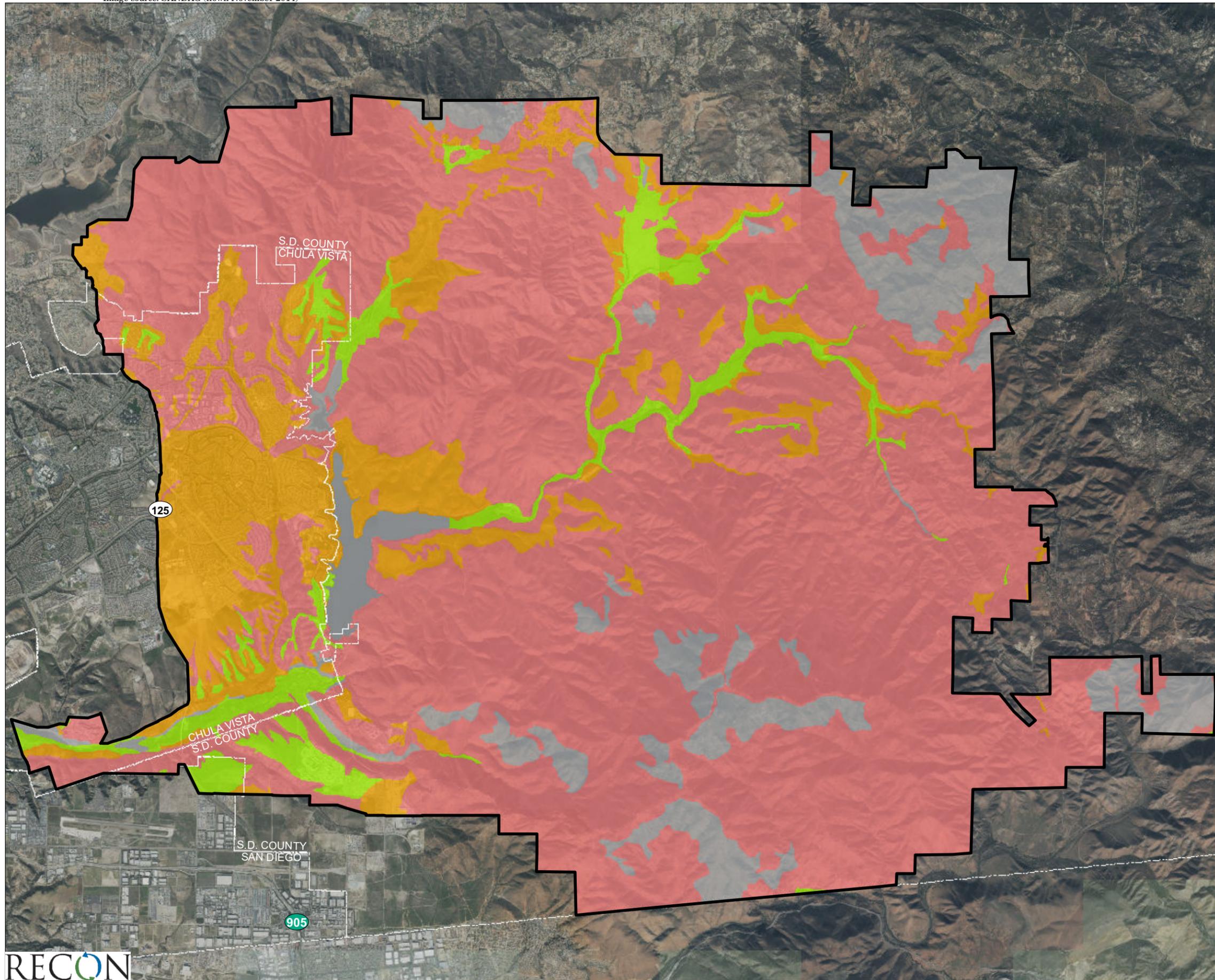
FIGURE 4  
USFWS Critical Habitat



-  Otay Trail Study Area
-  Rivers (SanGIS)
- National Wetland Inventory (USFWS)**
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Riverine



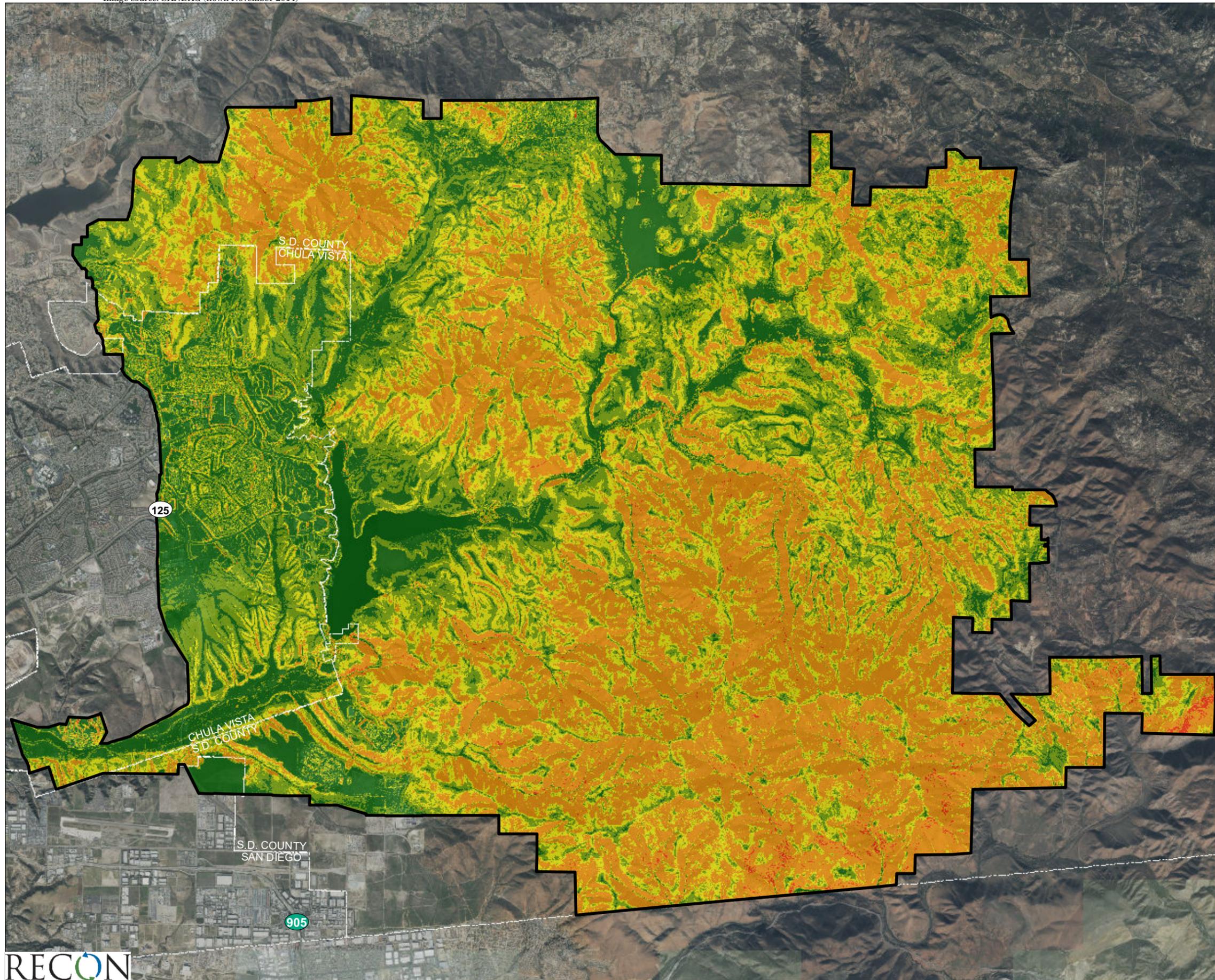
**FIGURE 5**  
Potential Jurisdictional Resources



-  Otay Trail Study Area
- Soils (Trail/Road Erodibility Rating)**
-  Severe
-  Moderate
-  Slight
-  Not rated



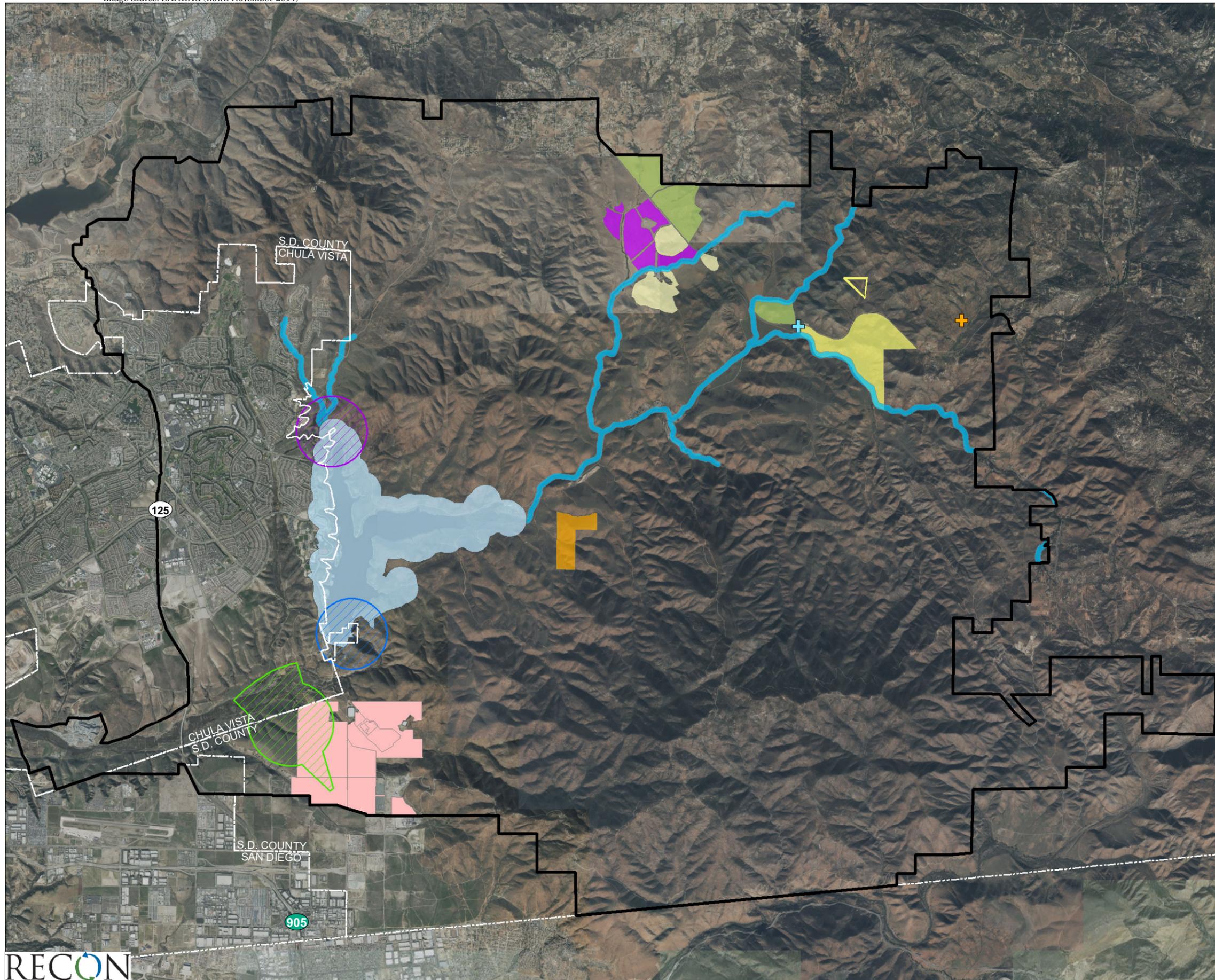
FIGURE 6  
Soil Erodibility



-  Otay Trail Study Area
- Slope**
-  less than 10% slope
-  10% to less than 25% slope
-  25% to less than 40% slope
-  40% to less than 90% slope
-  90% slope or steeper



FIGURE 7  
Slope



- Otay Trail Study Area
- Formerly Used Defense Sites (FUDS)
- Munitions Response Areas (MRAs)
- Correctional Facility Parcels
- Hollenbeck Canyon Wildlife Area**
- Closed Areas
- Hunting Dog Training Area
- Existing State Housing
- Proposed Hunting Dog Training Ponds and Fields
- Rancho Jamul Ecological Reserve**
- Closed Areas
- Special Hunting Areas
- San Diego National Wildlife Refuge Draft CCP**
- Proposed Hunting Area
- City of San Diego Public Utilities Trail Guidelines – Source Water Protection Zones**
- Reservoir Outlet (2,500 foot buffer)
- Upper Otay Dam (2,500 foot buffer)
- Lower Otay Reservoir (1,000 foot buffer)
- Major Tributary (200 foot buffer)



**FIGURE 8**  
Potential Land Use Conflicts