

APPENDIX A

DETAILED MAPS OF THE STUDY AREA

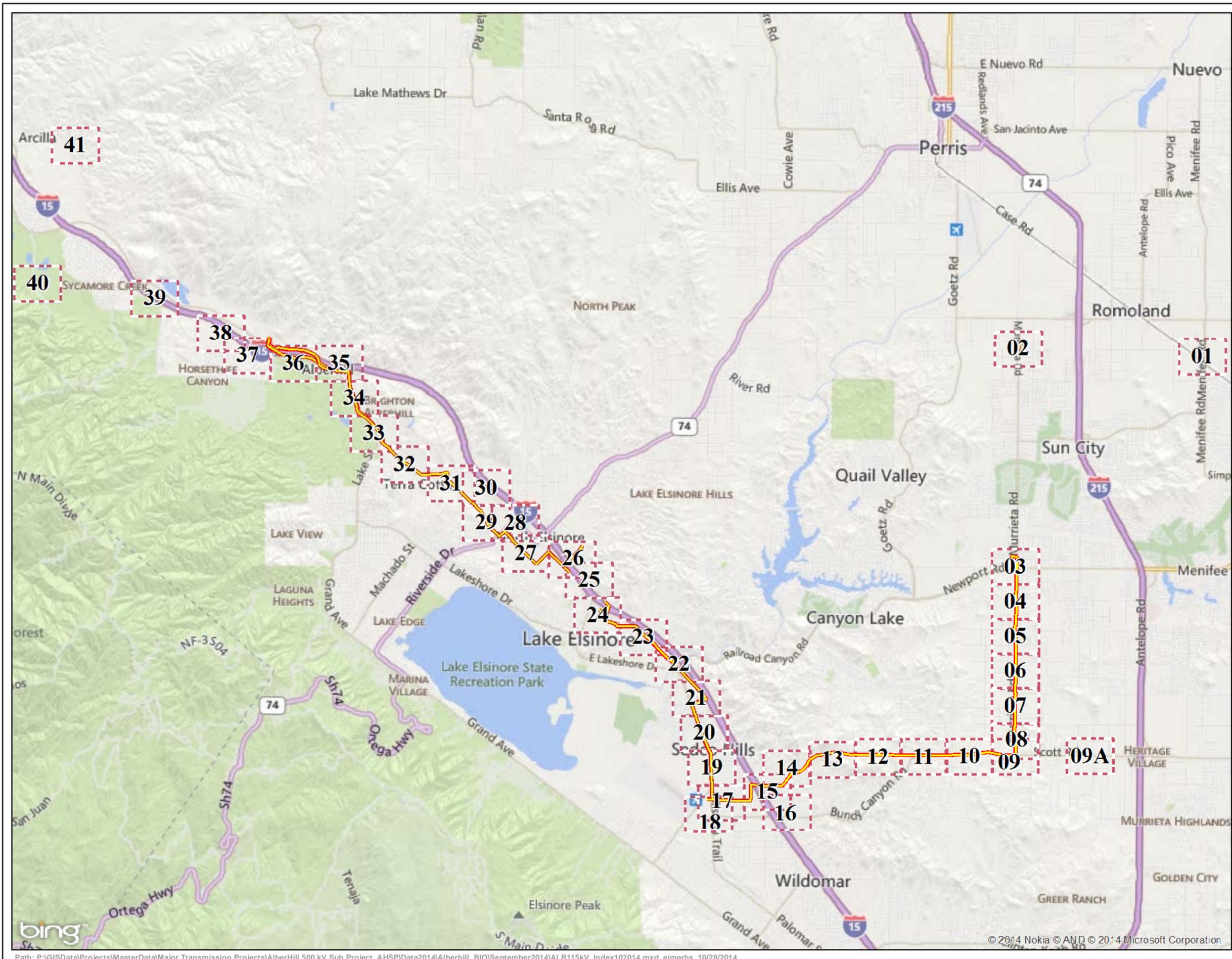
A1-115-kV Sub T/L Map Book

A2-500-kV T/L Map Book

A3-Proposed Substation Map

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A1
115-KV SUB T/L MAP BOOK

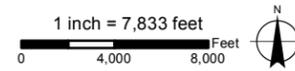


Legend

COMMON NAME	ACRONYM
Alluvial Scrub	RAFS
Bald Eagle	BAEA
Bell's Sage Sparrow	BSSP
Black-tailed Jackrabbit	BTJA
Burrowing Owl	BUOW
California Black Walnut	CBWA
California Gnatcatcher	CAGN
California Horned Lark	CHLA
chaparral sand-verbena	CHSV
Coast Live Oak	CLOA
Coast Live-Oak Woodland Riparian	CLOWR
Coast Live-Oak Woodland Upland	CLOWU
Coastal Western Whiptail	CWWH
Cooper's hawk	COHA
Costa's hummingbird	COHU
Coulter's Goldfields	COGO
Coulter's Matilija Poppy	CMPO
Douglas' microseris	DOMI
Downy Woodpecker	DOWO
Golden Eagle	GOEA
kangaroo rat (sign)	KARA
Lawrence's goldfinch	LAGO
Lawrence's Goldfinch	LAGO
Least Bell's Vireo	LBVI
Lincoln's Sparrow	LISP
Loggerhead Shrike	LOSH
long-spined spine flower	LSPP
Los Angeles Pocket Mouse	LAPM
Munz's Onion	MUON
Northern Harrier	NOHA
Nuttall's woodpecker	NUWO
Oak Titmouse	OATI
Orange-Throated Whiptail	OTWH
Osprey	OSPR
Palmer's grapplinghook	PAGR
Paniculate Tarplant	PATA
Parry's spineflower	PASP
Peninsular Spineflower	PESP
Peregrine Falcon	PEFA
Purple Martin	PUMA
Red-diamond rattlesnake	RDRA
red-tailed hawk nest	RTHA Nest
Robinson's peppergrass	ROPE
Rosy Boa	ROBO
Roundleaf Stork's Bill	RLSB
Rufous-crowned Sparrow	RCSP
Sad Diego Wood Rat	SDWO
San Diego ambrosia	SDAM
San Jacinto Valley Crownscale	SJVC
Sharp-shinned Hawk	SSHA
SKR	SKR
Slender-horned Spineflower	SHSP
small-flowered morning glory	SFMG
Smooth Tarplant	SMTA
southern live oak (non-native)	SLOA
Spadefoot Toad	WESP
Swainson's Hawk	SWHA
White Pelican	WHPE
White Rabbit Tobacco	WRTO
White-tailed Kite	WTKI

Map Notes
 -Map Current as of 10/30/2014

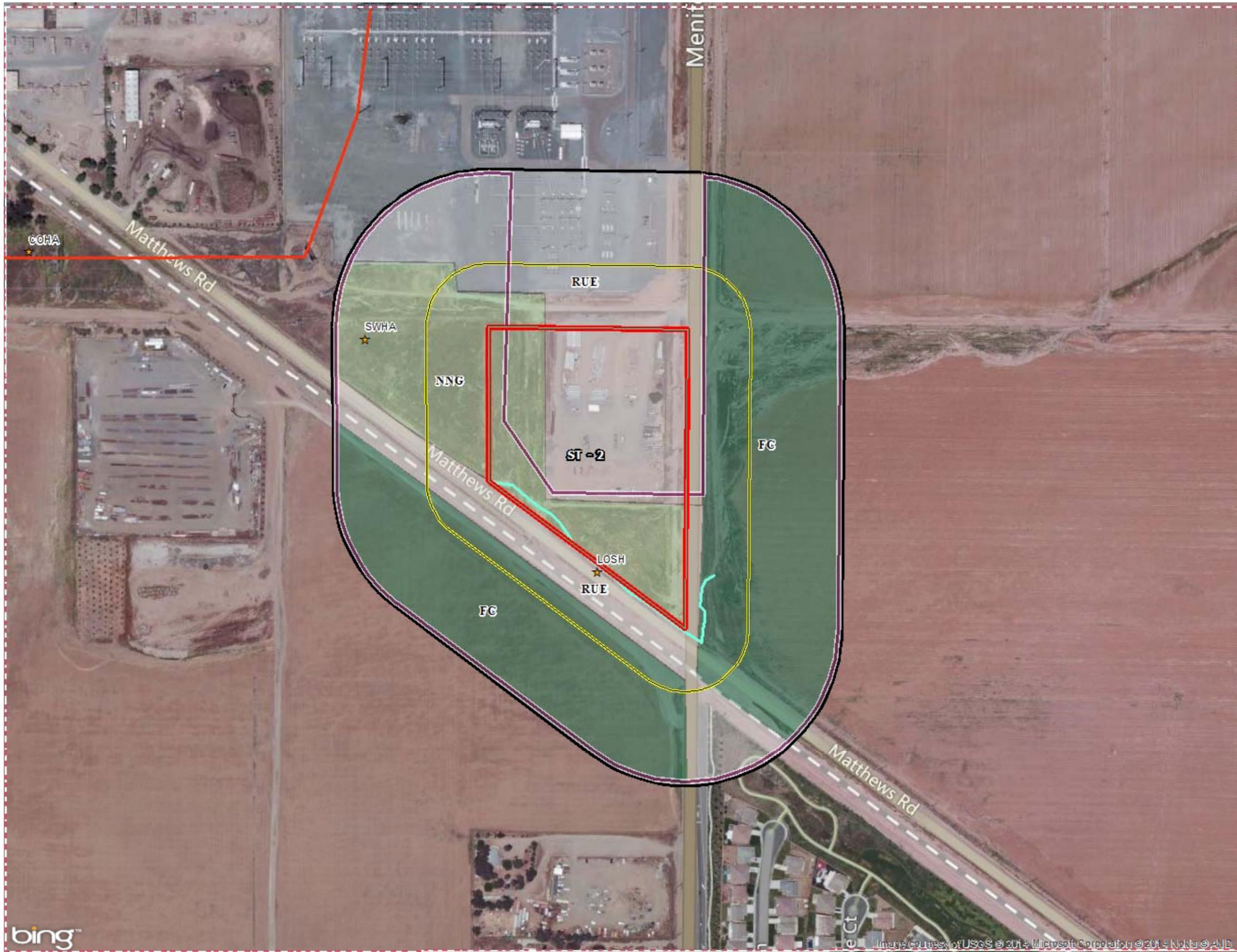
Map Index Grid



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Riverside County, California
Substation Index Map



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
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Vegetation Communities

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- MS - Mulefat Scrub
- FC - Field Croplands
- TS - Tamarisk Scrub
- G/O - Grove/Orchard
- RAFS - Alluvial
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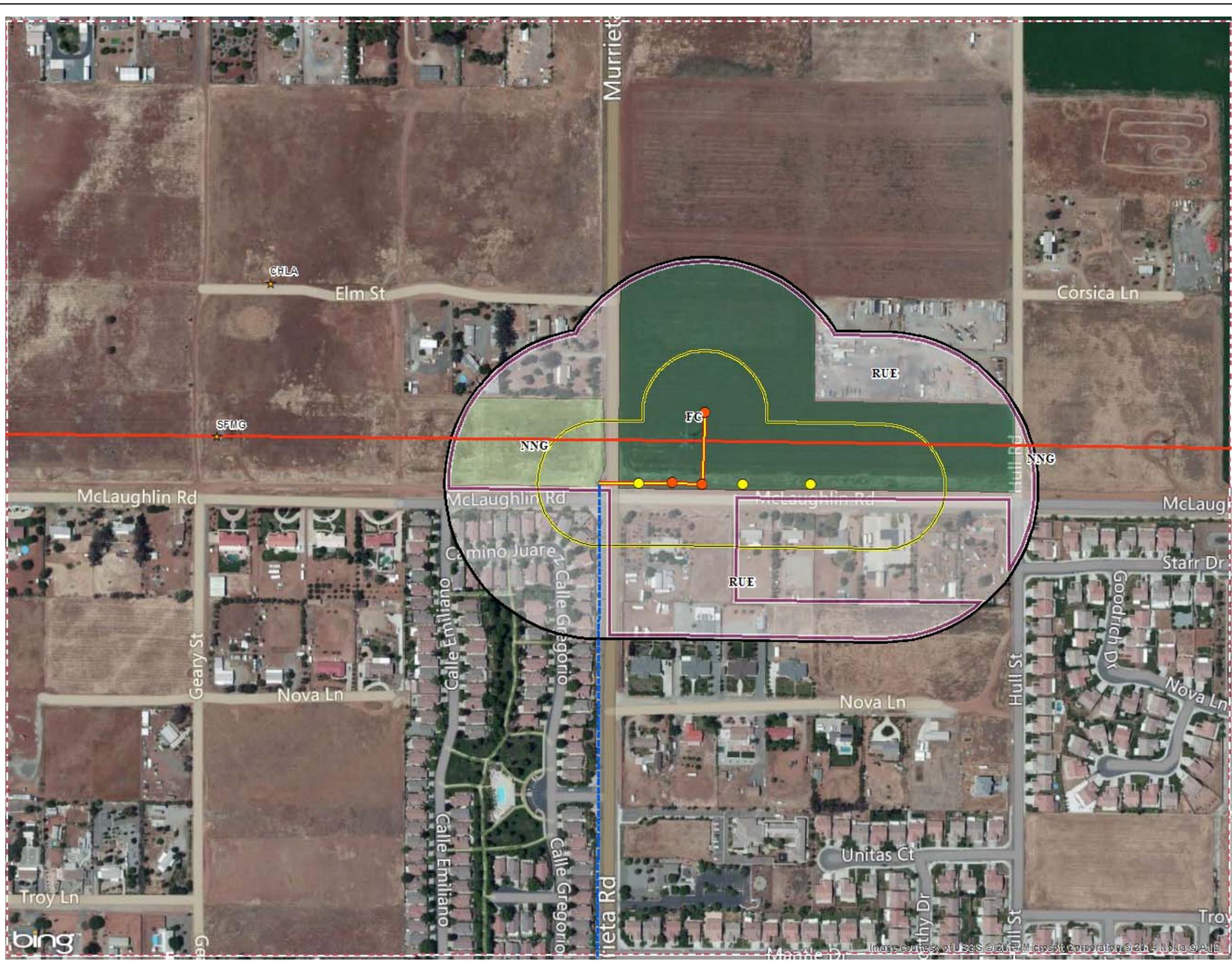
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 01



Legend

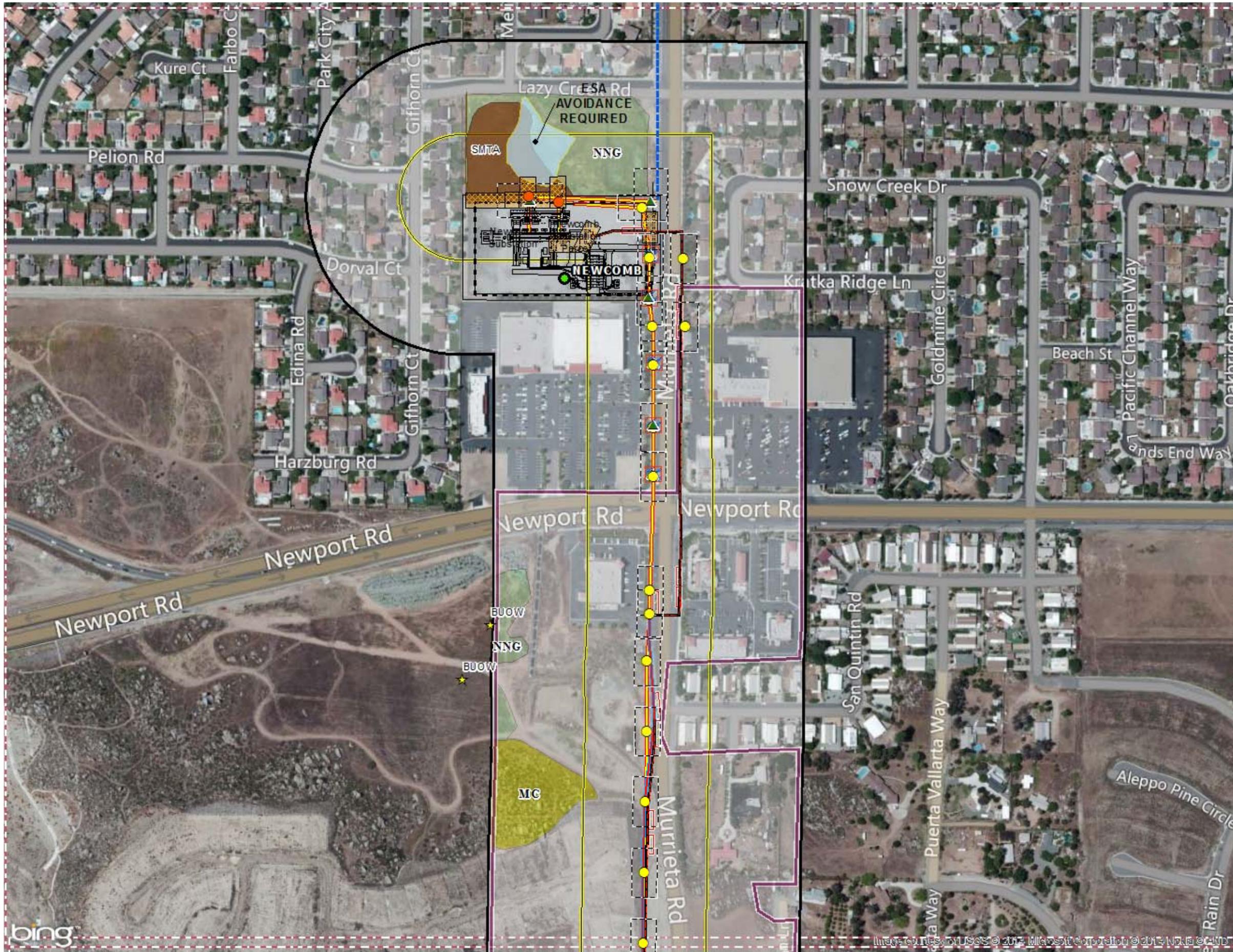
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 1 inch = 300 feet
 0 150 300 Feet



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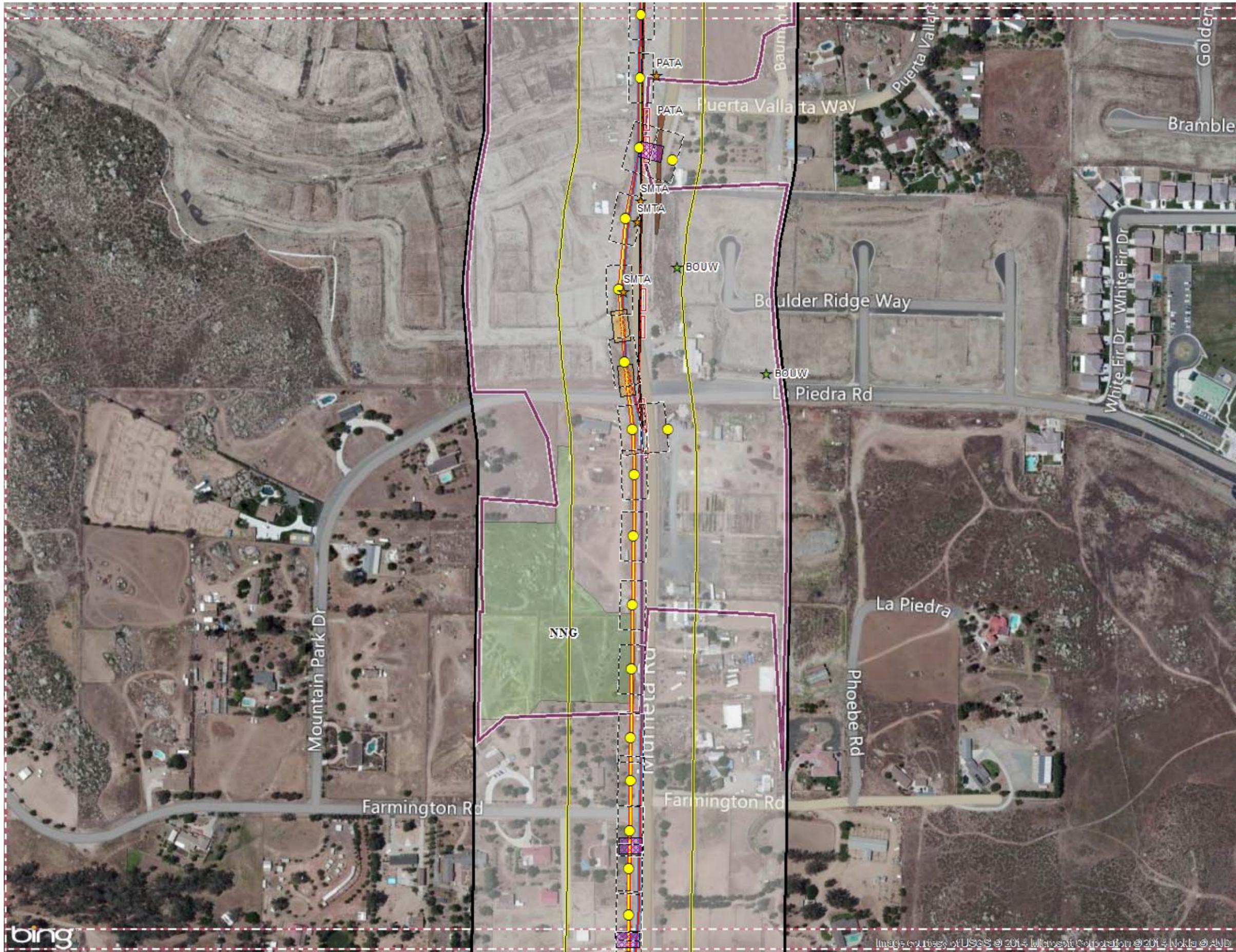
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Riverside County, California



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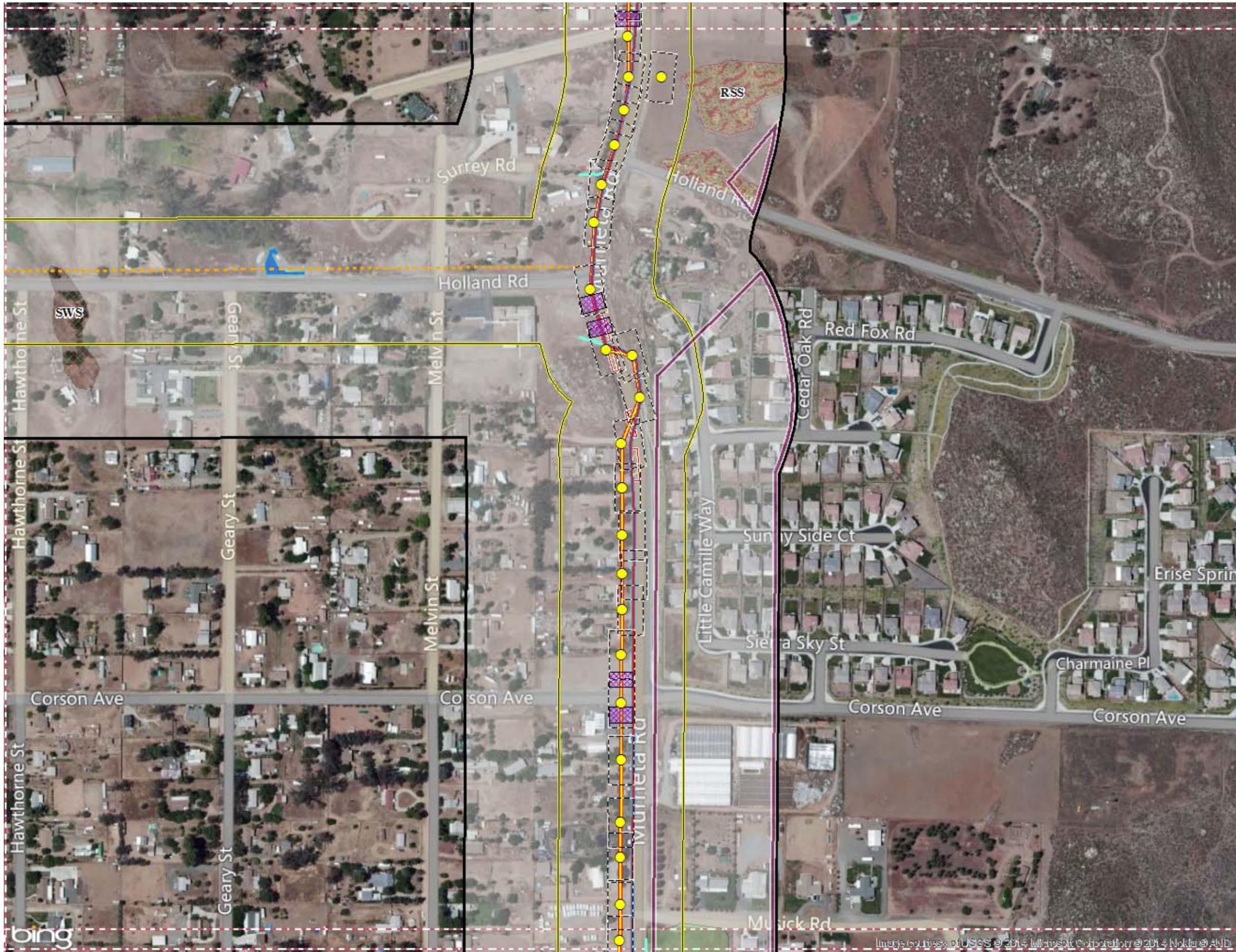
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 04



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Legend

Project Features

- | | |
|----------------------------------|-------------------------------------|
| ● Substation label | --- New 500 kV Transmission Route |
| □ Existing Towers | — Existing 500 kV Transmission Line |
| ■ New Towers | — Access Road, Existing |
| ○ Existing Pole | — Access Road, New |
| ● Modify Pole | — New OH Telecom Line |
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| □ Structure Work | — New 115kV Route |
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| □ Pulling Sites | □ Newcomb Substation Fence |
| □ Wire Setup Site | □ Substation Temporary Disturbance |
| □ Work | □ Substation Wall Grading Limit |
| □ Laydown Yards | □ Disturbance Area |

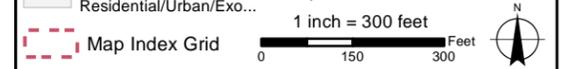
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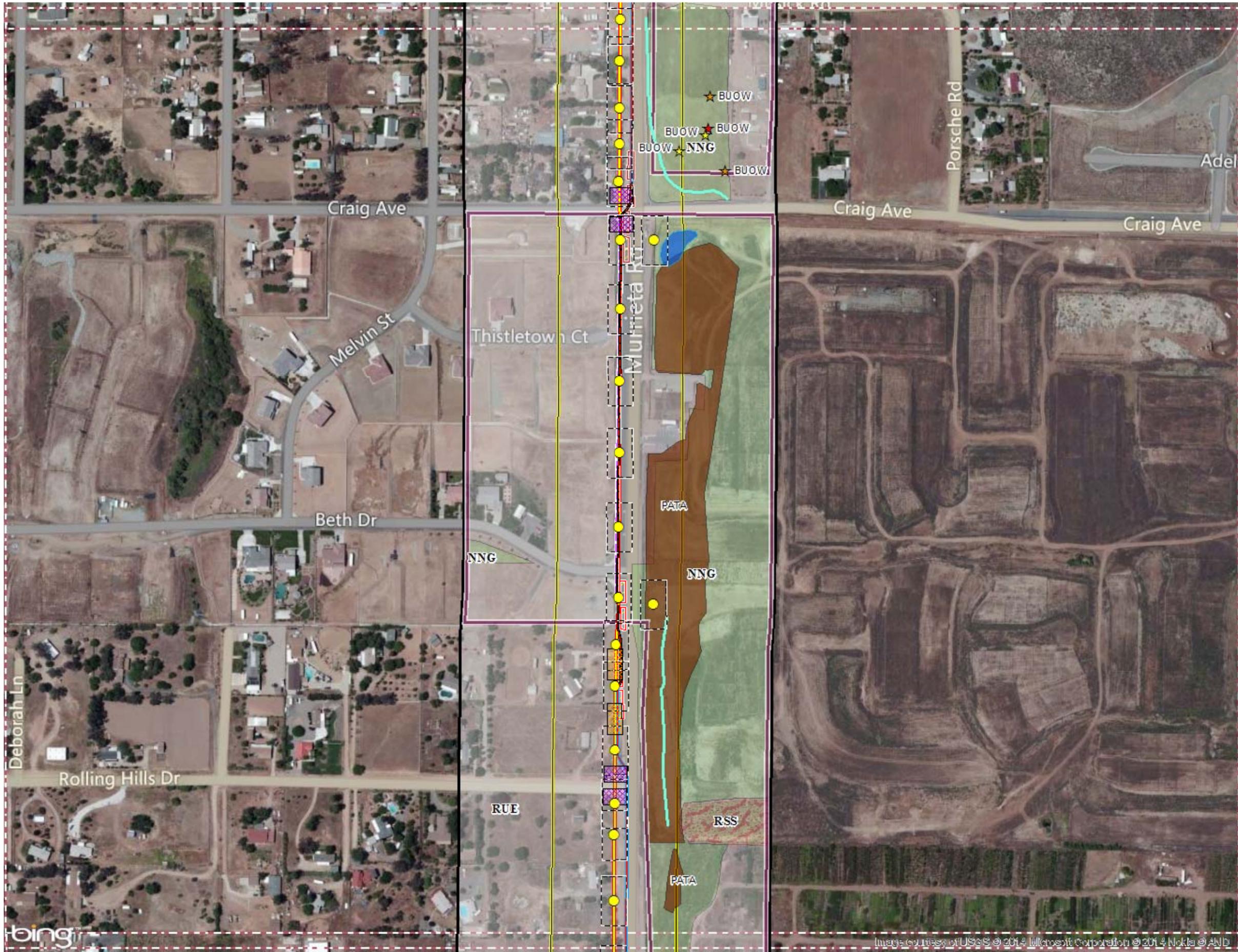
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



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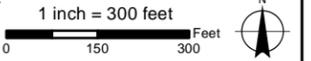
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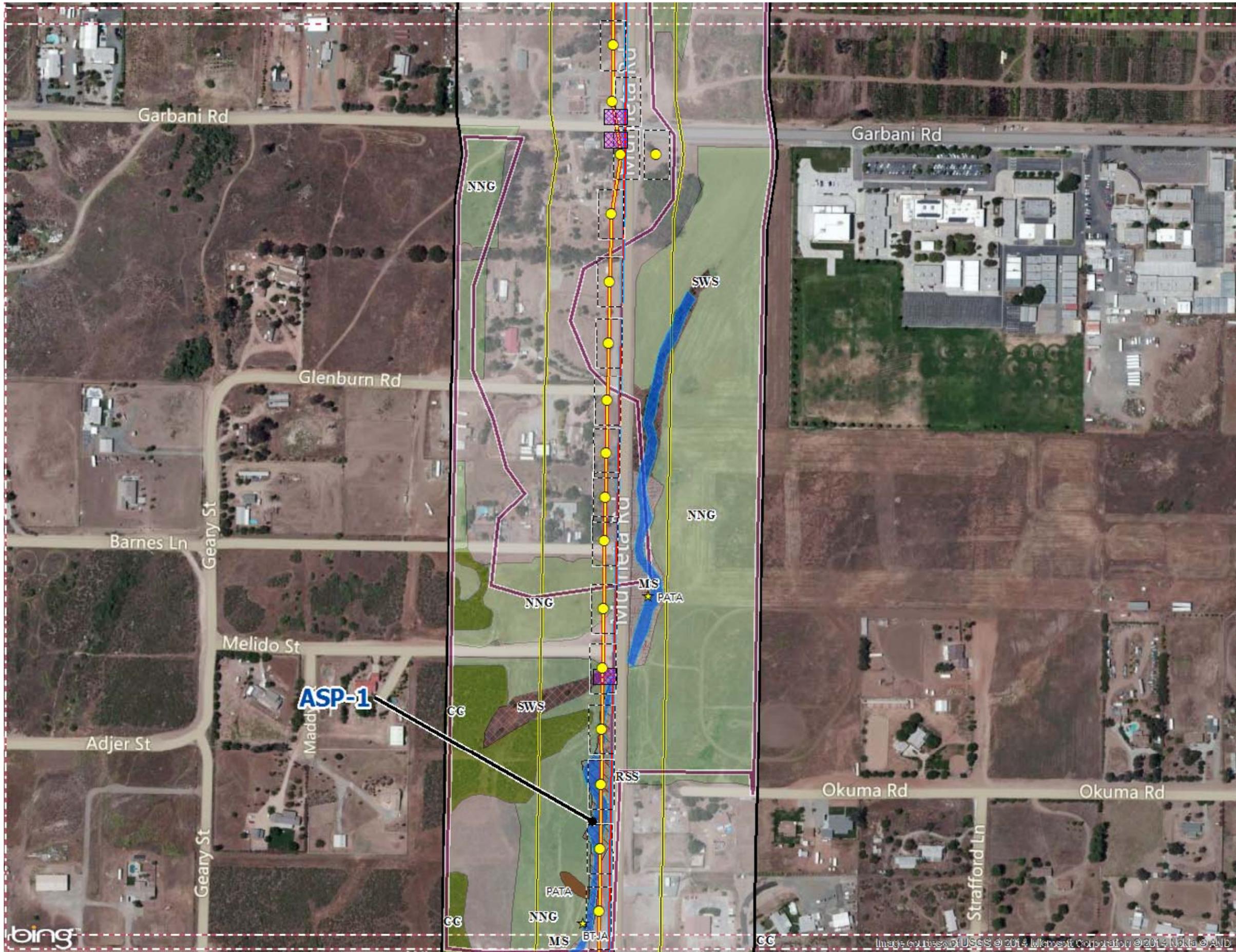
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 06



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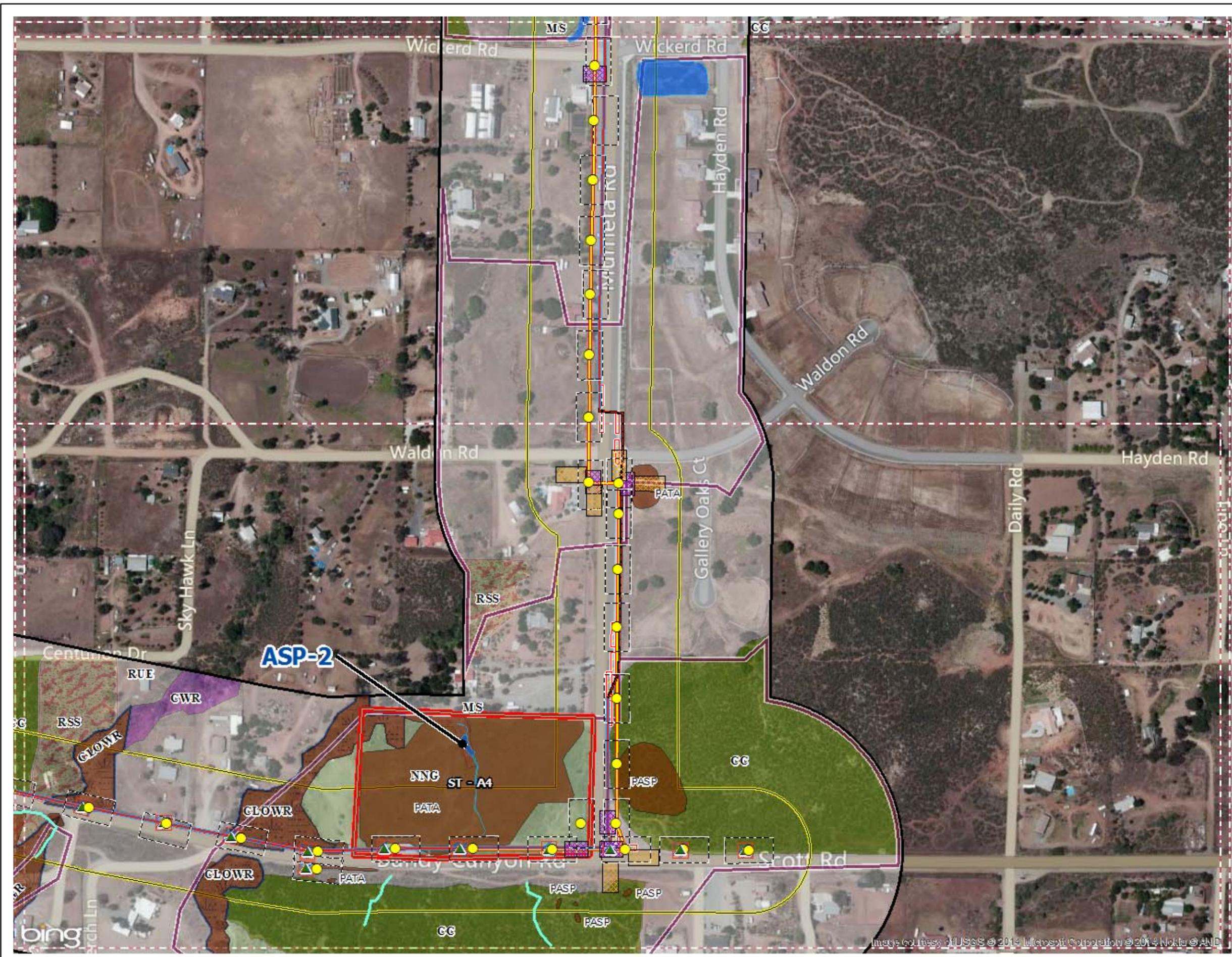


Riverside County, California

Subtransmission Map 07



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<ul style="list-style-type: none"> OW - Open Water MS - Mulefat Scrub FC - Field Croplands TS - Tamarisk Scrub G/O - Grove/Orchard RAFS - Alluvial MC - Mixed Chaparral CC - Chamise Chaparral AG - Disturbed Agriculture RSS - Riversidean Sage Scrub NNG - Non-Native Grasslands SWS - Southern Willow Scrub RUE - Residential/Urban/Exo... 	<ul style="list-style-type: none"> VFM - Valley Freshwater Marsh RAFS - Disturbed Alluvial Scrub CAM - Cismontane Alkali Marsh DRSS - Disturbed Riversidean Sage Scrub CLOWU - Coast Live-Oak Woodland Upland CLOWR - Coast Live-Oak Woodland Riparian SSR - Southern Sycamore Riparian Woodland CWR - Southern Cottonwood/Willow Riparian Forest
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*Map Current as of 10/30/2014

1 inch = 300 feet

0

150

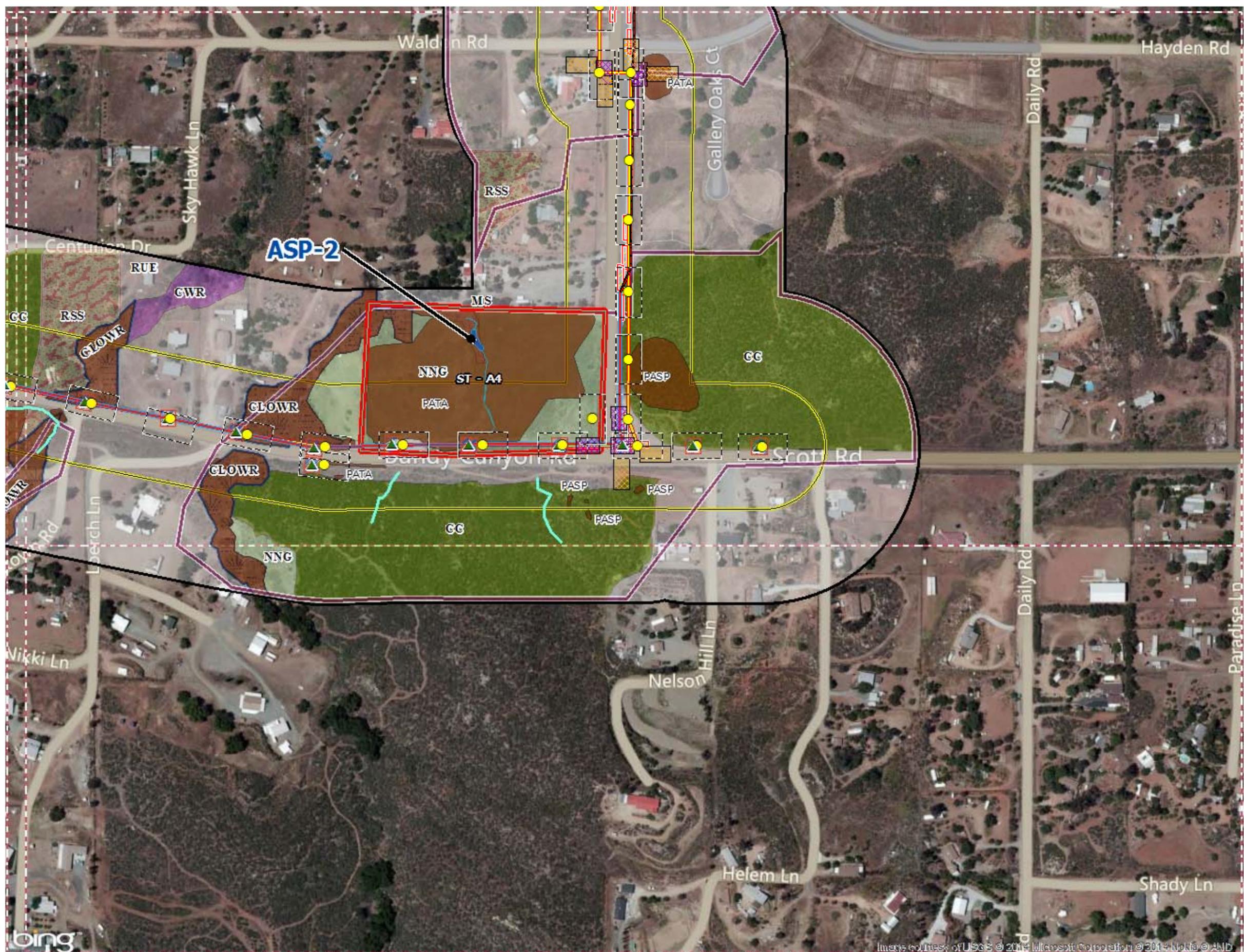
300

Feet

Biological Resources & Proposed Project Design
Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 08



Legend

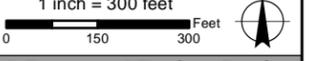
Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
- Structure Work
- Tower Disturbance
- Demolition
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work
- Laydown Yards
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
- Access Road, New
- New OH Telecom Line
- New UG Telecom Line
- New UG Distribution
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- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
- Alt Route
- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall
- Grading Limit
- Disturbance Area

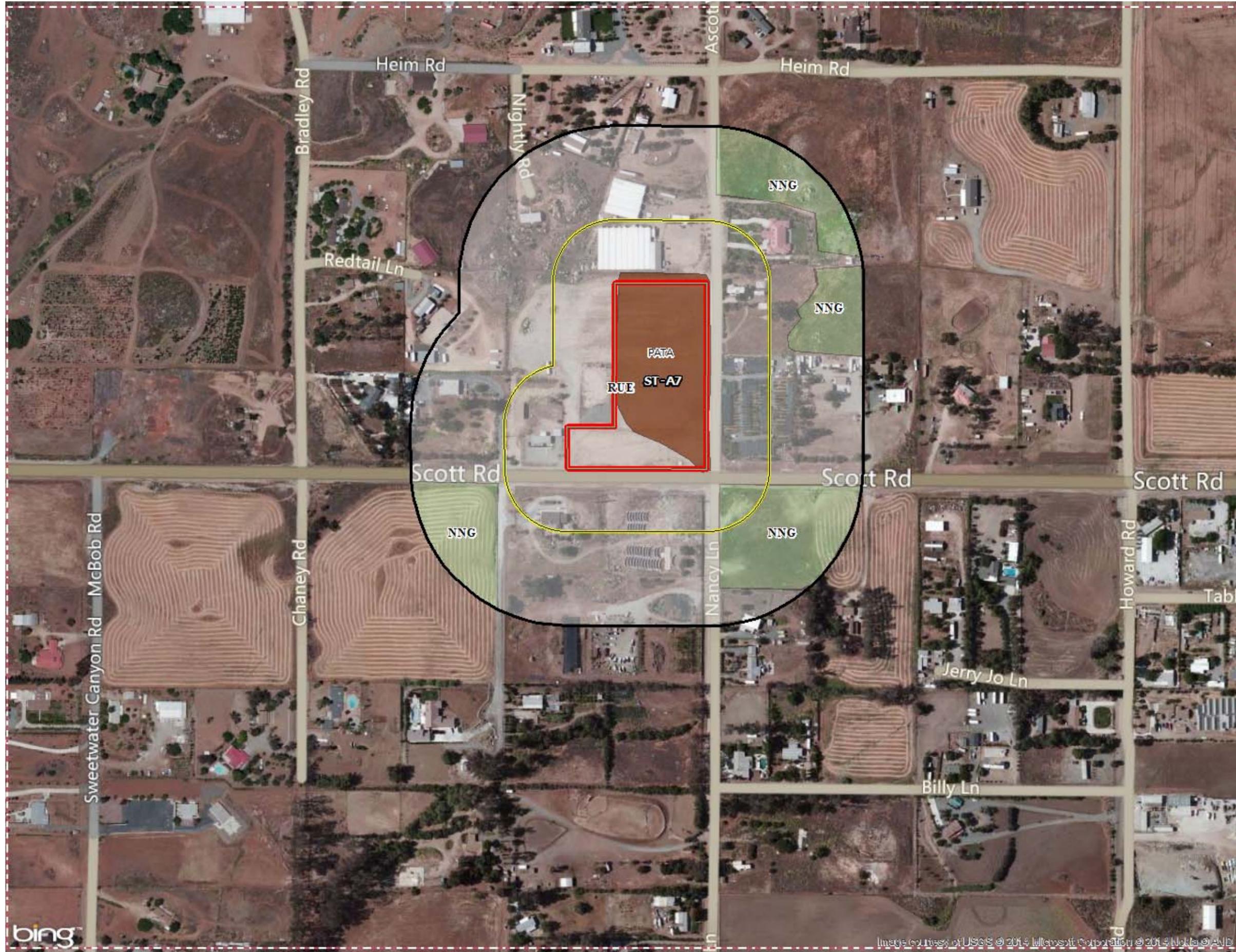
- #### Sensitive Species Data
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 - ★ Sensitive Species (2012)
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 - LBV Avoidance
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Legend

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- Modify Pole
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1 inch = 300 feet

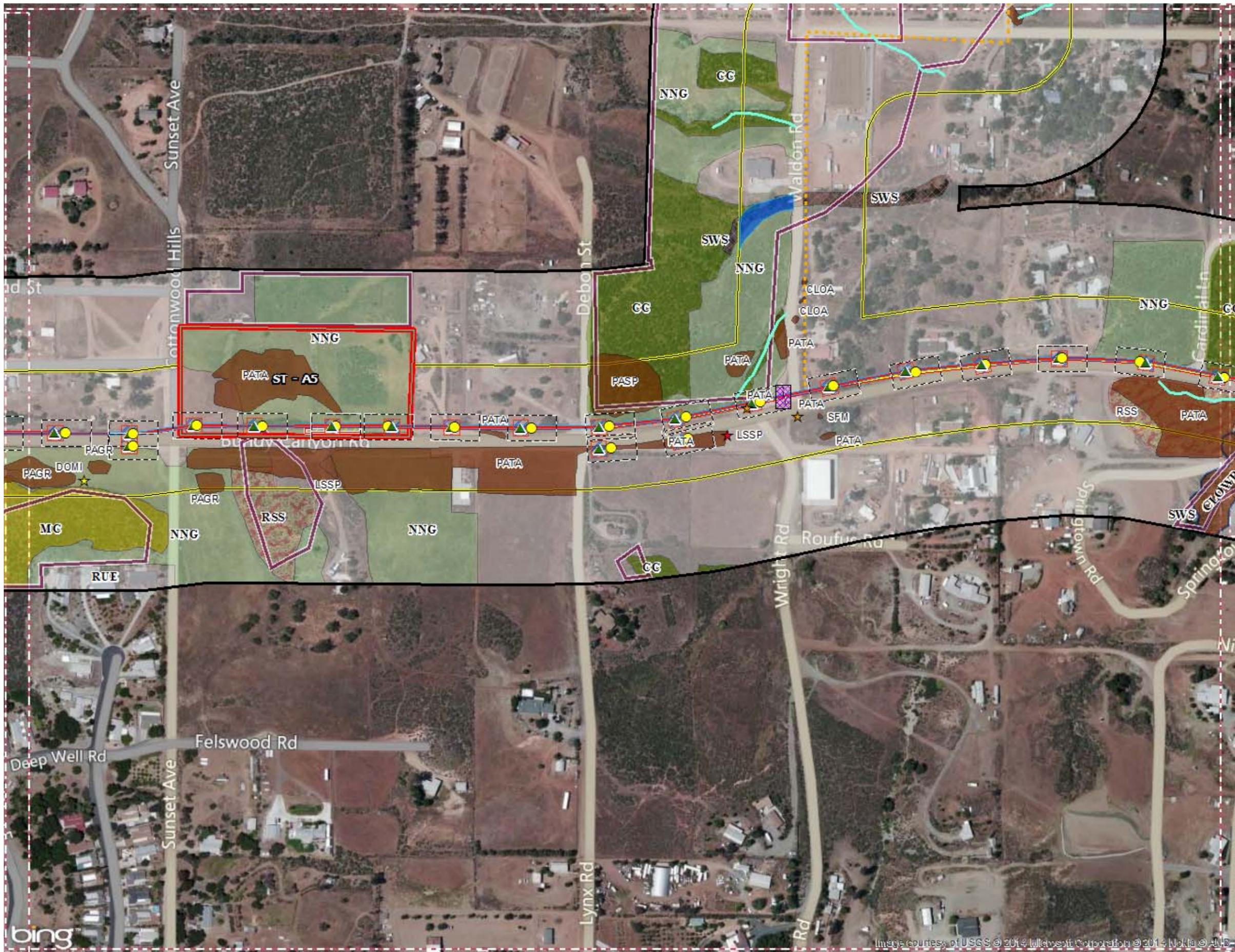
0 150 300 Feet

Map Index Grid

Biological Resources & Proposed Project Design
Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 09A



Legend

Project Features

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- Existing Towers
- New Towers
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- New TSP
- ▲ Remove
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Vegetation Communities

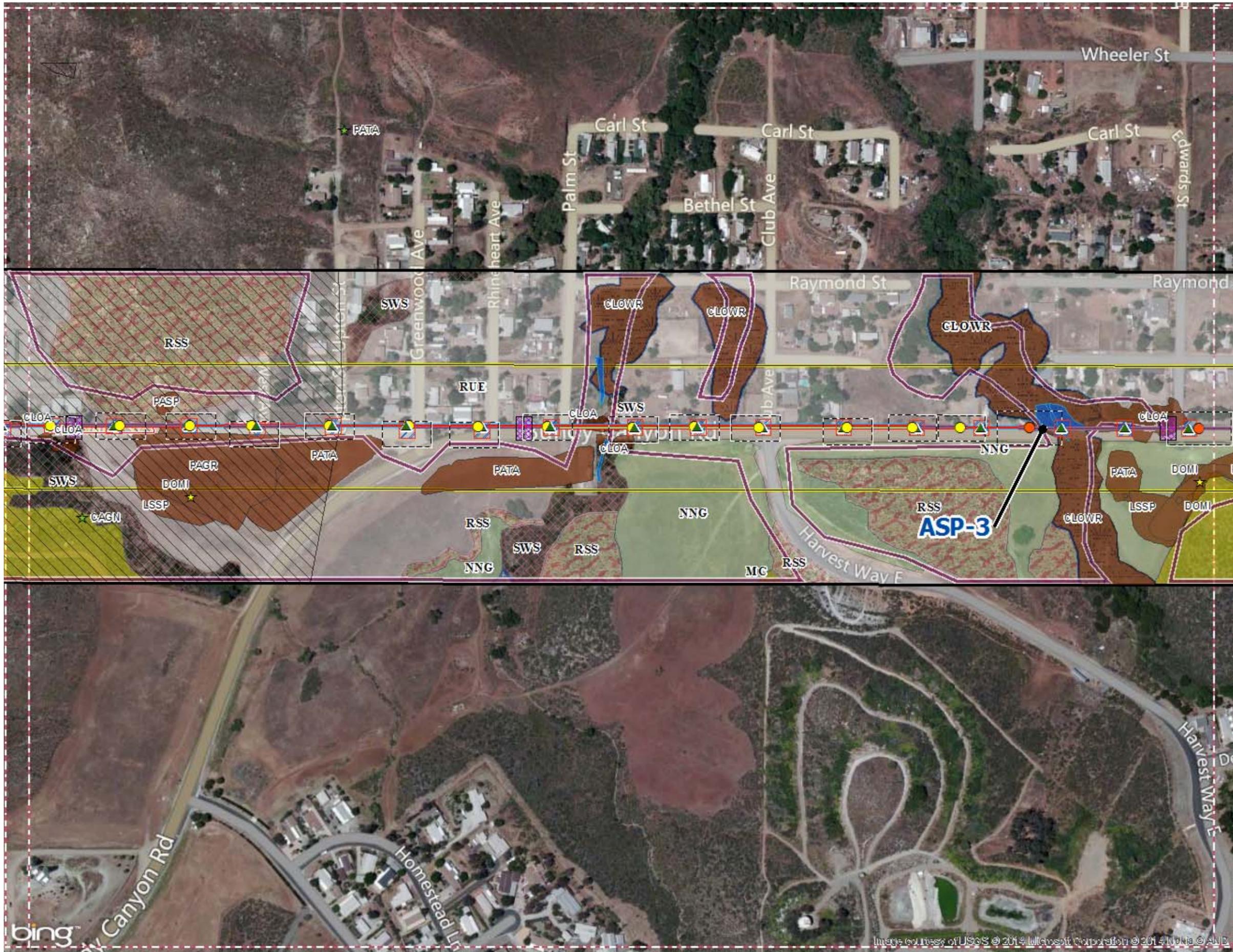
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Legend

Project Features

- | | |
|--------------------------------|-----------------------------------|
| Substation label | New 500 kV Transmission Route |
| Existing Towers | Existing 500 kV Transmission Line |
| New Towers | Access Road, Existing |
| Existing Pole | Access Road, New |
| Modify Pole | New OH Telecom Line |
| New Pole | New UG Telecom Line |
| New TSP | New UG Distribution |
| Remove | Alberhill Drainage Design |
| Telecom Vault | Alberhill Pump |
| Existing Access Road Edge | Alberhill Design |
| New Access Road | Alberhill Waterline |
| Telecom Pulling Sites | Alberhill Waterline Easement |
| 500 kV Pulling/Tensioning Site | Existing 115kV Route |
| Structure Work | New 115kV Route |
| Tower Disturbance | Alt Route |
| Demolition | Substation Grading Limits |
| Guard Pole | Substation Basins |
| Pulling Sites | Newcomb Substation Fence |
| Wire Setup Site | Substation Temporary Disturbance |
| Laydown Yards | Substation Wall Grading Limit |
| | Disturbance Area |

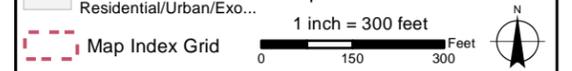
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| Sensitive Species (2006) | LBV Avoidance |
| Potential Jurisdictional Waters (Avoid or delineation) | Seasonal Depression |

Vegetation Communities

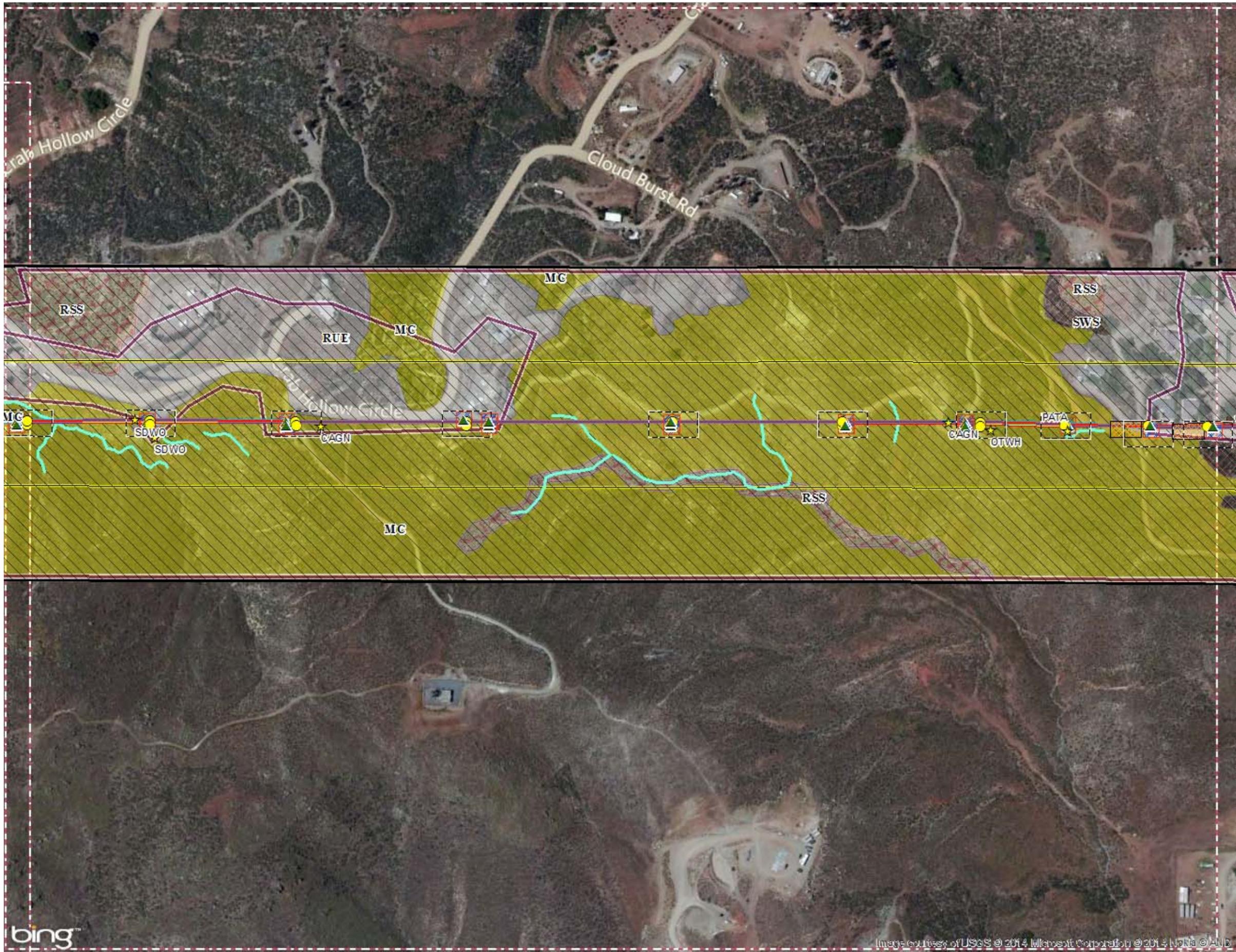
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Legend

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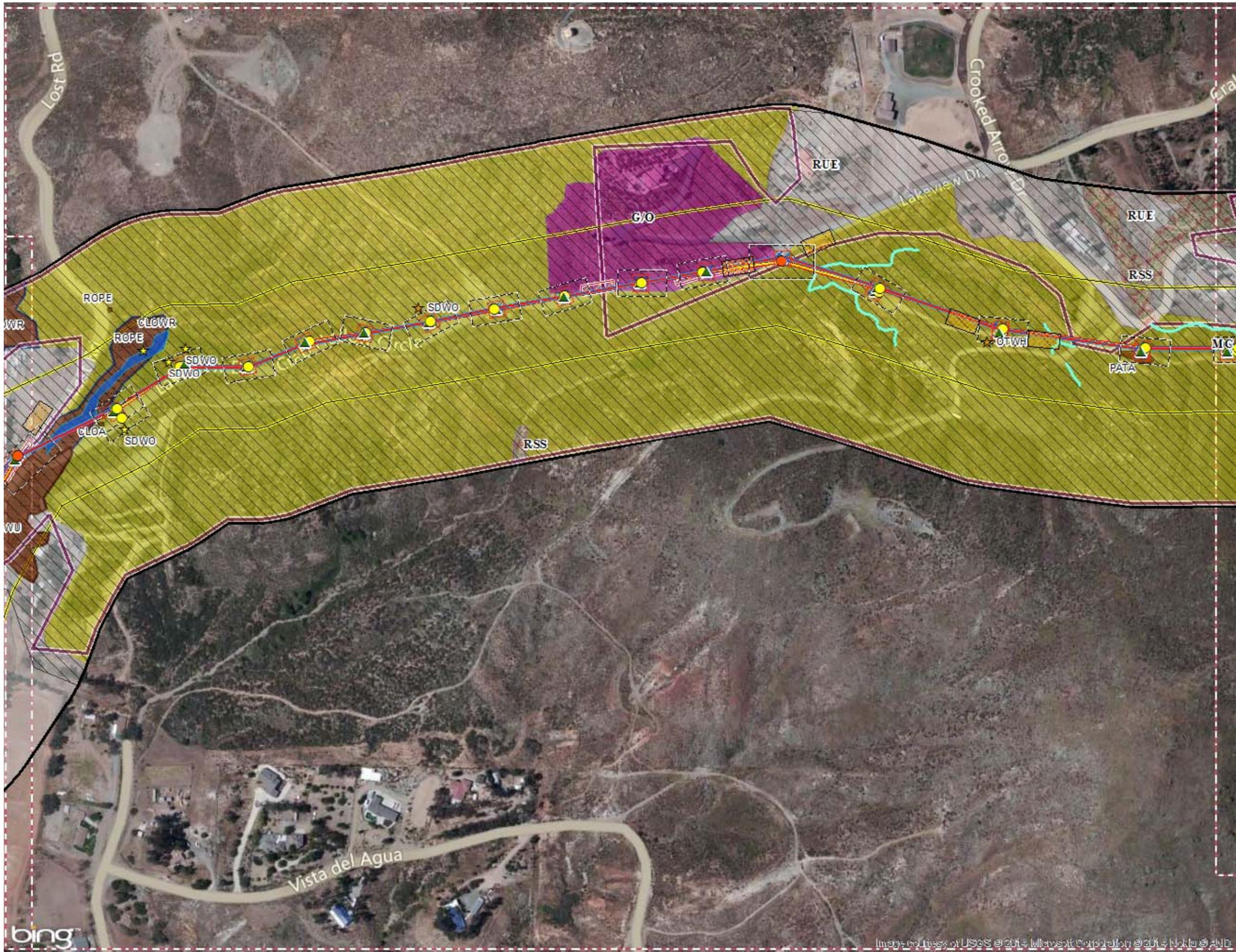


Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California
Subtransmission Map 12

bing

Image courtesy of USGS © 2014, Microsoft Corporation © 2014, Nokia © AFD



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
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1 inch = 300 feet

Biological Resources & Proposed Project Design

Alberhill Subtransmission Line Project

EDISON Riverside County, California

Subtransmission Map 13



Image courtesy of USGS © 2014, lullenspit Corporation © 2014, Nokia © AWD



Legend

Project Features

- | | |
|--------------------------------|-----------------------------------|
| Substation label | New 500 kV Transmission Route |
| Existing Towers | Existing 500 kV Transmission Line |
| New Towers | Access Road, Existing |
| Existing Pole | Access Road, New |
| Modify Pole | New OH Telecom Line |
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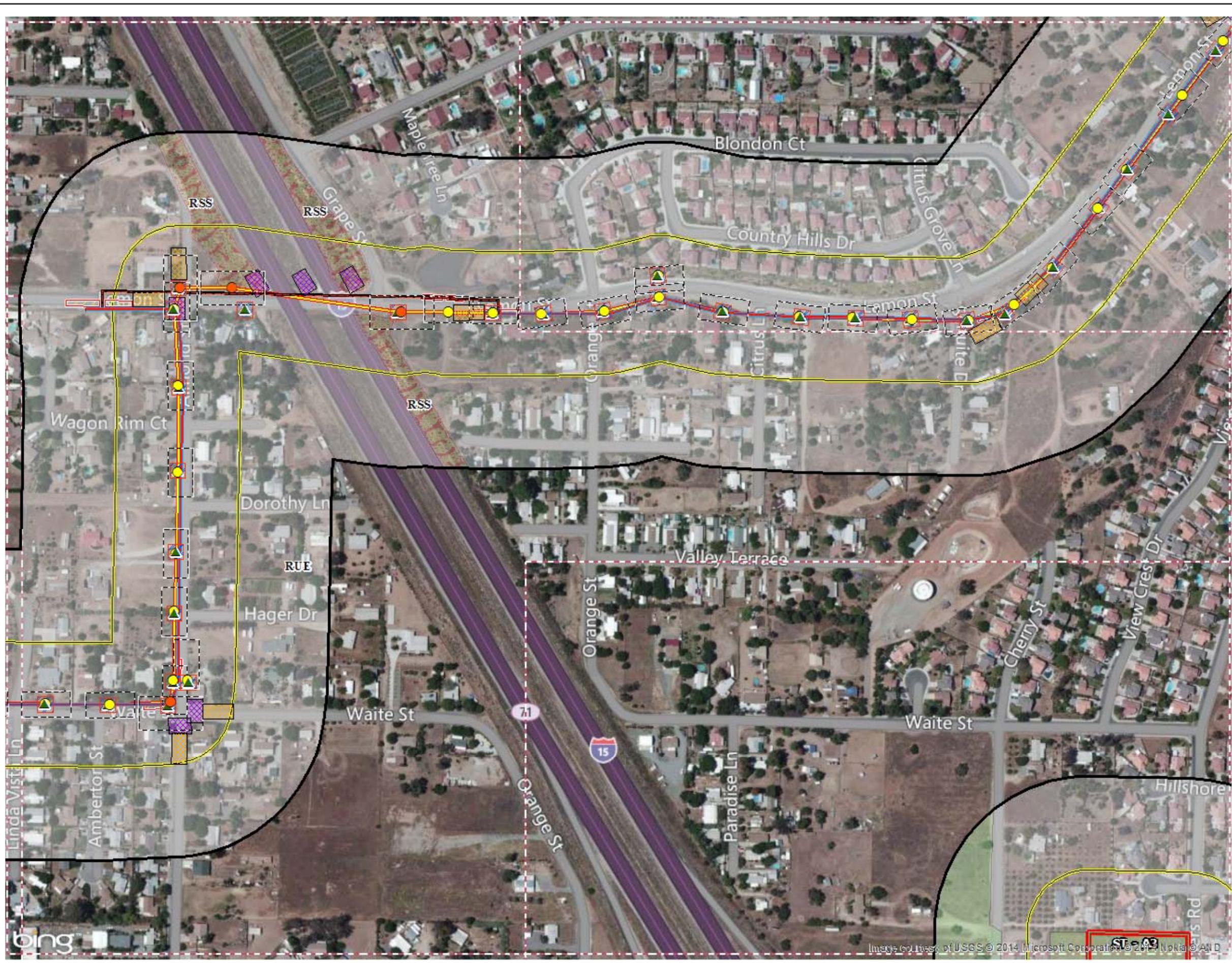
*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 14



Legend

Project Features

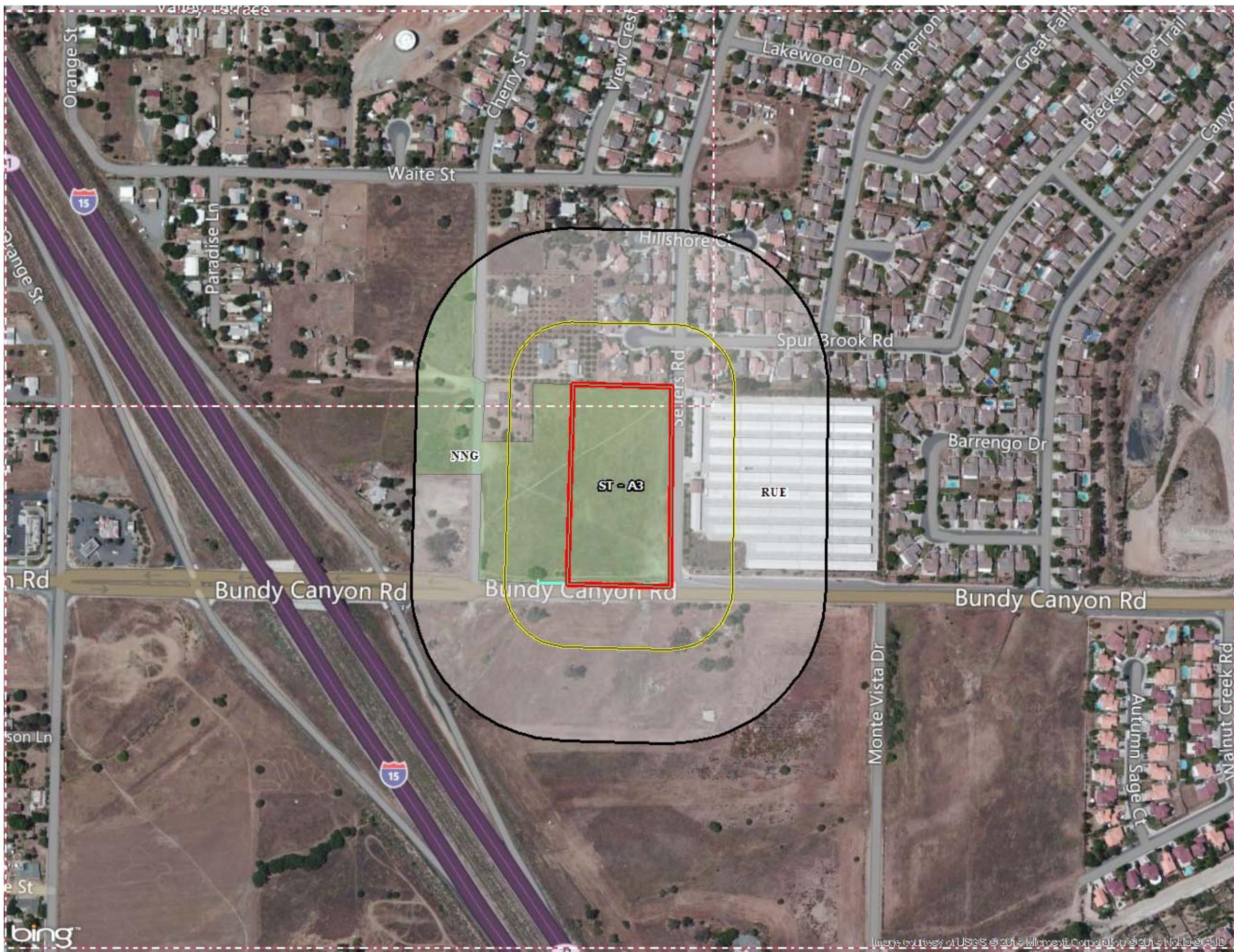
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Legend

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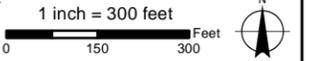
Sensitive Species Data

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- Seasonal Vegetation Removal Area
- LBV Avoidance
- Seasonal Depression

Vegetation Communities

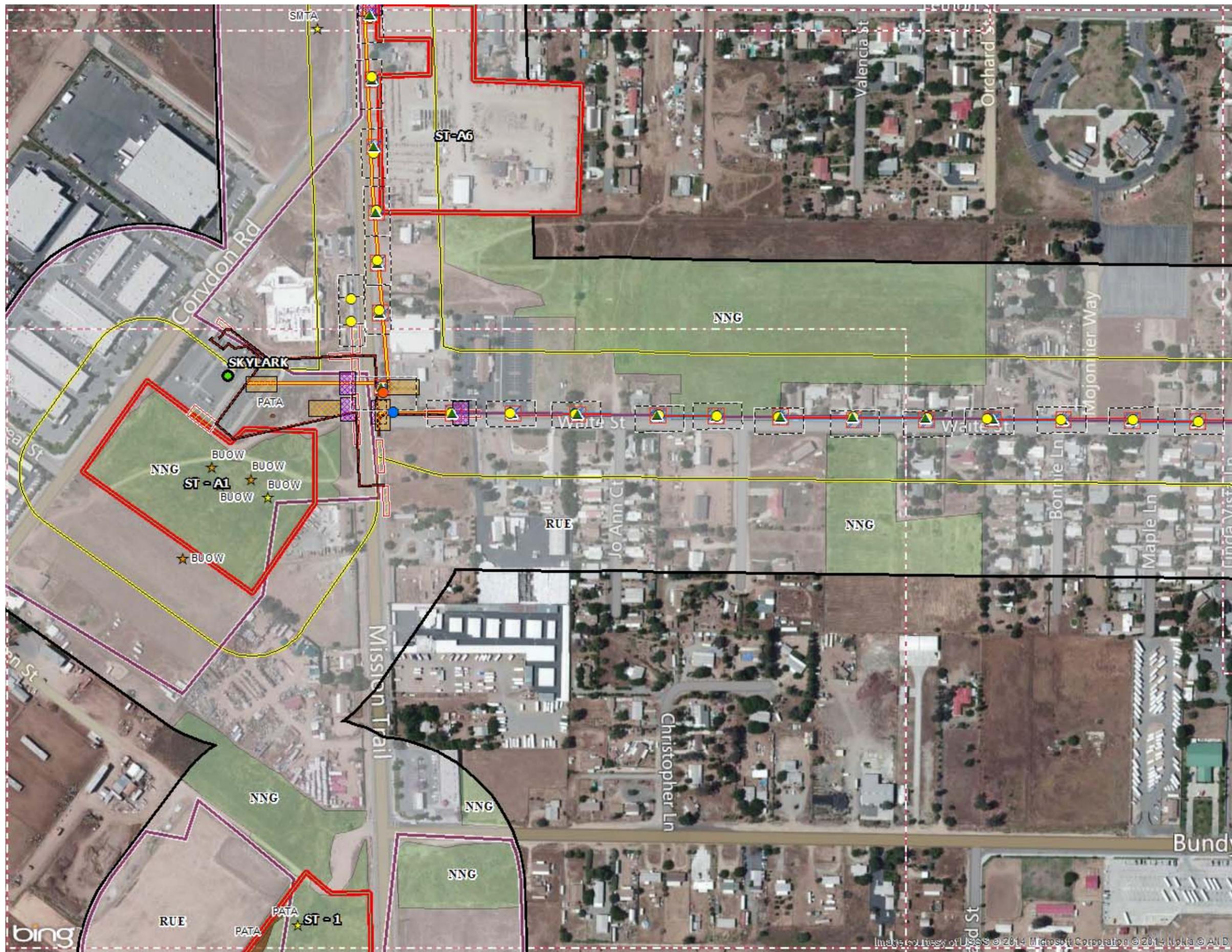
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Legend

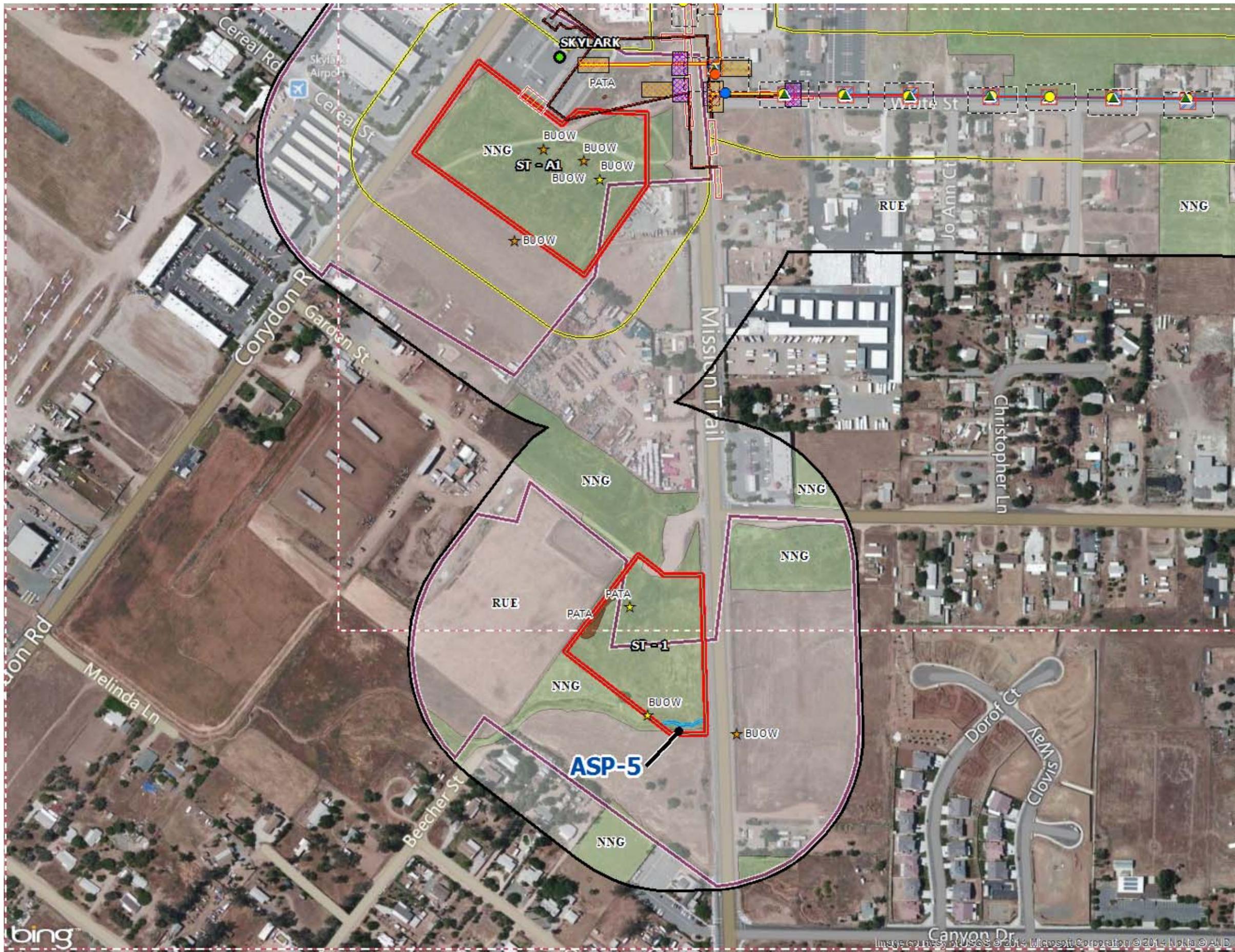
Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⬮ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
- Structure Work
- Tower Disturbance
- Demolition
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work
- Laydown Yards
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
- Access Road, New
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- New UG Distribution
- Alberhill Drainage Design
- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
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- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
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*Map Current as of 10/30/2014
 1 inch = 300 feet
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Legend

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- New Access Road
- Telecom Pulling Sites
- Structure Work
- Tower Disturbance
- Demolition
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work
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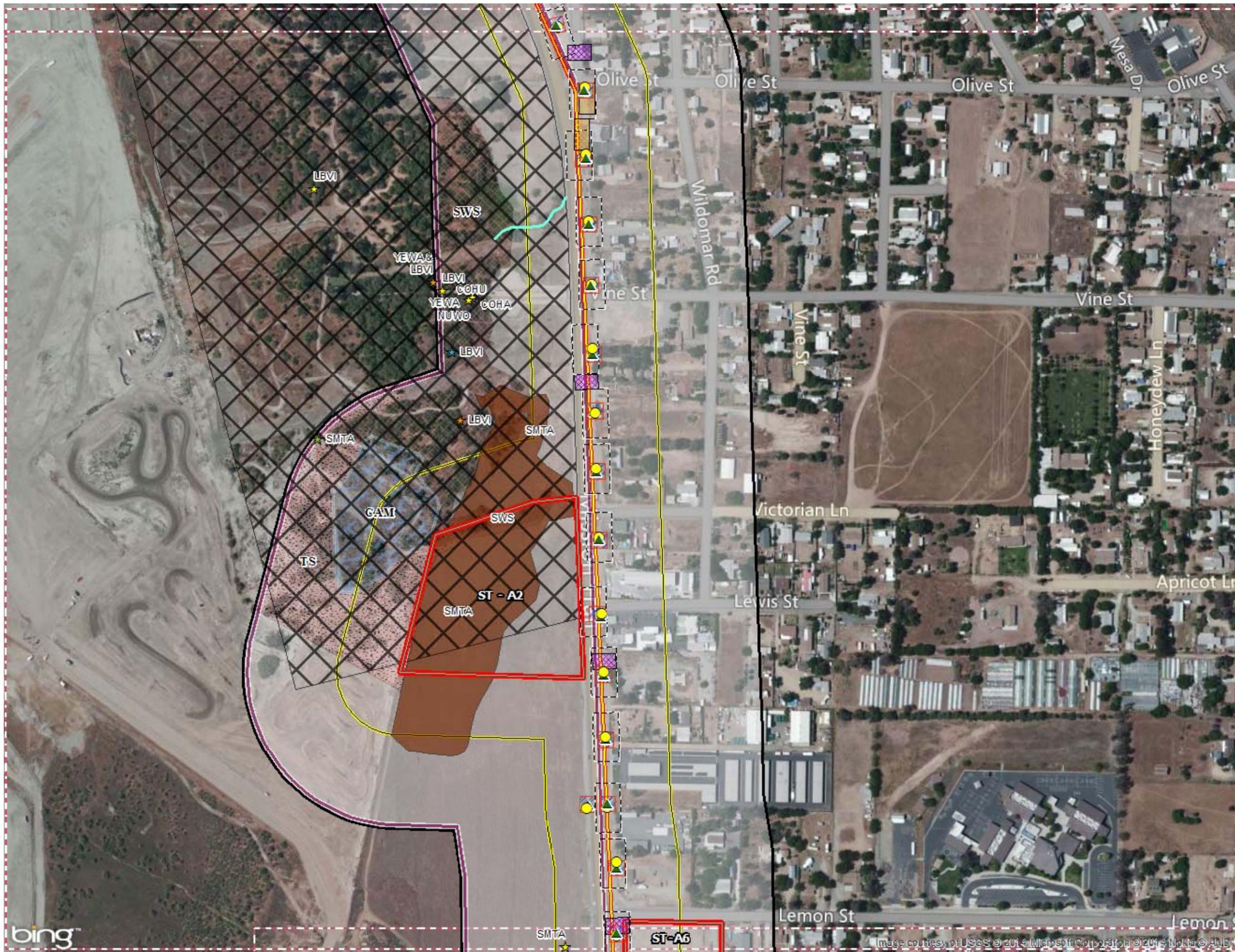
*Map Current as of 10/30/2014

1 inch = 300 feet

Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 18



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
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- New Pole
- New TSP
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Legend

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Biological Resources & Proposed Project Design

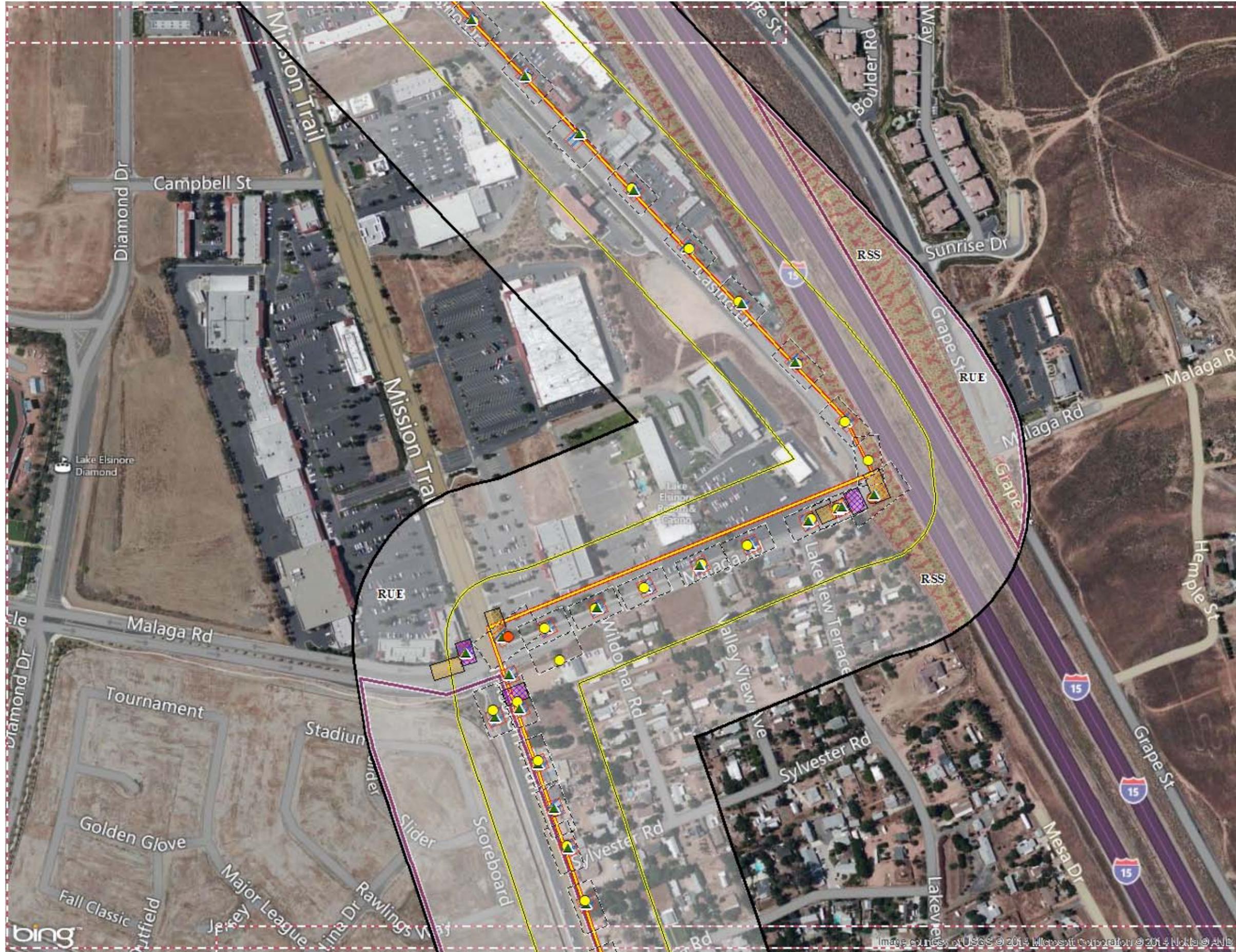
Alberhill Subtransmission Line Project

EDISON Riverside County, California

Subtransmission Map 20



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Legend

Project Features

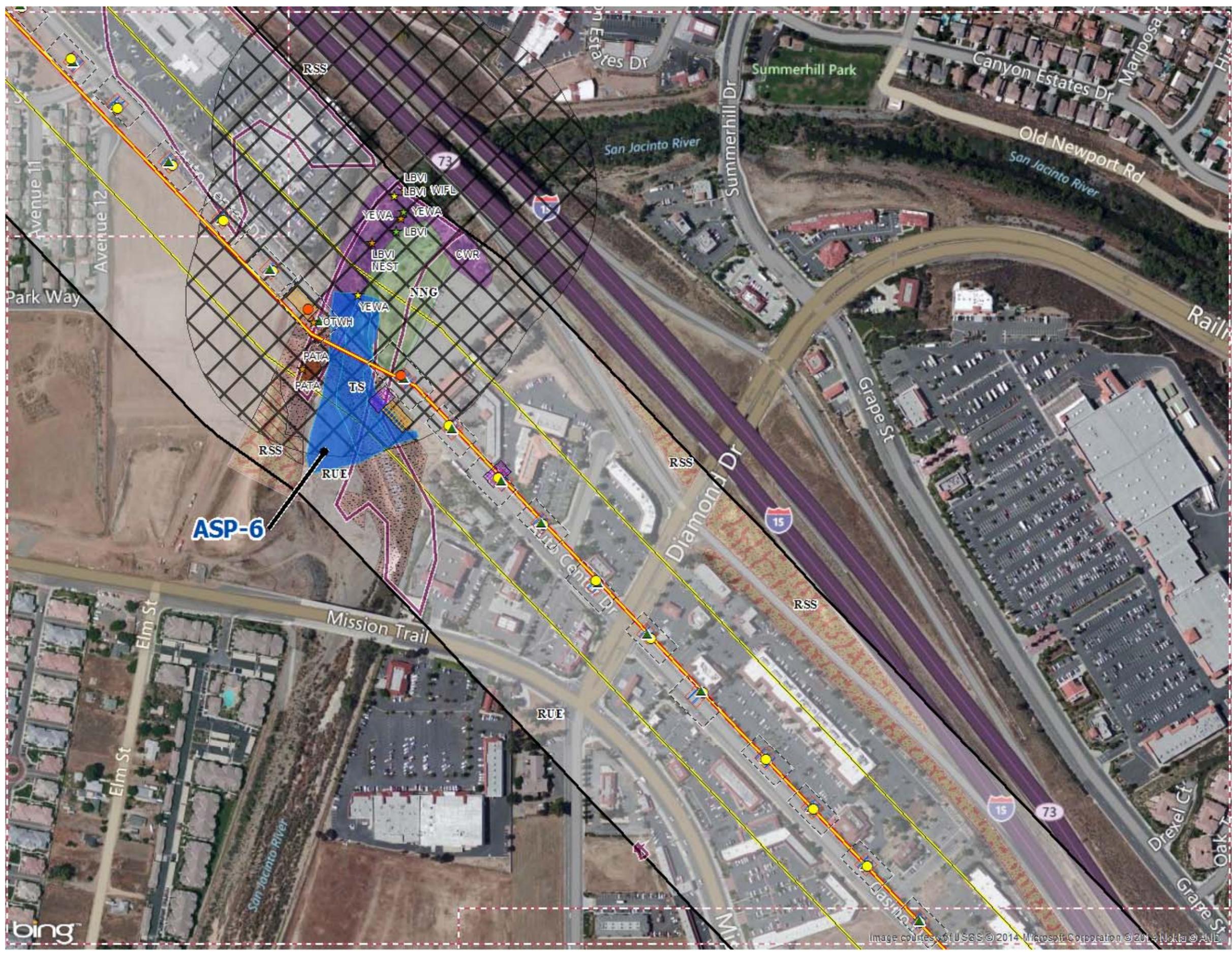
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Legend

Project Features

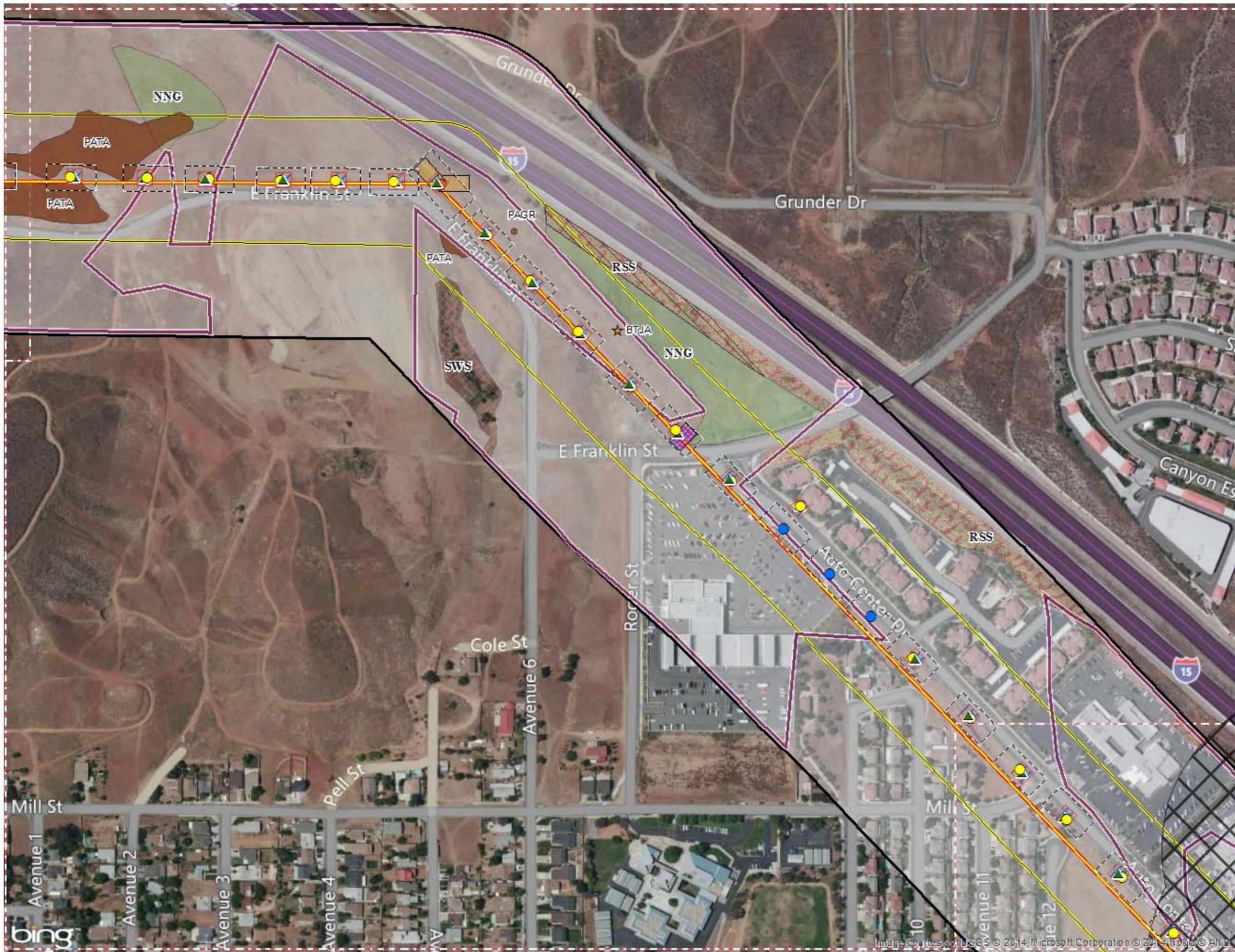
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|--|--------------------------------|--|-----------------------------------|
| | Substation label | | New 500 kV Transmission Route |
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| | New Towers | | Access Road, Existing |
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| | Modify Pole | | New OH Telecom Line |
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| | New TSP | | New UG Distribution |
| | Remove | | Alberhill Drainage Design |
| | Telecom Vault | | Alberhill Pump |
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| | Telecom Pulling Sites | | Alberhill Waterline Easement |
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| | Structure Work | | New 115kV Route |
| | Tower Disturbance | | Alt Route |
| | Demolition | | Substation Grading Limits |
| | Guard Pole | | Substation Basins |
| | Pulling Sites | | Newcomb Substation Fence |
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| | Work | | Substation Wall |
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| | | | Disturbance Area |

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*Map Current as of 10/30/2014
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Legend

Project Features

- | | |
|----------------------------------|-------------------------------------|
| ● Substation label | --- New 500 kV Transmission Route |
| □ Existing Towers | — Existing 500 kV Transmission Line |
| ■ New Towers | — Access Road, Existing |
| ○ Existing Pole | — Access Road, New |
| ● Modify Pole | — New OH Telecom Line |
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| ▭ Structure Work | — New 115kV Route |
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| ▭ Demolition | ▭ Substation Grading Limits |
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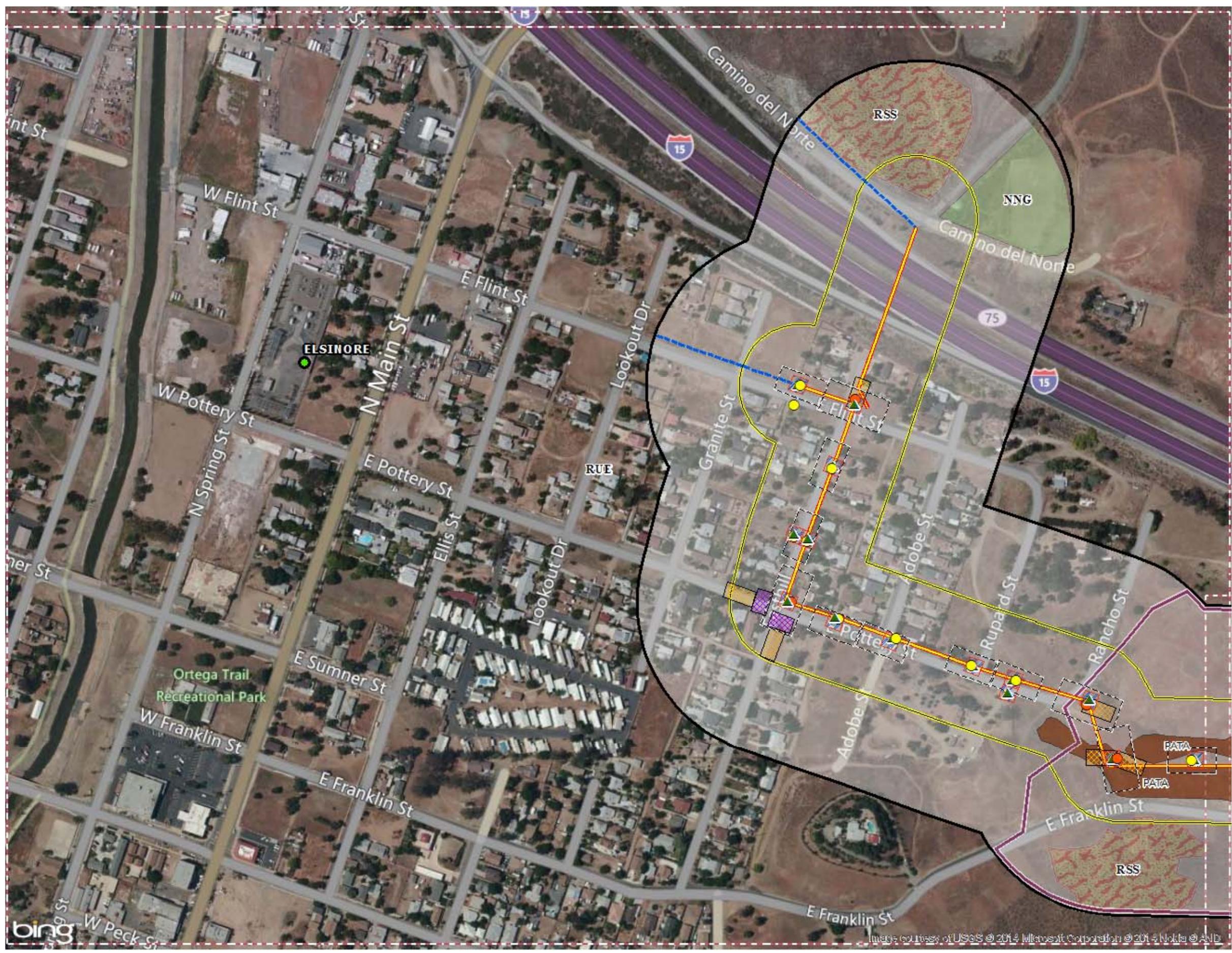
*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California

Subtransmission Map 23



Legend

Project Features

- Substation label
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- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ◆ Telecom Vault
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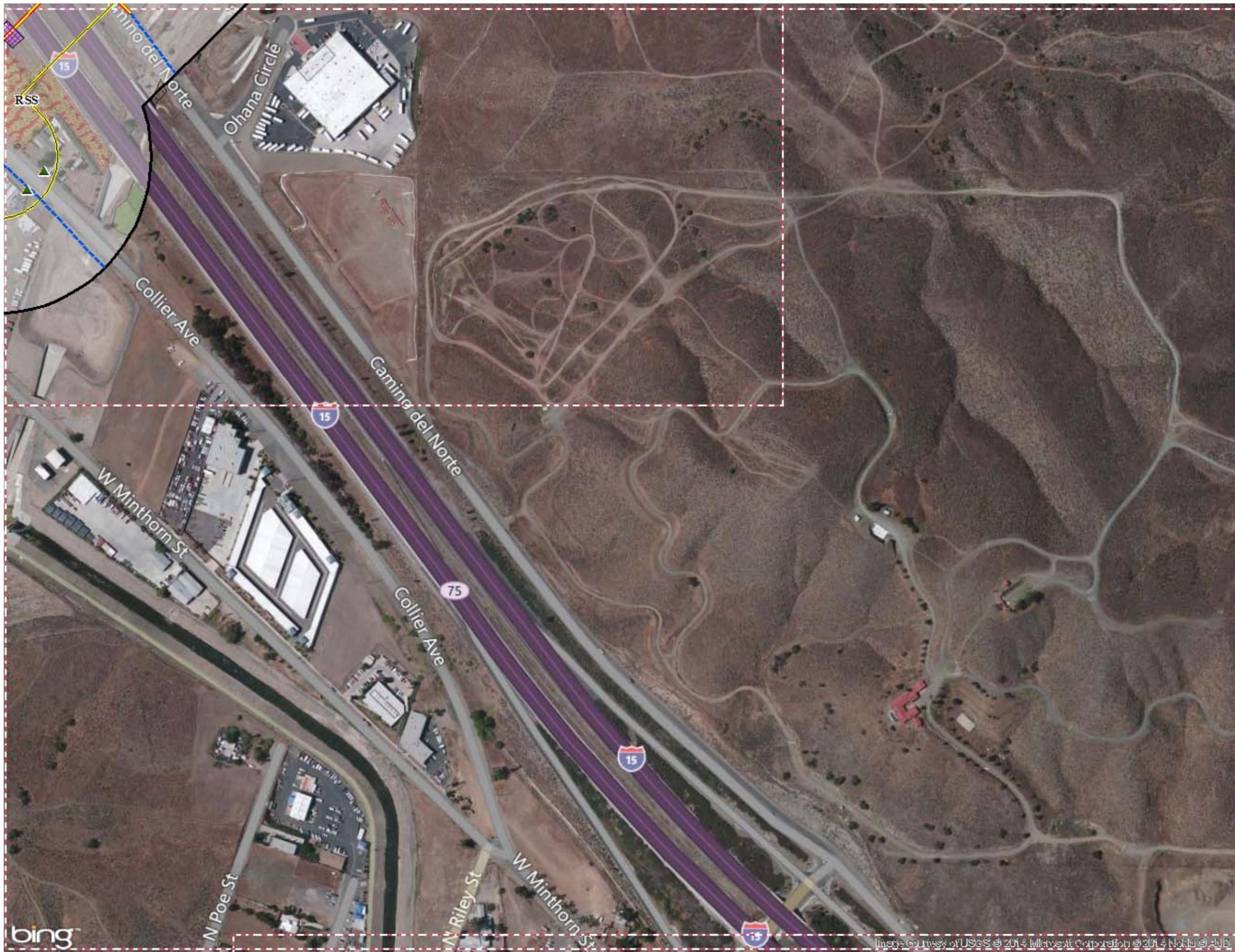
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- SWS - Southern Willow Scrub
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- Map Index Grid
- VFM - Valley Freshwater Marsh
- RAFS - Disturbed Alluvial Scrub
- CAM - Cismontane Alkali Marsh
- DRSS - Disturbed Riversidean Sage Scrub
- CLOWU - Coast Live-Oak Woodland Upland
- CLOWR - Coast Live-Oak Woodland Riparian
- SSR - Southern Sycamore Riparian Woodland
- CWR - Southern Cottonwood/Willow Riparian Forest

*Map Current as of 10/30/2014

1 inch = 300 feet

0 150 300 Feet



Legend

Project Features

- | | | | |
|--|--------------------------------|--|-----------------------------------|
| | Substation label | | New 500 kV Transmission Route |
| | Existing Towers | | Existing 500 kV Transmission Line |
| | New Towers | | Access Road, Existing |
| | Existing Pole | | Access Road, New |
| | Modify Pole | | New OH Telecom Line |
| | New Pole | | New UG Telecom Line |
| | New TSP | | New UG Distribution |
| | Remove | | Alberhill Drainage Design |
| | Telcom Vault | | Alberhill Pump |
| | Existing Access Road Edge | | Alberhill Design |
| | New Access Road | | Alberhill Waterline |
| | Telcom Pulling Sites | | Alberhill Waterline Easement |
| | 500 kV Pulling/Tensioning Site | | Existing 115kV Route |
| | Structure Work | | New 115kV Route |
| | Tower Disturbance | | Alt Route |
| | Demolition | | Substation Grading Limits |
| | Guard Pole | | Substation Basins |
| | Pulling Sites | | Newcomb Substation Fence |
| | Wire Setup Site | | Substation Temporary Disturbance |
| | Work | | Substation Wall |
| | Laydown Yards | | Grading Limit |
| | | | Disturbance Area |

Sensitive Species Data

- | | | | |
|--|--|--|--|
| | Sensitive Species (2014) | | Delineated Jurisdictional Waters - Avoid or get Permit |
| | Sensitive Species (2013) | | RCHCA/ARL |
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| | Sensitive Species (2011) | | Sensitive Bio Polygons |
| | Sensitive Species (2010) | | Bio Survey Area (Pedestrian Survey) |
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| | Sensitive Species (2008) | | Riversidean Alluvial Sage Scrub Avoidance Buffer |
| | Sensitive Species (2007) | | Seasonal Vegetation Removal Area |
| | Sensitive Species (2006) | | LBV Avoidance |
| | Potential Jurisdictional Waters (Avoid or delineation) | | Seasonal Depression |

Vegetation Communities

- | | | | |
|--|--------------------------------|--|--|
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| | AG - Disturbed Agriculture | | |
| | RSS - Riversidean Sage Scrub | | |
| | NNG - Non-Native Grasslands | | |
| | SWS - Southern Willow Scrub | | |
| | RUE - Residential/Urban/Exo... | | |

*Map Current as of 10/30/2014



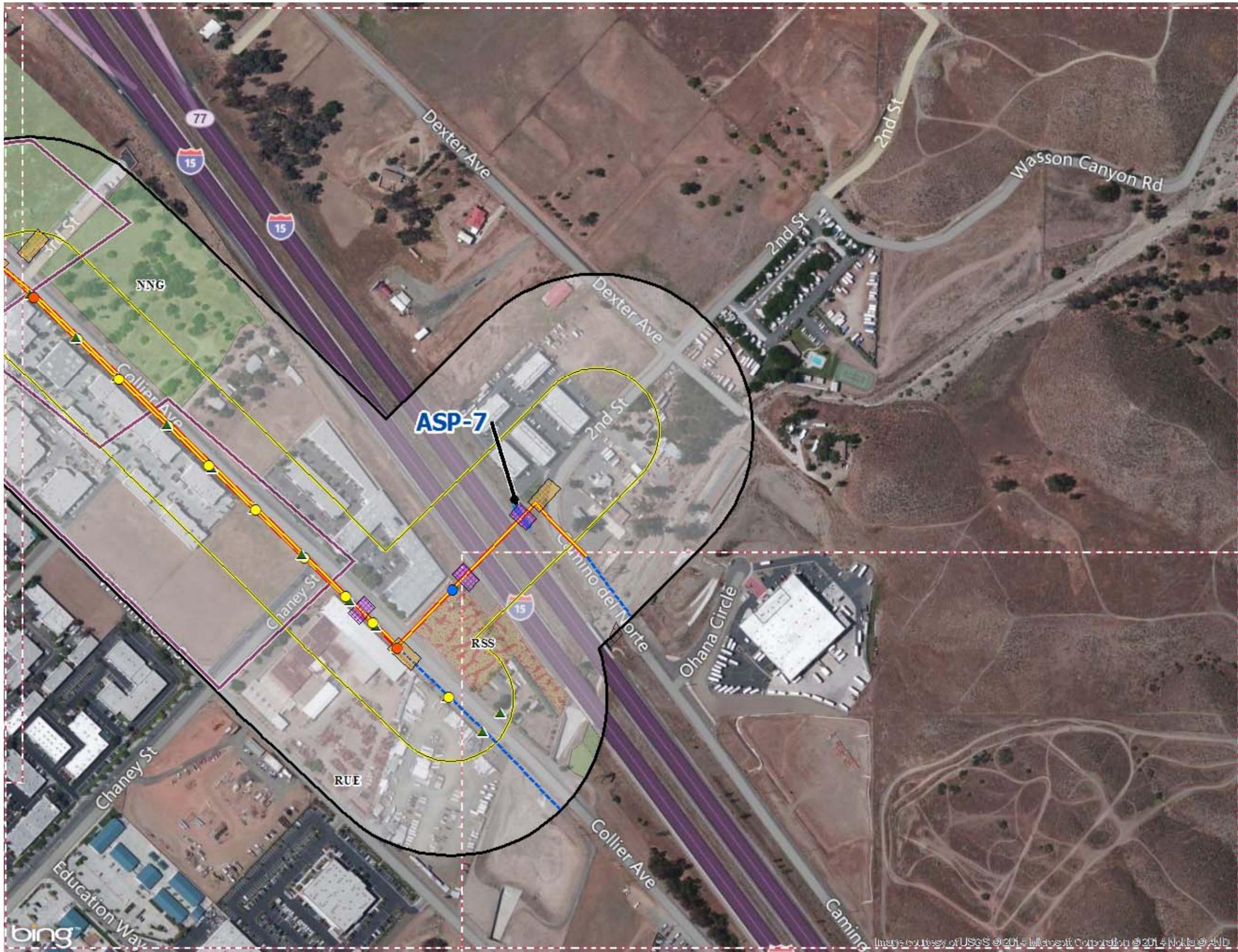
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 25



Image courtesy of USGS © 2014 IntelSat Corporation © 2014 Nokia © AWD



Legend

Project Features

- | | |
|--------------------------------|-----------------------------------|
| Substation label | New 500 kV Transmission Route |
| Existing Towers | Existing 500 kV Transmission Line |
| New Towers | Access Road, Existing |
| Existing Pole | Access Road, New |
| Modify Pole | New OH Telecom Line |
| New Pole | New UG Telecom Line |
| New TSP | New UG Distribution |
| Remove | Alberhill Drainage Design |
| Telecom Vault | Alberhill Pump |
| Existing Access Road Edge | Alberhill Design |
| New Access Road | Alberhill Waterline |
| Telecom Pulling Sites | Alberhill Waterline Easement |
| 500 kV Pulling/Tensioning Site | Existing 115kV Route |
| Structure Work | New 115kV Route |
| Tower Disturbance | Alt Route |
| Demolition | Substation Grading Limits |
| Guard Pole | Substation Basins |
| Pulling Sites | Newcomb Substation Fence |
| Wire Setup Site | Substation Temporary Disturbance |
| Work | Substation Wall |
| Laydown Yards | Grading Limit |
| | Disturbance Area |

Sensitive Species Data

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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
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- Tower Disturbance
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- Alberhill Design
- Alberhill Waterline
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- Existing 115kV Route
- New 115kV Route
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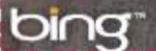


Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Riverside County, California

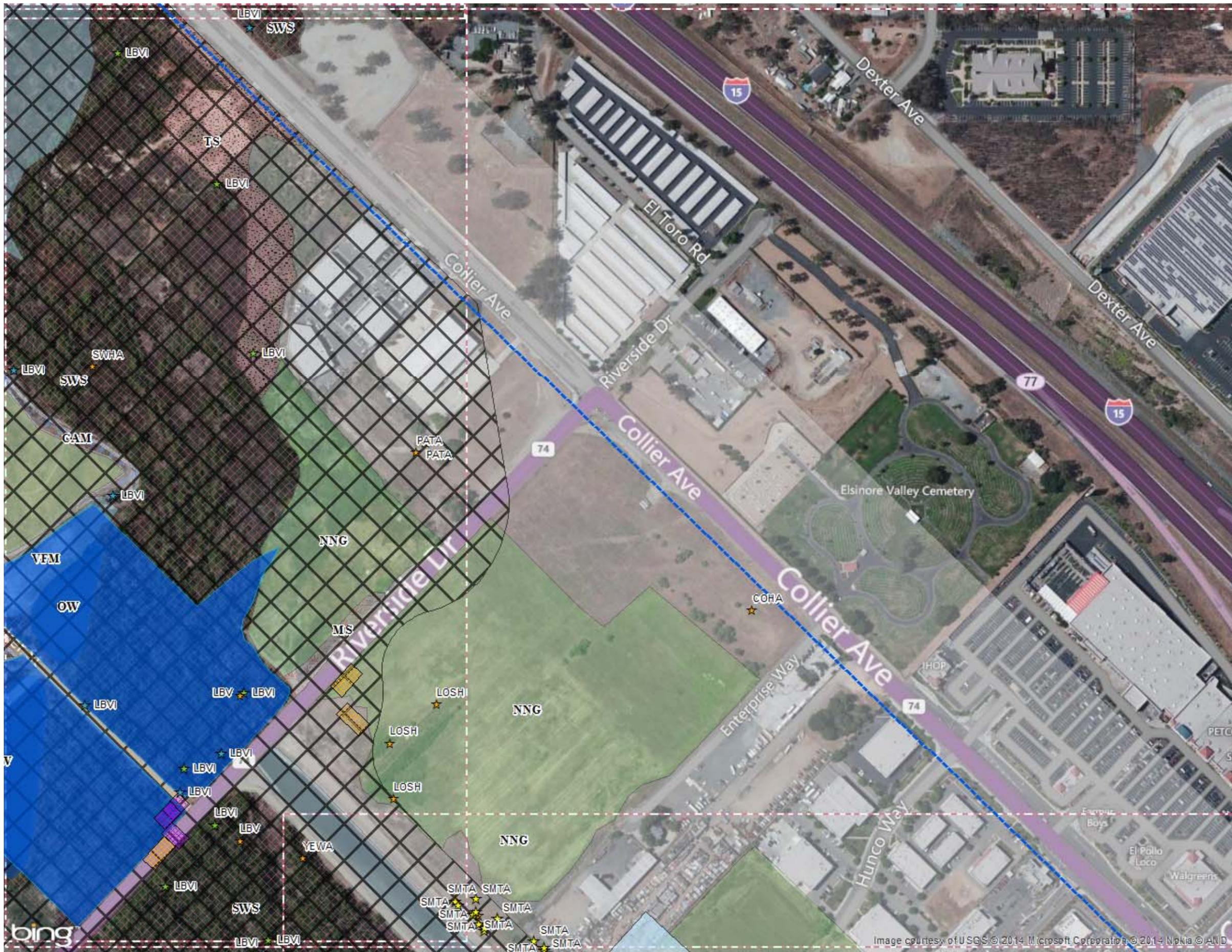
Subtransmission Map 27



Bastron

PEFA

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Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊗ Telcom Vault
- Existing Access Road Edge
- New Access Road
- Telcom Pulling Sites
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- Tower Disturbance
- Demolition
- Guard Pole
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- Alberhill Pump
- Alberhill Design
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- New 115kV Route
- Alt Route
- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall Grading Limit
- Disturbance Area

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- LBV Avoidance
- Seasonal Depression

Vegetation Communities

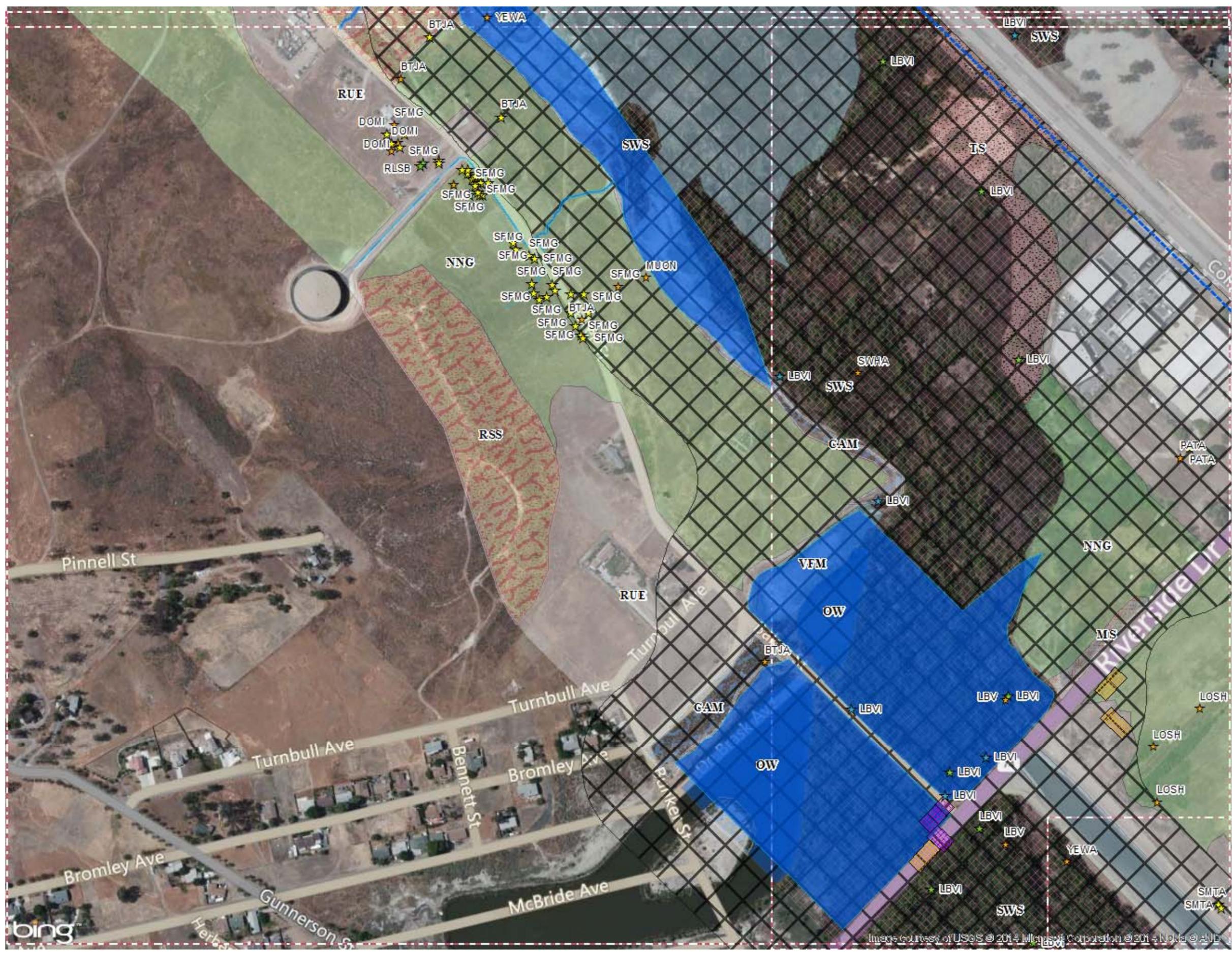
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Legend

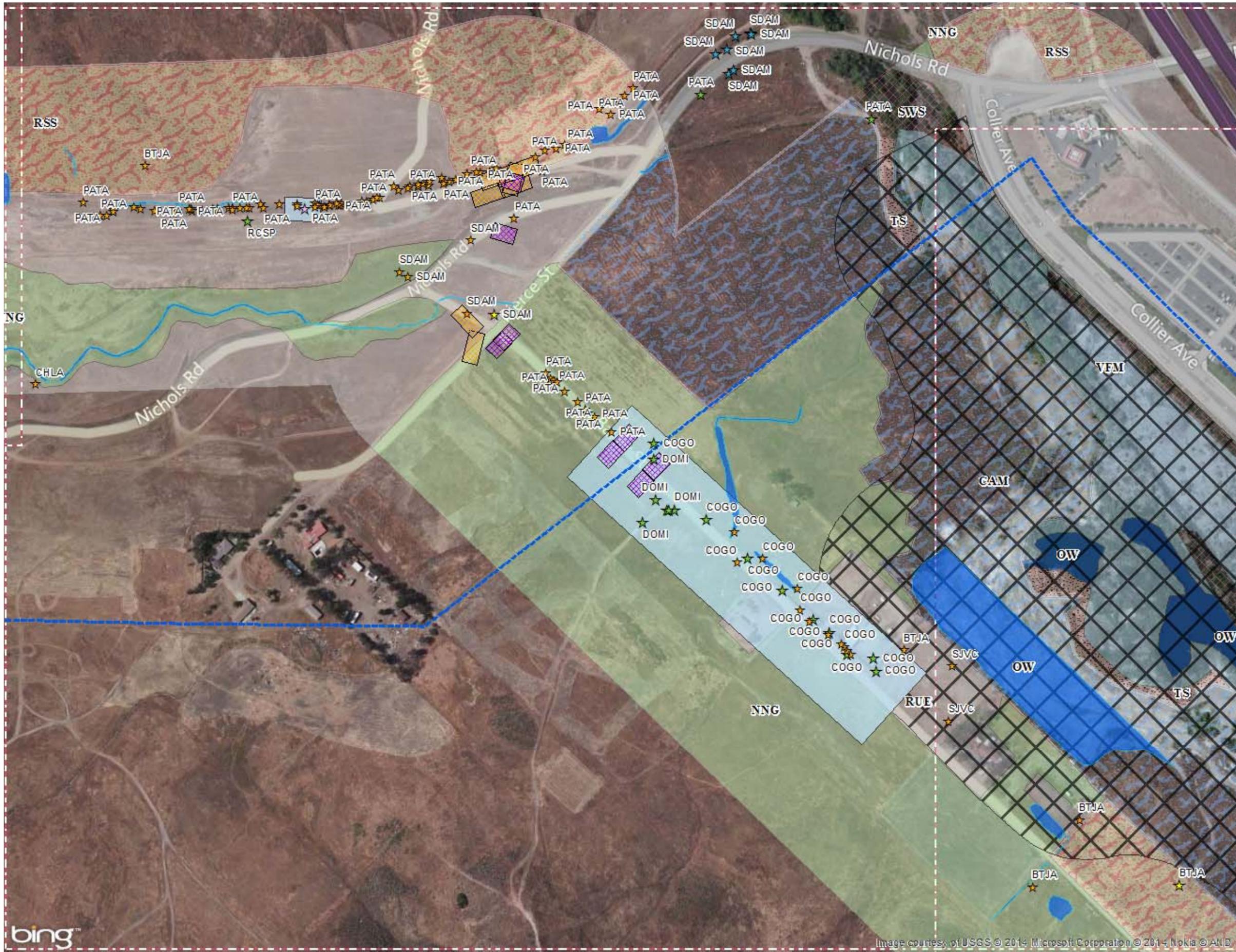
Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
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- New Access Road
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- Substation Temporary Disturbance
- Substation Wall
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*Map Current as of 10/30/2014
 1 inch = 300 feet
 0 150 300 Feet



Legend

Project Features

- Substation label
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- New Towers
- Existing Pole
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- New TSP
- Remove
- Telecom Vault
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- Existing 500 kV Transmission Line
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Riverside County, California

Subtransmission Map 31



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Legend

Project Features

- | | | | |
|--|--------------------------------|--|-----------------------------------|
| | Substation label | | New 500 kV Transmission Route |
| | Existing Towers | | Existing 500 kV Transmission Line |
| | New Towers | | Access Road, Existing |
| | Existing Pole | | Access Road, New |
| | Modify Pole | | New OH Telcom Line |
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| | Remove | | Alberhill Drainage Design |
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| | 500 kV Pulling/Tensioning Site | | Existing 115kV Route |
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| | Demolition | | Substation Grading Limits |
| | Guard Pole | | Substation Basins |
| | Pulling Sites | | Newcomb Substation Fence |
| | Wire Setup Site | | Substation Temporary Disturbance |
| | Work | | Substation Wall Grading Limit |
| | Laydown Yards | | Disturbance Area |

Sensitive Species Data

- | | | | |
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Vegetation Communities

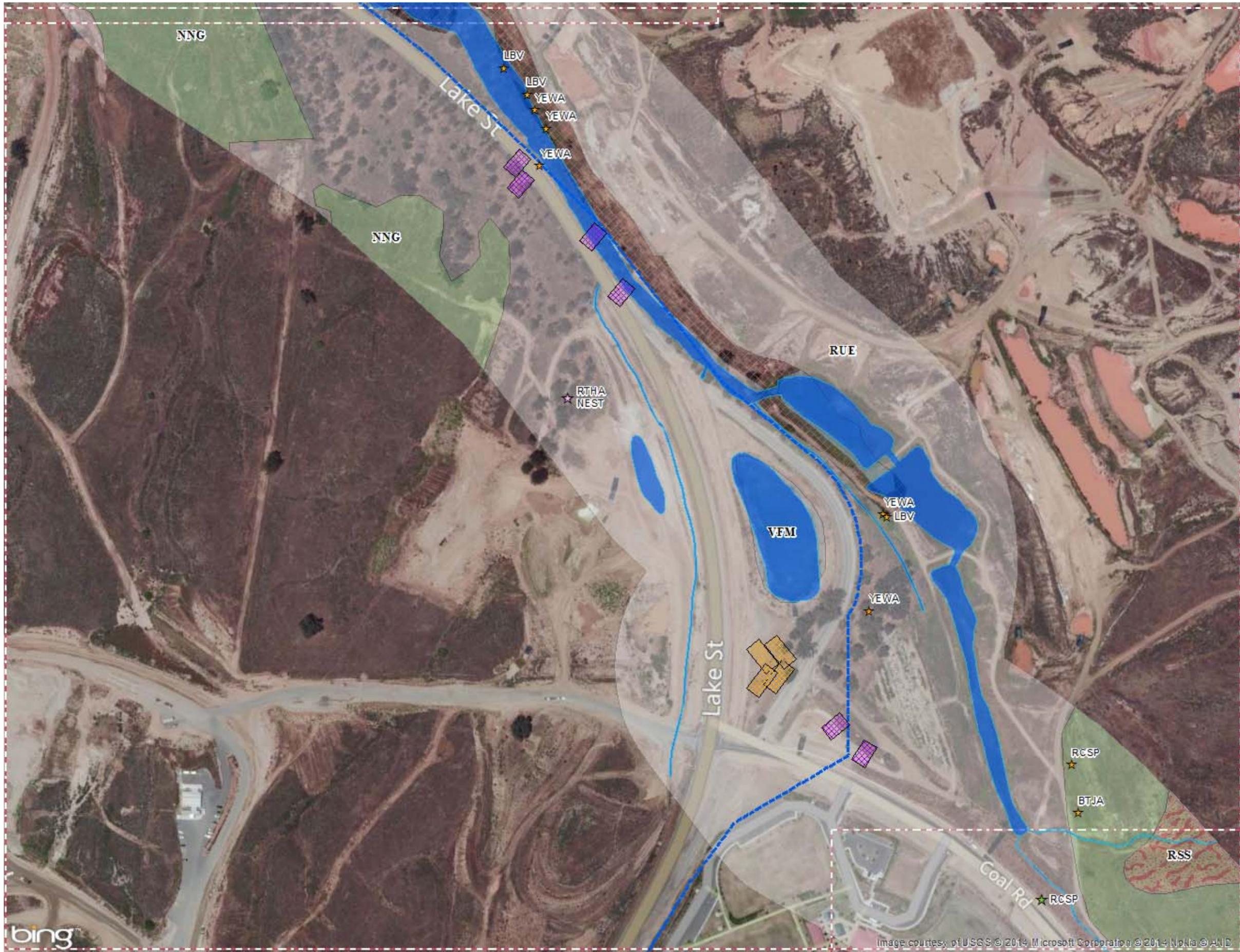
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California



Legend

Project Features

- Substation label
- Existing Towers
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- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
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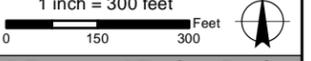
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*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



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Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
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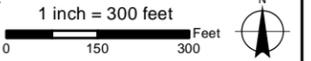
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- RCHCA/ARL
- Riverside County Required BUOW Survey Area
- Sensitive Bio Polygons
- Bio Survey Area (Pedestrian Survey)
- Bio Survey Area (Visual [Binocular/Spotting Scope] Survey)
- Riversidean Alluvial Sage Scrub Avoidance Buffer
- Seasonal Vegetation Removal Area
- LBV Avoidance
- Seasonal Depression

Vegetation Communities

- OW - Open Water
- MS - Mulefat Scrub
- FC - Field Croplands
- TS - Tamarisk Scrub
- G/O - Grove/Orchard
- RAFS - Alluvial
- MC - Mixed Chaparral
- CC - Chamise Chaparral
- AG - Disturbed Agriculture
- RSS - Riversidean Sage Scrub
- NNG - Non-Native Grasslands
- SWS - Southern Willow Scrub
- RUE - Residential/Urban/Exo...
- VFM - Valley Freshwater Marsh
- RAFS - Disturbed Alluvial Scrub
- CAM - Cismontane Alkali Marsh
- DRSS - Disturbed Riversidean Sage Scrub
- CLOWU - Coast Live-Oak Woodland Upland
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*Map Current as of 10/30/2014

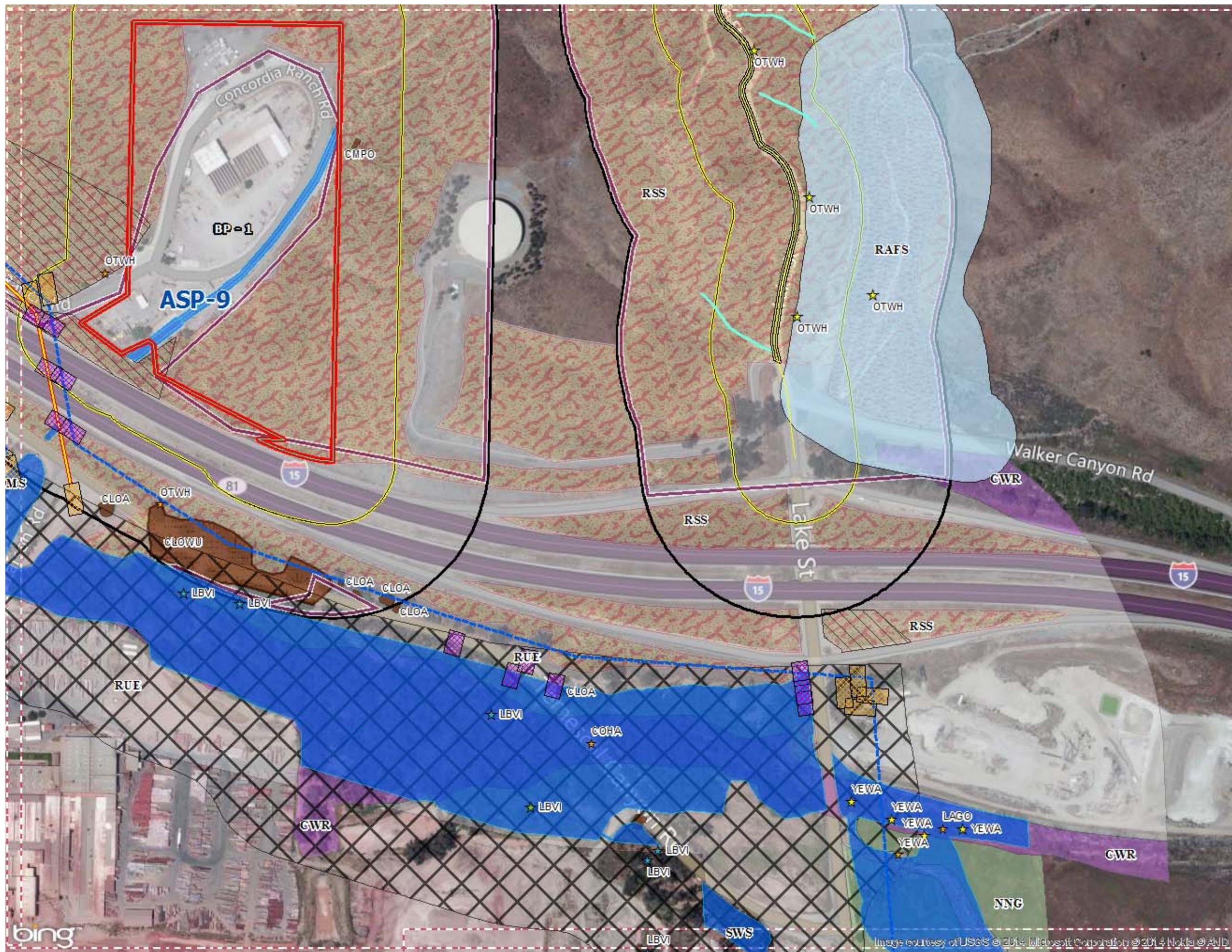


Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Image courtesy of USGS © 2014 Microsoft Corporation © 2014 Nokia © ANL



Legend

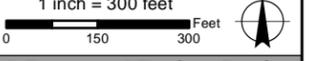
Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
- Structure Work
- Tower Disturbance
- Demolition
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work
- Laydown Yards
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
- Access Road, New
- New OH Telecom Line
- New UG Telecom Line
- New UG Distribution
- Alberhill Drainage Design
- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
- Alt Route
- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall Grading Limit
- Disturbance Area

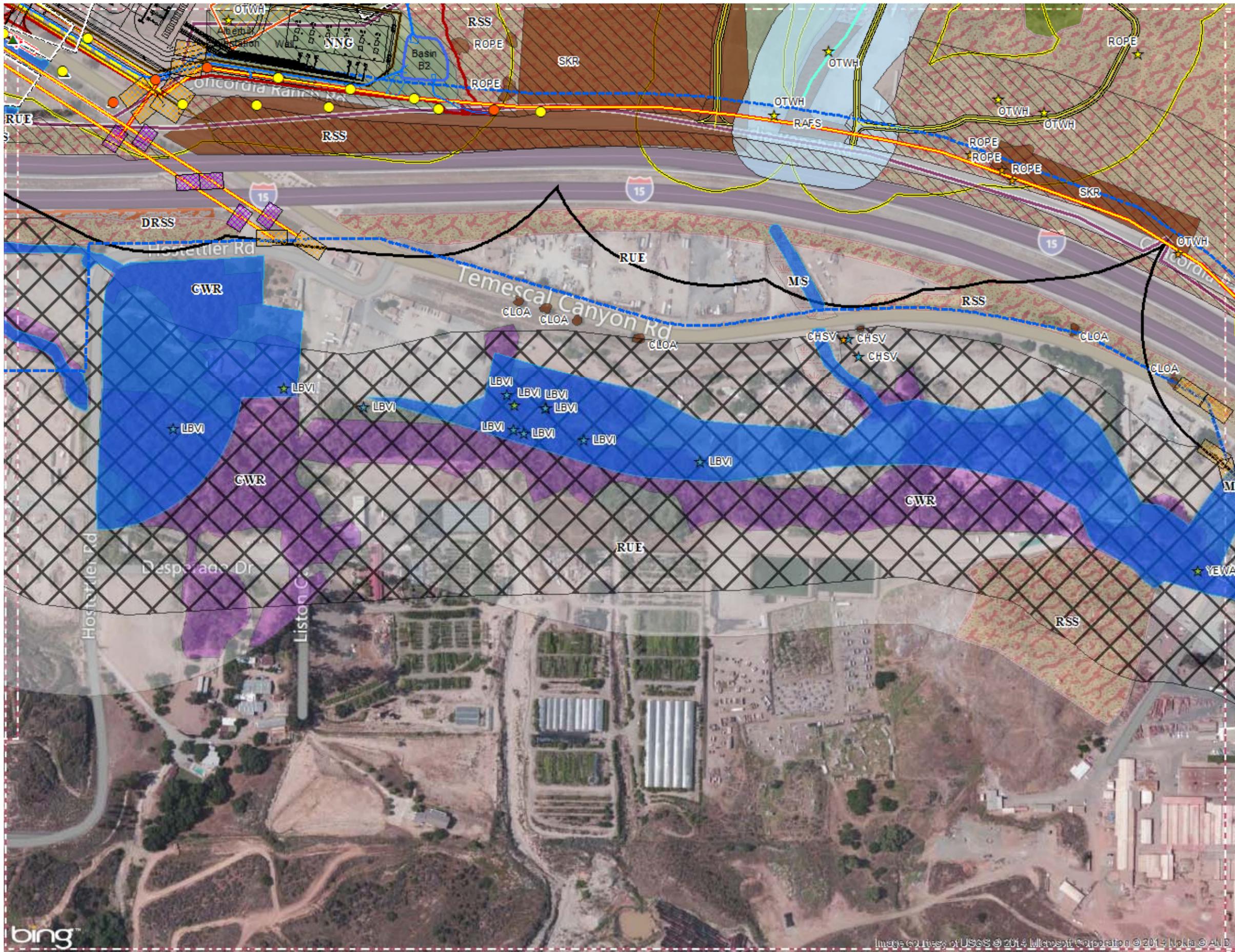
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- Remove
- Telecom Vault
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
- Access Road, New
- New OH Telecom Line
- New UG Telecom Line
- New UG Distribution
- Alberhill Drainage Design
- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
- Alt Route
- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall
- Grading Limit
- Disturbance Area

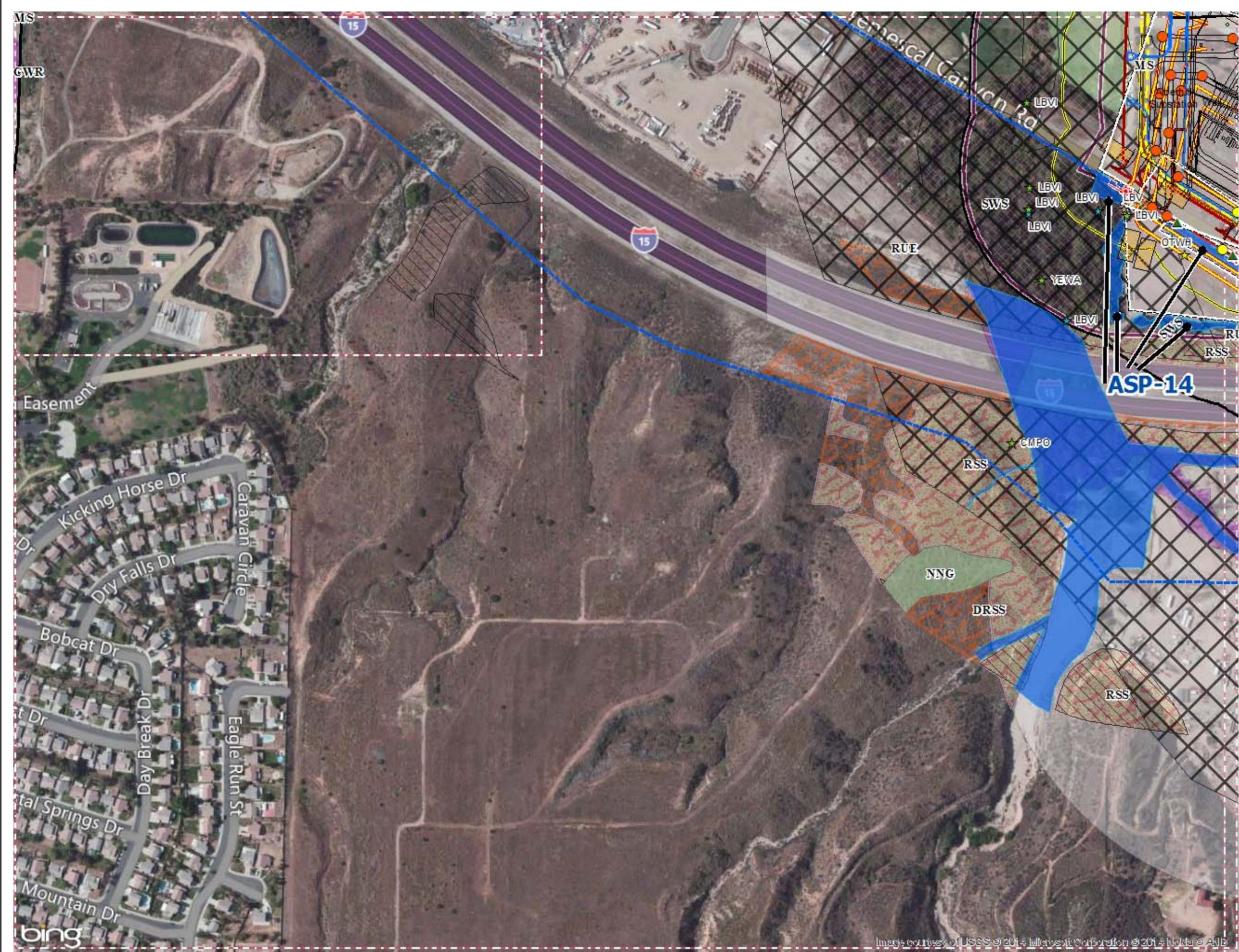
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*Map Current as of 10/30/2014
 1 inch = 300 feet



Images courtesy of USGS © 2014, Microsoft Corporation © 2014, Nokia © ANI



Legend

Project Features

	Substation label		New 500 kV Transmission Route
	Existing Towers		Existing 500 kV Transmission Line
	New Towers		Access Road, Existing
	Existing Pole		Access Road, New
	Modify Pole		New OH Telecom Line
	New Pole		New UG Telecom Line
	New TSP		New UG Distribution
	Remove		Alberhill Drainage Design
	Telecom Vault		Alberhill Pump
	Existing Access Road Edge		Alberhill Design
	New Access Road		Alberhill Waterline
	Telecom Pulling Sites		Alberhill Waterline Easement
	500 kV Pulling/Tensioning Site		Existing 115kV Route
	Structure Work		New 115kV Route
	Tower Disturbance		Alt Route
	Demolition		Substation Grading Limits
	Guard Pole		Substation Basins
	Pulling Sites		Newcomb Substation Fence
	Wire Setup Site		Substation Temporary Disturbance
	Work		Substation Wall Grading Limit
	Laydown Yards		Disturbance Area

Sensitive Species Data

	Sensitive Species (2014)		Delineated Jurisdictional Waters - Avoid or get Permit
	Sensitive Species (2013)		RCHCA/ARL
	Sensitive Species (2012)		Riverside County Required BUOW Survey Area
	Sensitive Species (2011)		Sensitive Bio Polygons
	Sensitive Species (2010)		Bio Survey Area (Pedestrian Survey)
	Sensitive Species (2009)		Bio Survey Area (Visual [Binocular/Spotting Scope] Survey)
	Sensitive Species (2008)		Riversidean Alluvial Sage Scrub Avoidance Buffer
	Sensitive Species (2007)		Seasonal Vegetation Removal Area
	Sensitive Species (2006)		LBV Avoidance
	Potential Jurisdictional Waters (Avoid or delineation)		Seasonal Depression

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	RUE - Residential/Urban/Exo...		

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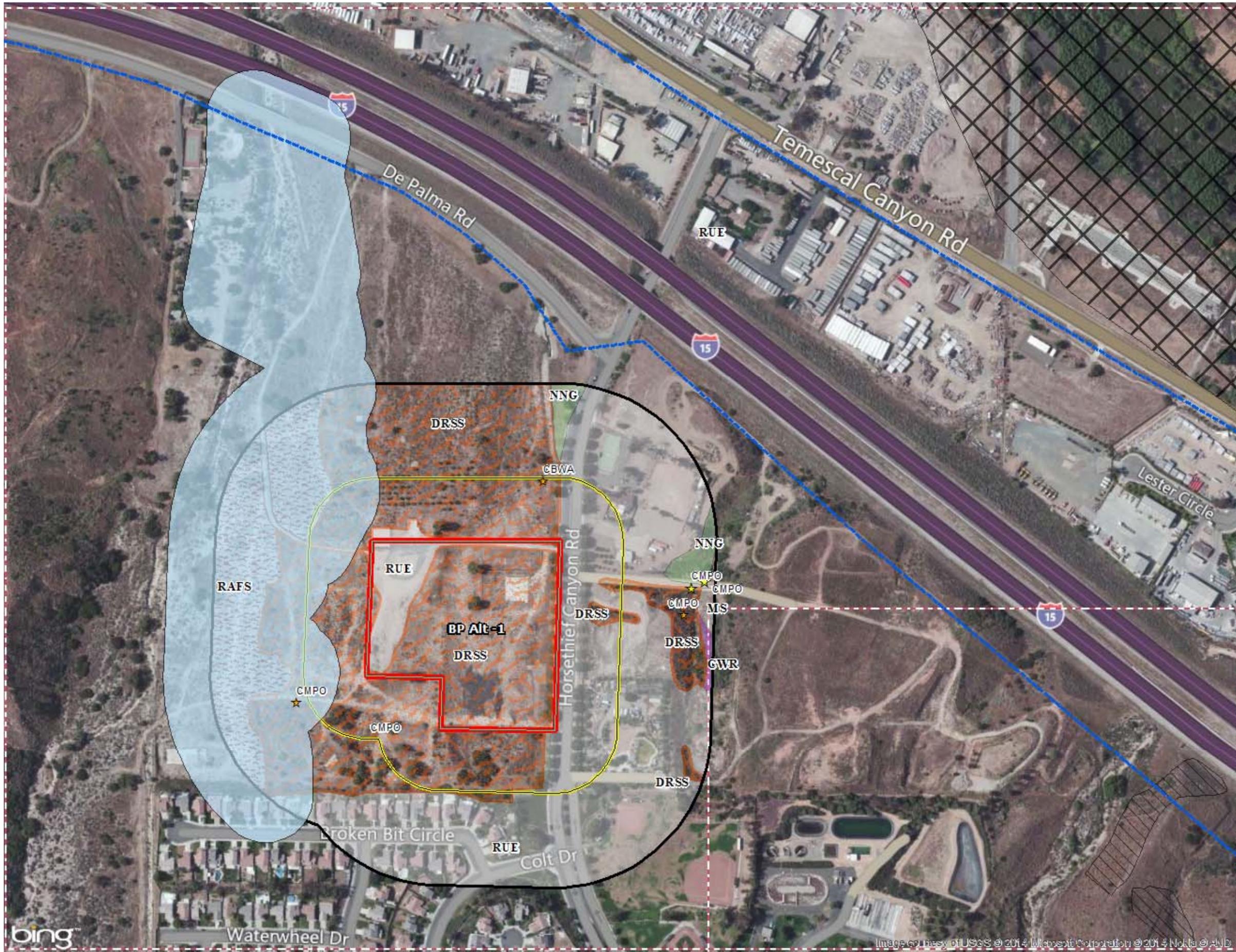
0 150 300 Feet

Biological Resources & Proposed Project Design
Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 37

Images courtesy of USGS © 2014, iLluminat Corporation © 2014, Nokia © ANI



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
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- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
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- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall
- Grading Limit
- Disturbance Area

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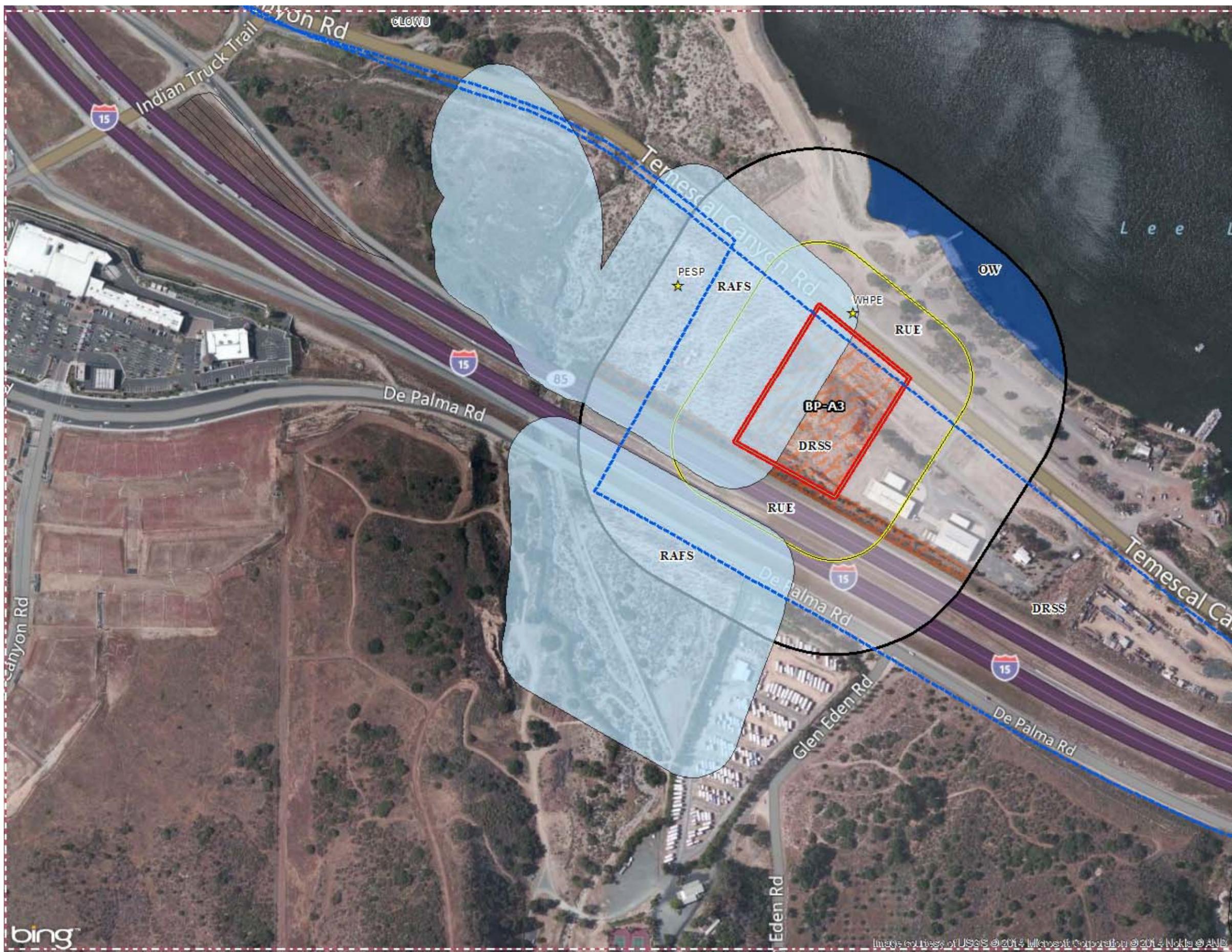
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 38

bing

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Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
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- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
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- 500 kV Pulling/Tensioning Site
- Structure Work
- Tower Disturbance
- Demolition
- Guard Pole
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- Work
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- Substation Temporary Disturbance
- Substation Wall
- Grading Limit
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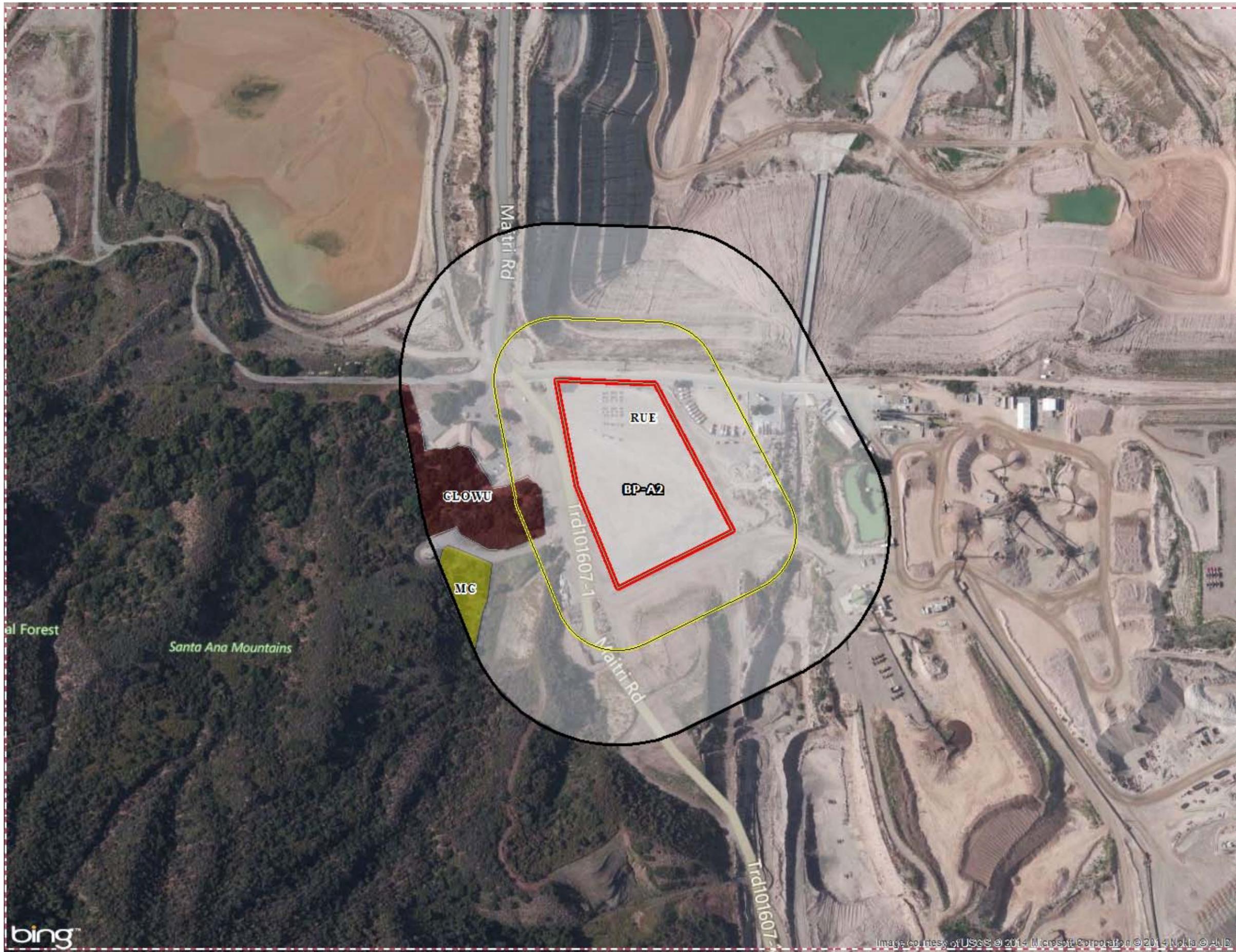
*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 39



Legend

Project Features

- | | | | |
|--|--------------------------------|--|-----------------------------------|
| | Substation label | | New 500 kV Transmission Route |
| | Existing Towers | | Existing 500 kV Transmission Line |
| | New Towers | | Access Road, Existing |
| | Existing Pole | | Access Road, New |
| | Modify Pole | | New OH Telecom Line |
| | New Pole | | New UG Telecom Line |
| | New TSP | | New UG Distribution |
| | Remove | | Alberhill Drainage Design |
| | Telcom Vault | | Alberhill Pump |
| | Existing Access Road Edge | | Alberhill Design |
| | New Access Road | | Alberhill Waterline |
| | Telcom Pulling Sites | | Alberhill Waterline Easement |
| | 500 kV Pulling/Tensioning Site | | Existing 115kV Route |
| | Structure Work | | New 115kV Route |
| | Tower Disturbance | | Alt Route |
| | Demolition | | Substation Grading Limits |
| | Guard Pole | | Substation Basins |
| | Pulling Sites | | Newcomb Substation Fence |
| | Wire Setup Site | | Substation Temporary Disturbance |
| | Work | | Substation Wall |
| | Laydown Yards | | Grading Limit |
| | | | Disturbance Area |

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|--|--|--|--|
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| | RUE - Residential/Urban/Exo... | | |

*Map Current as of 10/30/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 40



Image courtesy of USGS © 2014 Microsoft Corporation © 2014 Nokia © AFD



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
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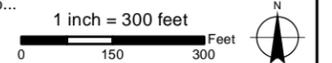
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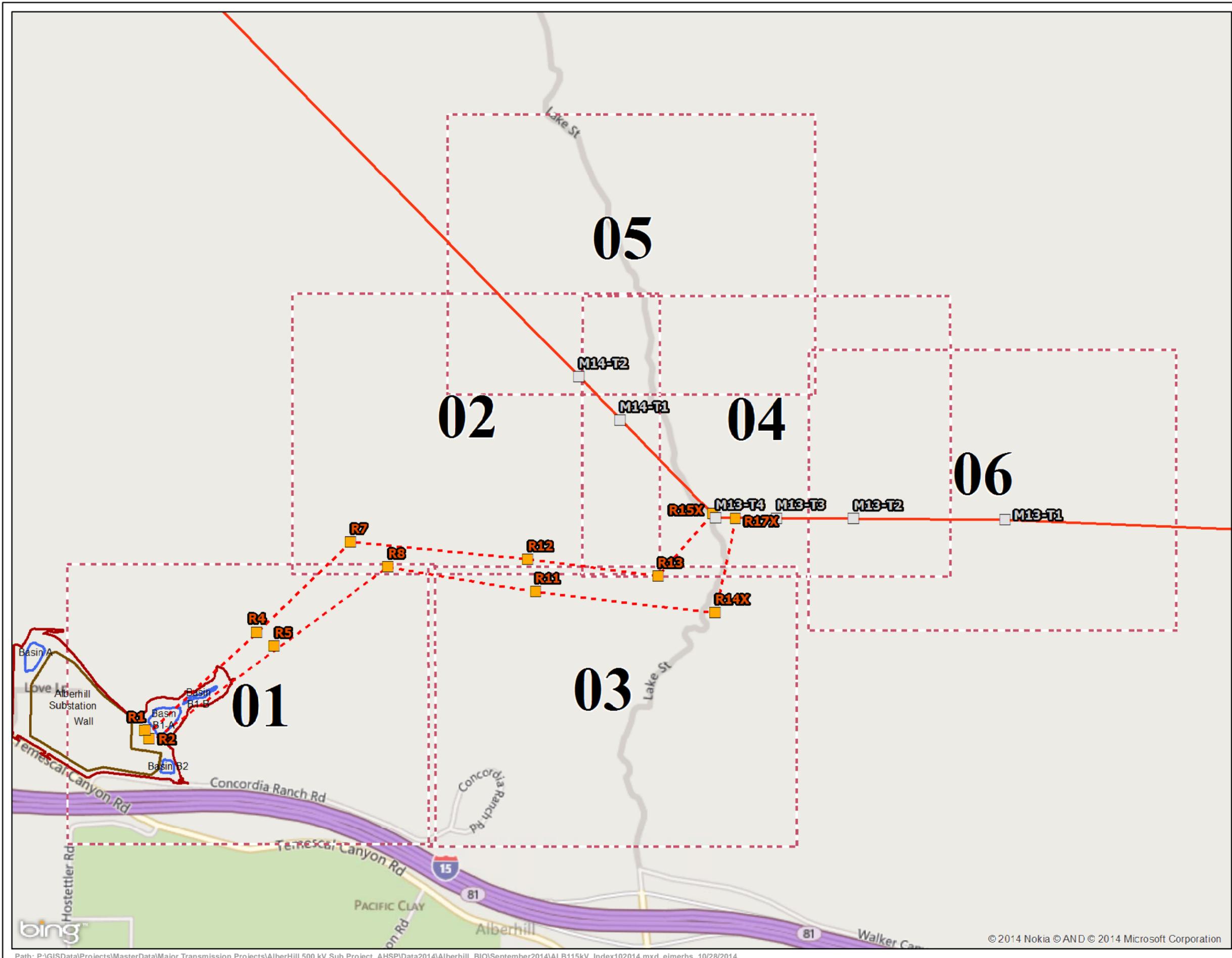


Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

Subtransmission Map 41

A2
500-KV T/L MAP BOOK



Legend

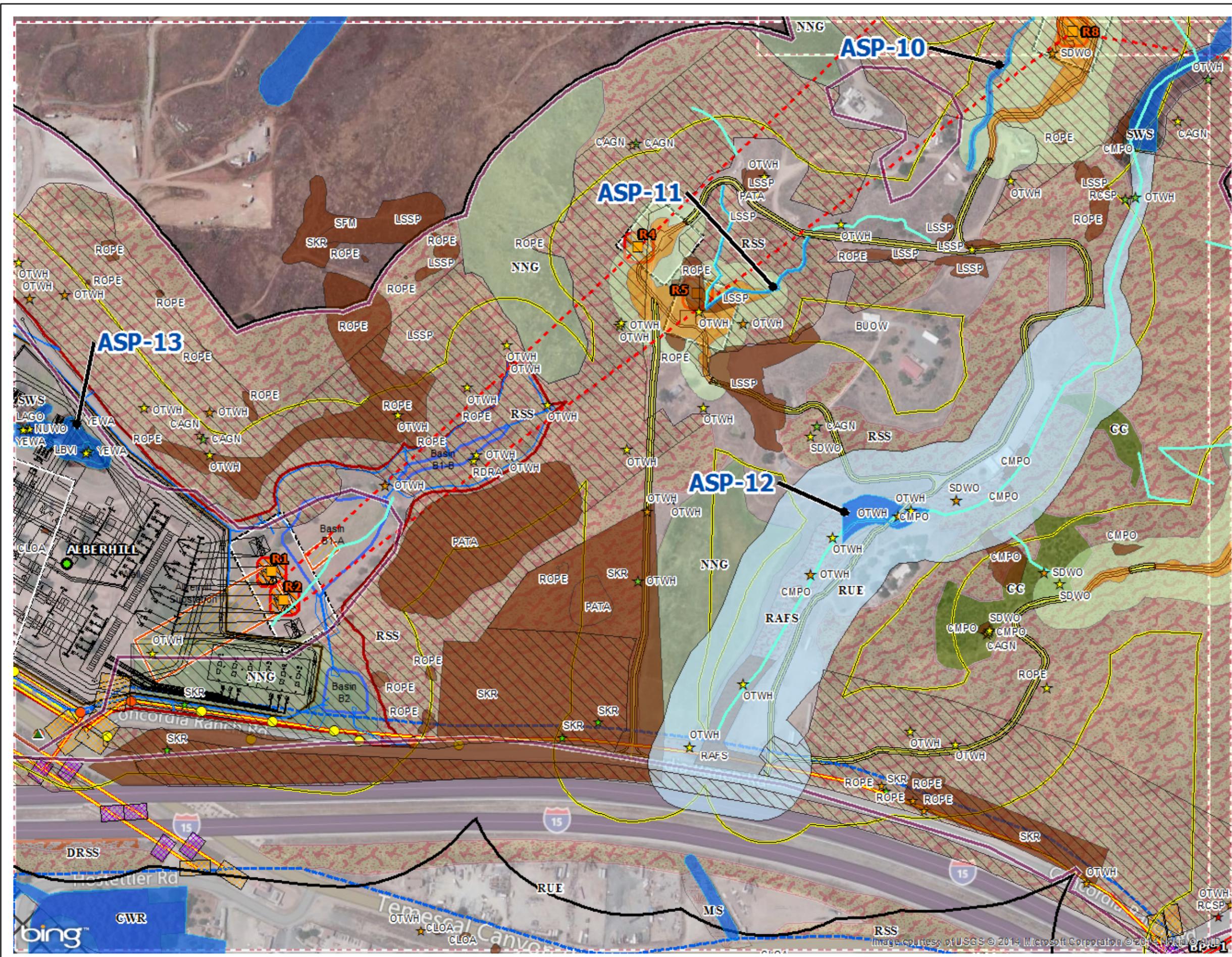
COMMON NAME	ACRONYM
Alluvial Scrub	RAFS
Bald Eagle	BAEA
Bell's Sage Sparrow	BSSP
Black-tailed Jackrabbit	BTJA
Burrowing Owl	BUOW
California Black Walnut	CBWA
California Gnatcatcher	CAGN
California Horned Lark	CHLA
chaparral sand-verbena	CHSV
Coast Live Oak	CLOA
Coast Live-Oak Woodland Riparian	CLOWR
Coast Live-Oak Woodland Upland	CLOWU
Coastal Western Whiptail	CWWH
Cooper's hawk	COHA
Costa's hummingbird	COHU
Coulter's Goldfields	COGO
Coulter's Matilija Poppy	CMPO
Douglas' microseris	DOMI
Downy Woodpecker	DOWO
Golden Eagle	GOEA
kangaroo rat (sign)	KARA
Lawrence's goldfinch	LAGO
Lawrence's Goldfinch	LAGO
Least Bell's Vireo	LBVI
Lincoln's Sparrow	LISP
Loggerhead Shrike	LOSH
long-spined spine flower	LSSP
Los Angeles Pocket Mouse	LAPM
Munz's Onion	MUON
Northern Harrier	NOHA
Nuttall's woodpecker	NUWO
Oak Titmouse	OATI
Orange-Throated Whiptail	OTWH
Osprey	OSPR
Palmer's grapplinghook	PAGR
Paniculate Tarplant	PATA
Parry's spineflower	PASP
Peninsular Spineflower	PESP
Peregrine Falcon	PEFA
Purple Martin	PUMA
Red-diamond rattlesnake	RDRA
red-tailed hawk nest	RTHA Nest
Robinson's peppergrass	ROPE
Rosy Boa	ROBO
Roundleaf Stork's Bill	RLSB
Rufous-crowned Sparrow	RCSP
Sad Diego Wood Rat	SDWO
San Diego ambrosia	SDAM
San Jacinto Valley Crowscale	SJVC
Sharp-shinned Hawk	SSHA
SKR	SKR
Slender-horned Spineflower	SHSP
small-flowered morning glory	SFMG
Smooth Tarplant	SMTA
southern live oak (non-native)	SLOA
Spadefoot Toad	WESP
Swainson's Hawk	SWHA
White Pelican	WHPE
White Rabbit Tobacco	WRTO
White-tailed Kite	WTKI

Map Notes
 -Map Current as of
 10/28/2014



Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON
 Riverside County, California
500 kV Index Map



Legend

Project Features

	Substation label		New 500 kV Transmission Route
	Existing Towers		Existing 500 kV Transmission Line
	New Towers		Access Road, Existing
	Existing Pole		Access Road, New
	Modify Pole		New OH Telcom Line
	New Pole		New UG Telcom Line
	New TSP		New UG Distribution
	Remove		Alberhill Drainage Design
	Telcom Vault		Alberhill Pump
	Existing Access Road Edge		Alberhill Design
	New Access Road Edge		Alberhill Waterline
	Telcom Pulling Sites		Alberhill Waterline Easement
	500 kV Pulling/Tensioning Site		Existing 115kV Route
	Structure Work Area		New 115kV Route
	Tower Disturbance Area		Alt Route
	Demolition Area		Substation Grading Limits
	Guard Pole		Substation Basins
	Pulling Sites		Newcomb Substation Fence
	Wire Setup Site		Substation Temporary Disturbance
	Work Area		Substation Wall
	Laydown Yards		Grading Limit
			Disturbance Area

Sensitive Species Data

	Sensitive Species (2014)		Delineated Jurisdictional Waters - Avoid or get Permit
	Sensitive Species (2013)		RCHCA/ARL
	Sensitive Species (2012)		Riverside County Required BUOW Survey Area
	Sensitive Species (2011)		Sensitive Bio Polygons
	Sensitive Species (2010)		Bio Survey Area (Pedestrian Survey)
	Sensitive Species (2009)		Bio Survey Area (Visual [Binocular/Spotting Scope] Survey)
	Sensitive Species (2008)		Riverside Alluvial Sage Scrub Avoidance Buffer
	Sensitive Species (2007)		Seasonal Vegetation Removal Area
	Sensitive Species (2006)		LBV Avoidance
	Potential Jurisdictional Waters (Avoid or delineation)		Seasonal Depression

Vegetation Communities

	OW - Open Water		VFM - Valley Freshwater Marsh
	MS - Mulefat Scrub		RAFS - Disturbed Alluvial Scrub
	FC - Field Croplands		CAM - Cismontane Alkali Marsh
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	CC - Chamise Chaparral		CWR - Southern Cottonwood/Willow Riparian Forest
	AG - Disturbed Agriculture		
	RSS - Riverside Sage Scrub		
	NNG - Non-Native Grasslands		
	SWS - Southern Willow Scrub		
	RUE - Residential/Urban/Exo...		

*Map Current as of 10/28/2014

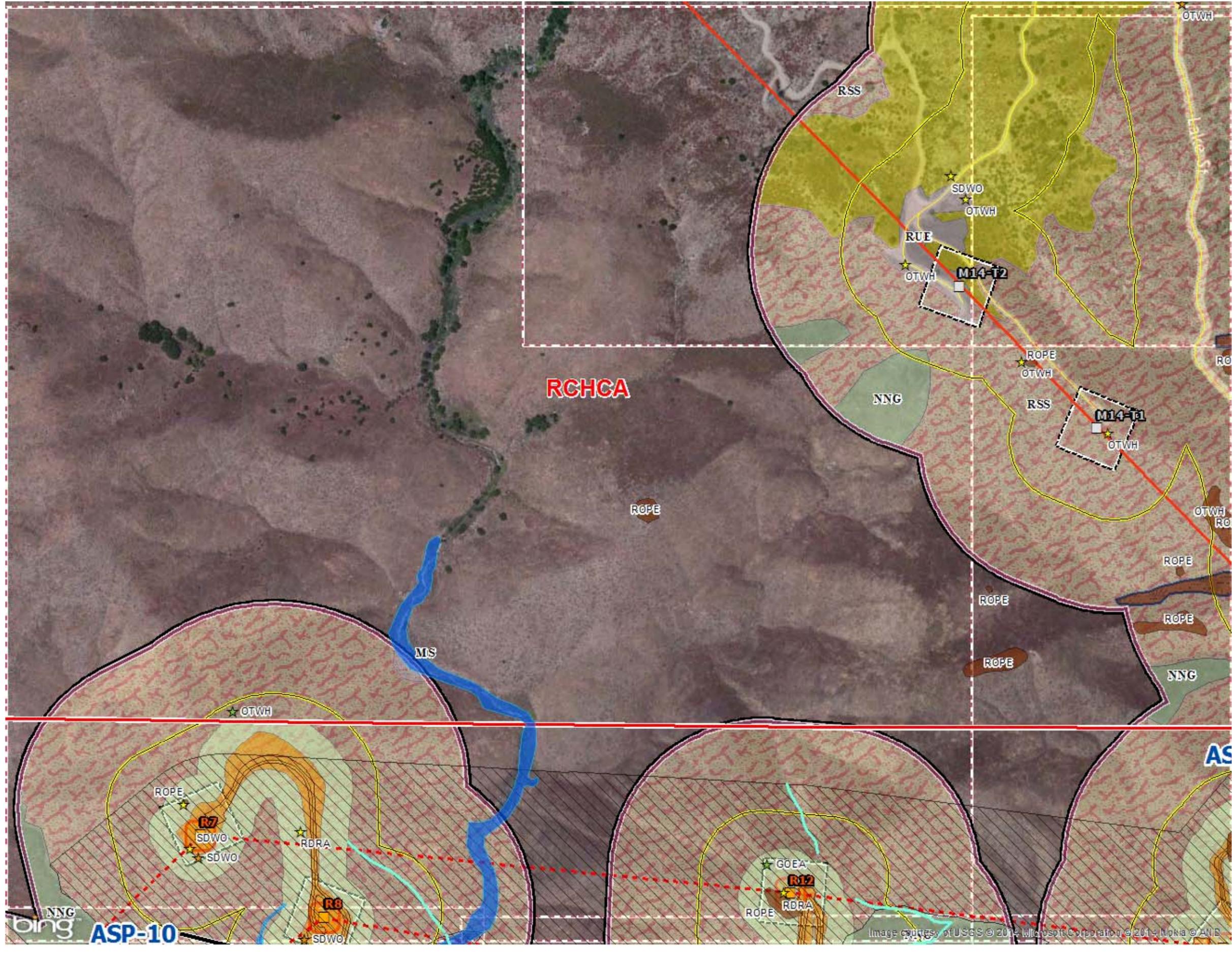
1 inch = 300 feet

500kV Map Grid

Biological Resources & Proposed Project Design
Alberhill Subtransmission Line Project

Riverside County, California

500 kV Map 01



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ◆ Telcom Vault
- Existing Access Road Edge
- New Access Road Edge
- Telcom Pulling Sites
- 500 kV Pulling/Tensioning Site
- Structure Work Area
- Tower Disturbance Area
- Demolition Area
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work Area
- Laydown Yards
- New 500 kV Transmission Route
- Existing 500 kV Transmission Line
- Access Road, Existing
- Access Road, New
- New OH Telcom Line
- New UG Telcom Line
- New UG Distribution
- Alberhill Drainage Design
- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
- Existing 115kV Route
- New 115kV Route
- Alt Route
- Substation Grading Limits
- Substation Basins
- Newcomb Substation Fence
- Substation Temporary Disturbance
- Substation Wall
- Grading Limit
- Disturbance Area

Sensitive Species Data

- ★ Sensitive Species (2014)
- ★ Sensitive Species (2013)
- ★ Sensitive Species (2012)
- ★ Sensitive Species (2011)
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- ★ Sensitive Species (2009)
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- Bio Survey Area (Pedestrian Survey)
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- Seasonal Vegetation Removal Area
- LBV Avoidance
- Seasonal Depression

Vegetation Communities

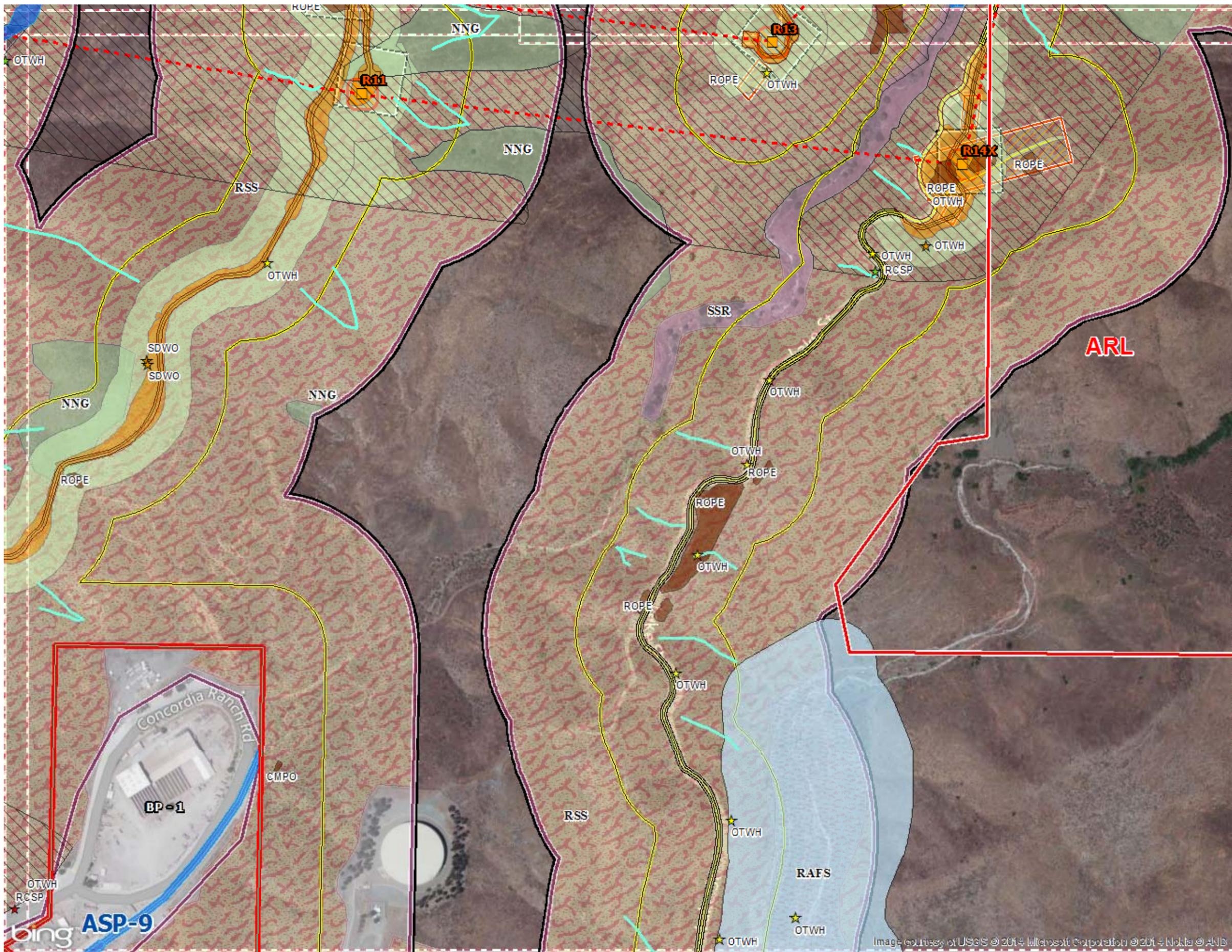
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*Map Current as of 10/28/2014

1 inch = 300 feet

Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

EDISON Riverside County, California



Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- ⊕ Telecom Vault
- Existing Access Road Edge
- New Access Road Edge
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
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- Demolition Area
- Guard Pole
- Pulling Sites
- Wire Setup Site
- Work Area
- Laydown Yards
- New 500 kV Transmission Route
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- Access Road, Existing
- Access Road, New
- New OH Telecom Line
- New UG Telecom Line
- New UG Distribution
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- Alberhill Pump
- Alberhill Design
- Alberhill Waterline
- Alberhill Waterline Easement
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- Substation Grading Limits
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- Substation Wall
- Grading Limit
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- Seasonal Vegetation Removal Area
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Vegetation Communities

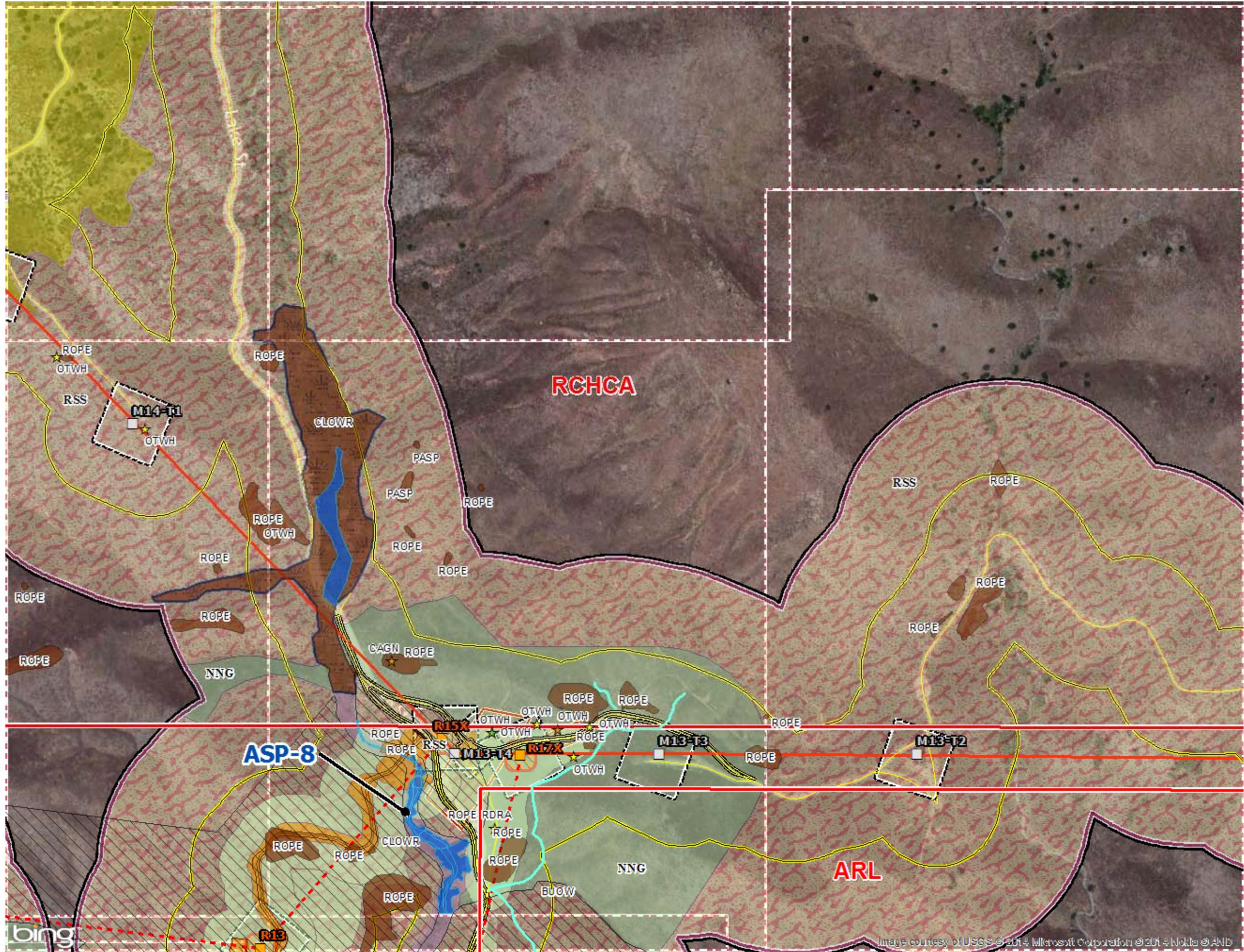
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*Map Current as of 10/28/2014

1 inch = 300 feet

Biological Resources & Proposed Project Design

Alberhill Subtransmission Line Project
 Edison
 Riverside County, California



Legend

Project Features

	Substation label		New 500 kV Transmission Route
	Existing Towers		Existing 500 kV Transmission Line
	New Towers		Access Road, Existing
	Existing Pole		Access Road, New
	Modify Pole		New OH Telcom Line
	New Pole		New UG Telcom Line
	New TSP		New UG Distribution
	Remove		Alberhill Drainage Design
	Telcom Vault		Alberhill Pump
	Existing Access Road Edge		Alberhill Design
	New Access Road Edge		Alberhill Waterline
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	Laydown Yards		Grading Limit
			Disturbance Area

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0 150 300 Feet

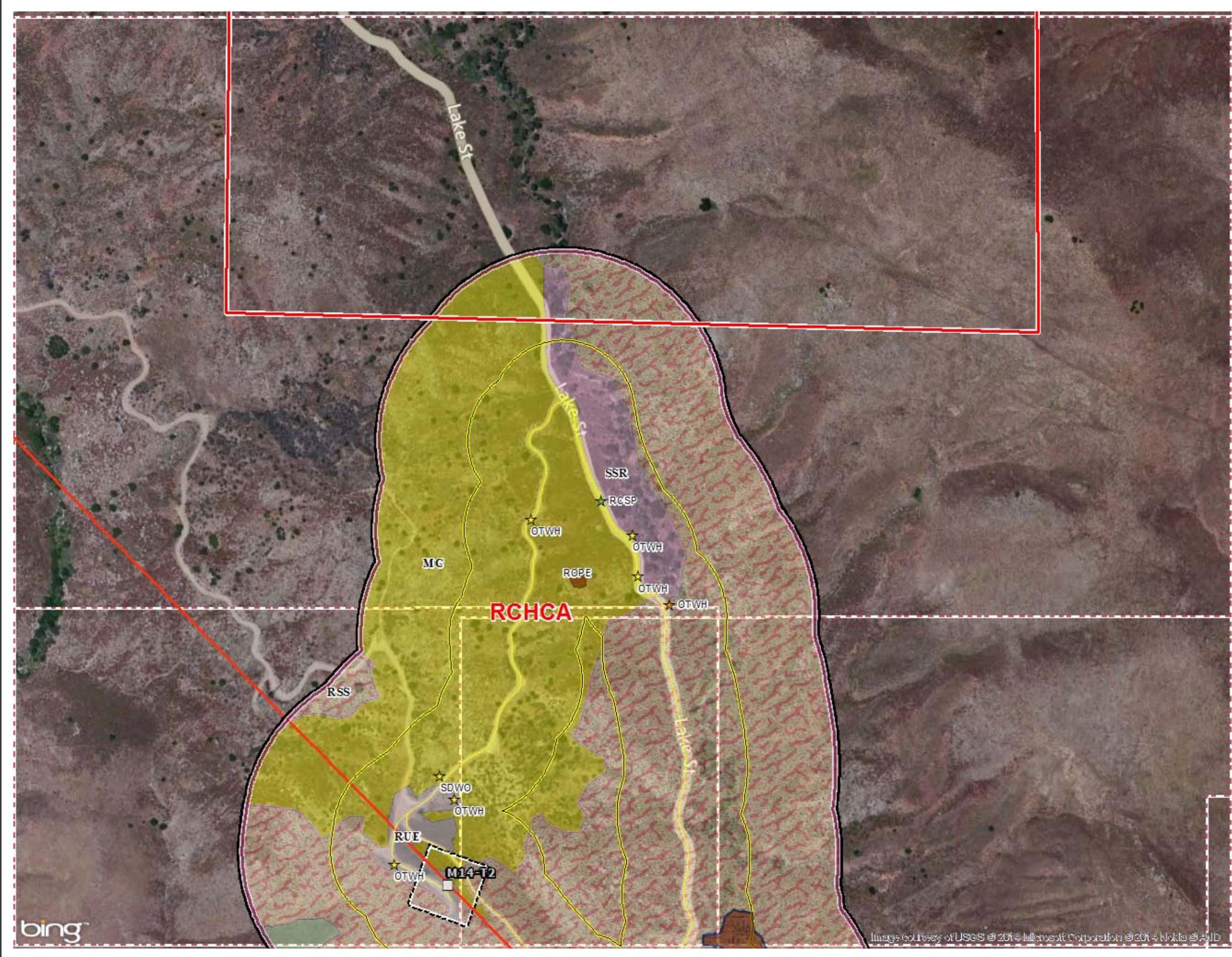
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Alberhill Subtransmission Line Project

Riverside County, California

500 kV Map 04

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Legend

Project Features

Substation label	New 500 kV Transmission Route
Existing Towers	Existing 500 kV Transmission Line
New Towers	Access Road, Existing
Existing Pole	Access Road, New
Modify Pole	New OH Telcom Line
New Pole	New UG Telcom Line
New TSP	New UG Distribution
Remove	Alberhill Drainage Design
Telcom Vault	Alberhill Pump
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Telcom Pulling Sites	Alberhill Waterline Easement
500 kV Pulling/Tensioning Site	Existing 115kV Route
Structure Work Area	New 115kV Route
Tower Disturbance Area	Alt Route
Demolition Area	Substation Grading Limits
Guard Pole	Substation Basins
Pulling Sites	Newcomb Substation Fence
Wire Setup Site	Substation Temporary Disturbance
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Laydown Yards	Grading Limit
	Disturbance Area

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0 150 300 Feet

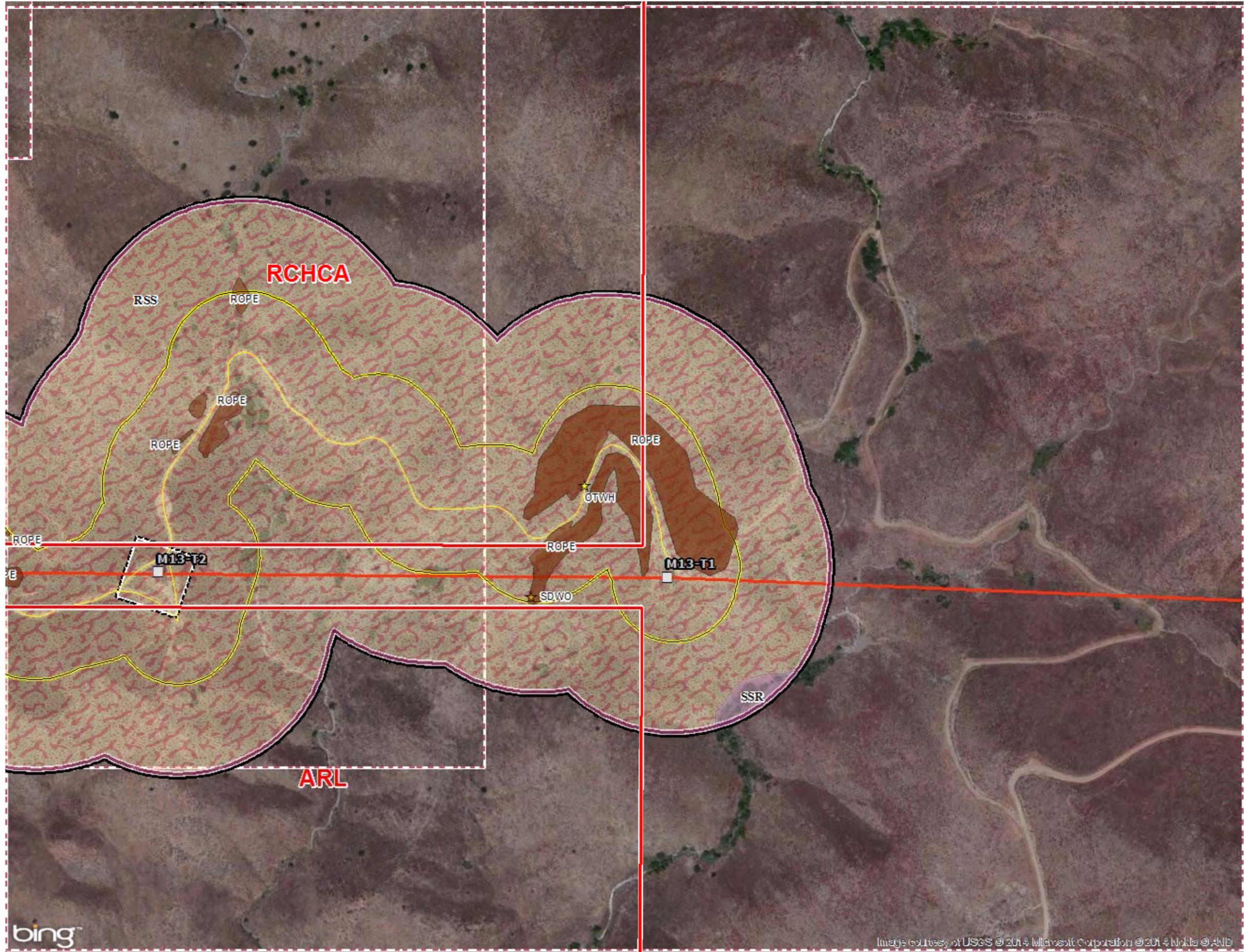
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

Riverside County, California

500 kV Map 05

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Legend

Project Features

	Substation label		New 500 kV Transmission Route
	Existing Towers		Existing 500 kV Transmission Line
	New Towers		Access Road, Existing
	Existing Pole		Access Road, New
	Modify Pole		New OH Telcom Line
	New Pole		New UG Telcom Line
	New TSP		New UG Distribution
	Remove		Alberhill Drainage Design
	Telcom Vault		Alberhill Pump
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Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project

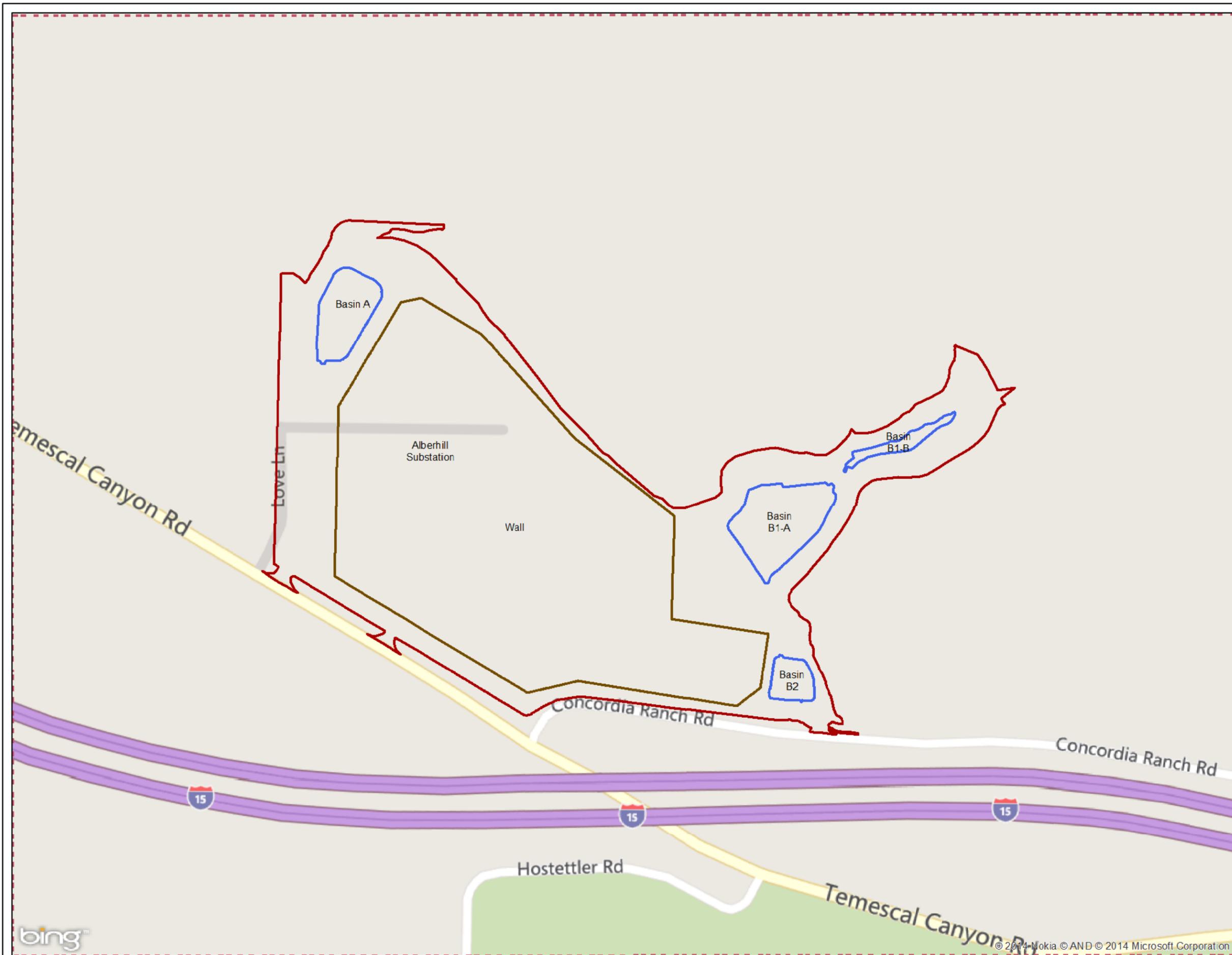
Riverside County, California

500 kV Map 06

bing

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A3
PROPOSED SUBSTATION MAP



Legend

COMMON NAME	ACRONYM
Alluvial Scrub	RAFS
Bald Eagle	BAEA
Bell's Sage Sparrow	BSSP
Black-tailed Jackrabbit	BTJA
Burrowing Owl	BUOW
California Black Walnut	CBWA
California Gnatcatcher	CAGN
California Horned Lark	CHLA
chaparral sand-verbena	CHSV
Coast Live Oak	CLOA
Coast Live-Oak Woodland Riparian	CLOWR
Coast Live-Oak Woodland Upland	CLOWU
Coastal Western Whiptail	CWWH
Cooper's hawk	COHA
Costa's hummingbird	COHU
Coulter's Goldfields	COGO
Coulter's Matilija Poppy	CMPO
Douglas' microseris	DOMI
Downy Woodpecker	DOWO
Golden Eagle	GOEA
kangaroo rat (sign)	KARA
Lawrence's goldfinch	LAGO
Lawrence's Goldfinch	LAGO
Least Bell's Vireo	LBVI
Lincoln's Sparrow	LISP
Loggerhead Shrike	LOSH
long-spined spine flower	LSSP
Los Angeles Pocket Mouse	LAPM
Munz's Onion	MUON
Northern Harrier	NOHA
Nuttall's woodpecker	NUWO
Oak Titmouse	OATI
Orange-Throated Whiptail	OTWH
Osprey	OSPR
Palmer's grapplehook	PAGR
Paniculate Tarplant	PATA
Parry's spineflower	PASP
Peninsular Spineflower	PESP
Peregrine Falcon	PEFA
Purple Martin	PUMA
Red-diamond rattlesnake	RDRA
red-tailed hawk nest	RTHA Nest
Robinson's peppergrass	ROPE
Rosy Boa	ROBO
Roundleaf Stork's Bill	RLSB
Rufous-crowned Sparrow	RCSP
Sad Diego Wood Rat	SDWO
San Diego ambrosia	SDAM
San Jacinto Valley Crowscale	SJVC
Sharp-shinned Hawk	SSHA
SKR	SKR
Slender-horned Spineflower	SHSP
small-flowered morning glory	SFMG
Smooth Tarplant	SMTA
southern live oak (non-native)	SLOA
Spadefoot Toad	WESP
Swainson's Hawk	SWHA
White Pelican	WHPE
White Rabbit Tobacco	WRTO
White-tailed Kite	WTKI

Map Notes
 -Map Current as of 10/28/2014

Map Index Grid



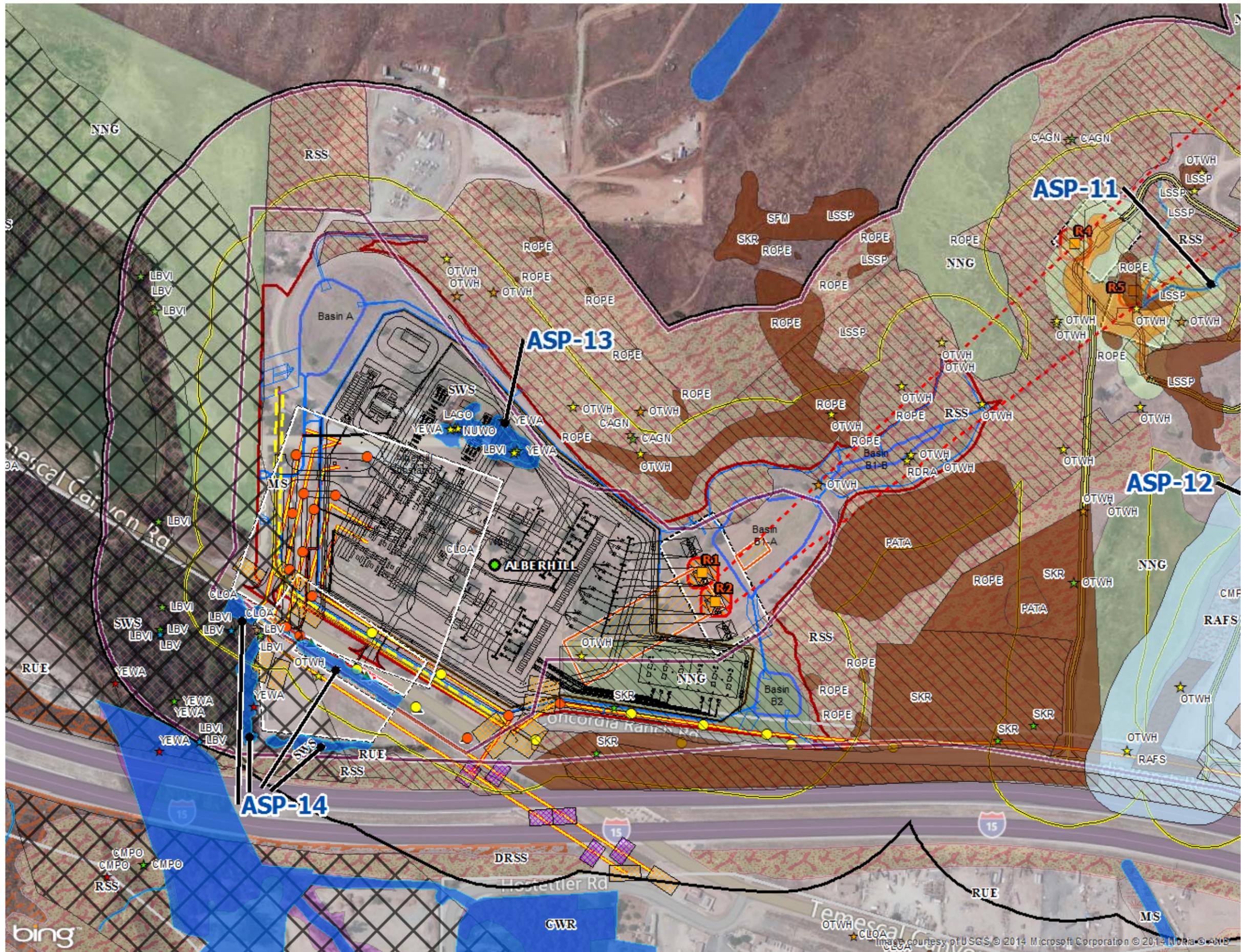
Biological Resources & Proposed Project Design Alberhill Subtransmission Line Project



Riverside County, California

Substation Index Map





Legend

Project Features

- Substation label
- Existing Towers
- New Towers
- Existing Pole
- Modify Pole
- New Pole
- New TSP
- ▲ Remove
- Telecom Vault
- Existing Access Road Edge
- New Access Road
- Telecom Pulling Sites
- 500 kV Pulling/Tensioning Site
- Structure Work
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Biological Resources & Proposed Project Design
Alberhill Subtransmission Line Project

EDISON Riverside County, California

Substation Map

APPENDIX B
ASSESSOR PARCEL NUMBERS

B1-115-kV Sub T/L APN List
B2-500-kV T/L APN List
B3-Proposed Substation APN List

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B1
115-KV SUB T/L APN LIST

**B1. (115 kV Sub T/L)
Alberhill System Project
Assessor Parcel Numbers**

APN	Owner 1	Owner 2	Owner 3
391199760	WERNER FAMILY PROP.		
391199761	SOUTHERN CALIFORNIA EDISON CO.		
391199762	SMITH. HAROLD		
391199763	SMITH. HAROLD		
391199764	FUHRMAN. THOMAS		
391199765	FUHRMAN. THOMAS		
391199766	THORNBURGH. SHEILA		
391199767	KNOLL. JEFFREY	KNOLL, ANGELA	
391199768	HARDEGREE. BRUCE	HARDEGREE, LIDA	
391199769	ALCALA. IGNACIO	ALCALA, GLORIA	
391199770	MENDEZ. JESSICA		
391199771	WILSON. TRACEY	LEVIN, TRACEY	
391199772	SHOEMAKER. DAVID	SHOEMAKER, LORA	
391199773	COX. KENNETH	COX, LYNDIA	
391199774	GRIFFIN. ROGER	ADAMS, DARRELL	ADAMS, JUDITH
391199775	KNOLL. JEFFREY	KNOLL, ANGELA	
391199776	AMIR. AMIR		
391199777	GHARACHEDAGHI. MAHMOUD	FATEMI, FATEME	
391199778	MCGRATH. JOHN	MCGRATH, ANN	
391199779	BARREDA. PEDRO	BARREDA, LEANOR	
391199780	TORRES. JOSE	TORRES, RAMONA	
391199781	ANDREWS. REBECCA		
391199782	ANDREWS. REBECCA		
391199783	BRIDGEMAN. SIMON	BRIDGEMAN, AMY	
391199784	KNUDSEN. KENNETH		
391199785	OBESO. JESUS		
391199786	DURO. CHRISTOPHER		
391199787	EAGLE RIDGE CHURCH.		
391199788	EAGLE RIDGE CHURCH.		

391199789	SHULTZ. JAMES		
391199790	HODGE. JOHN	HODGE, ALICIA	
391199791	GROTH FAMILY RANCH PARTNERS.		
391199792	FIDELITY MORTGAGE LENDERS INC.		
391199793	PETERSON. KERMIT		
391199794	GONZALES. EVANGELINA		
391199795	LINAN. JOSE		
391199796	GUERRERO. JOSE	ROMERO, ALEJANDRA	
391199797	SEWARD. LARRY	SEWARD, LORETTA	
391199798	PASCOE. WILLIAM		
391199799	MCGRATH. JOHN	MCGRATH, ANN	
391199800	ENGLEHART. LARRY	ENGLEHART, PATRICIA	
391199801	JONES. BERNARD	JONES, DORIS	
391199802	FISCUS. DEANNE		
391199803	MARTINEZ. BENJAMIN	MARTINEZ, FLORENTINA	MARTINEZ, LUIS
391199804	LANG. ALLEN	LANG, PAMELA	
391199805	REED. RICHARD	REED, GERTRUDE	
391199806	CHASE. DANIEL		
391199807	EASTERN MUNICIPAL WATER DIST.		
391199808	BROOKFIELD AMR RG.		
391199809	BROOKFIELD AMR RG.		
391199810	BROOKFIELD AMR RG.		
391199811	BROOKFIELD AMR RG.		
391199812	BROOKFIELD AMR RG.		
391199813	BROOKFIELD AMR RG.		
391199814	BROOKFIELD AMR RG.		
391199815	DONALD W PETERSEN FAMILY LTD PARTNERSHIP.		
391199816	EJD PROP.	WILLIAMS, LEWIS	WILLIAMS, SANDRA
391199817	DAVIS. CRAIG	DAVIS, RITA	
391199818	DAVIS. CRAIG	DAVIS, RITA	
391199819	COLE. MARY		
391199820	WRIGHT. GUILLERMINA	SANDOVAL, CYNTHIA	
391199821	JOHNSON. WILLIAM		
391199822	BOATRIGHT. BENJAMIN		

391199823	CAL NATIVE PLANTS.		
391199824	HASCH. J		
391199825	LYTLE. JOHN	LYTLE, MARY	
391199826	GOMEZ. JUAN	GOMEZ, SUSANA	
391199827	CHAGOLLA. STEPHEN	CHAGOLLA, CLAUDIA	
391199828	GRENINGER. MICHAEL		
391199829	BOTTO. ANTHONY	BOTTO, LAURA	
391199830	LACAYO. RUDOLPH		
391199831	FORTHUN. ROBERT	MAZIK, GRACE	
391199832	BARNETT. EDWARD	BARNETT, DARLENE	
391199833	BARNETT. EDWARD	BARNETT, DARLENE	
391199834	BAKER. MICHAEL	BAKER, TRACY	
391199835	CONENNA. THOMAS	CONENNA, JONI	
391199836	CONENNA. THOMAS	CONENNA, JONI	
391199837	BUNDY FIVE MILLION.		
391199838	ROWE. BEVERLY	SCHNEIDER, MELINDA	
391199839	HELTON. TROY		
391199840	DRK PROP.		
391199841	DAGAY. JEAN	DAGAY, GERTRUDE	
391199842	CRAWFORD. NANCY		
391199843	OUTHUIJSE. JOHN	OUTHUIJSE, DARLENE	
391199844	MANSLAND DEV.		
391199845	WILSON. WILLIAM	CEDIEL, BONNIE	
391199846	GERARD. BERTHE		
391199847	JOHNSON. WESTON		
391199848	CHRISTENSEN. HERBERT	CHRISTENSEN, MARY	
391199849	NOOTBAAR. ERIC		
391199850	GERARD. BERTHE		
391199851	ST NICHOLAS GREEK ORTHODOX CHURCH OF TEM.		
391199852	YEN. DAVID	YEN, ROSA	
391199853	TRAN. SCOTT	BIERLY, JEROME	TRAN, LINH
391199854	KOO. CHOON	KOO, MOON	
391199855	HARMATZ. JERRY		
391199856	HARMATZ. JERRY		

391199857	HARMATZ. JERRY		
391199858	TALLMAN. JUDITH		
391199859	STEBOR PROP.		
391199860	CHENWELL INC.		
391199861	CHENWELL INC.		
391199862	TOYOTA MOTOR SALES U S A INC.		
391199863	ROBLES. FRANK	ROBLES, KAREN	
391199864	DCH CALIF INV.		
391199865	GREGORY. ROBERT	GREGORY, NANCY	
391199866	DEPASQUALE. LOUIS	SINK, DANIEL	DEPASQUALE, ISABELLA
391199867	DEPASQUALE. LOUIS	SINK, DANIEL	INLAND PACIFIC CALIF,
391199868	COUNTY OF RIVERSIDE.		
391199869	YANAGISAWA. WILFRED		
391199870	LE. BAO	TRAN, PHUONG	
391199871	FALCONER. DIANE		
391199872	GONZALES. JAMES	GONZALES, ESTELA	
391199873	26TH CORP.		
391199874	CHURCHILL. MARK	CHURCHILL, LAURIE	
391199875	GARCIA FRANCISCO & KRISTINE LIV TRUST.	GARCIA, FRANCISCO	GARCIA, KRISTINE
391199876	YAP. STEPHEN	BURRISS YAP, LOUREE	
391199877	ZUPAN. PETER	ZUPAN, KATHLEEN	
391199878	MICALIF. LOREN	UPTON, MARIAN	
391199879	GUERRERO. ANTONIO	GUERRERO, ISIDRA	
391199880	YOUNGER. DENNIS	YOUNGER, DELORES	
391199881	LAKE ELSINORE ELKS LODGE 2591.		
391199882	BENSON. HOA		
391199883	ROBLEDO. RICARDO	ROBLEDO, ROSA	
391199884	HERNANDEZ. TANIA	CASILLAS, GERARDO	
391199885	BIGELSON. WILLIAM		
391199886	ZAVALA. CESAR		
391199887	BURDICK. SHELTON		
391199888	DUCHSCHERER. JOE		
391199889	JUBALA. MANUEL	JUBALA, BELINDA	
391199890	JUBALA. MANUEL	JUBALA, BELINDA	

391199891	BIGELSON. SIMA		
391199892	DUNN. RYAN		
391199893	HERRERA. CARMEN		
391199894	HERRERA. CARMEN		
391199895	ALVAREZ. JOSE		
391199896	HERNANDEZ. GERARDO		
391199897	CICH. BRIAN	LASCOLA, REBECCA	
391199898	MENDOZA. REGINA	MENDOZA, LOUIS	
391199899	ANDERSON. JASON	ANDERSON, KAREN	
391199900	FEDERAL HOME LOAN MORTGAGE CORP.		
391199901	LE. JOLIE		
391199902	CANYON RANCH L P.		
391199903	KHAYYAL. VIRGINIA	DACARET, VIVIAN	CHADE, ROBERT
391199904	LAKE PLACE HOMES.		
391199905	HERRERA. BENJAMIN		
391199906	RACANA. LAWRENCE	RACANA, MARGARET	
391199907	DEVELOPMENT AT MISSION TRAILS LAKE ELSINORE.		
391199908	MKJ WILDOMAR BUSINESS PARK.		
391199909	WHITESTONE PROP INC.	DHANOA, BHARPUR	MAKAM, RAVI
391199910	STATE OF CALIF.		
391199911	DCH CALIF INV.		
391199912	THOMAS. BERNICE		
391199913	RIGHTWAY HOLDINGS.		
391199914	RKW & MLW ELSINORE.		
391199915	MORRIS. GARY	MORRIS, ELENA	
391199916	RKW & MLW ELSINORE.		
391199917	RKW & MLW ELSINORE.		
391199918	RIVERSIDE COUNTY FLOOD CONT.		
391199919	MAIZLAND. DAVID		
391199920	EVMWD.		
391199921	FSA REALTY I.		
391199922	FSA REALTY I.	ARNOLD, MARK	ARNOLD, LISEL
391199923	VALENZUELA. GUILLERMO	VALENZUELA, DOLORES	VALENZUELA, HENRY
391199924	KHASTOO. SHARO	HYMAN, S	HYMAN, SUSAN

391199925	LICK & STICK IT.	
391199926	MKJ ADNOFF INV.	
391199927	RIVERSIDE COUNTY FLOOD CONT.	
391199928	PILARO. REY	
391199929	NEGRETE. SILVINO	NEGRETE, PILAR
391199930	LORENZANA. ROLANDO	LORENZANA, HILDA
391199931	SOUTHERN CALIF EDISON CO.	
391199932	SOUTHERN CALIFORNIA EDISON CO.	
391199933	DCH CALIF INV.	
391199934	PASADENA BUILDING N.	
391199935	CENTRAL AVENUE INDUSTRIAL.	
391199936	FCI CONST INC.	
391199937	FCI CONST INC.	
391199938	FCI CONST INC.	
391199939	FCI CONST INC.	
391199940	FCI CONST INC.	
391199941	FCI CONST INC.	
391199942	FCI CONST INC.	
391199943	D & D CATTLE CO.	
391199944	AYVACI. OMER	
391199945	NAKSHABANDI. EDDIE	
391199946	GAMBLE. JOHN	GAMBLE, FIROUZEH
391199947	HSU. MIN	SABELLA, ANGELA
391199948	SHIELDS. CYNTHIA	
391199949	BLOOD. DAVID	
391199950	SOUTH IC DEV INC.	HSU, CHI PING
391199951	MORRIS. GARY	MORRIS, ELENA
391199952	RUVALCABA. SALVADOR	RUVALCABA, MARIA
391199953	GLOBAL SIGNAL ACQUISITIONS IV.	
391199954	FIRST CITIZENS BANK & TRUST CO.	
391199955	COUNTRY CLUB HOLDINGS.	
391199956	DONNELLY. WILLIAM	
391199957	KRENZALEK. JOHN	KRENZALEK, FLORENCE
391199958	TADLA. EDWARD	

391199959	CLEMENTS. RHONDA	
391199960	FAVERO. STEVEN	KIMES, JUDY
391199961	COUNTRY CLUB HOLDINGS.	
391199962	LINDSEY. PATRICIA	
391199963	LINDSEY. PATRICIA	
391199964	COUNTRY CLUB HOLDINGS.	
391199965	MORENO. JOYCE	CAT LIN JOY ENTERPRISES,
391199966	MORENO. JOYCE	CAT LIN JOY ENTERPRISES,
391199967	HAYS. DAVID	
391199968	MORIDI. KAMBIZ	
391199969	ROCHA. LUCERO	
391199970	HAYS. DAVID	
391199971	CITY OF LAKE ELSINORE.	
391199972	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199973	COUNTY OF RIVERSIDE.	
391199974	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199975	CASTLE & COOKE ALBERHILL RANCH.	
391199976	CASTLE & COOKE ALBERHILL RANCH.	
391199977	CASTLE & COOKE ALBERHILL RANCH.	
391199978	CASTLE & COOKE ALBERHILL RANCH.	
391199979	CASTLE & COOKE ALBERHILL RANCH.	
391199980	CASTLE & COOKE ALBERHILL RANCH.	
391199981	CASTLE & COOKE CALIFORNIA INC.	
391199982	PROVIDENT ENGINEERING DEV CO.	W & J ASSOC,
391199983	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199984	COUNTY OF RIVERSIDE.	
391199985	PACIFIC CLAY PRODUCTS INC.	
391199986	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199987	T T GROUP.	
391199988	PACIFIC CLAY PRODUCTS INC.	
391199989	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199990	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199991	CASTLE & COOKE LAKE ELSINORE WEST INC.	
391199992	CASTLE & COOKE LAKE ELSINORE WEST INC.	

391199993	PACIFIC CLAY PRODUCTS INC.	
391199994	DAR INV.	
391199995	TEMECULA VALLEY.	
391199996	SOUTHERN CALIF EDISON CO.	
391199997	RICH HAVEN VISSER.	HILL COUNTRY S A LTD,
391199998	SO CAL SANDBAGS INC.	
391199999	HANMER. WILLIAM	
391200000	TEMESCAL ELSINORE PARTNERS.	
391200001	UNITED BRICK & CLAY WORKER LOCAL 843 AFL TR.	
391200002	SOUTHERN CALIF EDISON CO.	
391200003	SOUTHERN CALIF EDISON CO.	
391200004	BUNTING. FREDA	
391200005	EVMWD.	
391200006	TEMESCAL ELSINORE PARTNERS.	
391200007	OTTO. JANE	
391200008	STATE OF CALIF.	
391200009	STATE OF CALIF.	
391200010	PACIFIC CLAY PRODUCTS INC.	PACIFIC CLAY PROD INC,

B2
500-KV T/L APN LIST

**B2. (500 kV T/L)
Alberhill System Project
Assessor Parcel Numbers**

APN	Owner 1	Owner 2	Owner 3
390100002	RIVERSIDE CO HABITAT CONSERV AGENCY INC		
390110003	SOUTHERN CALIFORNIA EDISON CO		
391120010	PAWLOWSKI	PAWLOWSKI, DANIEL	PAWLOWSKI, NORMA
391120026	SOUTHERN CALIF EDISON CO		
390110006	COUNTY OF RIVERSIDE		
391120009	PAWLOWSKI	PAWLOWSKI, DANIEL	PAWLOWSKI, NORMA
391120011	TONTO CORP	GABRYCH, EUGENE	GABRYCH, EUGENE
391200016	FRANSSONS INV CO		
390110007	GENUS		
391120012	CONCORDIA PROP		

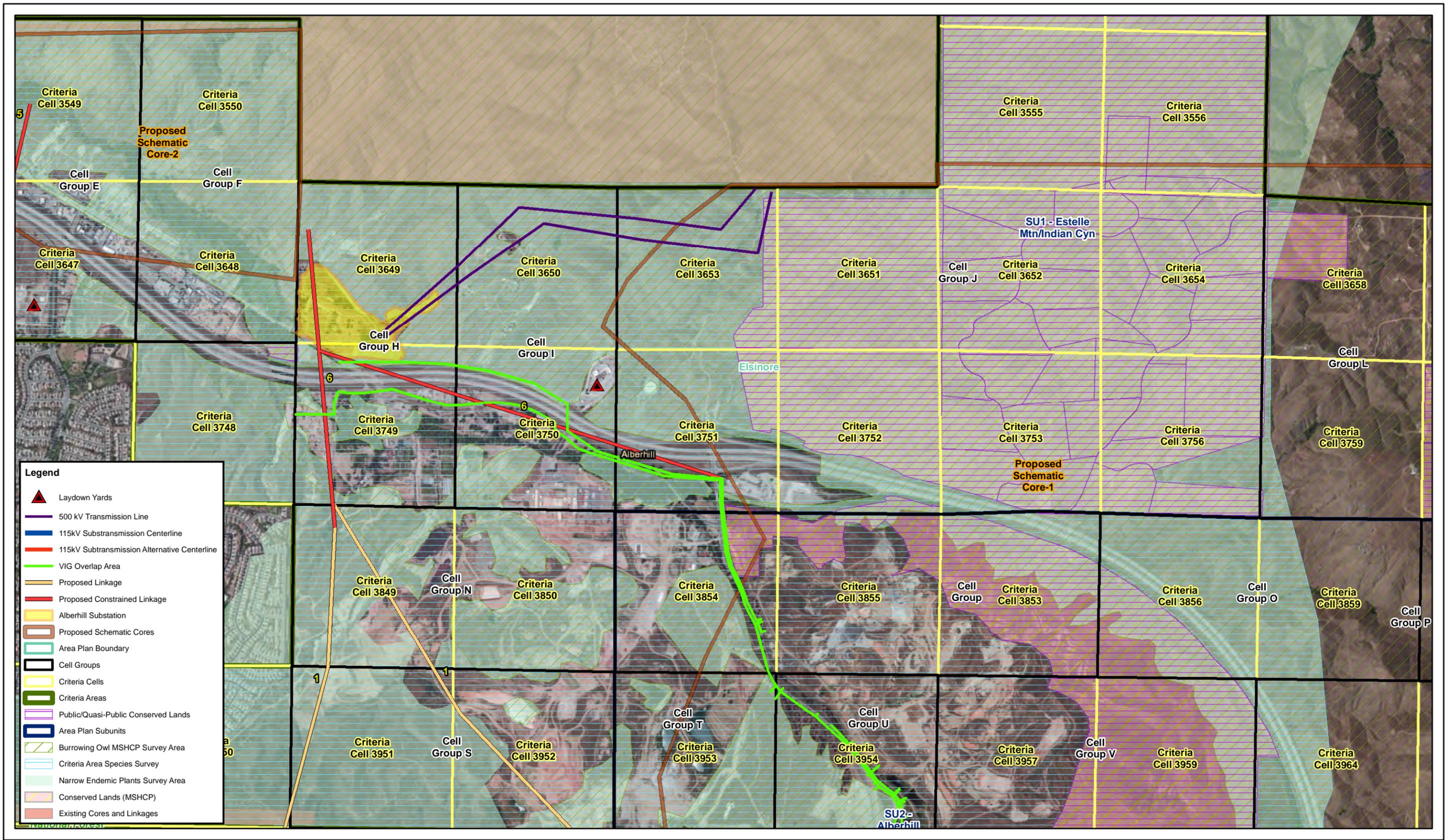
B3
PROPOSED SUBSTATION APN LIST

**B3. (Substation)
Alberhill System Project
Assessor Parcel Numbers**

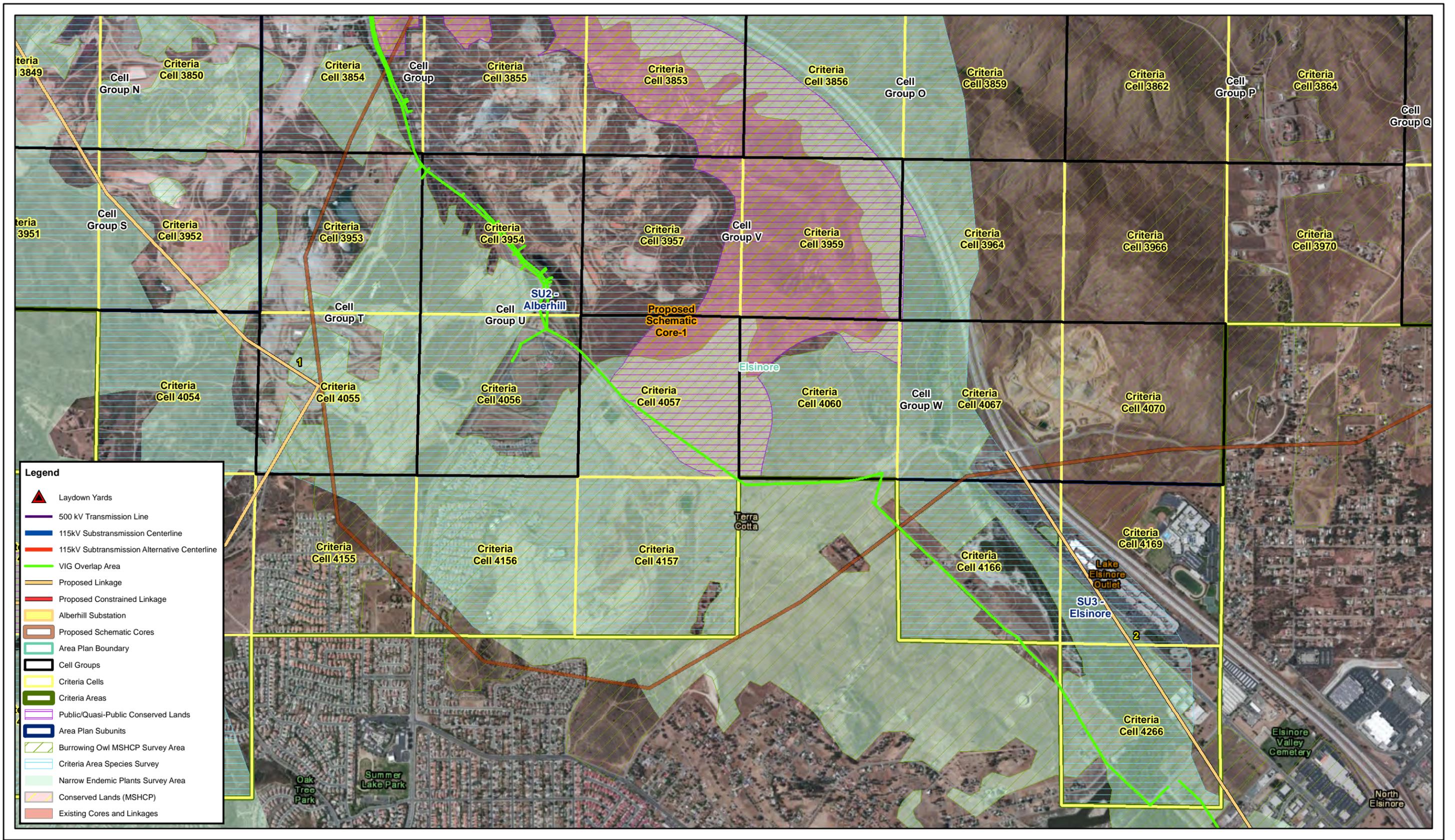
APN	Owner 1	Owner 2	Owner 3
391120003	SOUTHERN CALIF EDISON CO		
391120024	SOUTHERN CALIF EDISON CO		
391120022	SOUTHERN CALIF EDISON CO		
391160022	SOUTHERN CALIF EDISON CO		
391120026	SOUTHERN CALIF EDISON CO		
391110006	DERUYTER, J	DERUYTER, JOANNE	DERUYTER, JO
391110022	EVMWD		
391120002	SOUTHERN CALIF EDISON CO		
391120016	SOUTHERN CALIF EDISON CO		
391110007	DERUYTER, J	DERUYTER, JOANNE	DERUYTER, JO
391120023	SOUTHERN CALIF EDISON CO		
391160021	SOUTHERN CALIF EDISON CO		
339200009	SOUTHERN CALIFORNIA EDISON CO		
391120015	EVMWD		

APPENDIX C
MSHCP CRITERIA AREAS AND CELLS

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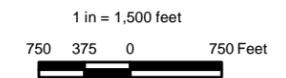
MSHCP Criteria Areas and Cells
MSHCP Biological Resources Technical Report for the Alberhill System Project
Riverside County, California

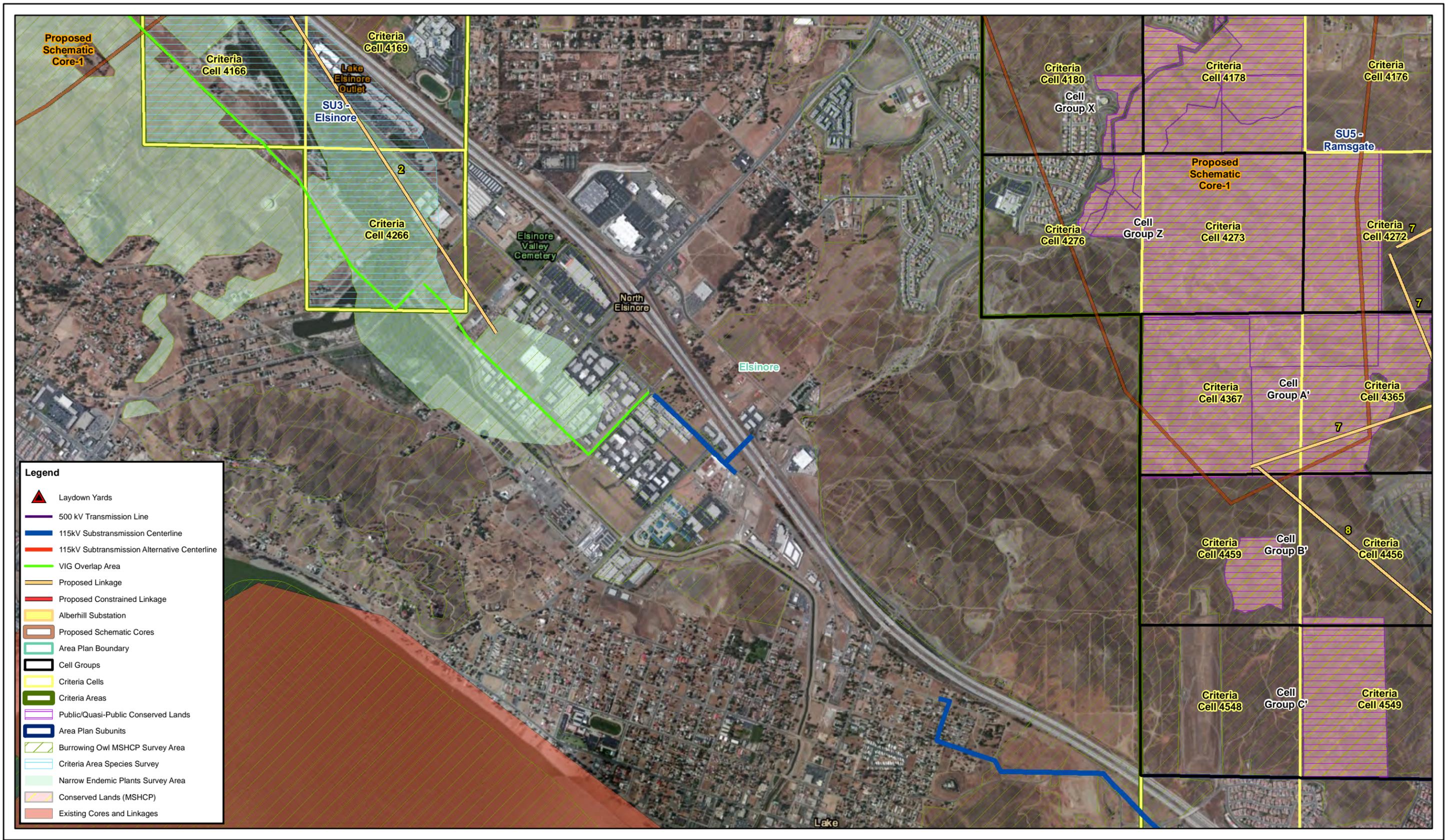


Legend

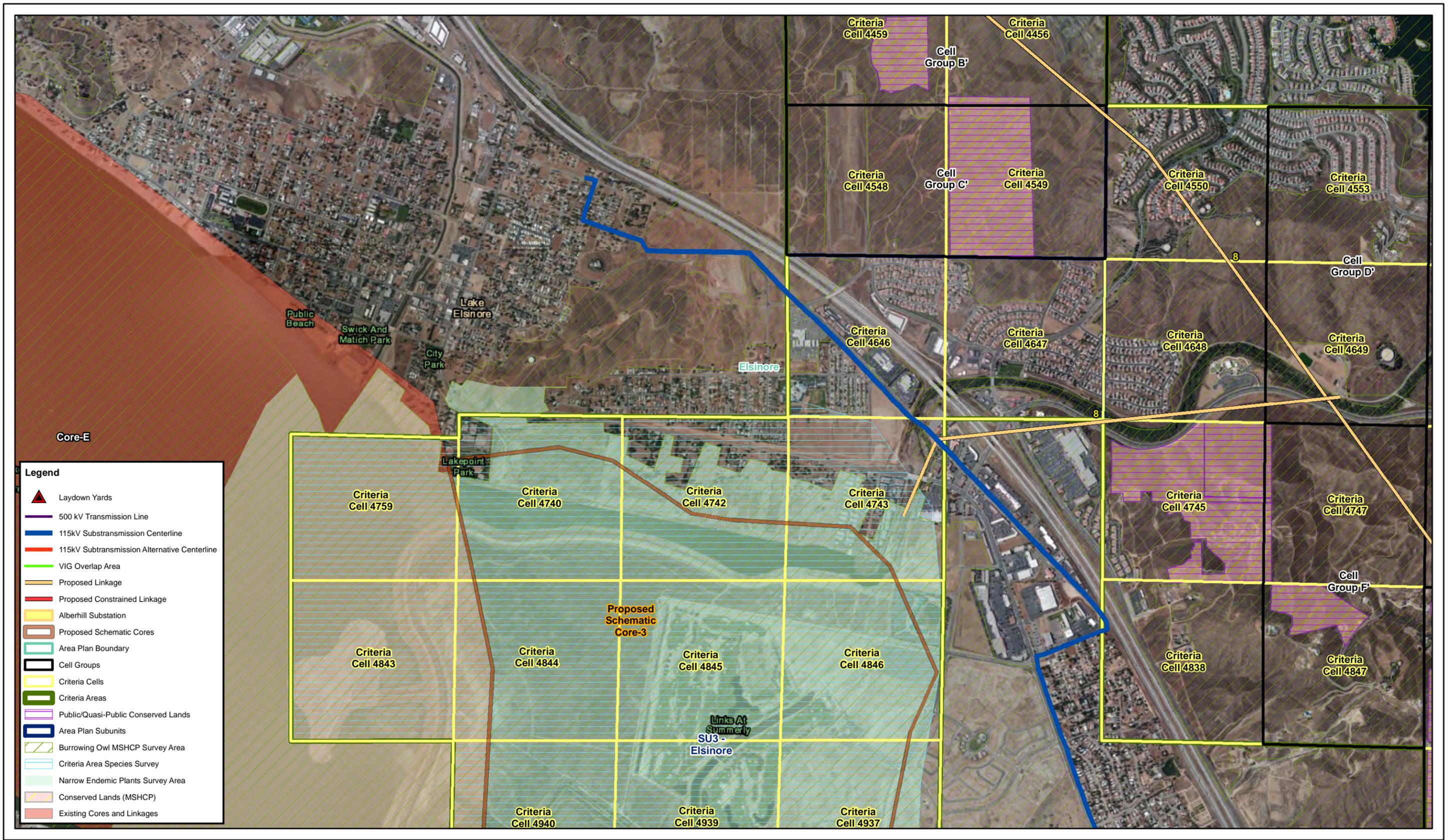
- Laydown Yards
- 500 kV Transmission Line
- 115kV Subtransmission Centerline
- 115kV Subtransmission Alternative Centerline
- VIG Overlap Area
- Proposed Linkage
- Proposed Constrained Linkage
- Alberhill Substation
- Proposed Schematic Cores
- Area Plan Boundary
- Cell Groups
- Criteria Cells
- Criteria Areas
- Public/Quasi-Public Conserved Lands
- Area Plan Subunits
- Burrowing Owl MSHCP Survey Area
- Criteria Area Species Survey
- Narrow Endemic Plants Survey Area
- Conserved Lands (MSHCP)
- Existing Cores and Linkages

MSHCP Criteria Areas and Cells
MSHCP Biological Resources Technical Report for the Alberhill System Project
Riverside County, California

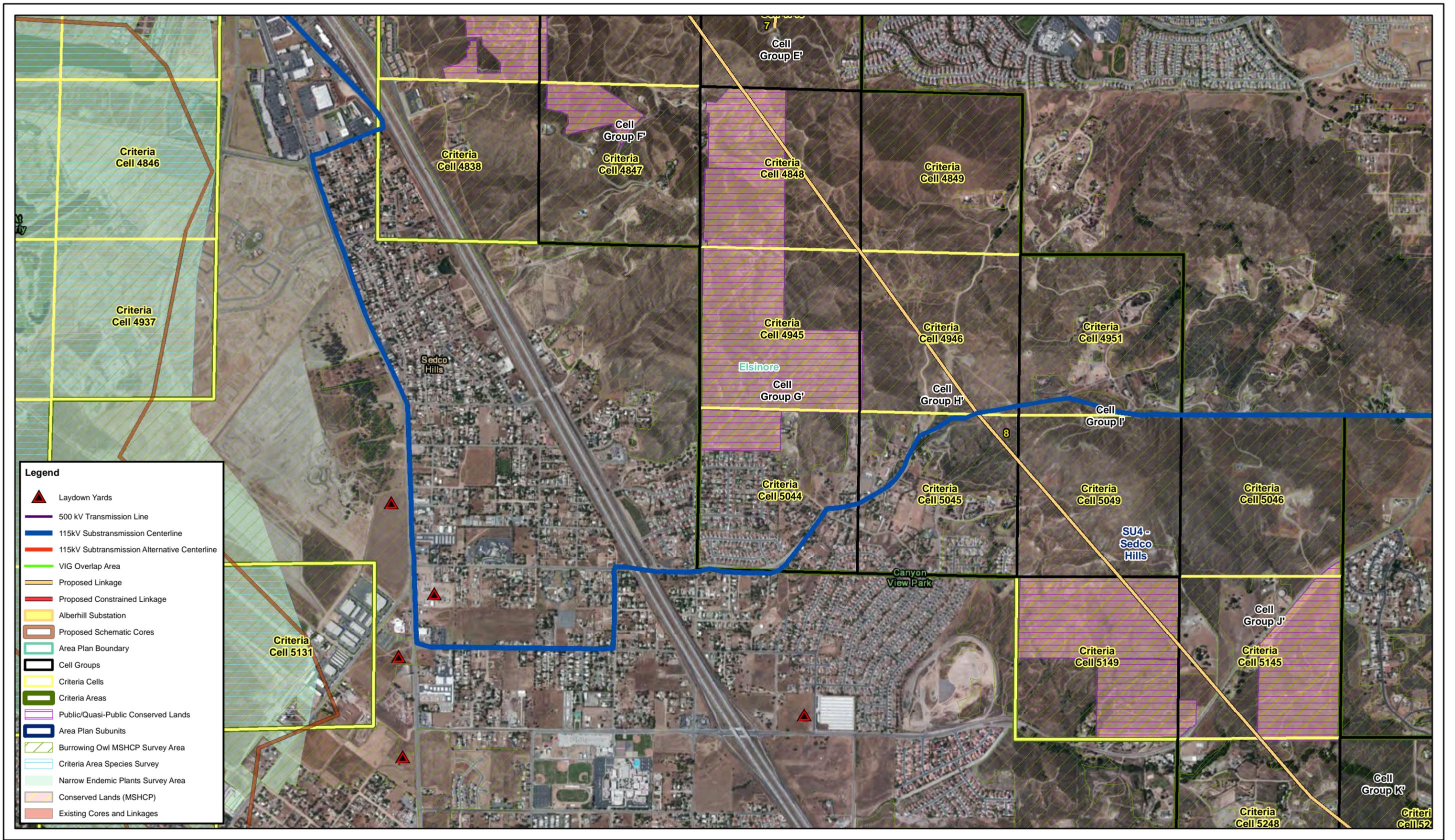




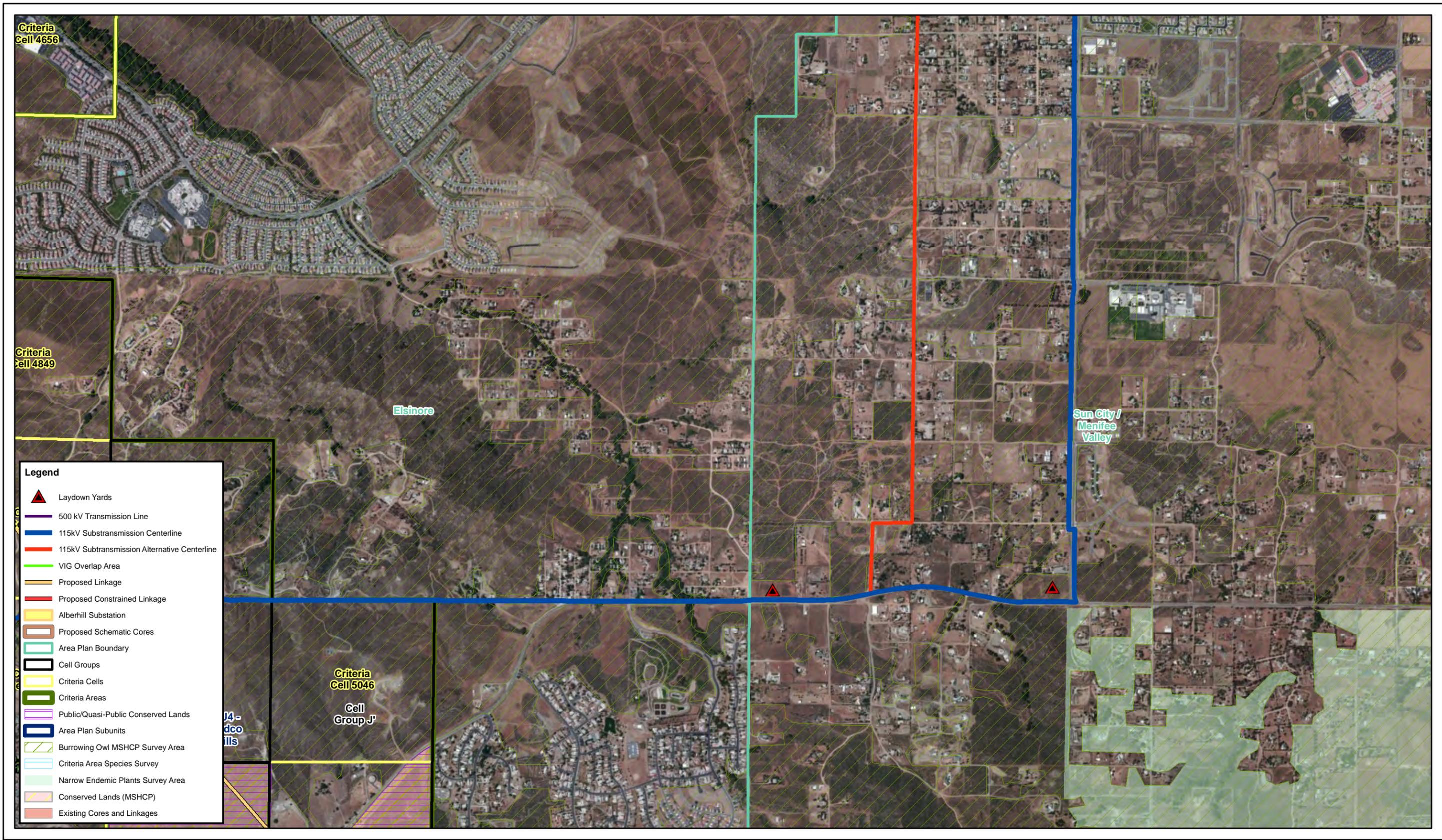
MSHCP Criteria Areas and Cells
MSHCP Biological Resources Technical Report for the Alberhill System Project
Riverside County, California



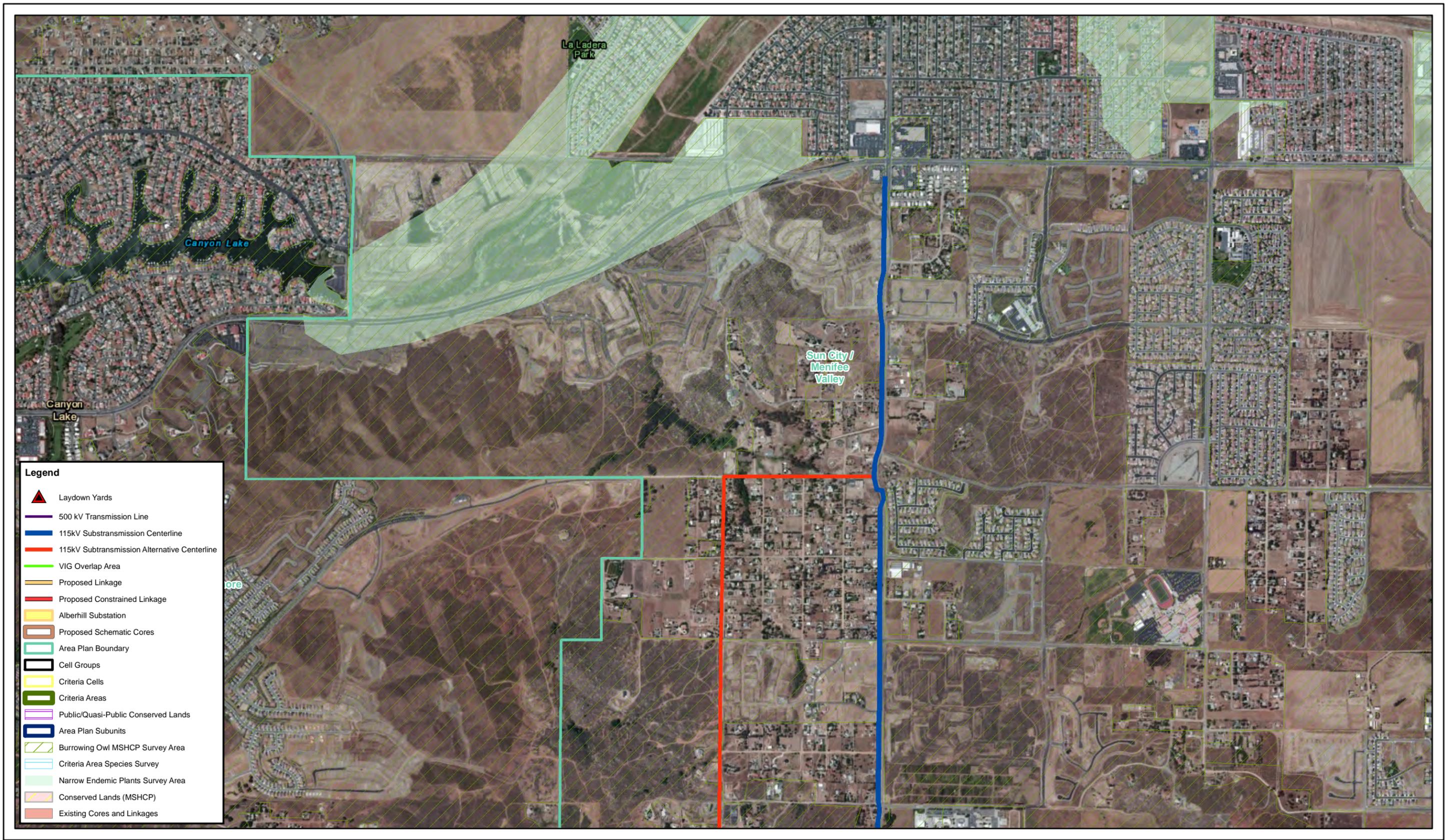
MSHCP Criteria Areas and Cells
MSHCP Biological Resources Technical Report for the Alberhill System Project
Riverside County, California



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Riverside County, California



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Riverside County, California

APPENDIX D

SPECIES THAT HAVE POTENTIAL TO OCCUR WITHIN THE PROJECT AREA

D1-Plants
D2-Wildlife

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**D1
PLANTS**

2012 Alberhill System Project, Sensitive Plant Species Potential for Occurrence Table

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	BLOOMING PERIOD	SUITABLE HABITAT AND POTENTIAL FOR OCCURRENCE
chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	CNPS:1B.1	-	Jan-Sep	Occurs within sandy soils and is associated with chaparral and sage scrub plant communities. 80–1600 meters. <i>Unlikely to occur in the Substation and 500-kV study areas. Occurs in the 115-kV study area.</i>
Yucaipa onion <i>Allium marvinii</i>	CNPS:1.B.1 MSHCP: NEPS	Partially Covered	April-May	Occurs in openings within chaparral plant communities. Often associated with clay soils. 760–1065 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115 kV study areas.</i>
Munz's onion <i>Allium munzii</i>	FE ST CNPS:1B.1 MSHCP: NEPS	Partially Covered	March-May	Occurs in clay soils (Within Western Riverside County unit Bosanko clay soils and Las Posas gravelly loam) within mesic sites in grassy openings within scrublands or woodlands. 297–1070 meters. <i>Unlikely to occur in the Substation study area. Moderate potential to occur in the 500-kV and proposed 115-kV study areas.</i>
San Diego ambrosia <i>Ambrosia pumila</i>	FE CNPS:1B.1 MSHCP: NEPS	Partially Covered	April-Oct	Occurs in upland areas on clay slopes or dry margins of vernal pools. Often associated with open, gently sloped grasslands, and generally found in alkaline soils. 20–415 meters. <i>No potential to occur in the Substation and 500-kV study areas. Occurs within the proposed 115-kV study area.</i>
Johnston's rock cress <i>Arabis johnstonii</i>	FSS CNPS:1B.2 MSHCP: NEPS	Partially Covered	Feb-June	Occurs within chaparral and lower montane coniferous forest. Often associated with eroded clay soils. 1350–2150 meters. <i>Unlikely to occur in the Substation, 500-kV and the proposed 115-kV study areas.</i>
Rainbow manzanita <i>Arctostaphylos rainbowensis</i>	CNPS:1B.1	Fully Covered	Dec-March	Most often occurs in gabbro soils within chaparral in Riverside and San Diego counties. 225–670 meters. <i>Unlikely to occur in the Substation, 500-kV and the proposed 115-kV study areas.</i>
western spleenwort <i>Asplenium vespertinum</i>	CNPS:4.2	-	February-June	Occurs within rocky soils and is associated with chaparral, cismontane woodland, and coastal scrub plant communities. 180-1000 meters. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Jaeger's milkvetch <i>Astragalus pachypus</i> var. <i>jaegeri</i>	CNPS:1B.1	Fully Covered	Dec-June	Occurs in a variety of habitats including chaparral, cismontane woodland, coastal scrub, and valley/foothill grassland habitats. Occurs locally within the "Badlands" south of Beaumont and Potrero Canyon area. 365–915 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	BLOOMING PERIOD	SUITABLE HABITAT AND POTENTIAL FOR OCCURRENCE
San Jacinto Valley crowscale <i>Atriplex coronata</i> var. <i>notatior</i>	FE CNPS:1B.1 MSHCP:CAS	Partially Covered	April-Aug	Occurs primarily in floodplains dominated by alkali scrub, alkali playas, vernal pools, and, to a lesser extent, alkali grasslands. Restricted to highly alkaline, silty-clay soils in association with Travers-Domino-Willows soil association. 139–500 meters. <i>Unlikely to occur in the substation and 500-kV study areas. Occurs within the proposed 115-kV study area.</i>
Coulter’s saltbush <i>Atriplex coulteri</i>	CNPS:1B.2	-	March-Oct	In western Riverside County, this species has the potential to occur within sage scrub and valley/foothill grassland habitats. Often associated with alkaline or clay soils. 3-460 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
south coast saltscale <i>Atriplex pacifica</i>	CNPS:1B.2	-	March-Oct	In western Riverside County, this species has the potential to occur within sage scrub habitats. A majority of known occurrences for this species are associated with coastal scrub and dune areas. 0–140 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Parish’s brittlescale <i>Atriplex parishii</i>	CNPS:1B.1 MSHCP:CAS	Partially Covered	June-Oct	Occurs within alkaline soils and is most often associated with vernal pool and playa habitat types. 25–1900 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
Davidson’s saltscale <i>Atriplex serenana</i> var. <i> davidsonii</i>	CNPS:1B.2 MSHCP: CAS	Partially Covered	April-Oct	Occurs in gentle hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grassland, mixed native/nonnative grassland, and alkaline grassland plant communities in association with clay, loamy sand or alkaline silty-clay soils. 10–200 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
California ayenia <i>Ayenia compacta</i>	CNPS:2.3	-	March-April	Occurs within rocky soils and is associated with Mojavean desert scrub and Sonoran desert scrub. 150-1095 meters. <i>No potential to occur within the substation, 500-kV, and proposed 115-kV study areas.</i>
Nevin’s barberry <i>Berberis nevinii</i>	FE SE CNPS:1B.1 MSHCP:CAS	Partially Covered	March-June	Occurs in a variety of habitats including cismontane woodland, chaparral, sage scrub, and riparian scrub habitat. Often associated with sandy or gravelly soils. Closest natural known locations are “Badlands” near Redlands and Vail Lake Area. 274-825 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
thread-leaved brodiaea <i>Brodiaea filifolia</i>	FT SE CNPS:1B.1 MSHCP:CAS	Partially Covered	March-June	Occurs on gentle hillsides and floodplains in semi-alkaline mudflats, vernal pools, mesic needle grass, grassland, nonnative grassland, and alkali grassland. Requires mesic, clay habitats; sometimes serpentine. Most known local locations associated with seasonally wet flats in the Perris Area. 25-1219 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Orcutt’s brodiaea <i>Brodiaea orcuttii</i>	CNPS:1B.1	Fully covered	May-July	Vernal pools, valley and foothill grasslands, closed-cone coniferous forest, cismontane woodland, chaparral, and meadows. Requires mesic, clay habitats; sometimes serpentine. Usually found in vernal pools and small drainages. 30–1692 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	BLOOMING PERIOD	SUITABLE HABITAT AND POTENTIAL FOR OCCURRENCE
Santa Rosa basalt brodiaea <i>Brodiaea santarosae</i>	CNPS:3	-	May-June	Occurs within basaltic soils and is associated with valley and foothill grasslands. 580-1045 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Tecate cypress <i>Callitropsis forbesii</i>	CNPS:1B.1	-	-	Occurs within closed-cone coniferous forest and chaparral habitat. Usually associated with clay, gabbroic or metavolcanic soils. 250 and 1490 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Munz's mariposa lily <i>Calochortus palmeri</i> var. <i>munzii</i>	CNPS:1B.2 MSHCP: NEPS	Partially Covered	June-July	Occurs in seasonally moist, fine granitic loam on exposed knolls in the shade of lower montane coniferous forest and on moist, sandy clay in moist chaparral and meadows. 900–1640 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Plummer's mariposa lily <i>Calochortus plummerae</i>	CNPS:1B.2	Fully Covered	May-July	Occurs on rocky or sandy sites, usually of granitic or alluvial material within sage scrub, chaparral, valley foothill grassland, cismontane woodland, and lower montane coniferous forest. Can be very common after a fire. 100–1700 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
intermediate mariposa lily <i>Calochortus weedii</i> var. <i>intermedius</i>	CNPS:1B.2	Fully Covered	May-July	Occurs on rocky or sandy sites within sage scrub, chaparral, and valley/foothill grassland habitats. 105–855 meters. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Payson's jewel flower <i>Caulanthus simulans</i>	CNPS:4.2	Fully Covered	Feb-June	Occurs in frequently burned areas or in other disturbed sites such as streambeds within chaparral and coastal scrub habitats. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Vail Lake ceanothus <i>Ceanothus ophiochilus</i>	FT SE CNPS:1B.1 MSHCP:CAS	Partially Covered	Feb-March	Occurs within chamise chaparral habitats. Usually found on ridgelines and north-facing slopes. Usually associated with gabbroic or pyroxenite-rich rock outcrops. 580–1065 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	BLOOMING PERIOD	SUITABLE HABITAT AND POTENTIAL FOR OCCURRENCE
southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	CNPS:1B.1	-	May-Nov.	Occurs within marshes, swamps, vernal mesic valley/foothill grasslands, and vernal pools. Coastal species. 0-427 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	CNPS:1B.1 MSHCP:CAS	Partially Covered	April-Sept	Occurs in alkali meadow or alkali scrub within valley and foothill grasslands, meadows, playas, or riparian woodland. 0-480 meters. <i>Unlikely to occur within the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
Peninsular spineflower <i>Chorizanthe leptotheca</i>	CNPS:4.2	Fully Covered	May-Aug	Occurs within chaparral, coastal scrub, and lower montane coniferous forest. 300-1900 meters. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	CNPS:1B.1	Fully Covered	April-June	Occurs in coastal sage scrub and chaparral. Found on dry slopes and flats within dry sandy soils. 275-1220 meters. <i>Moderate potential to occur in the 500-kV study area, as suitable habitat is present. Moderate potential to occur in the substation study area. Occurs in the 500-kV and the proposed 115-kV study areas.</i>
long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longspina</i>	CNPS:1B.2	Fully Covered	April-July	Occurs in gabbroic clay soils within chaparral, coastal scrub, meadows, and valley/foothill grasslands. 30-1530 meters. <i>Moderate potential to occur in the substation study area. Occurs in the 500-kV and the proposed 115-kV study areas.</i>
white-bracted spineflower <i>Chorizanthe xanti</i> var. <i>leucotheca</i>	CNPS:1B.2	-	April-June	Occurs within Mojavean desert scrub, or pinyon and juniper woodland. Usually associated with sandy or gravelly soils. 300-1200 meters. <i>No potential to occur in the substation, 500-kV, or proposed 115-kV study areas.</i>
summer holly <i>Comarostaphylis diversifolia</i> ssp. <i>Diversifolia</i>	CNPS:1B.2	-	April-June	Occurs within chaparral and cismontane woodland habitat. Maritime habitats with relatively cool and wet weather. 30-550 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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small-flowered morning glory <i>Convolvulus simulans</i>	CNPS:4.2	Fully Covered	March-July	Occurs within chaparral, sage scrub, and valley/foothill grassland habitat. Has an affinity to serpentine soil and associated with seeps. 30–700 meters. <i>Unlikely to occur in the substation and 500-kV study areas. Moderate potential to occur in the proposed 115-kV study area.</i>
Mojave tarplant <i>Deinandra mohavensis</i>	SE CNPS:1B.3	Fully Covered	June-Oct	Occurs within mesic areas of chaparral and sage scrub habitats. Also associated with riparian scrub. 640–1600 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
paniculate tarplant <i>Deinandra paniculata</i>	CNPS: 4.2	-	April-Nov	Occurs within dry foothills and mesas in sage scrub, valley/foothill grasslands, and nonnative grasslands. Often associated with disturbed sites within these habitat types. <i>Occurs adjacent to the substation study area. Occurs in the 500-kV and the proposed 115-kV study areas.</i>
slender-horned spineflower <i>Dodecahema leptoceras</i>	FE SE CNPS:1B.1 MSHCP: NEPS	Partially Covered	April-June	Occurs within chaparral and sage scrub habitats. Flood deposited terraces and washes. Associations include <i>Encelia</i> , <i>Dalea</i> , and <i>Lepidospartum</i> . 200–760 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
Santa Monica dudleya <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	FT CNPS: 1B.2	-	May-June	Known only from the western Santa Monica Mountains. <i>No potential to occur in the substation, 500- kV, and the proposed 115-kV study areas.</i>
many-stemmed dudleya <i>Dudleya multicaulis</i>	CNPS:1B.2 MSHCP: NEPS	Partially Covered	April-July	Occurs in heavy clay soils or grassy slopes in barrens, rocky places, and ridgelines of chaparral, sage scrub and, valley/foothill grasslands. 15–790 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
sticky dudleya <i>Dudleya viscida</i>	CNPS:1B.2	Fully Covered	May-June	Occurs within chaparral, cismontane woodland, and sage scrub habitat. Usually associated with rock outcrops. 10–550 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
Santa Ana River wooly star <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	FE SE CNPS:1B.1	Fully Covered	May-Sept	Occurs within alluvial-fans or sandy river terraces. Known from one extended but fragmented population (associated with Santa Ana River). 91–610 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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round-leaved filaree <i>Erodium (California) macrophylla</i>	CNPS:1B.1 MSHCP:CAS	Partially Covered	March-May	Occurs in grasslands with relatively low cover of annual grasses on friable/clay soils. 15–1200 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV study area. Occurs in the proposed 115-kV study areas.</i>
San Diego button celery <i>Eryngium aristulatum</i> var. <i>parishii</i>	FE SE CNPS:1B.1	Fully Covered	April-June	Occurs within vernal pool, sage scrub, and valley/foothill grasslands. Almost always under natural conditions in wetlands. 20–620 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
San Jacinto mountains bedstraw <i>Galium angustifolium</i> ssp. <i>jacinticum</i>	CNPS:1B.3 MSHCP: NEPS	Partially Covered	June-Aug	Occurs within lower montane coniferous forest habitat. 1350–2100 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California bedstraw <i>Galium californicum</i> ssp. <i>Primum</i>	CNPS:1B.2	Fully Covered	May-July	Occurs within chaparral and lower montane coniferous forest habitat. 1350–1700 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Campbell's liverwort <i>Geothallus tuberosus</i>	CNPS:1B.1	-	-	Occurs within mesic areas of sage scrub habitat and vernal pools often associated with clay soils. 10–600 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
Palmer's grapplehook <i>Harpagonella palmeri</i>	CNPS: 4.2	Fully Covered	March-May	Occurs within openings in chaparral, sage scrub, and valley/foothill grassland habitats. Often associated with clay soils. 20–955 meters. <i>Unlikely to occur within the substation study area. Occurs in the 500-kV and the proposed 115-kV study areas.</i>
shaggy-haired alumroot <i>Heuchera hirsutissima</i>	CNPS:1B.3	Fully Covered	May-July	Occurs within subalpine coniferous forest and upper montane coniferous forest habitat. 1520–3500 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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graceful tarplant <i>Holocarpha virgata</i> ssp. <i>elongata</i>	CNPS: 4.2	Fully Covered	May-Nov	Occurs within cismontane woodland, chaparral, sage scrub, and valley/foothill grassland habitat. Locally known within grasslands and oak woodlands on the Santa Rosa Plateau. Associated well developed clay soils. 60-1100 meters. <i>Unlikely to occur within the substation, 500-kV, and the proposed 115-kV study areas.</i>
vernal barley <i>Hordeum intercedens</i>	CNPS: 3.2	Fully Covered	March-June	Occurs in vernal pools or mesic areas within sage scrub and valley/foothill grassland habitats. Often associated with saline flats and depressions. 5-1000 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	CNPS:1B.1	-	Feb-Jul	Occurs in chaparral, cismontane woodland, and coastal scrub. Requires sandy or gravelly sites. Known locally on the Pacific slope of the Santa Ana Mountains. 70-810 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
beautiful hulsea <i>Hulsea vestita</i> ssp. <i>callicarpa</i>	CNPS: 4.2	Fully Covered	May-Oct	Occurs within chaparral and lower montane coniferous forest. Often associated with rocky or gravelly, granitic soils. 915-3050 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California satintail <i>Imperata brevifolia</i>	CNPS: 2.1	-	Sept-May	Occurs in a variety of habitat types, including chaparral, sage scrub, Mojavean desert, riparian scrub, and meadows and seeps. Often associated alkaline soils and springs. 0-500 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
southern California black walnut <i>Juglans californica</i>	CNPS: 4.2	Partially Covered	March-Aug	Occurs on slopes and in canyons and valleys within chaparral, cismontane woodland, and sage scrub habitats. 50-900 meters. <i>No potential to occur in the substation study area. Moderate potential to occur within the 500-kV and the proposed 115-kV study areas.</i>
Santa Lucia dwarf rush <i>Juncus luciensis</i>	CNPS:1B.2	-	April-July	Occurs in a variety of habitat types, including chaparral, Great Basin scrub, lower montane coniferous forest, meadows, seeps, and vernal pools. 300-2040 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	CNPS:1B.1 MSHCP: CAS	Partially Covered	Feb-June	Occurs primarily in highly alkaline, silty-clay soils. Travers-Domino-Willows soil association within alkali vernal pools community. 1-1220 meters. <i>Unlikely to occur within the substation and 500-kV study areas. High potential to occur in the proposed 115-kV study area.</i>
heart-leaved pitcher sage <i>Lepechinia cardiophylla</i>	CNPS:1B.2 MSHCP: CAS	Partially Covered	April-July	Occurs in closed-cone coniferous forest, chaparral, and cismontane woodland. 520-1370 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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Robinson's peppergrass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	CNPS:1B.2	-	Jan-July	Occurs within chaparral, coastal scrub. Often associated with dry soils. 1–885 meters. <i>Occurs adjacent to the substation study area. Occurs in the 500-kV and the proposed 115-kV study areas.</i>
ocellated Humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	CNPS: 4.2	Fully Covered	March-August	Occurs within openings in a variety of habitat types including: chaparral, cismontane woodland, sage scrub, lower montane coniferous forest, and riparian woodland. Generally associated with relatively wet and cool regions. 30-1800 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
lemon lily <i>Lilium parryi</i>	CNPS:1B.2	Fully Covered	July-Aug	Occurs within lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Prefers wet, mountainous terrain; generally in forested areas, on shady edges of streams, in open boggy meadows and seeps. 1220–2745 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Parish's meadowfoam <i>Limnanthes gracilis</i> ssp. <i>parishii</i>	SE CNPS:1B.2	Fully Covered	April-June	Occurs within lower montane coniferous forest, meadows, seeps, and vernal pool habitats. Almost always under natural conditions in wetlands. 600-2000 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
small-flowered microseris <i>Microseris douglasii</i> var. <i>platycarpha</i>	CNPS: 4.2	Fully Covered	March-May	Occurs within cismontane woodland, sage scrub, valley and foothill grassland, and vernal pool habitats. Often associated with clay soils. 15–1070 meters. <i>Occurs adjacent to the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
Cleveland's bush monkeyflower <i>Mimulus clevelandii</i>	CNPS: 4.2	Fully Covered	April-July	Occurs within chaparral, cismontane woodland, and lower montane coniferous forest. Often associated with gabbroic soils in disturbed areas/openings with above described habitat types. 815–2000 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Palomar monkeyflower <i>Mimulus diffusus</i>	CNPS: 4.3	Fully Covered	April-June	Occurs within chaparral and lower montane coniferous forest. Often associated with sandy or gravelly soils. 1220–1830 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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felt-leaved monardella <i>Monardella hypoleuca</i> ssp. <i>lanata</i>	CNPS:1B.2	-	June-Aug	Occurs within chaparral and cismontane woodland habitat. 300-1575 meters. Ssp. <i>lanata</i> is excluded from Riverside Co. Northern extent of range is San Luis Rey River in San Diego Co. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Hall's monardella <i>Monardella macrantha</i> ssp. <i>hallii</i>	CNPS:1B.3	Fully Covered	June-Oct	Occurs within broad-leaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland habitats. Often associated with dry slopes and ridges in openings within the above communities. 730-2195 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California muhly <i>Muhlenbergia californica</i>	CNPS: 4.3	Fully Covered	June-Sept	Occurs within wetlands or mesic sites in chaparral, sage scrub, and lower montane forest habitats. Also found in meadows and seeps. Locally known in the San Jacinto Mountains. 100-2000 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
little mouse-tail <i>Myosurus minimus</i> ssp. <i>apus</i>	CNPS:3.1 MSHCP:CAS	Partially Covered	March-June	Occurs in valley/foothill grasslands with alkaline soils and vernal pools. 20-640 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
mud nama <i>Nama stenocarpum</i>	CNPS:2.2 MSHCP:CAS	Partially Covered	Jan-July	Occurs within marshes and along the margins of lakes. 5-500 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
spreading (Moran's) navarretia <i>Navarretia fossalis</i>	FT CNPS:1B.1 MSHCP: NEPS	Partially Covered	April-June	Primarily associated with vernal pools, depressions, and ditches in areas that once supported vernal pools. Often associated with a larger vernal floodplain(s) dominated by annual alkali grasslands and alkali playa. 30-1300 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
prostrate vernal pool navarretia <i>Navarretia prostrata</i>	CNPS:1B.1 MSHCP:CAS	Partially Covered	April-July	Occurs within wetlands and mesic sites found within habitat types including: sage scrub, meadows and seeps, and alkali valley/foothill grassland. Also associated with vernal pools. 15-700 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Peninsular nolina <i>Nolina cismontana</i>	CNPS:1B.2	-	May-July	Occurs within chaparral and sage scrub habitats. Often associated with sandstone or gabbro soils. 140-1275 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California Orcutt grass <i>Orcuttia californica</i>	FE SE CNPS:1B.1 MSHCP: NEPS	Partially Covered	April-Aug	All known localities are associated with vernal pools, specifically, southern basaltic clay pan and alkaline vernal pools. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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chickweed oxytheca <i>Oxytheca caryophylloides</i> (<i>Sidotheca caryophylloides</i>)	CNPS: 4.3	Fully Covered	July-Sep	Occurs within lower montane coniferous forest habitat. Often associated with sandy soils. 1114–2600 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California beardtongue <i>Penstemon californicus</i>	CNPS:1B.2	Fully Covered	May-Aug	Occurs within chaparral, lower montane coniferous forest, and pinyon juniper woodland. Often associated with sandy soils. 1170–2300 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Allen’s daisy <i>Pentachaeta aurea</i> ssp. <i>allenii</i>	CNPS:1B.1	-	March-June	Occurs within openings in sage scrub and valley/foothill grassland habitats. Locally known on the west slope of the Santa Ana Mountains in Orange County.75-520 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Brand’s phacelia <i>Phacelia stellaris</i>	FC CNPS:1B.1 MSHCP: NEPS	Partially Covered	March-June	Occurs within sandy washes and alluvial benches in alluvial floodplains. The species is generally dependent on periodic flooding and sediment transport. Generally a coastal species, but few inland locations have been recorded. 1-400 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Santiago Peak phacelia <i>Phacelia suaveolens</i> ssp. <i>keckii</i>	CNPS:1B.3	-	May-June	Occurs within closed-cone coniferous forest and chaparral. Known from only four occurrences. 545–1600 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
woolly chaparral-pea <i>Pickeringia montana</i> var. <i>tomentosa</i>	CNPS:4.3	-	May-August	Occurs within gabbroic, granitic, and clay soils associated with chaparral plant communities. 0-1700 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
narrow-petaled rein orchid <i>Piperia leptopetala</i>	CNPS:4.3	-	May-July	Occurs within cismontane woodland and upper and lower montane coniferous forest plant communities. 380-2225 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Fish’s milkwort <i>Polygala cornuta</i> var. <i>fishiae</i>	CNPS: 4.3	Fully Covered	May-Aug	Occurs within chaparral, cismontane woodland, and riparian woodland. Locally known in the Santa Ana Mountains within relatively wetter environments. 100-1000 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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cliff cinquefoil <i>Potentilla rimicola</i>	CNPS: 2.3	Fully Covered	July-Sept	Occurs within subalpine coniferous forest and upper montane coniferous forest. Associated with granitic, rocky areas and soils. Known in CA from approximately five occurrences in the San Jacinto Mountains. 2400–2800 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
white rabbit-tobacco <i>Pseudognaphalium leucocephalum</i>	CNPS: 2.2	-	July-Dec	Occurs within chaparral, cismontane woodland, sage scrub, and riparian woodlands. Usually associated with sandy or gravelly substrates. 0–2100 meters. <i>Unlikely to occur in the substation and 500-kV study areas. Moderate potential to occur in the proposed 115-kV study area.</i>
Nuttall's scrub oak <i>Quercus dumosa</i>	CNPS: 1B.1	-	Feb-April	Occurs within closed-cone coniferous forest chaparral, sage scrub. Usually associated with sandy, clay loam soils. 15–400 meters. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Engelmann oak <i>Quercus engelmannii</i>	CNPS: 4.2	Fully Covered	July-Dec	Occurs within chaparral, cismontane woodland, riparian woodland, valley/foothill grassland habitat. Locally known in the Santa Rosa Plateau and the Crown Valley area near lake Skinner. 50-1300 meters. <i>No potential to occur in the substation and 500-kV study areas. Unlikely to occur in the proposed 115-kV study areas.</i>
Coulter's matilija poppy <i>Romneya coulteri</i>	CNPS: 4.2	Fully Covered	March-July	Occurs within chaparral and sage scrub habitats. Often found within these plant communities after burns. 20–1200 meters. <i>Occurs in the 500-kV study area. Moderate potential to occur in the substation and proposed 115-kV study areas.</i>
San Miguel savory <i>Satureja chandleri</i>	CNPS:1B.2 MSHCP: NEPS	Partially Covered	March-July	Occurs in chaparral, cismontane woodland, coastal scrub, riparian woodland, valley/foothill grasslands. Requires rocky, gabbroic, or metavolcanic substrate. Often found within these plant communities after burns. Locally known on the eastern slope of the Santa Ana Mountains. 20-1200 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Southern Mountain skullcap <i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	CNPS:1B.2	-	June-Aug.	Occurs within chaparral, cismontane woodland, and lower montane coniferous forests. Found in gravelly soils on streambeds or in mesic sites in oak or pine woodland. 425–2000 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
Hammitt's clay-cress <i>Sibaropsis hammittii</i>	CNPS:1B.2 MSHCP: NEPS	Partially Covered	March-April	Occurs within openings in chaparral and valley/foothill grasslands. Often associated higher elevation (1000 meters) and within well-developed clay soils. 720-1065 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

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salt spring checkerbloom <i>Sidalcea neomexicana</i>	CNPS: 2.2	-	March-June	Usually occurs in wetlands but occasionally found in nonwetland environs. Occurs within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and alkaline playas. 15–1530 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
bottle liverwort <i>Sphaerocarpos drewei</i>	CNPS: 1B.1	-	-	Occurs within openings on soil in chaparral and sage scrub habitats. 90–600 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
San Bernardino aster <i>Symphotrichum defoliatum</i>	CNPS: 1B.2	-	July-Nov	Occurs within meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland habitat. Found in vernal mesic grasslands or near ditches, streams, springs, and disturbed areas within 2-2040 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
Parry's tetraococcus <i>Tetraococcus dioicus</i>	CNPS: 1B.2	-	April-May	Occurs in stony and gabbroic soil within chaparral and coastal scrub. 165–1000 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
California screw moss <i>Tortula californica</i>	CNPS: 1B.2	-	-	Occurs within chenopod scrub and valley/foothill grassland. Usually associated with sandy soil. 10–1460 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Wright's trichocoronis <i>Trichocoronis wrightii</i> var. <i>wrightii</i>	CNPS: 2.1 MSHCP: NEPS	Partially Covered	May-Sept	Occurs within meadows and seeps, marshes and swamps, riparian forest, and vernal pool habitat. Usually associated with alkaline soils. 5–435 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
San Diego County viguiera <i>Viguiera laciniata</i>	CNPS:4.2	-	February-August	Occurs within chaparral and coastal scrub plant communities. 60-750 meters. <i>Unlikely to occur in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>
La Purisima viguiera <i>Viguiera viguiera (purisimae)</i>	CNPS: 2.3	-	April-Sept.	Occurs within coastal bluff scrub and chaparral. CNPS maps this species' range within Orange and San Diego counties only. 365–425 meters. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

Source: CNPS 2013, Riverside County 2003c, CNDDDB 2013.

Source: CNDDDB and CNPS (2012)

MSHCP Codes:

NEPS - Narrow Endemic Plant Species

CAS - Criteria Area Species

Federal Status Designations:

FE - Federally Listed Endangered

FT - Federally Listed Threatened

FC - Federal Candidate Species for Listing

FSS - U.S. Department of Agriculture Forest Service Sensitive

State Status Designations:

SE - State Listed Endangered

ST - State Listed Threatened

SC - State Candidate Species for Listing

SSC - California Department of Fish and Wildlife Species of Special Concern

FP - California Department of Fish and Wildlife Fully Protected Species

CNPS Codes:

1A. - Presumed extinct in California

1B. - Rare or Endangered in California and elsewhere

2. - Rare or Endangered in California, more common elsewhere

3. - Plants for which we need more information - Review list

4. - Plants of limited distribution - Watch list

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 - Fairly endangered in California (20-80% occurrences threatened)

.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

Notes:

Gray highlighted cells contain species that are listed (i.e., federal and/or state listed threatened and endangered).

Partially Covered Species under the WRCMSHCP require additional mitigation if 90% avoidance cannot be demonstrated and a DBESP is required.

D2
WILDLIFE

2012 Alberhill System Project, Sensitive Wildlife Species Potential for Occurrence Table

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
INVERTEBRATES			
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	Fully Covered	Found at scattered locations throughout southern California, although known only from Riverside and San Diego counties in southern California. Restricted to cool-water vernal pools, often early in the rainy season. <i>No potential to occur in the 500-kV study area. Unlikely to occur in the substation, proposed 115-kV study areas.</i>
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	FE	-	Known range limited to southern California, in Orange and San Diego counties, and adjacent northwestern Baja California. Occurs in vernal pools and similar ephemeral wetland habitats, including artificial habitats. All known localities below 2,300' elevation and within 40 miles of the Pacific Ocean. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	FE	Fully Covered	Range restricted to limited areas of southern California and northern Baja California; currently known in southern California only from relatively small populations within Riverside and San Diego counties. Inhabits openings within Riversidean sage scrub and chaparral; also found in grasslands, and vernal pool and lake margins. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Delhi Sands flower-loving fly <i>Rhaphiomidas terminatus abdominalis</i>	FE	Fully Covered	Known from a very small range in southern California, southwestern San Bernardino and northwestern Riverside counties; currently known only from a range encompassing an 8-mile radius, though presumed to have once occurred throughout the Colton Dunes formation, a 40-square-mile area. Its habitat is restricted to fine, sandy soils, often with wholly or partly consolidated dunes, and a particular soil type classified as the "Delhi" formation. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	FE	Fully Covered	Endemic to western Riverside County, as well as southern California coastal counties, from Ventura to San Diego. Restricted to relatively deep vernal pools in grasslands or in openings within coastal sage scrub and chaparral. Hatch in warm water later in season. <i>No potential to occur in the 500-kV study area. Unlikely to occur in the substation and proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
FISH			
Santa Ana sucker <i>Catostomus santaanae</i>	FT SSC	Fully Covered	Endemic to southern California, known historically only from the San Gabriel, Los Angeles, and Santa Ana river systems of Los Angeles, Orange, Riverside, and San Bernardino counties. Prefers permanent streams and small to medium-sized rivers with cool temperatures. Riparian habitat is typically to provide cover and refuge from floods. Can inhabit reservoirs. <i>No potential to occur in the substation and 500-kV study areas. No potential to occur in the proposed 115-kV study area.</i>
arroyo chub <i>Gila orcuttii</i>	SSC	Fully Covered	The arroyo chub is native to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers and to Malibu and San Juan creeks. They prefer slow-moving mud or sand-bottomed sections of streams and are abundant only in portions of the Santa Margarita River and Trabuco, San Juan, and Malibu creeks. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
southern steelhead (southern California) <i>Oncorhynchus mykiss irideus</i>	FE SSC	-	Range is from the Santa Maria River, San Luis Obispo County, south to the larger remaining streams in San Diego County. Southern steelhead currently occurs in only four large river systems in their range: the Santa Maria, Santa Ynez, Ventura, and Santa Clara rivers. Adults migrate from the ocean into freshwater streams to spawn between December and April. Juveniles remain in freshwater streams for two to three years before migrating to the ocean. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
Santa Ana speckled dace <i>Rhinichthys osculus</i>	SSC	-	The “Santa Ana” population of speckled dace is restricted to the headwaters of the Santa Ana and San Gabriel river drainages. Prefers shallow, gravel and cobble riffles of permanent flowing streams, with overhanging riparian vegetation for cover. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
AMPHIBIANS			
arroyo toad <i>Anaxyrus californicus</i>	FE SSC	Partially Covered	Uncommon and local in primarily cismontane southern California from Santa Barbara County south into Baja California. Inhabits washes, streams, arroyos and adjacent uplands, generally where riparian woodlands (willow, cottonwood, sycamore, and/or coast live oak) are present. Typically requires shallow, gravelly pools adjacent to sandy terraces, with little or no emergent vegetation. <i>Unlikely to occur in the proposed 115-kV study area. No potential to occur in the substation and 500-kV study areas.</i>
California red-legged frog <i>Rana aurora draytonii</i>	FT SSC	Partially Covered	Usually occurs in or near permanent water of low gradient streams, marshes, ponds, lakes, and other quiet bodies of water. Breeding occurs in permanent or seasonal pools. The only known location for this species to still occur in Riverside County is the Santa Rosa Plateau. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
Mountain yellow-legged frog <i>Rana muscosa</i>	FE SSC	Partially Covered	Now rare and extremely localized in southern California. They inhabit perennial, cool mountain streams with steep gradients. Typically in the chaparral belt, but may occur at higher elevations (e.g., most records between 1,500 and 7,500 feet elevation). <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
western spadefoot toad <i>Spea hammondi</i>	SSC	Fully Covered	Occurs in a variety of habitats, from lowlands to foothills, in grasslands, open chaparral and sage scrub, and open woodland. Most often prefers short-grass plains, with sandy or gravelly soils (e.g., alkali flats, washes, alluvial fans). Known to breed in stock tanks and other artificial water bodies. In upland habitats to avoid desiccation, becomes inactive and burrows underground. Active again in late winter and spring after the first rains. <i>High potential to occur in the substation and 500-kV study areas. Occurs within the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
Coast Range newt <i>Taricha torosa torosa</i>	SSC	Fully Covered	Occurs along the coast and coast ranges of California from Mendocino County to San Diego County. Breeding occurs in ponds, reservoirs, and streams. Outside breeding season found in terrestrial habitats (e.g., grasslands, moist oak woodlands and chaparral); can migrate over 0.5 mile to find breeding ponds or slow-moving streams. Will spend drier periods burrowing in soil or under fallen logs and debris. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
REPTILES			
southwestern pond turtle <i>Actinemys (Clemmys) marmorata pallida</i>	SSC	Fully Covered	Occurs along the coastal slope of southern California, from the San Francisco Bay area south into Baja California, from sea level to over 5,900 feet elevation. Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation and either rocky or muddy bottoms. Generally requires permanent (or nearly permanent) water. Can also be found in woodland and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. <i>No potential to occur in the substation and 500-kV study areas. High potential to occur in the proposed 115-kV study area.</i>
Belding's orange-throated whiptail <i>Aspidoscelis hyperythra (Cnemidophorus hyperythrus beldingi)</i>	SSC	Fully Covered	Occurs in a limited range within the coastal slope of southern California, from the Santa Ana River area portions of Orange, Riverside and San Bernardino counties, and south into Baja California. From sea level to approximately 2,000 feet elevation. Prefers semi-arid brushy areas, typically with loose soil and rocks, including coastal sage scrub, chaparral, rocky hillsides, washes and streamsides. <i>Occurs in the substation, 500-kV, and proposed 115-kV study areas.</i>
coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	-	Fully Covered	Found in coastal southern California habitats which have been altered and fragmented by development. Chaparral, woodland, and riparian areas. Inhabits a variety of ecosystems, primarily hot and dry open areas with sparse foliage. <i>Occurs in the substation, 500-kV, and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
rosy boa <i>Charina trivirgata</i>	FSS	-	Occurs widely but sparsely distributed in the desert and chaparral habitats throughout southern California, south of Los Angeles, from the coast to the Mojave and Colorado deserts. In coastal areas it inhabits rocky chaparral-covered hillsides and canyons, while in the desert it is found on scrub flats with good cover and in the mountains. High potential to occur in the substation study area. Occurs in the 500-kV and proposed 115-kV study areas.
southern rubber boa <i>Charina umbratica</i>	ST FSS	Fully Covered	Found in only a few disjunct montane regions of southern California: the San Bernardino, San Jacinto and Tehachapi mountains. Inhabits oak-conifer and mixed-conifer forests at elevations between roughly 5,000 and 8,200 feet, where rocks, logs, or other debris provide shelter. No potential to occur in the substation and 500-kV and the proposed 115-kV study areas.
northern red-diamond rattlesnake <i>Crotalus ruber ruber</i>	SSC	Fully Covered	Occurs in southern California from the Morongo Valley area of San Bernardino County west to the coast and south along the Peninsular Ranges to Baja California. Inhabits arid, rocky, brushy areas, including coastal sage scrub and chaparral, as well as oak and other woodlands and grasslands. Occurs in the substation, 500-kV, and proposed 115-kV study areas.
San Bernardino mountain kingsnake <i>Lampropeltis zonata (parvirubra)</i>	SSC FSS	Fully Covered	Limited range includes the San Jacinto, Santa Rosa, San Bernardino, Santa Susana, and San Gabriel mountains of southern California. Can be found in diverse habitats, including coniferous forest, oak-pine woodlands, riparian woodland, chaparral, and coastal sage scrub. Preferred areas include wooded areas near a stream with rock outcrops, talus, or rotting logs. Found as high as 9,000 feet on Mt. San Jacinto. Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas due to marginal habitat.
California (San Diego) mountain kingsnake <i>Lampropeltis zonata (pulchra)</i>	SSC FSS	Fully Covered	Found in three restricted areas in southern California: 1) in the central San Diego County Peninsular Ranges (the Laguna, Palomar, Volcan, and Hot Springs mountains); 2) the Santa Ana Mountains; and 3) the Hollywood Hills and Santa Monica Mountains. Has similar habitat preferences to the San Bernardino Mountain kingsnake (see above). From near sea level along the south coast to above 6,500 feet in the Cuyamaca Mountains. Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas due to marginal habitat.

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
Coast (San Diego) horned lizard <i>Phrynosoma coronatum</i>	SSC FSS	Fully Covered	Found along the coastal slope of southern California from the San Francisco Bay area south into Baja California. Inhabits open areas of sandy soil, sandy ridges, and low vegetation in valleys, foothills, and semiarid mountains from sea level to 8,000 feet in elevation. Found in grasslands, woodlands, sage scrub, and chaparral in openings with areas of friable soil. Frequently found near harvester ant mounds, its preferred prey. <i>High potential to occur in the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
coast patch-nosed snake <i>Salvadora hexalepis virgulata</i>	SSC	-	Occurs in southern California from the Carrizo Plains in San Luis Obispo County south through the coastal zone, west of the deserts, into coastal northern Baja California. Inhabits semi-arid brushy areas, including sage scrub and chaparral, in canyons, rocky hillsides, and mesas. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas due to lack of suitable habitat.</i>
two-striped garter snake <i>Thamnophis hammondi</i>	SSC FSS	-	In southern California, ranges along the coast and east through the Transverse Ranges into limited portions of the western desert; then south through the Peninsular Ranges into northern Baja California. Can be found at elevations from sea level to 6,988 feet. Found in or near permanent fresh water, often along streams with rocky beds and riparian growth. <i>Unlikely to occur in the substation and 500-kV study area, due to limited, marginal habitat. Moderate potential to occur in the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
BIRDS			
Cooper's hawk <i>Accipiter cooperii</i>	-	Fully Covered	An uncommon, though increasing, breeding resident species in cismontane southern California, with an influx of birds during the winter months. Forages over a broad variety of woodland and shrub communities, especially wherever concentrations of birds (their preferred prey) may be found. Nests within a variety of woodland habitats, such as riparian or oak woodlands, but in recent years has shown a tolerance for developed areas and has begun nesting in suburban and urban "woodlands." <i>Occurs (foraging) in the substation and 500-kV and the proposed 115-kV study areas.</i>
northern goshawk <i>Accipiter gentiles</i>	SSC FSS	Fully Covered	Very rare, and extremely local, resident in a few southern California mountain ranges (e.g., the San Jacinto Mountains). Most records have been during the breeding season and have generally occurred in dense coniferous or mixed coniferous-deciduous woodlands. A rare winter visitor to the northern deserts. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
sharp-shinned hawk <i>Accipiter striatus</i>	-	Fully Covered	An uncommon winter visitor to southern California. Occurs in a variety of woodland and shrubland communities (native and nonnative), wherever concentrations of small birds (their preferred prey) may be found. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
tri-colored blackbird <i>Agelaius tricolor</i>	SSC BCC	Fully Covered	A resident breeder in cismontane southern California. When present, can often occur in large numbers, as a highly colonial species. However, has significantly declined in the region and is becoming somewhat rare and localized. Often more common and widespread in winter. For breeding, requires open water, protected nest sites (flooded or spiny/thorny vegetation), and suitable foraging sites within a mile or two of the nesting colony. Dense beds of freshwater emergent vegetation (cattails and/or bulrush) are often used by colonies for nest placement, with foraging occurring in nearby grasslands, agricultural fields, fallow fields, dairies, and feedlots. <i>Unlikely to occur in the 500-kV study area due to lack of suitable habitat. Moderate potential to occur in the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	WL	-	A fairly common resident and breeder in cismontane southern California. Prefers relatively steep, often rocky hillsides, with dominant vegetation ranging from grasses and forbs to a moderate shrub cover (including coastal sage scrub or sparse chaparral communities). <i>Occurs in the substation, 500-kV, and the proposed 115-kV study areas.</i>
grasshopper sparrow <i>Ammodramus savannarum</i>	SSC	Fully Covered	An uncommon, localized summer resident (March through August), and breeder, in cismontane southern California. Declining throughout much of its former range. Nests and forages in areas of relatively expansive grasslands (both native and nonnative), including grasslands interspersed with occasional shrubs (e.g., sage scrub species) or taller weeds (e.g., wild artichoke). Can occur on level or sloping terrain; generally found in lower elevations. <i>Occurs in the substation and 500-kV study areas. Moderate potential to occur in the proposed 115-kV study area.</i>
Bell's sage sparrow <i>Amphispiza belli belli</i>	BCC	Fully Covered	An uncommon, localized resident and breeder in cismontane southern California. Preferred habitat includes low, dense chaparral (typically chamise dominant) in interior foothills, as well as coastal sage scrub (often with white sage). <i>Moderate potential to occur in the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
golden eagle <i>Aquila chrysaetos</i>	FP BCC	Fully Covered	A fairly rare resident, and breeder, in more remote regions of southern California, with generally some influx occurring into the region during winter. Forages over a variety of habitats and terrain, including grasslands, brushlands, and open woodland and savannah. This species is primarily restricted to rugged, mountainous terrain for nesting, generally well away from human disturbance. <i>Occurs (foraging) in the substation and 500-kV study areas (low potential to nest). Moderate potential to occur in the proposed 115-kV study area (no potential to nest).</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
<p>great blue heron</p> <p><i>Ardea herodias</i></p>	-	-	<p>Fairly common year-round in southern California, though somewhat smaller numbers during the breeding season. Breeds very locally, especially away from the coast. Forages at a wide variety of wetland habitats, including ponds, marshes, creeks, flood control channels, etc. Also will forage for rodents in fallow agricultural fields and vacant lots. Clusters of tall trees (e.g., eucalyptus) are often used for nesting.</p> <p><i>Occurs in the substation study area (as a fly-over). Unlikely to occur in the 500-kV study area. Occurs in the proposed 115-kV study area, with moderate potential for nesting near wetlands with adjacent tall trees.</i></p>
<p>long-eared owl</p> <p><i>Asio otus</i></p>	SSC	-	<p>A fairly rare resident, and very localized breeder, in cismontane southern California, although somewhat more widespread and common as a winter visitor here. Prefers dense riparian communities (including coast live oak, willows, cottonwoods) or occasionally other types of cover (e.g., dense olive groves) for roosting and nesting. Generally, grasslands or other open habitats for foraging are adjacent to roosting/nesting sites.</p> <p><i>Moderate potential to occur in the substation and 500-kV study areas as a winter visitor and as a breeder. Unlikely to occur in proposed 115-kV study area as a winter visitor (unlikely as a breeder, as they require well-developed riparian areas).</i></p>
<p>burrowing owl</p> <p><i>Athene cunicularia hypugaea</i></p>	SSC BCC	Partially Covered	<p>Now a fairly rare, and decreasing, resident breeder in southern California, away from the Imperial Valley. A small influx of nonbreeding birds often occurs during the winter. Prefers open, low-growing grasslands, fallow fields, agricultural areas, earth-lined flood control channels/ditches, dairies. Relies on the presence of burrowing rodents (especially California ground squirrel) for roost and nest sites.</p> <p><i>Unlikely to occur in the substation and 500-kV study area due to lack of suitable habitat and terrain features. Occurs in the proposed 115-kV study area.</i></p>
<p>American bittern</p> <p><i>Botaurus lentiginosus</i></p>		Fully Covered	<p>A fairly rare winter visitor to southern California; formerly a regular breeder throughout the coastal slope. Generally restricted to fairly extensive freshwater marsh habitats with dense patches of cattails and rushes.</p> <p><i>No potential to occur in the substation and 500-kV study area due to a lack of suitable habitat. Occurs (as a fly-over) in the proposed 115-kV study area.</i></p>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
ferruginous hawk <i>Buteo regalis</i>	BCC	Fully Covered	A rare to uncommon transient and winter visitor in southern California. Typically requires extensive grasslands, sparsely vegetated rolling hills, and agricultural fields for foraging habitat. Roosts in open areas, usually in a lone tree or utility pole. <i>Moderate potential to occur as a transient or winter visitor in the substation and 500-kV and the proposed 115-kV study areas.</i>
Swainson's hawk <i>Buteo swainsoni</i>	ST FSS BCC	Fully Covered	A fairly rare, though increasing, spring and fall transient in southern California. Has been extirpated for years (from most of the region as a breeder. Forages over a variety of open habitats, including grasslands, rangeland, agricultural fields, etc. <i>Moderate potential to occur as a transient in the substation and 500-kV study areas. Occurs (as a migrant) in the proposed 115-kV study areas.</i>
coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i>	SSC FSS BCC	Fully Covered	This population of cactus wren is an uncommon and declining resident breeder along the coastal slope of southern California. It occurs in coastal sage scrub, although it requires mature patches of tall prickly pear or cholla cactus for nesting and roosting. <i>Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
Vaux's swift <i>Chaetura vauxi</i>	SSC	-	In southern California, the Vaux's swift occurs only as a spring and fall migrant. <i>Moderate potential to occur (as a transient) in the substation and 500-kV study areas. Occurs (as a fly-over) in the proposed 115-kV study area.</i>
western snowy plover <i>Charadrius alexandrius nivosus</i>	FT SSC BCC	-	In southern California, an uncommon, declining breeding resident along the immediate coast and very rare, local breeder in the interior (away from the Salton Sea). In the interior, will opportunistically colonize receding lakeshores, sinks, and alkaline lakes, generally where devoid of any significant vegetation. Nests on sandy shorelines, salt flats, etc. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas due to a lack of suitable habitat.</i>
mountain plover <i>Charadrius montanus</i>	FT SSC BCC	Fully Covered	An uncommon and localized winter visitor to California (primarily Oct. to Feb.), with most populations occurring in the Central, San Joaquin and Imperial valleys. Flocks typically forage in short grasslands and agricultural fields. <i>No potential to occur in the substation or 500-kV study area. Unlikely to occur in the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
northern harrier <i>Circus cyaneus</i>	SSC	Fully Covered	A generally uncommon winter visitor to southern California, with a few nonbreeders occasionally remaining through the summer. Now a rare and localized breeder in the region. Forages over a variety of open habitat (e.g., marshes, vegetated shorelines, grasslands, agricultural fields) and occasionally open coastal sage scrub and brushy fields. Nests on the ground in open areas, where patches of taller vegetation are protected from disturbance. High potential to occur as a winter visitor in the substation and 500-kV study areas. Moderate potential to occur in the proposed 115-kV study area (moderate potential to nest in the substation and 500-kV study areas, and unlikely to nest in the proposed 115-kV study area).
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	SE FSS BCC	Fully Covered	An extremely rare and localized summer resident (May to Aug.) and breeder, with breeding now restricted to only a few southern California sites. Requires relatively expansive tracts of mature floodplain riparian forest, generally consisting of dense cottonwoods and willows, with a well developed understory component. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas due to a lack of suitable habitat.</i>
black swift <i>Cypseloides niger</i>	SSC BCC	Fully Covered	A rare spring and fall transient and very local breeder (primarily May to Sept.) in southern California. In Riverside County it is known to breed in the San Jacinto Mountains. Nesting in this region is generally restricted to waterfalls in steep canyons. <i>Moderate potential to occur as a rare transient in the substation, 500-kV, and the proposed 115-kV study areas (Unlikely to breed).</i>
yellow warbler <i>Dendroica petechia brewsteri</i>	SSC BCC	Fully Covered	A common spring and fall transient throughout southern California and an uncommon, though increasing summer visitor (Apr. to Aug.) and breeder, primarily along the coastal slope. For breeding, requires mature riparian woodland, primarily consisting of tall cottonwoods, willows, or alders. Occurs in the substation and the proposed 115-kV study areas as a widespread transient (moderate potential to occur as a breeder in the substation and proposed 115-kV study areas). Moderate potential to occur as a transient in the 500-kV study area (Unlikely to occur as a breeder in the 500-kV study area).

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
white-tailed kite <i>Elanus leucurus</i>	FP	Fully Covered	An uncommon, resident breeder in cismontane southern California. A cyclic species, it has undergone fairly significant population fluctuations, although currently appears to be declining in the region due to habitat loss. Winter roost site concentrations occasionally form during winter. Occurs in a variety of open habitats, foraging over valley and foothill grasslands, meadows, open marshy bottomlands, and agricultural fields; requires scattered large trees or mature riparian groves for nesting and winter roost sites. <i>Occurs in the substation and the proposed 115-kV study areas. Moderate potential to occur in the 500-kV study area as either a breeder or wintering roost.</i>
southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE SE BCC	Fully Covered	A very rare, localized, and declining summer resident/breeder in southern California. Occurs from early to mid May to late Aug. Restricted as a breeder to moist riparian communities, with breeding documented from sea level to over 5,000 feet. In southern California, nesting habitat typically is dominated by willows, but may also be dominated by alders and (very locally) salt cedar and coast live oak. Nesting habitat nearly always includes areas with surface water, or at least saturated soils, and therefore the understory generally supports a variety of hydrophytic vegetation. <i>No potential to occur in the substation and 500-kV study areas due to the lack of suitable habitat. Moderate potential to occur as breeder in the proposed 115-kV study area.</i>
California horned lark <i>Eremophila alpestris actia</i>	-	Fully Covered	In southern California, a fairly common winter visitor, and uncommon, localized summer resident/breeder. Occurs in winter, and as a breeder in sparse grasslands, large vacant lots, fallow agricultural fields, rangeland, typically on relatively level terrain. <i>Occurs in the substation and proposed 115-kV study areas. Unlikely to occur in the 500-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
peregrine falcon <i>Falco peregrinus</i>	FD SD FP BCC	Fully Covered	A fairly rare perennial visitor throughout cismontane southern California, with most occurring along the coast, such as at estuaries and coastal bluffs and promontories. A very rare and local breeder along the coast; more widespread during migration and as a winter visitor. Locally, has adapted to breeding in urban environments, especially where high-rise buildings and concentrations of rock pigeons, as a reliable food source, are present. In more natural settings, foraging habitat typically includes a variety of coastal and interior wetland communities as well as open areas such as airports and farmland. <i>Moderate potential to occur in the substation, 500-kV, and proposed 115-kV study areas as a transient/winter visitor.</i>
bald eagle <i>Haliaeetus leucocephalus</i>	FD SE FP FSS BCC	Fully Covered	Occurs primarily as a fairly rare, localized winter visitor to southern California, preferring ocean shore, estuaries, lake margins, and riverine habitats. Nesting has recently been documented in southern California mountain lakes (e.g., Lake Hemet). Nests and roosts in large, old-growth trees as well as tall snags, especially where near open water or other open wetland habitats and available sources of food. <i>Unlikely to occur (as a breeder) in the substation, 500-kV, or the proposed 115-kV study areas due to a lack of suitable habitat.</i>
yellow-breasted chat <i>Icteria virens</i>	SSC	Fully Covered	Summer resident in southern California (April to August), inhabiting willow riparian thickets and other brushy tangles near water courses. Typically nests in riparian-associated understory vegetation, including young willows, mule fat, blackberry, wild grape, etc. Generally forages and nests within 10 feet of the ground. <i>Unlikely to occur in the substation and 500-kV study areas. Moderate potential to occur in the more well-developed riparian areas in the proposed 115-kV study area.</i>
loggerhead shrike <i>Lanius ludovicianus</i>	SSC BCC	Fully Covered	A rare to uncommon breeding resident in southern California, with an influx into the region during winter. Prefers open terrain with short vegetation, including rangeland, agricultural fields, open brushlands, etc. Was once more common and widely distributed in North America. <i>Occurs in the substation study area. Moderate potential to occur in the 500-kV and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
black-crowned night heron <i>Nycticorax nycticorax</i>	-	Fully Covered	An uncommon to fairly common resident in southern California, being most common near the coast; breeds locally. Foraging habitat includes a variety of coastal and interior wetland communities, riparian woodlands, and waterways. Roosts and breeds in dense marshes or groves of dense trees (native or nonnative) near water bodies or other foraging areas. <i>Occurs in the substation survey area (as a fly-over). Unlikely to occur in the 500-kV study area. Occurs in the proposed 115-kV study area.</i>
mountain quail <i>Oreortyx pictus</i>	-	Fully Covered	A generally uncommon breeding resident in the mountains of southern California. Rarely comes down to the foothills on the coastal slopes of the mountains. Prefer montane chaparral and a variety of montane woodlands where a brushy understory is also present. <i>Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas due to their elevation and habitat preferences.</i>
osprey <i>Pandion haliaetus</i>	-	Fully Covered	An uncommon, primarily nonbreeding visitor to southern California, with largest numbers occurring outside the breeding season. Nesting has been on the increase in recent years, especially near the coast. Most frequent along the immediate coast, although occurs also at larger inland bodies of water (e.g., lakes, reservoirs, rivers). <i>No potential to occur as a nester in the substation or 500-kV study areas (Moderate potential to occur as a transient). Occurs (as a fly-over) in the proposed 115-kV study area.</i>
double-crested cormorant <i>Phalacrocorax auritus</i>	-	Fully Covered	Fairly common, year-round in southern California, with largest numbers during the nonbreeding season. Breeding occurs locally, though is increasing, primarily along the coast. Preferred foraging areas typically include larger lakes, reservoirs, and rivers with tall trees and snags used for roosting. <i>Occurs in the substation, 500-kV, and proposed 115-kV study areas (as a fly-over). Moderate potential to occur as a breeder in the proposed 115-kV study area primarily in areas of open water.</i>
downy woodpecker <i>Picoides pubescens</i>	-	Fully Covered	An uncommon to fairly common breeding resident in cismontane southern California, being more common to the north and west of Riverside Co. Inhabits a variety of woodland communities, including urban settings, though is most typical in a variety of riparian communities. <i>Occurs in the substation survey area. Unlikely to occur in the 500-kV study area. Moderate potential to occur in the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
white-faced ibis <i>Plegadis chihi</i>	-	Fully Covered	Generally an uncommon, though increasing, transient and winter visitor to southern California; also occurs as a very local summer resident and breeder. Foraging birds occur in flooded agricultural fields, marshes, flood control ditches, etc.; breeders typically require fairly extensive and undisturbed marshes with cattails, bulrush. <i>Occurs in the substation survey area (as a fly-over). Unlikely to occur in the 500-kV study area. Moderate potential to occur as a visitor in the proposed 115-kV study area, especially in the larger flood control channels or marshes.</i>
coastal california gnatcatcher <i>Polioptila californica californica</i>	FT SSC BCC	Fully Covered	An uncommon resident species and breeder in cismontane southern California from southeastern Ventura County to western San Diego County. Restricted to Riversidean, Diegan, and Venturan sage scrub communities in arid washes and mesas and on mild to moderate slopes. Habitat typically dominated or codominated by California sagebrush, California buckwheat, and brittlebush. Most populations occur below 1,500 feet elevation. Breeding typically occurs between March and August. <i>Occurs in the substation, 500-kV, and proposed 115-kV study areas.</i>
purple martin <i>Progne subis</i>	SSC	Fully Covered	A rare spring/fall transient throughout southern California, and a very rare, declining, and localized summer resident and breeder in the mountains and foothills of southern California. For nesting, they typically prefer old, tall sycamores, pines, etc., often where these trees occur in open oak woodland or coniferous forest. The availability of suitable nesting cavities and competition with European starlings over potential nest sites are factors which limit breeding opportunities for this species. <i>Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas.</i>
California spotted owl <i>Strix occidentalis occidentalis</i>	SSC FSS BCC	Fully Covered	A fairly rare to uncommon resident and breeder in the mountains and higher foothill canyons of southern California. Preferred habitat includes steep-walled canyons that are densely wooded with mixtures of mature live oaks and conifers. Other key components include a multi-layered forest canopy; large, old trees and snags; and woody debris on the forest floor. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas due to the lack of suitable habitat.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
tree swallow <i>Tachycineta bicolor</i>	-	Fully Covered	A common spring and fall transient throughout southern California, and an uncommon, localized summer resident and breeder. For nesting, typically prefers open bodies of water, including rivers and marshy areas, with scattered trees and/or snags, or artificial nest boxes. Availability of nest sites (natural cavities or nest boxes) and competition with European starlings over potential nest sites are factors which limit the breeding success of this species in southern California. High potential to occur as a transient within the substation, 500-kV, and the proposed 115-kV study areas. Moderate potential to occur as a breeder in the proposed 115-kV study area.
least Bell's vireo <i>Vireo bellii pusillus</i>	FE SE BCC	Fully Covered	A fairly rare to locally uncommon summer resident (late March to early Sept.) and breeder in southern California in relatively low elevation riparian floodplain habitat. Prefers willow riparian communities, which may be in the vicinity of water or along dry river bottoms. Nesting habitat generally includes a well-developed understory, which is necessary for nest concealment. Nests usually placed in <i>Baccharis</i> or young willows adjacent to or in openings within the riparian community. Occurs adjacent to the substation study area. Unlikely to occur in the 500-kV study area. Occurs in the proposed 115-kV study area.
MAMMALS			
pallid bat <i>Antrozous pallidus</i>	SSC FSS	-	Found over a broad range in southern California. Recorded in arid deserts and grasslands, often near rocky outcrops and water. Less abundant in evergreen and mixed conifer woodland. Usually roosts in rock crevice or building, less often in caves, under bridges, tree hollows, mines, etc. Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.
Dulzura pocket mouse <i>Chaetodipus californicus femoralis</i>	SSC	-	Known to occur only from extreme southwestern Riverside County south through western and central San Diego County and into Baja California. Found from sea level to 4,600 feet elevation. Preferred habitat includes chaparral, coastal sage scrub, and, especially, shrub/grassland ecotones. Unlikely to occur in the substation, 500-kV, or the proposed 115-kV study areas.

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	SSC	Fully Covered	Occurs on the coast slope of southern California from Los Angeles and San Bernardino counties south to San Diego County. It inhabits coastal sage scrub, scrub/grassland ecotones, and chaparral communities, often in rocky areas. <i>Occurs in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Aguanga kangaroo rat <i>Dipodomys merriami collinus</i>		Partially Covered	Found within a limited range from southwestern Riverside to northeastern San Diego counties. Appears to be associated with Riversidean sage scrub, chaparral, redshank chaparral, and nonnative grassland, where sandy-loam soils allow for ease of digging. Avoids rocky substrates. <i>No potential to occur in the substation, 500-kV, or the proposed 115-kV study areas based on known range of this species.</i>
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	FE SSC	Partially Covered	Occurs over a very limited range within western Riverside and southwest San Bernardino counties. Alluvial sage scrub on alluvial fans, flood plains, along washes, in adjacent upland areas, and in areas with historic braided stream channels. Prefers the more open early and intermediate stages of alluvial sage scrub, but mature scrub provides important habitat for animals to take refuge during floods. <i>No potential to occur in the substation and 500-kV study areas due to the lack of suitable habitat. Unlikely to occur in the proposed 115-kV study area.</i>
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	FE ST	Fully Covered	This species has a small range limited to western Riverside County and northwestern and north-central San Diego County. Restricted to annual grassland and open Riversidean sage scrub with a shrub cover of less than 30%. Prefers loose, friable, well-drained soil (generally at least 1.5 feet deep) and flat or gently rolling terrain. This species may recolonize abandoned agricultural land. It is most abundant where stands of native vegetation remain. <i>Occurs adjacent to the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
western mastiff bat <i>Eumops perotis californicus</i>	SSC		An uncommon bat that inhabits arid and semi-arid lowlands in southern California, including deciduous and coniferous woodlands, coastal sage scrub, chaparral, and grasslands. Is known to be active year-round. They primarily roost in crevices in vertical cliffs and rock faces; occasionally are found roosting in high buildings, trees, and tunnels, although it needs vertical faces to drop from in order to take flight. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
San Bernardino flying squirrel <i>Glaucomys sabrinus californicus</i>	SSC FSS	Fully Covered	A nocturnal resident of the San Bernardino and San Jacinto mountain ranges of southern California. An isolated, and the southern-most, subspecies of the wide-ranging northern flying squirrel. Typically inhabits old-growth forest comprised of nearly closed-canopy mixed coniferous woodland with some oak (especially black oak) usually present. <i>No potential to occur in the substation, 500-kV, and the proposed 115-kV study areas due to lack of suitable habitat and distribution.</i>
western red bat <i>Lasiurus blossevillii</i>	SSC FSS	-	Occurs over a large area of California but not found in the deserts. Can be locally common in some areas of California. Displays migratory movements between summer and winter, and transients may be outside their normal range. They prefer riparian areas for roosting, including areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores. Feeds over a wide variety of habitats, including grasslands, shrublands, open woodlands, and croplands. <i>Moderate potential to occur in in the substation, 500-kV, and the proposed 115-kV study areas.</i>
western yellow bat <i>Lasiurus xanthinus</i>	SSC	-	An uncommon species in California restricted primarily to the southern counties of Riverside, San Diego and Imperial. It has been recorded in valley foothill riparian, desert riparian, and palm oasis communities. Considered to be migratory and is known to be in California only during spring, summer, and fall. Roosts in trees and appears to especially favor palms. <i>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	SSC	Fully Covered	Occurs west of the mountains in southern California, from Ventura to San Diego counties. A generalist that prefers a variety of open and semi-open habitats including grasslands, agricultural fields, sparse coastal sage scrub, open alluvial washes. Typically avoids dense chaparral and woodland habitats. <i>Moderate potential to occur in the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>
bobcat <i>Lynx rufus</i>	-	Fully Covered	Occurs throughout most of southern California, inhabiting a wide range of habitats including mixed woodlands and forest edge, marsh, riparian, and various brushland communities (such as sage scrub and chaparral). Large tracts of habitat are most often favored. Rests and/or dens in rocky clefts, caves/rock shelters, hollow logs, under fallen trees, etc. <i>High potential to occur in the substation and 500-kV study areas. Occurs in the proposed 115-kV study area.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
long-tailed weasel <i>Mustela frenata</i>	-	Fully Covered	A fairly common, though rarely seen, resident of southern California west of the deserts in a variety of habitats and elevations. Often near water. Favored habitats include brushlands, open woodlands, agricultural field edges, riparian communities, and marshlands. Tolerant of close proximity to humans. <i>High potential to occur in the substation and 500-kV. Occurs in the proposed 115-kV study area.</i>
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	SSC	Fully Covered	Occurs in coastal California from San Luis Obispo County south through the Transverse and Peninsular ranges into Baja California. Occurs in a variety of habitats and elevations. Prefers pinyon-juniper woodland, chaparral, and sage scrub communities and most desert habitats. Most abundant in rocky outcrops and on rocky slopes, building a stick nest typically in cracks within rocky outcrops and boulder piles. <i>Occurs in the substation, 500-kV, and the proposed 115-kV study areas.</i>
pocketed free-tail bat <i>Nyctinomops femerosaccus</i>	SSC	-	Has been found in southern California in Riverside, San Diego and Imperial counties, though records are few. Occurs in a variety of arid habitats, mostly in desert regions, such as pinyon-juniper woodland, desert scrub, palm oasis, desert washes, and riparian. Prefers rocky areas with high cliffs. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
southern grasshopper mouse <i>Onychomys torridus ramona</i>	SSC	-	Common in arid desert habitats of the Mojave Desert and southern Central Valley of California. Alkali desert scrub and desert scrub habitats are preferred, with somewhat lower densities expected in other desert habitats, including succulent shrub, wash, and riparian areas. Also occurs in coastal scrub, mixed chaparral, sagebrush, low sage, and bitterbrush habitats. Uncommon in valley foothill and montane riparian and in a variety of other habitats. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas.</i>
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	SSC FSS	Partially Covered	Ranges historically from Los Angeles and San Bernardino counties south to portions of western Riverside County. Occurs in relatively arid, lower elevations with fine, sandy soils, typically in grassland or coastal sage scrub habitats. <i>Unlikely to occur in the substation, 500-kV, and the proposed 115-kV study areas due to lack of suitable habitat.</i>

COMMON AND SCIENTIFIC NAMES	SENSITIVITY STATUS	WRCMSHCP COVERED SPECIES	PREFERRED HABITAT, SEASONAL STATUS AND DISTRIBUTION, POTENTIAL FOR OCCURRENCE
<p>mountain lion</p> <p><i>Puma concolor</i></p>	<p>SSC</p>	<p>Fully Covered</p>	<p>Associated generally with mountainous or remote high desert areas of southern California but also occurs on the coastal slope, closer to towns and human-altered landscapes. Occupies a wide variety of habitats, including brushlands and woodlands with good cover, wetlands, riparian communities, and occasionally more open habitats. Studies have determined that habitat areas of at least 750 square miles are needed to ensure long-term population persistence (e.g., individual territories average well over 100 sq. miles per male, less for females). Protection of viable wildlife movement areas is considered very important for healthy lion populations.</p> <p>High potential to occur in the 500-kV study area. Unlikely to occur in the substation and proposed 115-kV study areas due to level of human disturbance, limited preferred prey (deer), and extent of remaining open space.</p>
<p>American badger</p> <p><i>Taxidea taxus</i></p>	<p>SSC</p>	<p>-</p>	<p>Badgers are uncommon throughout southern California. They are generally associated with dry, open, treeless regions, including grasslands, rangeland and high deserts. In southern California they have been found in grassy openings within coastal sage scrub. The badger's altitudinal range extends from below sea level to over 12,000 feet.</p> <p>Moderate potential to occur in the substation, 500-kV, and the proposed 115-kV study areas.</p>

Source: Bond 1977; Unitt 1987, 2004; McKernan 1993, 1997; Yosef 1996; Beedy and Hamilton 1999; Collins 1999; Hughes 1999; Atwood et al. 2001; AECOM 2008a; Shuford and Gardali 2009; CDFW 2009b

Federal Status Designations:

FE – Federally Listed Endangered
 FT – Federally Listed Threatened
 FC – Federal Candidate Species for Listing
 FD – Federally Delisted
 BCC – U.S. Fish and Wildlife Service Birds of Conservation Concern
 FSS – U.S. Department of Agriculture Forest Service Sensitive

State Status Designations:

SE – State-listed as Endangered
 ST – State-listed as Threatened
 SC – State Candidate Species for Listing
 SSC – California Department of Fish and Wildlife Species of Special Concern
 FP – California Department of Fish and Wildlife Fully Protected Species
 WL – California Department of Fish and Wildlife Watch List Species

Notes:

Gray highlighted cells contain species that are listed (i.e., federal and/or state threatened and endangered).

Partially Covered Species under the WRCMSHCP require additional mitigation if 90% avoidance cannot be demonstrated and a DBESP is required.

APPENDIX E

**SPECIES OBSERVED WITHIN THE
PROJECT AREA**

E1-Plants
E2-Wildlife

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E1
PLANTS

Lycopodiophyta

Selaginellaceae

Selaginella bigelovii Underw.

Pteridophyta

Pteridaceae

Cheilanthes newberryi (D.C. Eat.) Domin.

Pellaea andromedifolia (Kaulf.) Fée

Pellaea mucronata (D.C. Eat.) D.C. Eat.

Pityrogramma triangularis (Kaulfuss) Maxon

Gymnosperms

Pinaceae

Pinus canariensis C. Sm.

Pinus halepensis Mill.

Pinus pinea L.

Angiosperms

Eudicots

Adoxaceae

Sambucus mexicana Presl.

Aizoaceae

Mesembryanthemum

Amaranthaceae

Amaranthus albus L.

Amaranthus blitoides S. Wats.

Anacardiaceae

Pistacia atlantica Desf.

Rhus aromatica Ait.

Rhus laurina Nutt.

Rhus ovata S. Wats.

Schinus molle L.

Schinus terebinthifolius Raddi

Toxicodendron diversilobum (Torr. & Gray) Greene

Apiaceae

Apiastrum angustifolium Nutt.

Bowlesia incana Ruiz & Pavon

Daucus pusillus Michx.

Lomatium dasycarpum (Torr. & Gray) Coult. & Rose

Lomatium utriculatum (T. & G.) C. & R.

Sanicula arguta Greene ex C. & R.

Sanicula bipinnatifida Dougl. ex Hook.

Apocynaceae

Funastrum cynanchoides (Decne.) Schltr.

Nerium oleander L.

Sarcostemma cynanchoides Dcne.

Asteraceae

Acourtia microcephala DC.

Ambrosia acanthicarpa Hook.

Ambrosia confertiflora DC.

Ambrosia psilostachya DC.

Ancistrocarphus filagineus Gray

Anthemis cotula L.

Artemisia californica Less.

Artemisia douglasiana Bess.

Artemisia dracunculus L.

Baccharis pilularis DC.

Baccharis salicifolia (Ruiz & Pavón) Pers.

Baccharis salicina Torr. & Gray

Baccharis sarothroides Gray

Bebbia juncea (Benth.) Greene var. *aspera* Greene

Brickellia desertorum Coville

Carduus pycnocephalus L.

Centaurea melitensis L.

Centaurea solstitialis L.

Chaenactis artemisiifolia (Harv. & Gray ex Gray) Gray

Chaenactis glabriuscula DC.

Chamomilla suaveolens (Pursh.) Rydb.

Cirsium vulgare (Savi) Ten.

Cnicus benedictus L.

Conyza bonariensis (L.) Cronq.

Conyza canadensis (L.) Cronq.

Conyza coulteri Gray

Cotula australis (Sieber) Hook. f.

Dimorphotheca sinuata DC.

Encelia farinosa Gray ex Torr. var. *farinosa*

Ericameria palmeri (Gray) Hall var. *pachylepis* (Hall) Nesom

Erigeron foliosus Nutt.

Eriophyllum confertiflorum (DC.) Gray

Eriophyllum multicaule (DC.) Gray

Filago arizonica Gray

Filago californica Nutt.

Filago gallica L.

Gnaphalium bicolor Biol.

Gnaphalium californicum DC.

Gnaphalium luteo-album L.

Gnaphalium palustre Nutt.

Gutierrezia californica (DC.) T. & G.

Gutierrezia microcephala (DC.) Gray

Haplopappus squarrosus H. & A.

Hedypnois cretica (L.) Dum.-Cours.

Helianthus annuus L.
Helianthus gracilentus Gray
Hemizonia fasciculata (DC.) Torr. & Gray
Hemizonia kelloggii Greene
Hemizonia paniculata Gray
Hemizonia pungens ssp. *laevis* Keck
Heterotheca grandiflora Nutt.
Hypochaeris glabra L.
Hypochaeris radicata L.
Lactuca serriola L.
Lasthenia coronaria (Nutt.) Ornd.
Lasthenia gracilis (DC.) Greene
Layia glandulosa (Hook.) H. & A.
Layia platyglossa (Fisch. & Mey.) Gray
Lepidospartum squamatum (Gray) Gray
Lessingia filaginifolia (H. & A.) M.A. Lane
Malacothrix saxatilis (Nutt.) T. & G.
Matricaria discoidea DC.
Matricaria globifera (Thunb.) Fenzl in Harv. & Sond.
Matricaria matricarioides (Less.) Porter
Microseris douglasii ssp. *platycarpa* (Gray) Chambers
Microseris heterocarpa (Nutt.) Chamb.
Microseris lindleyi (DC.) Gray
Oncosiphon piluliferum (L.f.) Källersjö
Pluchea sericea (Nutt.) Cov.
Porophyllum gracile Benth.
Psilocarphus brevissimus Nutt.
Rafinesquia californica Nutt.
Senecio vulgaris L.
Silybum marianum (L.) Gaertn.
Solidago californica Nutt.
Sonchus asper (L.) Hill
Sonchus oleraceus L.
Stephanomeria exigua Nutt. ssp. *deanei* (J.F. Macbr.) Gottlieb
Stephanomeria virgata Benth.
Stylocline gnaphaloides Nutt.
Tetradymia comosa Gray
Xanthium strumarium L.

Bignoniaceae

Catalpa speciosa (Warder) Warder ex Engelm.

Boraginaceae

Amsinckia intermedia Fisch. & C.A. Mey.
Amsinckia retrorsa Suksd.
Amsinckia tessellata Gray
Cryptantha corollata (I.M. Johnston) I.M. Johnston ?
Cryptantha intermedia (Gray) Greene
Cryptantha microstachys (Greene ex Gray) Greene

Harpagonella palmeri Gray
Heliotropium curassavicum L.
Pectocarya anisocarpa Veno, ined.
Pectocarya linearis (R. & P.) DC.
Pectocarya penicillata (H. & A.) A. DC.
Pectocarya recurvata Jtn.
Plagiobothrys canescens Benth.
Plagiobothrys collinus (Phil.) Jtn.
Plagiobothrys collinus var. *californicus* (Gray) Higgins
Plagiobothrys collinus (Phil.) Jtn. var. *fulvescens* (I.M. Johnston) Higgins
Plagiobothrys leptocladus (Greene) Johnst.
Plagiobothrys tenellus (Nutt.) Gray

Brassicaceae

Athysanus pusillus (Hook.) Greene
Brassica geniculata (Desf.) Ball
Brassica rapa L.
Brassica tournefortii Gouan.
Capsella bursa-pastoris (L.) Medik.
Caulanthus heterophyllus (Nutt.) Payson var. *pseudosimulans* R. Buck, ined.
Coronopus didymus (L.) Sm.
Lepidium dictyotum A. Gray
Lepidium lasiocarpum T. & G.
Lepidium nitidum Nutt.
Lepidium virginicum L. var. *robinsonii* (Thell.) C. Hitchc.
Raphanus sativus L.
Rorippa nasturtium-aquaticum (L.) Hayek
Sisymbrium irio L.
Sisymbrium orientale L.
Thysanocarpus curvipes Hook.
Thysanocarpus laciniatus Nutt.
Tropidocarpum gracile Hook.

Cactaceae

Cylindropuntia californica (Torr. & A. Gray) F. M. Knuth
Opuntia littoralis (Engelm.) Cockerell
Trichocereus spachianus (Lem.) Riccob.

Campanulaceae

Nemacladus ramosissimus Nutt.

Caryophyllaceae

Cerastium glomeratum Thuill.
Herniaria cinerea DC.
Herniaria hirsuta ssp. *cinerea* (DC.) Coutinho
Loeflingia squarrosa Nutt. ssp. *squarrosa*
Silene antirrhina L.
Spergularia marina (L.) Griseb.
Spergularia rubra (L.) J. Presl. & C. Presl.
Stellaria media (L.) Villars

Chenopodiaceae

Atriplex argentea Nutt.
Atriplex semibaccata R. Br.
Atriplex suberecta I. Verd.
Chenopodium berlandieri Moq.
Chenopodium californicum (S. Wats.) S. Wats.
Chenopodium murale L.
Salsola tragus L.

Convolvulaceae

Calystegia macrostegia (Greene) Brummitt ssp. *arida* (Greene) Brummitt
Convolvulus arvensis L.
Cressa truxillensis Kunth
Cuscuta californica Hook. & Arn.

Crassulaceae

Crassula connata (R. & P.) Berger
Dudleya lanceolata (Nutt.) Britt. & Rose
Dudleya pulverulenta (Nutt.) Britt. & Rose

Cucurbitaceae

Cucurbita foetidissima Kunth
Cucurbita palmata S. Wats.
Marah macrocarpus (Greene) Greene

Euphorbiaceae

Croton californicus Muell.-Arg.
Croton setigerus Hook.
Euphorbia albomarginata T. & G.
Euphorbia peplus L.
Euphorbia polycarpa Benth.
Euphorbia prostrata Ait.
Ricinus communis L.

Fabaceae

Acacia
Astragalus gambelianus Sheldon
Astragalus pomonensis M. E. Jones
Caesalpinia gilliesii (Hook.) Wallich ex D. Dietr.
Lotus hamatus Greene
Lotus heermannii (Dur. & Hilg.) Greene
Lotus humistratus Greene
Lotus purshianus (Benth.) Clem. & Clem.
Lotus salsuginosus Greene
Lotus scoparius (Nutt.) Ottley var. *brevialatus* Ottley
Lotus strigosus (Nutt.) Greene
Lotus wrangelianus Fisch. & Mey.
Lupinus bicolor Lindl.
Lupinus concinnus Agardh.
Lupinus excubitus M.E. Jones
Lupinus hirsutissimus Benth.
Lupinus microcarpus Sims
Lupinus sparsiflorus Benth.

Lupinus succulentus Koch
Lupinus truncatus H. & A.
Medicago polymorpha L.
Melilotus albus Medikus ?
Melilotus indicus (L.) All.
Parkinsonia aculeata L.
Trifolium hirtum L.
Trifolium obtusiflorum Hook. f.
Trifolium willdenovii Spreng. ?
Vicia americana Muhl. ex Willd.
Vicia villosa Roth

Fagaceae

Quercus agrifolia Née
Quercus berberidifolia Liebm.
Quercus virginiana P. Mill.

Frankeniaceae

Frankenia salina (Molina) I.M. Johnston

Geraniaceae

Erodium botrys (Cav.) Bertol.
Erodium cicutarium (L.) L'Her. ex Ait.
Erodium moschatum (L.) L'Her. ex Ait.

Hydrophyllaceae

Emmenanthe penduliflora Benth.
Eriodictyon crassifolium Benth. var. *crassifolium*
Eucrypta chrysanthemifolia (Benth.) Greene
Nemophila menziesii H. & A.
Phacelia campanularia Gray
Phacelia cicutaria Greene var. *hispida* (Gray) J.T. Howell
Phacelia distans Benth.
Phacelia minor (Harv.) Thell.
Phacelia ramosissima Dougl. ex Lehm.
Pholistoma auritum (Lindl.) Lilja

Juglandaceae

Juglans hindsii X *regia*
Juglans regia L.

Lamiaceae

Lamium amplexicaule L.
Marrubium vulgare L.
Salvia apiana Jeps.
Salvia columbariae Benth.
Salvia mellifera Greene
Scutellaria tuberosa Benth.
Stachys ajugoides Benth. ?
Trichostema lanceolatum Benth.

Linaceae

Hesperolinon micranthum (Gray) Small

Malvaceae

Malacothamnus fasciculatus (Nutt.) Greene

Malva parviflora L.

Malva sylvestris L.

Malvella leprosa (Ort.) Krapov.

Meliaceae

Melia azedarach L.

Moraceae

Ficus carica L.

Morus alba L.

Myrtaceae

Eucalyptus camaldulensis Dehnh.

Eucalyptus cladocalyx F. Muell.

Eucalyptus populnea F. Muell.

Nyctaginaceae

Mirabilis laevis (Benth.) Curran

Oleaceae

Ligustrum japonicum Thunb.

Olea europaea L.

Onagraceae

Camissonia bistorta (Nutt. ex T. & G.) Raven

Camissonia californica (Nutt. ex T. & G.) Raven

Camissonia hirtella (Greene) Raven

Camissonia ignota (Jepson) Raven

Camissonia strigulosa (Fisch. & Mey.) Raven

Clarkia epilobioides (Nutt. ex T. & G.) Nels. & Macbr.

Clarkia purpurea (Curt.) A. Nels. & Macbr.

Epilobium brachycarpum C. Presl

Epilobium campestre (Jeps.) Hoch & W.L. Wagner

Epilobium ciliatum Raf.

Papaveraceae

Dicentra chrysantha (H. & A.) Walp.

Eschscholzia californica Cham.

Platystemon californicus Benth.

Romneya coulteri Harv.

Plantaginaceae

Plantago erecta Morris

Plantago lanceolata L.

Platanaceae

Platanus racemosa Nutt.

Plumbaginaceae

Limonium perezii F. T. Hubb.

Polemoniaceae

Allophyllum

Eriastrum sapphirinum (Eastw.) Mason

Gilia angelensis V. Grant

Linanthus androsaceus (Benth.) Greene

Linanthus parviflorus (Benth.) Greene

Navarretia atractyloides (Benth.) H. & A.
Saltugilia australis (H. Mason & A.D. Grant) L. Johnson

Polygonaceae

Chorizanthe coriacea Goodm.
Chorizanthe fimbriata Nutt.
Chorizanthe parryi S. Wats. var. *parryi*
Chorizanthe polygonoides var. *longispina* (Goodman) Munz
Eriogonum elongatum Benth.
Eriogonum fasciculatum Benth. var. *foliolosum* (Nutt.) S. Stokes ex Abrams
Eriogonum fasciculatum Benth. var. *polifolium* (A. DC.) T. & G.
Eriogonum gracile Benth.
Polygonum argyrocoleon Kunze
Polygonum aviculare L.
Pterostegia drymarioides F. & M.
Rumex crispus L.
Rumex hymenosepalus Torr.
Rumex salicifolius Weinm.

Portulacaceae

Calandrinia ciliata (R. & P.) DC.
Calyptridium monandrum Nutt.
Claytonia parviflora Dougl. ex Hook.
Claytonia perfoliata Donn ex Willd.
Portulaca oleracea L.

Primulaceae

Anagallis arvensis L.

Proteaceae

Grevillea robusta A. Cunningham ex R. Br.

Punicaceae

Punica granatum L.

Ranunculaceae

Clematis pauciflora Nutt.
Delphinium parryi Gray

Rhamnaceae

Ceanothus crassifolius Torr.
Rhamnus crocea Nutt.
Ziziphus jujuba (L.) Lam.

Rosaceae

Adenostoma fasciculatum H. & A.
Cercocarpus betuloides Torr. & A. Gray
Heteromeles arbutifolia (Lindl.) M. Roemer
Prunus dulcis (P. Mill.) D.A. Webber
Prunus ilicifolia (Nutt.) Walp.

Rubiaceae

Galium angustifolium Nutt. ex Gray
Galium aparine L.

Rutaceae

Citrus sinensis (L.) Osbeck

Salicaceae

Populus fremontii S. Wats.

Salix laevigata Bebb

Salix lasiolepis Benth.

Scrophulariaceae

Antirrhinum coulterianum Benth.

Antirrhinum nuttallianum Benth.

Castilleja affinis H. & A.

Castilleja exserta (Heller) Chuang & Heckard

Collinsia concolor Greene

Collinsia heterophylla Buist ex Grah.

Linaria canadensis (L.) Dum-Cours. var. *texana* (Scheele) Penn.

Keckliella antirrhinoides (Benth.) Straw

Mimulus aurantiacus Curtis var. *pubescens* (Torr.) D. Thompson

Mimulus aurantiacus Curtis var. *puniceus* (Nutt.) D. Thompson

Mimulus brevipes Benth.

Mimulus cardinalis Benth.

Mimulus guttatus DC.

Mimulus pilosus (Benth.) S. Wats.

Penstemon spectabilis Thurb. ex Gray

Scrophularia californica Cham. & Schldl.

Veronica peregrina L.

Veronica persica Poir.

Simarobaceae

Ailanthus altissima (P. Mill.) Swingle

Solanaceae

Datura wrightii Regel

Lycium andersonii Gray

Nicotiana glauca Grah.

Nicotiana quadrivalvis Pursh

Solanum americanum Miller

Solanum douglasii Dunal

Solanum elaeagnifolium Cav.

Solanum esculentum L.

Solanum umbelliferum Eschsch.

Tamaricaceae

Tamarix ramosissima Ledeb.

Ulmaceae

Ulmus parvifolia Jacq.

Urticaceae

Parietaria hespera B. D. Hinton

Urtica dioica L.

Urtica urens L.

Vitaceae

Parthenocissus vitacea (Kerr) Hitchc.

Vitis vinifera L.

Verbanaceae

Verbena lasiostachys Link.

Verbena tenuisecta Briq.

Zygophyllaceae

Tribulus terrestris L.

Monocots

Agavaceae

Agave

Yucca whipplei Torr.

Arecaceae

Syagrus romanzoffiana (Cham.) Glassm.

Washingtonia robusta H. A. Wendl.

Cyperaceae

Juniperus californica Carr.

Carex

Cyperus eragrostis Lam.

Scirpus acutus Muhl. ex Bigel. ?

Juncaceae

Juncus bufonius L.

Juncus macrophyllus Cov. ?

Juncus textilis Buch.

Juncus xiphioides E. Meyer

Liliaceae

Allium haematochiton S. Wats.

Allium peninsulare Lemmon ex Greene var. *peninsulare*

Bloomeria crocea (Torr.) Coville

Calochortus concolor (Baker) Purdy

Calochortus splendens Dougl. ex Benth.

Calochortus weedii Wood var. *weedii*

Dichelostemma capitatum (Benth.) Alph. Wood

Muilla maritima (Torr.) S. Wats.

Poaceae

Aristida adscensionis L.

Arundo donax L.

Avena barbata Brot.

Avena fatua L.

Avena sativa L.

Bromus diandrus Roth

Bromus hordeaceus L.

Bromus rubens L.

Bromus tectorum L.

Bromus trinii Desv.

Cortaderia selloana (J.A. & J.H. Schult.) Asch. & Graebn.

Cynodon dactylon (L.) Pers.

Distichlis spicata (L.) Greene

Elymus condensatus Presl

Elymus glaucus Buckl.
Festuca arundinacea Schreb.
Festuca bromoides L.
Festuca microstachys Nutt. var. *pauciflora* Scribn. ex Beal
Festuca myuros L.
Festuca octoflora Walt.
Hordeum marinum Huds.
Hordeum murinum L.
Lamarckia aurea (L.) Moench
Lolium perenne L.
Melica frutescens Scribn.
Melica frutescens X *imperfecta* ?
Melica imperfecta Trin.
Muhlenbergia microsperma (DC.) Kunth.
Phalaris minor Retz.
Poa annua L.
Poa secunda Presl.
Polypogon monspeliensis (L.) Desf.
Schismus barbatus (L.) Thell.
Stipa coronata Thurb.
Stipa lepida Hitchc.
Stipa pulchra Hitchc.
Triticum aestivum L.

Typhaceae

Typha

E2
WILDLIFE

Invertebrates

Arachnida

tarantula

(Spiders, Ticks, and Scorpions)

Aphonopelma sp.

Decapoda

Astacidae

crayfish

(Crayfish, Crabs, Lobsters, Prawns, and Shrimp)

(Freshwater Crayfish)

Pacifastacus spp.

Odonata

flame skimmer
blue dasher
Mexican amberwing
blue-eyed darner

(Dragonflies, Damselflies, and Relatives)

Libellula saturata
Pachydiplax longipennis
Perithemis intensa
Rhionaeschna multicolor

Lepidoptera

Hesperiidae

sachem skipper
funereal duskywing
propretius duskywing
fiery skipper
checkered skipper

(Moths and Butterflies)

(Skipper Butterflies)

Atalopedes campestris
Erynnis funeralis
Erynnis propertius
Hylephila phylus
Pyrgus albescens

Lycaenidae

pygmy blue
brown elfin
perplexing hairstreak
echo blue
southern blue
marine blue
Acmon blue
gray hairstreak

(Gossamer-winged Butterflies)

Brephidium exile
Callophrys augustinus
Callophrys perplexa
Celastrina echo
Glaucopsyche lygdamus australis
Leptotes marina
Plebejus acmon
Strymon melinus

Nymphalidae

Gabb's checkerspot
buckeye butterfly
west coast lady
painted lady
American lady

(Brush-footed Butterflies)

Chlosyne gabbii
Junonia coenia
Vanessa annabella
Vanessa cardui
Vanessa virginiensis

Papilionidae

pale swallowtail
anise swallowtail

(Swallowtail Butterflies)

Papilio eurymedon
Papilio zelicaon

Pieridae

desert orangetip
Sara orangetip
alfalfa butterfly
Harford's sulphur
dainty yellow
cabbage white
checkered white

(White, Yellow, or Orange Butterflies)

Anthocharis cethura
Anthocharis sara
Colias eurytheme
Colias harfordii
Nathalis iole
Pieris rapae
Pontia protodice

Riodinidae
Behr's metalmark

(Metalmark Butterflies)
Apodemia virgulti

Fish

Cypriniformes

(Carps, Minnows, Loaches, and Relatives)

Cyprinidae
common carp
common dace

(Carps, True Minnows, and Relatives)
Cyprinus carpio
Leuciscus leuciscus

Perciformes

(Cichlids, Sunfish, Damselfish, Bass, Perch, and Relatives)

Centrarchidae
sunfish
bass

(Bass, Bluegill, Pumpkinseed, and Crappies)
Centrarchus spp.
Micropterus spp.

Salmoniformes

(Salmon, Trout, Chars, Freshwater Whitefish, and Graylings)

Salmonidae

(Salmon, Trout, Chars, Freshwater Whitefish, and Graylings)

trout

Oncorhynchus spp.

Amphibia

(Amphibians)

Anura

(Frogs and Toads)

Ranidae
bullfrog

(True Frogs)
Rana catesbeiana

Reptilia

(Reptiles)

Squamata

(Lizards and Snakes)

Boidae
rosy boa

(Boas)
Charina trivirgata

Colubridae
red racer
California striped racer
San Diego Gopher Snake

(Colubrids)
Coluber flagellum piceus
Coulber lateralis lateralis
Pituophis catenifer annectens

Phrynosomatidae
coast horned lizard
western fence lizard
granite spiny lizard
side-blotched lizard

Phrynosoma coronatum
Sceloporus occidentalis
Sceloporus orcutti
Uta stansburiana

Teiidae

(Whiptails and Relatives)

Belding's orange-throated whiptail
coastal western whiptail

Viperidae

red diamond rattlesnake

Aspidoscelis hyperythra beldingi
Aspidoscelis tigris stejnegeri

(Vipers)

Crotalus ruber

Aves

(Birds)

Anseriforms

(Screamers, Ducks, and Relatives)

Anatidae

cinnamon teal
mallard

(Swans, Geese, and Ducks)

Anas cyanoptera
Anas platyrhynchos

Apodiformes

(Swifts and Hummingbirds)

Apodidae

white-throated swift
Vaux's swift

(Swifts)

Aeronautes saxatalis
Chaetura vauxi

Trochilidae

black-chinned hummingbird
Anna's hummingbird
Costa's hummingbird
Rufous/Allen's hummingbird

(Hummingbirds)

Archilochus alexandri
Calypte anna
Calypte costae
Selasphorus rufus/sasin

Caprimulgiforms

(Goatsuckers and Relatives)

Caprimulgidae

lesser nighthawk

(Goatsuckers)

Chordeiles acutipennis

Charadriiformes

(Shorebirds, Gulls, and Relatives)

Charadriidae

killdeer

(Plovers and Relatives)

Charadrius vociferous

Laridae

California gull

(Skuas, Gulls, Terns, and Skimmers)

Larus californicus

Recurvirostridae

black-necked stilt

(Avocets and Stilts)

Himantopus mexicanus

Ciconiiformes

(Herons, Storks, Ibises, and Relatives)

Ardeidae

great egret
great blue heron
cattle egret
green heron
snowy egret
black-crowned night heron

(Herons and Bitterns)

Ardea alba
Ardea herodias
Bubulcus ibis
Butorides virescens
Egretta thula
Nycticorax nycticorax

Cathartidae

turkey vulture

(New World Vultures)

Cathartes aura

Threskiornithidae white-faced ibis	(Ibises and Spoonbills) <i>Plegadis chihi</i>
Columbiformes	(Pigeons and Doves)
Columbidae rock pigeon common ground-dove band-tailed pigeon Eurasian collared-dove mourning dove	(Pigeons and Doves) <i>Columba livia</i> <i>Columbina passerina</i> <i>Patagioenas fasciata</i> <i>Streptopelia decaocto</i> <i>Zenaida macroura</i>
Cuculiformes	(Cuckoos and Relatives)
Cuculidae greater roadrunner	(Typical Cuckoos) <i>Geococcyx californianus</i>
Falconiformes	(Vultures, Hawks, and Falcons)
Acciptridae Cooper's hawk golden eagle red-tailed hawk red-shouldered hawk Swainson's hawk northern harrier white-tailed kite osprey	(Hawks, Old World Vultures, and Harriers) <i>Accipiter cooperii</i> <i>Aquila chrysaetos</i> <i>Buteo jamaicensis</i> <i>Buteo lineatus</i> <i>Buteo swainsoni</i> <i>Circus cyaneus</i> <i>Elanus leucurus</i> <i>Pandion haliaetus</i>
Falconidae merlin American kestrel	(Caracaras and Falcons) <i>Falco columbarius</i> <i>Falco sparverius</i>
Galliformes	(Magapodes, Curassows, Pheasants, and Relatives)
Odontophoridae California quail	(New World Quail) <i>Callipepla californica</i>
Gruiformes	(Cranes, Rails, and Relatives)
Rallidae American coot	(Rails, Gallinules, and Coots) <i>Fulica americana</i>
Passeriformes	(Perching Birds)
Aegithalidae bushtit	(Bushtit) <i>Psaltriparus minimus</i>
Alaudidae horned lark	(Larks) <i>Eremophila alpestris</i>
Cardinalidae lazuli bunting blue grosbeak black-headed grosbeak	(Cardinals, Grosbeaks, and Allies) <i>Passerina amoena</i> <i>Passerina caerulea</i> <i>Pheucticus melanocephalus</i>

Corvidae

western scrub-jay
 American crow
 common raven

Emberizidae

rufous-crowned sparrow
 sage sparrow
 lark sparrow
 dark-eyed junco
 song sparrow
 savannah sparrow
 California towhee
 spotted towhee
 chipping sparrow
 white-crowned sparrow

Fringillidae

Lawrence's goldfinch
 lesser goldfinch
 American goldfinch
 house finch
 purple finch

Hirundinidae

barn swallow
 cliff swallow
 northern rough-winged swallow
 tree swallow
 violet-green swallow

Icteridae

red-winged blackbird
 tri-colored blackbird
 Brewer's blackbird
 Bullock's oriole
 hooded oriole
 brown-headed cowbird
 great-tailed grackle
 western meadowlark

Mimidae

northern mockingbird
 California thrasher

Motacillidae

American pipit

Paridae

oak titmouse
 mountain chickadee

Parulidae

yellow-rumped warbler
 yellow warbler
 common yellowthroat

(Jays, Magpies, and Crows)

Aphelocoma californica
Corvus brachyrhynchos
Corvus corax

(Emberizines)

Aimophila ruficeps
Amphispiza belli
Chondestes grammacus
Junco hyemalis
Melospiza melodia
Passerculus sandwichensis
Pipilo crissalis
Pipilo maculatus
Spizella passerina
Zonotrichia leucophrys

(Finches)

Carduelis lawrencei
Carduelis psaltria
Carduelis tristis
Carpodacus mexicanus
Carpodacus purpureus

(Swallows)

Hirundo rustica
Petrochelidon pyrrhonota
Stelgidopteryx serripennis
Tachycineta bicolor
Tachycineta thalassina

(Blackbirds, Orioles, and Allies)

Agelaius phoeniceus
Agelaius tricolor
Euphagus cyanocephalus
Icterus bullockii
Icterus cucullatus
Molothrus ater
Quiscalus mexicanus
Sturnella neglecta

(Mockingbirds and Trashers)

Mimus polyglottos
Toxostoma redivivum

(Wagtails and Pipits)

Anthus rubescens

(Titmice and Relatives)

Baeolophus inornatus
Poecile gambeli

(Wood Warblers and Relatives)

Dendroica coronata
Dendroica petechia
Geothlypis trichas

MacGillivray's warbler Nashville Warbler Wilson's warbler Passeridae house sparrow	<i>Oporornis tolmiei</i> <i>Oreothlypis ruficapilla</i> <i>Wilsonia pusilla</i> (Old World Sparrows) <i>Passer domesticus</i>
Ptilonotidae phainopepla	(Silky Flycatchers) <i>Phainopepla nitens</i>
Regulidae ruby-crowned kinglet	(Kinglets) <i>Regulus calendula</i>
Sturnidae European starling	(Starlings and Allies) <i>Sturnus vulgaris</i>
Sylviidae willow warbler California gnatcatcher	(Old World Warblers and Gnatcatchers) <i>Phylloscopus trochilus</i> <i>Polioptila californica</i>
Thraupidae western tanager	(Tanagers) <i>Piranga ludoviciana</i>
Timaliidae wrentit	(Babblers) <i>Chamaea fasciata</i>
Troglodytidae marsh wren rock wren Bewick's wren house wren	(Wrens) <i>Cistothorus palustris</i> <i>Salpinctes obsoletus</i> <i>Thryomanes bewickii</i> <i>Troglodytes aedon</i>
Turdidae hermit thrush Swainson's thrush Western Bluebird American robin	(Thrushes) <i>Catharus guttatus</i> <i>Catharus ustulatus</i> <i>Sialia mexicana</i> <i>Turdus migratorius</i>
Tyrannidae western wood-pewee Pacific-slope flycatcher ash-throated flycatcher black phoebe Say's phoebe western kingbird Cassin's kingbird	(Tyrant Flycatchers) <i>Contopus spridulus</i> <i>Empidonax difficilis</i> <i>Myiarchus cinerascens</i> <i>Sayornis nigricans</i> <i>Sayornis saya</i> <i>Tyrannus verticalis</i> <i>Tyrannus vociferans</i>
Vireonidae Bell's vireo Cassin's vireo warbling vireo Hutton's vireo	(Typical Vireos) <i>Vireo bellii</i> <i>Vireo cassinii</i> <i>Vireo gilvus</i> <i>Vireo huttoni</i>
Pelecaniformes	(Tropicbirds, Pelicans, and Relatives)
Pelecanidae American white pelican	(Pelicans) <i>Pelecanus erythrorhynchos</i>

Phalacrocoracidae
double-crested cormorant
Piciformes

Picidae
northern flicker
acorn woodpecker
downy woodpecker
Nuttall's woodpecker

Strigiforms

Strigidae
burrowing owl
great horned owl

Tytonidae
barn owl

Mammalia

Artiodactyla

Cervidae
mule deer

Carnivora

Canidae
feral dog
coyote

Felidae
feral cat
bobcat

Procyonidae
raccoon

Lagomorpha

Leporidae
San Diego black-tailed jackrabbit
desert cottontail

Rodentia

Geomyidae
Botta's pocket gopher

Heteromyidae
San Diego pocket mouse
Dulzura/San Diego kangaroo rat
Stephens' kangaroo rat

(Cormorants)
Phalacrocorax auritus
(Woodpeckers and Relatives)

(Woodpeckers and Wrynecks)
Colaptes auratus
Melanerpes formicivorus
Picoides pubescens
Picoides nuttallii

(Owls)

(Typical Owls)
Athene cunicularia
Bubo virginianus

(Barn Owls)
Tyto alba

(Mammals)

(Even-toed Ungulates)

(Deer, Elk, and Relatives)
Odocoileus hemionus

(Carnivores)

(Foxes, Wolves, and Relatives)
Canis familiaris
Canis latrans

(Cats)
Felis catus
Lynx rufus

(Raccoons and Relatives)
Procyon lotor

(Rabbits, Hares, and Pika)

(Rabbits and Hares)
Lepus californicus bennettii
Sylvilagus audubonii

(Rodents)

(Pocket Gophers)
Thomomys bottae

(Pocket Mice and Kangaroo Rats)
Chaetodipus fallax
Dipodomys simulans
Dipodomys stephensi

Muridae

California vole
house mouse
deer mouse
Bryant's woodrat
desert woodrat
large-eared woodrat
black rat
western harvest mouse

Sciuridae

California ground squirrel

(Mice, Rats, and Voles)

Microtus californicus
Mus musculus
Peromyscus maniculatus
Neotoma bryanti
Neotoma lepida
Neotoma macrotis
Rattus rattus
Reithrodontomys megalotis

(Squirrels, Chipmunks, and Marmots)

Spermophilus beecheyi