

4.2 Biological Resources

This section describes the existing biological resources within Santa Barbara County and evaluates the significance of the changes in biological resources that would result from implementation of the Santa Barbara County Last-Mile Broadband Program (“Broadband Program” or “Project”) and feasible mitigation measures to reduce these potential impacts. The information and analysis presented are based in part on the biological resources data presented in Appendix C.

4.2.1 Environmental Setting

Regional Setting

The Project would facilitate construction and operation of future broadband facilities in various communities across Santa Barbara County that are currently underserved or unserved by high-speed broadband internet services. These broadband facilities could include both underground and aerial fiberoptic cable as part of proposed “last-mile” broadband facilities, which are intended to reach end users in these affected communities. These last-mile facilities would provide connections to end users in communities across the County and connect from the State of California’s “middle-mile” broadband network (“Statewide Middle Mile Network”) currently being implemented by the California Department of Technology.

The area subject to future broadband facility installations under the proposed Broadband Program (i.e., the “Project Area”) includes the entire County of Santa Barbara (County), since, with a few exceptions discussed below, the specific locations of future broadband facility installations are currently not known (see Figure 2-1, *Regional Location*, in Chapter 2, *Project Description*, of this Draft PEIR). A total of nine communities in the County have already been identified as “Priority Areas” under the Broadband Program, all of which have already been the subject of high-level engineering design. Figure 2-2, *Broadband Facility Locations*, in Chapter 2 provides a County-wide view of the Project Area, including the location of existing and/or approved middle-mile broadband facilities in the County, as well as the locations of all nine identified Priority Areas.

This section describes the existing environment for biological resources in the County. The setting information presented herein was compiled from available database searches and scientific literature. Specific sources used to analyze the distribution of biological resources and assess impacts of the future broadband facilities within the Priority Areas and within other parts of the County are cited below and include the following:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2024a);
- California Native Plant Society (CNPS) Rare Plant Inventory (RPI) (CNPS 2024);
- CDFW Special Animals List (CDFW 2024b);
- CDFW State and Federally Listed Endangered, Threatened, and Rare Plants of California List (CDFW 2024c);
- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper web application (USFWS 2024a);

- United States Department of Agriculture (USDA) and United States Forest Service (USFS) CALVEG Vegetation Classification & Mapping (CALVEG) database (USDA & USFS 2018);
- USFWS National Wetlands Inventory Mapper (NWI) Wetlands Mapper web application (USFWS 2024b);
- Missing Linkages: Restoring Connectivity to the California Landscape (Penrod et al. 2001); and
- CDFW Habitat Connectivity Mapper web application (CDFW 2024d).

Vegetation Types

The County contains a wide variety of vegetation types. Twenty vegetation types have been mapped within the County using the USDA and USFS CALVEG database (USDA & USFS 2018), as shown below in **Figure 4.2-1: Vegetation Cover**. It should be noted that the classification system mapped habitats from a broad perspective and that site-specific variation may be present (e.g., site-specific vegetation communities may be identified on a more detailed level based on the dominant species present). Additionally, the data was mapped in 2004, so there may be variations due to changes in vegetation types over time (e.g., due to development, disturbance, introduction of exotic plant species, restoration of native habitat). **Table 4.2-1, CALVEG Vegetation Types within Priority Areas**, below, provides a summary of the acreages of each vegetation type within each Priority Area. Note that there are CALVEG vegetation types listed in Table 4.2-1 that are not present within the Priority Areas but that are present elsewhere within the County.

**TABLE 4.2-1
 CALVEG VEGETATION TYPES WITHIN PRIORITY AREAS**

Vegetation Type	Priority Area								
	Guadalupe	Casmalia	East of Santa Maria	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Agriculture	248.8	29.6	1,134.5	971.5	122.6	538.1	37.7	4,288.7	72.6
Barren Land	22.1	12.1	188.7	--	24.4	26.2	--	132.1	18.6
Big Basin Sagebrush	--	--	--	--	--	--	--	--	--
Blackbush	--	--	--	--	--	--	--	--	--
Ceanothus Mixed Chaparral	--	3.1	450.6	--	--	--	--	17.8	786.6
Chamise Chaparral	--	--	60.1	--	--	128.2	--	--	0.3
Chokecherry – Serviceberry - Rose	--	--	--	--	--	--	--	--	--
Coastal Sage Scrub	--	23.7	1,691.7	6.1	85.3	227.1	690.8	2,035.5	433.9
Creosote Bush Scrub	--	--	--	--	--	--	--	--	--
Forest Land	27.4	11.1	2,044.1	8.5	150.2	1,561.8	466.3	1,467.3	1,169.7
Montane Meadows	2.3	--	--	--	--	--	--	--	--

Vegetation Type	Priority Area								
	Guadalupe	Casmalia	East of Santa Maria	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Montane Shrubland	--	--	--	--	--	--	--	--	--
Mountain Big Sagebrush	--	--	--	--	--	--	--	--	--
North Coastal Scrub	--	--	--	--	--	--	--	--	25.7
Salt Desert Scrub	--	--	--	--	--	--	--	--	--
Scrub Oak Mixed Chaparral	--	--	145.0	--	--	--	--	--	512.8
Urban	521.2	32.1	88.2	212.7	246.3	33.7	4.2	292.6	517.0
Valley Grassland	19.9	427.4	1,107.8	350.3	831.6	2,410.7	704.6	4,486.5	739.9
Water	--	--	3.0	4.0	--	1.6	--	4.6	8.1
Wetlands	--	--	--	--	--	--	--	--	--

SOURCE: ESA 2024, CALVEG 2018.

Descriptions of each of the habitats adapted from the Society for Range Management’s *Rangeland Cover Types of the United States*; USDA’s *South Coast and Montane Ecological Province Vegetation Descriptions*; and USDA’s *Existing Vegetation Classification, Mapping, and Inventory Technical Guide Version 2.0* Appendices are presented below (Society for Range Management 1994, USDA 2009, and USDA & USFS 2015). It should be noted that these vegetation types are generalized, and that site-specific variation is likely to be present. Habitats which occur within populated areas can also show variation because of a greater exposure to anthropogenic influences such as the introduction of exotic plant species.

Agriculture

Agricultural land is used primarily for the production of food and fiber and includes orchards, vineyards, and field crops. Land used exclusively for livestock pasture may be mapped as Annual Grassland in those cases in which land uses are not recognizable (USDA 2009).

Barren Land

Barren land includes landscapes that are generally devoid of vegetation, such as exposed bedrock, cliffs, interior sandy or gypsum areas. It may include quarries and mine sites (USDA 2009).

Basin Big Sagebrush

Basin big sagebrush is characterized by an overstory of mainly basin big sagebrush and an understory of perennial grasses and perennial forbs. Basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) is the principal shrub with smaller amounts of rubber and green rabbitbrush (*Chrysothamnus nauseosus* and *C. viscidiflorus*). Antelope bitterbrush (*Purshia tridentata*) and gray horsebrush (*Tetradymia canescens*) also occur. The major grasses are bluebunch wheatgrass (*Agropyron spicatum*), Sandberg bluegrass (*Poa secunda*) and Idaho fescue (*Festuca idahoensis*). Other perennial grasses may include bottlebrush squirreltail (*Sitanion hystrix*), needle-and-thread (*Stipa comata*), rhizomatic wheatgrasses (*Agropyron dasystachyum*) and related species. Cheatgrass (*Bromus tectorum*) also occurs on most sites. The forb cover may contain yarrow (*Achillea millefolium* var. *lanulosa*), pale agoseris (*Agoseris glauca*), pussytoes (*Antennaria dimorpha*) and spp., tapertip onion (*Allium acuminatum*), milkvetch (*Astragalus* spp.), arrowleaf balsamroot (*Balsamorhiza sagittata*), hawksbeard (*Crepis acuminata* and spp.), fleabane (*Erigeron pumilis* and spp.), biscuit root (*Lomatium macrocarpum* and *L. triternatum*), Lupine (*Lupinus* spp.) and longleaf phlox (*Phlox longifolia*) (Society for Range Management 1994).

Blackbush

Blackbush (*Coleogyne ramosissima*) occurs in stands where it may comprise 95 percent of the vegetation. Plants from the creosote bush (*Larrea tridentata*) and pinyon (*Pinus* spp.) juniper (*Juniperus* spp.) types are common associates including spiny hopsage (*Grayia spinosa*), mormon-tea (*Ephedra* spp.), rabbitbrush (*Chrysothamnus* spp.), desert thorn (*Lycium andersonii*), desert bitterbrush (*Purshia glandulosa*), antelope bitterbrush, big sagebrush (*Artemisia tridentata*), California buckwheat (*Eriogonum fasciculatum*), and goldenbush (*Haplopappus cooperii*). Red brome (*Bromus rubens*), filaree (*Erodium cicutarium*), desert needlegrass (*Stipa speciosa*) and black grama (*Bouteloua uripoa*) may be in the understory (Society for Range Management 1994).

Ceanothus Mixed Chaparral

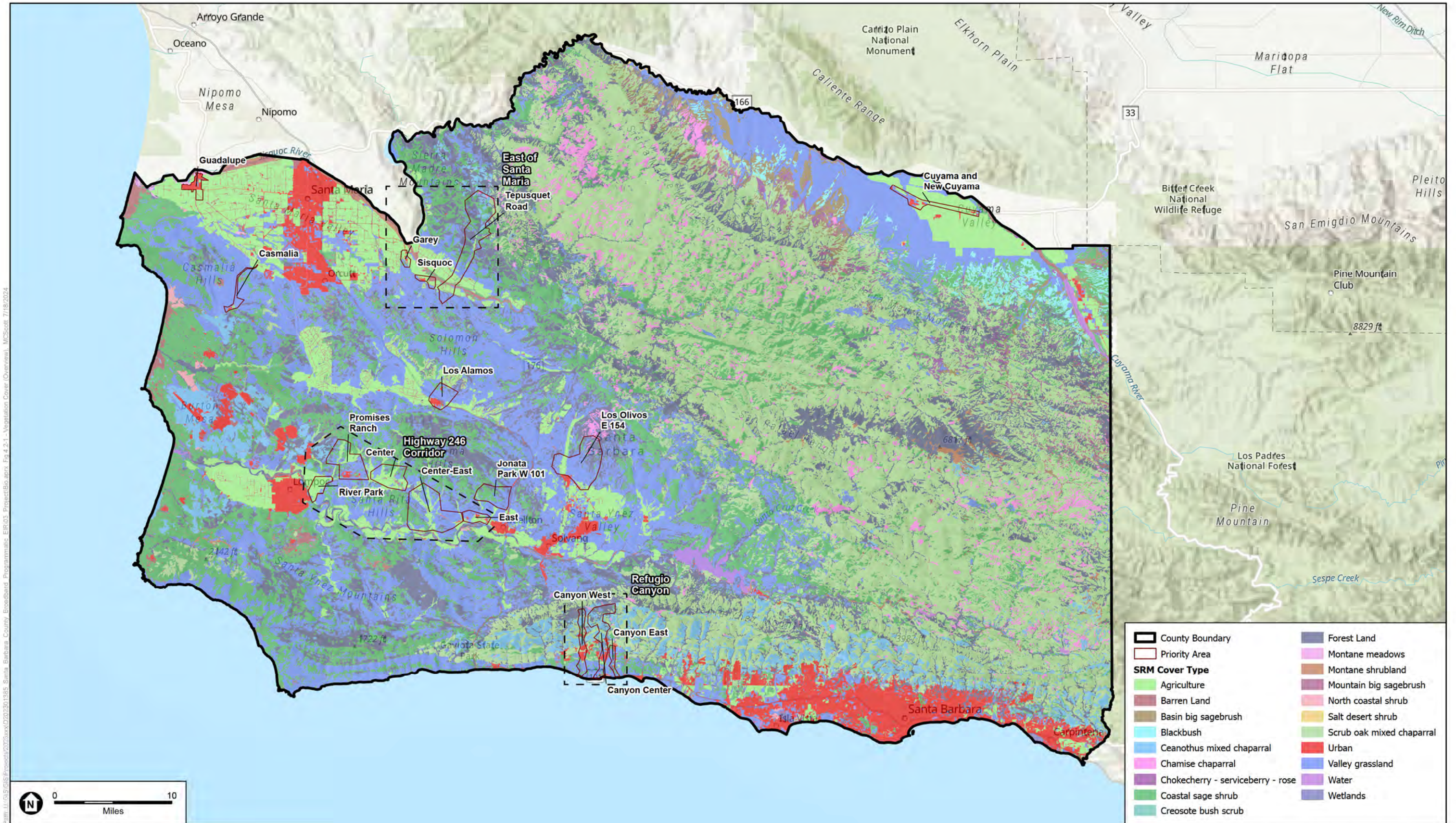
Mixed chaparral is made up of a variety of several plant communities dominated by ceanothus species including hoaryleaf ceanothus (*Ceanothus crassifolius*), buckbrush (*C. cuneatus*), cupleaf ceanothus (*C. greggii*), hairy ceanothus (*C. oliganthus*) and woolyleaf ceanothus (*C. tomentosus*) (Society for Range Management 1994).

Chamise Chaparral

Chamise chaparral associated species include California buckwheat, black sage (*Salvia mellifera*), scrub oak (*Quercus dumosa*), manzanita (*Arctostaphylos* spp.), ceanothus (*Ceanothus* spp.), mountain mahogany (*Cercocarpus betuloides*), laural sumac (*Malosma laurina*), sugarbush (*Rhus ovata*), silktassel (*Garrya* spp.), coyote bush (*Baccharis pilularis*), chaparral ryegrass (*Elymus* spp.), and chaparral yucca (*Yucca whipplei*) (Society for Range Management 1994).

Chokecherry – Serviceberry – Rose

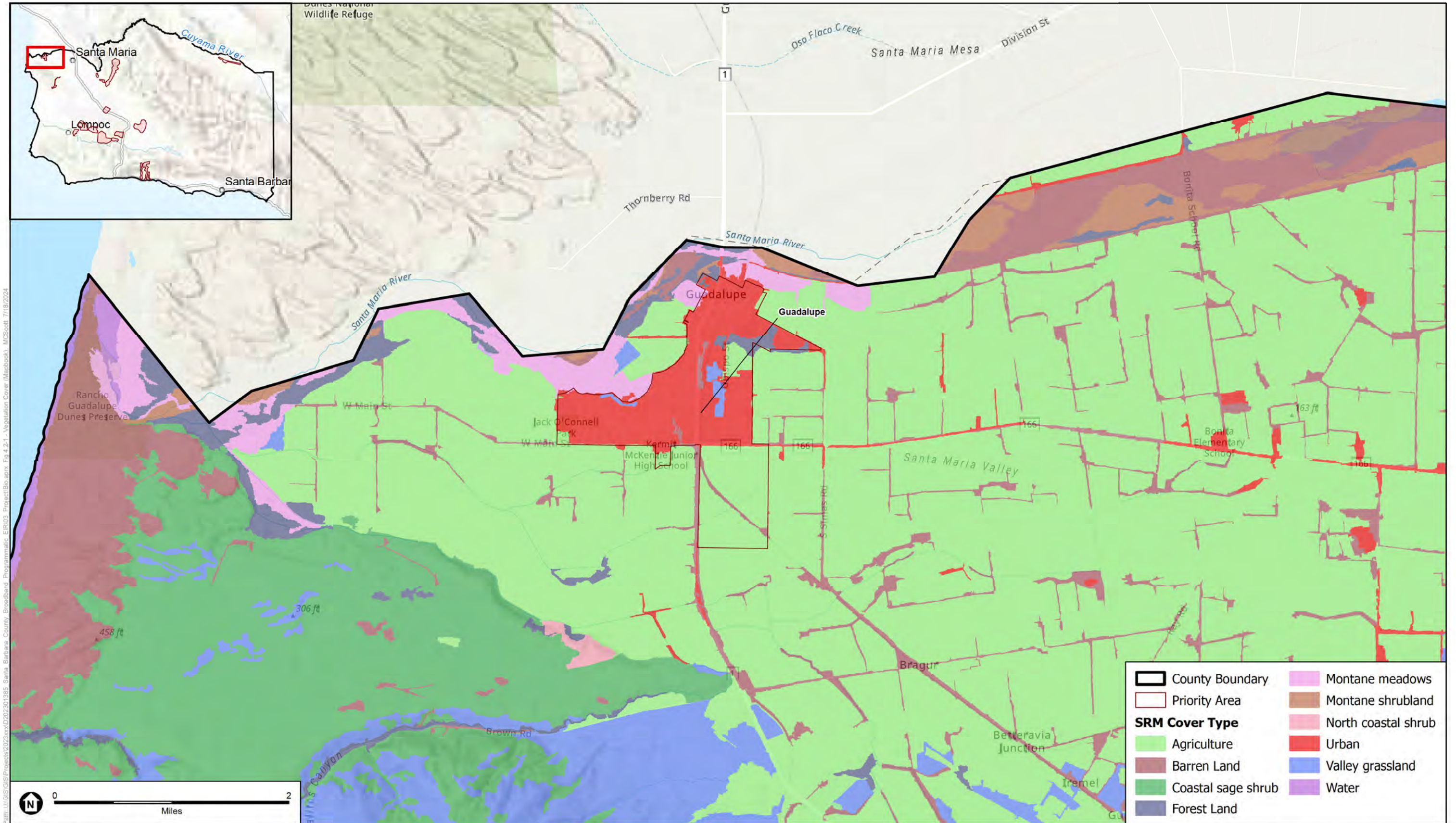
This vegetation type is dominated by one or more of the following species: chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier alnifolia*), wild rose (*Rosa* spp.) and snowberry (*Symphoricarpos* spp.) (Society for Range Management 1994).



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

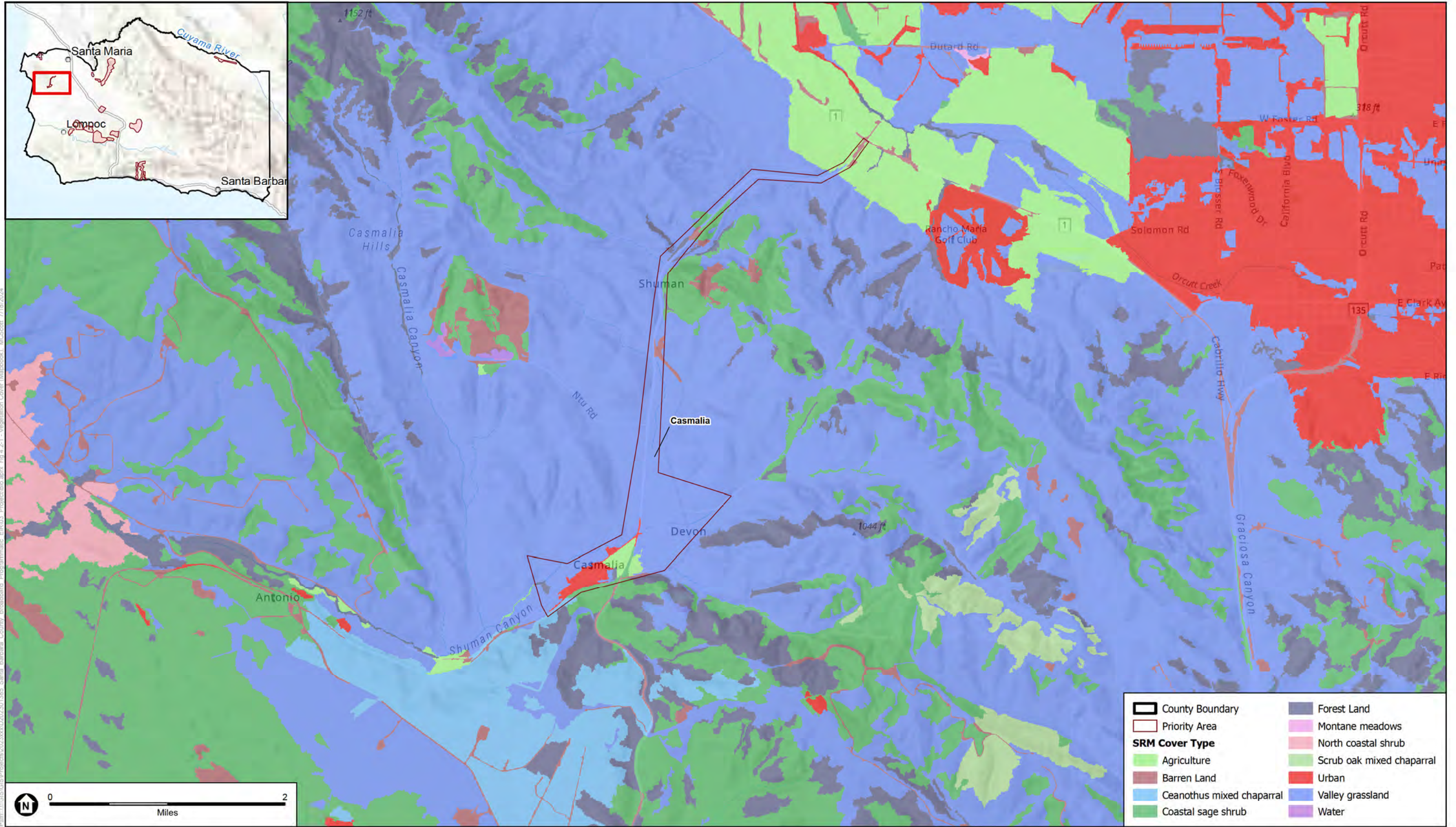
Figure 4.2-1
Vegetation Cover



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-1A
Vegetation Cover
Guadalupe

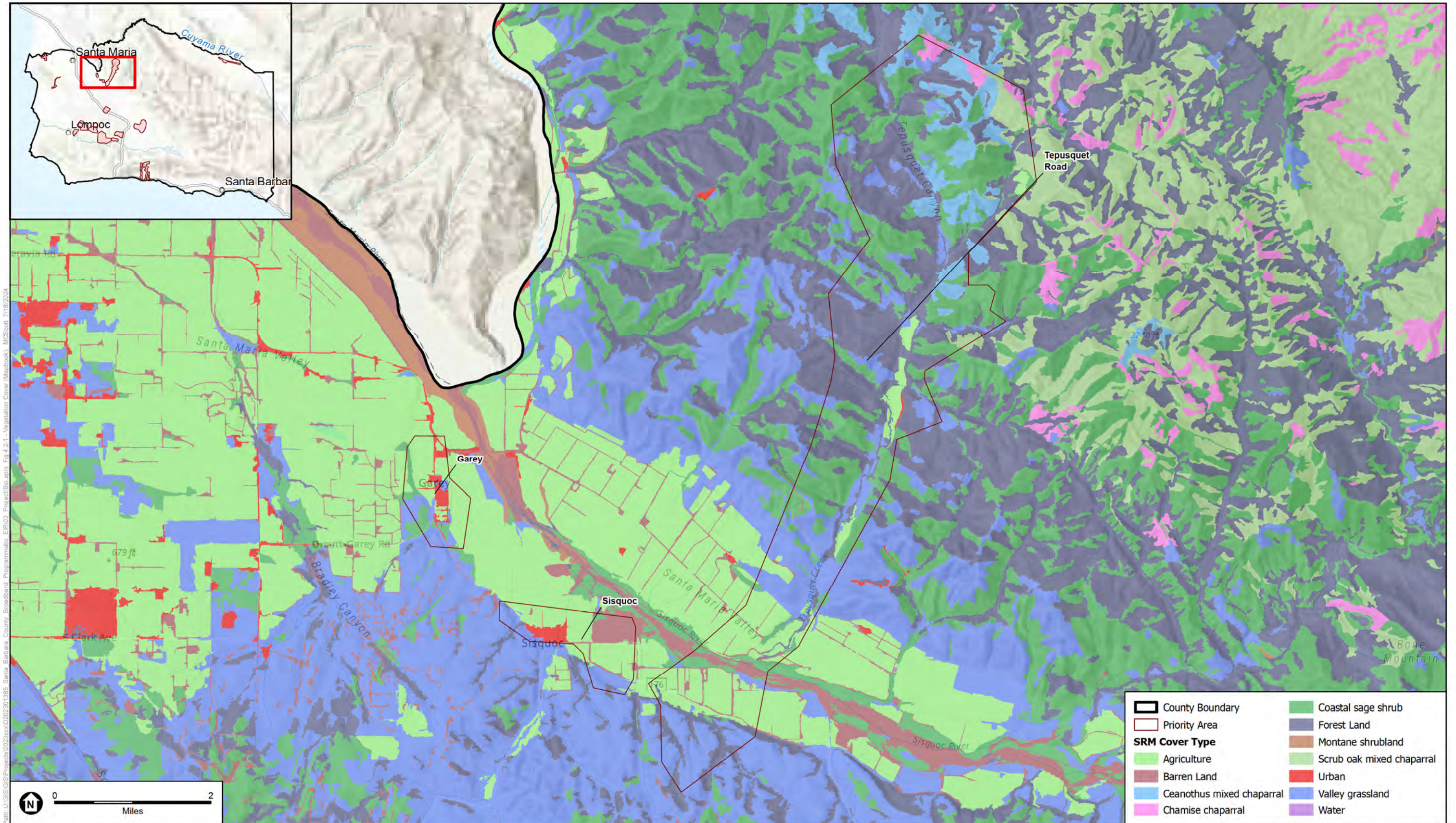


Santa Barbara County Broadband Program - EIR/03 - Project/BA - Fig 4.2-1 - Vegetation Cover (Mapbook) - M/Scott 7/18/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

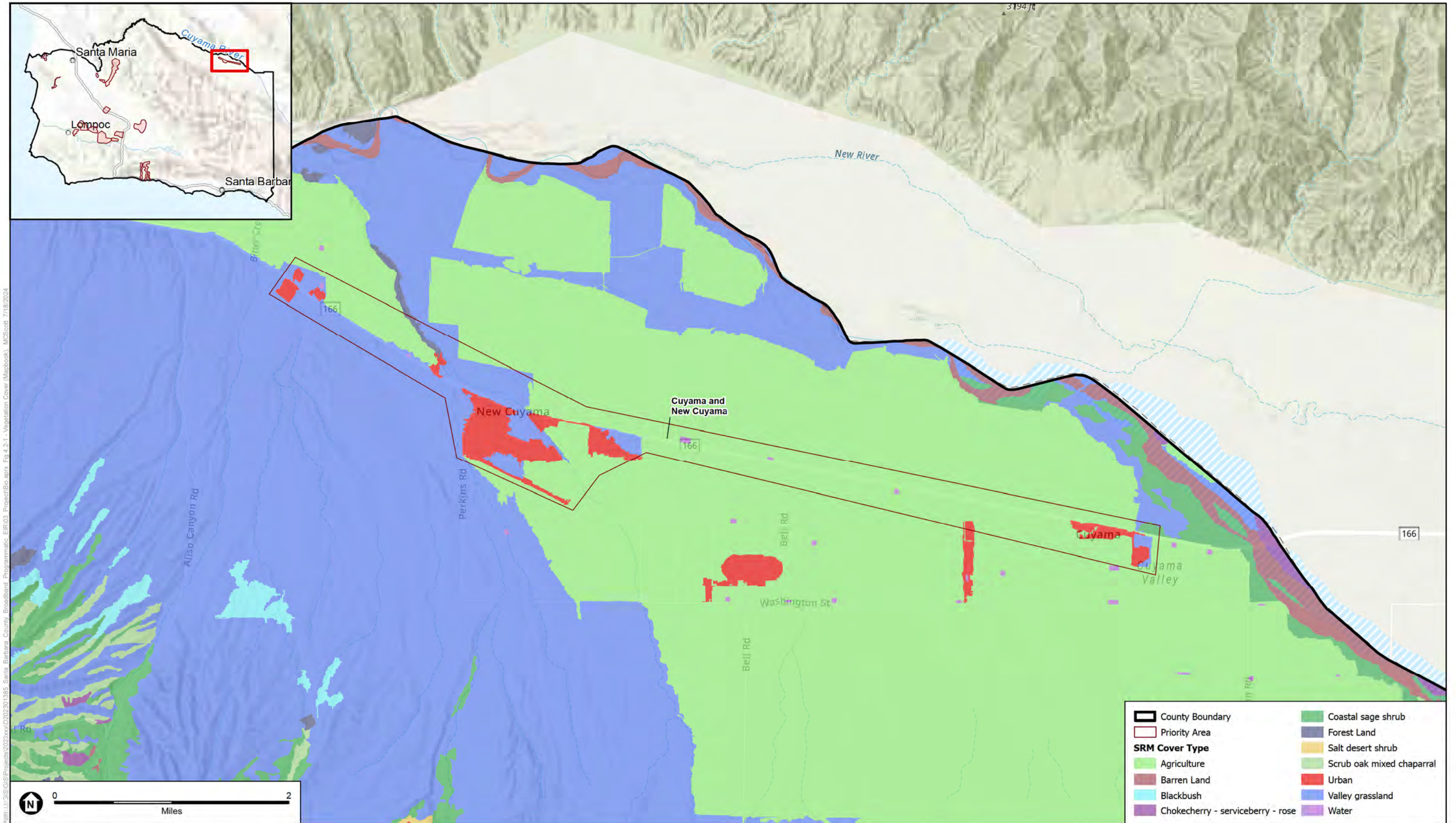
Figure 4.2-1B
Vegetation Cover
Casmalia



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-1C
Vegetation Cover
East of Santa Maria

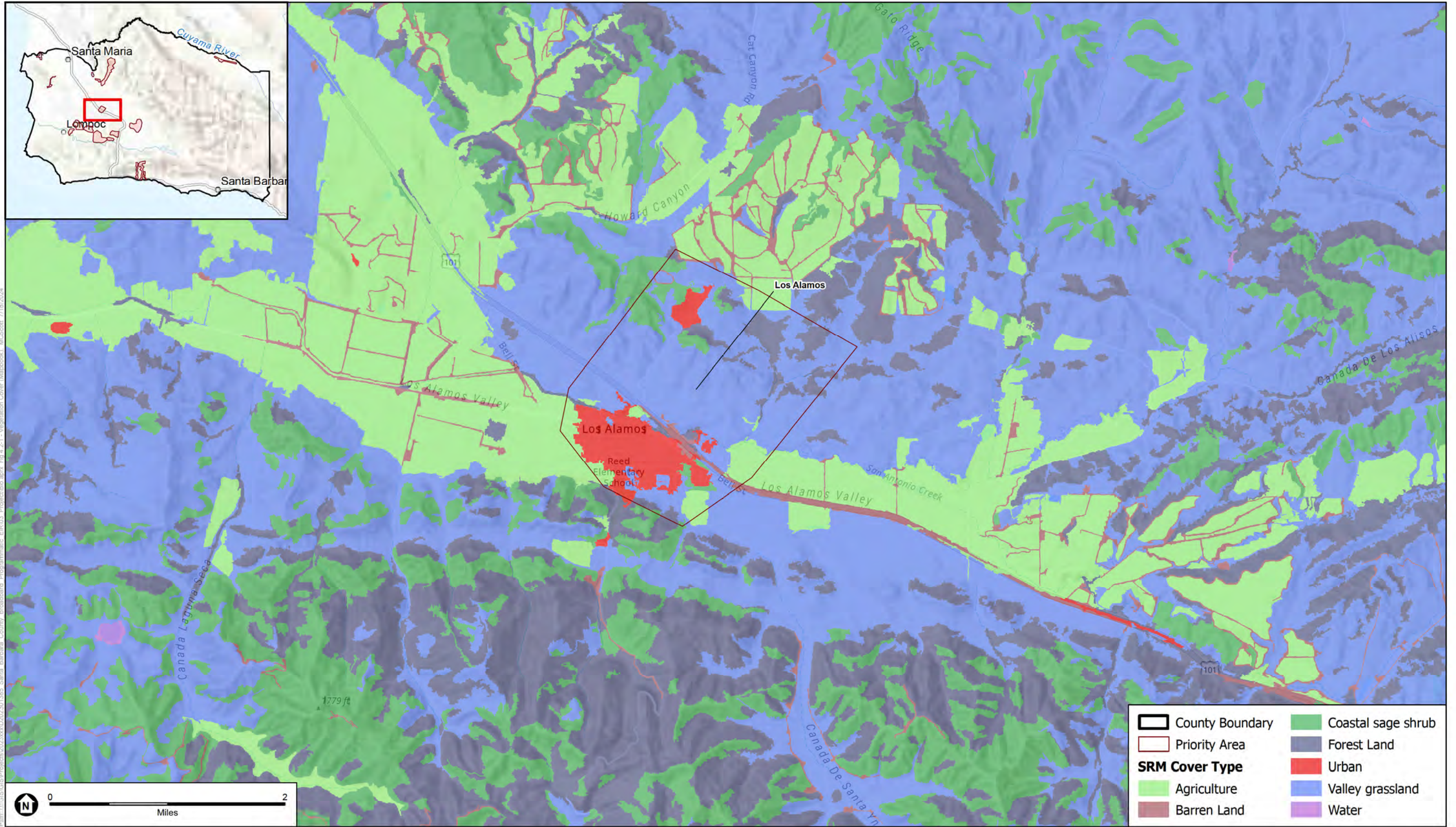


SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-1D
Vegetation Cover
Cuyama and New Cuyama



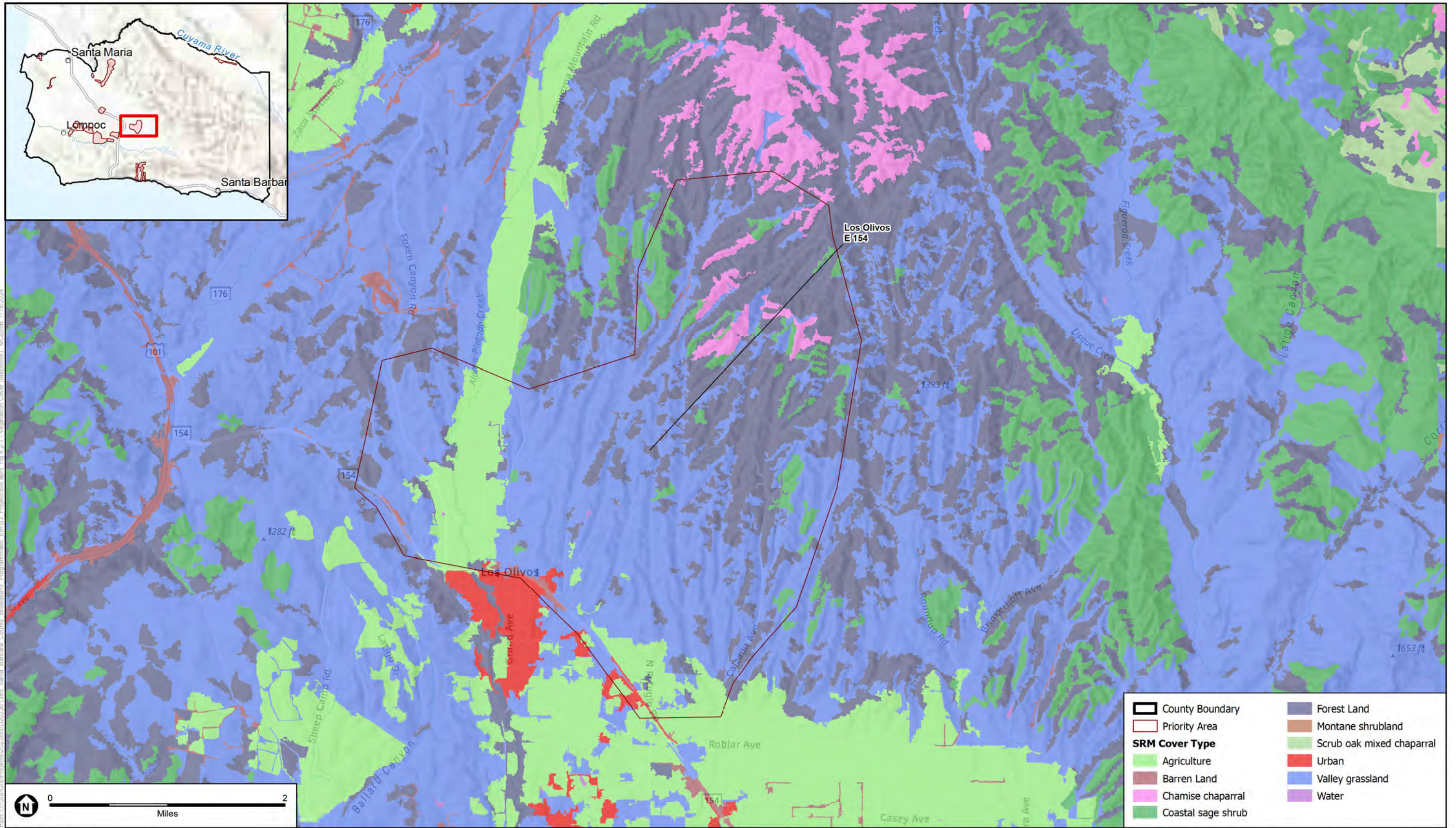


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SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-1E
Vegetation Cover
Los Alamos

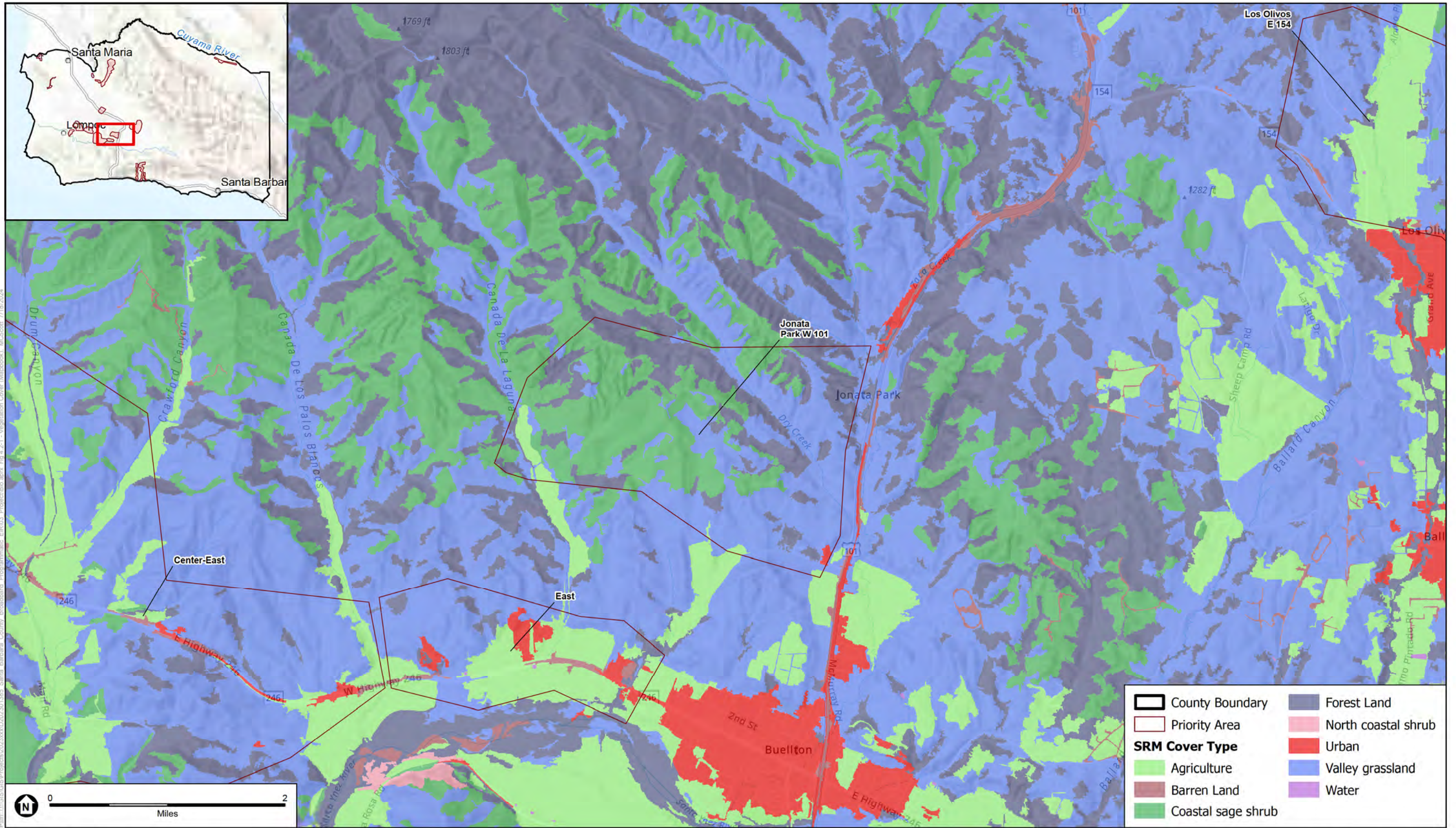


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SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

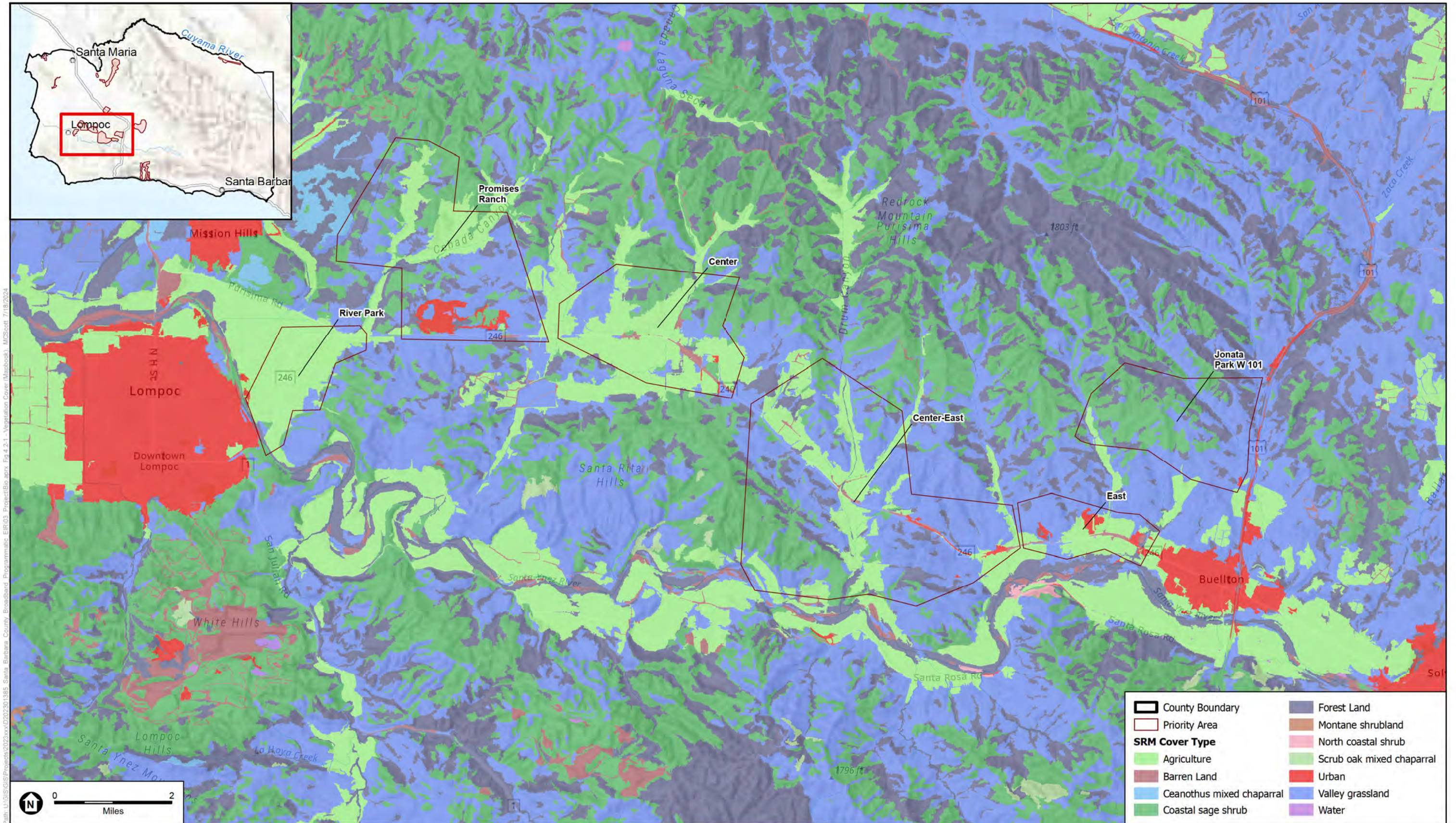
Figure 4.2-1F
Vegetation Cover
Los Olivos E 154



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

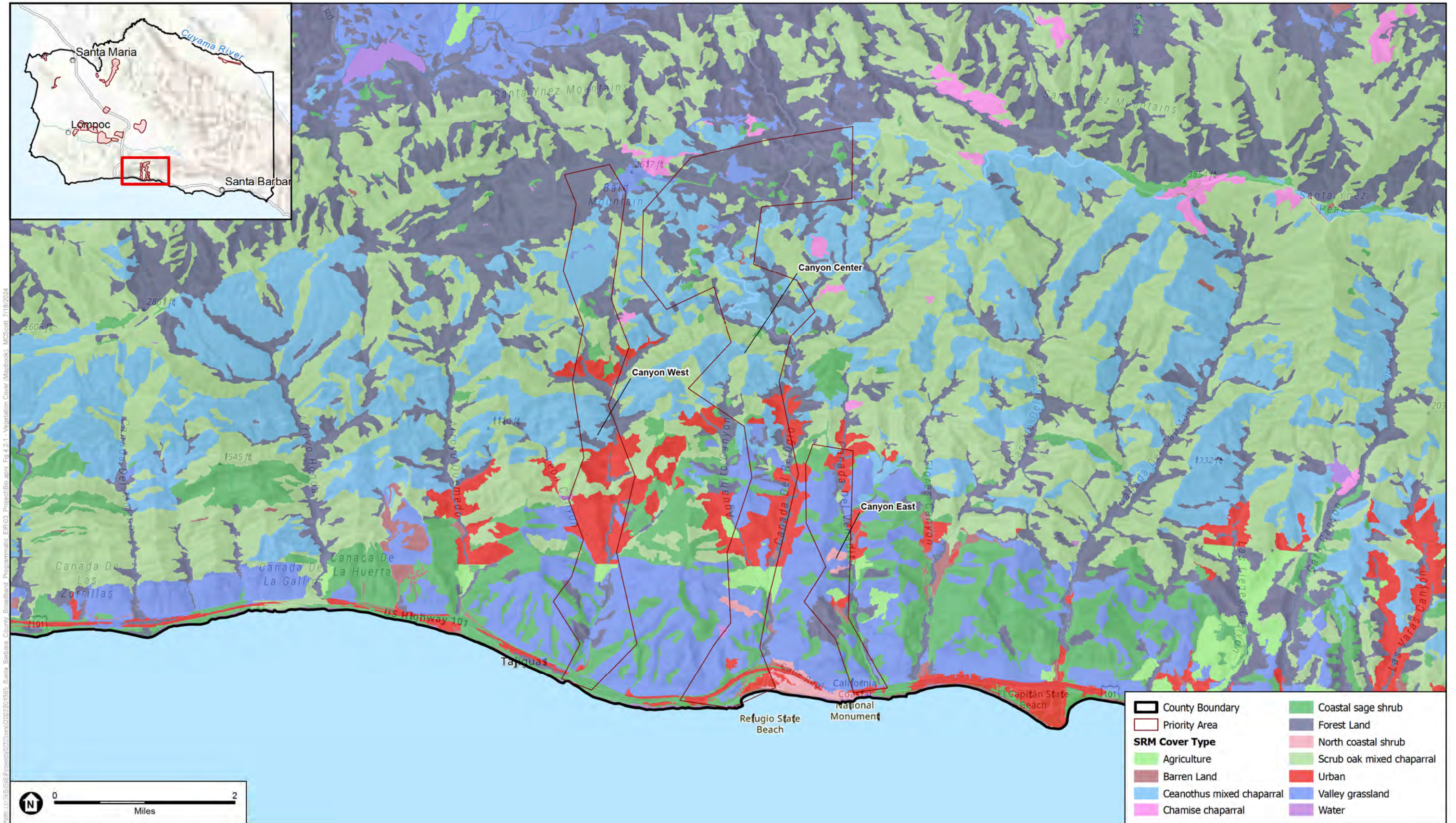
Figure 4.2-1G
Vegetation Cover
Jonata Park W 101



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-1H
Vegetation Cover
Highway 246 Corridor



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-11
Vegetation Cover
Refugio Canyon

Coastal Sage Shrub

Coastal sage shrub is dominated by facultatively drought-deciduous subshrubs less than 4.5 feet (1.5m) tall. The principal species are black sage, purple sage (*Salvia leucophylla*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), California buckwheat, California encelia (*Encelia californica*), and lemonade berry (*Rhus integrifolia*). Commonly associated species include perennial bunch grasses, perennial forbs, stemless rosette plants, succulents, and additional evergreen and drought-deciduous shrubs (Society for Range Management 1994).

Creosote Bush Scrub

Creosote bush is the dominant species, while codominant species include burro weed (*Franseria dumosa*) galleta grass (*Hilaria rigida*), jumping cholla (*Opuntia bigelovii*), cheese bush (*Hymenoclea salsola*), and brittle bush (*Encelia farinosa*, *E. frutescens*). Other species occurring in this type are Ephedra sp., blackbush, hedgehog cactus (*Echinocactus* sp.), yucca (*Yucca* sp.), Joshua tree (*Yucca brevifolia*), ocotillo (*Fouquieria splendens*), indigo bush (*Dalea*), boxthorn (*Lycium*), globemallow (*Sphaeralcea ambigua*), cactus (*Echinocereus engelmannii*, *E. Mojavensis*), golden cholla (*Opuntia echinocarpa*), beaver tail cactus (*O. basilaris*), mesquite (*Prosopis juliflora*), screwbean mesquite (*P. pubescens*) and various perennial and annual grasses and forbs. Baccharis (*Baccharis brachyphylla*, *B. sergiloides*), desert ironwood (*Olneya tesota*), arrowweed (*Pluchea sericea*) and desert willow (*Chilopsis linearis*) may occur along water courses (Society for Range Management 1994).

Forest Land

Forest Land contains a tree-crown aerial density of 10 percent or more. These areas are stocked with trees capable of producing timber or other wood products (USDA & USFS 2015).

Montane Meadows

Montane meadows are habitats occupied by grass (*Poaceae* family) and grasslike species. The primary environmental characteristic of meadow vegetation is an associated high water table, during all or part of the year (Society for Range Management 1994).

Montane Shrubland

The cover type is characterized by evergreen species but deciduous or partially deciduous species may also be present. The following species usually characterize montane shrubland communities: whitethorn ceanothus (*Ceanothus cordulatus*), snowbrush ceanothus (*C. velutinus*), greenleaf manzanita (*Artostaphylos patula*), pinemat manzanita (*A. nevadensis*), Hoary manzanita (*A. canescens*), bitter cherry (*Prunus emarginata*), huckleberry oak (*Quercus vaccinifolia*), Sierra chinquapin (*Castanopsis sempervirens*), juneberry (*Amelanchier pallida*), fremont silktassel (*Garrya fremontii*), Greene goldenweed (*Haplopappus greenii*), mountain mahogany, toyon (*Heteromeles arbutifolia*), sumac (*Rhus* sp.), and California coffeeberry (*Rhamnus californica*). In addition, conifer and oak trees may occur in sparse stands or as scattered individuals (Society for Range Management 1994).

Mountain Big Sagebrush

Mountain big sagebrush is dominated by mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) with understory of perennial grasses and forbs. Mountain big sagebrush is the most abundant shrub accompanied by antelope bitterbrush, green rabbitbrush (*Chrysothamnus ciscidiflorus*), gray horsebrush,

and Mountain snowberry (*Sumphoricarpus oreophilus*). The understory consists of perennial grasses and forbs including Idaho fescue and bluebunch wheatgrass, Sandberg bluegrass, mountain brome (*Bromus carinatus* and related spp.), slender wheatgrass (*Agropyron caninum*), junegrass (*Koeleria pyramidata*), onion grass (*Melica* spp.), western needlegrass (*Stipa occidentalis*) and sedges (*Carex geyeri* and spp.). Common forms include yarrow, milkvetches (*Astragalus miser* and spp.), arrowleaf balsamroot, tapertip, hawksbeard (*Crepis acuminata*), Wyeth and sulphur buckwheat (*Eriogonum heraleoides* and *E. umbellatum*), Aven (*Geum triflorum*), biscuitroot (*Lomatium triternatum* and spp.), Lupine, longleaf phlox and groundsel (*Senecio interrimus*) (Society for Range Management 1994).

North Coastal Shrub

North coastal shrub includes coyote bush (*Baccharis pilularis* spp. *consanguinea*), blueblossom ceanothus (*Ceanothus thrysiflorus*), California coffeeberry, California wax myrtle (*Myrica californica*), bush lupine (*Lupinus arboreus*), and salal (*Gaultheria shallon*) cowparsnip (*Heracleum lanatum*), blue wildrye (*Elymus glaucus*), and giant horsetail (*Equisetum telemateia*) in the overstory. Beneath the overstory is a mixture of bush monkeyflower (*Diplacus aurantiacus*), coastal buckwheat (*Eriogonum latifolium*), goldenweed (*Haplo-pappus ericoides*), golden yarrow (*Eriophyllum staechadifolium*), Suksdorfs sagebrush (*Artemisia suksdorfii*), yerba santa (*Eriodictylon californicum*), California blackberry (*Rubus vitifolius*), Nootka rose (*Rosa nutkana*), poison oak (*Toxicodendron diversilobum*), salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*), trailing blackberry (*Rubus ursinus*), red fescue (*Festuca rubra*), slough sedge (*Carex obnupta*), sweet vernalgrass (*Anthoxanthum odoratum*), sweet velvetgrass (*Holcus lanatus*), Canada goldenrod (*Solidago canadensis*), paintbrush (*Castilleja latifolia*), pearly everlasting (*Anaphalis margaritacea*), western yarrow (*Achillea millefolium*), brackenfern (*Pteridium aquilinum* var. *lanuginosum*), and sword fern (*Polystichum munitum*). Gorse (*Ulex europaeus*) and Scotch broom (*Cytisus scoparius*) are sometimes major components (Society for Range Management 1994).

Salt Desert Shrub

Salt desert shrub occurs in low elevation landscapes in the temperate deserts of the Great Basin and surrounding areas in the western United States (U.S.). Vegetation cover is low and is dominated by one or more species of low growing chenopod shrubs. Dominant species include shadscale (*Atriplex confertifolia*), black greasewood (*Sarcobatus vermiculatus*) and winterfat (*Ceratoides lanata*). Other species may include four-wing saltbush (*Atriplex canescens*), Bailey's greasewood (*Sarcobatus baileyi*), bud sagebrush (*Artemisia spinescens*), salt rabbitbrush, blacksagebrush (*Artemisia nova*), Nuttall's saltbush (*Atriplex nuttallii*), Indian rice grass (*Oryzopsis hymenoides*), Saltgrass (*Distichlis spicatum*), Galleta (*Hilaria jamesii*), Squirreltail, alkali sacaton (*Sporobolus airoides*), bluejoint (*Elymus triticoides*), and great basin wildrye (*Elymus cinereus*) (Society for Range Management 1994).

Scrub Oak Mixed Chaparral

Scrub Oak Mixed Chaparral is dominated by scrub oak or interior live oak (*Quercus wislizenii* var. *frutescens*) with a wide variety of associated shrubs. Common associates include mountain mahogany, toyon, hollyleaf cherry (*Prunus ilicifolia*), silktassel (*Garrya flavescens*, *G. veatchii*), California coffeeberry, redberry (*Rhamnus ilicifolia*), foothill ash (*Fraxinus dipetala*), and elderberry (*Sambucus mexicana*), honeysuckle (*Lonicera subspicata*), wild cucumber (*Marah macrocarpus*), chaparral virgin's bower (*Clematis lasiantha*), and poison oak. Seral communities (10-60 years old) are characterized by a

relatively high cover of ceanothus species including chaparral whitehorn (*Ceanothus leucodermis*), hairy ceanothus, woollyleaf ceanothus, hoaryleaf ceanothus (*C. crassifolius*), cupleaf ceanothus, buckbrush and blue-blossom ceanothus (*C. thyrsiflorus*) (Society for Range Management 1994).

Urban

This category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries and the like. In those cases where the managed landscapes may have a considerable vegetation component, other land use categories may be more appropriate, such as Ornamental Conifer and Hardwood mixtures within city parks. Much of the landscape in southern California has been mapped in this category (USDA 2009).

Valley Grassland

Valley grassland is characterized by herbaceous annual plants including common genera like Erodium, Trifolium, Madia, Amsinckia, and Brassica, mixed with species from the grass genera (*Avena*, *Bromus*, *Festuca*, and *Hordeum*) (Society for Range Management 1994).

Water

Water is labeled in CALVEG mapping in those cases in which permanent sources of surface water are identified within a landscape unit of sufficient size to be mapped. The category includes lakes, streams, and canals of various sizes, bays and estuaries and similar water bodies. These areas are considered to have a minimum of vegetation components, except along the edges, which may be mapped as types such as Wet Meadows, Tule-Cattail freshwater marshes, or Pickleweed-Cordgrass saline or mixed marshes. Islands of sufficient size within water bodies are mapped according to their terrestrial dominant vegetation types (USDA 2009).

Wetlands

Wetlands can be divided into two major types: fresh emergent wetland and saline emergent wetland. Fresh emergent wetlands are characterized by frequent flooding, upright, perennial hydrophytes and roots that are adapted to anaerobic conditions, with species such as big leaf sedge (*Carex amplifolia*), balticrush (*Juncus balticus*), redroot nutgrass (*Cyperus erythrorhizas*), saltgrass (*Distichlis spicata*), tule bulrush (*Scirpus validus*), river bulrush (*Scirpus fluviatilis*), and arrowhead (*Sagittaria* spp.). Saline emergent wetlands are characterized by salt or brackish water and are dominated by species such as cordgrass (*Spartina* spp.), pickleweed (*Salicornia* spp.), saltgrass (*Distichlis spicata* var. *stricta*), marsh dodder (*Cuscuta* spp.) (Society for Range Management 1994).

Special-Status Species

The term special-status species refers to plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or currently are, listed as rare, threatened, or endangered by the federal and/or state governments. Such species are legally protected under the federal Endangered Species Act (FESA) and/or state Endangered Species Act (CESA) or other regulations or are species that are considered sufficiently rare by the regulatory and scientific community to qualify for protection. The term special-status species includes the following:

- Species listed or proposed for listing as threatened or endangered under the FESA (Code of Federal Regulations Title 50, Section 17.12 [listed plants] and Section 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
- Species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Species listed or proposed for listing by the State of California as threatened or endangered under the CESA (California Code of Regulations Title 14, Section 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code [CFGF] Section 1900 et seq.);
- Species designated by CDFW as California Species of Special Concern (SSC);
- Animals fully protected under the CFGF (Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines Section 15380); and
- Plants considered by CDFW and CNPS to be “rare, threatened or endangered in California” (California Rare Plant Rank 1A, 1B, and 2).

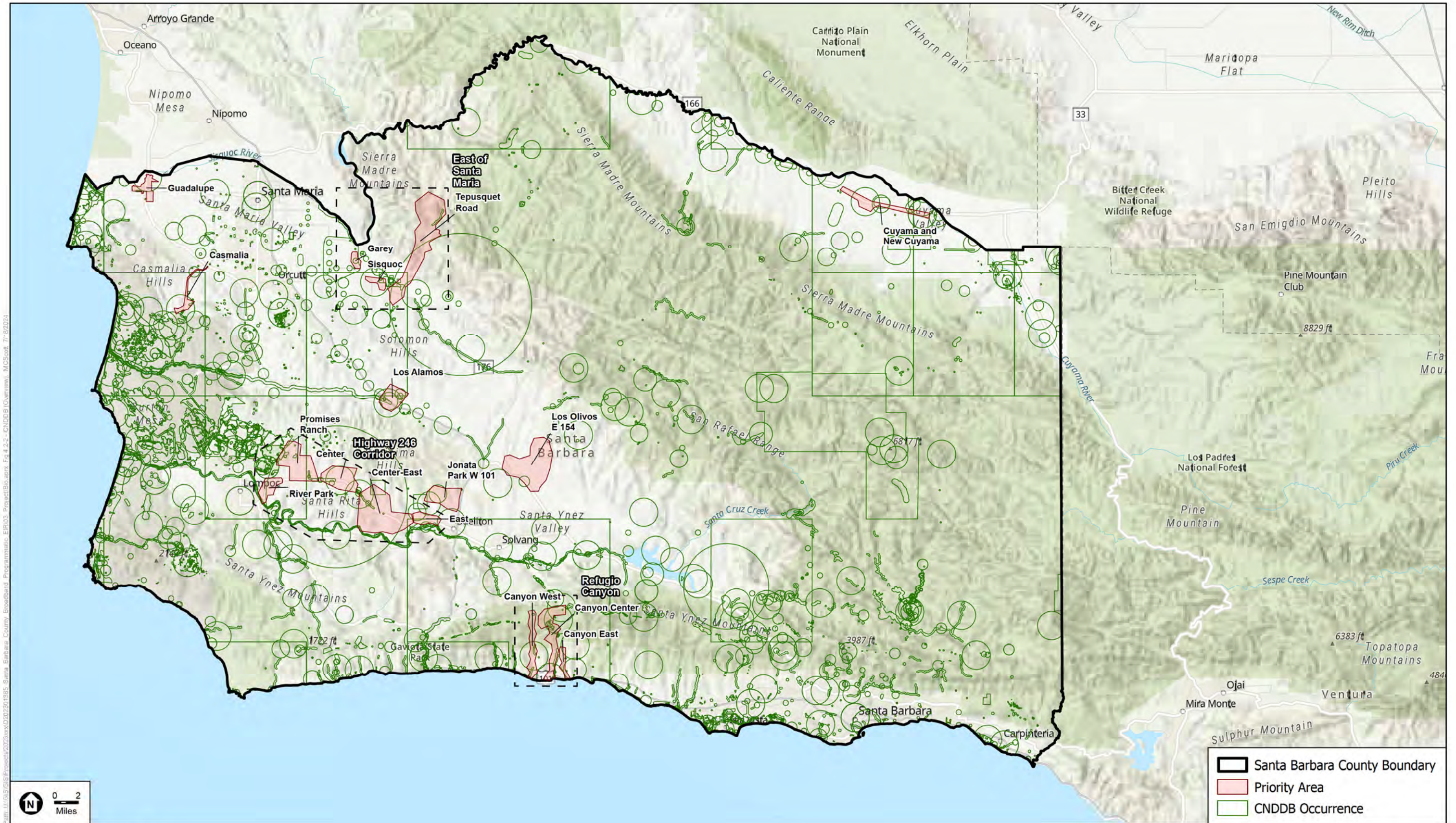
A comprehensive list of special-status plant and wildlife species that could occur in the County was compiled based on a database search and literature review to assess the likelihood of species occurrence and potential impacts of future broadband facilities within the Priority Areas and impacts of future broadband facilities in other parts of the County to these species. Occurrences of special-status species within the County and the nine Priority Areas that have been recorded in the CNDDDB are shown in **Figure 4.2-2: CNDDDB Occurrences**.

Plants

A total of 117 special-status plant species were evaluated for their potential to occur within the Priority Areas and within the County as a whole. Of these, it was determined that one is not expected to occur, 24 have a low potential to occur, four have a low to moderate potential to occur, 75 have a moderate potential to occur, two have a moderate to high potential to occur, and 11 have a high potential to occur within the County. A detailed discussion of each special-status plant species, their preferred habitat, and potential to occur within the County and each of the Priority Areas is included in **Appendix C**.

Wildlife

A total of 77 special-status wildlife species were evaluated for their potential to occur within the County and within the Priority Areas. It was determined that three have a low potential to occur, ten have a moderate potential to occur, and 64 have a high potential to occur within the County. A detailed discussion of each special-status wildlife species, their preferred habitat, and potential to occur is included in **Appendix C**.

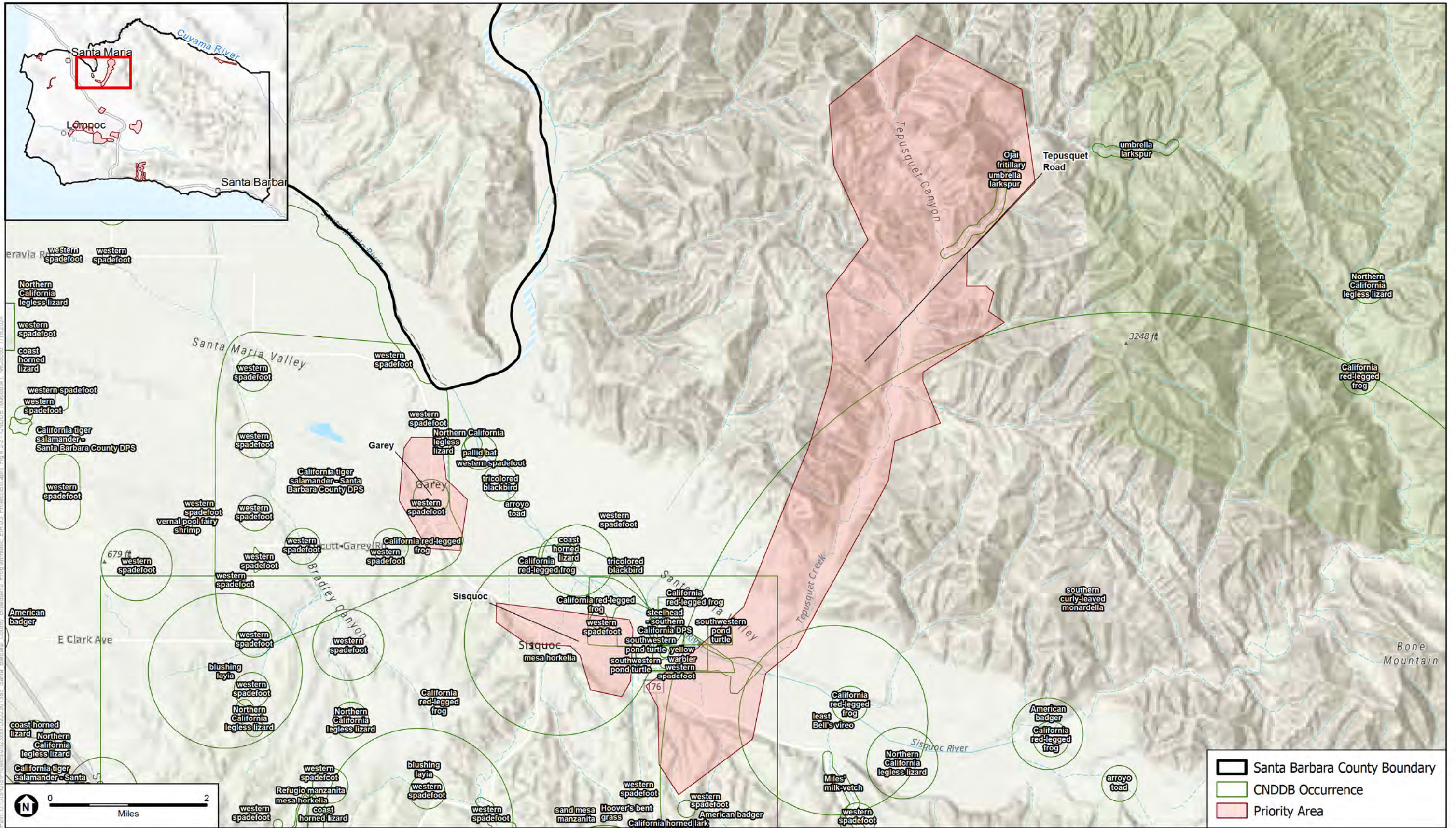


SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-2
CNDDB Occurrences



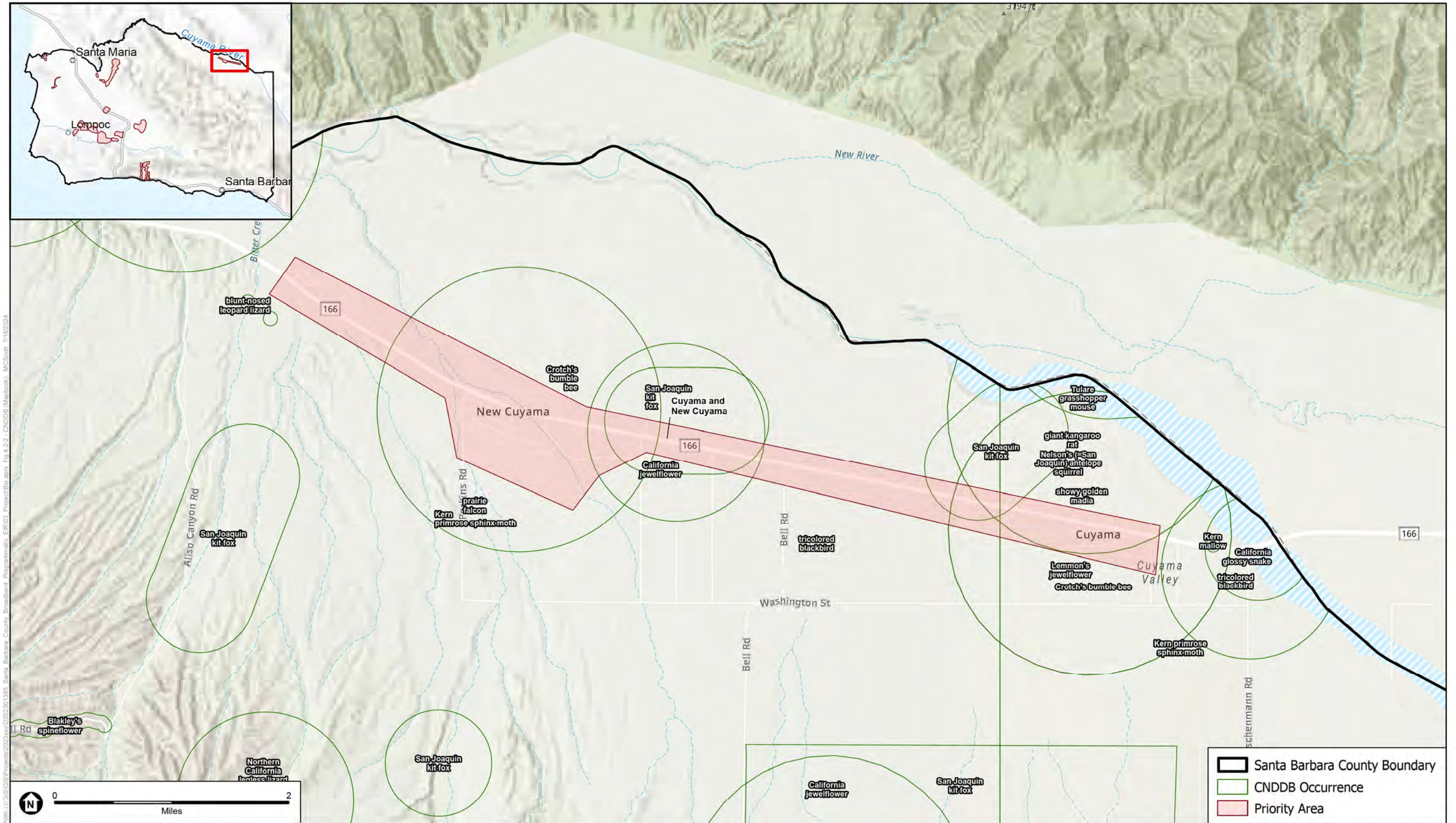


SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-2C
 CNDDB Occurrences
 East of Santa Maria



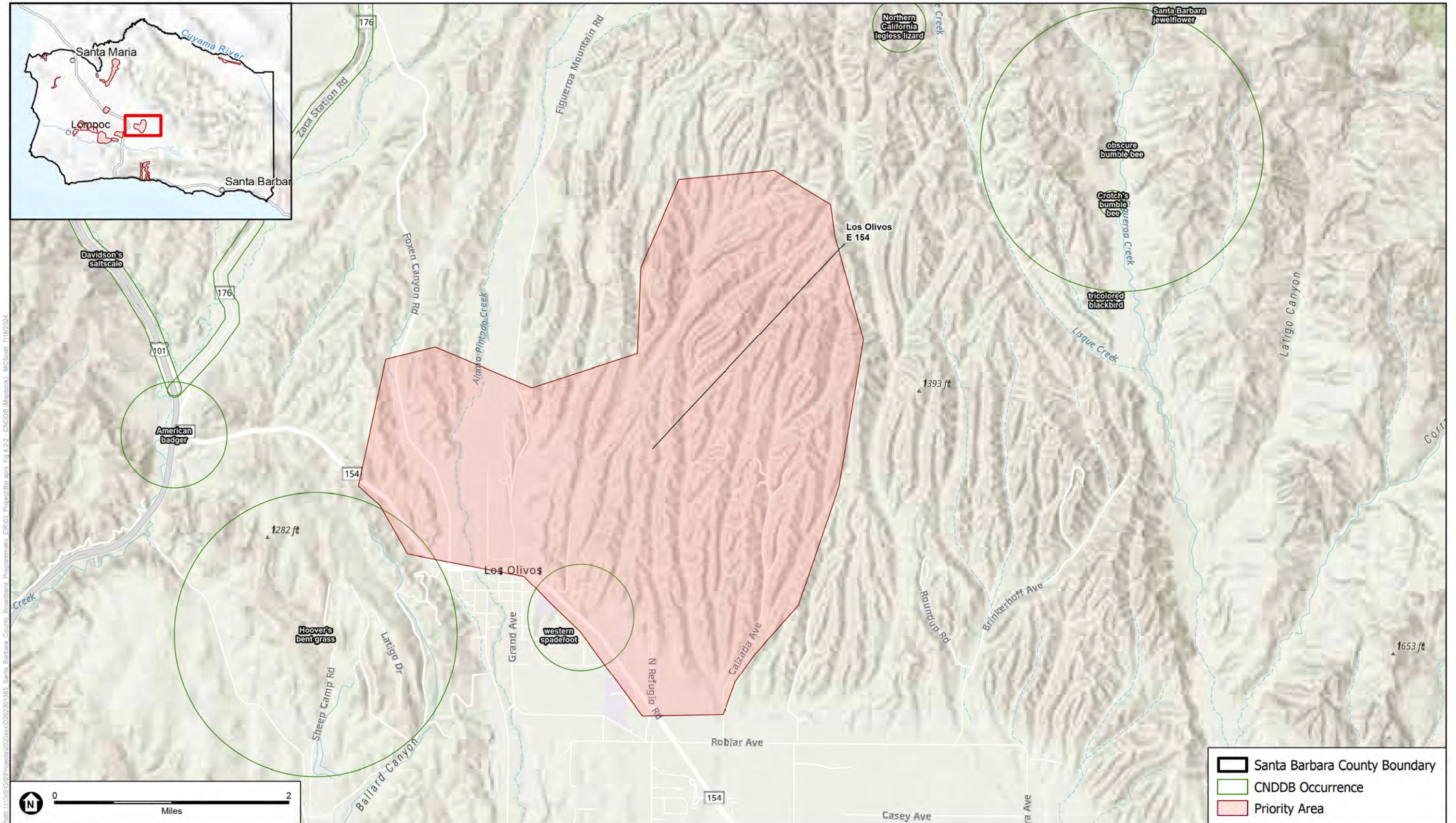


SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-2D
CNDDDB Occurrences
Cuyama and New Cuyama

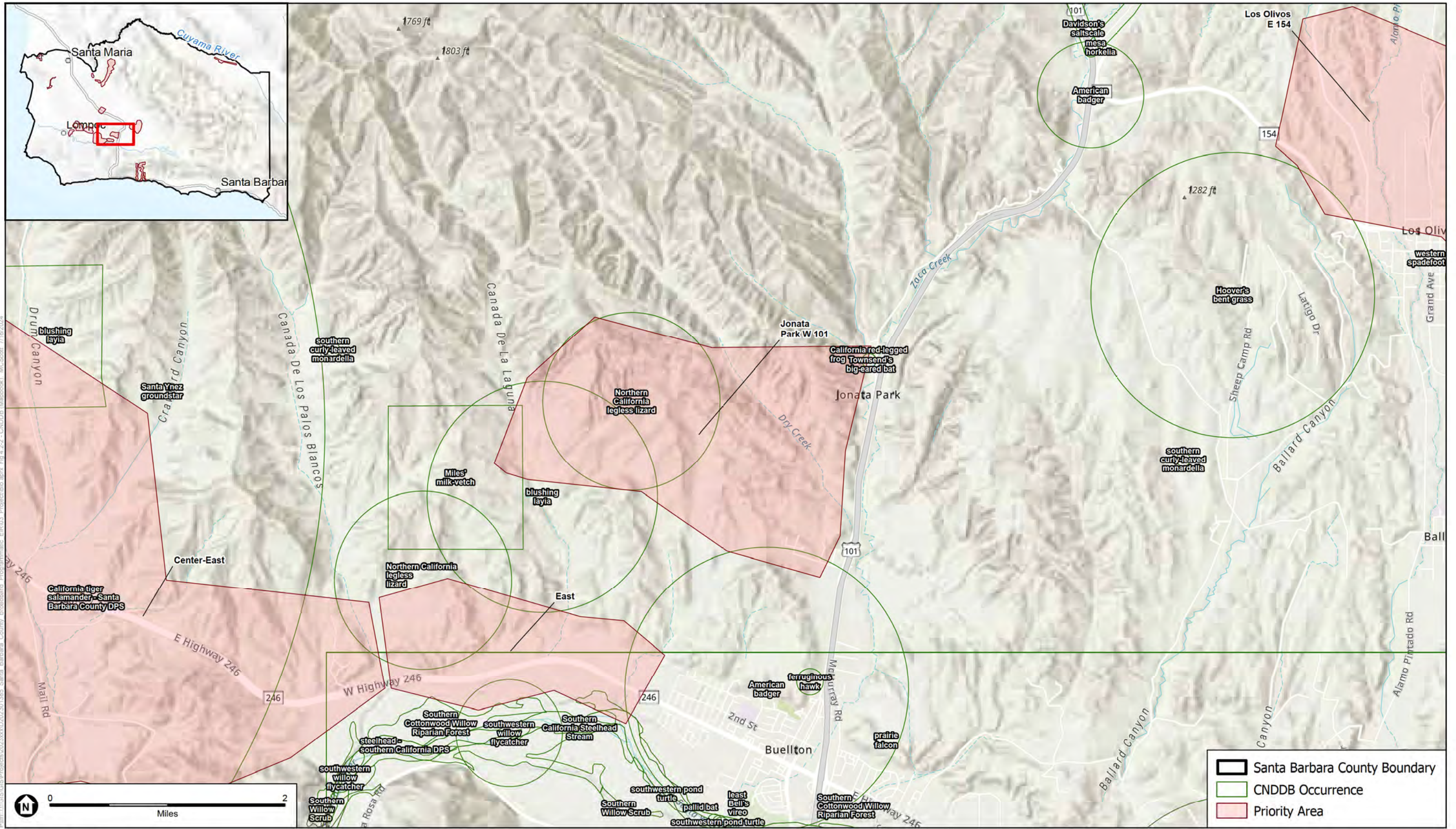




SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-2F
 CNDDDB Occurrences
 Los Olivos E 154



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-2G
 CNDDB Occurrences
 Jonata Park W 101



Critical Habitat

The USFWS designates critical habitat for species that have been listed as threatened or endangered. Critical habitat is defined in FESA Section 3(5)(A) as those lands (or waters) within a species' current range that contains the physical or biological features that are considered essential to its conservation. Agencies that propose, fund, or issue a permit for a project that may affect a federally listed species or critical habitat must prepare a Habitat Conservation Plan as part of an application for a permit from the USFWS. As shown below in **Figure 4.2-3, Critical Habitat**, the County contains critical habitat for 14 species including (USFWS 2024a):

- Arroyo toad (*Anaxyrus californicus*)
- California condor (*Gymnogyps californianus*)
- California red-legged frog (*Rana draytonii*)
- California tiger salamander (*Ambystoma californiense* pop. 2)
- Gaviota tarplant (*Deinandra increscens* ssp. *villosa*)
- La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Lompoc yerba santa (*Eriodictyon capitatum*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Tidewater goby (*Eucyclogobius newberryi*)
- Vandenberg monkeyflower (*Diplacus vandenbergensis*)
- Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Western snowy plover (*Anarhynchus nivosus nivosus*)

Within the Priority Areas, critical habitat is present within the Guadalupe, Casmalia, Hwy 246 Corridor, and Refugio Canyon Priority Areas. Specifically, La Graciosa thistle critical habitat is present within Guadalupe and Casmalia Priority Areas, California red-legged frog critical habitat is present within Casmalia and Refugio Canyon Priority Areas, and arroyo toad critical habitat and California tiger salamander critical habitat is present within the Hwy 246 Corridor Priority Area. The specific location of critical habitat with respect to the Priority Areas is shown in Figure 4.2-3.

Aquatic Resources

Four primary watersheds occur within the County including Santa Maria, which includes the Cuyama and Sisquoc watersheds; San Antonio Creek; Santa Ynez; and South Coast, which is composed of approximately 50 short, steep watersheds. The headwaters of the principal waters are generally undeveloped, and the middle and lower sections are often developed with urban or agricultural uses. The four major rivers draining these watersheds are the Santa Maria, Sisquoc, Cuyama, and Santa Ynez. Several creeks are associated with each one of these watersheds. The drainages within these watersheds are of biological importance as they provide valuable foraging habitat, breeding habitat, and movement habitat for a variety of animal species including sensitive species such as steelhead – Southern California distinct population segment (DPS) 10 (*Oncorhynchus mykiss*), California red-legged frog, and southwestern willow flycatcher.

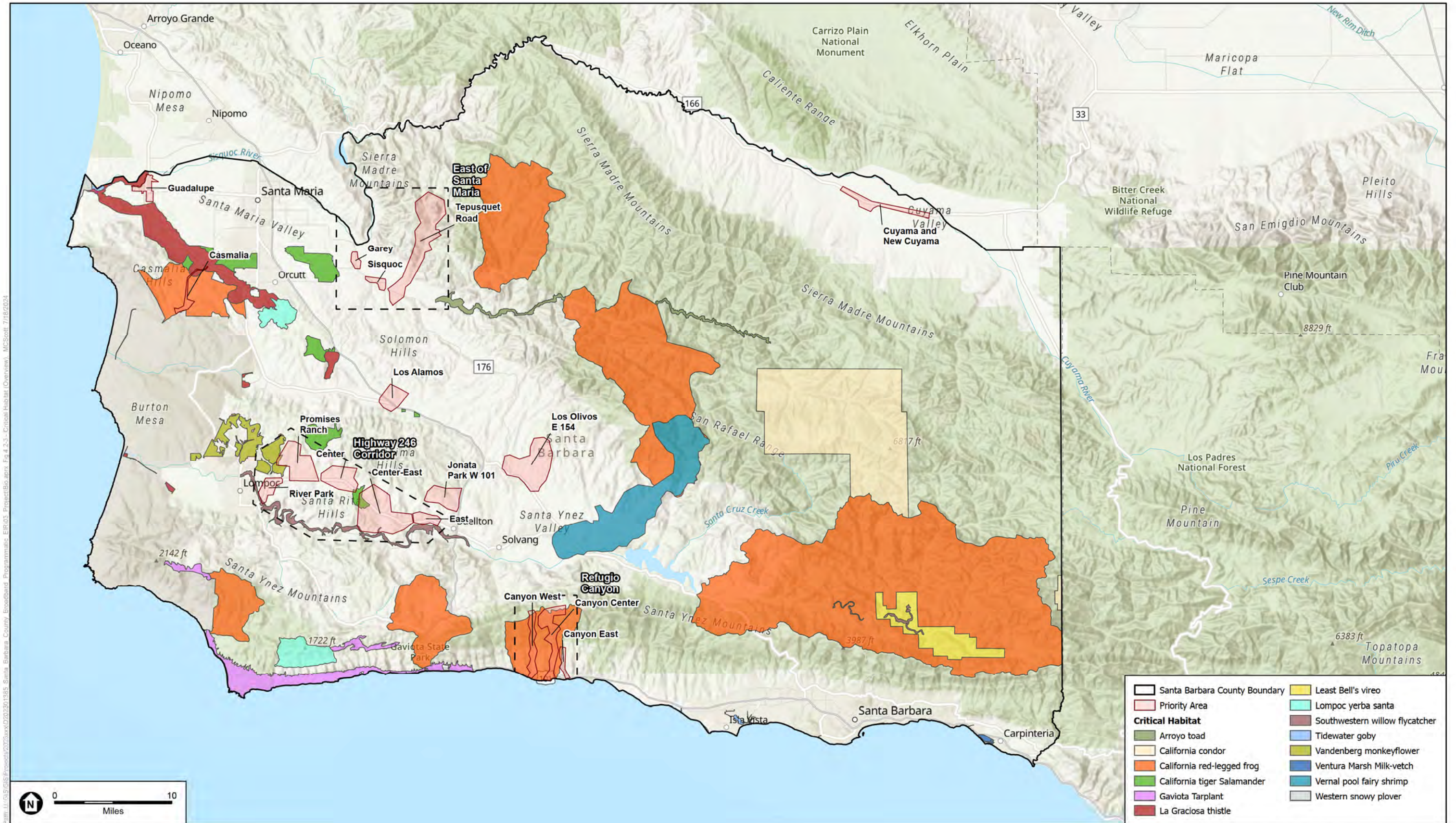
Wetlands are regarded as important biological resources both because of their rarity in southern California and because they serve a variety of functional values. Several types of wetlands exist in the County including coastal salt marshes, vernal pools, and riparian habitats. The USFWS NWI is a nationwide database showing the distribution and types of U.S. wetlands to aid in conservation efforts. An aquatic resources delineation was not conducted as part of this analysis; however, this analysis considers riparian and wetland areas identified by the NWI within the County (USFWS 2024b). These resources are shown below in **Figure 4.2-4, Aquatic Resources**.

Aquatic resources within the County may be subject to United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW jurisdiction and regulatory authority. The limits of potential USACE waters of the U.S. and RWQCB waters of the State are based on the presence of “ordinary high water mark” (OHWM) indicators, such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and/or the presence of litter and debris. Wetlands, including seasonal wetlands, seeps, marshes, and similar areas, are defined by the USACE as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE. Areas within CDFW jurisdiction typically refer to streambeds and associated wetland or riparian vegetation. The boundaries of the streams and associated vegetation are delineated based on a break in slope at the top of bank for aquatic features or to the outer edge of the overhanging riparian or wetland vegetation.

Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

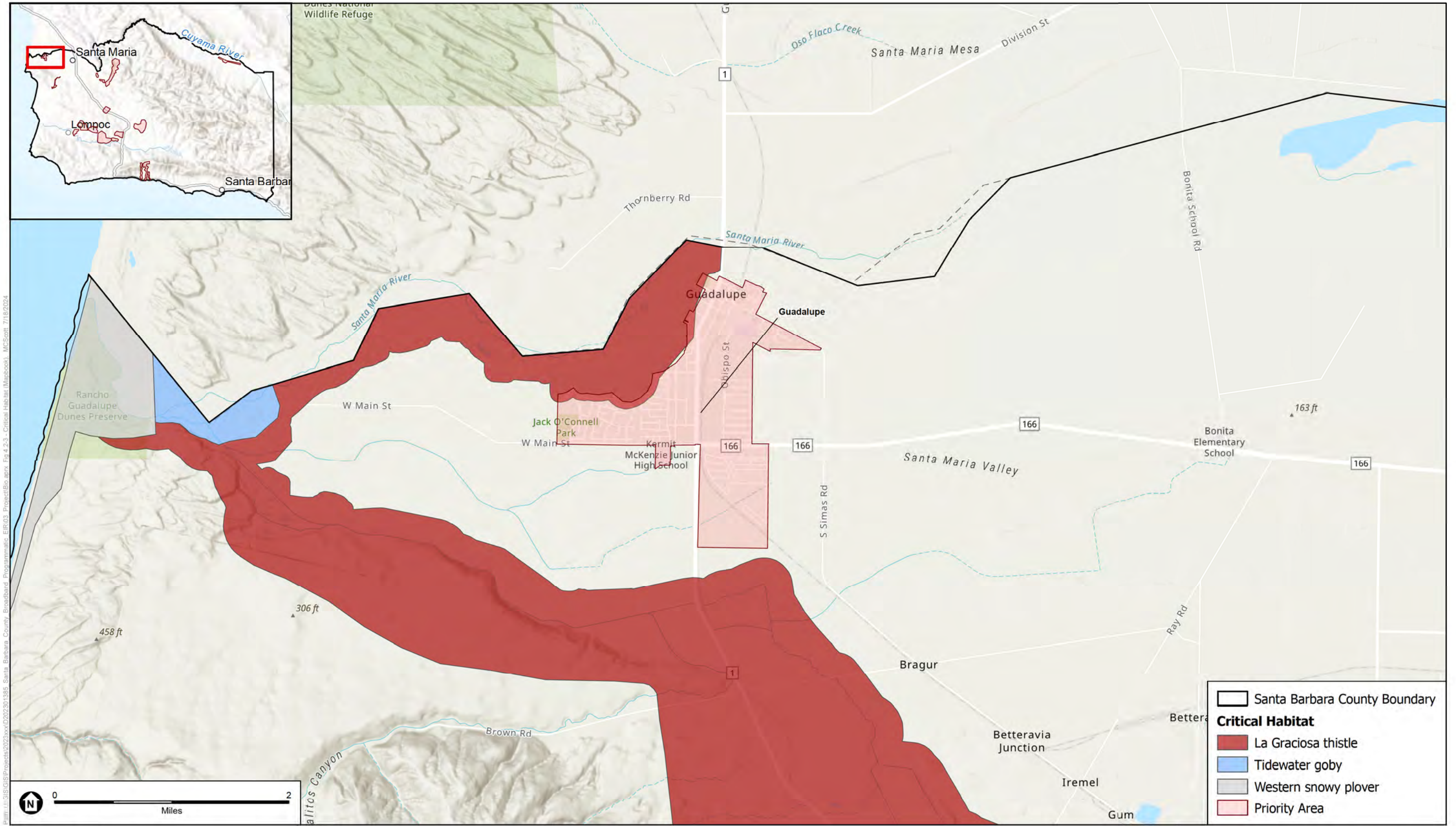
The habitats within the linkage or corridor do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

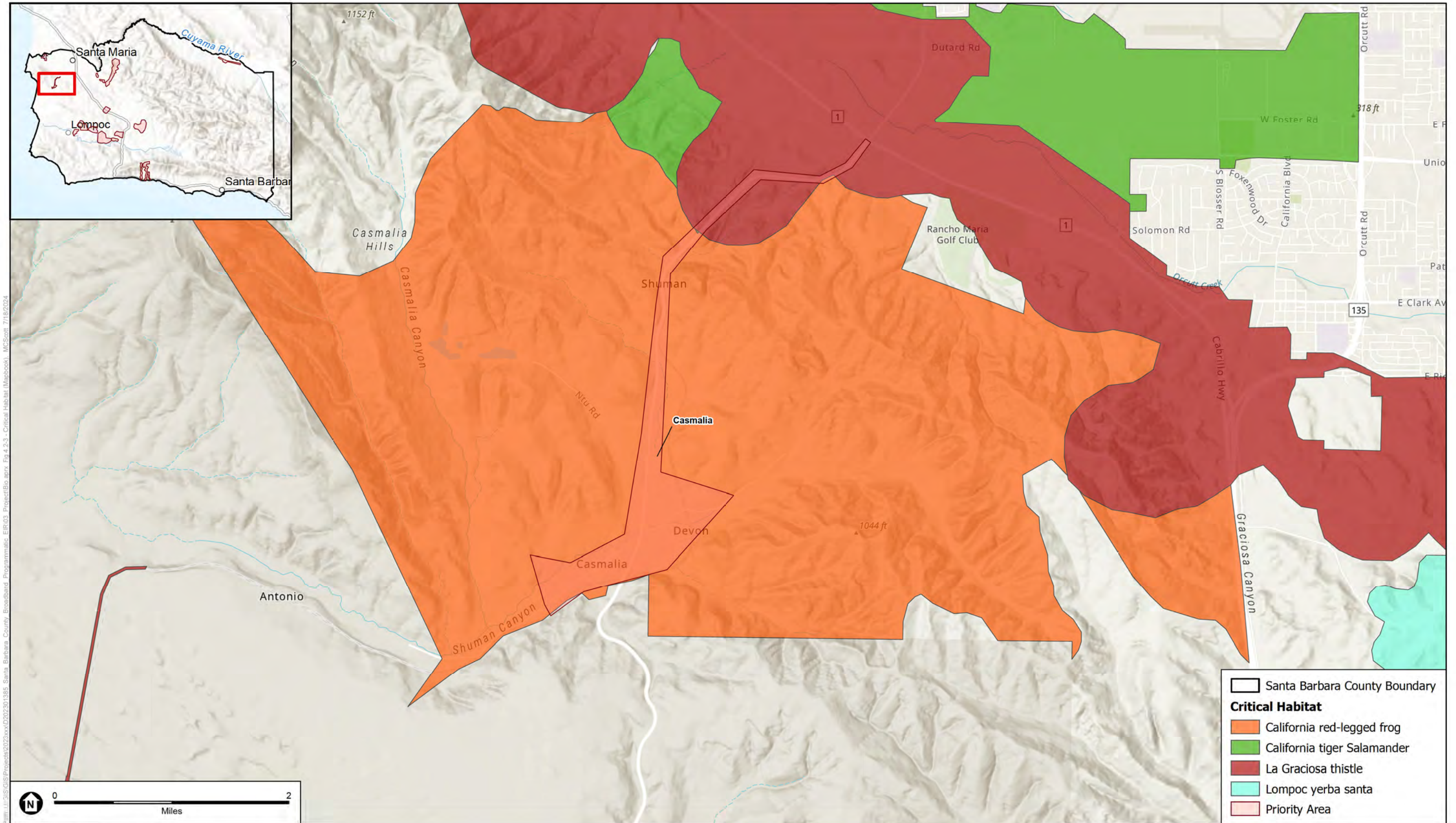
Figure 4.2-3
Critical Habitat



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3A
Critical Habitat
Guadalupe

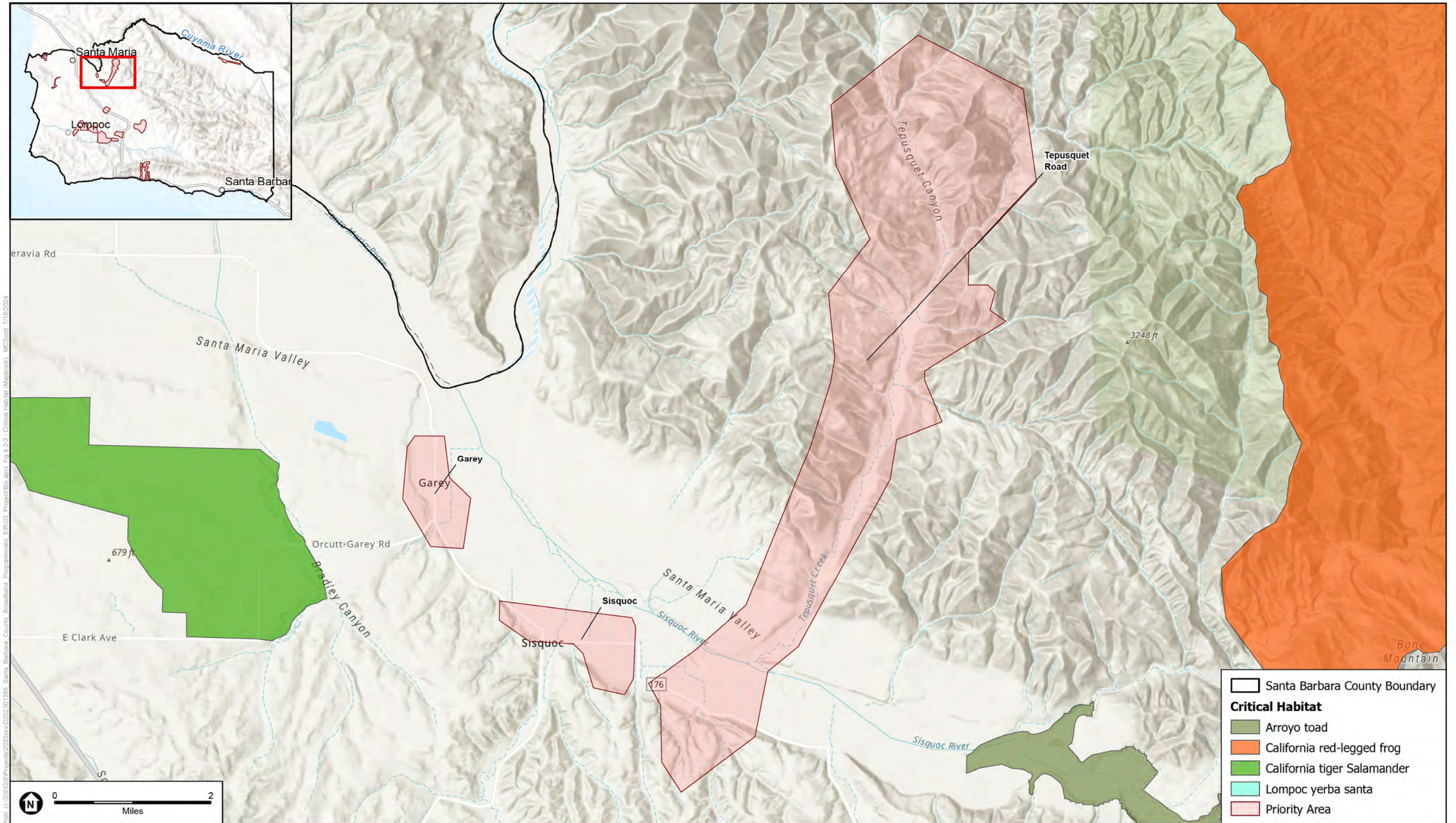


U:\GIS\Projects\2023\202301385_Santa_Barbara_County_Broadband_Program\mxd\ER03_Project\BAs\BAs_Fig_4.2-3_Critical_Habitat_Mapbook_MCS04h_7/18/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3B
Critical Habitat
Casmalia



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3C
Critical Habitat
East of Santa Maria



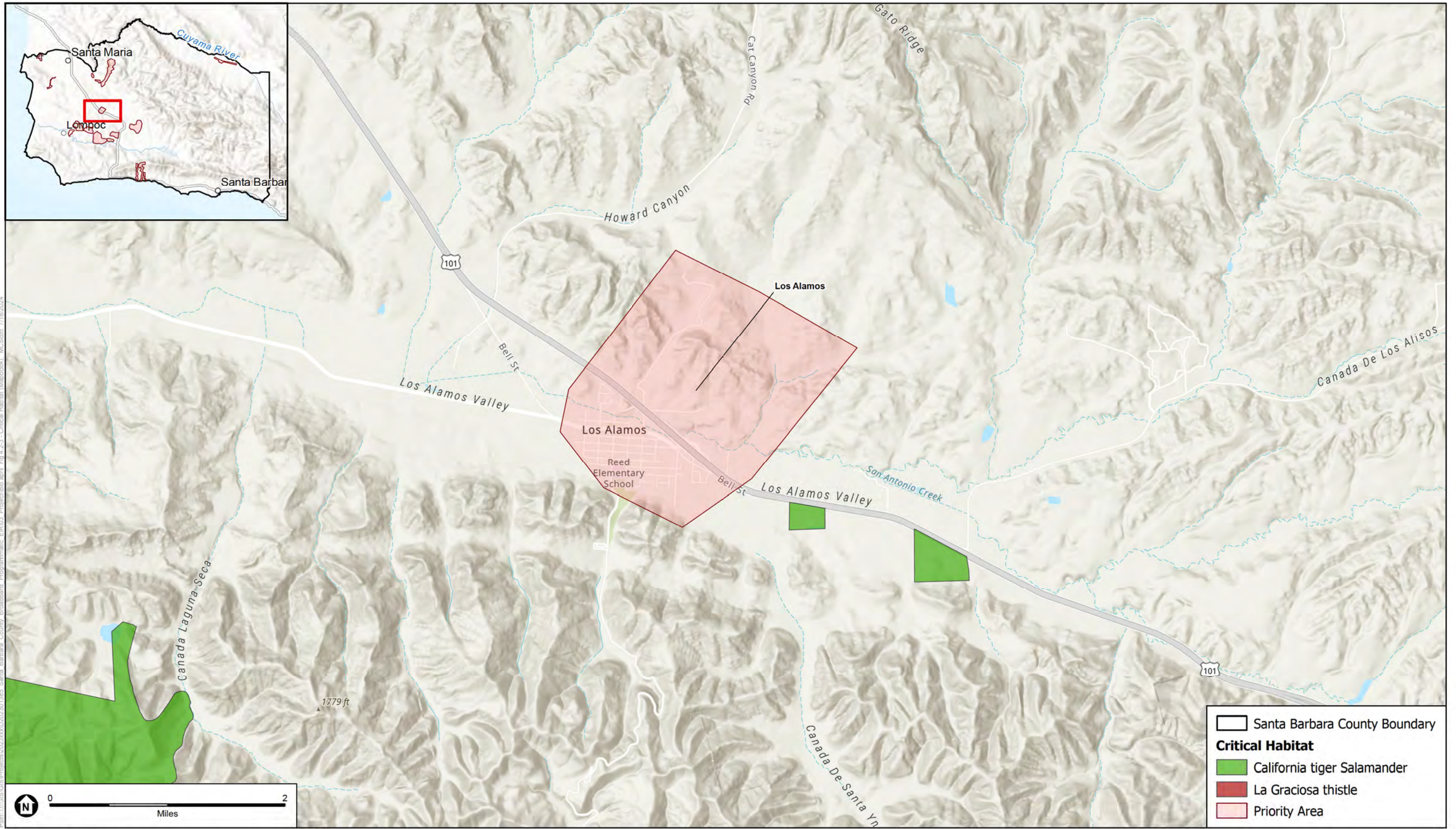
www.lucis.com GIS/Projects/2023/02/202301385_Santa_Barbara_County_Broadband_Programmatic_EIR/03_Project/04_03_Critical_Habitat_Mapbook_MCS04h_7/18/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3D
 Critical Habitat
 Cuyama and New Cuyama



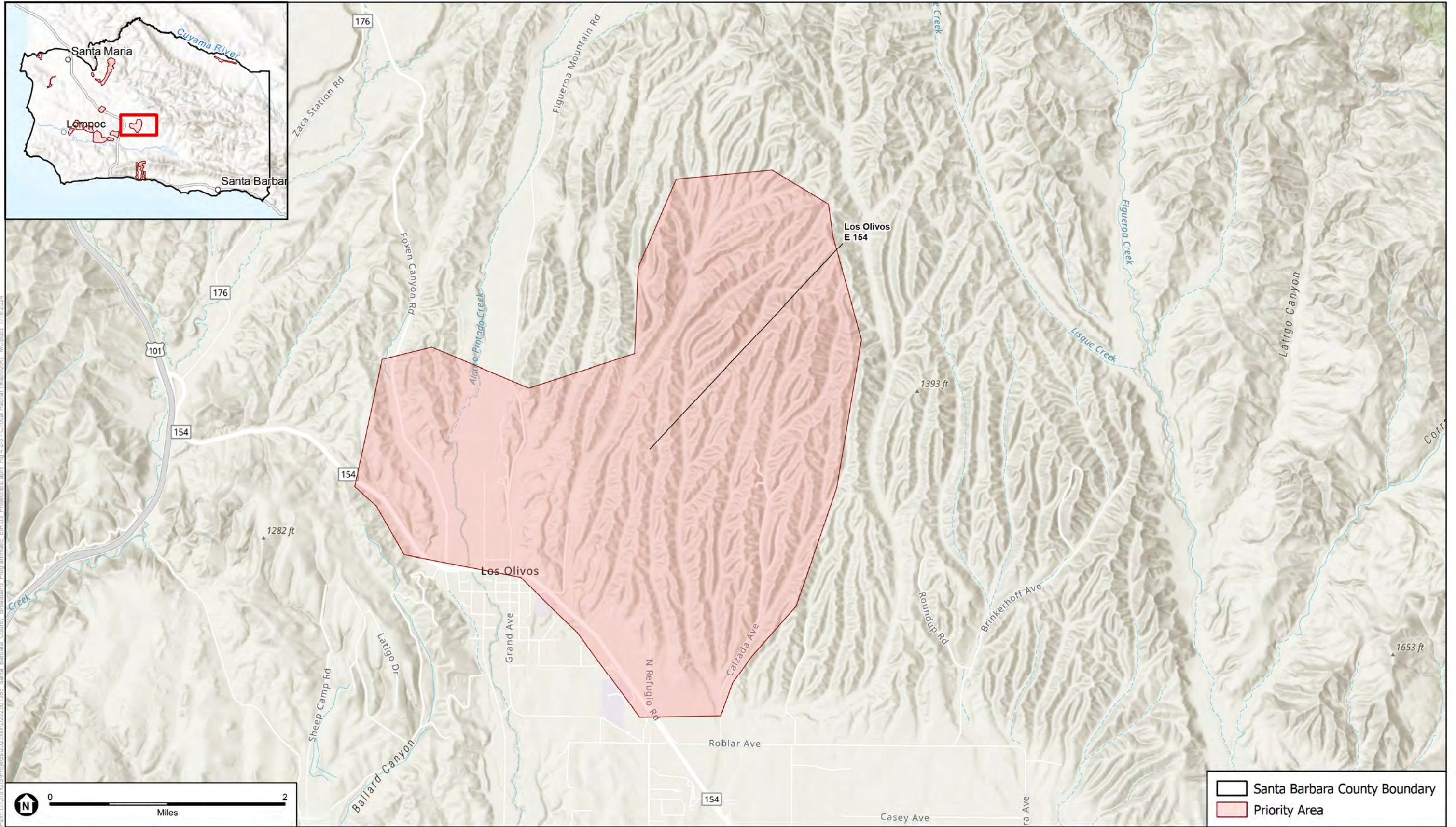


\s\GIS\GISData\2023\202301355_Santa_Barbара_County_Broadband_Program\GIS\ER03_ProtectBa.mxd Fig 4.2-3 Critical Habitat (Mapbook) MCS\Staff 7/18/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3E
Critical Habitat
Los Alamos

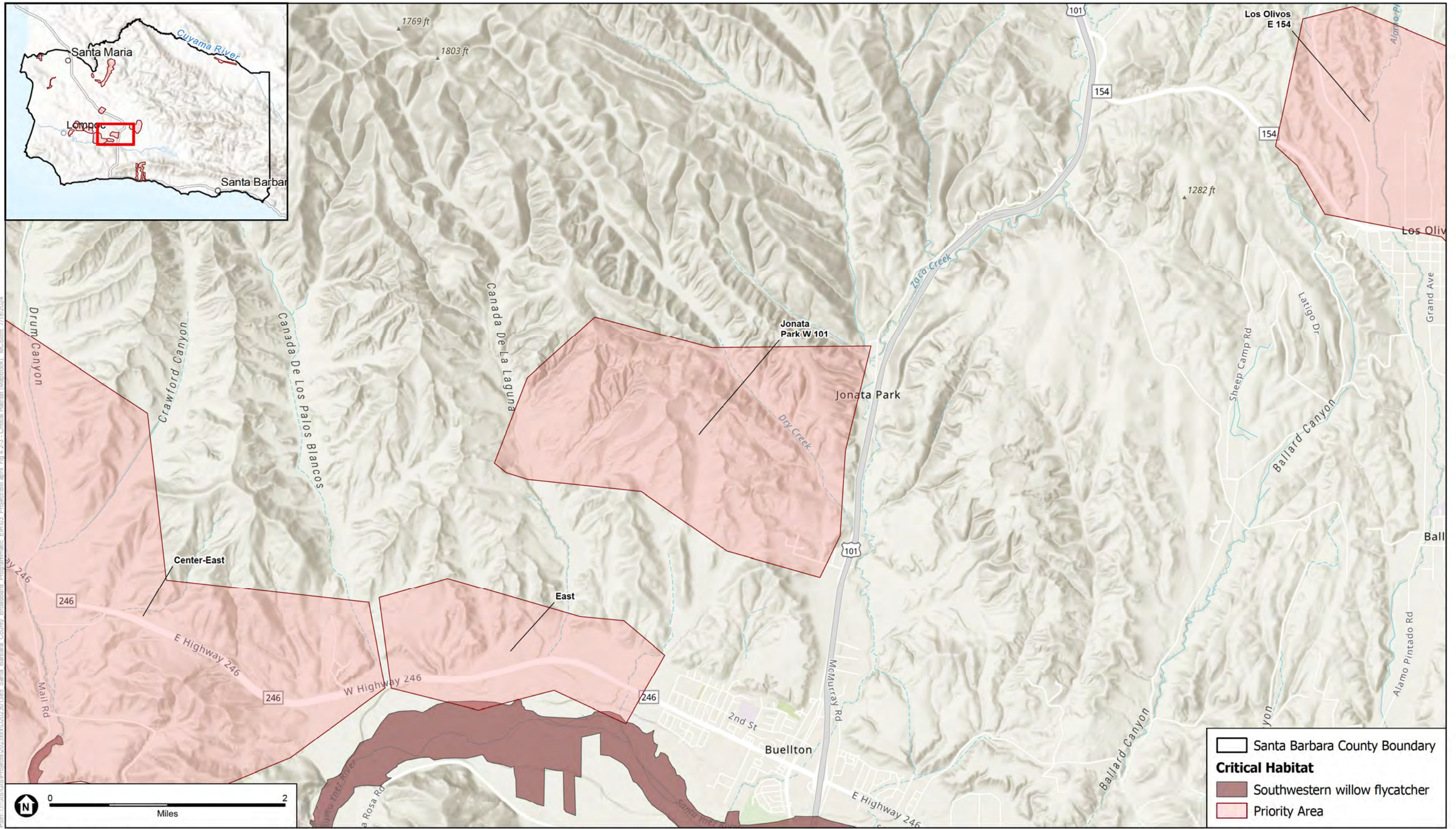


Source: U.S. Geological Survey, Santa Barbara County Broadband Program, EIR/03 Project/04 map, Fig. 4.2-3F Critical Habitat (Mapbook), M/S/04 7/18/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-3F
 Critical Habitat
 Los Olivos E 154

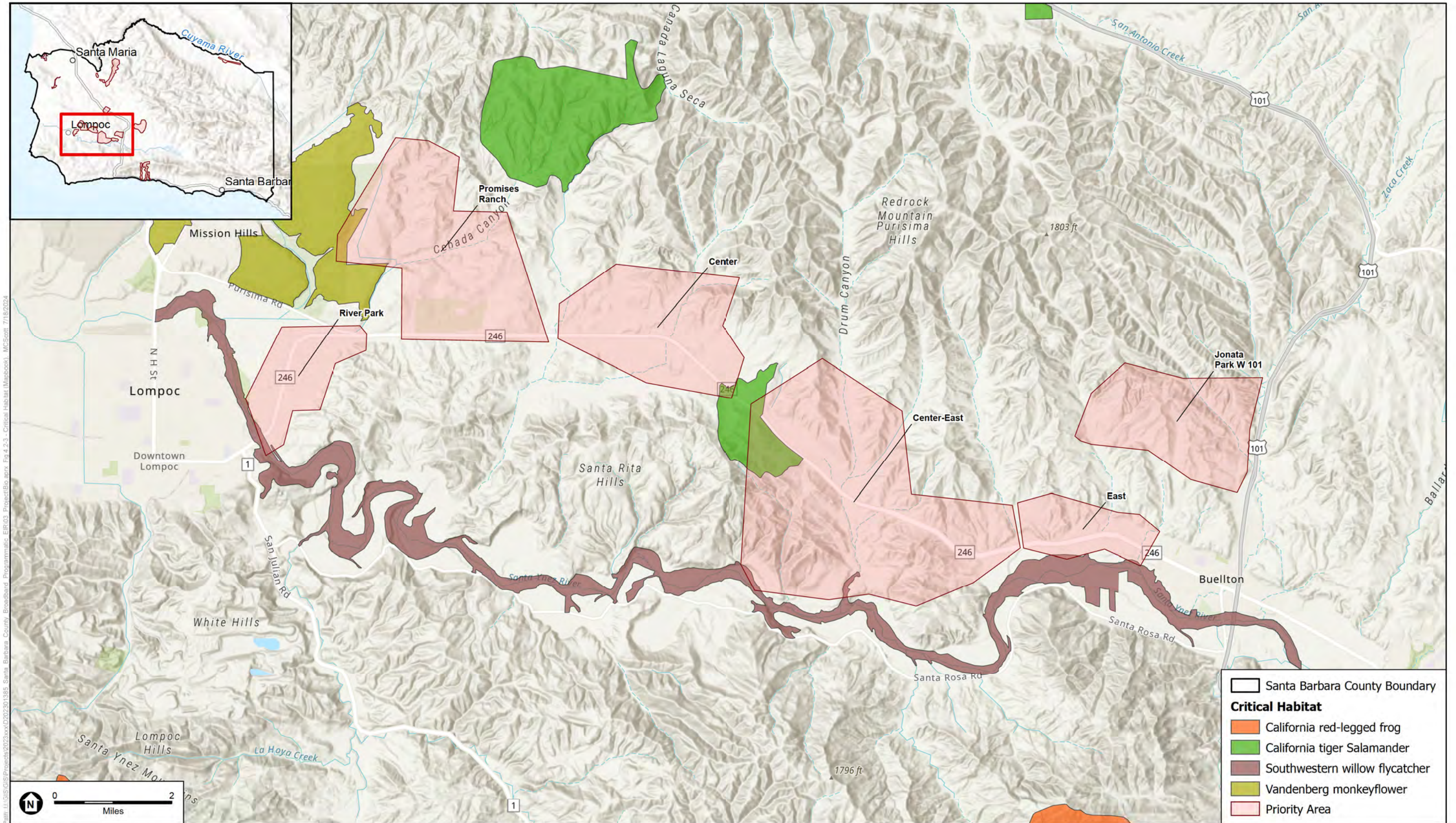


Source: U.S. Geological Survey, 2023; Santa Barbara County Broadband Program; EIR/03 Project/03a; Fig. 4.2-3G Critical Habitat (Mapbook); M/S/03/21/2024

SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

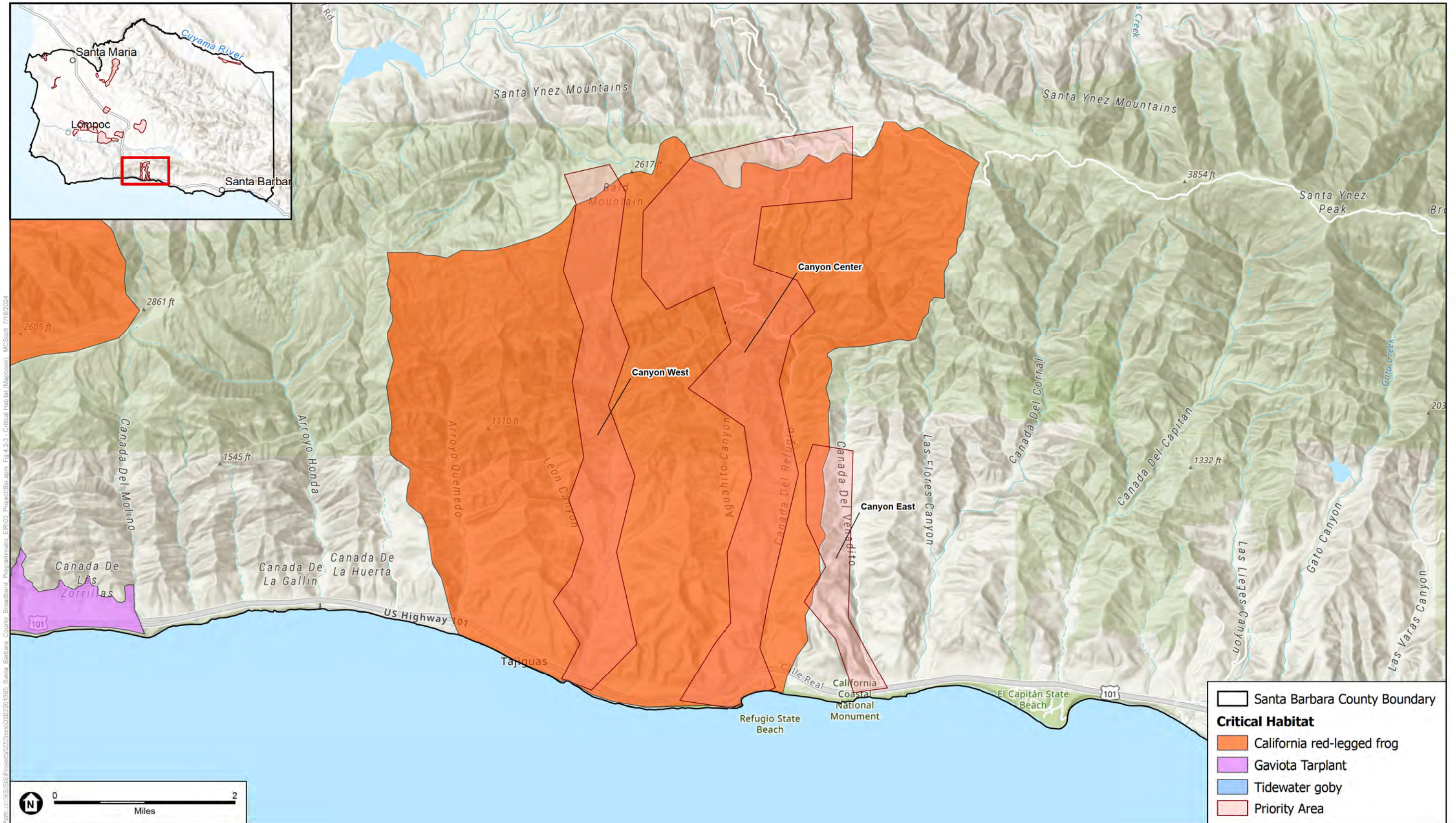
Figure 4.2-3G
 Critical Habitat
 Jonata Park W 101



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

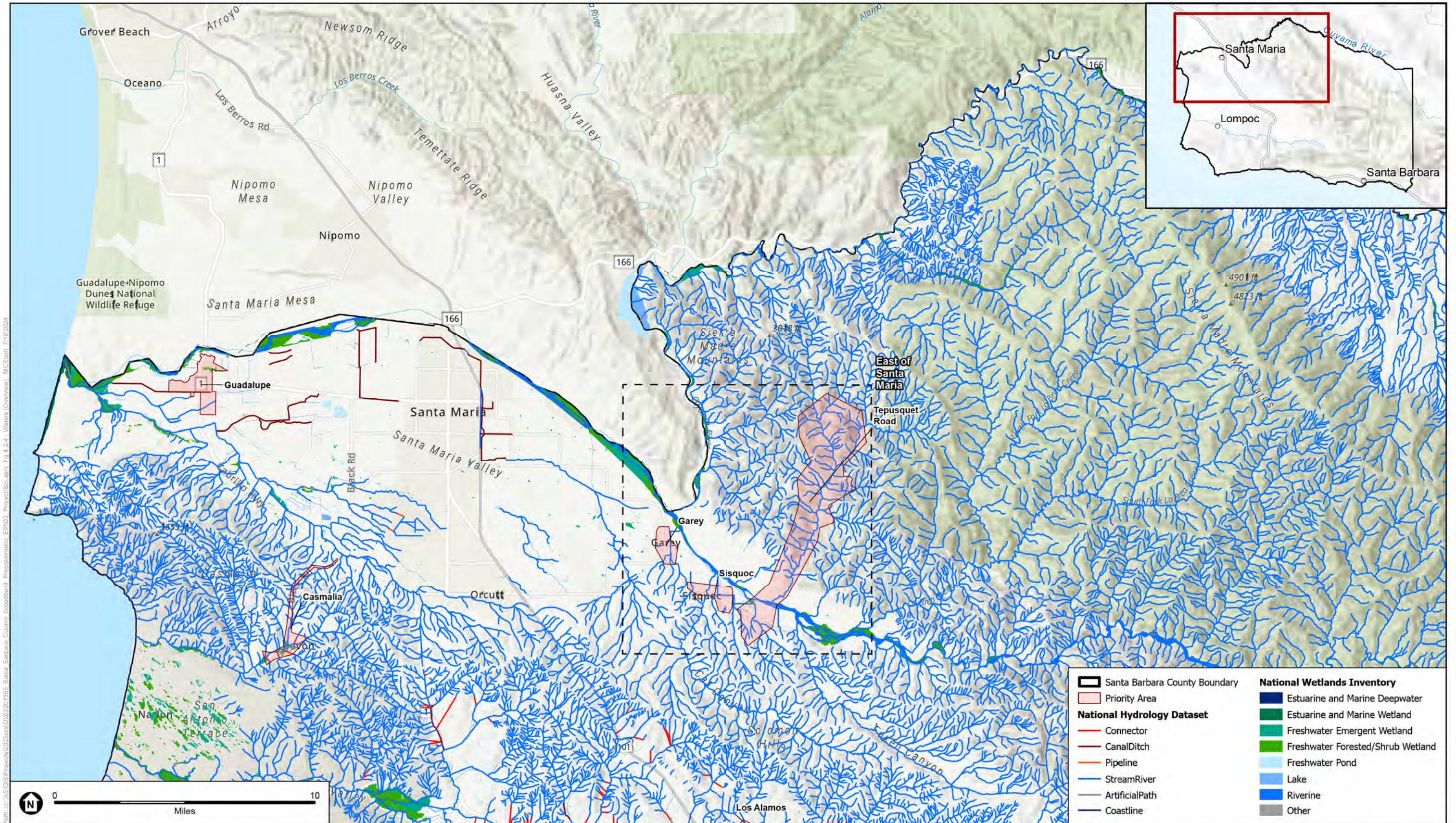
Figure 4.2-3H
Critical Habitat
Highway 246 Corridor



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

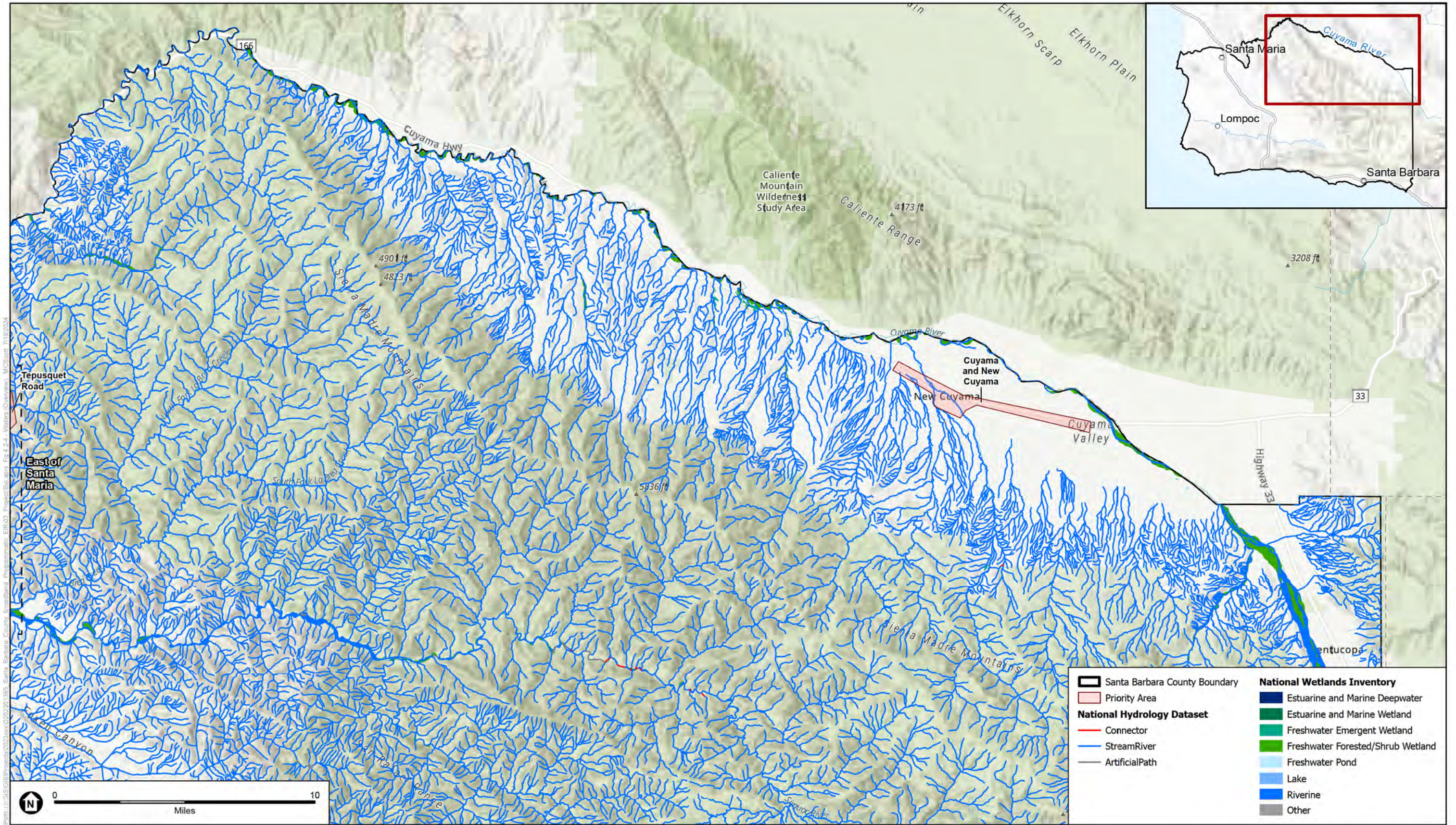
Figure 4.2-3I
Critical Habitat
Refugio Canyon



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

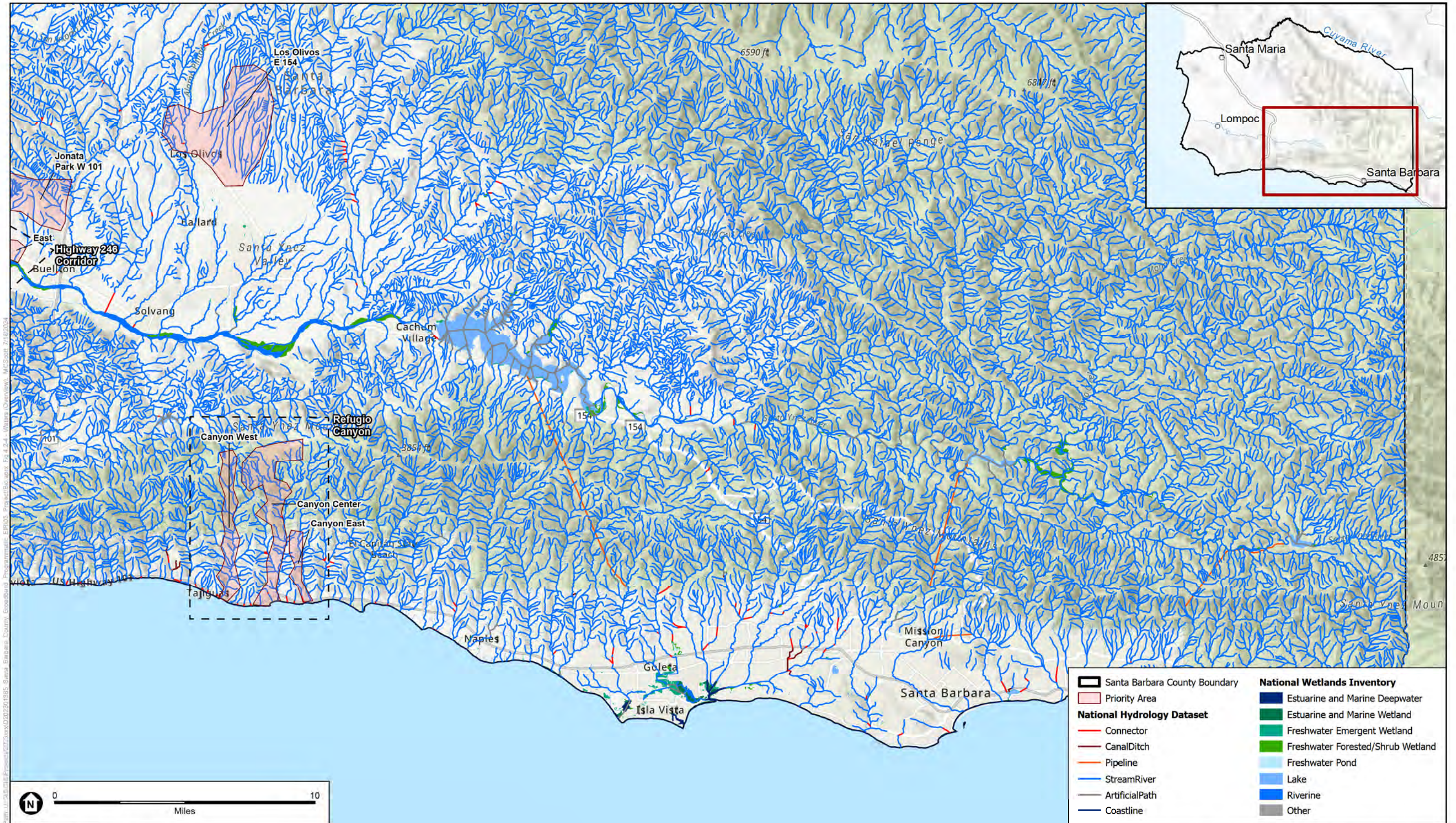
Figure 4.2-4
Waters
Waters Overview 1



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

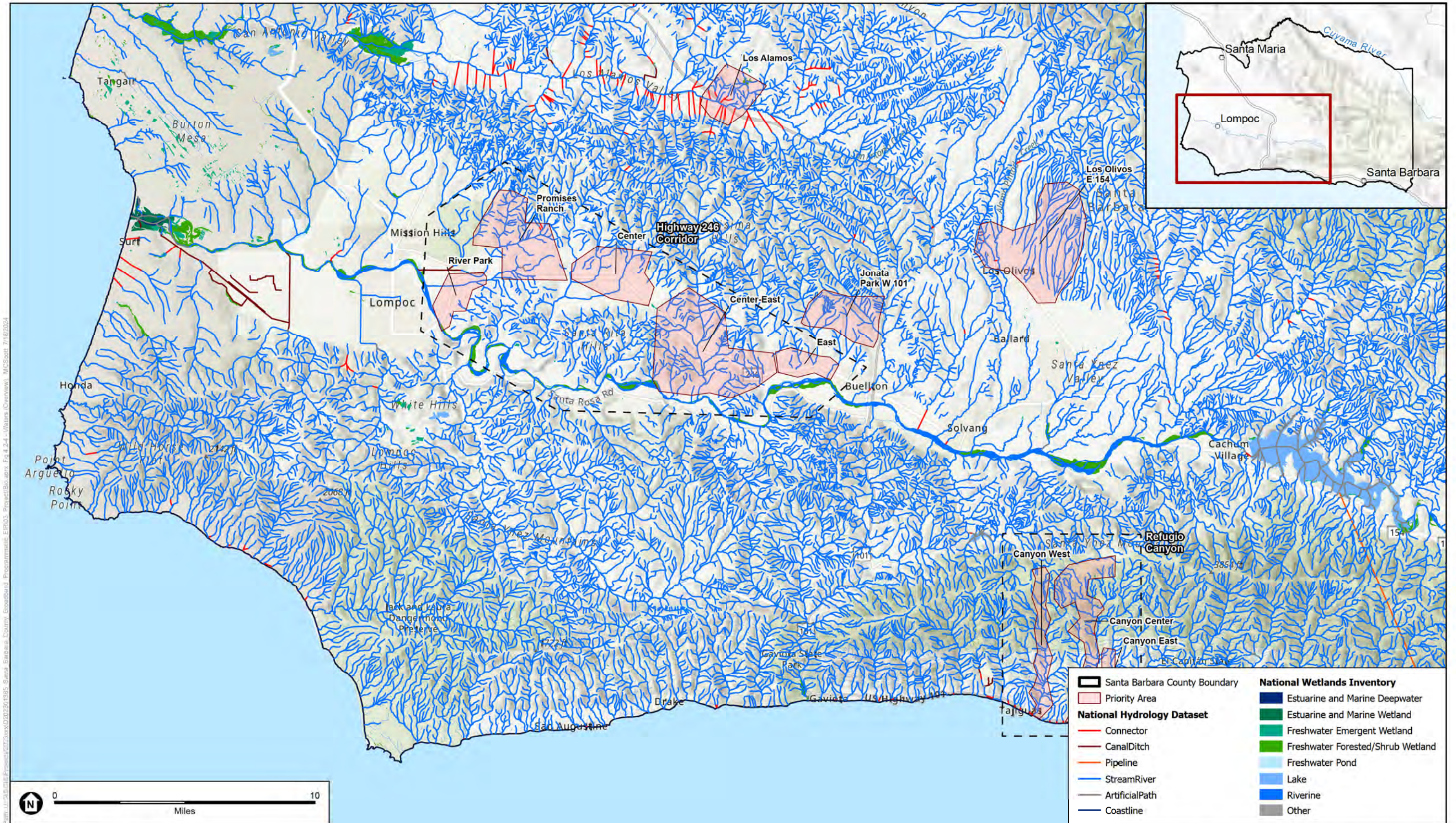
Figure 4.2-4
Waters
Waters Overview 2



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

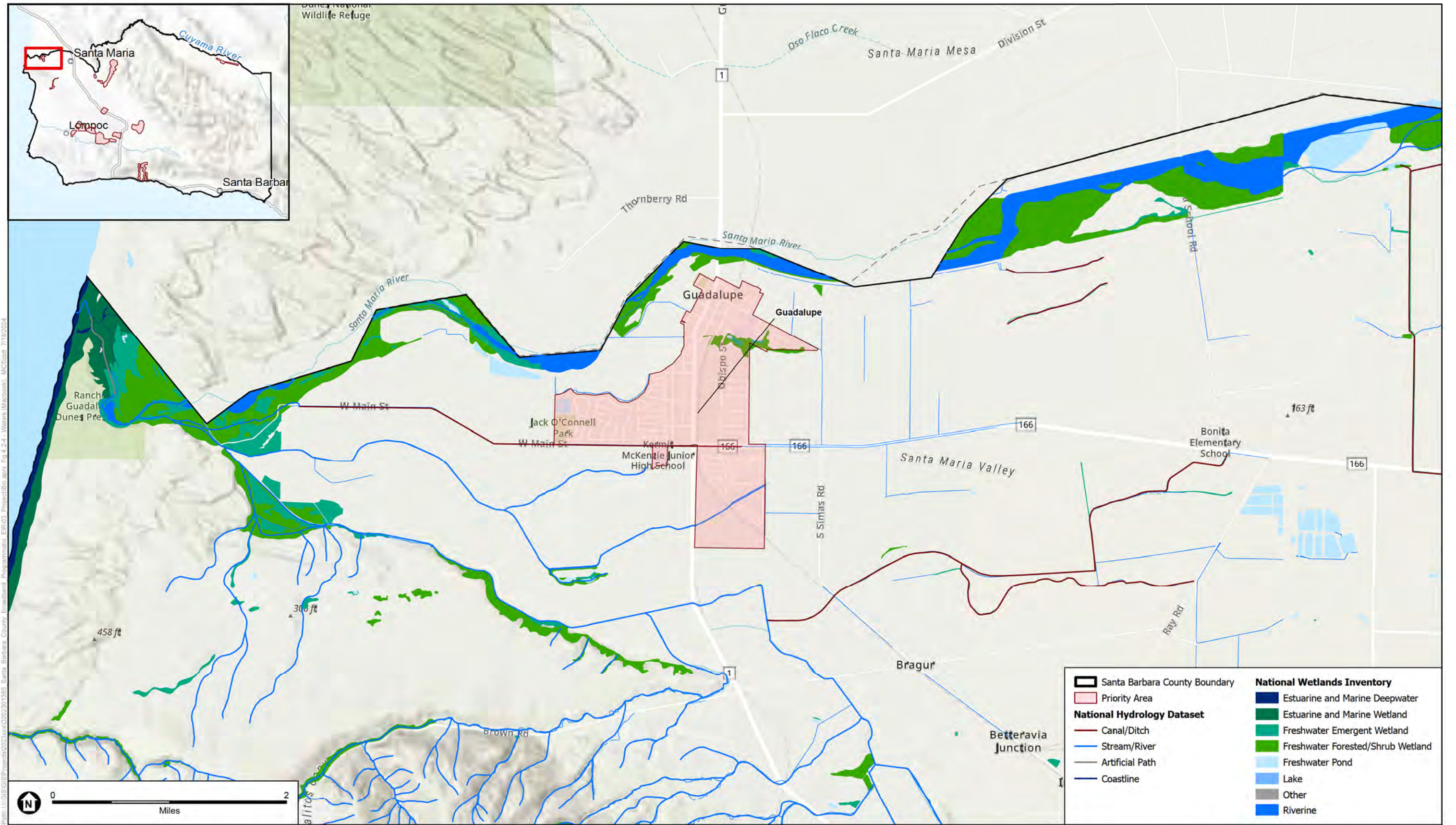
Figure 4.2-4
Waters
Waters Overview 3



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

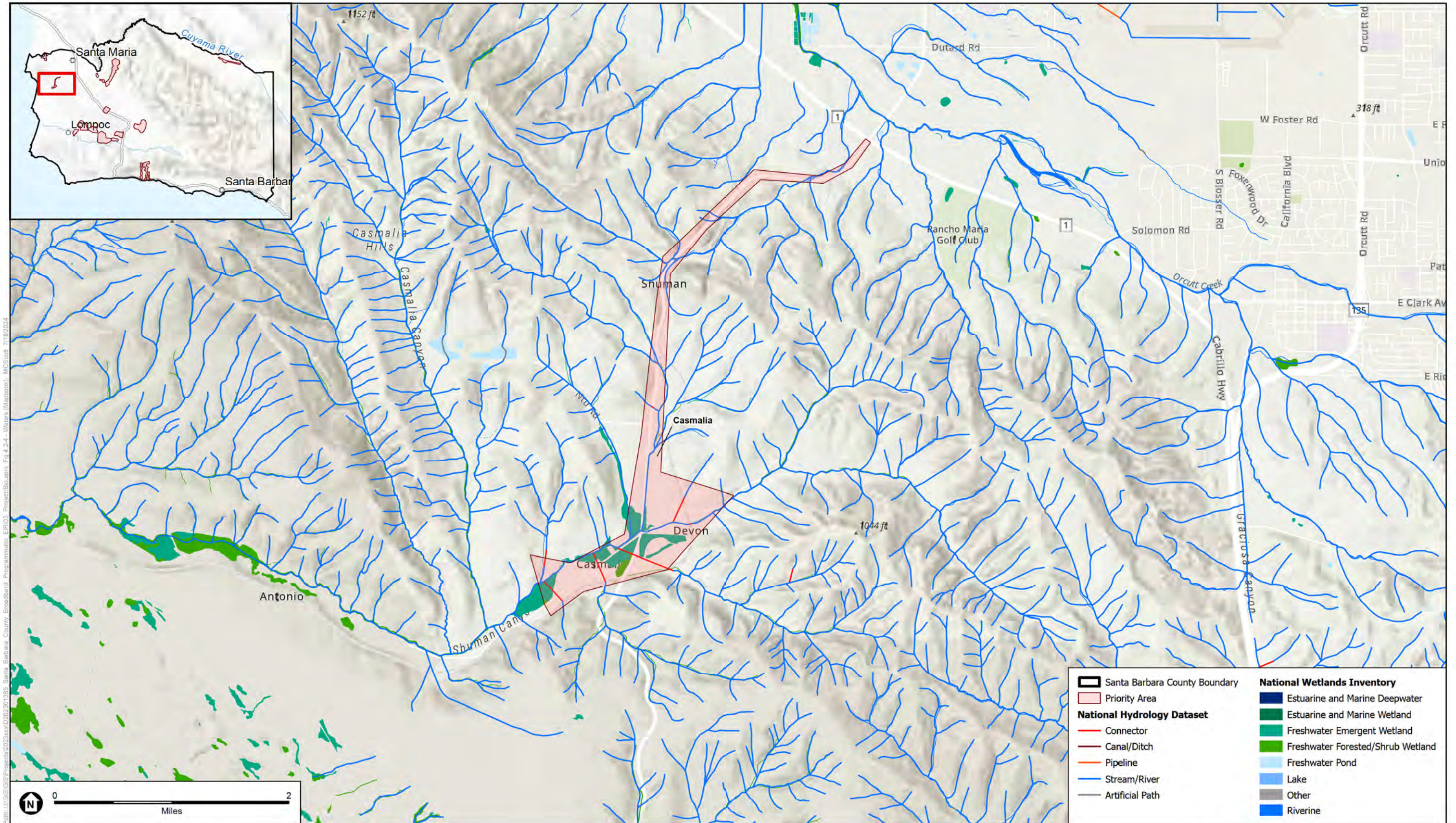
Figure 4.2-4
Waters
Waters Overview 4



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

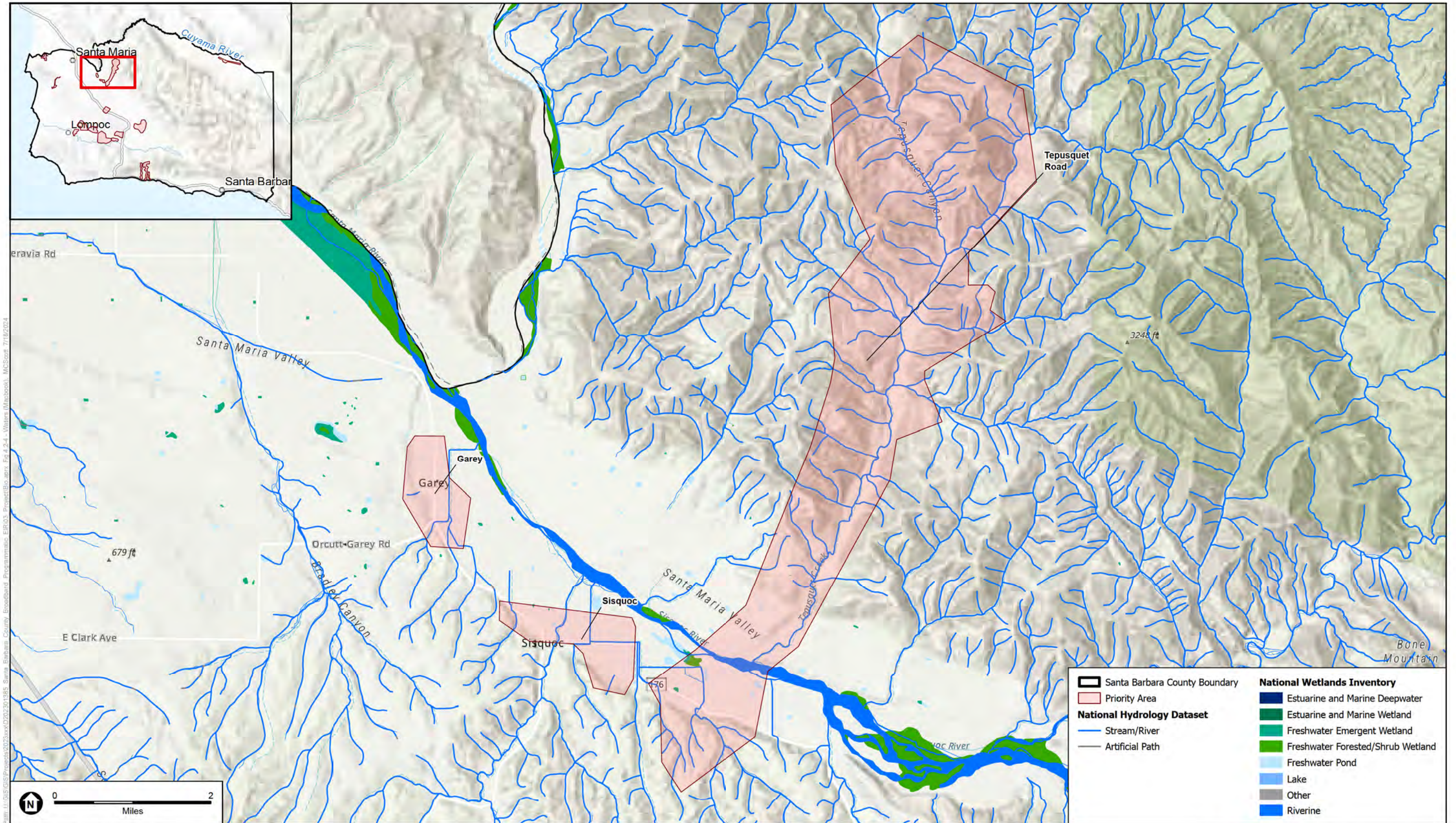
Figure 4.2-4A
Waters
Guadalupe



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

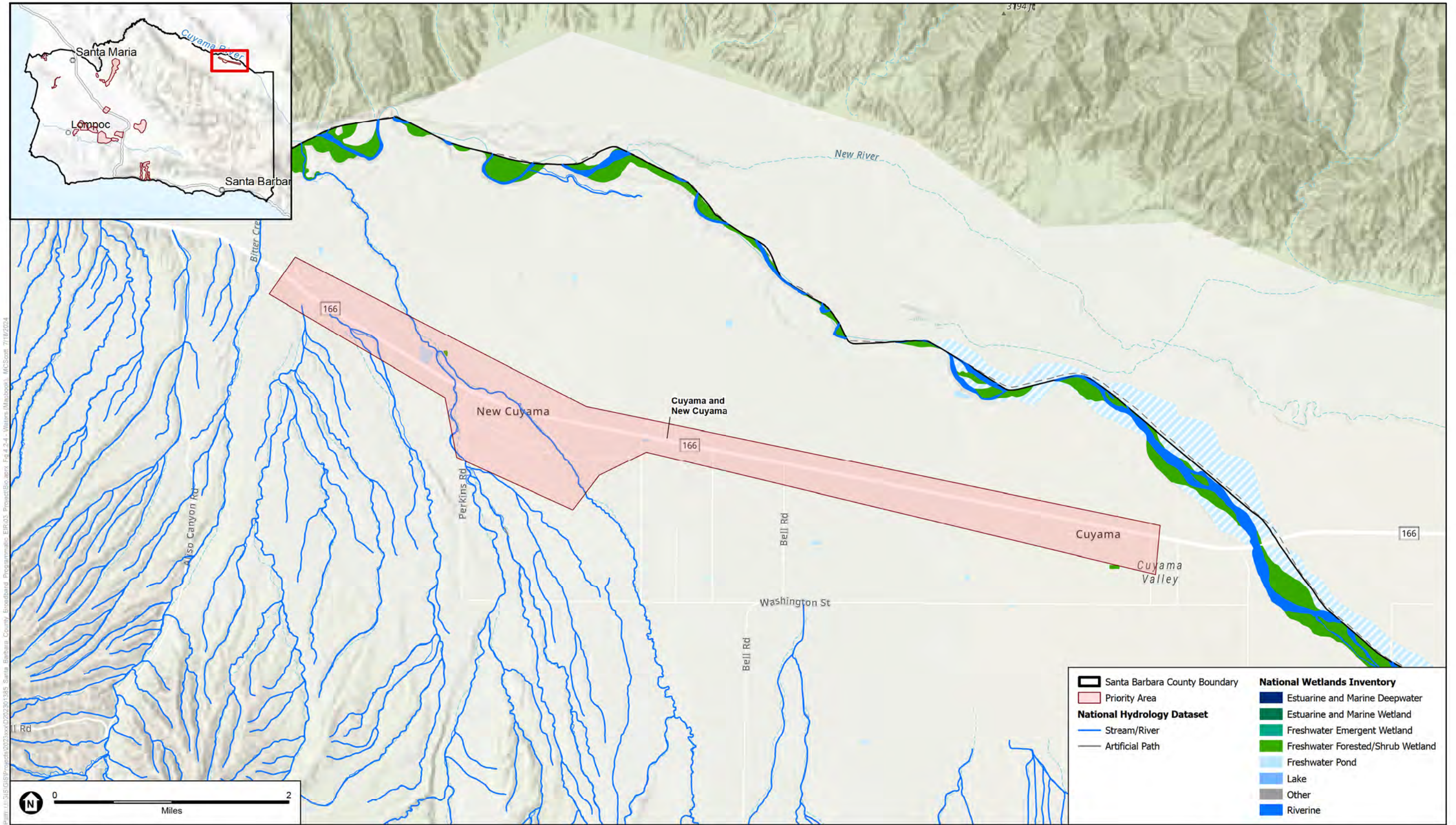
Figure 4.2-4B
Waters
Casmalia



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

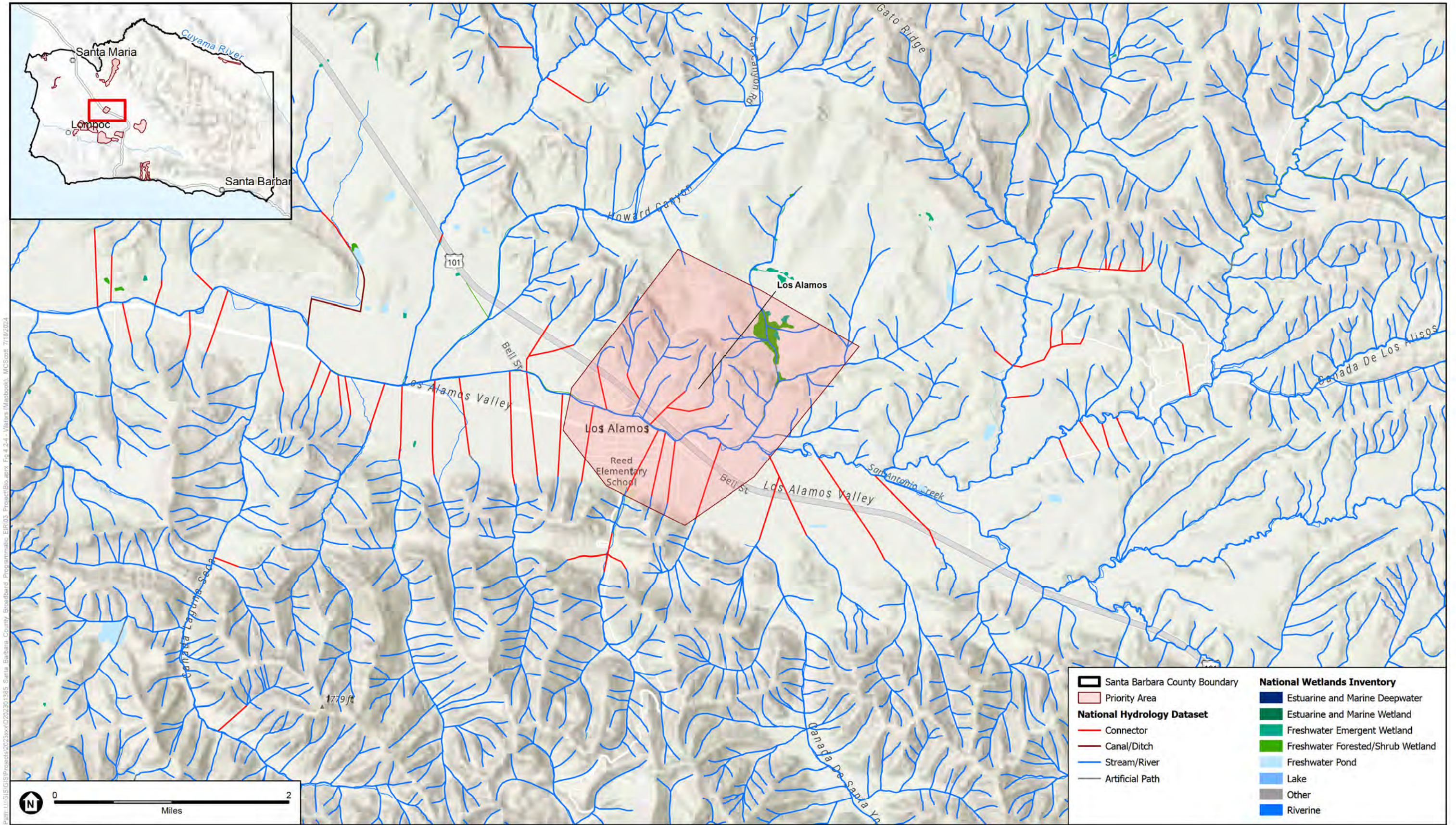
Figure 4.2-4C
Waters
East of Santa Maria



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

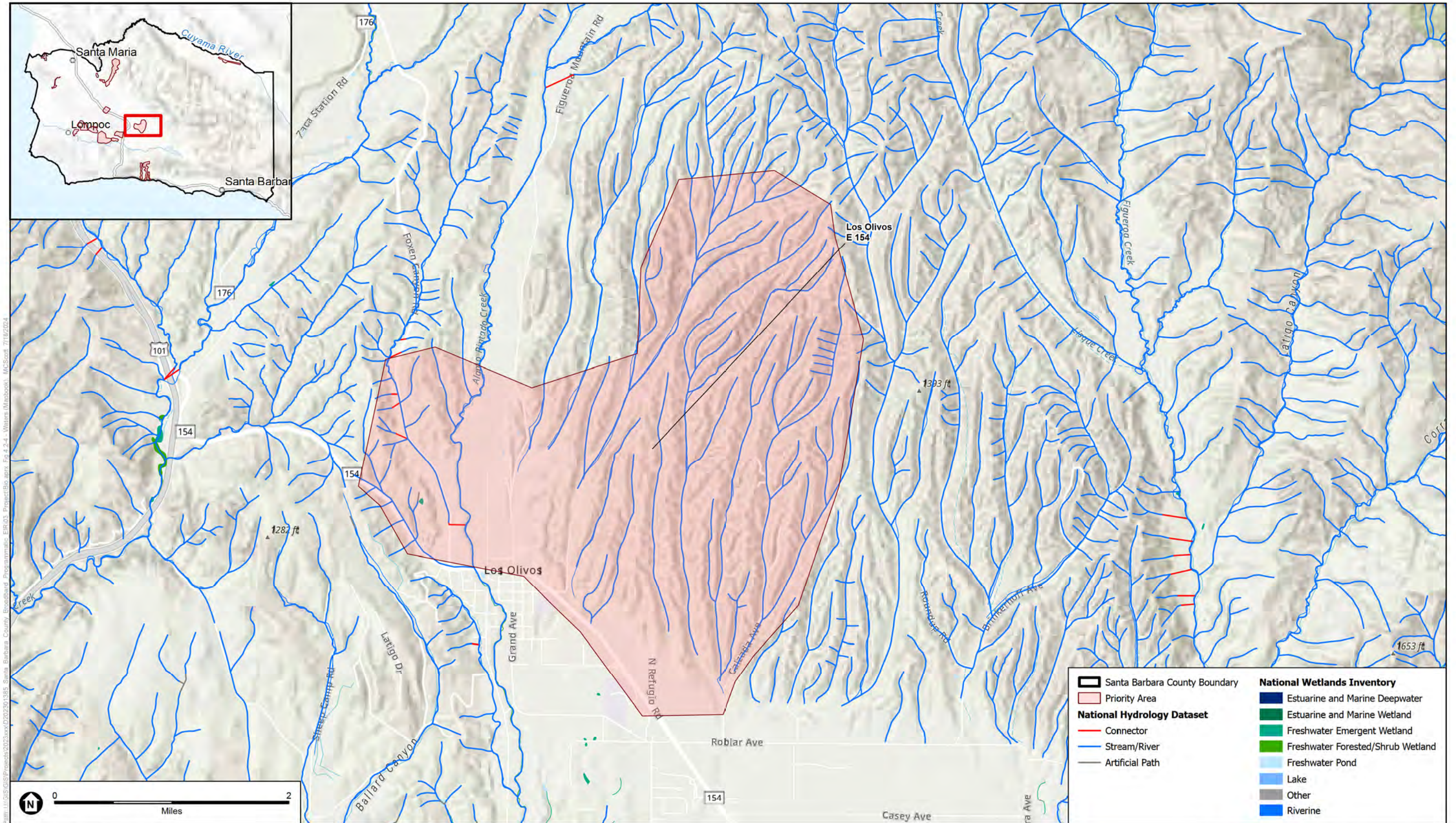
Figure 4.2-4D
Waters
Cuyama and New Cuyama



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

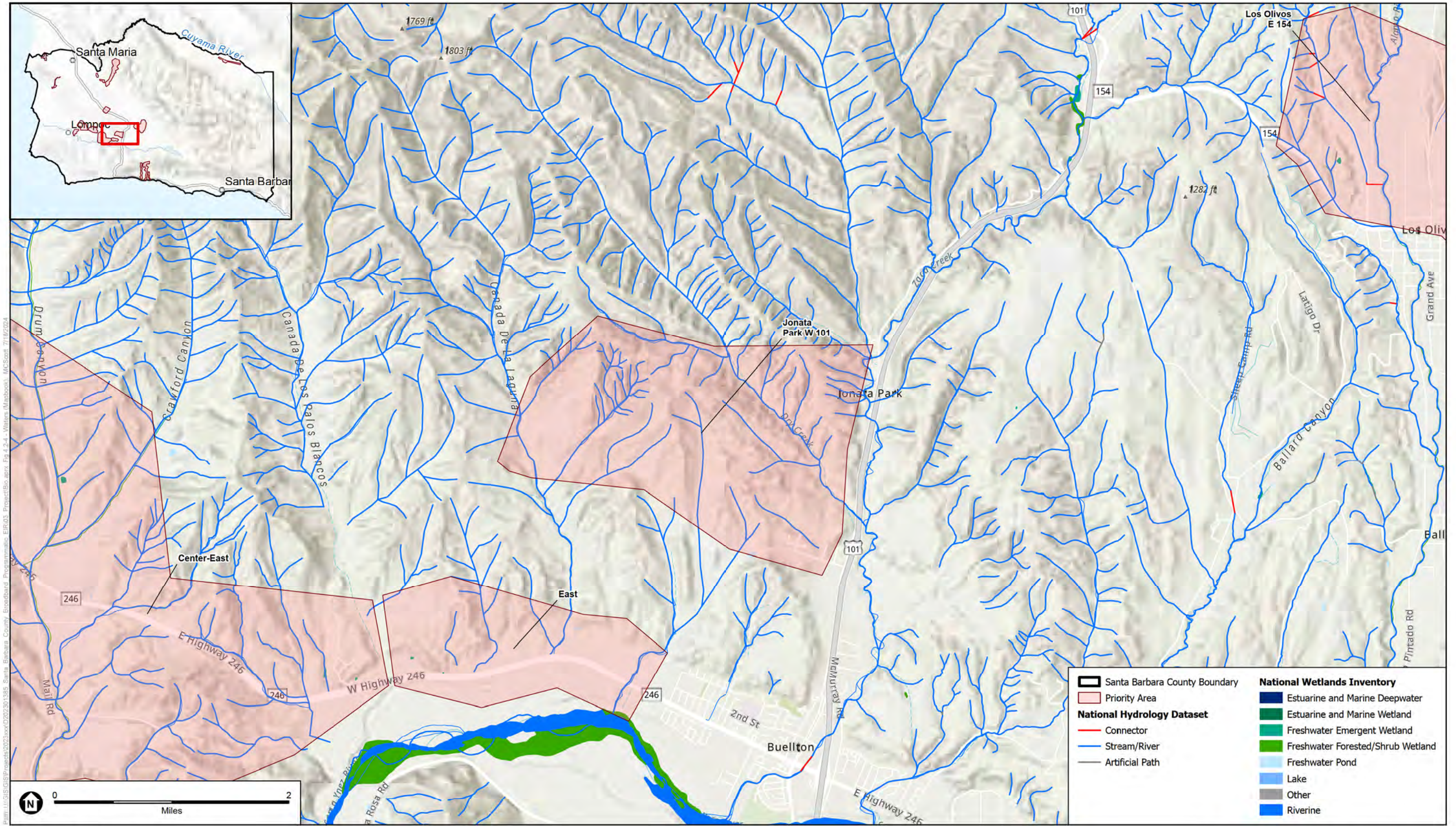
Figure 4.2-4E
Waters
Los Alamos



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

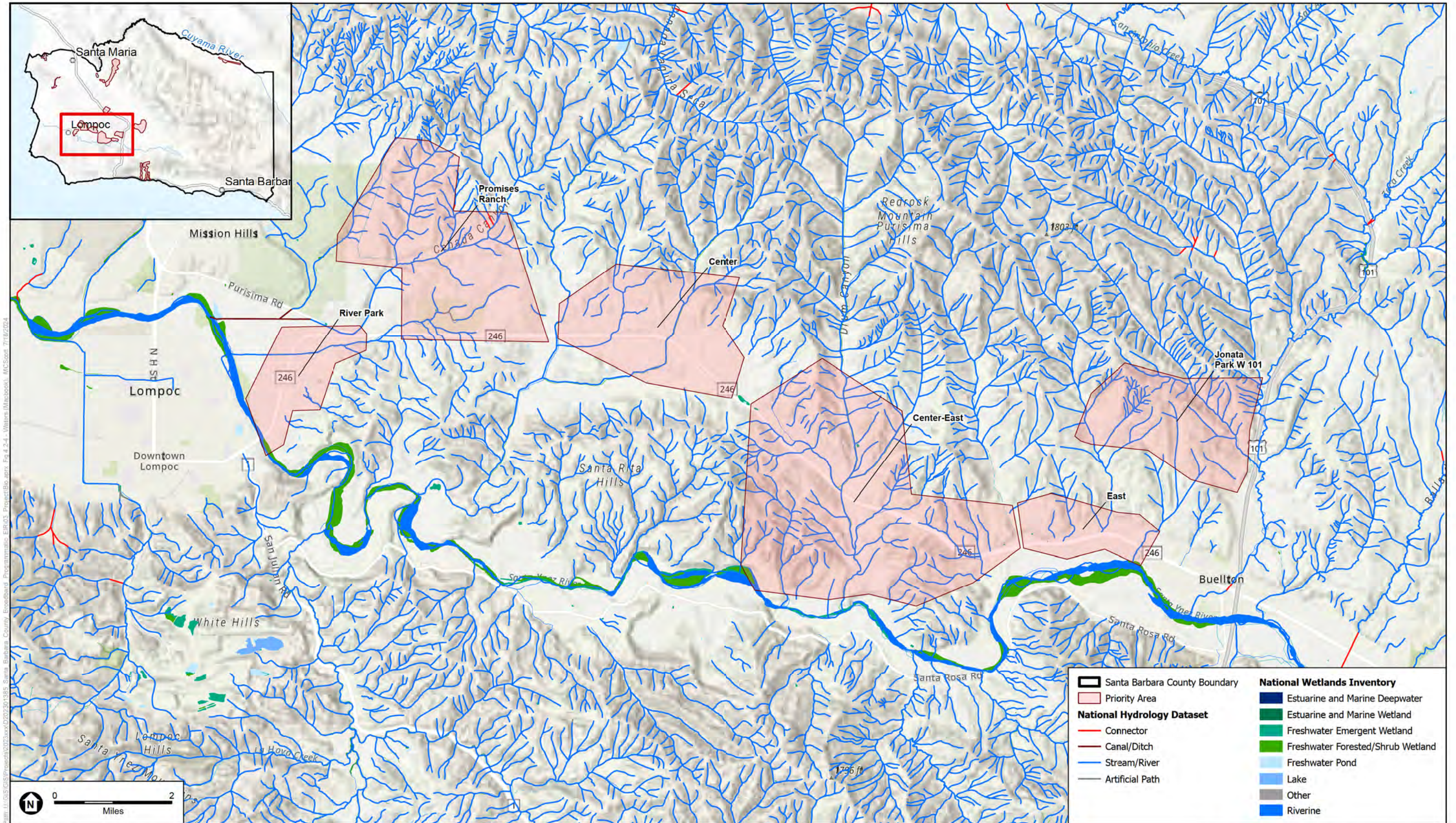
Figure 4.2-4F
Waters
Los Olivos E 154



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

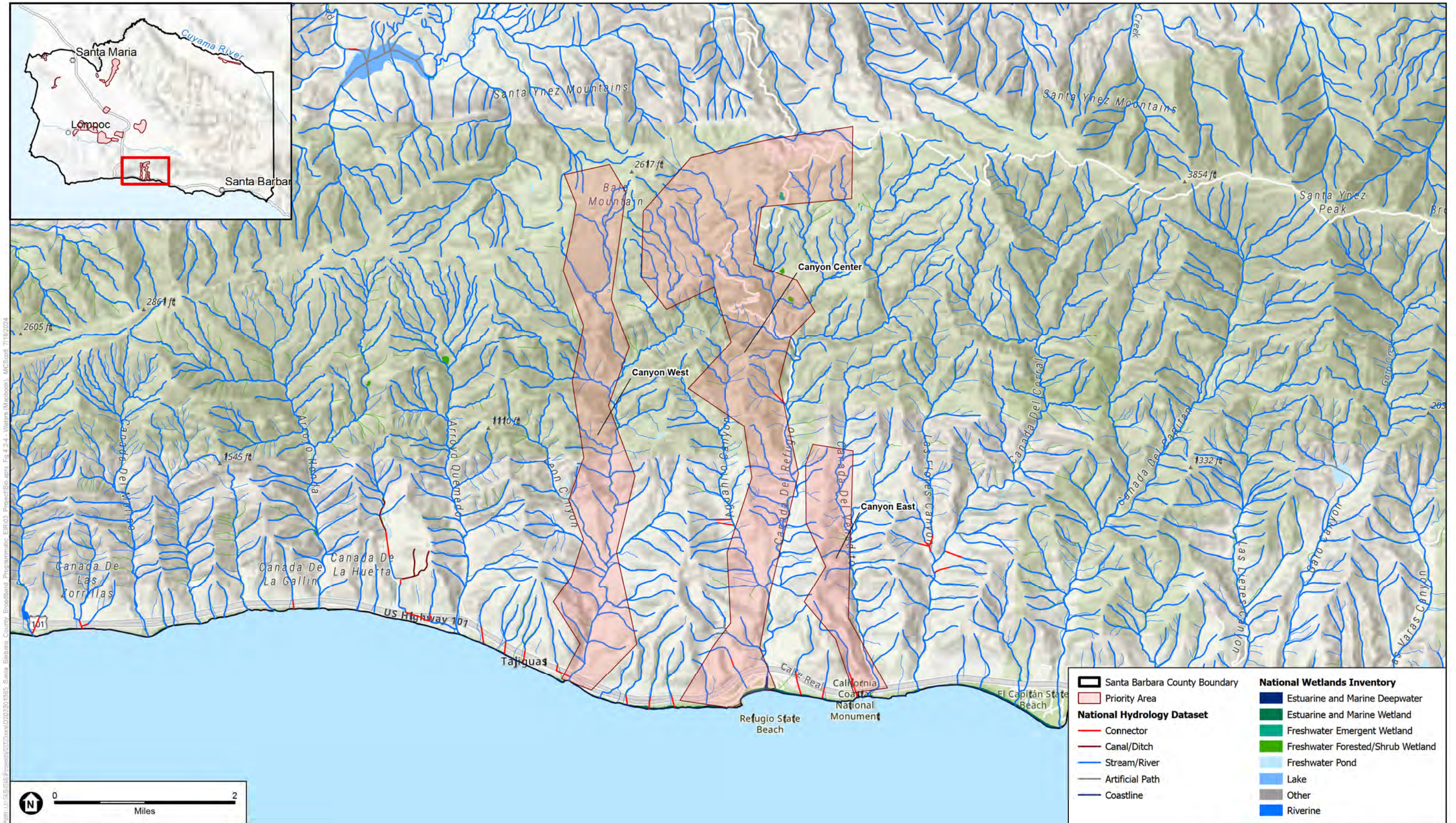
Figure 4.2-4G
Waters
Jonata Park W 101



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-4H
Waters
Highway 246 Corridor



SOURCE: ESA, 2024; CalVeg, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-41
Waters
Refugio Canyon

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The mountainous regions of the County may support wildlife movement on a regional scale while riparian corridors may provide more local scale opportunities for wildlife movement throughout the County. The CDFW Habitat Connectivity Mapper identifies two essential connectivity areas within the County (CDFW 2024d). One is located near the coastline in the western portion of the County from south of Guadalupe to south of Lompoc. The other is located over a large area of the mountainous regions in the southern portion of the County. In addition, three important movement corridors are also identified from the report titled *Missing Linkages: Restoring Connectivity to the California Landscape* (Penrod et al. 2001). All three are located in the western part of the County and are associated with the Santa Ynez River, San Antonio Creek/Purissima Hills and along the south coast near Gaviota. These areas are identified as important movement corridors for species such as steelhead, mountain lion, riparian birds, and other small carnivores. Wildlife movement corridors within the County are shown in **Figure 4.2-5, Wildlife Movement Corridors**, below.

Nesting Birds and Native Wildlife Nursery Sites

The trees and shrubs within the County may provide habitat for nesting birds. Even the disturbed and developed areas within the County may provide suitable habitat for ground nesting species such as killdeer.

4.2.2 Regulatory Setting

This section describes the federal, state, and local laws, policies, and regulations that would apply to the Project.

Federal

Federal Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) are the designated federal agencies responsible for administering the FESA. The FESA defines species as “endangered” and “threatened” and provides regulatory protection for any species thus designated. FESA Section 9 prohibits the “take” of species listed by USFWS as threatened or endangered. As defined in the FESA, taking means “... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.” Recognizing that take cannot always be avoided, FESA Section 10(a) includes provisions for takings that are incidental to, but not the purpose of, otherwise lawful activities.

FESA Section 7(a)(2) requires all federal agencies, including USFWS, to evaluate projects authorized, funded, or carried out by federal agencies with respect to any species proposed for listing or already listed as endangered or threatened and the species’ critical habitat, if any is proposed or designated. Federal agencies must undertake programs for the conservation of endangered and threatened species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its “critical habitat.”

As defined in the FESA, “individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.”

FESA Section 4(a)(3) and (b)(2) requires the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in FESA Section 3(5)(A): (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (PCEs) (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) domestically implements a series of international treaties that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds; the act provides that it shall be unlawful, except as permitted by regulations, “to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird” (16 USC 703).

Bald and Golden Eagle Protection Act

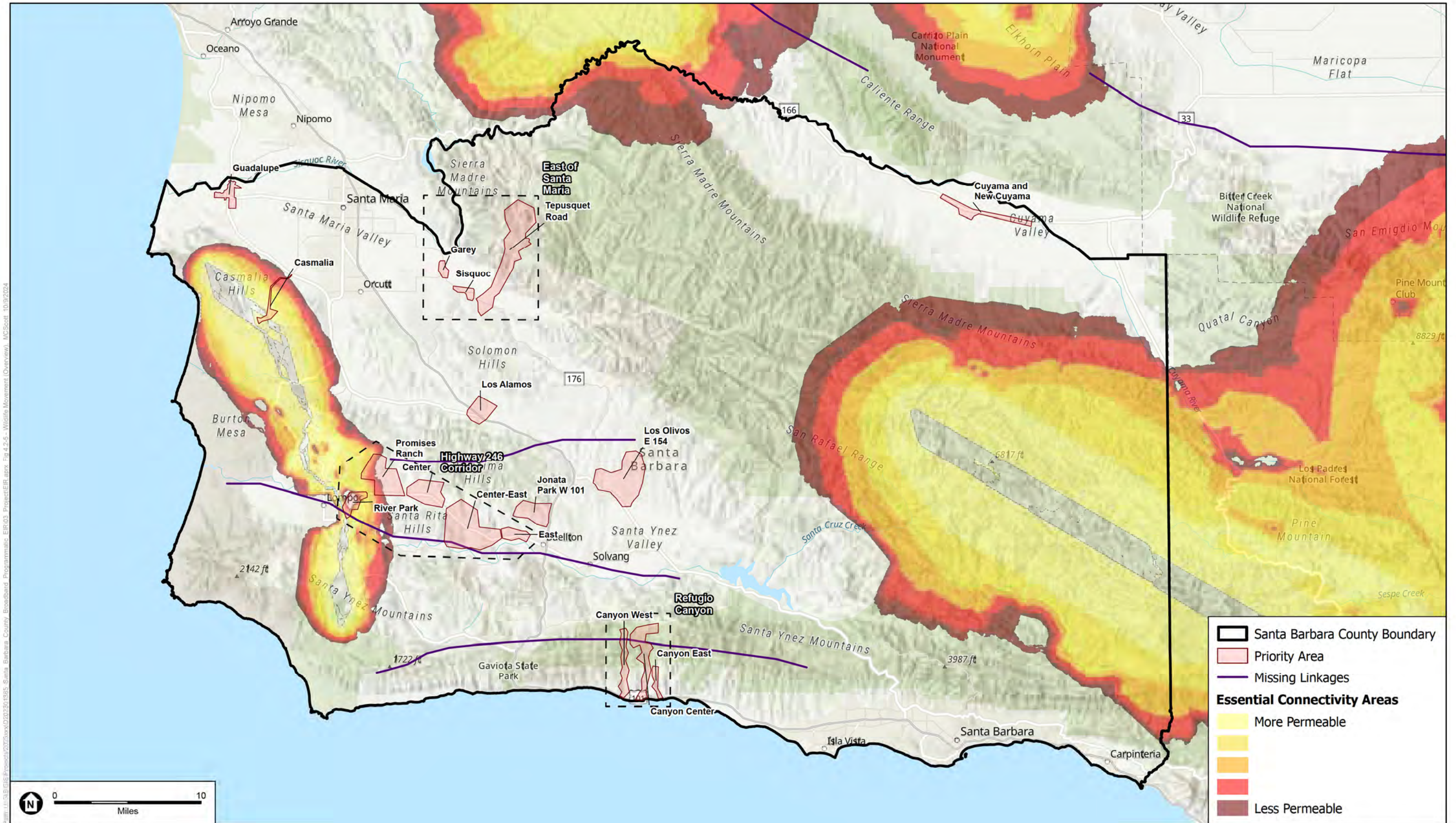
The Bald and Golden Eagle Protection Act (16 USC 668) protects bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species, and establishes civil penalties for violation of this act.

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the law was significantly reorganized and expanded in 1972. “Clean Water Act” became the law’s common name with amendments in 1972.

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Activities in waters of the U.S. regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and mining projects. Section 404 requires that a permit be issued before dredged or fill material may be discharged into waters of the U.S., unless the activity is exempt from regulation under Section 404 (e.g., certain farming and forestry activities).

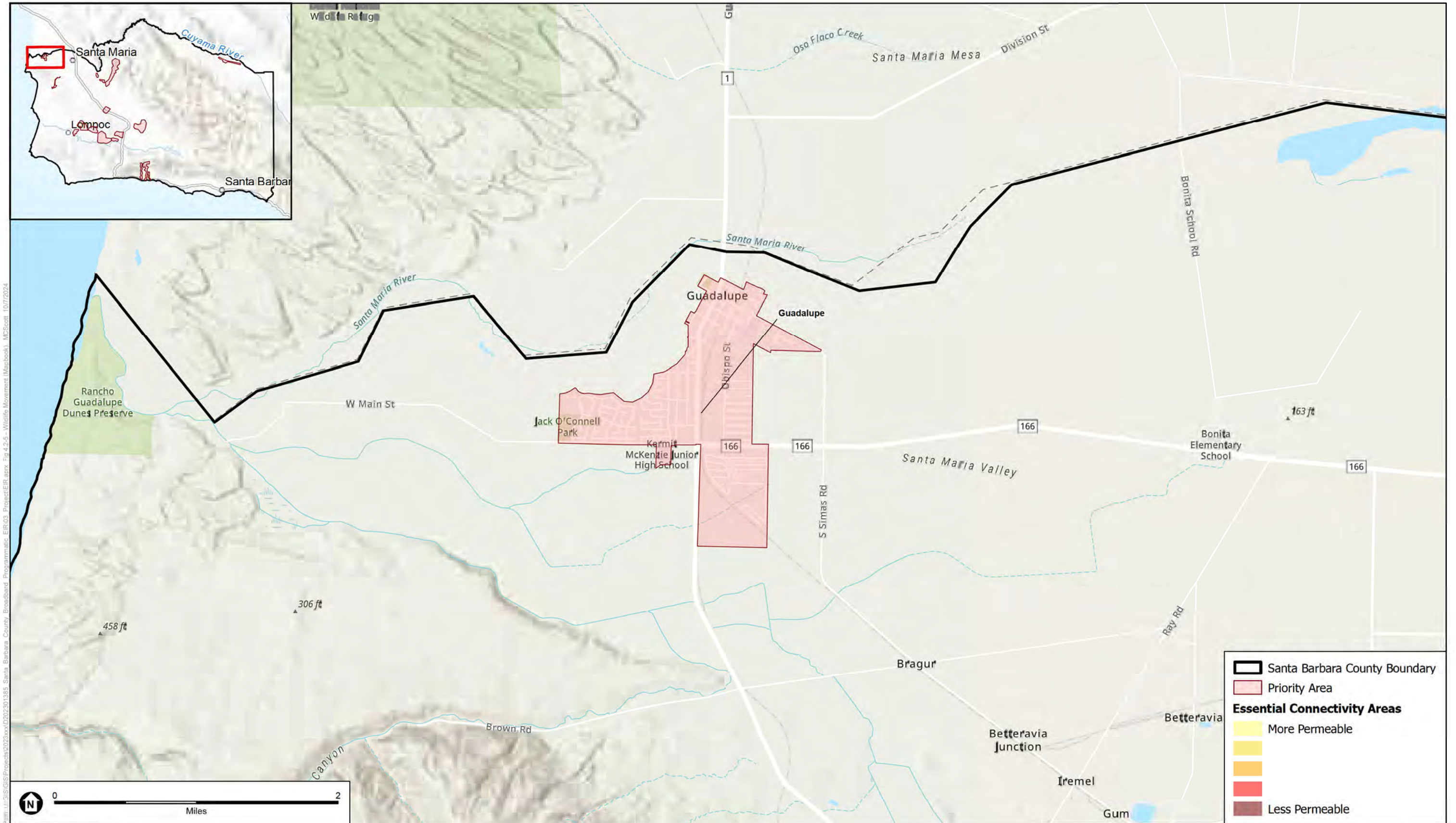
Wetlands are defined by USACE as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 CFR 328.3[c][1]; 40 CFR 120.2[c][1]). Indicators of three wetland parameters (hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by site investigation, must be present at a site for USACE to classify the site as a wetland (Environmental Laboratory 1987).



SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

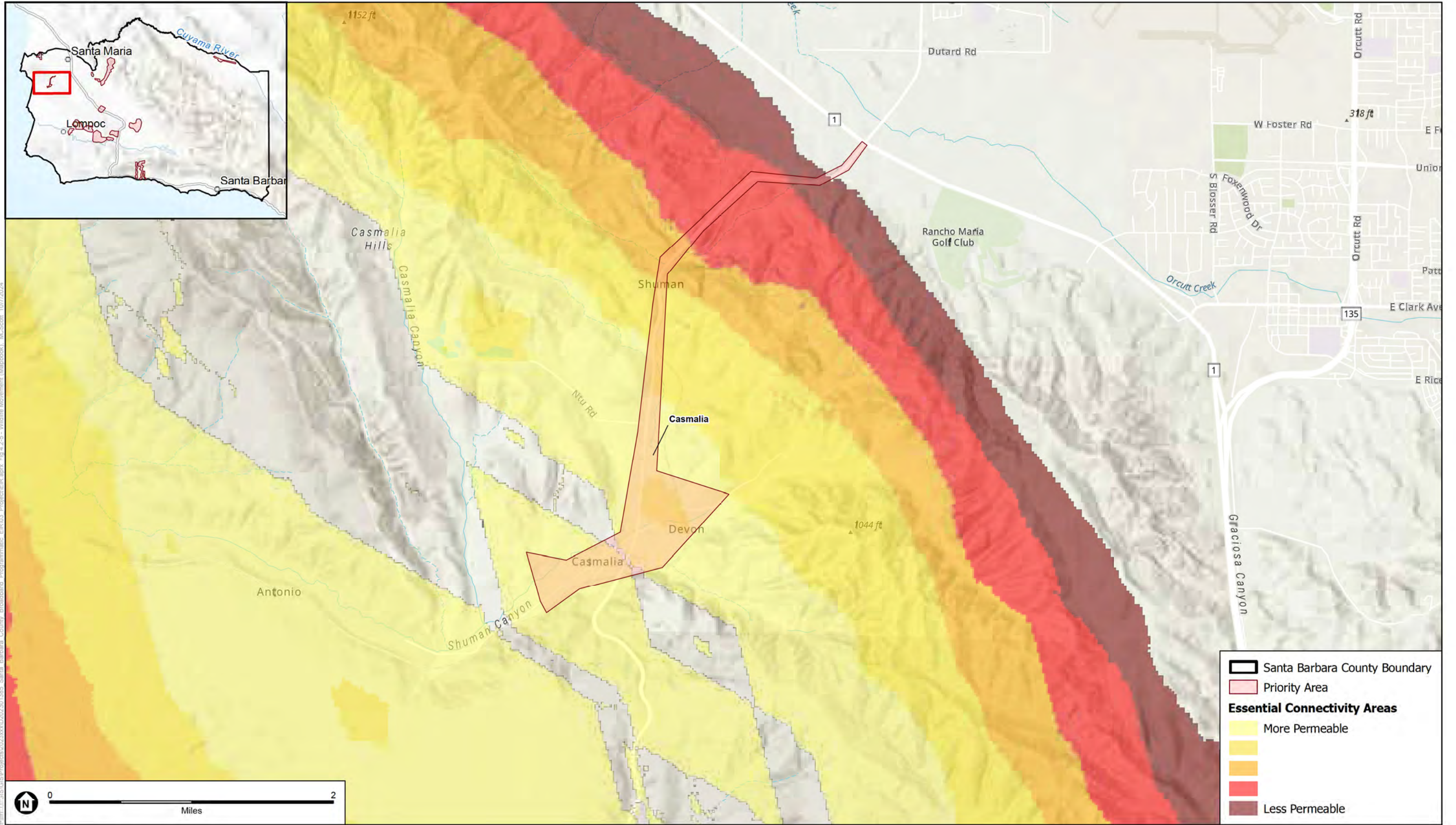
Figure 4.2-5
Wildlife Movement
Overview



SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

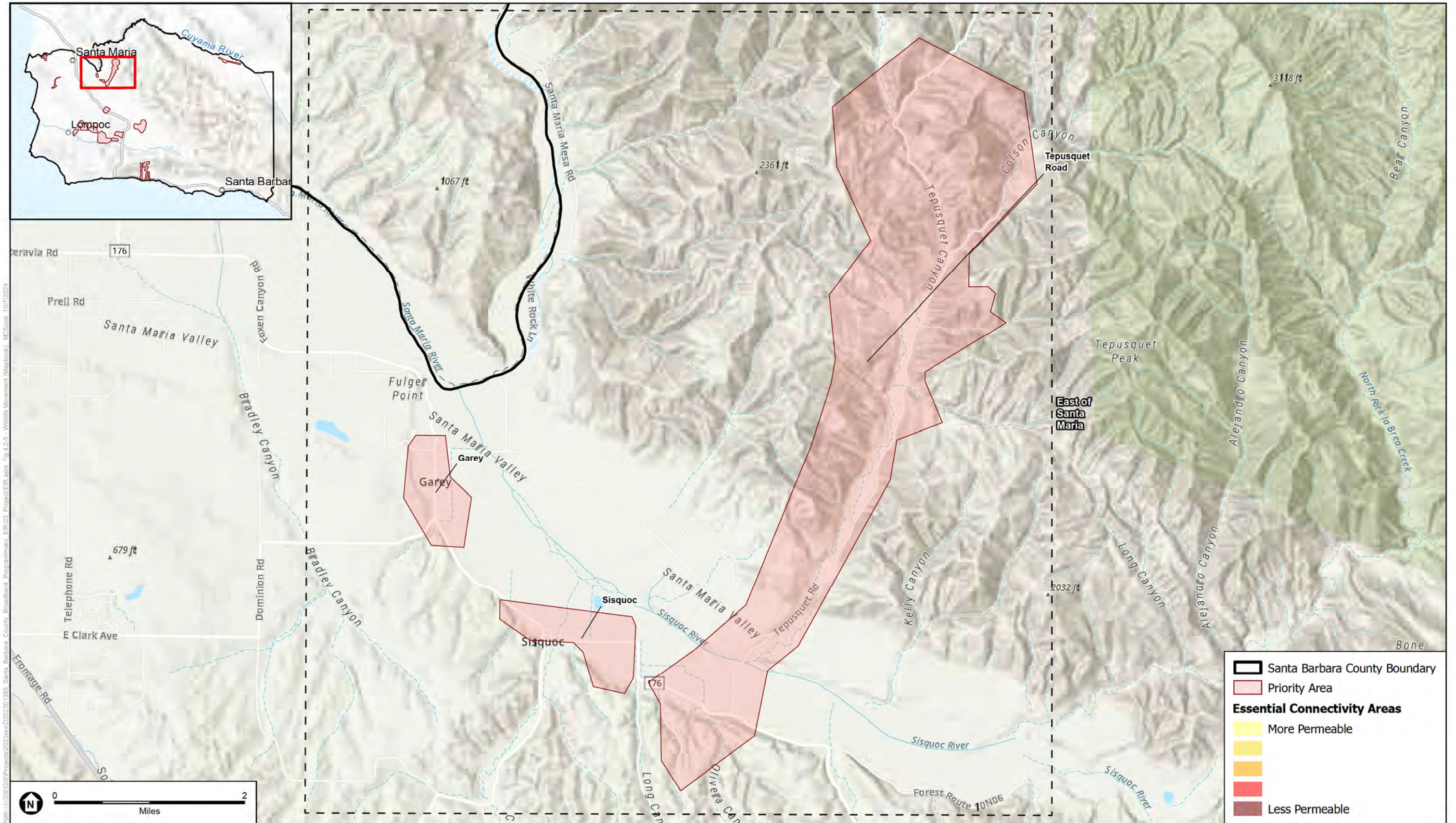
Figure 4.2-5A
Wildlife Movement
Guadalupe



Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5B
Wildlife Movement
Casmalia

U:\GIS\Projects\2023\202301385 - Santa Barbara County Broadband Program\GIS\Projects\EIR\03 - Project\EIR\figs - Fig 4.2-5 - Wildlife Movement (Mapbook)_MCScott_10/7/2024



SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5C
Wildlife Movement
East of Santa Maria



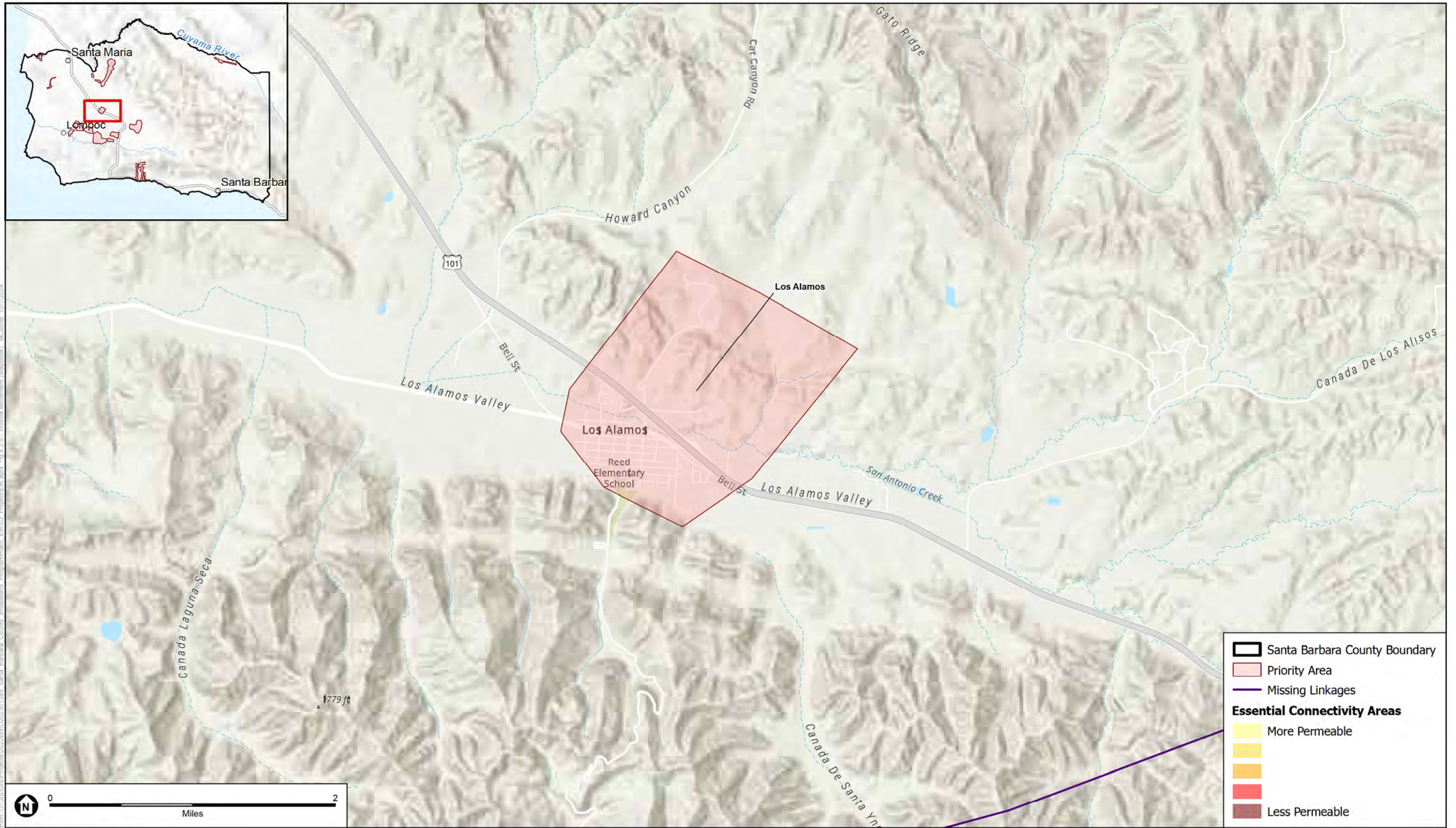
Santa Barbara County Broadband Programmatic EIR/03 Project EIR app. Fig. 4.2-5. Wildlife Movement (Mapbook). M/Scott 10/17/2024

SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5D
Wildlife Movement
Cuyama and New Cuyama

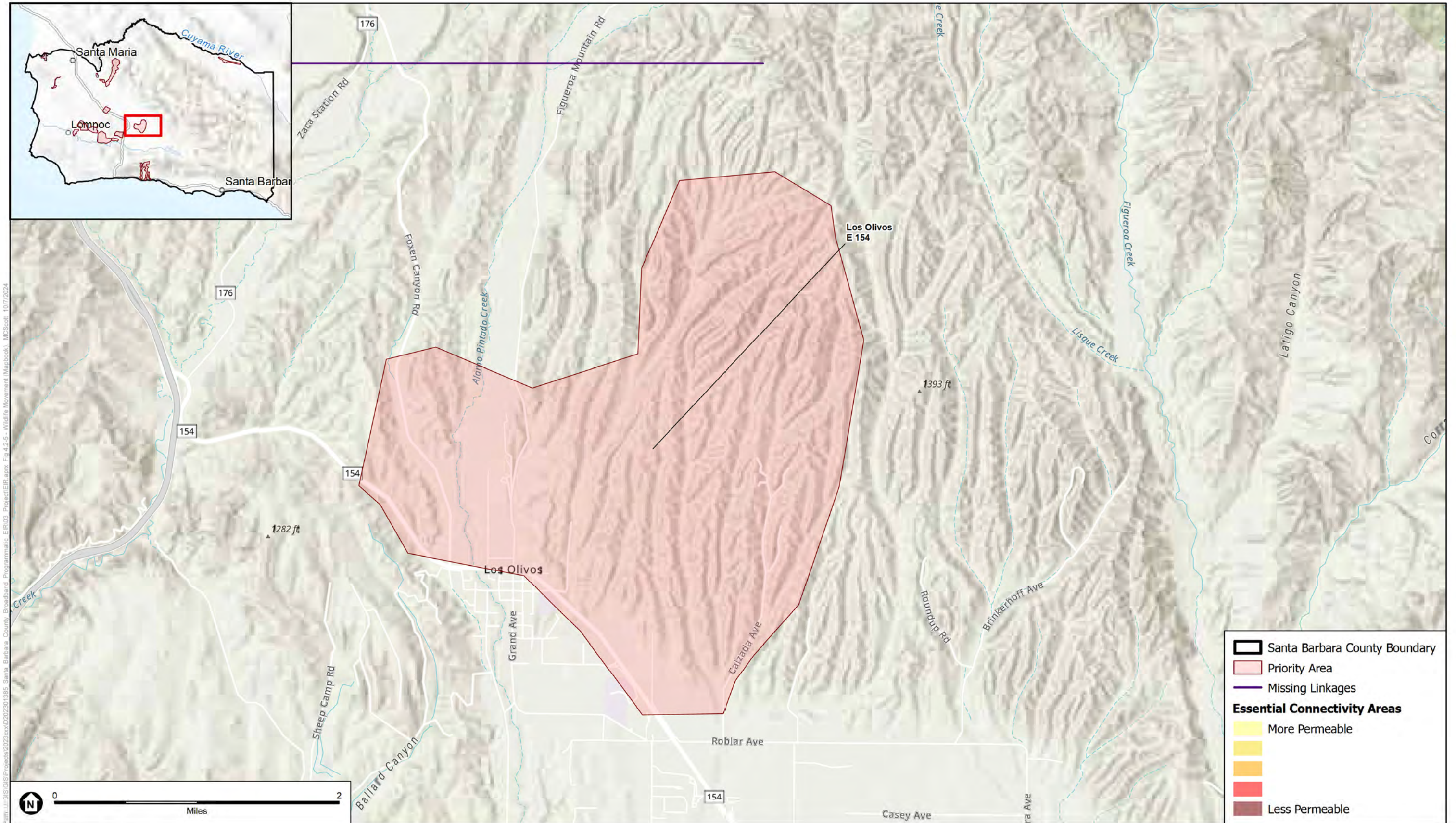




SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

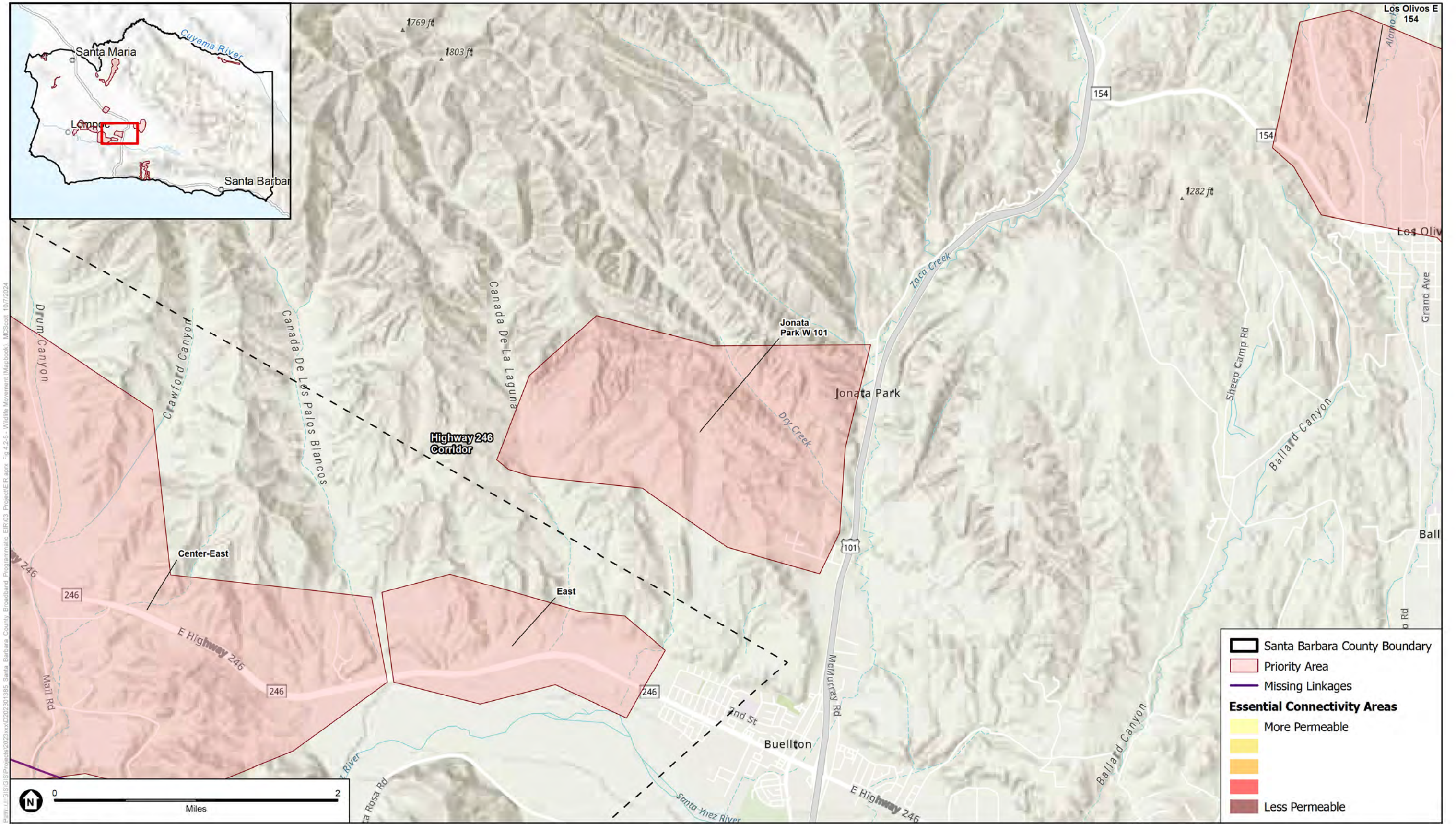
Figure 4.2-5E
Wildlife Movement
Los Alamos



SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

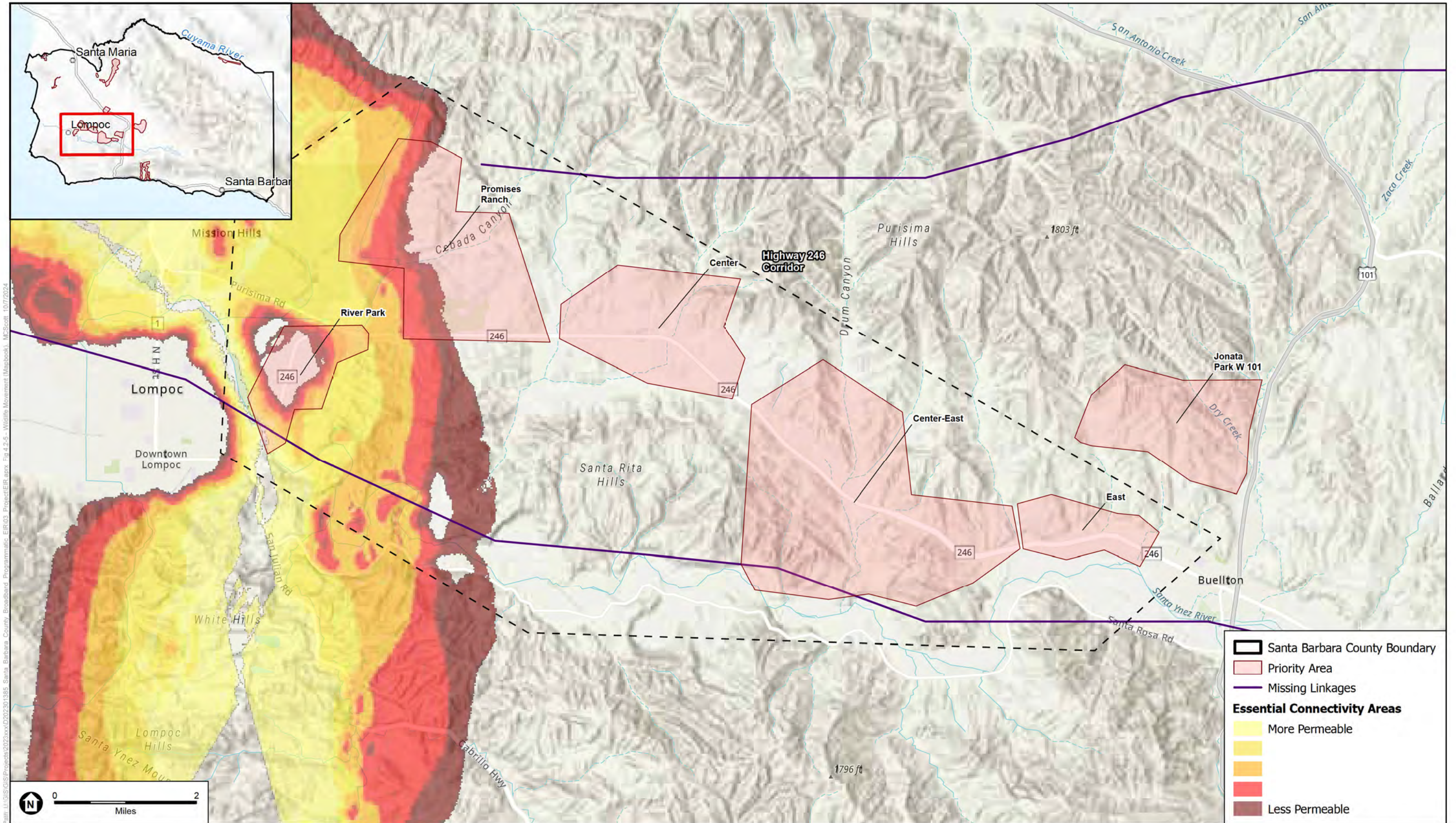
Figure 4.2-5F
Wildlife Movement
Los Olivos E 154



SOURCE: ESA, 2024; CDFW, 2024

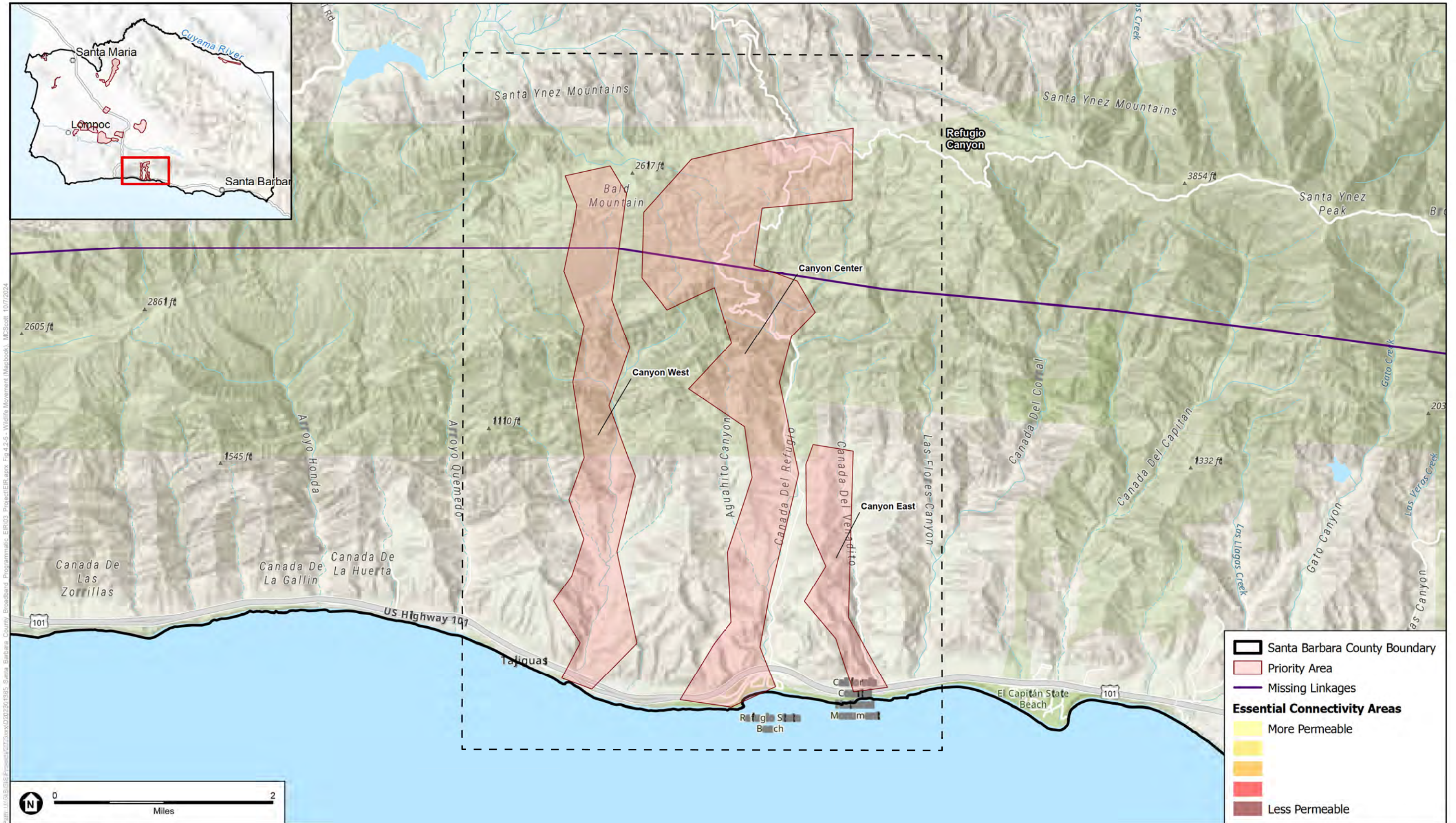
Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5G
Wildlife Movement
Jonata Park W 101



Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5H
Wildlife Movement
Highway 246 Corridor



SOURCE: ESA, 2024; CDFW, 2024

Santa Barbara County Last-Mile Broadband Program

Figure 4.2-5I
Wildlife Movement
Refugio Canyon

Section 401 of the CWA gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the U.S. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the state or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307.

Rivers and Harbors Act, Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the U.S. Structures or work outside the limits defined for navigable waters of the U.S. require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the U.S. and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

State

CEQA Guidelines Section 15380

Although Threatened and Endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(b) provides that a species not listed by FESA or the CESA may be considered rare or endangered if it can be shown to meet certain criteria for rarity. These criteria have been modeled after the definition of FESA and the section of CFGC discussing rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a species that meets the CEQA criteria but has not been listed by CDFW or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies have the opportunity to designate the species protection.

CEQA Guidelines also identify other locally or regionally significant resources, including natural communities or habitats as sensitive resources. CEQA requires an assessment of such communities and potential project impacts. Natural communities identified by CDFW as sensitive are considered to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities.

California Endangered Species Act

The CESA (CFGF Section 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is “consistent” with the CESA under CFGF Section 2080.1. For projects that would result in take of a species listed under the CESA only, an incidental take permit is required under Section 2081(b).

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state (California’s surface waters and groundwater, including wetlands) fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect waters of the state must obtain a Waste Discharge Requirement from the RWQCB in the absence of federal waters. The majority of the County falls under the jurisdiction of the Central Coast RWQCB, though a small portion of the County (along its eastern boundary) is within the jurisdiction of the Los Angeles RWQCB.

California Fish and Game Code

Sections 1600–1616

Under these sections of the CFGF, a project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a “stream” is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

Sections 3503, 3503.5, 3513, and 3800

Under these sections, a project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to CFGF Section 3800.

Sections 3511, 4700, 5050, and 5515

These sections of the CFGC prohibit take or possession of fully protected species. CDFW does not have the authority to permit incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Native Plant Protection Act

California's Native Plant Protection Act requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least ten days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. Landowners are required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Porter-Cologne Water Quality Control Act

The State Water Board regulates the protection of waters of the state through Section 13050[e] of the California Water Code. Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act to mean any surface water or groundwater, including saline waters within the boundaries of the state. Under this definition, isolated wetlands that may not be subject to regulations under federal law are considered waters of the state and regulated accordingly. The California Water Boards are in the process of updating the state Wetland Area Protection Policy, which includes a proposed wetland definition.

Local

County of Santa Barbara

County of Santa Barbara Comprehensive Plan

The County has prepared the Santa Barbara County Comprehensive Plan (Comprehensive Plan), which is a long-term plan that is meant to guide future development within the County. The Comprehensive Plan includes a Land Use Element, which lays out the general patterns of development throughout the County, as well as a Conservation Element, which includes policies that address the conservation, development, and use of natural resources including water, forests, soils, rivers, and mineral deposits in the County (Santa Barbara County 1979a; Santa Barbara County 1980). The Comprehensive Plan also includes an Open Space Element that identifies areas within the County where natural resources such as wetlands, rare and endangered species, and shorelines and dunes occur (Santa Barbara County 1979b).

The Land Use Element and Conservation Element policies related to biological resources that would be applicable to the Project include the following (Santa Barbara County 1979a; Santa Barbara County 1980):

Land Use Element

Hillside and Watershed Protection Policies

1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion, or other hazards shall remain in open space.
3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.
4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location.
5. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater recharge.
6. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Streams and Creeks Policies

1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Conservation Element

- Naples Reef and inshore area should be maintained primarily as a scientific research and educational area. The Local Coastal Program, in consultation with the state Department of Fish and Game, recommends that continued recreational use of this area be permitted and monitored to prevent depletion of marine resources.
- Coastal dunes should be protected from all but scientific and educational uses, except portions of the Guadalupe Dunes already scarred by ORV's. Wherever possible, dune areas should be placed in a "preserve" status. Ocean Beach County Park should not be expanded.
- In Goleta, Devereux, and Carpinteria sloughs, scientific and educational research and recreational activities should be limited, traffic should be minimized, and the present size of the sloughs should be maintained. The Mosquito Abatement District should be encouraged to reduce control activities to the minimum level needed to avoid severe nuisance problems and to carry out studies to achieve this goal.
- Native grasslands should be subjected only to regulated scientific study wherever they occur.
- On the More Mesa grasslands, only very light recreation restricted to trails should be permitted, in order to protect the White-tailed Kite.
- In the Santa Maria Grassland where the Spadefoot Toad lives, moderate intensity recreation can be tolerated as long as soil disturbance is minimized.

- In the Santa Ynez Valley canyon communities, unregulated and haphazard development should be prohibited, roads should be kept narrow, and cattle grazing closely controlled.
- In the Southern Oak Woodland along Rincon Creek, urban development and all but very light recreation should not be allowed.
- In the Foothill Woodland between Santa Cruz Guard Station and Wheat Peak, development should be stopped, and further road construction should be prevented. Moderate recreational use would be acceptable.
- In the Mixed Evergreen Forest Habitat, disturbance should be minimized by keeping roads as they are and curtailing development.
- In the Jualachichi Summit area, Jalama Road should not be widened, and cattle grazing should not be permitted near the summit.
- The Purisima Hills should be preserved by limiting road widening and restricting the number of trails.
- In the Coulter Pine Forest on the ridge of the Santa Ynez Mountains, the practice of spraying herbicide should be curtailed. The U.S. Forest Service has banned ORV's in order to minimize disturbance of the habitat.
- In the Miranda Pine Mountain and associated upland area, light recreation activities could be allowed, but road building and development should be stopped.
- Around trees serving as traditional roosting sites for butterflies and Turkey Vultures, a 100 foot wide buffer zone should be established for protection of these species.
- The nine streams in the County deserving special protection are Rattlesnake, Mission, San Roque, San Jose, Dos Pueblos, Tajiguas, Arroyo Hondo, Refugio, and Jalama Creeks. Only scientific study and light recreation activities should be permitted in or near these streams, and buffer strips at least 100 feet wide should be established. Pesticides should not be used in these buffer zones.
- Development of the Santa Ynez River should be halted, the river water should not be depleted further, and no pollutants should be discharged into the river.
- The eastern end of Lake Cachuma should remain undisturbed to protect the bird habitat, and the lake's north shore also should remain closed to the public.
- The County should evaluate each of these recommendations in preparing environmental impact reports, in order to ensure that adequate consideration is given to preserving ecological communities.

Santa Barbara County Coastal Land Use Plan

Each of the counties and cities along the California coast is required by the Coastal Act to prepare a Local Coastal Program (LCP) for the portion of the unincorporated area of the County within the Coastal Zone. The local coastal program is required to include a Land Use Plan, which serves as the local coastal element of the County's general plan. The Santa Barbara County Coastal Land Use Plan (CLUP) is a guide for the general patterns of development throughout the coastal areas of the County. Its purpose is to protect coastal resources while accommodating land use development within the Coastal Zone. The CLUP includes policies related to major topics that reflect the principal coastal resource protection and development issues in the County. These policies are meant to bring the County into conformity with the Coastal Act and all new development within the County's coastal zone will have to meet the standards set forth in these policies. CLUP policies related to biological resources that may be applicable to the future

broadband facilities that could be developed under the Project include the following (Santa Barbara County 1982):

9-1: Prior to the issuance of a development permit, all projects on parcels shown on the land use plan and/or resource maps with a Habitat Area overlay designation or within 250 feet of such designation or projects affecting an environmentally sensitive habitat area shall be found to be in conformity with the applicable habitat protection policies of the land use plan. All development plans, grading plans, etc., shall show the precise location of the habitat(s) potentially affected by the proposed project. Projects which could adversely impact an environmentally sensitive habitat area may be subject to a site inspection by a qualified biologist to be selected jointly by the County and the applicant.

Habitat Type: Dunes

9-2: Because of their State-wide significance, coastal dune habitats shall be preserved and protected from all but resource dependent, scientific, educational, and light recreational uses. Sand mining and oil well drilling may be permitted if it can be shown that no alternative location is feasible and such development is sited and designed to minimize impacts on dune vegetation and animal species. Disturbance or destruction of any dune vegetation shall be prohibited, unless no feasible alternative exists, and then only if re-vegetation is made a condition of project approval. Such re-vegetation shall be with native California plants propagated from the disturbed sites or from the same species at adjacent sites.

9-5: For all permitted uses, including recreation, foot traffic on vegetated dunes shall be minimized. Where access through dunes is necessary, well-defined footpaths shall be developed and used.

Habitat Type: Wetlands

9-9: A buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands. No permanent structures shall be permitted within the wetland or buffer area except structures of a minor nature, i.e., fences, or structures necessary to support the uses in Policy 9-10.

The upland limit of a wetland shall be defined as: 1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; or 2) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or 3) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation and land that is not.

Where feasible, the outer boundary of the wetland buffer zone should be established at prominent and essentially permanent topographic or manmade features (such as bluffs, roads, etc.). In no case, however, shall such a boundary be closer than 100 feet from the upland extent of the wetland area, nor provide for a lesser degree of environmental protection than that otherwise required by the plan. The boundary definition shall not be construed to prohibit public trails within 100 feet of a wetland.

For the Highway 101: Carpinteria to Santa Barbara project and the projects identified in Policy 7-31 and Policy 7-32, new development in wetlands or within the 100-foot wetland buffer strip may be permitted in accordance with the provisions of the Transportation Corridor Wetland Overlay District (TCWO), in Chapter 35-102H of the Coastal Zoning Ordinance.

9-14: New development adjacent to or in close proximity to wetlands shall be compatible with the continuance of the habitat area and shall not result in a reduction in the biological productivity

or water quality of the wetland due to runoff (carrying additional sediment or contaminants), noise, thermal pollution, or other disturbances.

Habitat Type: Native Grasslands

9-18: Development shall be sited and designed to protect native grassland areas.

Habitat Type: Vernal Pools

9-21: Development shall be sited and designed to avoid vernal pool sites as depicted on the resource maps.

Habitat Type: Butterfly Trees

9-22: Butterfly trees shall not be removed except where they pose a serious threat to life or property, and shall not be pruned during roosting and nesting season.

9-23: Adjacent development shall be set back a minimum of 50 feet from the trees.

Habitat Type: Marine Mammal Rookeries and Hauling Grounds

9-25: Marine mammal rookeries shall not be altered or disturbed by recreational, industrial, or any other uses during the times of the year when such areas are in use for reproductive activities, i.e., mating, pupping, and pup care.

Habitat Type: White-Tailed Kite

9-26: There shall be no development including agricultural development, i.e., structures, roads, within the area used for roosting and nesting.

9-28: Any development around the nesting and roosting area shall be set back sufficiently far as to minimize impacts on the habitat area.

9-29: In addition to preserving the ravine plant communities on More Mesa for nesting and roosting sites, the maximum feasible area shall be retained in grassland to provide feeding area for the kites.

Habitat Type: Native Plant Communities

9-35: Oak trees, because they are particularly sensitive to environmental conditions, shall be protected. All land use activities, including cultivated agriculture and grazing, should be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees on grazing lands should be encouraged.

9-36: When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.

Habitat Type: Streams

9-37: The minimum buffer strip for major streams in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams in urban areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis. The buffer shall be established based on an investigation of the following factors and after consultation with the Department of

Fish and Game and Regional Water Quality Control Board in order to protect the biological productivity and water quality of streams:

- 1) soil type and stability of stream corridors;
- 2) how surface water filters into the ground;
- 3) slope of the land on either side of the stream; and
- 4) location of the 100-year flood plain boundary.

Riparian vegetation shall be protected and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible.

9-38: No structures shall be located within the stream corridor except: public trails, dams for necessary water supply projects, flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and other development where the primary function is for the improvement of fish and wildlife habitat. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible.

9-40: All development, including dredging, filling, and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in Policy 9-38. When such activities require removal of riparian plant species, revegetation with local native plants shall be required except where undesirable for flood control purposes. Minor clearing of vegetation for hiking, biking, and equestrian trails shall be permitted.

9-41: All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Santa Barbara County Code

Chapter 9A – Brush Removal, Southeasterly Coastal Area and Coastal Zone

Chapter 9A of the Santa Barbara County Code (County Code) regulates the removal of native brush, shrubs, trees and roots within the southeasterly coastal area of the unincorporated County to reduce erosion damage, flood hazards, and soil loss. This regulation requires that written approval from the building and safety division of the department of planning and development be obtained prior to removing, destroying, or causing the removal or destruction of natural vegetation within the southeasterly coastal areas of the County covered by this regulation.

Chapter 14 Appendix A – Grading Ordinance Guidelines for Native Oak Tree Removal

The purpose of this regulation is to protect native oak trees and govern deciduous and live oak removals. It proposes a tiered system based on lot size and the number of trees removed to determine the applicable permits required. Tier 1 covers exempt tree removals, Tier 2 requires replanting, Tier 3 requires a management plan, and Tier 4 requires discretionary permit review from the County. The County Grading Ordinance applies to all private land outside of the Coastal Zone and urban boundaries.

Santa Barbara County Land Use and Development Code

The County's Land Use and Development Code, Chapter 35 of the County Code, includes development standards that are meant to protect biological resources (Santa Barbara County 2024).

Section 35.28.100 Environmentally Sensitive Habitat Overlay

Section 35.28.100 of the Land Use and Development Code provides restrictions on development in areas with unique natural resources including sensitive plant and wildlife species and/or their habitats. The overlay is intended to:

1. Protect and preserve specified areas in which plant or wildlife species or their habitats are either rare or especially valuable because of their role in the ecosystem, and that could be easily disturbed or degraded by human activities and developments; and
2. Ensure that each project permitted in the overlay zone is designed and carried out in a manner that will provide the maximum feasible protection to sensitive habitat areas.

Sections 35.28.100(B) and (C) describe the applicability of the overlay (e.g., description of how a determination of the ESH boundary is made during permit application review) and permit and processing requirements, respectively.

Section 35.28.170 Riparian Corridor – Goleta (RC-GOL) Overlay Zone

Section 35.28.170 of the LUDC identifies the Goleta (RC-GOL) overlay zone is applied within rural areas designated agriculture on the Comprehensive Plan maps for the Eastern Goleta Valley Community Plan area and Goleta Community Plan area to protect and preserve mapped Riparian Corridors that could be easily disturbed or degraded by development and other human activities. The overlay is also intended to maintain a continuous canopy of trees along each Riparian Corridor and protect the overall ecological integrity of the mapped stream system. Sections 35.28.170(B) and (C) describe the applicability of the overlay and permit and processing requirements, respectively.

Chapter 35 – Zoning, Article IX – Deciduous Oak Tree Protection and Regeneration

The County Deciduous Oak Tree Protection and Regeneration Ordinance implements the goals and policies of the Santa Barbara County Comprehensive Plan that promote the protection of deciduous oak trees (Santa Barbara County 2003). Article IX identifies requirements for oak tree replacement if an oak tree removal permit is permitted, including requiring preparation of an Oak Tree Management Plan, replacing oak trees removed at a compensation ratio of 15 to 1, replacing trees with native nursery stock, planting saplings in suitable locations, and maintaining and protecting planted saplings. These regulations address deciduous oak tree removal in the inland rural areas of the county if such removal is not associated with development that requires a permit under Articles III or IV of Chapter 35 of the County Code. For the urban and coastal areas, community plans and the CLUP determine tree protection policies.

Santa Barbara County Coastal Zoning Ordinance

As described above, each of the counties and cities along the California coast is required by the Coastal Act to prepare a Local Coastal Program (LCP) for the portion of the unincorporated area of the County within the Coastal Zone. The local coastal program is required to include a zoning ordinance. Thus, the County prepared and adopted the County Coastal Zoning Ordinance which will implement the certified Land Use Plan by classifying and regulating the uses of land, buildings, and structures within the

County's Coastal Zone. The Coastal Zoning Ordinance applies to any development within the Coastal Zone of the unincorporated area of the County (Santa Barbara County 2008).

County Environmental Thresholds and Guidelines Manual

The County prepared its Environmental Thresholds and Guidelines Manual to assist the public, applicants, environmental consulting firms, and County decision makers in understanding the use and application of various environmental impacts from proposed Projects (Santa Barbara County 2021). The most recent update to the County Environmental Thresholds and Guidelines Manual was published in January of 2021. The manual includes thresholds of significance that are intended to supplement provisions of the State CEQA Guidelines for a variety of environmental resources, including biological resources. These thresholds are included in Section 4.2.4, below.

Incorporated Cities

There are eight incorporated cities in Santa Barbara County including Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. Each of these incorporated cities has been required by State law to adopt their own general plans to guide development within the sphere of influence for each city. These general plans are required to include conservation and open space elements which are often combined as one general plan element that describes the natural and human-made resources within the cities and how these resources, including biological resources, will be preserved and protected. Furthermore, each city has its own Municipal Code which may include regulations and requirements for the protection of biological resources within the City, including, but not limited to, tree preservation ordinances. These local plans and regulations would be applicable to construction and operation of future broadband facilities developed under the proposed project that fall within the "sphere of influence" of these cities.

One of the Priority Areas that has been identified for the development of broadband network facilities, the Guadalupe Priority Area, is located within the sphere of influence of the City of Guadalupe. Therefore, City of Guadalupe plans, policies, and regulations that have been developed for the protection of biological resources are discussed in detail below.

City of Guadalupe General Plan

The City of Guadalupe is located in northern Santa Barbara County, within the Santa Maria Valley. The City's General Plan was adopted in November 2022 and serves as a blueprint of the use and development of land within the City. As required by State law, the General Plan includes a Conservation and Open Space Element that addresses conservation of natural resources and open spaces, including biological resources. The goals and policies included in the Conservation and Open Space Element that are specific to biological resources include the following:

Goal COS-2: To protect natural habitats and other open space areas to ensure the longevity of native species as the built environment develops and to preserve aesthetic and visual amenities.

Policy COS-1.4: The City will work to protect existing open space and habitat resources, as they are essential to the wellbeing of Guadalupe.

Policy COS-1.5: Where development could occur in areas with potential habitat for special-species occur, such as within the riparian or disturbed grassland areas shown in Figure 5-2,

Habitat Map, and Figure 5-3, Recorded Observations of Special-Status Species, or in other locations where such habitat may be present as identified by the Planning Director, an assessment of potential impacts to biological resources shall be conducted by a qualified biologist. If determined necessary by a qualified biologist, focused surveys per applicable regulatory agency protocols shall be conducted to determine if such species could occur. Impacts to special-status species shall be avoided or minimized to the extent possible. If impacts cannot be avoided, measures to mitigate for the loss of individuals and/or habitat shall be implemented.

Policy COS-1.6: Where development could occur in areas with potential nesting bird habitat, such as within the riparian or disturbed grassland areas shown on Figure 5-2, Habitat Map, or in other locations where such habitat may be present as may be identified by the Planning Director, native nesting birds protected by the Federal Migratory Bird Treaty Act and the California Fish and Game Code shall be surveyed for and protected, if found. Disturbance activities shall not occur during the nesting season (generally considered February 1 – August 31) until nesting bird surveys have been conducted and no nesting activity is occurring on or adjacent to a project site. If nesting activity is observed, a qualified biologist may recommend an exclusion area be maintained until birds have fledged.

Policy COS-1.7: The City shall protect the ecological, aesthetic, and recreational value of sensitive wetland and riparian habitats associated with aquatic features within and directly adjacent to the city limits. Where development could occur in or within 50 feet of the edge of riparian vegetation or 50 feet from the top of bank of wetland habitats shown on Figure 5-2, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, a qualified biologist or restoration ecologist shall be retained to determine the appropriate development setbacks and other protective measures needed to ensure the long-term protection and enhancement of the sensitive community.

Policy COS-1.8: Applicants for projects on sites within 50 feet from the top of bank of potential jurisdictional wetlands or waterways as shown on Figure 5-2, Habitat Map, or in other locations where such features may be present as may be identified by the Planning Director, shall retain a qualified biologist/wetland regulatory specialist to conduct a site investigation and assess whether the wetland or waterway features are jurisdictional, assess potential impacts, and determine whether stream buffers/riparian setbacks are required. If a feature is found to be jurisdictional or potentially jurisdictional, the applicant shall comply with the appropriate permitting processes.

City of Guadalupe Street Tree Ordinance

The City of Guadalupe Street Tree Ordinance was enacted in 1959 and was amended in 2023. The purpose of the Street Tree Ordinance is to maintain the City’s “urban forest” by regulating the planting of trees in public places and protecting these and other existing trees from injury or abuse as well as providing for required maintenance of street trees. The Street Tree Ordinance prohibits planting or removing from any public parking strip (i.e., any portion of a City easement over privately owned project adjacent to a City street) or other public place in the City without permission from the Director of Public Works. In addition, the Street Tree Ordinance prohibits destroying or mutilating trees and prohibits attaching rope, wire, sign, poster, handbill, or other thing to a tree growing in a public space. It is also a violation of the ordinance to cause or permit wire charged with electricity to come into contact with protected trees, or to allow any gaseous, liquid, or solid substance which is harmful to protected trees to come into contact with their roots or leaves.

4.2.3 Analysis, Impacts and Mitigation

Methodology and Significance Thresholds

The database searches and literature review identified sensitive biological resources have been previously recorded within the County, which assisted in establishing a list of potential special-status species and sensitive habitats that could be affected by the implementation of the future broadband facilities within the Priority Areas and the future broadband facilities within other parts of the County. The CNDDDB and CNPS RPI were queried for special-status species with the potential to occur within the County, which are included in Appendix C, while the USFWS Critical Habitat Mapper was used to identify USFWS-designated critical habitat for these special-status species within the County. The CALVEG database was used to identify vegetation types within the County that could support sensitive natural communities as designated by various resource agencies, such as the CDFW California Natural Community List (CDFW 2023a). These sensitive natural communities are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution and are considered threatened enough to warrant some level of protection. In addition, the NWI was used to identify riparian and wetland areas within the County. The results of the database search and literature review formed the basis for the analysis of impacts of future broadband facilities on sensitive resources within the County and the development of mitigation measures to avoid, reduce, and minimize impacts to those resources.

As discussed within Chapter 2, *Project Description*, the area subject to future broadband facility installations under the Project includes the entire County, and, with the exception of the Priority Areas, the specific locations of future broadband facilities are not currently known. Therefore, the analysis presented below considers the impacts that would result from implementation of the future broadband facilities within the Priority Areas as well as potential impacts that could result from implementation of the future broadband facilities within the County as a whole.

Significance Thresholds

CEQA Appendix G

Pursuant to the *CEQA Guidelines*, potentially significant impacts to biological resources would result if the Project would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

County of Santa Barbara Thresholds of Significance

In addition to the CEQA Guidelines, the Santa Barbara County Environmental Thresholds and Guidelines Manual (2021) contains criteria for determining the significance of an impact to biological resources. Disturbance to habitats or species may be significant, based on substantial evidence in the record, if they substantially impact significant resources for either the short- or the long-term in the following ways:

- Substantially reduce or eliminate species diversity or abundance.
- Substantially reduce or eliminate quantity or quality of nesting areas.
- Substantially limit reproductive capacity through losses of individuals or habitat.
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes).
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

The manual states that environmental impact analysis and mitigation needs to include federal and State biological resource regulations (i.e., the federal and State Endangered Species Acts, National Environmental Policy Act, Clean Water Act Section 404, Bald Eagle Protection Act, Migratory Bird Treaty Act, Executive Order 11990 [wetlands protection], Rivers and Harbors Act Section 10, Marine Protection, Sanctuary and Research Act, Marine Mammal Protection Act, and Section 1601 and 1603 Stream Alteration Agreements). In addition, requirements for the protection of biological resources listed in the Comprehensive Plan Conservation Element, Environmental Resource Management Element, Land Use Element, Community Plans, and Local Coastal Plans should also be included for projects in the unincorporated area of Santa Barbara County.

Section D of the County's Environmental Thresholds and Guidelines Manual (2021) includes habitat-specific impact assessment guidelines, which provides additional impact assessment guidelines specific to several biological communities. The following summarizes the thresholds applied to different habitat types and resources throughout the county.

Wetlands. Based on the County guidelines, the following types of project-created impacts may be considered significant:

- Projects that result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect on the environment.
- Wildlife access, use, and dispersal in wetland habitats are key components of their ecosystem value. Projects that substantially interrupt wildlife access, use and dispersal in wetland areas, would typically be considered to have potentially significant impacts.

- The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Therefore, maintenance of hydrological conditions, such as the quantity and quality of runoff, must be assessed in project review.

Coastal Salt Marsh. Based on the County guidelines, the following types of project- related impacts may be considered significant:

- Substantial alteration of tidal circulation or decrease of tidal prism;
- Adverse hydrological changes, substantial increase in sedimentation, introduction of toxic elements or alteration of ambient water temperature;
- Creation of indirect impacts such as noise and turbidity that affects sensitive animal species, especially during critical periods such as breeding and nesting;
- Disruption of wildlife dispersal corridors; and
- Disturbance or removal of substantial amounts of marsh habitats.

Vernal Pools. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Direct removal of a vernal pool or vernal pool complex;
- Direct or indirect adverse hydrologic changes such as altered freshwater input, changes in the watershed area or runoff quantity and/or quality, substantial increase in sedimentation, introduction of toxic elements or alteration of ambient water temperature;
- Disruption of a larger plant community (e.g., grassland) within which a vernal pool(s) occur;
- Isolation or fragmentation of contiguous habitat which would disrupt animal movement patterns or seed dispersal routes;
- Activities that would increase the chance of exotic plant invasion;
- Activities that would increase the vulnerability of species to local extirpation.

Riparian Habitats. Based on the County guidelines, the following types of project- related impacts may be considered significant:

- Direct removal of riparian vegetation;
- Disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation;
- Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion;
- Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential; and

- Construction activity that disrupts critical time periods (nesting, breeding) for fish and other wildlife species.

Native Grasslands. Native grasslands are defined as an area where native grassland species comprise 10% or more of the total relative cover. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Removal or severe disturbance to a patch or patches of native grasses greater than $\frac{1}{4}$ acre; or
- Removal or severe disturbance to native grassland patches that are part of a larger significant native grassland.

Oak Woodlands and Forests. Based on the County guidelines, project-created impacts on oak woodlands and forests may be considered significant due to changes in habitat value and species composition such as the following:

- Habitat fragmentation;
- Removal of understory;
- Alteration to drainage patterns;
- Disruption of the canopy; or
- Removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland.

Individual Native Trees. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Impacts to native specimen trees, regardless of size. Specimen trees are defined as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species;
- Impacts to rare native trees, which are very low in number or isolated in distribution; or
- The loss of 10% or more of the trees of biological value on a project site.

Impacts and Mitigation Measures

The following section presents a programmatic-level discussion of the potential for impacts to sensitive biological resources from implementation of the Project, but also provides Project-level analysis of proposed broadband installations within the identified Priority Areas. This section summarizes the impacts associated with construction and operation of future broadband facilities proposed as part of the Santa Barbara County Last-Mile Broadband Program. Due to the programmatic nature of the Project, a precise, project-level analysis of the specific impacts associated with all future individual broadband facilities is not possible at this time. However, a total of nine communities in the County have already been identified as “Priority Areas” under the Broadband Program, which have already been the subject of high-level engineering design. Therefore, the following discussion of impacts and mitigation measure includes discussions of impacts that could occur from installation of broadband facilities within the nine Priority Areas as well as a discussion of impacts that could occur from installation of broadband facilities that may be developed in future within other yet-to-be identified underserved communities in the County.

Threshold 1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact Statement 1: Implementation of the Project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

A total of 117 special-status plant species and 77 special-status wildlife species have been recorded within the County. Future broadband facilities that are sited in undeveloped lands that support suitable habitat for these species could result in negative effects to special-status plants and wildlife. If these species are present and impacts cannot be avoided, then impacts to special-status species from construction or operation of future broadband facilities would be potentially significant.

The Project would include the installation of fiber optic cable in various locations throughout the County. The new fiber optic lines would be installed underground following public or private roadways. The Project also includes installation and construction activities within areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although the Project would be designed to generally avoid drainages and sensitive habitats, specific locations and designs for future broadband facility locations have not yet been determined. Therefore, implementation of the Project could be located within undeveloped land, and it is possible that construction or operation of the Project could impact special status plant or wildlife.

Priority Area Projects

Special-status species that have been recorded within the County were evaluated for their potential to occur in each of the Priority Areas (see Appendix C). It was determined that 56 special-status plant and 50 special-status wildlife species have a moderate to high potential to occur within one or more of the Priority Areas and are evaluated (CDFW 2024a; CNPS 2024). In addition, USFWS-designated critical habitat for 14 special-status species is present within the County (USFWS 2024a).

As described within Chapter 2, *Project Description*, in general, the new fiber optic lines would be installed underground following public or private roadways with the intention to minimize or avoid disturbance of roadway surfaces wherever feasible. However, it is possible some fiber optic lines could be installed directly under roadways in areas with limited shoulder space or where existing conduit under the road may be used, thus avoiding new surface disturbance. The Project would also include installation and construction activities within those areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although not anticipated, where subsurface installation of fiber

optic cable is infeasible, aerial installation along existing utility poles will be undertaken. GSCA's methods of aerial installation will follow General Order 95 pole safety and loading requirements.

Construction

Plants

There are 56 special-status plant species that were determined to have a moderate to high potential to occur within at least one of the Priority Areas. **Table 4.2-2**, below, provides a summary of each special-status plant species with a moderate to high potential to occur within the Priority Areas.

Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct crushing or burial of individual plants and may alter or degrade existing suitable habitat for these species. In addition, construction-related traffic and earth moving activities may generate dust that adheres to leaves and inhibits photosynthesis and grading activities could disturb soils that could contain seeds, bulbs, nutrients, and mycorrhizae that special-status plants utilize for survival. Furthermore, incidental introduction of nonnative weed species from construction activities could result in loss of suitable habitat for native special-status plant species. Therefore, impacts to special-status plant species, if present, from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status plant species within the Priority Areas, **Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-02: Special-Status Plant Species; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-07: Revegetation Plan** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status species within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Wildlife

There are 48 special-status wildlife species that have been determined to have a moderate to high potential to occur within at least one of the Priority Areas. **Table 4.2-3**, below, provides a summary of each special-status wildlife species with a moderate to high potential to occur within the Priority Areas.

**TABLE 4.2-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN PRIORITY AREAS**

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Hoover's bent grass <i>Agrostis hooveri</i>	1B.2	M	H	H	--	H	H	H	H	M
Santa Ynez groundstar <i>Ancistrocarphus keilii</i>	1B.1	--	--	--	--	M	M	H	H	M
aphanisma <i>Aphanisma blitoides</i>	1B.2	--	M	--	--	--	--	--	--	--
Eastwood's brittle-leaf manzanita <i>Arctostaphylos crustacea</i> ssp. <i>eastwoodiana</i>	1B.1	--	--	--	--	--	--	--	M	--
La Purisima manzanita <i>Arctostaphylos purissima</i>	1B.1	--	M	H	--	M	--	M	M	M
Refugio manzanita <i>Arctostaphylos refugioensis</i>	1B.2	--	--	H	--	--	--	--	M	H
sand mesa manzanita <i>Arctostaphylos rudis</i>	1B.2	--	H	H	--	M	--	M	H	--
Miles' milk-vetch <i>Astragalus didymocarpus</i> var. <i>milesianus</i>	1B.2	--	--	--	--	--	--	--	H	M
Coulter's saltbush <i>Atriplex coulteri</i>	1B.2	--	--	--	--	--	--	--	M	M
south coast saltscale <i>Atriplex pacifica</i>	1B.2	--	--	--	--	--	--	--	M	--
Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i>	1B.2	--	--	--	--	H	H	H	M	--
late-flowered mariposa-lily <i>Calochortus fimbriatus</i>	1B.3	--	--	--	--	--	M	M	M	H

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
<i>La Panza mariposa-lily</i> <i>Calochortus simulans</i>	1B.3	--	--	M	--	--	--	--	--	--
California jewelflower <i>Caulanthus californicus</i>	FE; CE; 1B.1	--	--	--	H	--	--	--	--	--
Lemmon's jewelflower <i>Caulanthus lemmonii</i>	1B.2	--	--	--	H	--	--	--	--	--
Santa Barbara ceanothus <i>Ceanothus impressus</i> var. <i>impressus</i>	1B.2	--	H	--	--	--	--	--	H	--
southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	1B.1	--	--	--	--	--	--	--	--	M
Blakley's spineflower <i>Chorizanthe blakleyi</i>	1B.3	--	--	--	H	--	--	--	--	--
Bolander's water-hemlock <i>Cicuta maculata</i> var. <i>bolanderi</i>	2B.1	--	H	--	--	M	--	--	--	--
compact cobwebby thistle <i>Cirsium occidentale</i> var. <i>compactum</i>	1B.2	H	M	--	--	--	--	--	--	--
La Graciosa thistle <i>Cirsium scariosum</i> var. <i>loncholepis</i>	FE; CT; 1B.1	H	H	M	--	H	--	M	H	--
California saw-grass <i>Cladium californicum</i>	2B.2	--	H	M	--	H	M	M	M	--
seaside bird's-beak <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	CE; 1B.1	--	M	--	--	M	M	H	H	H
Gaviota tarplant <i>Deinandra increscens</i> ssp. <i>villosa</i>	FE; CE; 1B.1	M	H	--	--	--	--	--	M	H

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
dune larkspur <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	1B.2	M	H	M	--	--	M	M	H	--
recurved larkspur <i>Delphinium recurvatum</i>	1B.2	--	--	--	M	--	--	--	--	--
umbrella larkspur <i>Delphinium umbraculorum</i>	1B.3	--	--	H	M	--	H	--	--	H
Vandenberg monkeyflower <i>Diplacus vandenbergensis</i>	FE; 1B.1	--	M	--	--	--	--	--	H	--
beach spectaclepod <i>Dithyrea maritima</i>	CT; 1B.1	M	--	--	--	--	--	--	M	--
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	1B.1	H	H	--	--	--	--	--	M	--
Kern mallow <i>Eremalche parryi</i> ssp. <i>kernensis</i>	FE; 1B.2	--	--	--	H	--	--	--	--	--
Blochman's leafy daisy <i>Erigeron blochmaniae</i>	1B.2	H	--	--	--	--	--	--	--	--
Lompoc yerba santa <i>Eriodictyon capitatum</i>	FE; CR; 1B.2	--	M	M	--	M	--	--	M	--
Ojai fritillary <i>Fritillaria ojaiensis</i>	1B.2	--	--	H	--	--	M	M	M	H
mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	1B.1	--	H	H	--	M	H	H	H	M
Kellogg's horkelia <i>Horkelia cuneata</i> var. <i>sericea</i>	1B.1	M-H	H	M	--	M	--	--	M	--
Santa Lucia dwarf rush <i>Juncus luciensis</i>	1B.2	--	--	--	--	--	--	--	--	M
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	1B.1	--	--	--	--	--	M	--	M	M

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
blushing layia <i>Layia erubescens</i>	1B.2	M	H	H	--	H	H	H	H	M
pale-yellow layia <i>Layia heterotricha</i>	1B.1	--	--	--	M	--	M	--	H	--
Santa Barbara honeysuckle <i>Lonicera subspicata</i> var. <i>subspicata</i>	1B.2	--	--	--	--	M	H	--	H	H
showy golden madia <i>Madia radiata</i>	1B.1	--	--	--	H	--	--	--	--	--
slender bushmallow <i>Malacothamnus jonesii</i> var. <i>gracilis</i>	1B.1	--	--	M	--	--	--	--	--	--
Carmel Valley malacothrix <i>Malacothrix saxatilis</i> var. <i>arachnoidea</i>	1B.2	--	--	--	--	--	--	--	M	--
white-veined monardella <i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	1B.3	--	--	--	--	--	M	M	H	H
southern curly-leaved monardella <i>Monardella sinuata</i> ssp. <i>sinuata</i>	1B.2	--	H	H	--	H	H	H	H	M
crisp monardella <i>Monardella undulata</i> ssp. <i>crispa</i>	1B.2	--	H	--	--	--	--	--	M	--
San Luis Obispo monardella <i>Monardella undulata</i> ssp. <i>undulata</i>	1B.2	M	H	M	--	--	--	--	M	--
San Joaquin woollythreads <i>Monolopia congdonii</i>	FE; 1B.2	--	--	--	H	--	--	--	--	--
aparejo grass <i>Muhlenbergia utilis</i>	2B.2	--	--	M	--	H	M	M	M	--
Gambel's water cress <i>Nasturtium gambelii</i>	FE; CT; 1B.1	--	M	--	--	--	--	--	M	--

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Sonoran maiden fern <i>Pelazoneuron puberulum var. sonorensis</i>	2B.2	--	--	--	--	--	--	--	M	H
black-flowered figwort <i>Scrophularia atrata</i>	1B.2	H	H	M	--	H	--	M	H	M
chaparral ragwort <i>Senecio aphanactis</i>	2B.2	--	--	--	--	--	M	M	H	H
San Bernardino aster <i>Symphotrichum defoliatum</i>	1B.2	--	H	M	--	M	--	--	M	--
Santa Ynez false lupine <i>Thermopsis macrophylla</i>	CR; 1B.3	--	--	--	--	--	--	--	--	H

NOTES:

Federal Listing Status

- FE Federally Endangered
- FT Federally Threatened
- FC Federal Candidate
- FPE Federally Proposed as Endangered
- FPT Federally Proposed as Threatened
- FPD Federally Proposed for Delisting

State Listing Status

- SE State Listed as Endangered
- ST State Listed as Threatened
- SCE State Candidate for Endangered
- SCT State Candidate for Threatened
- SR State Rare

California Rare Plant Ranks (CRPR):

- California Rare Plant Rank 1A Plants presumed extirpated in California and either rare or extinct elsewhere
- California Rare Plant Rank 1B Plants rare, threatened, or endangered in California and elsewhere
- California Rare Plant Rank 2A Plants presumed extirpated in California but common elsewhere
- California Rare Plant Rank 2B Plants rare, threatened, or endangered in California, but common elsewhere
- California Rare Plant Rank 3 Plants about which more information is needed, a review list
- California Rare Plant Rank 4 Plants of limited distribution, a watch list

Threat Code extensions and their meanings:

- 0.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3- Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

**TABLE 4.2-3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN PRIORITY AREAS**

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Invertebrates										
Crotch's bumble bee <i>Bombus crotchii</i>	SCE	--	M	M	H	M	H	M	M	M
American bumble bee <i>Bombus pensylvanicus</i>	None	--	M	M	M	M	H	M	M	M
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	H	H	H	M	M	M	M	H	M
Kern primrose sphinx moth <i>Euproserpinus euterpe</i>	FT	--	--	--	H	--	--	--	--	--
Fish										
tidewater goby <i>Eucyclogobius newberryi</i>	FE; SSC	--	--	--	--	--	--	--	--	H
unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE; SE; FP	--	H	--	--	--	--	--	--	--
arroyo chub <i>Gila orcuttii</i>	SSC	--	M	--	--	--	--	--	--	--
steelhead - southern California DPS <i>Oncorhynchus mykiss irideus pop. 10</i>	FE; SC	--	--	M	--	--	--	--	M	--
Amphibians										
California tiger salamander - Santa Barbara County DPS <i>Ambystoma californiense pop. 2</i>	FE; ST; WL	--	H	H	--	H	H	H	H	--
arroyo toad <i>Anaxyrus californicus</i>	FE	--	--	H	--	--	--	--	--	--

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
foothill yellow-legged frog - south coast DPS <i>Rana boylei pop. 6</i>	FE; SE; SSC	--	--	M	--	--	--	--	--	H
California red-legged frog <i>Rana draytonii</i>	FT; SSC	H	H	H	--	H	H	H	H	H
western spadefoot <i>Spea hammondi</i>	FPT; SSC	--	H	H	--	H	H	H	H	M
Coast Range newt <i>Taricha torosa</i>	SSC	--	--	--	--	--	--	--	--	H
Reptiles										
California glossy snake <i>Arizona elegans occidentalis</i>	SSC	--	--	--	H	--	--	--	--	--
southwestern pond turtle <i>Actinemys pallida</i>	FPT; SSC	M	H	H	H	H	H	H	H	H
coast horned lizard <i>Phrynosoma blainvillii</i>	SSC	M	H	H	H	M	M	--	H	H
coast patch-nosed snake <i>Salvadora hexalepis virgulata</i>	SSC	--	--	--	--	--	--	--	--	H
two-striped gartersnake <i>Thamnophis hammondi</i>	SSC	M	--	--	--	--	--	--	--	H
Birds										
Cooper's hawk <i>Accipiter cooperii</i>	WL	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)	H (nesting) H (foraging)
tricolored blackbird <i>Agelaius tricolor</i>	ST; SSC	H	H	H	H	M	M	--	M	M
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	WL	--	M	H	--	M	M	M	M	H

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
		grasshopper sparrow <i>Ammodramus savannarum</i>	SSC	--	M	--	--	--	--	--
golden eagle <i>Aquila chrysaetos</i>	BGEPA, BCC; FP, WL	M (foraging)	M (foraging)	M (nesting) M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)
Bell's sparrow <i>Artemisospiza belli belli</i>	WL	--	--	--	M	--	--	--	M	M
burrowing owl <i>Athene cunicularia</i>	BCC; SCC	--	M	M	M	--	M	--	--	M
ferruginous hawk <i>Buteo regalis</i>	BCC; WL	H (foraging)	M (foraging)	M (foraging)	H (foraging)	M (foraging)	M (foraging)	H (foraging)	H (foraging)	M (foraging)
Swainson's hawk <i>Buteo swainsoni</i>	BCC; ST	M (foraging)	--	--	H (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)
western snowy plover <i>Anarhynchus nivosus nivosus</i>	FT; BCC SCC	--	--	--	--	--	--	--	--	H
white-tailed kite <i>Elanus leucurus</i>	FP	H (nesting) H (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	M (nesting) M (foraging)	H (nesting) H (foraging)
southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE; SE	--	--	--	--	--	--	--	H	--
California horned lark <i>Eremophila alpestris actia</i>	WL	M	--	H	M	H	M	M	M	M
American peregrine falcon <i>Falco peregrinus anatum</i>	BCC, delisted; Delisted	M (nesting) M (foraging)	--	--	--	--	--	--	--	--
California condor <i>Gymnogyps californianus</i>	FE; SE; FP	--	--	--	M-H (foraging)	--	M (foraging)	--	--	--
bald eagle <i>Haliaeetus leucocephalus</i>	BGEPA, delisted; SE; FP	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)	M (foraging)

Species Common Name Scientific Name	Status	Priority Area								
		Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
		double-crested cormorant <i>Nannopterum auritum</i>	WL	M	--	--	M	--	--	--
purple martin <i>Progne subis</i>	SSC	--	--	--	M	--	--	--	--	H
bank swallow <i>Riparia riparia</i>	ST	--	--	--	M	--	--	--	M	--
yellow warbler <i>Setophaga petechia</i>	SSC	M	M	H	H	M	M	M	H	H
California least tern <i>Sternula antillarum browni</i>	FE; SE; FP	--	--	--	--	--	--	--	--	M
Mammals										
Nelson's (=San Joaquin) antelope squirrel <i>Ammospermophilus nelsoni</i>	ST	--	--	--	H	--	--	--	--	--
pallid bat <i>Antrozous pallidus</i>	SSC	--	H	H	--	M	M	H	H	M
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	SSC	H	H	M	--	M	H	H	H	H
giant kangaroo rat <i>Dipodomys ingens</i>	FE; SE	--	--	--	H	--	--	--	--	--
western mastiff bat <i>Eumops perotis californicus</i>	SSC	--	--	--	--	--	--	--	H	--
western red bat <i>Lasiurus frantzii</i>	SSC	--	--	M	--	--	--	--	--	M
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	SSC	--	--	M	--	M	--	--	H	H
Tulare grasshopper mouse <i>Onychomys torridus tularensis</i>	SSC	--	--	--	H	--	--	--	--	--
American badger <i>Taxidea taxus</i>	SSC	M	H	H	--	H	H	H	H	H

Species		Priority Area								
Common Name	Status	Guadalupe	Casmalia	East of Santa Marai	Cuyama and New Cuyama	Los Alamos	Los Olivos	Jonata Park	Hwy 246 Corridor	Refugio Canyon
Scientific Name										
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE; ST	--	--	--	H	--	--	--	--	Wat

NOTES:

Federal Listing Status

FE	Federally Endangered
FT	Federally Threatened
FC	Federal Candidate
FPE	Federally Proposed as Endangered
FPT	Federally Proposed as Threatened
FPD	Federally Proposed for Delisting

State Listing Status

SE	State Listed as Endangered
ST	State Listed as Threatened
SCE	State Candidate for Endangered
SCT	State Candidate for Threatened
SR	State Rare

CDFW Status

FP	Fully Protected. Species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock
SA	Special Animals. Animals tracked by CDFW or that have been given special-status by a non-governmental agency.
SSC	Special of Special Concern. Species are given this designation by CDFW due to declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.
WL	Watch List. For species that were previously SSC but no longer merit SSC status, or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify its status.

Invertebrates. Four special status invertebrates have a moderate to high potential to occur within the Priority Areas including Crotch's bumble bee (*Bombus crotchii*), American bumble bee (*Bombus pensylvanicus*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Kern primrose sphinx moth (*Euproserpinus euterpe*). Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to these special-status invertebrates, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status invertebrates within the Priority Areas. Therefore, impacts to special-status invertebrates from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status invertebrates within the Priority Areas, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; **Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species**; and **Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status invertebrates within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Fish. Four special-status fish species have a moderate to high potential to occur within the Priority Areas including tidewater goby, unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo chub (*Gila orcuttii*), and steelhead - southern California DPS. Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status fish, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status fish within the Priority Areas. Therefore, impacts to special-status fish from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status fish within the Priority Areas Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status fish within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Amphibians. Six special-status amphibians have a moderate to high potential to occur within the Priority Areas including California tiger salamander - Santa Barbara County DPS, arroyo toad, foothill yellow-legged frog - south coast DPS (*Rana boylei* pop. 6), California red-legged frog, western spadefoot (*Spea hammondi*), and coast range newt (*Taricha torosa*). Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status amphibians, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status amphibians within the Priority Areas. Therefore, impacts to special-status amphibians from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status amphibians within the Priority Areas, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status amphibians within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Reptiles. Five special-special status reptiles have a moderate to high potential to occur within the Priority Areas including California glossy snake (*Arizona elegans occidentalis*), southwestern pond turtle (*Actinemys pallida*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), and two-striped gartersnake (*Thamnophis hammondi*). Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status reptiles, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status reptiles within the Priority Areas. Therefore, impacts to special-status reptiles from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status reptiles within the Priority Areas Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status reptiles within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Birds. Twenty-one special-status bird species have a moderate to high potential to occur within the Priority Areas including Cooper's hawk (*Accipiter cooperii*), tricolored blackbird (*Agelaius tricolor*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle, Bell's sparrow (*Artemisiospiza belli belli*), burrowing owl (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), western snowy plover, white-tailed kite (*Elanus leucurus*), southwestern willow flycatcher, California horned lark (*Eremophila alpestris actia*), American peregrine falcon (*Falco peregrinus anatum*), double-crested cormorant (*Nannopterum auritum*), purple martin (*Progne subis*), bank swallow (*Riparia riparia*), yellow warbler (*Setophaga petechia*), and California least tern (*Sternula antillarum browni*). Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status birds, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status birds within the Priority Areas. Therefore, impacts to special-status birds from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status birds within the Priority Areas, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and **Mitigation Measure BIO-10: Nesting Birds** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status birds within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Mammals. Ten special-status mammals have a moderate to high potential to occur within the Priority Areas including Nelson's antelope squirrel (*Ammospermophilus nelson*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), giant kangaroo rat (*Dipodomys ingens*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus frantzii*), San Diego desert woodrat (*Neotoma lepida intermedia*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), American badger (*Taxidea taxus*), and San Joaquin kit fox (*Vulpes macrotis mutica*). Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status mammals, if present, within the Priority Areas. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status mammals within the Priority Areas. Therefore, impacts to special-status mammals from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status mammals within the Priority Areas Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan Mitigation Measure; BIO-08: Endangered/Threatened Wildlife Species; Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species; and **Mitigation Measure BIO-10: Bats** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status mammals within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Critical Habitat

As discussed in Section 4.2.2, above, USFWS-designated critical habitat for California red-legged frog, La Graciosa thistle, Vandenberg monkeyflower, and California tiger salamander are present within the Priority Areas. Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities within the Priority Areas could result in modification or conversion of designated critical habitat for California red-legged frog, La Graciosa thistle, Vandenberg monkeyflower, and/or California tiger salamander and the impact to critical habitat would be potentially significant. Therefore, **Mitigation Measure BIO-13: Critical Habitat** would be implemented. With implementation of these measures, impacts to California red-legged frog, La Graciosa thistle, Vandenberg monkeyflower, and California tiger salamander critical habitat within the Priority Areas would be **less than significant** with mitigation incorporated.

Operation

Plants, Wildlife and Critical Habitat

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to special-status plant and wildlife species or result in modification or conversion of USFWS-designated critical habitat within the Priority Areas. Therefore, the impact from construction of future broadband facilities in the Priority Areas would be **less than significant** and no mitigation is required.

Future Broadband Facilities

As discussed above, 117 special-status plant species and 77 special-status wildlife species have been recorded in the County (see Appendix C) (CDFW 2024a; CNPS 2024). These species could be impacted by future broadband facility installations within the County. It is assumed that the nature and intensity of such future broadband facilities would be similar in scope and scale to those identified for the Priority Areas.

Construction

Plants

A total of 117 special-status plant species (see Appendix C) have been recorded within the County (CDFW 2024a, CNPS 2024). Project components that are sited in undeveloped lands that support suitable habitat may support one or more of these species. If these species are present and impacts cannot be avoided, then impacts to special-status plant species from construction of future broadband facilities that could be developed under the Project would be potentially significant.

Although the future broadband facilities would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, as the location of future broadband facilities that could be developed under the Project is unknown, construction activities including grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct crushing or burial of individual plants and may alter or degrade existing suitable habitat for these species. In addition, construction-related traffic and earth moving activities may generate dust that adheres to leaves and inhibits photosynthesis and grading activities could disturb soils that could contain seeds, bulbs, nutrients, and mycorrhizae that special-status plants utilize for survival. Furthermore, incidental introduction of nonnative weed species from construction activities could result in loss of suitable habitat for native special-status plant species. Therefore, impacts to special-status plant species from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status plant species within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-02: Special-Status Plant Species, Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-07: Revegetation Plan would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status species within the County would be reduced to a **less than significant** level with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to candidate, sensitive, or special-status species and their habitats. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Wildlife

Seventy-seven special-status wildlife species (see Appendix C) have been recorded within the County. Project components that are sited in undeveloped lands that support suitable habitat may support one or more of these species. If these species are present and impacts cannot be avoided, then impacts to special-status wildlife species from construction of future broadband facilities that could be developed under the Project would be potentially significant.

Special Status Invertebrates. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-status invertebrates (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status invertebrates, if present, within the County. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status invertebrates within the County. Therefore, impacts to special-status invertebrates from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status invertebrates within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species; and **Mitigation Measure BIO-12: Monarch Butterfly** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status invertebrates within the County would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Fish. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-status fish (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status fish, if present, within the County. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status fish within the County. Therefore, impacts to special-status fish from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status fish within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status fish within the County would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Amphibians. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-

status amphibians (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status amphibians, if present, within the County. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status amphibians within the County. Therefore, impacts to special-status amphibians from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status amphibians within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status amphibians within the County would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Reptiles. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-status reptiles (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status reptiles, if present, within the County. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status reptiles within the County. Therefore, impacts to special-status reptiles from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status reptiles within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status reptiles within the County would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Birds. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-status birds (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status birds, if present, within the County. In addition, increased noise, artificial light, increased human

presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status birds within the County. Therefore, impacts to special-status birds from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status birds within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; and Mitigation Measure BIO-10: Nesting Birds would be implemented. With implementation of the aforementioned mitigation measures, construction-related impacts to special-status birds within the County would be reduced to a **less than significant** level with mitigation incorporated.

Special Status Mammals. Although the future broadband facilities would be similar in scope and scale to those identified for the Priority Areas and would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction activities could impact special-status mammals (see Appendix C). Construction activities such as grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status mammals, if present, within the County. In addition, increased noise, artificial light, increased human presence, and/or introduction of nonnative weed species during construction activities may temporarily result in a loss of suitable habitat for special-status mammals within the County. Therefore, impacts to special-status mammals from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status mammals within the County Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species Avoidance and Minimization; and Mitigation Measure BIO-11: Bats would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status mammals within the County would be reduced to a **less than significant** level with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to candidate, sensitive, or special-status species and their habitats. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Critical Habitat

As discussed in Section 4.2.2, above, USFWS-designated critical habitat for 14 species including arroyo toad, California condor, California red-legged frog, California tiger salamander, Gaviota tarplant, La Graciosa thistle, least Bell's vireo, Lompoc yerba santa, southwestern willow flycatcher, tidewater goby, Vandenberg monkeyflower, Ventura marsh milk-vetch, vernal pool fairy shrimp, and western snowy plover are present within the County. Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, construction of future broadband facilities within the County could result in modification or conversion of designated critical habitat and the impact to critical habitat would be potentially significant. Therefore, Mitigation Measure BIO-13: Critical Habitat would be implemented. With implementation of these measures, impacts from construction of future broadband facilities to designated critical habitat within the County would be **less than significant** with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to candidate, sensitive, or special-status species and their habitats. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Operation

Plants, Wildlife, and Critical Habitat

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to special status plant and wildlife species or result in modification or conversion of USFWS-designated critical habitat within the County. Therefore, the impact from operation of future broadband facilities that could be developed within the County would be **less than significant** and no mitigation is required.

Mitigation Measures

Mitigation Measure BIO-01: Habitat Assessment. A habitat assessment should be conducted prior to ground-disturbing activities within 500 feet of each project component footprint. Vegetation mapping should be conducted using *The Manual of California Vegetation*, second edition, (Sawyer, Keeler-Wolf, & Evens, 2009). If no suitable habitat occurs to support special-status plant species, special-status wildlife species, nesting bird species, or sensitive natural communities, then no further mitigation is necessary. If suitable habitat for any of these sensitive resources is determined to be present, then one or more of the following mitigation measures may be applicable.

Mitigation Measure BIO-02: Special-Status Plant Species. If suitable habitat for special-status plant species is identified during the Habitat Assessment (conducted pursuant to Mitigation Measure BIO-01: Habitat Assessment), a special-status plant survey focusing on the special-status plant species with a moderate to high potential to occur shall be conducted by a qualified

biologist prior to construction. The surveys should take place during the appropriate blooming period for each species in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018). If any special-status plant species are observed during the focused surveys, an appropriate setback buffer, as recommended by the qualified biologist, shall be established and these species should be avoided by the Project.

If avoidance of the special-status plant species is not feasible and Project-related impacts to special-status plants may be significant, a mitigation strategy for special-status plant species that may be impacted shall be developed by a qualified biologist. The mitigation strategy may include partial avoidance; preservation; and/or on-site or off-site restoration, translocation, and/or seed collection to create a similar population (e.g., based on number of individual plants, similar density over area, or both). If restoration and/or translocation is needed, a restoration/revegetation plan must be prepared and approved by CDFW. At a minimum, the plan should specify the following:

- A summary of impacts;
- The location of the mitigation site;
- Methods for harvesting seeds or salvaging and transplanting individuals to be impacted;
- Measures for propagating plants or transferring living plants from the salvage site to the mitigation site;
- Site preparation procedures for the mitigation site;
- A schedule and action plan to maintain and monitor the mitigation site;
- Performance standards by which to measure the success of the mitigation; and
- Contingency measures, such as replanting or weeding, if mitigation efforts are not successful.

Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program (WEAP). If any sensitive biological resources (i.e., special-status species, sensitive natural communities, or aquatic resources) are determined to be present within or near construction areas during the Habitat Assessment, the Project Applicant shall retain a qualified biologist to conduct a pre-construction WEAP training for all personnel working at the construction site. The WEAP should inform workers in recognizing special-status species and regulated biological resources known to occur or potentially occur on the site and avoidance buffers and measures necessary to avoid and/or minimize potential impacts to biological resources.

- All personnel associated with Project construction should attend the WEAP training prior to initiation of Project construction activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation). The training should include information about the special-status species potentially occurring within the Project Site, identification of special-status species and their habitats, a description of the regulatory status and general ecological characteristics of special-status species, and a review of the limits of construction and measures required to avoid and/or minimize impacts to biological resources within the work area. A fact sheet conveying this information should also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the Project.
- All employees working at the Project Site shall be required to sign a form provided by the qualified biologist documenting they have attended the WEAP and understand the

information presented to them. The signed form should be provided to the Project Applicant as documentation of training completion. The crew foreman should be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species and other regulated biological resources. If new personnel are brought onto the Project after completion of the initial WEAP training, the training should be conducted for all new personnel before they can participate in construction activities.

Mitigation Measure BIO-04: Qualified Biological Monitor. If any sensitive biological resources (i.e., special-status species, sensitive natural communities, or aquatic resources) are determined to be present within or near construction areas during the Habitat Assessment, the Project Applicant shall retain a qualified biological monitor(s) with relevant experience with the biological resources and regulations in the County. The qualified biologist should be present during initial ground disturbance or vegetation removal activities, should recommend appropriate setback buffers for protection of sensitive biological resources, where necessary, and shall have the authority to temporarily stop work if special-status species are observed that may be impacted by Project activities. The biologist should recommend measures for compliance with avoidance and minimization measures and applicable permit conditions related to the protection of biological resources.

Mitigation Measure BIO-05: Invasive Plant Species Control Measures. If any sensitive biological resources (i.e., special-status species, sensitive natural communities, or aquatic resources) are determined to be present within or near construction areas during the Habitat Assessment, the Project Applicant shall require construction contractors to ensure that equipment is free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil). For purposes of this mitigation measure, invasive plant species should include all species with a Cal-IPC rating of moderate or high. Prior to entering the construction site, equipment should be inspected to confirm it is free of mud, dirt, and debris. For larger sites that would be accessed via non-paved roads, tire track stations should be installed at the construction site entrances and exits, where appropriate. Staging areas and access routes should avoid weed infestations, and infestations within the work area(s) should be flagged and avoided to the maximum extent feasible. Only certified weed-free materials (e.g., fiber rolls, straw, and fill) should be used during construction of future broadband facilities.

Mitigation Measure BIO-06: General Construction Best Management Practices. If any sensitive biological resources (i.e., special-status, sensitive natural communities, or aquatic resources) are determined to be present within or near construction areas during the Habitat Assessment, the Project Applicant shall require construction contractors to adhere to the following general construction best management practices during construction of future broadband network facilities:

- Construction vehicles shall limit speed to 10 miles per hour within the unpaved limits of construction.
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species or have wildlife ramps available to allow for escape.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during construction activities shall be disposed of in closed containers only and removed daily from the construction site.
- No deliberate feeding of wildlife shall occur.
- No pets shall be allowed on construction sites.

- No firearms shall be allowed on construction sites.
- All vehicle and equipment maintenance shall be performed in designated staging areas.
- Access to the construction area shall be limited to established work hours.
- If construction activities must be performed at night (i.e., between dusk and dawn), all lighting shall be shielded and directed downwards to minimize light spillover and/or glare.
- All construction equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues.
- Provisions shall be in place to remediate accidental spills from construction equipment or other construction activities. All vehicle maintenance/fueling/staging shall occur a minimum of 100 feet away from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.
- If the construction of future broadband network installations have the potential to degrade water quality, water sampling shall be implemented to identify the pre-Project baseline, and to monitor during construction for comparison to the baseline.
- Any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor (recommended under Mitigation Measure BIO-01: Habitat Assessment). The construction foreman or biological monitor shall immediately notify the Project Applicant.

Mitigation Measure BIO-07: Revegetation Plan(s). For temporary impacts to natural communities to be returned to pre-Project conditions, a Revegetation Plan(s) (one or more) shall be prepared by a qualified biologist prior to starting construction of the future broadband network facilities and shall be implemented by the Project Applicant following completion of construction. The Revegetation Plan shall guide and ensure successful restoration of self-sustaining habitats, and shall include, at a minimum, the following:

- A native planting palette appropriate for each vegetation type being restored and appropriate to local conditions.
- Qualitative and quantitative monitoring methods to ensure that performance standards are tracked and met for a minimum 3-year period or until pre-Project conditions are restored to equivalent or better condition.

Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species. If the results of the Habitat Assessment, completed as required by Mitigation Measure BIO-01: Habitat Assessment, determine that suitable habitat may be present for endangered or threatened special-status wildlife species (see Appendix C for special-status species listing status) then prior to construction within 500 feet of areas that could support endangered/threatened wildlife species, protocol surveys shall be conducted by a qualified biologist in accordance with the most recent applicable USFWS and/or CDFW protocol guidelines (see CDFW's Survey and Monitoring Protocols and Guidelines (CDFW n.d.)).

If endangered/threatened wildlife species are observed during the protocol surveys, an appropriate setback buffer, as recommended by the qualified biologist, shall be established and direct and

indirect impacts to occupied habitat shall be avoided. In addition to avoiding direct mortality of these endangered/threatened wildlife species and direct impacts to occupied habitats, additional avoidance and mitigation measures may be required, such as constructing Project facilities outside the breeding season, establishing a suitable avoidance buffer around known territories, and restricting activities around certain times of year. If the Project results in potential direct or indirect impacts to endangered/threatened wildlife species and/or occupied habitats, the Project Applicant shall consult with USFWS and CDFW to ensure compliance with the Federal Endangered Species Act and/or California Endangered Species Act, which may include obtaining a “take” permit (e.g., Biological Opinion from USFWS, CESA Section 2081 Incidental Take Permit or CESA Section 2080.1 Consistency Determination from CDFW) and mitigation for permanent impacts occupied habitat (e.g., at a minimum mitigation-to-impact ratio of 2:1 or greater).

Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species. Several State Species of Special Concern may be impacted by construction of future broadband network facilities. If the results of the Habitat Assessment, completed as required by Mitigation Measure BIO-01: Habitat Assessment, determine that suitable habitat may be present for non-listed special-status wildlife species (see Appendix C for special-status species listing status) and Project impacts may be potentially significant, then prior to construction within 500 feet of areas that could support non-listed special-status wildlife species, the following measures shall be applicable to the future broadband network facilities:

- Pre-construction clearance surveys shall be conducted by a qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 200-foot buffer, if feasible, and shall identify all special-status wildlife species that may occur on-site. Any non-listed special-status species observed shall be relocated from the site either through direct capture or through passive exclusion.
- If any special-status animal species are present within or near construction areas, a WEAP training shall be implemented by the qualified biologist during construction activities to avoid and/or minimize potential impacts to these species (see Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program).
- If any special-status animal species are present within or near construction areas, an appropriate setback buffer, as recommended by the qualified biologist, shall be established.
- A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal.
- Any special-status wildlife species observed by the qualified biologist or construction crew shall be allowed to move out of harm’s way. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. At the end of each workday, excavations shall be secured with cover or a ramp provided to prevent wildlife entrapment.
- Upon completion of construction of the future broadband network facilities, a qualified biologist shall prepare a Final Compliance report documenting compliance activities implemented during construction, including the pre-construction survey results. The report shall be submitted within 30 days of completion of construction.

Mitigation Measure BIO-10: Nesting Birds. If the results of the Habitat Assessment, completed as required by Mitigation Measure BIO-01: Habitat Assessment, determine that suitable habitat for nesting birds is identified at future broadband facility sites and construction is scheduled to commence during the avian nesting season (February 1–August 31 for songbirds, and January 15 to August 31 for raptors), a qualified biologist shall conduct a nesting bird survey within 7 days of the anticipated start date to identify any active nests within 500 feet of the Project Site. If an active nest is detected, a suitable avoidance buffer shall be established by the qualified biologist in the field. Construction activities shall not occur within the buffer until a qualified biologist determines that the nest is no longer active (e.g., chicks have fledged). Appropriate buffer distances are generally 300 feet for passerine species and up to 500 feet for raptors; however, these may be reduced at the discretion of the qualified biologist depending on site-specific factors such as the location of the nest, species tolerance to human presence, and the types of construction-related noises, vibrations, and human activities that are expected occur. If construction temporarily ceases for a period greater than 7 days, and activities expect to recommence during the avian nesting season, the Project Site (including surrounding 500 feet) shall be resurveyed. If nesting birds are present within 500 feet of the Project Site, construction WEAP training shall be implemented by the qualified biologist during construction activities to avoid or minimize potential impacts to nesting birds (see Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program) and monitoring may be recommended for any work in the vicinity of nest avoidance buffers if determined necessary by the qualified biologist (per Mitigation Measure BIO-04: Qualified Biological Monitor).

Mitigation Measure BIO-11: Bats. If the results of the Habitat Assessment, completed as required by Mitigation Measure BIO-01: Habitat Assessment, determine that suitable habitat may be present for special-status bat species, then, prior to construction within 500 feet of areas that could support bat species, the following measures shall be applicable to the future broadband network facilities:

- A qualified biologist shall conduct presence/absence surveys for bats within 30 days prior to the start of construction. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost.
- If active roosts are located, an appropriate setback buffer, as recommended by the qualified biologist, shall be established, the roost shall be avoided, and Project construction activities shall be conducted as recommended by the biologist to avoid the area, which may include temporary postponement of activities or provision of a suitable buffer (of no less than 100 feet) around the roost until roosting activities cease. Exclusion devices such as netting may be installed to discourage bats from occupying the site in consultation with the CDFW. If a roost is determined by a qualified biologist to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the Project Site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.

Mitigation Measure BIO-12: Monarch Butterfly. Prior to completion of the final design, a qualified biologist shall review the planned future broadband network facilities for potential to impact monarch butterflies. If known or potential winter roost sites may be impacted, the biologist shall make recommendations to avoid impacts including, but not limited to, establishment of an appropriate setback buffer, as recommended by the qualified biologist,

relocation/redesign of project features to avoid roost sites, guidance regarding tree removal and trimming at roost sites, and recommendations regarding planting additional roost trees.

Between October 1 and March 1, construction shall not occur within 100 feet of known or potential roost sites, if feasible. If construction must occur during this period, a qualified biologist shall survey known and potential roost sites to confirm occupancy by monarch butterflies prior to the start of any construction within 100 feet. Multiple surveys may be necessary, and the closest known roost sites shall be used as voucher sites to confirm the timing of butterfly arrival. If monarch butterflies are found at a roost site, construction shall not occur within 100 feet of the roost site until the biologist has determined that the butterflies have left the area. The biologist shall visit the voucher sites to confirm that butterflies have left the region.

Mitigation Measure BIO-13: Critical Habitat. If critical habitat will potentially be impacted by the Project, but there is no “federal nexus” for the Project (e.g., impacts to a federally listed species, impacts to USACE waters or wetlands, federal funding), then no further mitigation is necessary. However, if critical habitat will potentially be impacted by the Project; there is a federal nexus for the Project; and the habitat to be impacted contains PCEs to support the federally-listed species (as defined in the Federal Register designating critical habitat for that species), then consultation with the USFWS shall be required and may include mitigation for permanent impacts critical habitat (e.g., at a minimum mitigation-to-impact ratio of 1:1 or greater, or as determined by the USFWS).

Cumulative Impacts

Impact Statement C1: Implementation of the Project, in combination with other development, could contribute to a substantial adverse effect, either directly or through habitat modifications, or any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Implementation of the Project could result in impacts to special-status species that have a potential to occur within the County (see Appendix C). Similarly, development of past, present, and reasonably foreseeable future projects within the County, as identified in **Table 3-1, Cumulative Project List**, in Chapter 3, *Environmental Setting*, of this Draft PEIR, would also have impacts on these biological resources. As a result, cumulative impacts would be considered potentially significant.

The Project would be expected to predominantly entail the installation of small-diameter fiber optic conduit and cabling along existing street rights-of-way with very limited ground disturbance, that would include small-scale above- and below-ground features such as access vaults (also known as handholes, pull boxes, and splice boxes), and potentially incidental small sheds housing network equipment. Due to the relatively small scale of the Project compared to past, present, and reasonably foreseeable cumulative projects that have been identified in Table 3-1, and the limited nature of construction and operational activities associated with the future broadband facilities, the Project’s contribution to cumulative impacts would be less-than-cumulatively considerable. Therefore, the cumulative impact to special-status plant and wildlife species would be **less than significant**.

Threshold 2: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact Statement 2: Implementation of the Project could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Based on the CALVEG database, there are 20 vegetation types that have been mapped within the County. The following vegetation communities, or some associations of these communities, are considered sensitive natural communities by CDFW (CDFW 2023):

- Blackbush
- Ceanothus mixed chaparral
- Chamise chaparral
- Chokecherry – Serviceberry – Rose
- Coastal sage shrub
- Creosote bush scrub
- Forest land
- Montane meadows
- Montane shrubland
- Mountain big sagebrush
- North coastal scrub
- Salt desert shrub
- Scrub oak mixed chaparral
- Valley grassland
- Wetland

In addition, there are numerous aquatic features within the Priority Areas and within other parts of the County that could support riparian habitat (see Figure 4.2-4).

The Project would include the installation of fiber optic cable in various locations throughout the County. The new fiber optic lines would be installed underground following public or private roadways. The Project also includes installation and construction activities within areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although the Project would be designed to generally avoid drainages and sensitive habitats, specific locations and designs for future broadband facility locations have not yet been determined. Therefore, implementation of the Project could be located within undeveloped land, and it is possible that construction or operation of the Project could impact special-status plant or animal species.

Priority Area Projects

Construction

Within the Priority Areas, there are eight CALVEG vegetation types that may support sensitive natural communities as designated by CDFW. **Table 4.2-4** summarizes the acreages of CALVEG vegetation types that are present within each of the Priority Areas and may support sensitive natural communities. There is potential for sensitive natural communities that occur within these CALVEG vegetation types or others that have not been reported or mapped (i.e., non-jurisdictional wetlands) to be affected by construction of one or more of the future broadband facilities that could be developed within the Priority Areas.

**TABLE 4.2-4
 CALVEG VEGETATION TYPES WITHIN PRIORITY AREAS THAT MAY SUPPORT SENSITIVE NATURAL COMMUNITIES**

Vegetation Type	Acreage
Guadalupe	
Forest land	27.4
Montane meadows	2.3
Valley grassland	19.9
Casmalia	
Ceanothus mixed chaparral	3.1
Coastal sage scrub	23.7
Forest land	11.1
Valley grassland	427.4
East of Santa Maria	
Ceanothus mixed chaparral	450.6
Chamise chaparral	60.1
Coastal sage scrub	1,691.7
Forest land	2,044.1
Scrub oak mixed chaparral	145.0
Valley grassland	1,1078
Cuyama and New Cuyama	
Coastal sage scrub	6.1
Forest land	8.5
Valley grassland	350.3
Los Alamos	
Coastal sage scrub	122.6
Forest land	150.2
Valley grassland	831.6

Vegetation Type	Acreage
Los Olivos	
Chamise chaparral	128.2
Coastal sage scrub	227.1
Forest land	1,561.8
Valley grassland	2,410.7
Jonata Park	
Coastal sage scrub	690.8
Forest land	466.3
Valley grassland	704.6
Hwy 246 Corridor	
Ceanothus mixed chaparral	17.8
Coastal sage scrub	2,035.5
Forest land	1,467.3
Valley grassland	4,486.5
Refugio Canyon	
Ceanothus mixed chaparral	786.6
Chamise chaparral	0.3
Coastal sage scrub	433.9
Forest land	1,169.7
North coastal scrub	25.7
Scrub oak mixed chaparral	512.8
Valley grassland	739.9
SOURCE: ESA 2024, CALVEG XXXX.	

As described within Chapter 2, *Project Description*, in general, the new fiber optic lines would be installed underground following public or private roadways with the intention to minimize or avoid disturbance of roadway surfaces wherever feasible. However, it is possible some fiber optic lines could be installed directly under roadways in areas with limited shoulder space or where existing conduit under the road may be used, thus avoiding new surface disturbance. The Project would also include installation and construction activities within those areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although not anticipated, where subsurface installation of fiber optic cable is infeasible, aerial installation along existing utility poles will be undertaken. GSCA's methods of aerial installation will follow General Order 95 pole safety and loading requirements.

Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, it is possible that the construction of future broadband facilities could result in modification or conversion of sensitive natural communities and/or riparian habitat. Therefore,

impacts to sensitive natural communities and/or riparian habitat, if present, from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to sensitive natural communities and/or riparian habitat within the Priority Areas, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; **Mitigation Measure BIO-14: Sensitive Natural Communities**; and **Mitigation Measure BIO-15: Aquatic Resources** would be implemented. With implementation of these mitigation measures, construction-related impacts to special-status species within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Operation

As described in Chapter 2, *Project Description*, once constructed operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to sensitive natural communities. Therefore, the impact from construction of future broadband facilities that could be developed within Priority Areas would be **less than significant** and no mitigation is required.

Future Broadband Facilities

Construction

As discussed above, CALVEG vegetation types that could support sensitive natural communities designated by the CDFW have been recorded in the County. These sensitive natural communities, if present, could be impacted by construction of future broadband facilities within the County. It is assumed that the nature and intensity of such future installation projects would be similar in scope and scale to those identified for the Priority Areas.

Although the Project would focus construction along roadways and would be designed to generally avoid drainages and sensitive habitats, as the location of future broadband facilities that could be developed under the Project is unknown, it is possible that the Project could result in modification or conversion of sensitive natural communities including riparian habitat. Therefore, impacts to special-status plant species, if present, from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status plant species within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-14: Sensitive Natural Communities; and Mitigation Measure BIO-15: Aquatic Resources would be implemented. With implementation of the

aforementioned mitigation measures, construction-related impacts to special-status species within the County would be reduced to a **less than significant** level with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to sensitive natural communities. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Operation

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to sensitive natural communities that have been designated by CDFW. Therefore, the impact from construction of future broadband facilities that could be developed within County would be **less than significant** and no mitigation is required.

Mitigation Measures

Mitigation Measure BIO-01: Habitat Assessment. See Impact Statement 1.

Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program. See Impact Statement 1.

Mitigation Measure BIO-05: Invasive Plant Species Control Measures. See Impact Statement 1.

Mitigation Measure BIO-06: General Construction Best Management Practices. See Impact Statement 1.

Mitigation Measure BIO-07: Revegetation Plan. See Impact Statement 1.

Mitigation Measure BIO-14: Sensitive Natural Communities. Sensitive natural communities, as defined by CDFW, shall be mapped within the vicinity of future broadband facilities per Mitigation Measure BIO-01: Habitat Assessment. This map will be used during Project design to determine if sensitive natural communities can be avoided.

Sensitive natural communities identified for avoidance should be demarcated (e.g., using brightly colored flagging) and avoided during Project construction. The marked boundaries should be maintained for the duration of Project construction activities in each work area and should be clearly visible to personnel on foot and by heavy equipment operators. If sensitive natural communities can be avoided, then no further mitigation is necessary.

If future broadband facilities cannot be sited to avoid temporary impacts to sensitive natural communities, sensitive natural communities shall be returned to pre-Project conditions (i.e., pre-Project elevation contours and revegetation initiated) within six months after the construction is

completed, and will be monitored for three years, or until a qualified biologist determines that affected natural communities have been restored to equivalent or better condition as compared to pre-Project conditions. A Revegetation Plan shall be prepared which would include implementation requirements for re-seeding/re-planting the area with locally indigenous native species, performance standards, success criteria, maintenance requirements, and monitoring requirements.

If future broadband facilities cannot be sited to avoid permanent impacts to sensitive natural communities, impacts to sensitive natural communities shall be mitigated at a 1:1 impact-to-mitigation ratio. This may include, but is not limited to:

- The purchase of credits from a mitigation bank or in-lieu fee program;
- On- and/or off-site land acquisition and preservation; and/or
- On- and/or off-site creation, restoration, and/or enhancement of sensitive natural communities.

If compensatory mitigation is to occur on- or off-site (i.e., not a mitigation bank or in-lieu fee program), a Sensitive Natural Community Mitigation and Monitoring Plan shall be prepared by a qualified biologist/restoration ecologist. The plan shall include details related to implementation requirements (e.g., seeding, planting, and/or staking of sensitive natural community species; salvage/dispersal of duff and seed bank; and/or removal of invasive, non-native species), performance standards, maintenance requirements, and future monitoring requirements.

Mitigation Measure BIO-15: Aquatic Resources. An aquatic resources delineation shall be conducted to determine the limits of potential jurisdictional aquatic resources within the vicinity of future broadband facilities. The results of the aquatic resources delineation will be used during project design to determine if aquatic resources can be avoided.

Aquatic resources identified for avoidance should be demarcated (e.g., using brightly colored flagging) and avoided during Project construction. The marked boundaries should be maintained for the duration of Project construction activities in each work area and should be clearly visible to personnel on foot and by heavy equipment operators. If aquatic resources can be avoided, then no further mitigation is necessary.

If aquatic resources will potentially be impacted by the Project, then the appropriate regulatory permits shall be obtained (e.g., CWA Section 404 Nationwide Permit from the USACE, CWA Section 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirement permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Wildlife Code from the CDFW). The following would be incorporated, as a minimum, into the permitting, subject to approval by the regulatory agencies:

- On- and/or off-site creation, restoration and/or enhancement of USACE/RWQCB jurisdictional wetlands, waters of the U.S., and/or waters of the State at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-Project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate). Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.
- On- and/or off-site creation, restoration, and/or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-Project conditions (i.e., pre-Project contours and revegetate with native species, where appropriate). Off-site creation, restoration,

and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.

Cumulative Impacts

Impact Statement C2: Implementation of the Project, in combination with other development, could contribute to a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Implementation of the Project could result in impacts to riparian habitat or other sensitive natural communities that have a potential to occur within the County, as described above. Similarly, development of past, present, and reasonably foreseeable future projects within the County, as identified in Table 3-1, would also have impacts on these biological resources. As a result, cumulative impacts would be considered potentially significant.

The Project would be expected to predominantly entail the installation of small-diameter fiber optic conduit and cabling along existing street rights-of-way with very limited ground disturbance, that would include small-scale above- and below-ground features such as access vaults (also known as handholes, pull boxes, and splice boxes), and potentially incidental small sheds housing network equipment. Due to the relatively small scale of the Project compared to past, present, and reasonably foreseeable cumulative projects that have been identified in Table 3-1, and the limited nature of construction and operational activities associated with the future broadband facilities, the Project's contribution to cumulative impacts would be less-than-cumulatively considerable. Therefore, the cumulative impact to riparian habitat or other sensitive natural communities would be **less than significant**.

Threshold 3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Statement 3: Implementation of the Project could have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

As discussed in Section 4.2.2, above, there are four primary watersheds within the County that support aquatic features including the Santa Maria, Sisquoc, Cuyama, and Santa Ynez rivers, as well as wetlands that have been mapped by the USFWS NWI (USFWS 2024b). These aquatic features are shown in Figure 4.2-4 and could be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority. In addition, wetlands that have not been included in the NWI may be present within the County and could also be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority.

The Project would include the installation of fiber optic cable in various locations throughout the County. The new fiber optic lines would be installed underground following public or private roadways. The Project also includes installation and construction activities within areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although the future

broadband facilities would be designed to generally avoid drainages and sensitive habitats, specific locations and designs for future broadband facilities have not yet been determined. Therefore, future broadband facilities could be located within undeveloped land, and it is possible that construction or operation of the Project could impact state or federally protected wetlands.

Priority Area Projects

Construction

Wetland habitat identified by the USFWS NWI are present within the Guadalupe, Casmalia, East of Santa Maria, Cuyama and New Cuyama, Los Alamos, Los Olivos, Hwy 246 Corridor, and Refugio Canyon Priority Areas. These wetlands may be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority. In addition, wetlands that have not been included in the NWI may be present within the Priority Areas and could also be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority.

As described within Chapter 2, *Project Description*, in general, the new fiber optic lines would be installed underground following public or private roadways with the intention to minimize or avoid disturbance of roadway surfaces wherever feasible. However, it is possible some fiber optic lines could be installed directly under roadways in areas with limited shoulder space or where existing conduit under the road may be used, thus avoiding new surface disturbance. The Project would also include installation and construction activities within those areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although not anticipated, where subsurface installation of fiber optic cable is infeasible, aerial installation along existing utility poles will be undertaken. GSCA's methods of aerial installation will follow General Order 95 pole safety and loading requirements.

Although the Project would focus construction along roadways and would be designed to generally avoid drainages, it is possible that the future broadband facilities could result in impacts to state or federally protected wetlands, if present. Therefore, impacts to state or federally protected wetlands from construction of future broadband facilities within the Priority Areas would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to special-status plant species within the Priority Areas, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-15: Aquatic Resources. With implementation of these mitigation measures, construction-related impacts to state or federally protected wetlands within the Priority Areas would be reduced to a **less than significant** level with mitigation incorporated.

Operation

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless

additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to state and federally protected wetlands. Therefore, the impact from construction of future broadband facilities that could be developed within Priority Areas would be **less than significant** and no mitigation is required.

Future Broadband Facilities

Construction

Wetlands within the County have been identified by the USFWS NWI and are shown in Figure 4.2-4. These wetlands may be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority. In addition, wetlands that have not been included in the NWI may be present within the County and could also be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority. It is assumed that the nature and intensity of such future broadband facilities would be similar in scope and scale to those identified for the Priority Areas.

Although the Project would focus construction along roadways and would be designed to generally avoid drainages, as the location of future broadband facilities that could be developed under the Project is unknown, it is possible that the future broadband facilities could result in impacts to state or federally protected wetlands. Therefore, impacts to state or federally protected wetlands from construction of future broadband facilities within the County would be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to state and federally protected wetlands within the County, Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-15: Aquatic Resources would be implemented. With implementation of these mitigation measures, construction-related impacts to state and federally protected wetlands would be reduced to a **less than significant** level with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to state or federally protected wetlands. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Operation

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to state or federally protected wetlands. Therefore, the impact from construction of future broadband facilities that could be developed within the County under the Project would be **less than significant** and no mitigation is required.

Mitigation Measures

Mitigation Measure BIO-01: Habitat Assessment. See Impact Statement 1.

Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program.
See Impact Statement 1.

Mitigation Measure BIO-06: General Construction Best Management Practices. See Impact Statement 1.

Mitigation Measure BIO-15: Aquatic Resources. See Impact Statement 2.

Cumulative Impacts

Impact Statement C3: Implementation of the Project, in combination with other development, could contribute to a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Implementation of the Project could result in impacts to state or federally protected wetlands that have a potential to occur within the County (see Appendix C). Similarly, development of past, present, and reasonably foreseeable future projects within the County, as identified in Table 3-1, would also have impacts on these biological resources. As a result, cumulative impacts would be considered potentially significant.

The Project would be expected to predominantly entail the installation of small-diameter fiber optic conduit and cabling along existing street rights-of-way with very limited ground disturbance, that would include small-scale above- and below-ground features such as access vaults (also known as handholes, pull boxes, and splice boxes), and potentially incidental small sheds housing network equipment. Due to the relatively small scale of the Project compared to past, present, and reasonably foreseeable cumulative projects that have been identified in Table 3-1, and the limited nature of construction and operational activities associated with the future broadband facilities, the Project's contribution to cumulative impacts would be less-than-cumulatively considerable. Therefore, the cumulative impact to state or federally protected wetlands would be **less than significant**.

Threshold 4: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Statement 4: Implementation of the Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

As discussed above, wildlife movement within the County is possible through mountainous regions and riparian corridors. There are two essential connectivity areas within the County including the western portion of the County from south of Guadalupe to south of Lompoc and a large area of the mountainous regions in the southeastern portion of the County. In addition, three movement corridors have been identified in the western portion of the County and are associated with the Santa Ynez River, San Antonio Creek/Purissima Hills, and along the south coast near Gaviota. Wildlife corridors within the County are shown in Figure 4.2-5: *Wildlife Movement Corridors*.

The Project would include the installation of fiber optic cable in various locations throughout the County. The new fiber optic lines would be installed underground following public or private roadways. The Project also includes installation and construction activities within areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although the future broadband facilities would be designed to generally avoid drainages and sensitive habitats, specific locations and designs for future broadband facilities have not yet been determined. Therefore, future broadband facilities could be located within undeveloped land, and it is possible that construction or operation of the Project could impact wildlife corridors.

Priority Area Projects

Construction

The new fiber optic lines would be installed underground following public or private roadways with the intention to minimize or avoid disturbance of roadway surfaces wherever feasible. However, it is possible some fiber optic lines could be installed directly under roadways in areas with limited shoulder space or where existing conduit under the road may be used, thus avoiding new surface disturbance. The Project would also include installation and construction activities within those areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although not anticipated, where subsurface installation of fiber optic cable is infeasible, aerial installation along existing utility poles will be undertaken. GSCA's methods of aerial installation will follow General Order 95 pole safety and loading requirements.

Wildlife Movement

The Los Alamos, Los Olivos, Jonata Park W 101, Hwy 246 Corridor, and Refugio Canyon Priority Areas may intersect with the wildlife movement corridors that have been identified within the County. Although the Project would focus construction along roadways, construction activities could result in localized, short-term hinderance of movement by resident or migratory wildlife due to temporary noise, lighting, dust, and human activities within the Priority Areas.

As discussed under Impact Statement 2, construction activities could result in impacts to vegetation which may support wildlife movement. However, construction of future broadband facilities within Priority Areas under the Project would implement Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-07: Revegetation Plan. Therefore, long-term loss of habitat that could support species movement would be minimal and would not hinder use of habitat linkages of wildlife movement corridors. Construction-related impacts to migratory wildlife species or migratory wildlife corridors within the Priority Areas would be **less than significant** with mitigation incorporated.

Nursery Sites

Future broadband facilities within the Priority Areas may cross habitat types that could support nesting behavior of a variety of species that are protected under state and federal regulations. Construction activities associated with the future broadband facilities could disturb nesting birds and cause nest site abandonment and/or reproductive failure from increased noise, artificial light, human presence, and/or removal of habitat, which would be a potentially significant impact. Therefore, construction of future broadband facilities within the Priority Areas would implement Mitigation Measure BIO-01: Habitat Assessment and Mitigation Measure BIO-10: Nesting Birds. With implementation of these measures, construction-related impacts to nesting birds within the Priority Areas would be **less than significant** with mitigation incorporated.

Operation

Wildlife Movement and Nursery Sites

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to wildlife movement or nesting birds. Therefore, the impact from construction of future broadband facilities that could be developed within the Priority Areas under the Project would be **less than significant** and no mitigation is required.

Future Broadband Facilities

Construction

It is assumed that the nature and intensity of such future broadband facilities would be similar in scope and scale to those identified for the Priority Areas.

Wildlife Movement

The location of future broadband facilities within the County may intersect with the wildlife movement corridors that have been identified within the County. Although the Project would focus construction along roadways, as the location of future broadband facilities that could be developed under the Project is unknown, construction activities could result in localized, short-term hinderance of movement by resident or migratory wildlife due to temporary noise, lighting, dust, and human activities within the County.

As discussed under Impact Statement 2, construction activities could result in impacts to vegetation which may support wildlife movement. However, construction of future broadband facilities within the County would implement Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-06: General Construction Best Management Practices; and Mitigation Measure BIO-07: Revegetation Plan. Therefore, long-term loss of habitat that could support species movement would be minimal and would not hinder use of habitat linkages of wildlife movement corridors. Construction-related impacts to migratory wildlife species or migratory wildlife corridors within the County would be **less than significant** with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to migratory wildlife species or migratory wildlife corridors. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Nursery Sites

Future broadband facilities within the County may cross habitat types that could support nesting behavior of a variety of species that are protected under state and federal regulations. Construction activities associated with future broadband facilities within the County that would be developed under the Project could disturb nesting birds and cause nest site abandonment and/or reproductive failure from increased noise, artificial light, human presence, and/or removal of habitat, which would be a potentially significant impact. Therefore, construction of future broadband facilities within the County would implement Mitigation Measure BIO-01: Habitat Assessment and Mitigation Measure BIO-10: Nesting Birds. With implementation of these measures, construction-related impacts to nesting birds within the County would be **less than significant** with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to wildlife nursery sites. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Operation

Wildlife Movement and Nursery Sites

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to wildlife movement or nesting birds. Therefore, the impact from construction of future broadband facilities that could be developed within the County under the Project would be **less than significant** and no mitigation is required.

Mitigation Measures

Mitigation Measure BIO-01: Habitat Assessment. See Impact Statement 1.

Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program. See Impact Statement.

Mitigation Measure BIO-06: General Construction Best Management Practices. See Impact Statement 1.

Mitigation Measure BIO-07: Revegetation Plan. See Impact Statement 1.

Mitigation Measure BIO-10: Nesting Birds. See Impact Statement 1.

Cumulative Impacts

Impact Statement C4: Implementation of the Project, in combination with other development, could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Implementation of the Project could result in impacts to wildlife movement corridors or native wildlife nursery sites that have a potential to occur within the County (see Appendix C). Similarly, development of past, present, and reasonably foreseeable future projects within the County, as identified in Table 3-1, would also have impacts on these biological resources. As a result, cumulative impacts would be considered potentially significant.

The Project would be expected to predominantly entail the installation of small-diameter fiber optic conduit and cabling along existing street rights-of-way with very limited ground disturbance, that would include small-scale above- and below-ground features such as access vaults (also known as handholes, pull boxes, and splice boxes), and potentially incidental small sheds housing network equipment. Due to the relatively small scale of the Project compared to past, present, and reasonably foreseeable cumulative projects that have been identified in Table 3-1, and the limited nature of construction and operational activities associated with the future broadband facilities, the Project's contribution to cumulative impacts would be less-than-cumulatively considerable. Therefore, the cumulative impact to wildlife movement or native wildlife nursery sites would be **less than significant**.

Threshold 5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Statement 5: Implementation of the Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As discussed above, the County has developed and implemented local policies and plans to protect biological resources including the Comprehensive Plan; CLUP; County Code, which includes the County Land Use and Development Code and, subsequently, the County Deciduous Oak Tree Protection and Regeneration Ordinance; and County Environmental Thresholds and Guidelines Manual. In addition, incorporated cities within the County have developed their own General Plans and municipal codes that would be applicable to any future broadband facilities that are proposed within their sphere of influence.

The Project would include the installation of fiber optic cable in various locations throughout the County. The new fiber optic lines would be installed underground following public or private roadways. The Project also includes installation and construction activities within areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although the Project would be designed to generally avoid drainages and sensitive habitats, specific locations and designs for future broadband facilities have not yet been determined. Therefore, construction of the future broadband

facilities could be located within undeveloped land, and it is possible that construction or operation of the Project could conflict with local policies for ordinances protecting biological resources.

Priority Area Projects

Construction

The new fiber optic lines would be installed underground following public or private roadways with the intention to minimize or avoid disturbance of roadway surfaces wherever feasible. However, it is possible some fiber optic lines could be installed directly under roadways in areas with limited shoulder space or where existing conduit under the road may be used, thus avoiding new surface disturbance. The Project would also include installation and construction activities within those areas where lateral lines are installed between public or private roadways and individual businesses or residences. Individual residence or business connections typically would be installed within previously disturbed and/or developed areas (e.g., adjacent to driveways or in landscaped areas), and generally would avoid drainages and sensitive habitats. Lateral alignments would typically follow other utility installations. Although not anticipated, where subsurface installation of fiber optic cable is infeasible, aerial installation along existing utility poles will be undertaken. GSCA's methods of aerial installation will follow General Order 95 pole safety and loading requirements.

Although the Project would focus construction along roadways, protected trees and other biological resources which are protected by local plans and ordinances, including those biological communities discussed within the County Environmental Thresholds and Guidelines Manual, could be encountered by future broadband facilities that would be developed within the Priority Areas under the Project and the impact would be potentially significant. In addition, the Guadalupe Priority Area is located within the sphere of influence of the City of Guadalupe. Any project-related impacts to biological resources that are protected by the City of Guadalupe General Plan and the applicable requirements of the City of Guadalupe Municipal Code would be potentially significant.

Implementation of **Mitigation Measure BIO-16: Tree Protection** would reduce construction-related impacts to trees protected under the County Deciduous Oak Tree Protection and Regeneration Ordinance to a less-than-significant level with mitigation incorporated. In addition, the Project would implement Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-02: Special-Status Plant Species; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species; Mitigation Measure BIO-10: Nesting Birds; Mitigation Measure BIO-11: Bats; Mitigation Measure BIO-12: Monarch Butterfly; Mitigation Measure BIO-14: Sensitive Natural Communities; and Mitigation Measure BIO-15: Aquatic Resources. Implementation of these measures would avoid, reduce and minimize, and/or mitigate potential impacts to biological communities, as discussed within the County Environmental Thresholds and Guidelines Manual, to a less than significant level. Furthermore, all construction of future broadband facilities would be required to comply with local plans, policies, ordinances, and applicable permitting procedures related to the protection of biological resources.

The Project would mitigate impacts to sensitive resources that are protected by any applicable plans, policies, or regulations adopted by incorporated cities, including the City of Guadalupe, as well as the Comprehensive Plan, CLUP, and County Environmental Thresholds and Guidelines Manual. In addition, the Project would comply with the requirements of the County Code, including the County Land Use and Development Code. Therefore, construction of future broadband facilities within the Priority Areas would have a **less than significant impact** with respect to compliance with local policies or ordinances protecting biological resources with mitigation incorporated.

Operation

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and would not include actions that would conflict with any local plans, policies, or ordinances protecting biological resources. Therefore, operation of the future broadband facilities within the Priority Areas would have **no impact** with respect to compliance with local plans, policies, or ordinances protecting biological resources. No mitigation is required.

Future Broadband Facilities

Construction

It is assumed that the nature and intensity of such future broadband facilities would be similar in scope and scale to those identified for the Priority Areas. Although the Project would focus construction along roadways, protected trees and other biological resources which are protected by applicable incorporated city or County plans, policies, and ordinances, including those biological communities discussed within the County Environmental Thresholds and Guidelines Manual, could be encountered by future broadband facilities that would be developed within the Priority Areas under the Project and the impact would be potentially significant.

Implementation of Mitigation Measure BIO-16: Tree Protection would reduce construction-related impacts to trees protected under the County Deciduous Oak Tree Protection and Regeneration Ordinance to a less-than-significant level with mitigation incorporated. In addition, the Project would implement Mitigation Measure BIO-01: Habitat Assessment; Mitigation Measure BIO-02: Special-Status Plant Species; Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program; Mitigation Measure BIO-04: Qualified Biological Monitor; Mitigation Measure BIO-05: Invasive Plant Species Control Measures; Mitigation Measure BIO-06: General Construction Best Management Practices; Mitigation Measure BIO-07: Revegetation Plan; Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species; Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species; Mitigation Measure BIO-10: Nesting Birds; Mitigation Measure BIO-11: Bats; Mitigation Measure BIO-12: Monarch Butterfly; Mitigation Measure BIO-14: Sensitive Natural Communities; and Mitigation Measure BIO-15: Aquatic Resources. Implementation of these measures would avoid, reduce and minimize, and/or mitigate potential impacts to biological communities, as discussed within the County Environmental Thresholds and Guidelines Manual, to a less than significant level. Furthermore, all construction of future broadband facilities would be required to comply with local

plans, policies, ordinances, and applicable permitting procedures related to the protection of biological resources.

The Project would mitigate impacts to sensitive resources that are protected by any applicable plans, policies, or regulations adopted by incorporated cities, as well as the Comprehensive Plan, CLUP, and the County Environmental Thresholds and Guidelines Manual. In addition, the Project would comply with the requirements of the County Code, including the County Land Use and Development Code. Therefore, construction of future broadband facilities within the Priority Areas would have a **less than significant impact** with respect to compliance with local policies or ordinances protecting biological resources with mitigation incorporated.

Furthermore, future projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts with respect to conflicts with local policies or ordinances. Through subsequent environmental review, future projects may be required to conduct site-specific biological resources surveys and/or incorporate site-specific mitigation measures, as deemed necessary.

Operation

As described in Chapter 2, *Project Description*, once constructed, operational activities for any individual fiber project implemented under the Project would be limited to routine maintenance to check the vaults that access the fiber optic line. The fiber optic facilities would generally operate passively unless additional service connections are installed or if incidental repairs are required due to damage. These maintenance activities would occur within previously disturbed areas and would not include actions that would conflict with any local plans, policies, or ordinances protecting biological resources. Therefore, operation of the future broadband facilities within the County would have **no impact** with respect to compliance with local policies or ordinances protecting biological resources. No mitigation is required.

Mitigation Measures

Mitigation Measure BIO-01: Habitat Assessment. See Impact Statement 1.

Mitigation Measure BIO-02: Special-Status Plant Species. See Impact Statement 1.

Mitigation Measure BIO-03: Construction Worker Environmental Awareness Program. See Impact Statement 1.

Mitigation Measure BIO-04: Qualified Biological Monitor. See Impact Statement 1.

Mitigation Measure BIO-05: Invasive Plant Species Control Measures. See Impact Statement 1.

Mitigation Measure BIO-06: General Construction Best Management Practices. See Impact Statement 1.

Mitigation Measure BIO-07: Revegetation Plan. See Impact Statement 1.

Mitigation Measure BIO-08: Endangered/Threatened Wildlife Species. See Impact Statement 1.

Mitigation Measure BIO-09: Non-Listed Special-Status Wildlife Species. See Impact Statement 1.

Mitigation Measure BIO-10: Nesting Birds. See Impact Statement 1.

Mitigation Measure BIO-11: Bats. See Impact Statement 1.

Mitigation Measure BIO-12: Monarch Butterfly. See Impact Statement 1.

Mitigation Measure BIO-14: Sensitive Natural Communities. See Impact Statement 1.

Mitigation Measure BIO-15: Aquatic Resources. See Impact Statement 1.

Mitigation Measure BIO-16: Tree Protection. If it is determined that construction may impact oak trees protected by the County's Deciduous Oak Tree Protection and Regeneration Ordinance included in Appendix IX of Chapter 35 of the Santa Barbara County Code, the Project Applicant shall procure an Oak Tree Removal Permit, if required by Section 35-909 of the County's Deciduous Oak Tree Protection and Regeneration Ordinance. Should an Oak Tree Removal Permit be required, the Project Applicant shall be required to implement the following, in addition to all other requirements as described within the County's Deciduous Oak Tree Protection Ordinance (Santa Barbara County 2003):

- An Oak Tree Management Plan shall be developed by an oak tree specialist for the Project Site on which any oak tree removal will take place and any lot used for off-site replacement. The plan shall comply with the requirements included in Section 35-911 of the County Deciduous Oak Tree Protection and Regeneration Ordinance, as included in Article IX of Chapter 35 of the County Code.
- Oak trees that are removed shall be compensated at a 15:1 ratio by replacement planting, or protection of naturally occurring oak trees between six inches and six feet tall on the Project Site.
- Replacement trees shall be nurtured for five years. At the end of the five years, ten trees for every protected tree removed shall be alive, in good health as defined by the oak tree specialist, and capable of surviving without nurturing and protection.
- Valley oak tree removal over an area of five acres or greater shall require valley oak replanting of an area of comparable size in an area of existing or historic valley oak habitat.

Cumulative Impacts

Impact Statement C5: Implementation of the Project, in combination with other development, could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As discussed above, all construction of future broadband facilities would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to the protection of biological resources. All other future broadband facilities installed within the County would also be required to comply with applicable County development requirements. Therefore, the cumulative impact would be **less than significant**.

Threshold 6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Statement 6: Implementation of the Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Priority Area Projects and Future Broadband Facilities

There are no adopted habitat or natural community conservation plans in the region. Therefore, implementation of the Project within Priority Areas and other parts of the County would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be **no impact** and no mitigation is required.

Mitigation Measures

None required.

Cumulative Impacts

Impact Statement C6: Implementation of the Project, in combination with other development, could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As discussed above, there are no adopted habitat or natural community conservation plans in the region. Therefore, the Project, in combination with other development, would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be **no cumulative impact**.

4.2.4 References

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