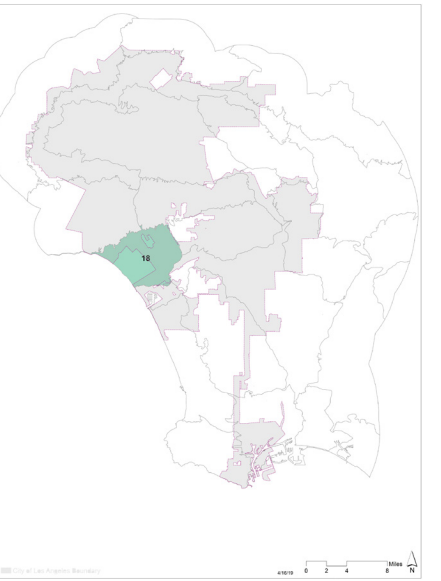
ECOTOPE 18: SANTA MONICA TERRACE

(Partially within the City of Los Angeles)



LANDFORM

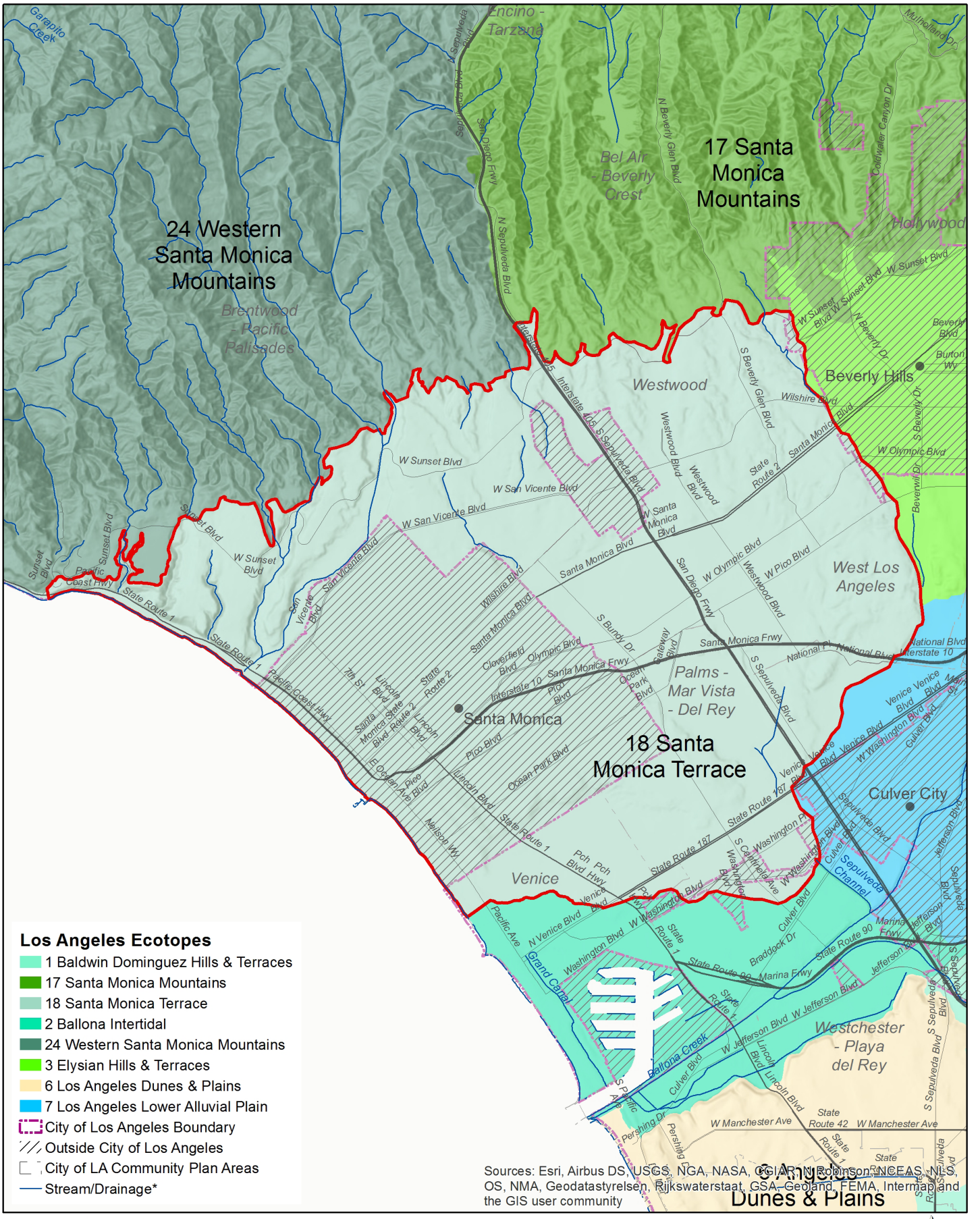
The Santa Monica Terraces sits adjacent to the coast, ranging from 0' to approximately 500' in elevation. A narrow coastal strand sits below coastal bluffs that rise abruptly to the relatively flat terrace that slopes gently down from the Santa Monica Mountains. The terrace is bisected by deep arroyos in places. Historic freshwater wetlands were once relatively frequent in places where groundwater surfaced. Few of these still remain, including Serra Springs, called Kuruvungna by the Gabrieleno Tongva people who consider them sacred, near University High School. Areas of low hills are present in the southeast between Westwood and Beverly Hills. Beverly Hills was chosen as the eastern boundary of the ecotope where topography begins to slope toward the east toward La Cienegas and the maritime influence on the microclimate begins to diminish. An area of dunes is also present toward the south near Venice before transitioning to a flat coastal terrace adjacent to the Ballona Wetlands.

MICROCLIMATE

The maritime influence-dominated Sunset Climate Zone 24 dominates the ecotope. Eastern areas are classified as Sunset Climate Zone 22, which is characterized by occasional frost; however, the higher terrain in these areas likely makes that a less frequent occurrence. Temperatures are moderate and summers are often moderated by ocean breezes compared to more inland areas. Aspects are generally south for alluvial terraces draining the Santa Monicas resulting in somewhat hotter site microclimates. Morning fog is common in spring and early summer. The ecotope is relatively prone to Santa Ana wind events in fall and early winter producing relatively dry and fire-prone microclimate conditions. The urban heat island is negligible due to the strong ocean influence on nighttime temperatures when the strongest effects of heat islands are prevalent.

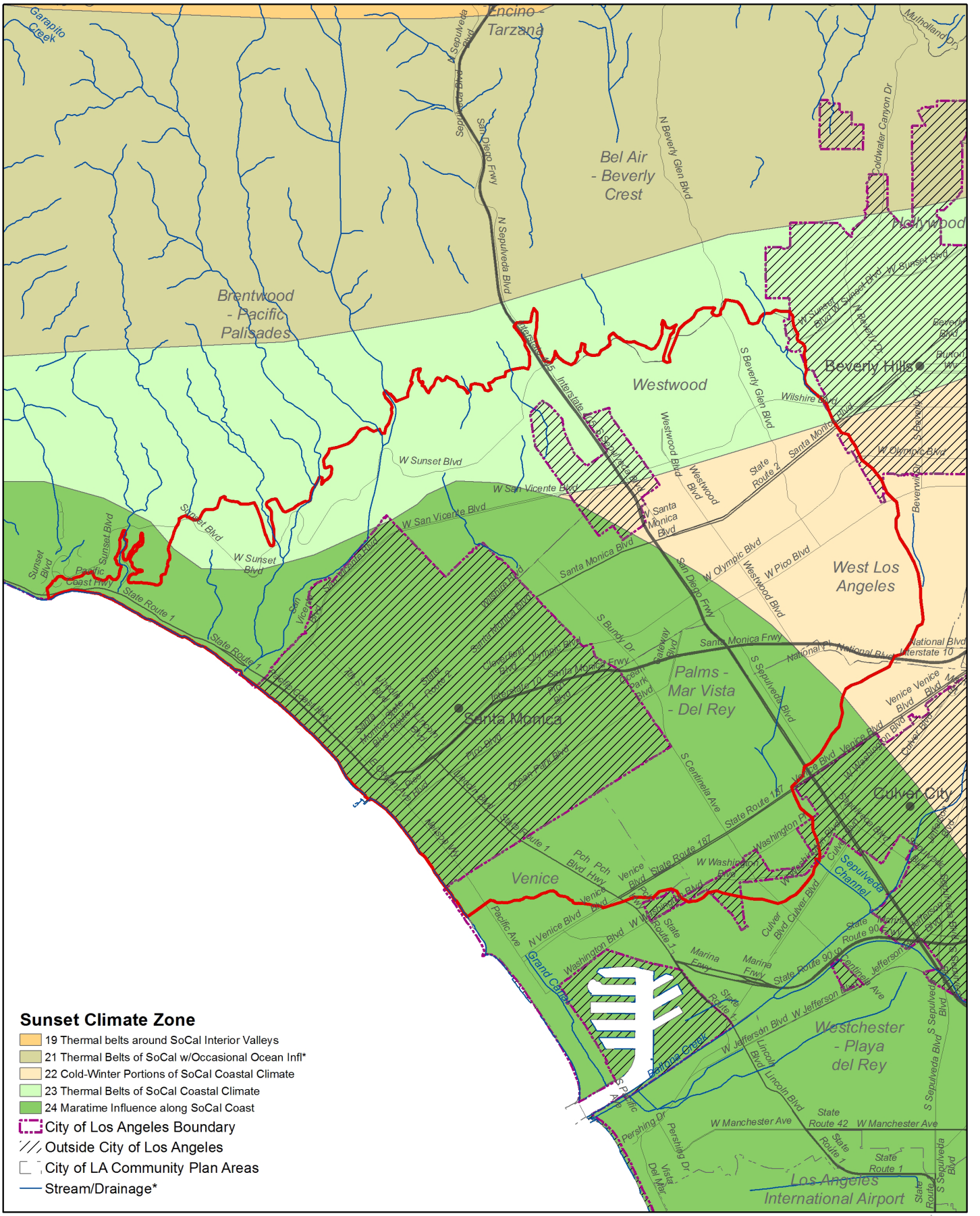
VEGETATION & LANDCOVER

Less than 0.5% of natural areas remain in the ecotope and include mostly coastal sage scrub alliances with smaller areas of native woodlands and chaparral. A 3-acre area of coastal strand is also in the process of being restored at Santa Monica Beach. The historical ecological characterization provided for the Los Angeles Dunes and Prairies in Mattoni and Longcore (1997) provides a good approximation for similar ecosystems within the ecotope. Portions of the ecotope were also estimated for the presence of historic wetland ecosystems and creeks by Dark et al. (2011) and include several areas of springs, herbaceous wet meadows, and vernal pools. Historic dune ecosystems have been converted, but analogous ecosystems are still present at the LAX Dunes near El Segundo providing a benchmark for potential restoration.



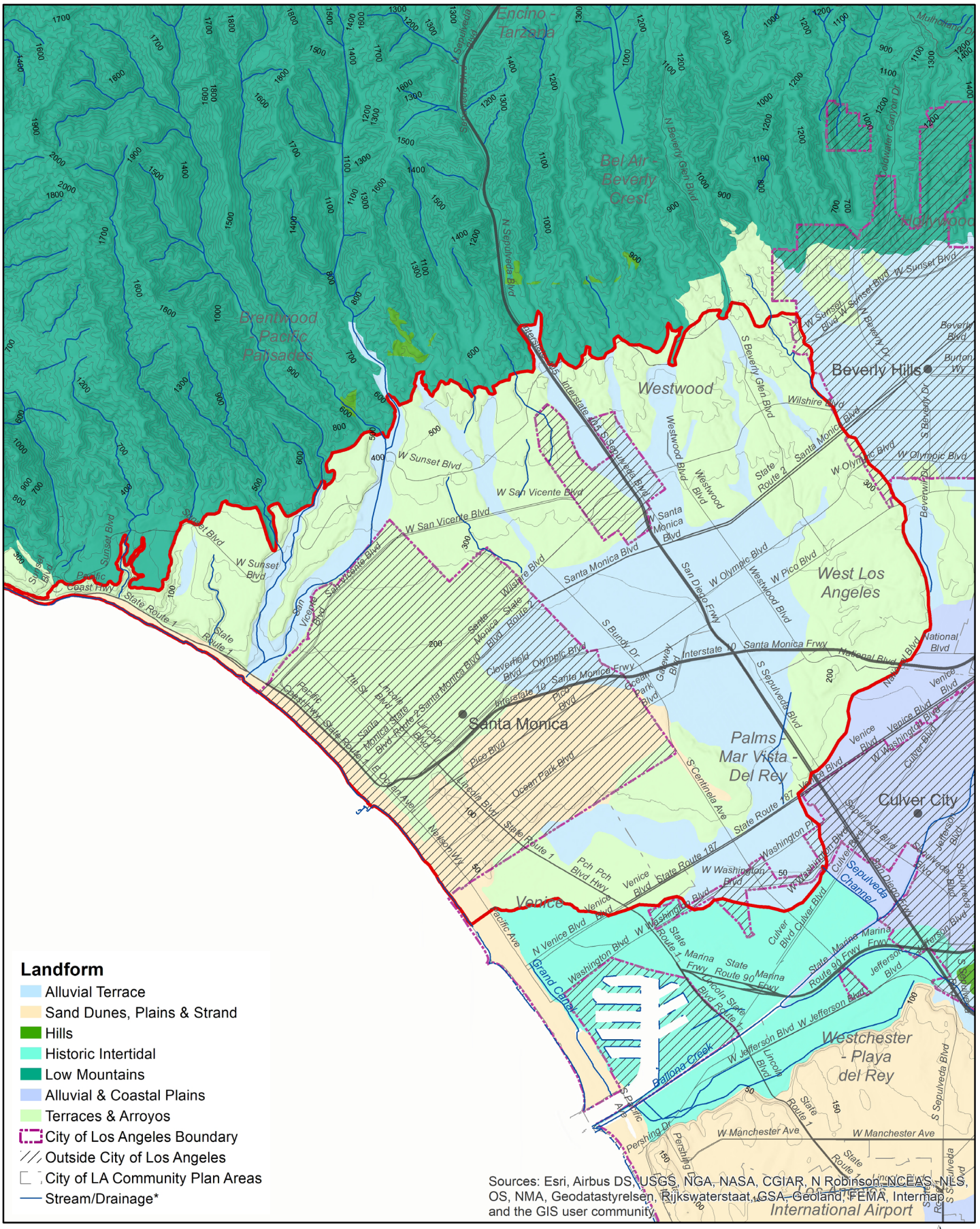
Ecotope 18 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



Landform

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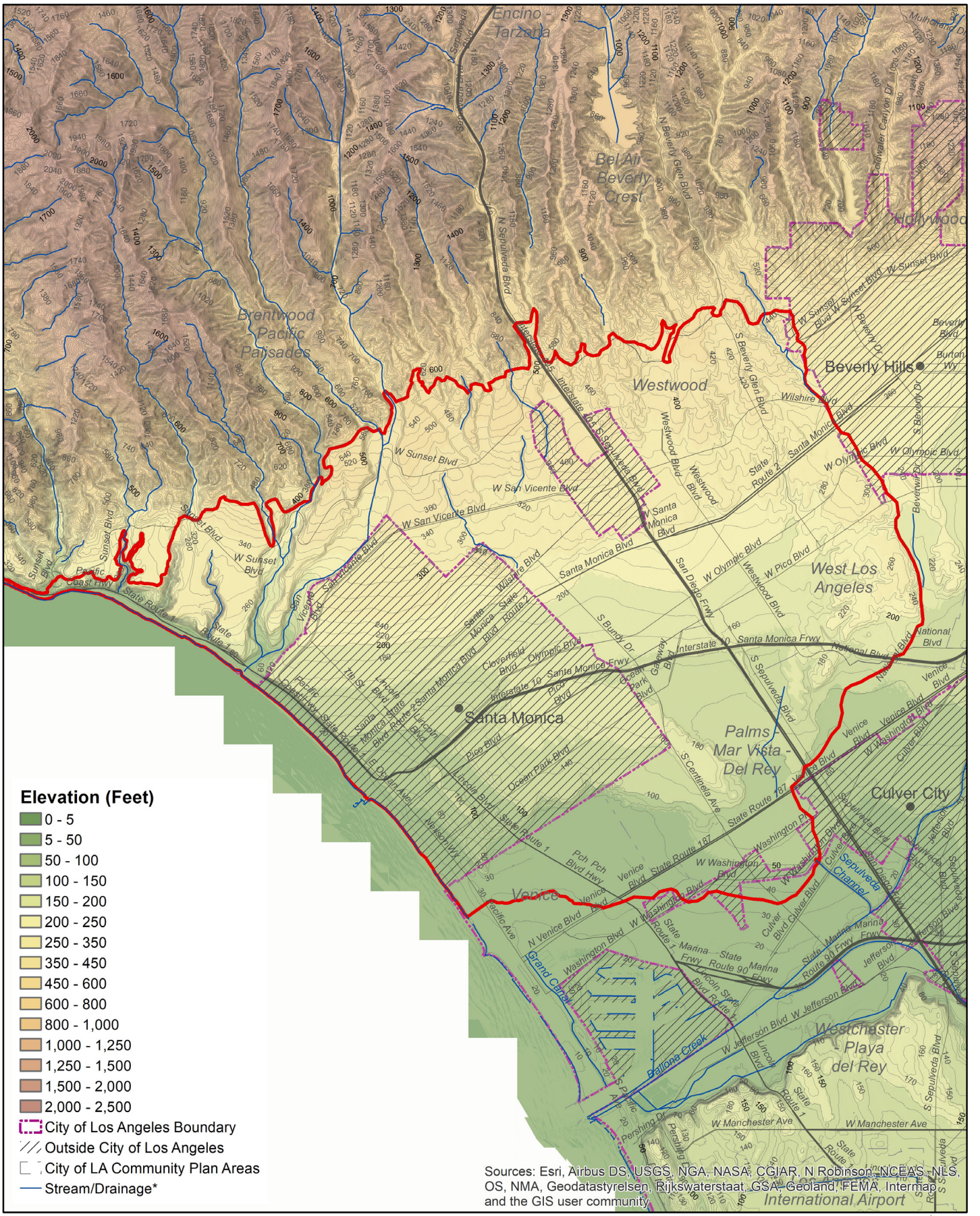
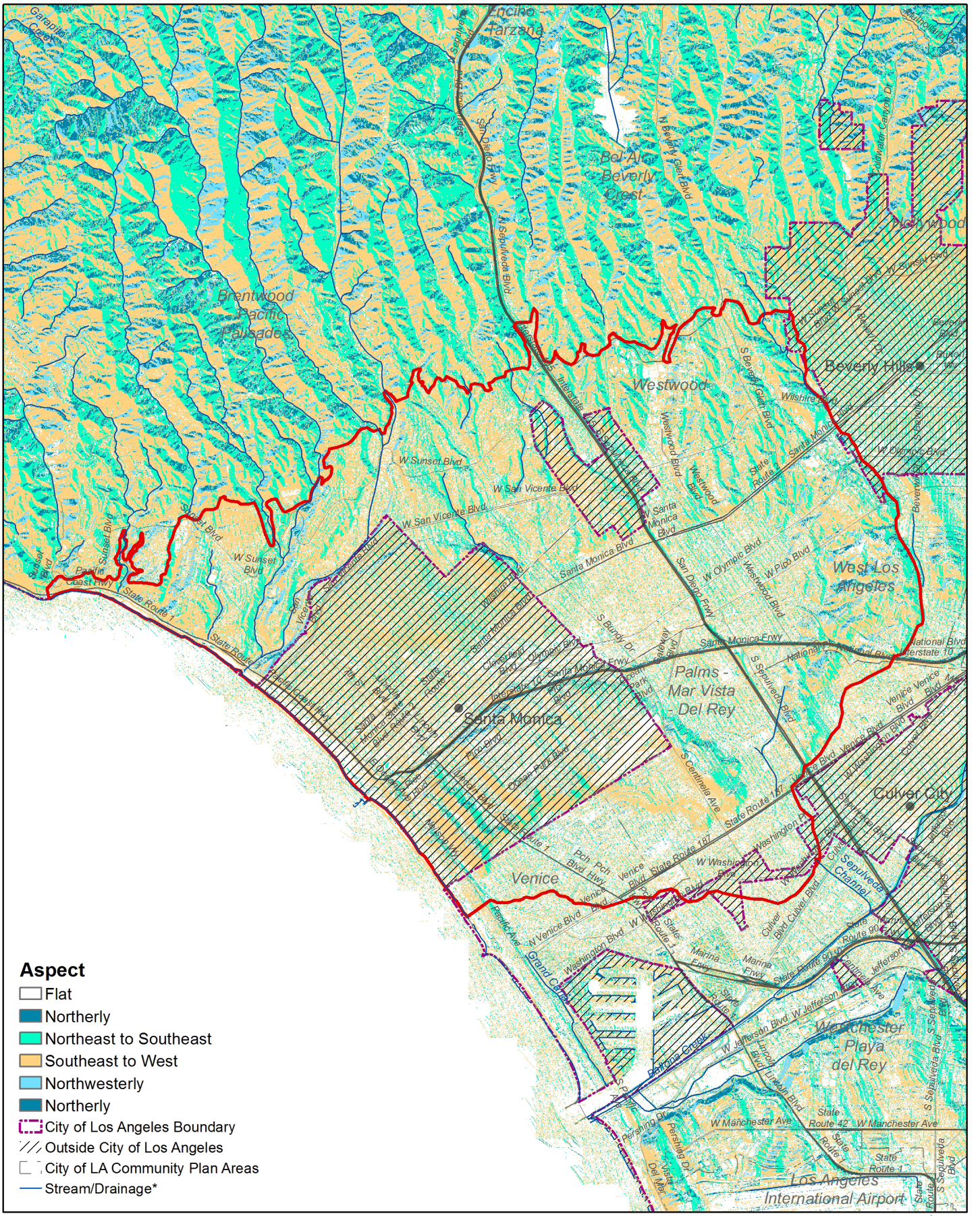


Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



Aspect

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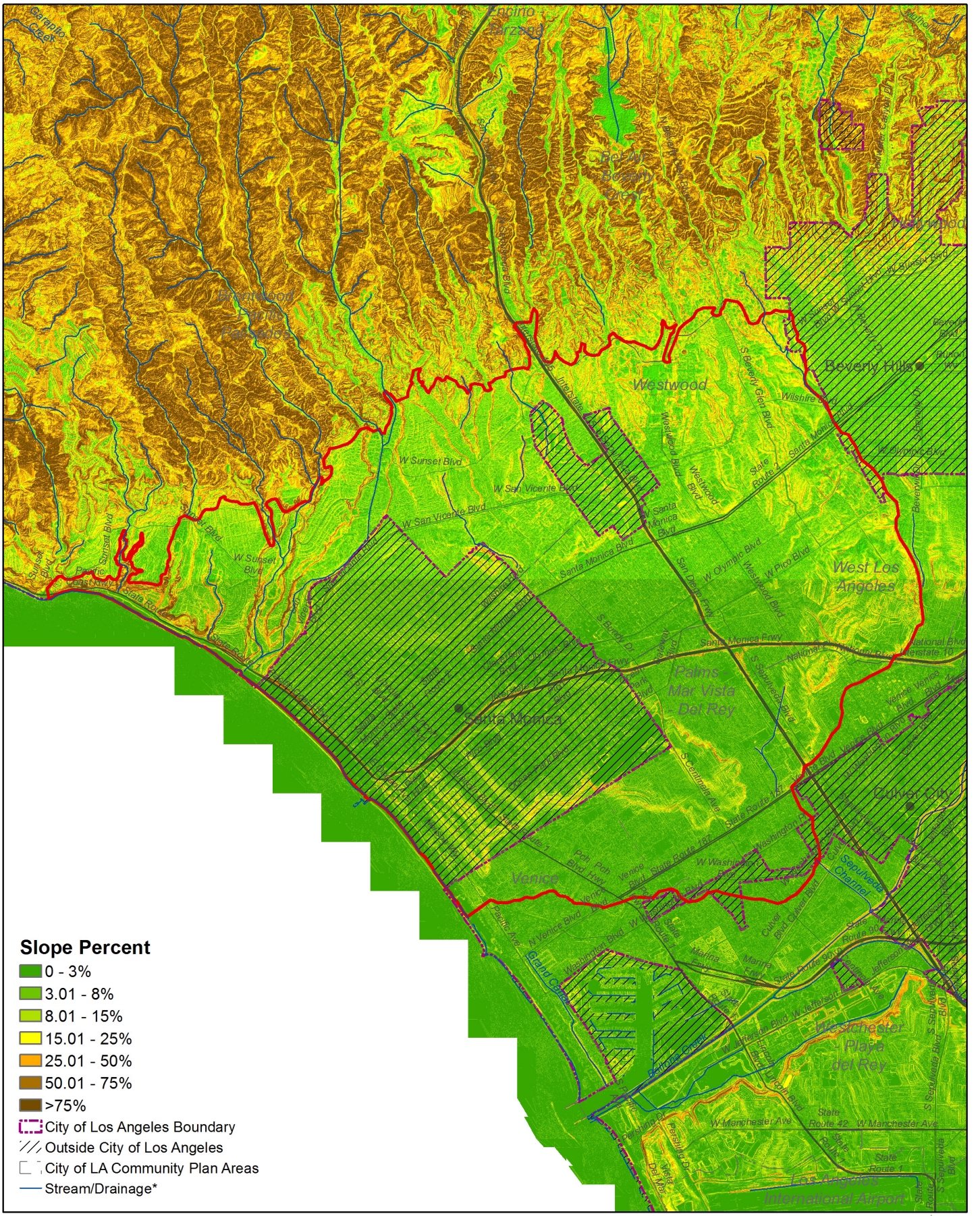

Slope Percent

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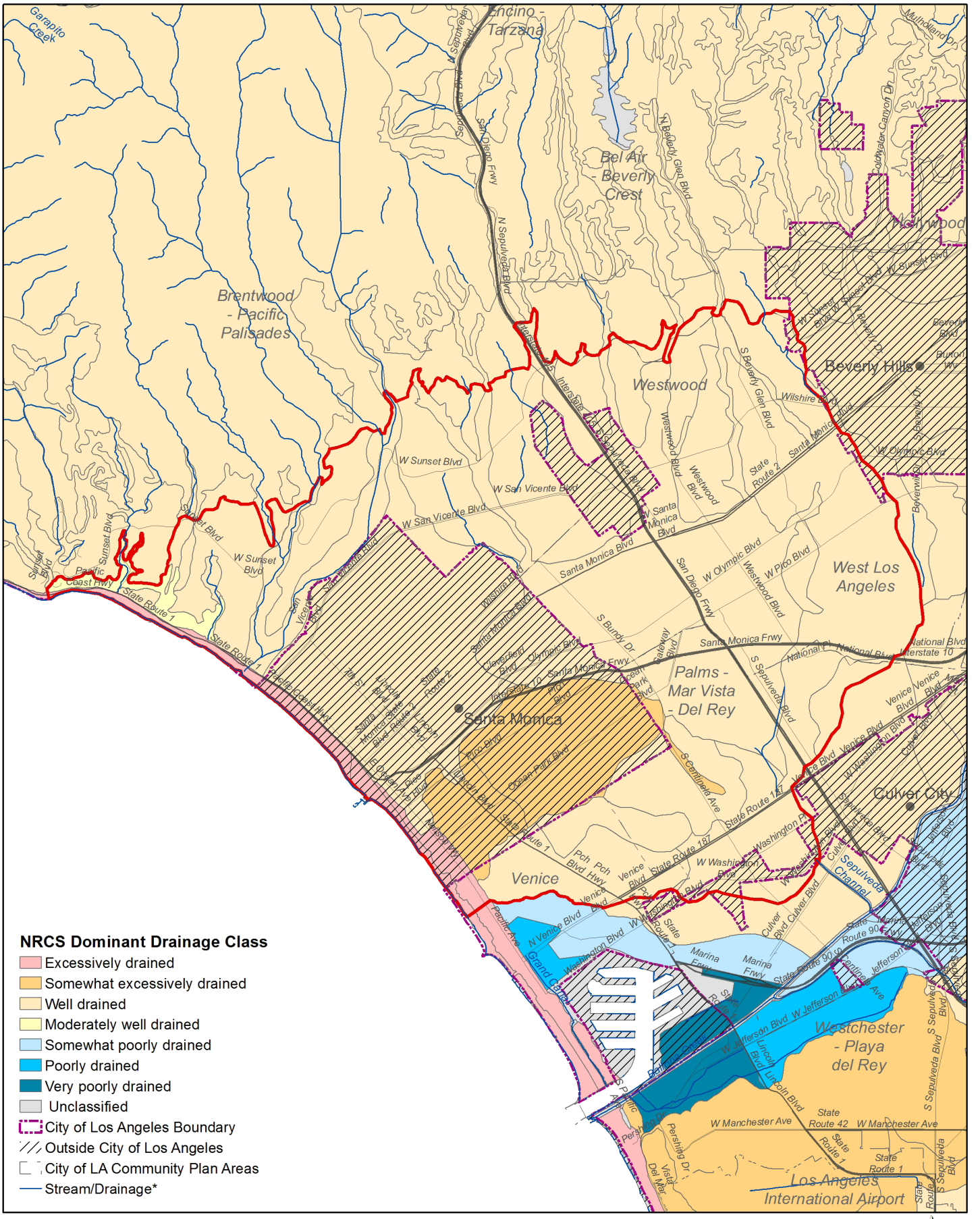
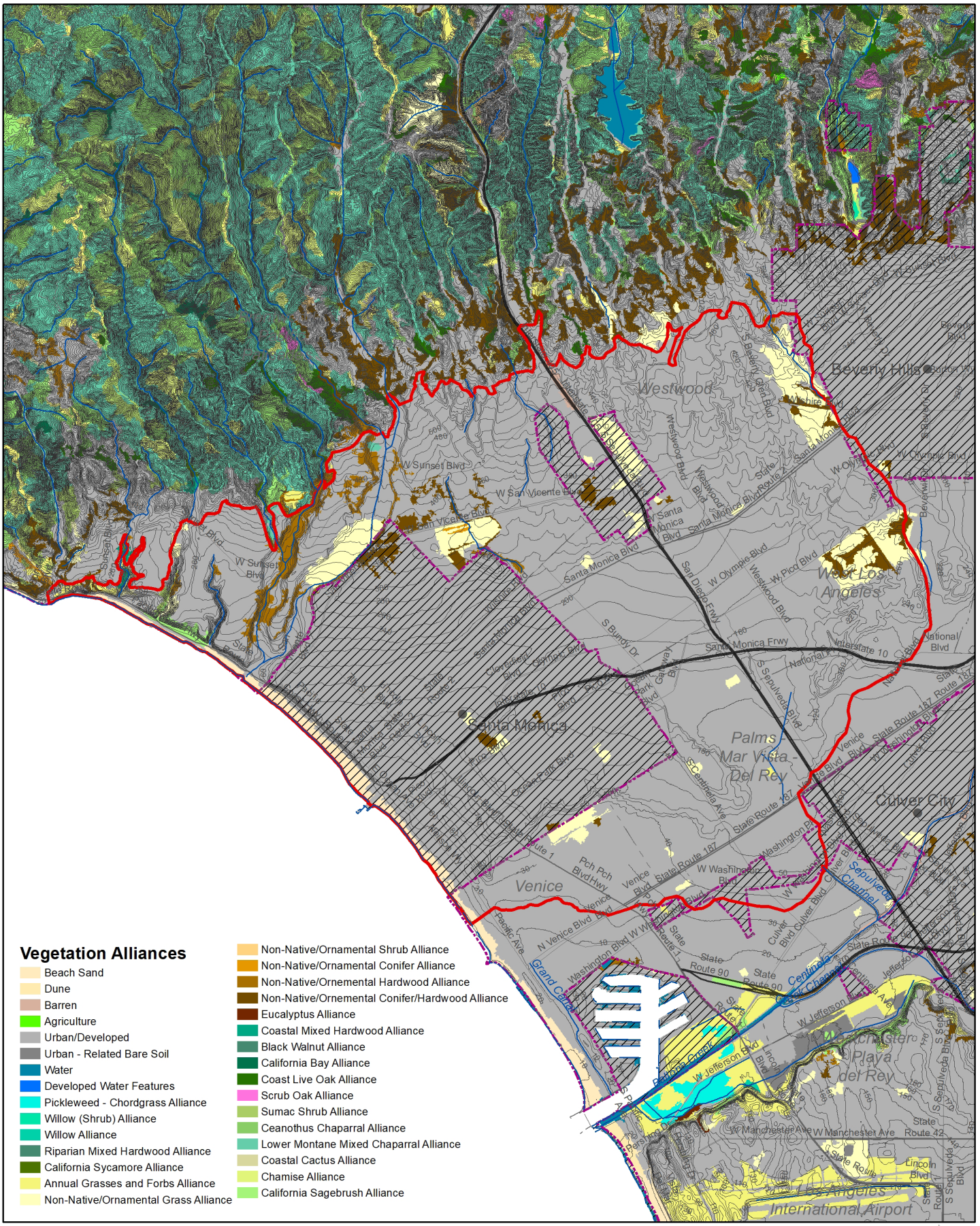


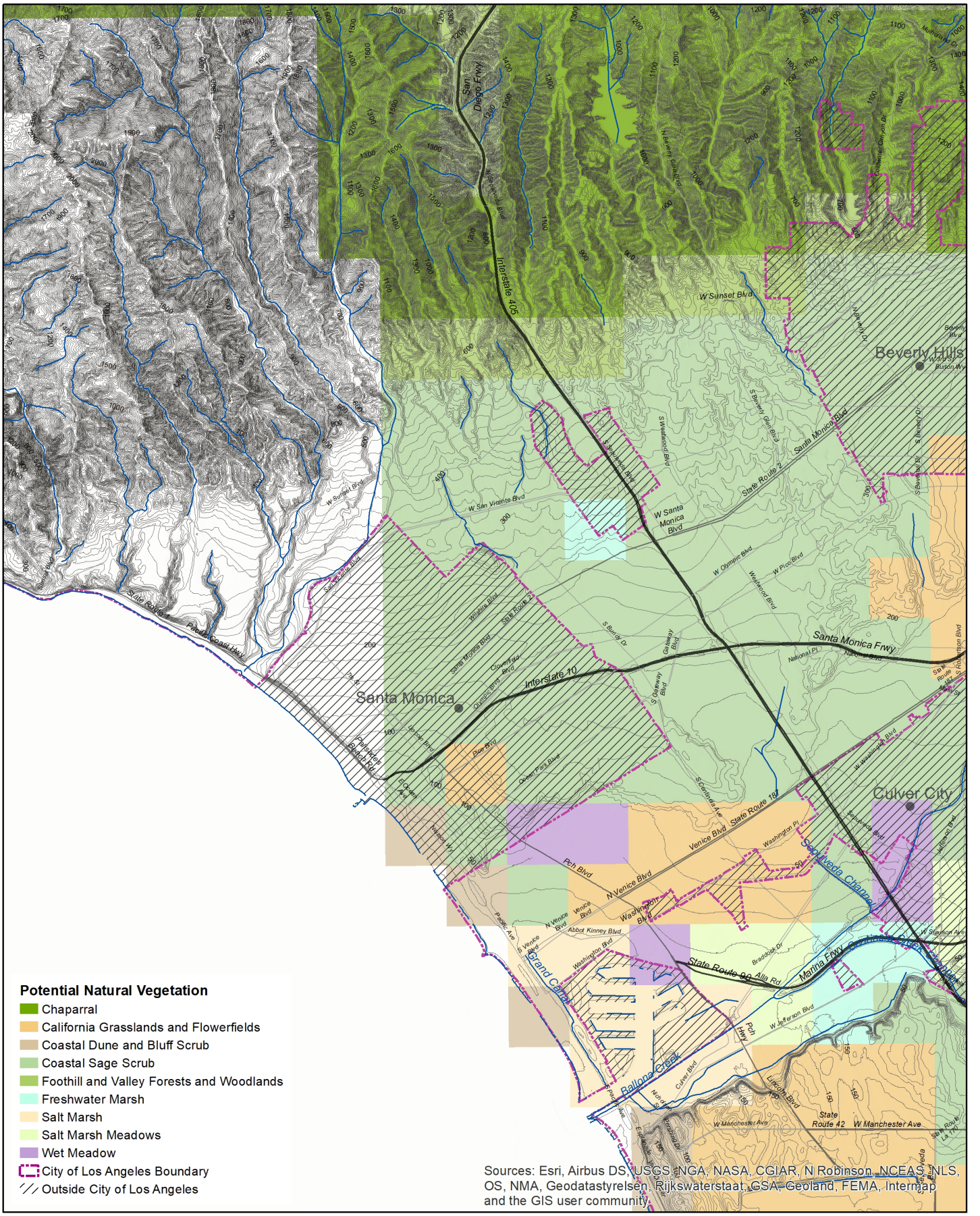
Drainage

Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.



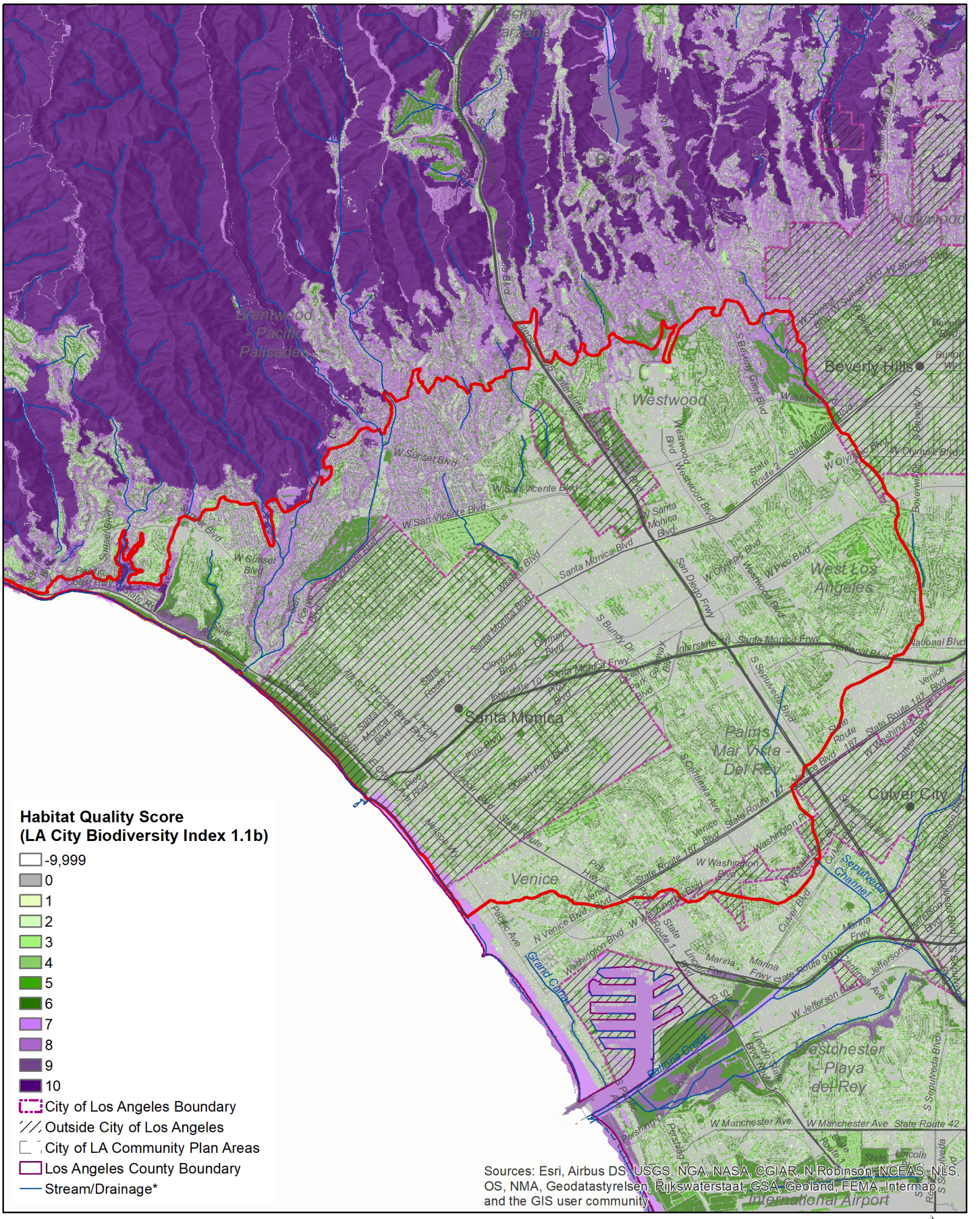
Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192

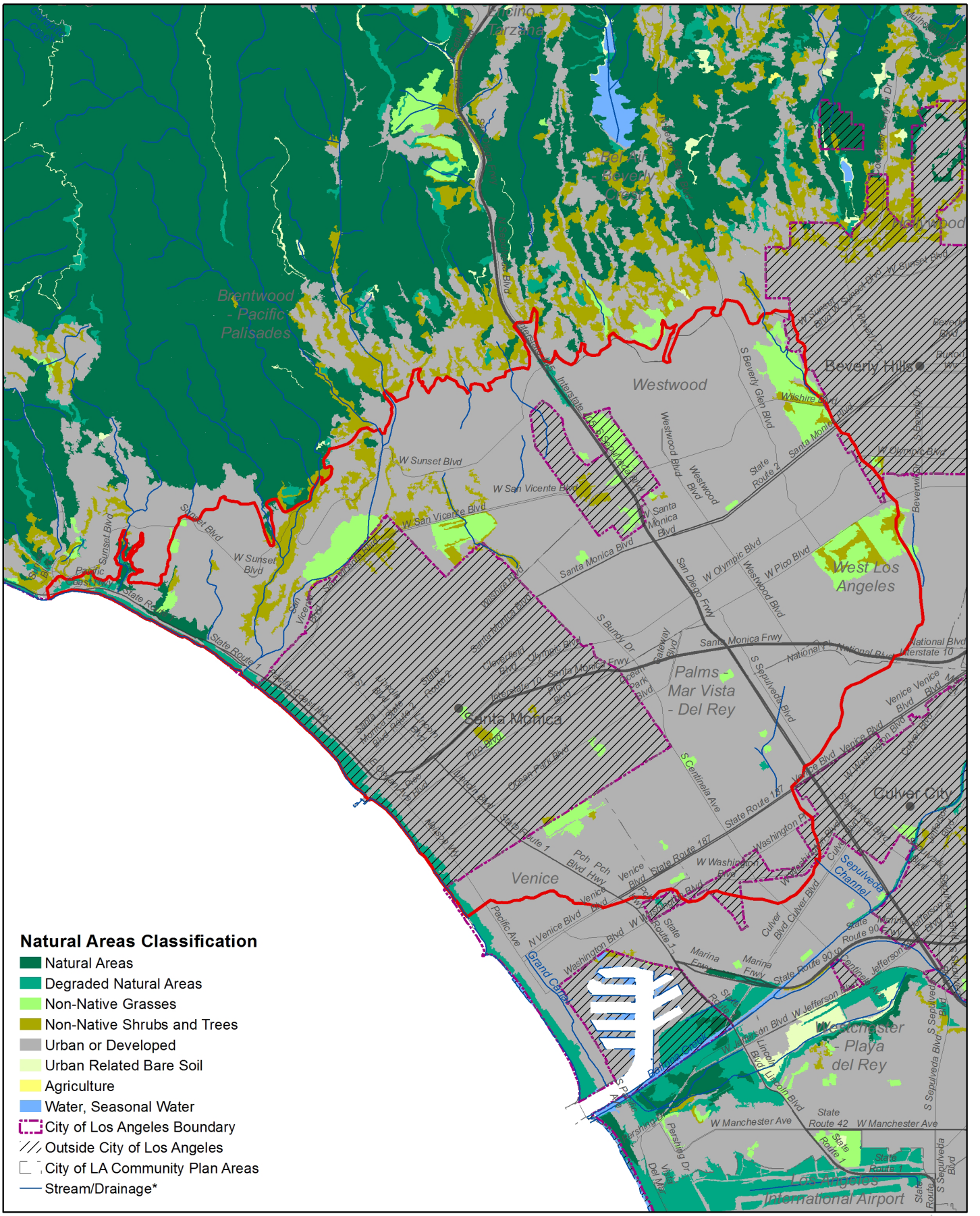


Hypothesized Potential Natural Vegetation

Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.

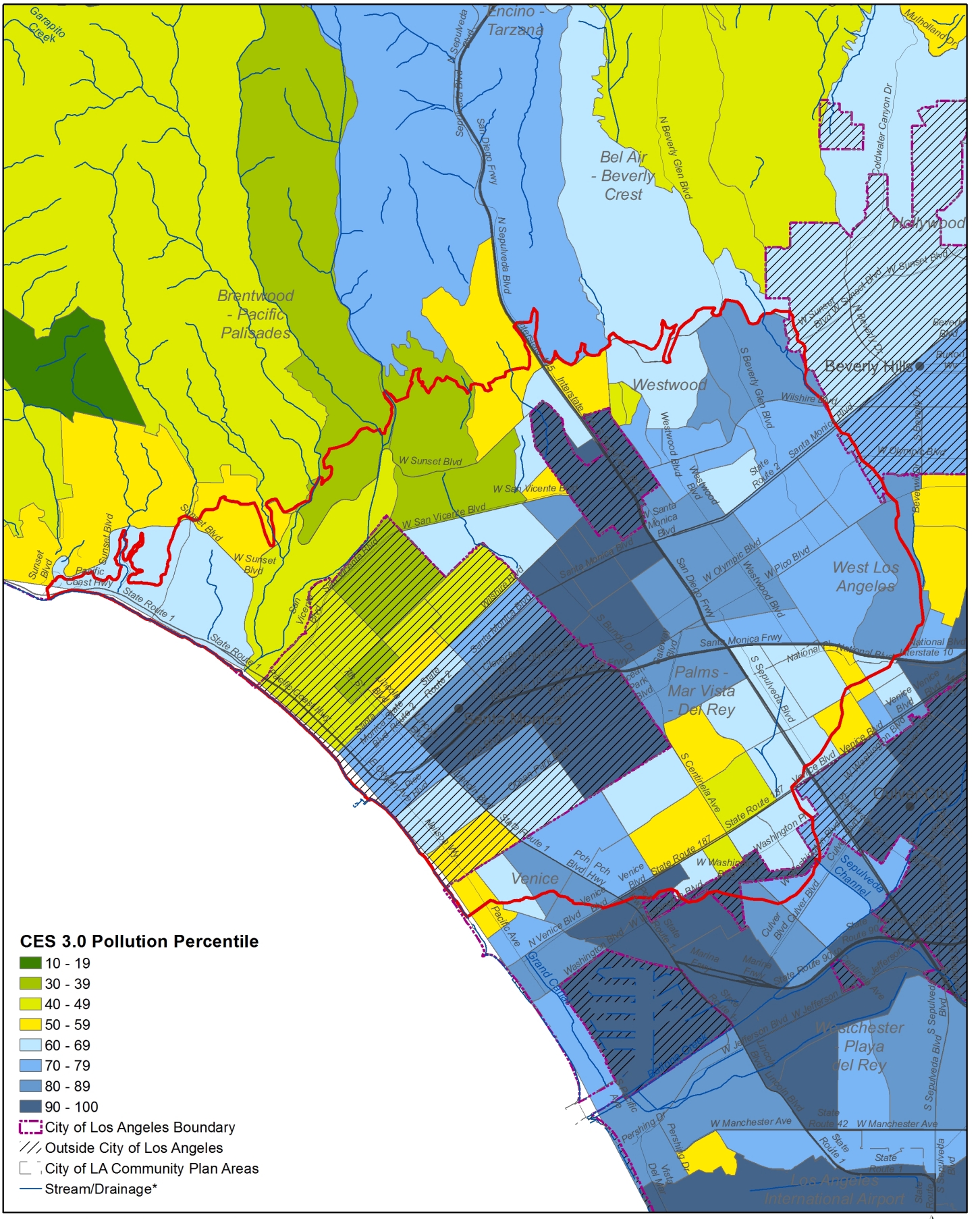


General Habitat Quality
Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



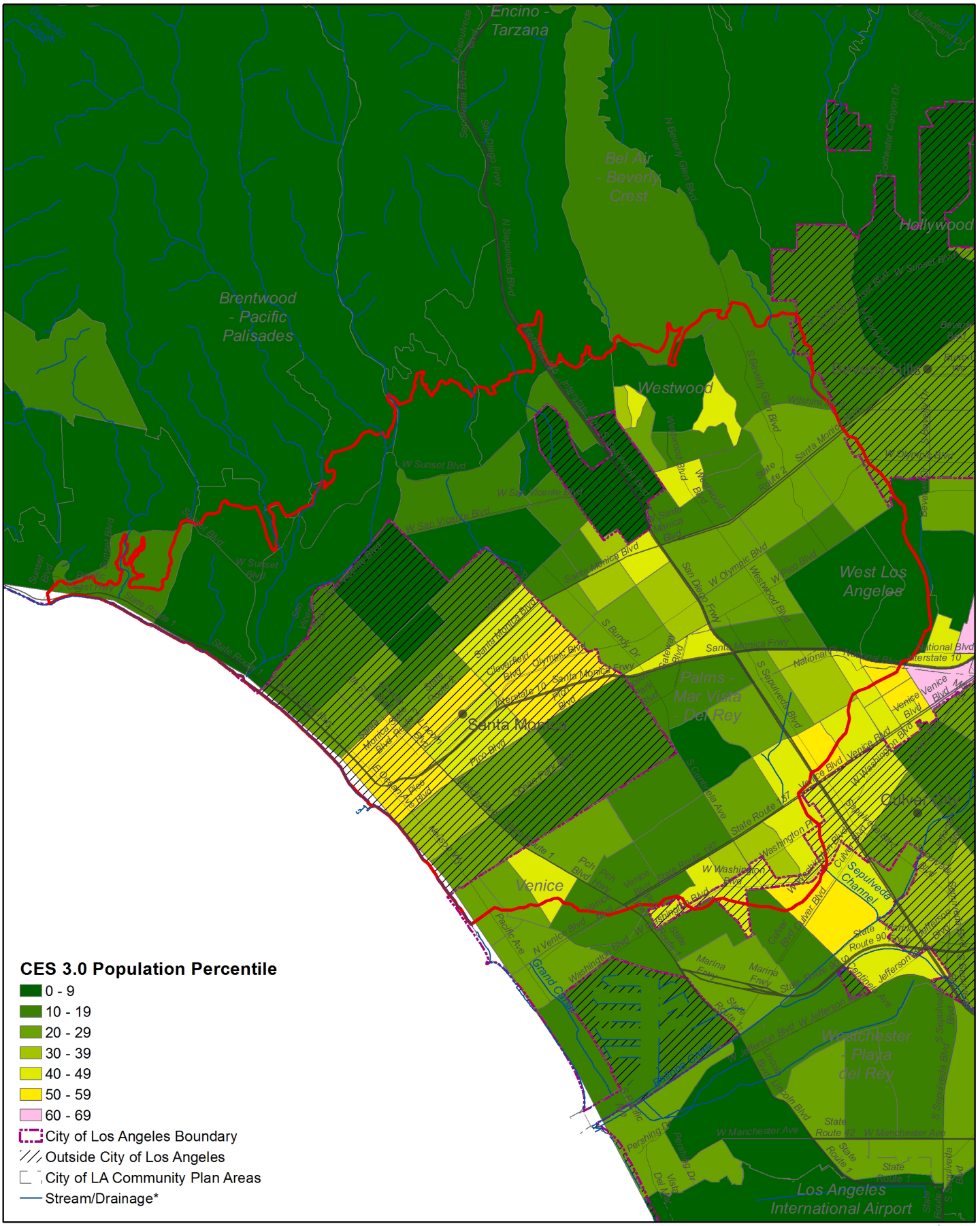
Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf



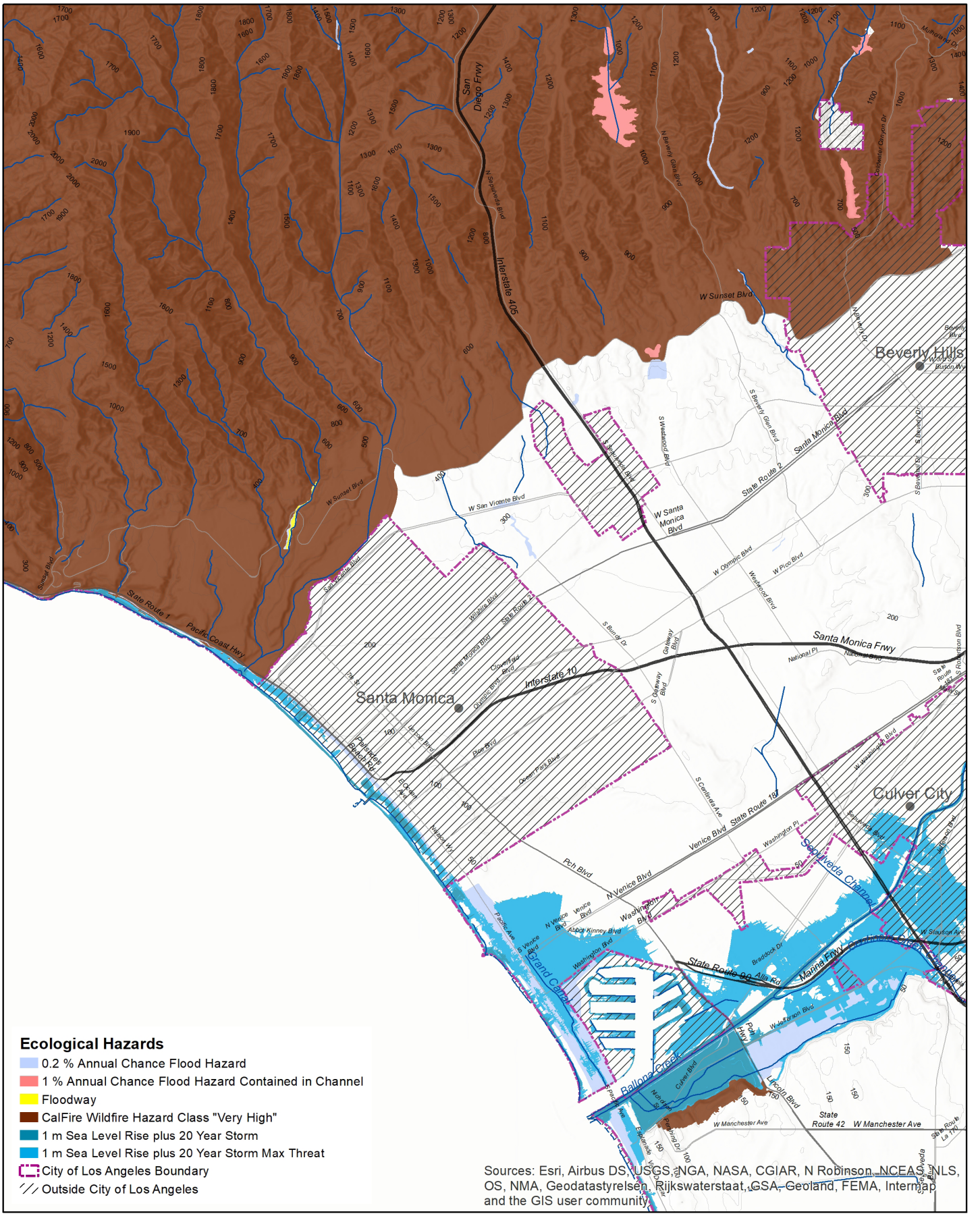
CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



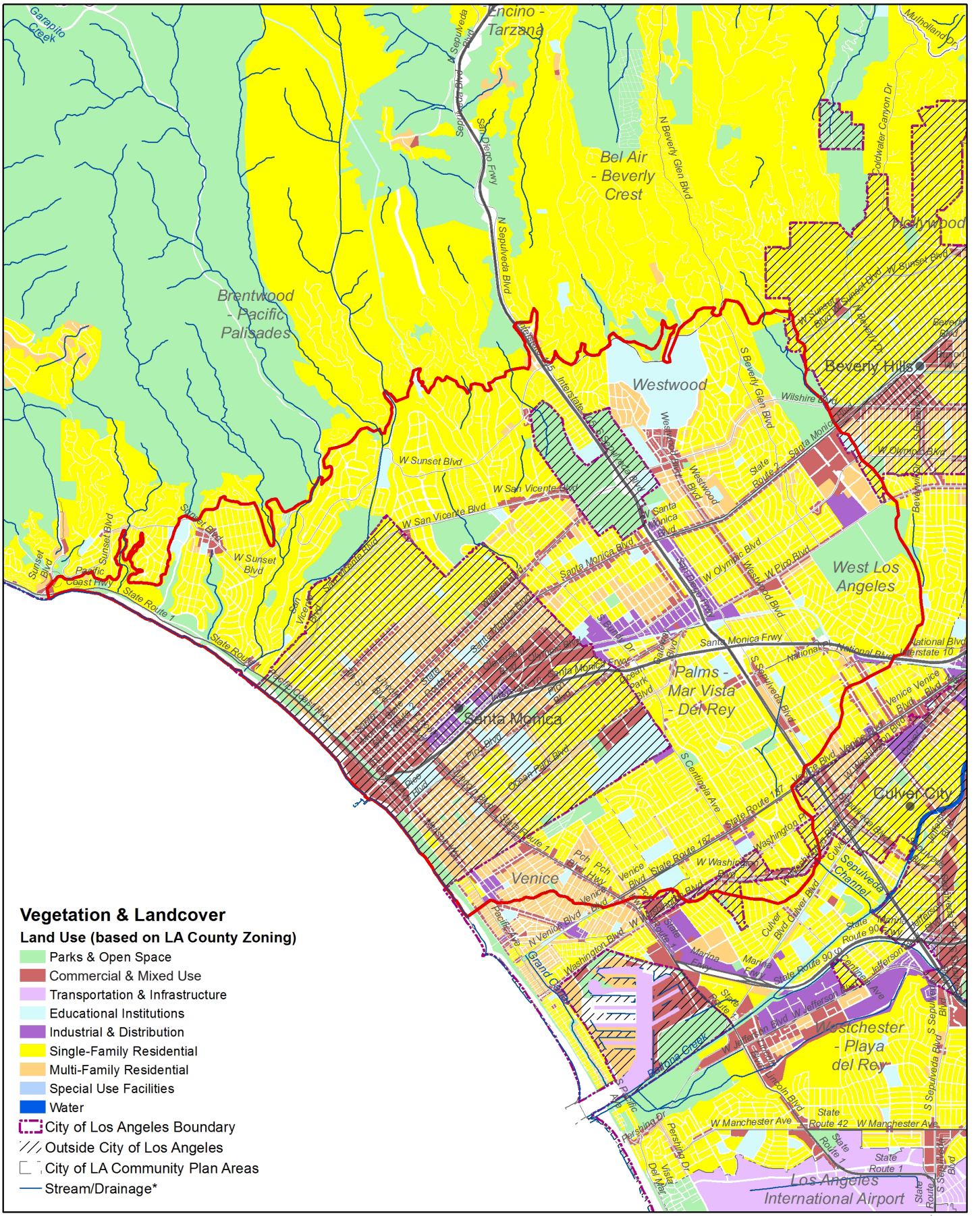
CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



Ecological Hazards

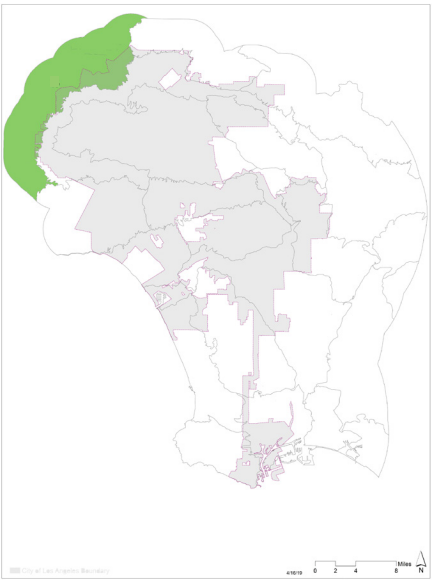
Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.



Land Use

Data source: 2008 Los Angeles County Countywide Zoning by the Southern California Association of Governments (SCAG). https://egis3.lacounty.gov/dataportal/2012/04/10/county-wide-zoning/

ECOTOPE 19: SANTA SUSANA MOUNTAINS (INCLUDES ECOTOPE 25: SIMI HILLS, & ECOTOPE 26: SIMI TERRACE)



(A small portion of this ecotope falls within the City of Los Angeles and only the portion of ecotope that falls within the broader study area has been delineated and characterized.)

LANDFORM

The Santa Susana Mountains, Simi Hills, and Simi Terrace include hills, low mountains, terraces, and valleys to the north of the Santa Monica Mountains and west of the San Gabriel Mountains. Large portions of these ecotopes within LA County are designated as a Sensitive Ecological Area. The Santa Susana Mountains are more rugged and rise to 3,747 feet above sea level at Oat Mountain. They run east-west resulting in dominant southerly and northerly aspects. Intensive, large-scale mass land grading associated with land development at the Porter Ranch community along the urban fringe of LA is reshaping landforms there. The Santa Susana Pass, along the 118 Freeway, serves as the boundary between the Simi Hills to the south. Terrain of the Simi Hills is lower in elevation and more variable in orientation. The eastern portion of the Simi Terrace Ecotope sits just west of the Santa Susana pass with gently sloping terrain composed of alluvial fans and plains and terrace landforms.

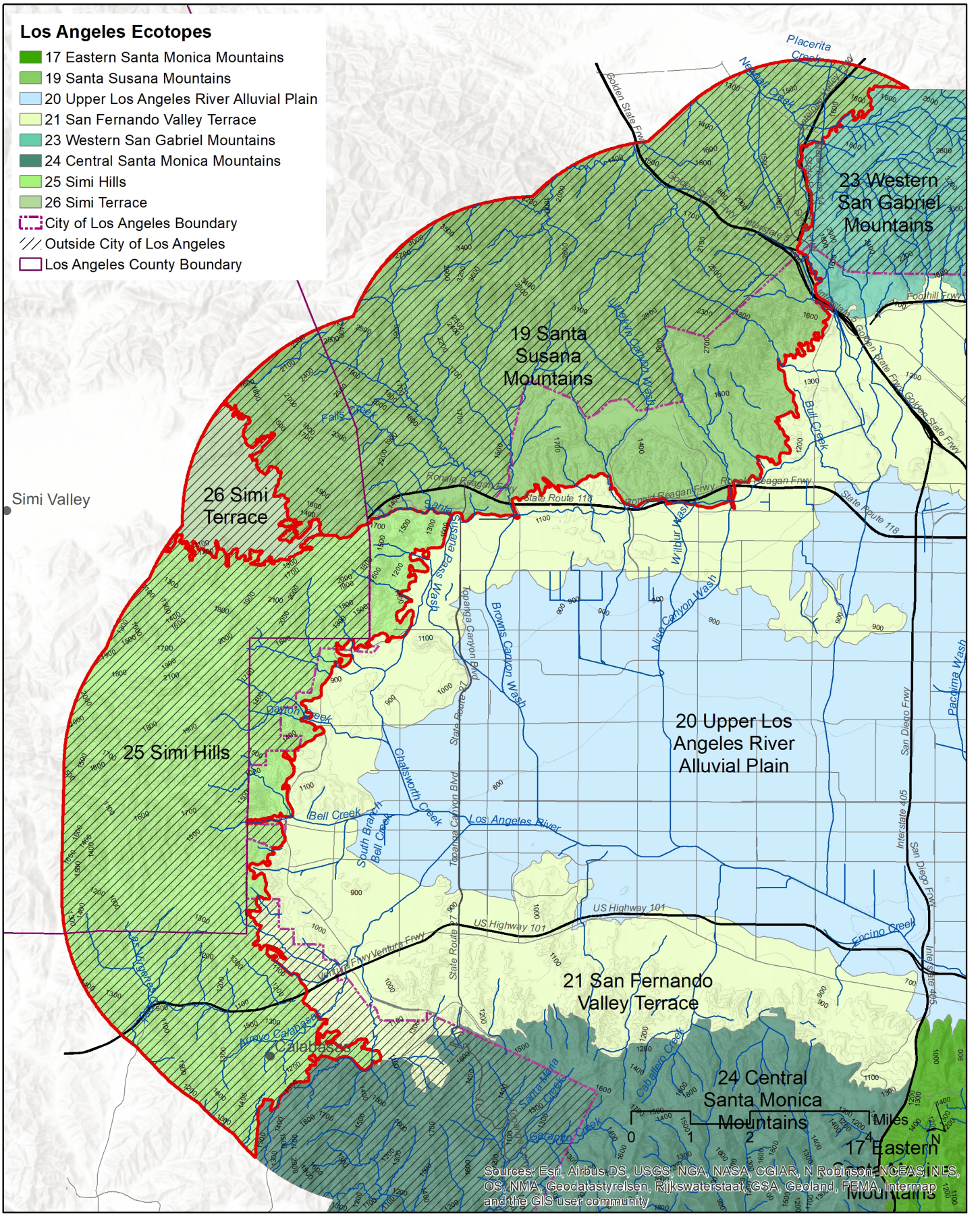
MICROCLIMATE

The higher elevation of the Santa Susana Mountains, and valley cooling effect of the Simi Terrace, result in cooler Sunset Climate Zones above and below the thermal belts, respectively. The Simi Hills and lower elevation areas of the Santa Susanas fall within the Valley Thermal Belts resulting in less frequent frost or freezing conditions and a longer growing season. All portions of the ecotope experience very hot summer temperatures relative to more coastal areas. Rain shadowing from the higher terrain of the Santa Monica Mountains to the south and west, and mountains of the Los Padres National Forest to the north, likely results in relatively lower precipitation, orographic enhancement on slopes, or marine fog. These ecotopes are also highly prone to Santa Ana wind events.

VEGETATION & LANDCOVER

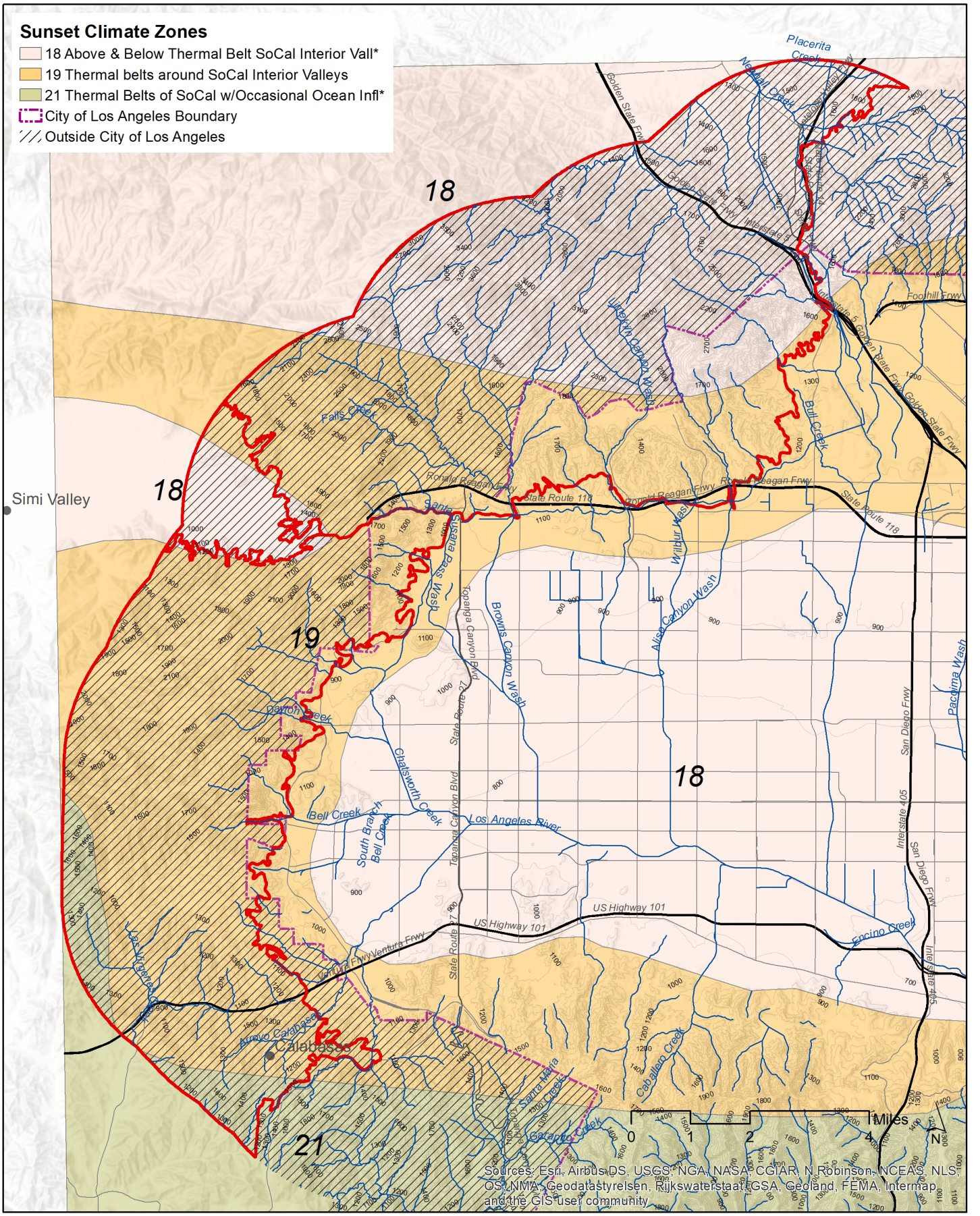
Vegetation is highly diverse across the ecotopes. Higher elevation, north slopes of the Santa Susana Mountains include pockets of big-cone Douglass fir alliance and other woodlands. Valleys include riparian woodlands and pockets of sensitive valley oak woodlands and savannas. Mainland cherry woodlands are also a rare woodland type of conservation significance. Higher elevations and cooler aspects are dominated by chaparral alliances. Lower elevations and more southerly aspects include higher prevalence of coastal sage scrub alliances and non-native annual grasslands. Unnatural wildfire frequencies, among other stressors, are likely driving vegetation type conversion of native vegetation to non-native annual grasslands across the ecotope, especially in the Simi Hills and other wind-prone and urban-adjacent areas.

In addition to their designation as Sensitive Ecological Areas, large portions of these ecotopes have also been identified as wildlife corridors in the California Essential Linkages Project. These corridors are envisioned to maintain and enhance connectivity for wildlife movement between the Santa Monica Mountains and Santa Susana Mountains. A habitat bridge over the 101 freeway at Liberty Canyon is planned as a key feature. Additional flora and fauna species of conservation significance include Lyon's pentachaeta (*Pentachaeta lyonii*), Nevin's Barberry (*Berberis nevinii*), Braunton's milkvetch (*Astragalus brauntonii*), Santa Susana tarplant (*Deinandra minthornii*), two-striped garter snake (*Thamnophis hammondii*), golden eagle (*Aquila chrysaetos*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and the San Diego desert woodrat (*Neotoma lepida intermedia*) (Los Angeles County 2, 2000).



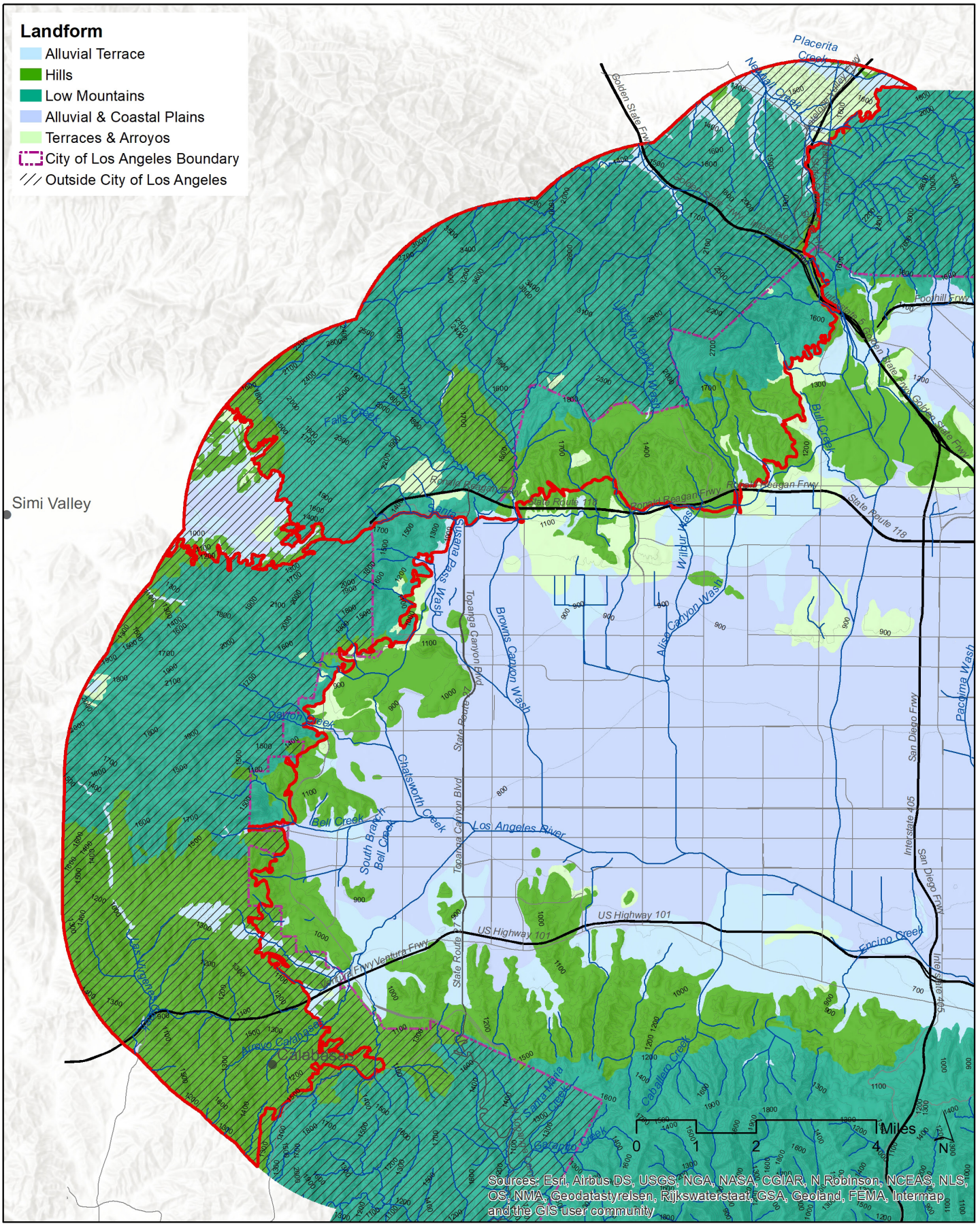
Ecotopes 19, 25, and 26 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



Landform

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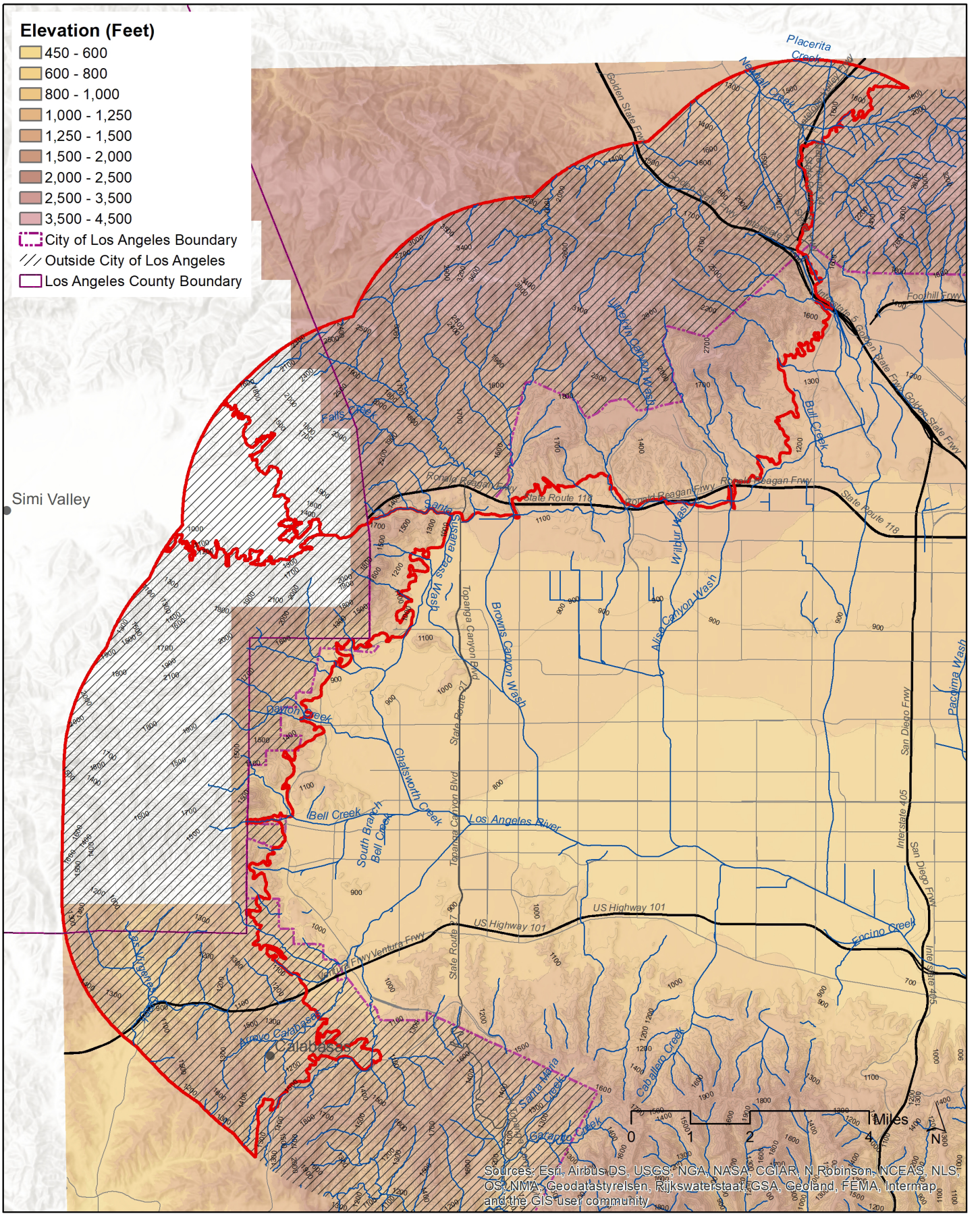

Elevation

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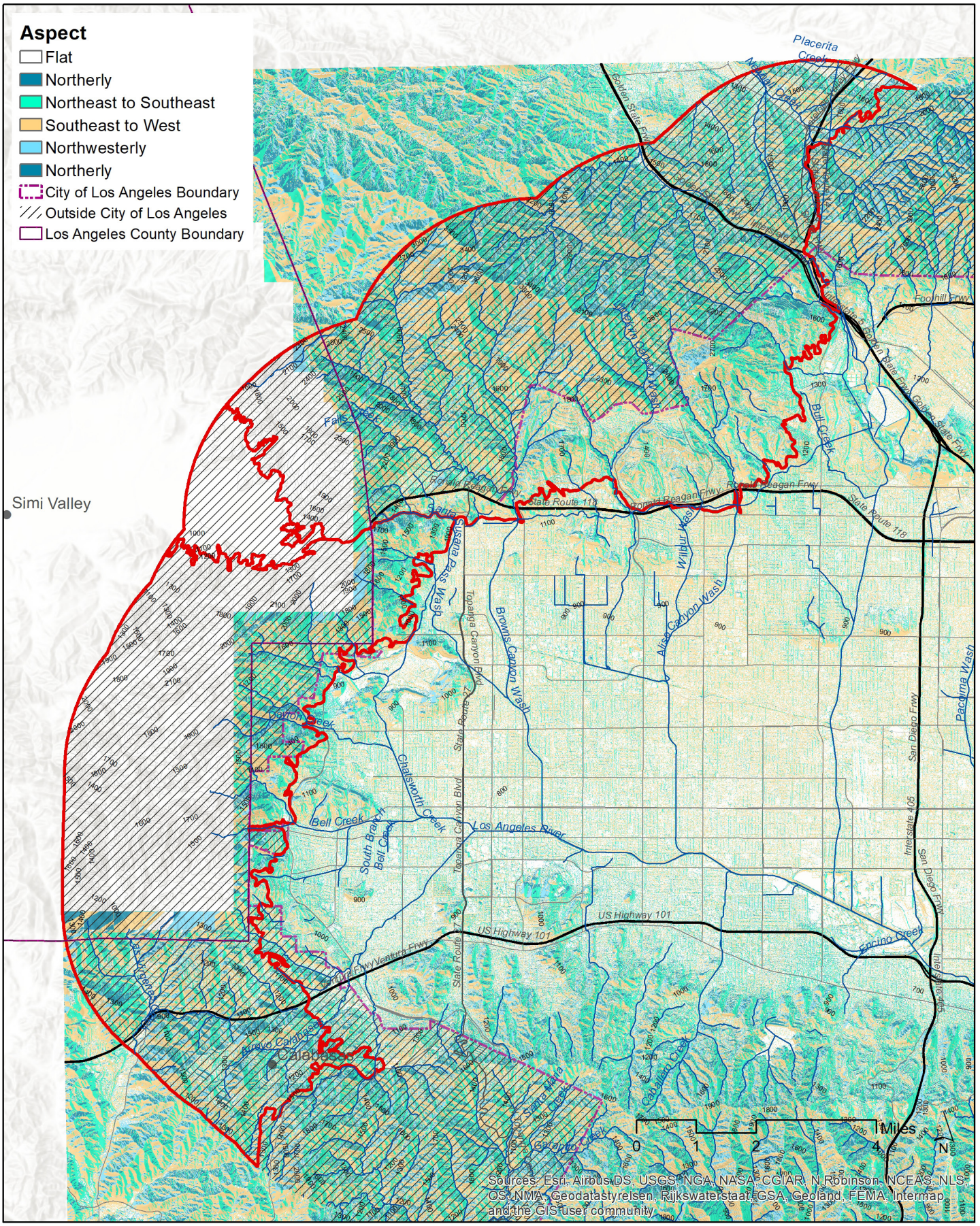

Aspect

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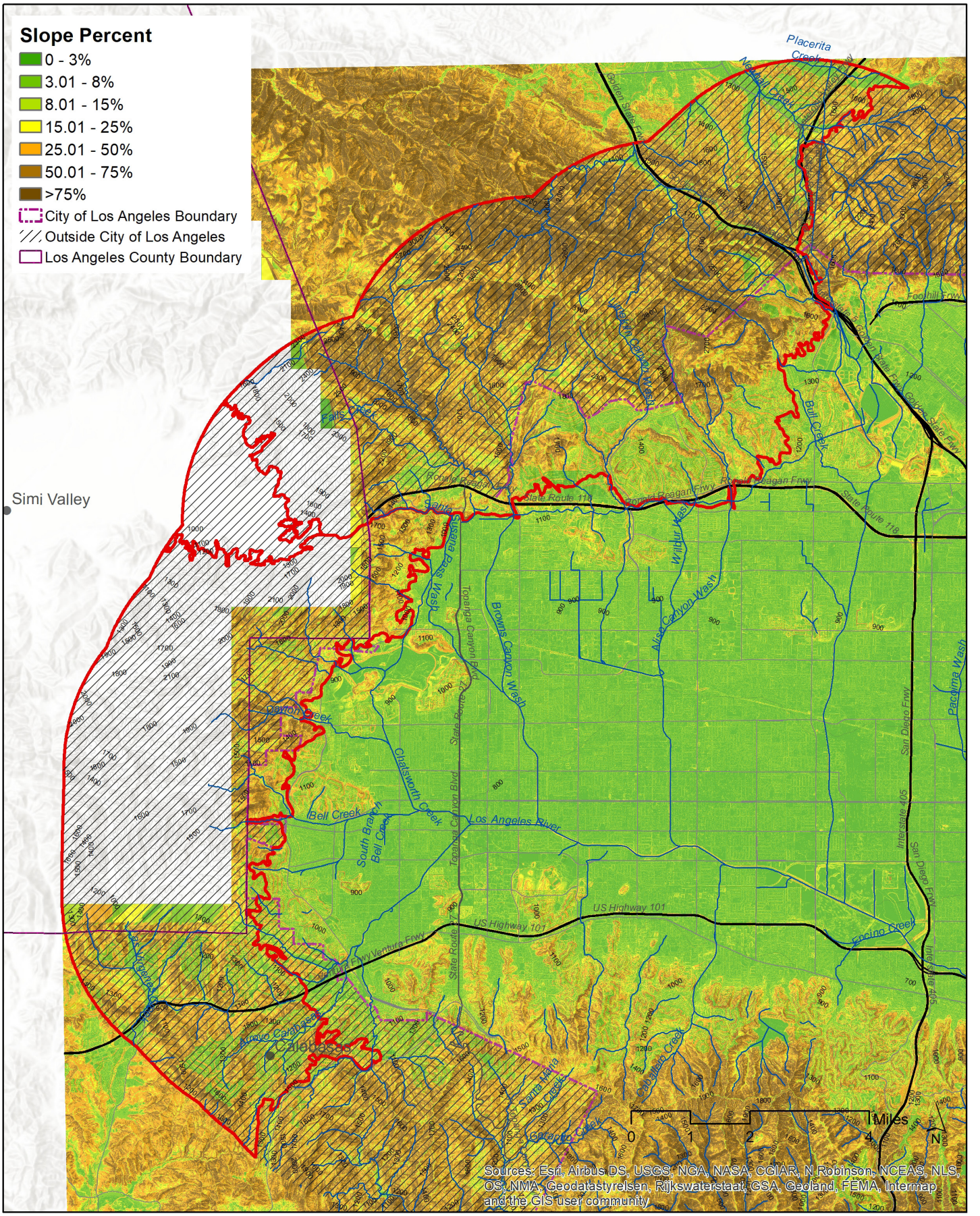

Slope Percent

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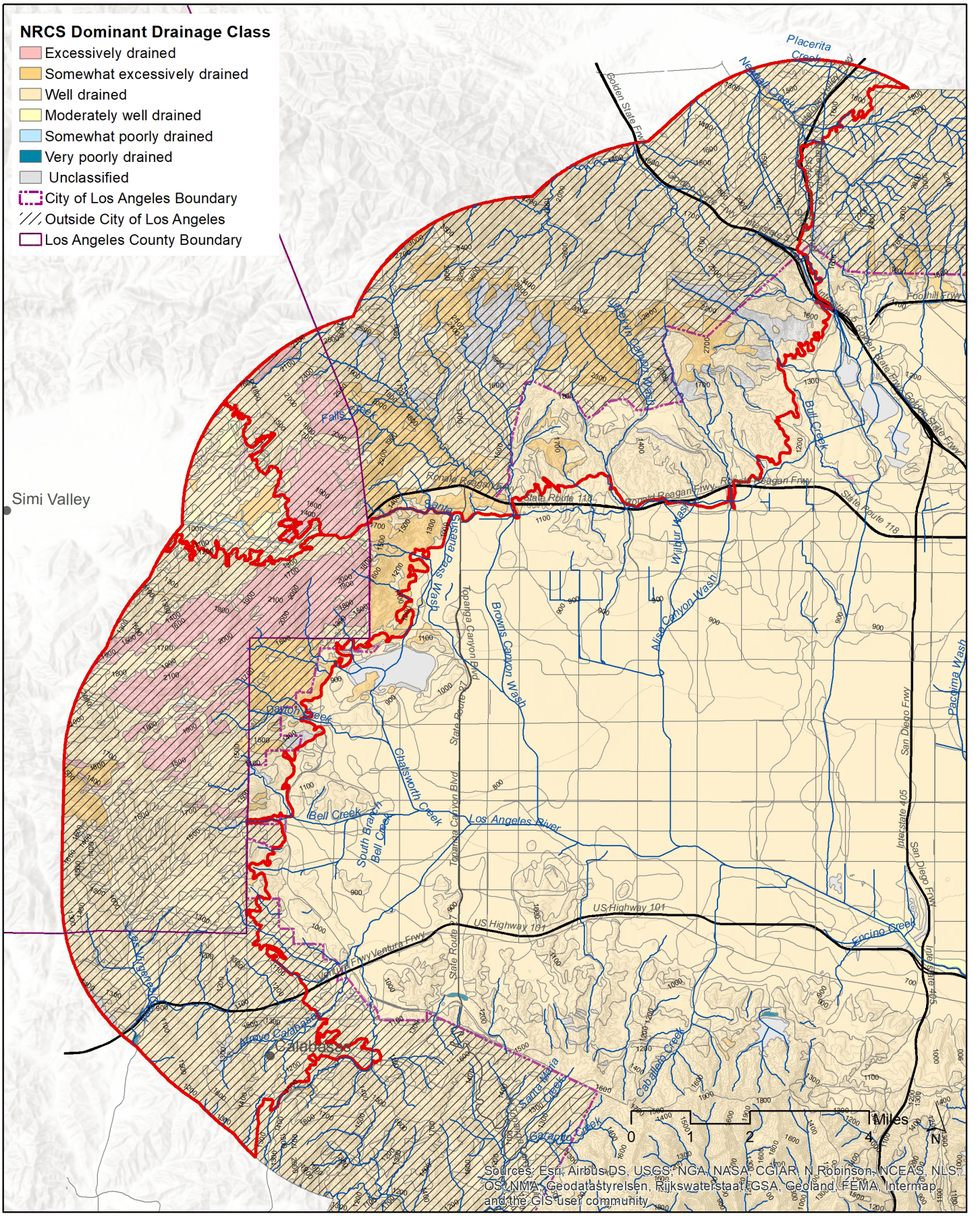
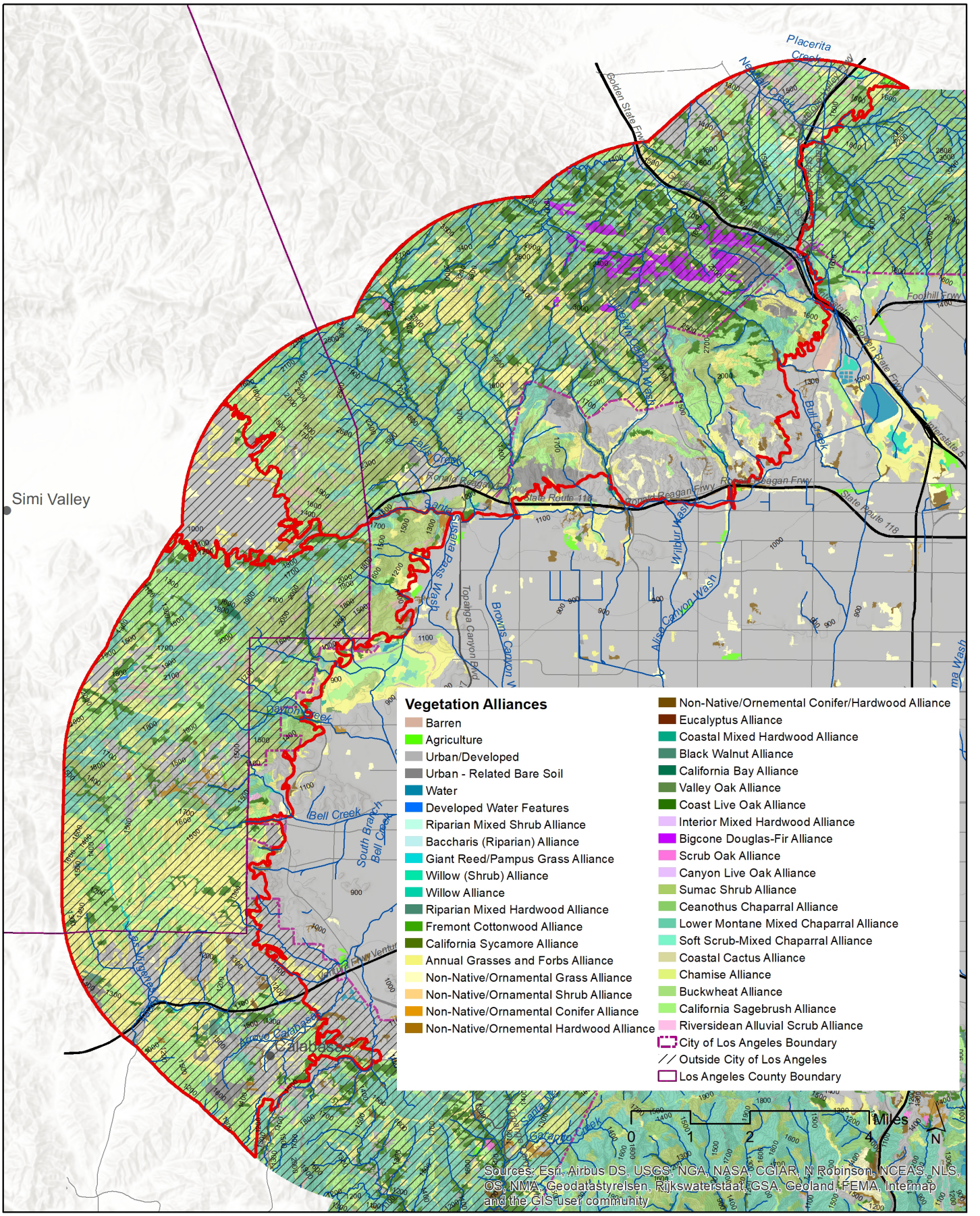


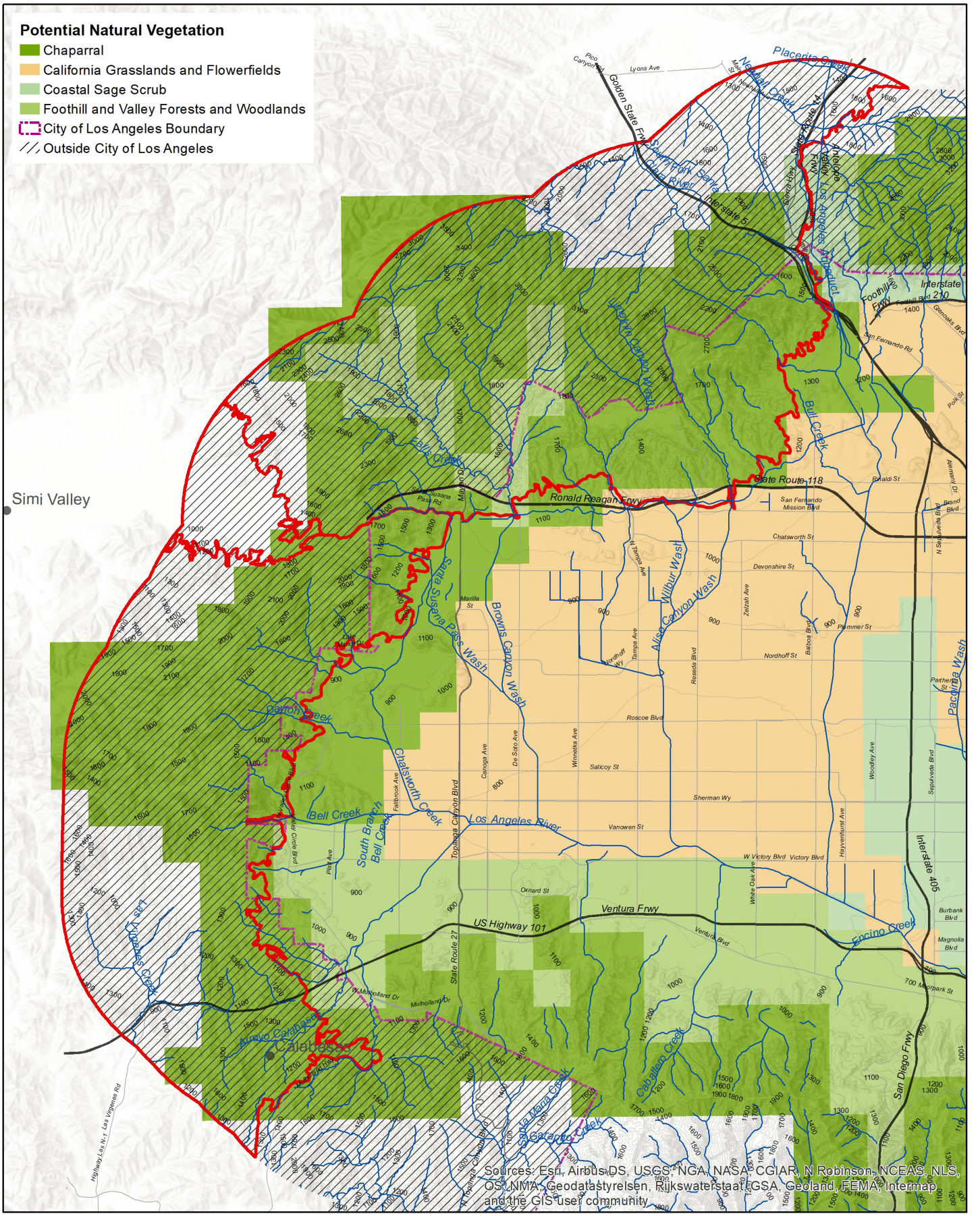
Drainage

Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.



Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192



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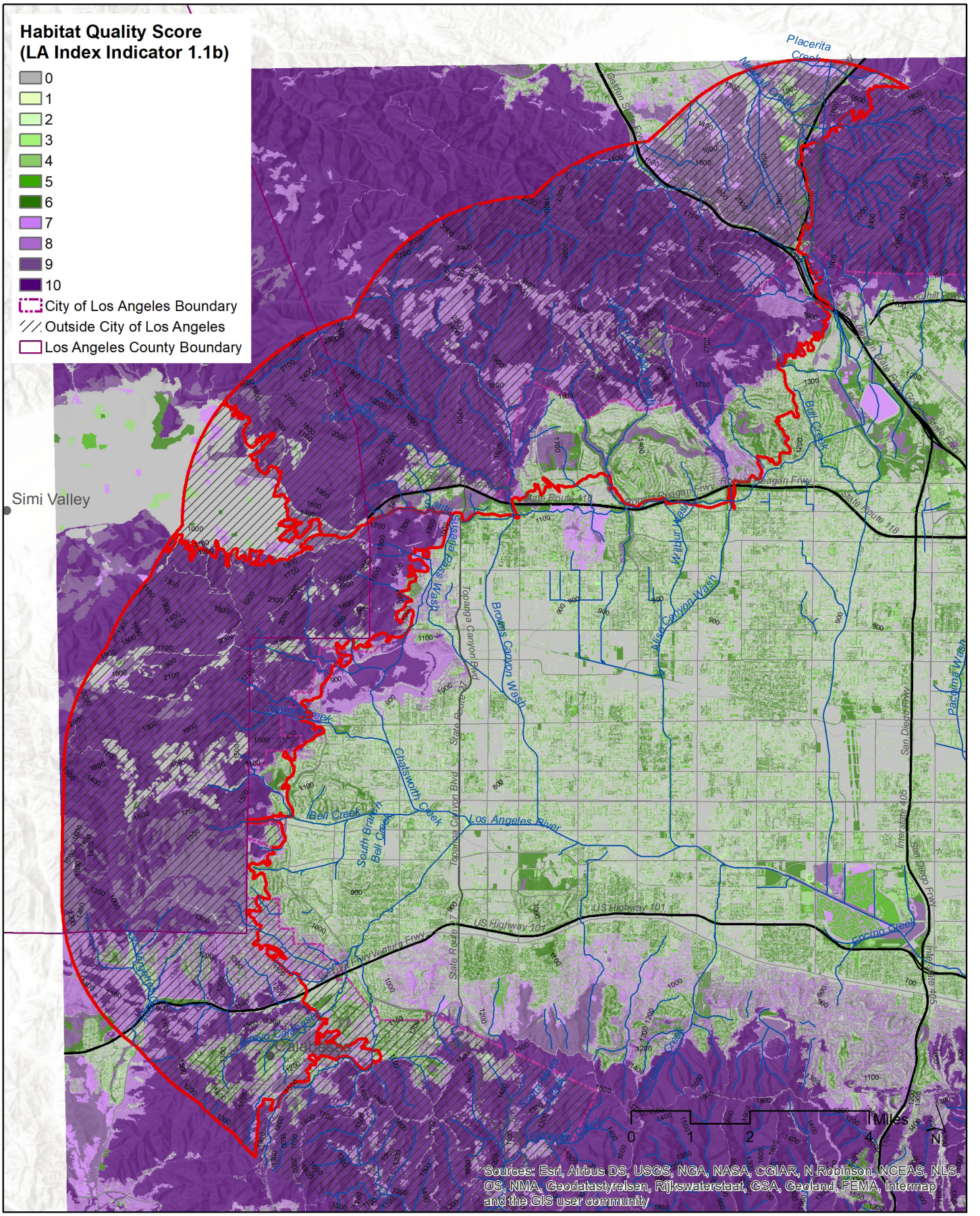
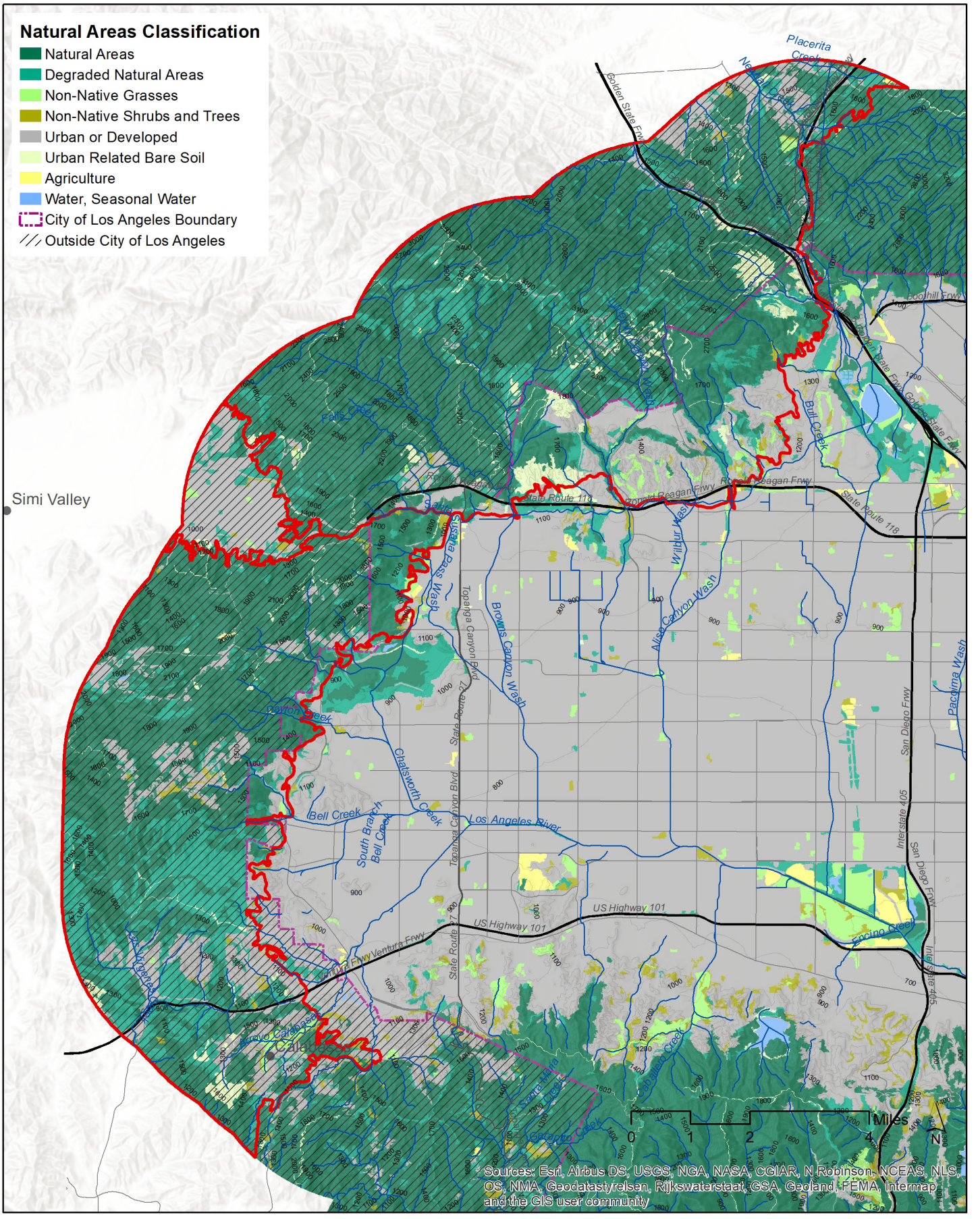
Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.



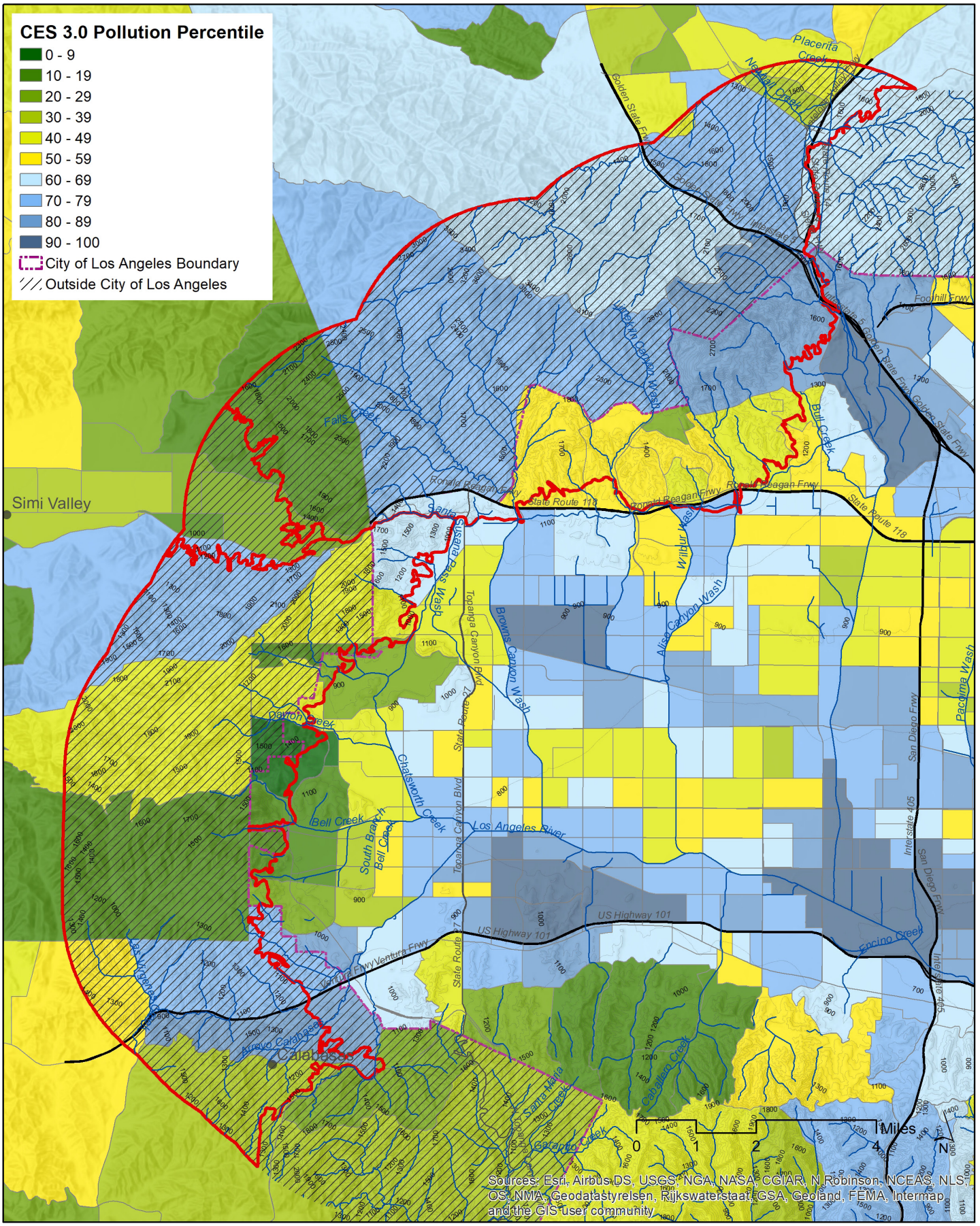
General Habitat Quality

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf



CalEnviroScreen Pollution Precentile (pollution exposure)

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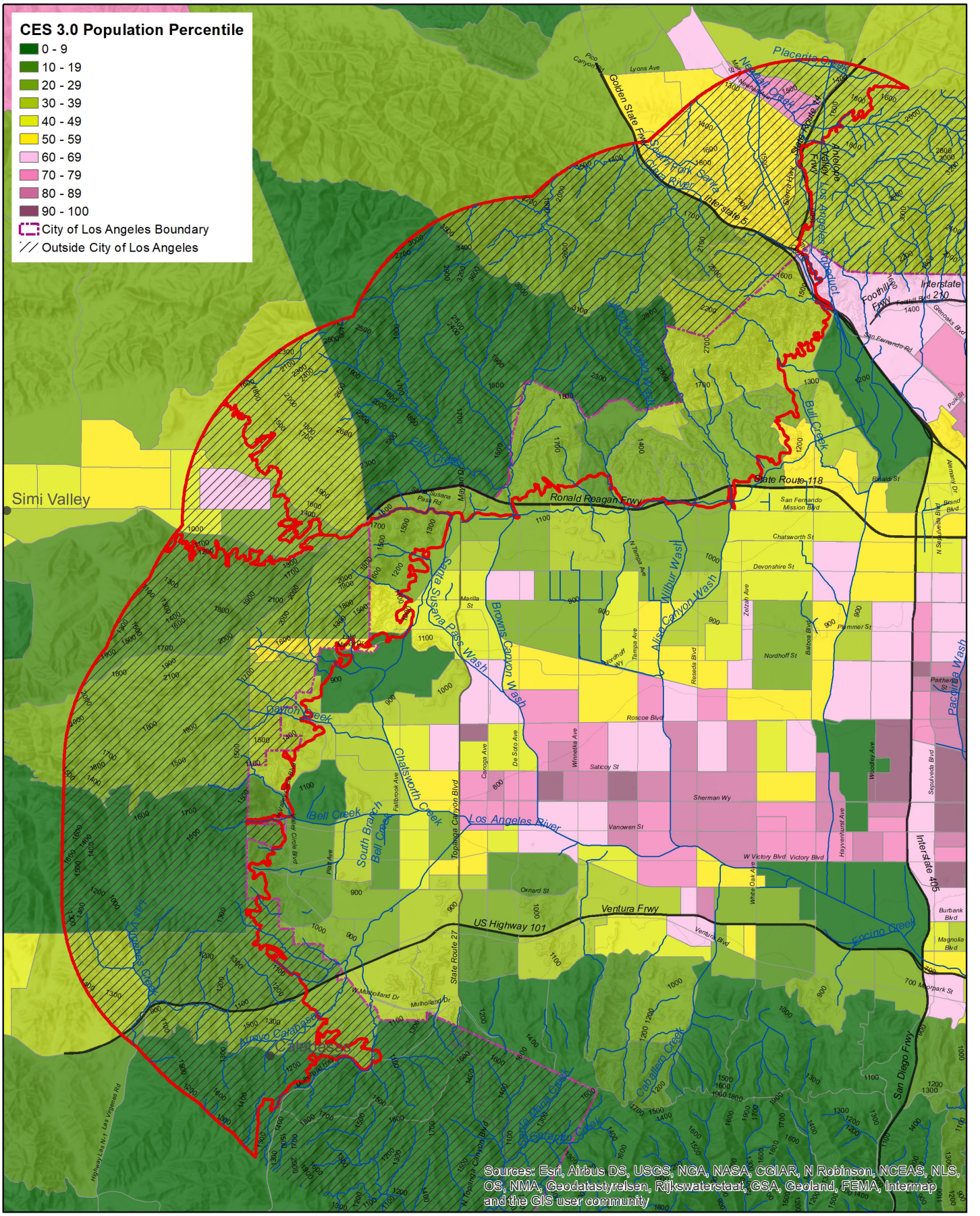
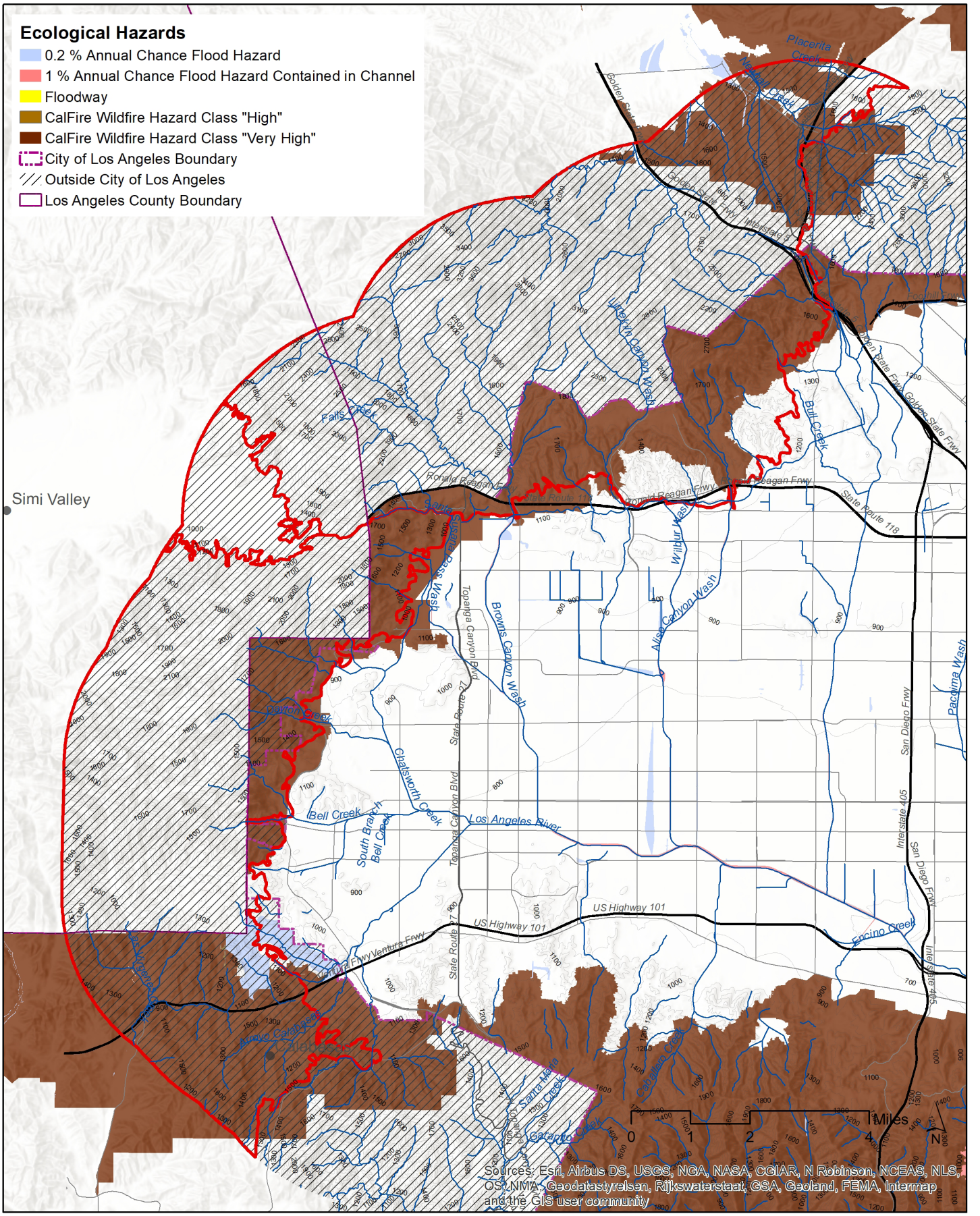


CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

0 1 2 4 Miles N



Ecological Hazards

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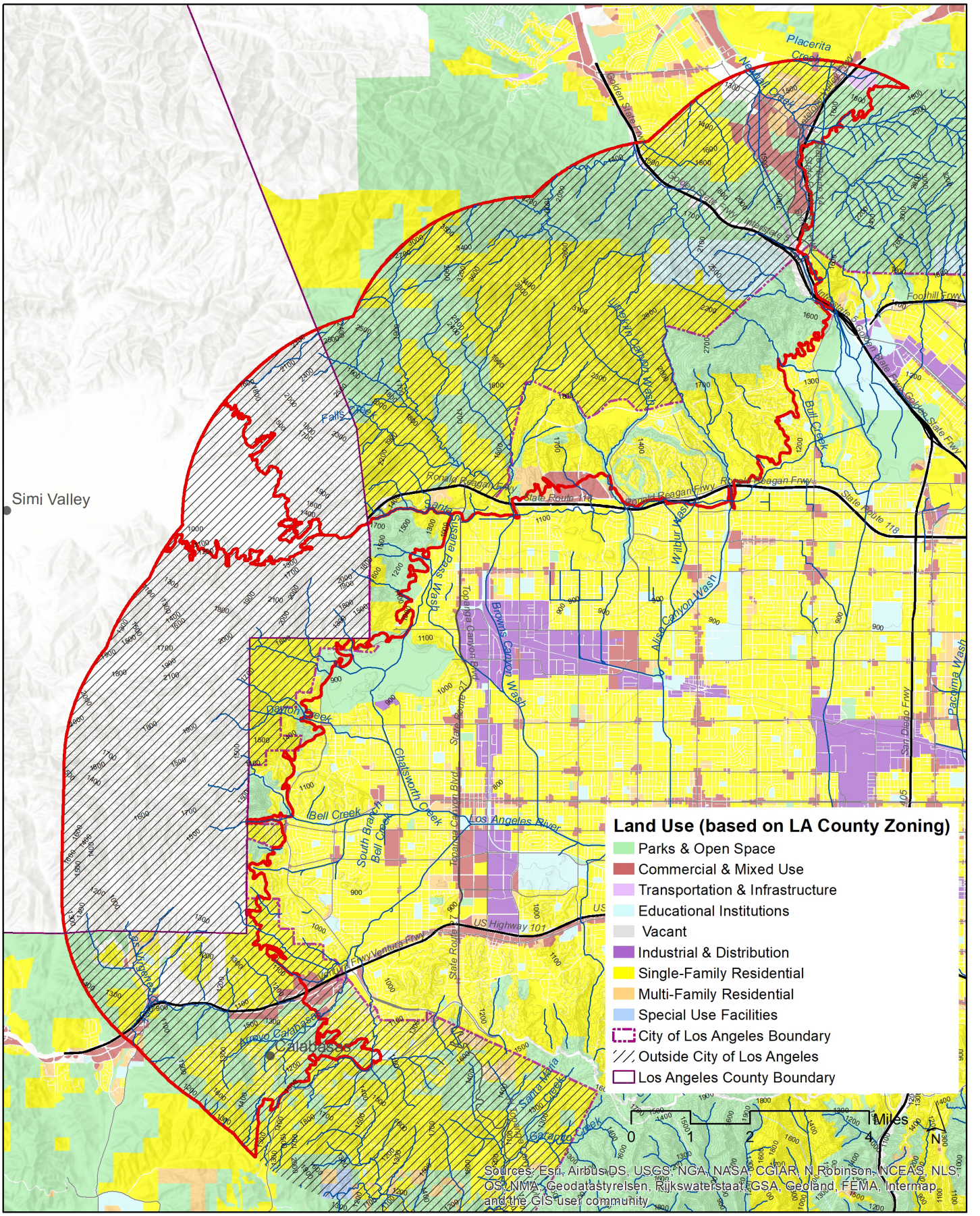
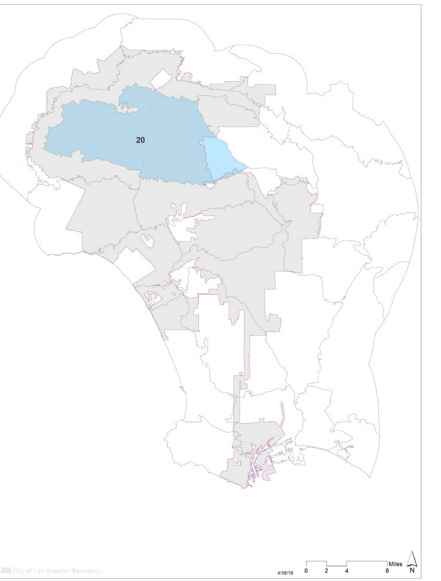


Land Use

Data source: 2008 Los Angeles County Countywide Zoning by the Southern California Association of Governments (SCAG). https://egis3.lacounty.gov/dataportal/2012/04/10/county-wide-zoning/

ECOTOPE 20: UPPER LOS ANGELES RIVER ALLUVIAL PLAIN

(Mostly within the City of Los Angeles)



LANDFORM

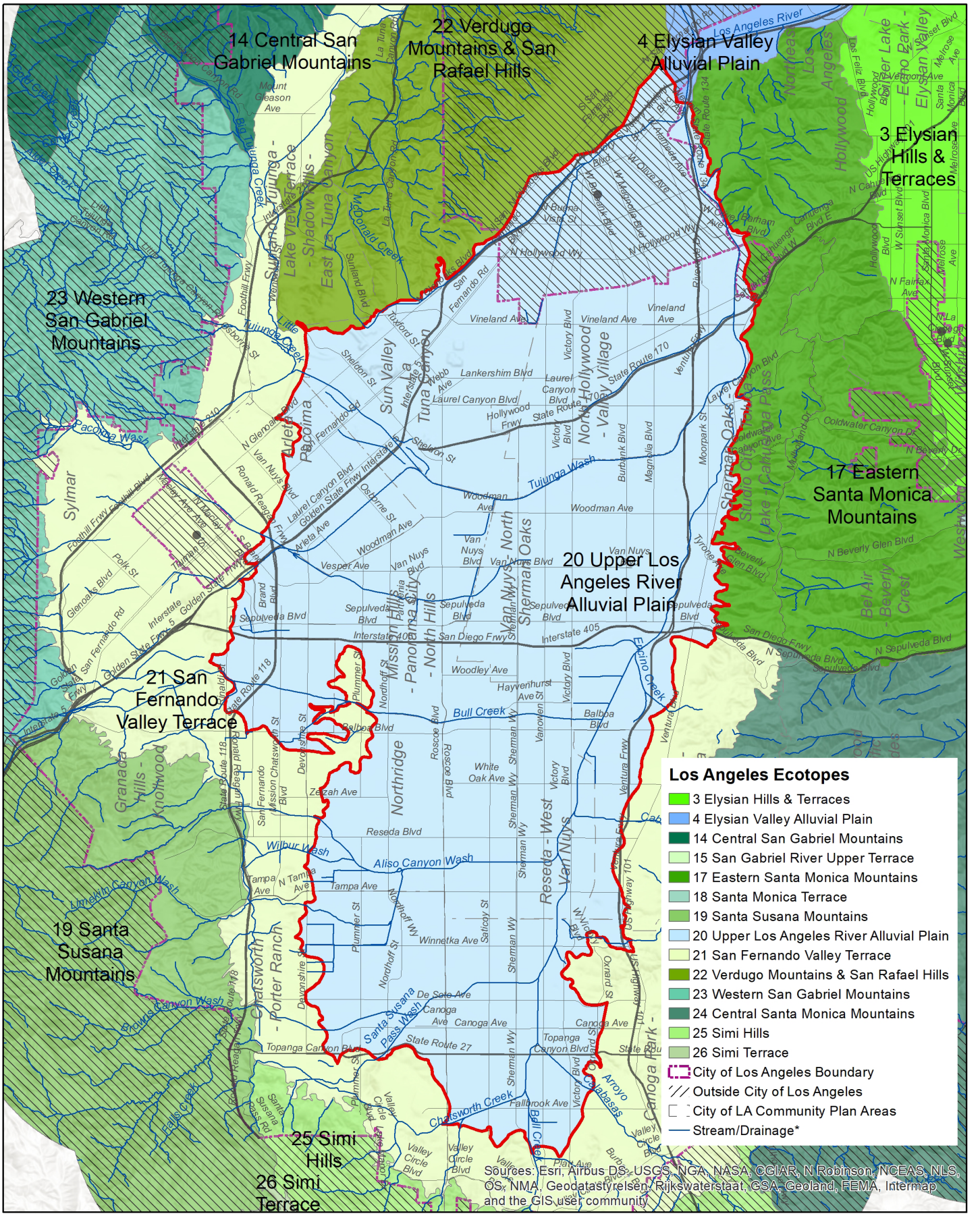
The Upper LA River Alluvial Plain ecotope includes very flat areas in the central San Fernando Valley. This plain was produced by historic broad-scale alluvial processes of sedimentation, erosion, and flooding associated with the LA River and its tributaries, drainages, and associated wetlands. This plain is characterized by very flat terrain, generally under 2% slopes. Historically, much of the ecotope was an active floodplain subject to catastrophic flooding prior to the enactment of flood control measures, and a few areas are still subject to flooding, especially around Burbank. Due to increased flood control and flat terrain, the alluvial plains have been subject to extensive development over the past century and very little natural function or character remains. However, permeable soils on many historic floodplains provide opportunities for increased groundwater infiltration in urban areas.

MICROCLIMATE

The San Fernando Valley is exposed to more continental influence than lower reaches of the LA River alluvial plain closer to the coast. The Santa Monica Mountains block coastal fog and shadow precipitation resulting in relatively dry conditions compared to other ecotopes, except in summer when occasional monsoon rains are more frequent here than more coastal areas. Summer heat extremes can produce some of the highest temperatures within the study area, while the low elevation of the valley floor, especially around Burbank, results in greater prevalence of cool winter temperatures and frost. It should be noted that any higher terrain, such as areas near the boundary with the Santa Monica or Verdugo Mountains may result in localized thermal belts that mean these areas rarely experience winter frost. Historically, the cooler winter temperatures of the valley floor areas led to a prevalence of stone fruit and nut crops in this ecotope compared to more citrus in slightly higher terrain of the adjacent San Fernando Valley Terrace ecotope. The flat terrain also increases heat loading of ground surfaces in summer months when the sun is more directly overhead. Santa Ana wind events can be relatively frequent and intense, especially closer to the Western San Gabriel Mountains, Santa Susana Mountains, and Simi Hills to the north and west.

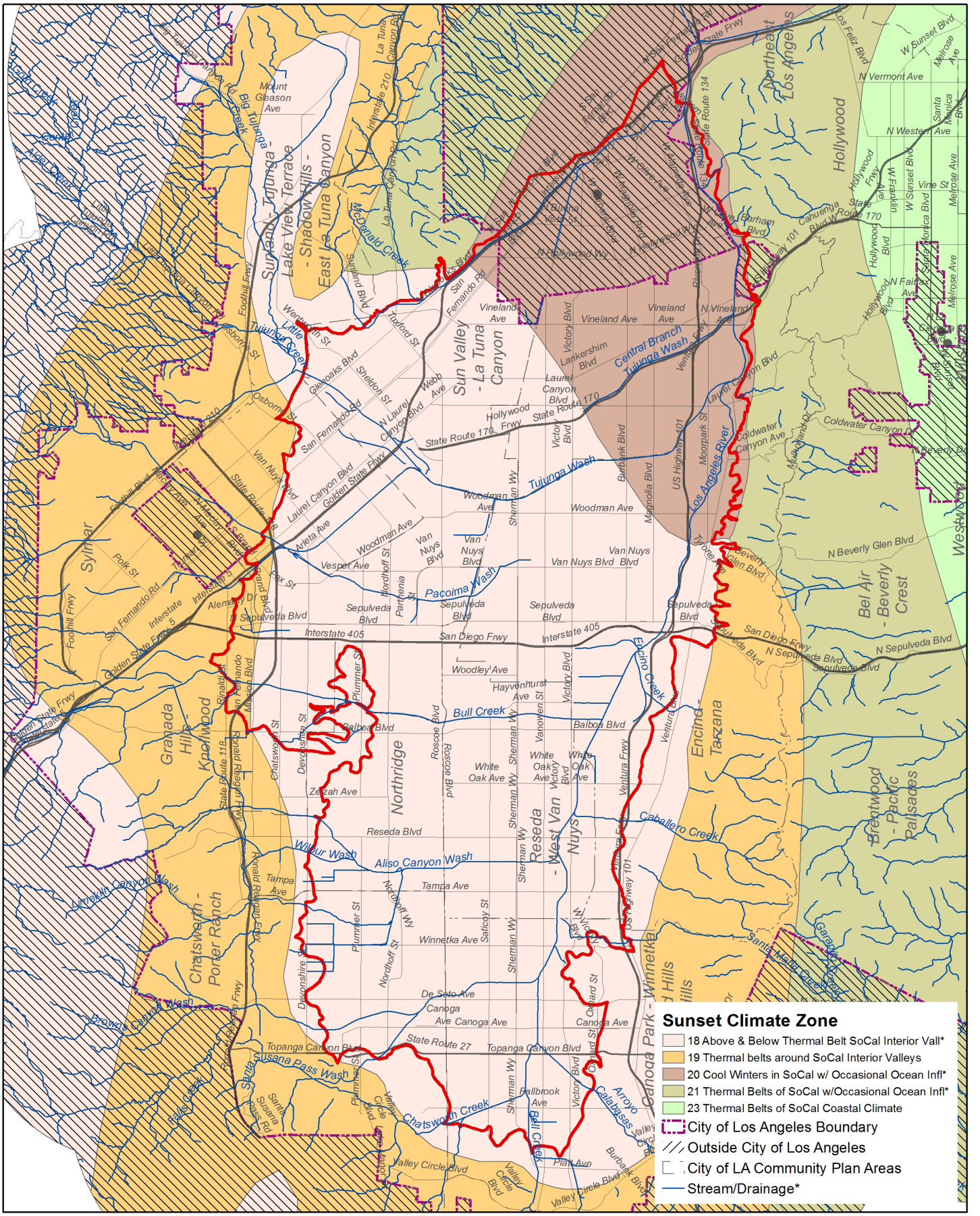
VEGETATION & LANDCOVER

Only 0.5% of the natural vegetation remains across the ecotope, mostly within the Sepulveda Basin. Riparian vegetation is the dominant remaining type here and provides nesting habitat for the federally endangered least Bell's vireos (*Vireo bellii pusillus*), and potentially the southwestern willow flycatcher (*Empidonax traillii extimus*). A few other small natural areas occur where riparian vegetation persists along the LA River and its tributaries, and some small patches of coastal sage scrub vegetation. Historically, alluvial plain ecotopes would have included riparian, woodland, or marsh vegetation near stream channels, wetlands, or areas of high ground water, and very dry coastal sage scrub or herbaceous grasslands and prairies on higher ground (Stein et al. 2007, Dark et al. 2011). Many endemic and rare species of high conservation concern have been extirpated from the ecotope, and restoration of this nearly lost segment of biodiversity is a key opportunity for environmental projects planned for the area.



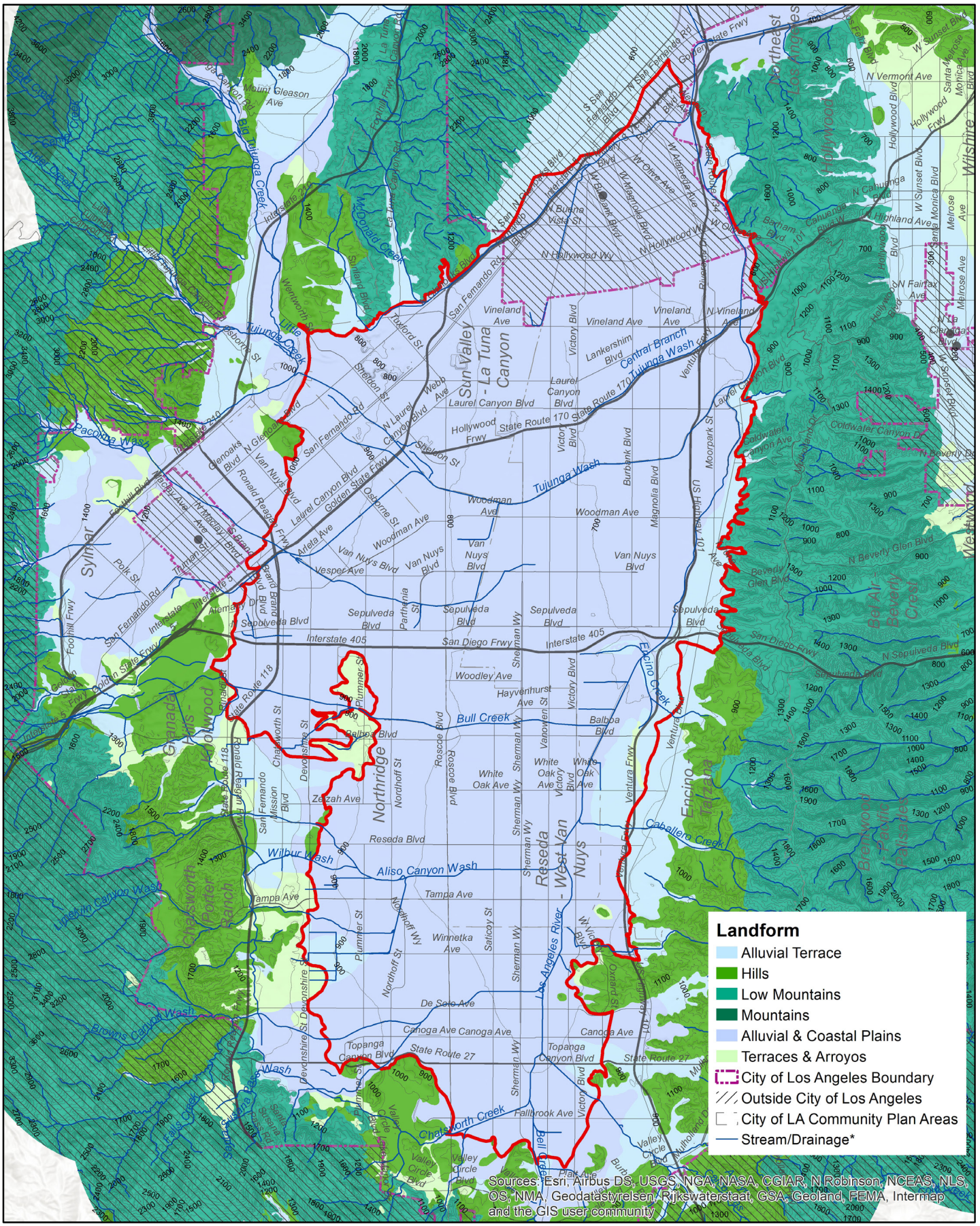
Ecotope 20 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



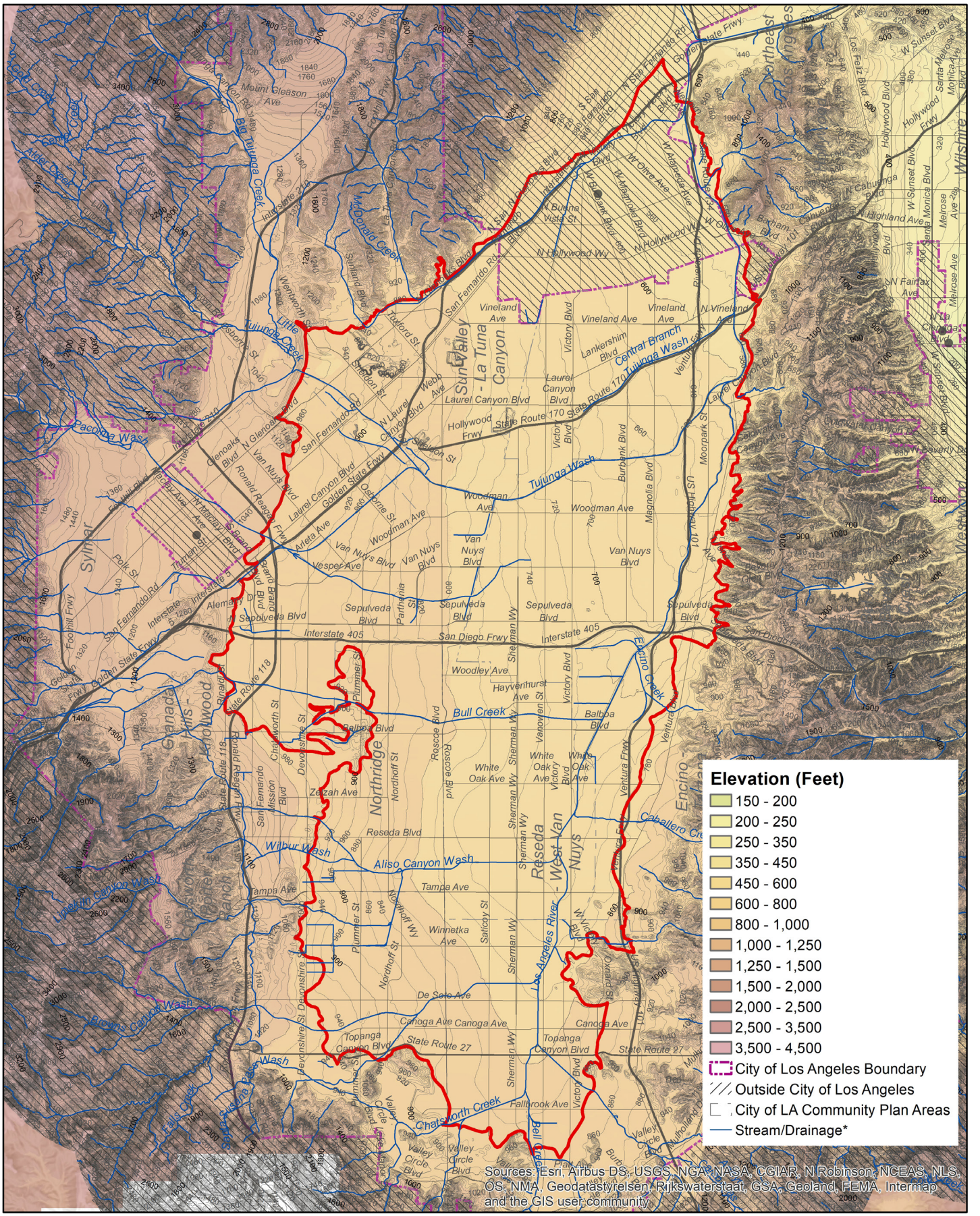
Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



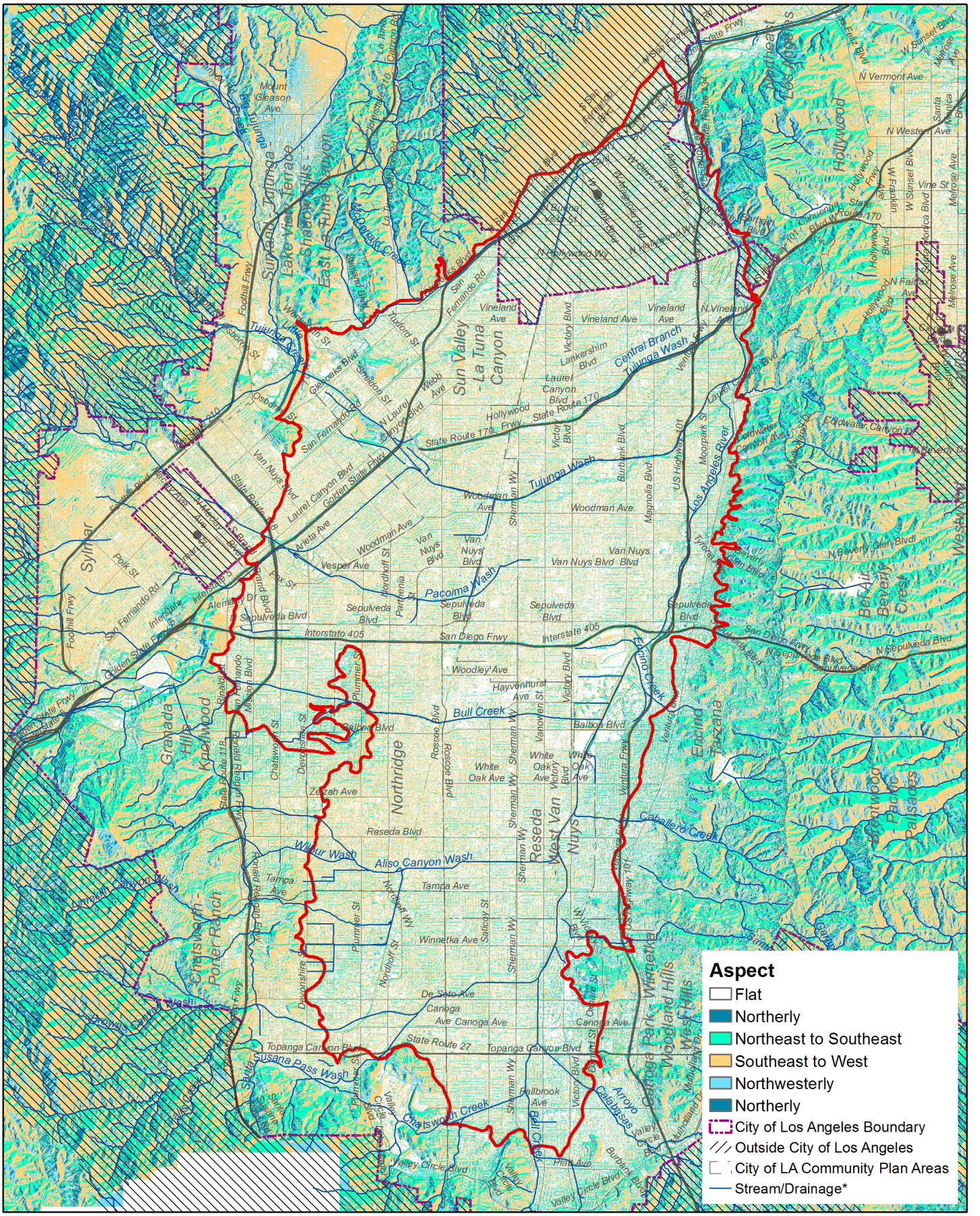
Landform

Data source: I. Brown (2019), https://escholarship.org/uc/item/4c81w4nr



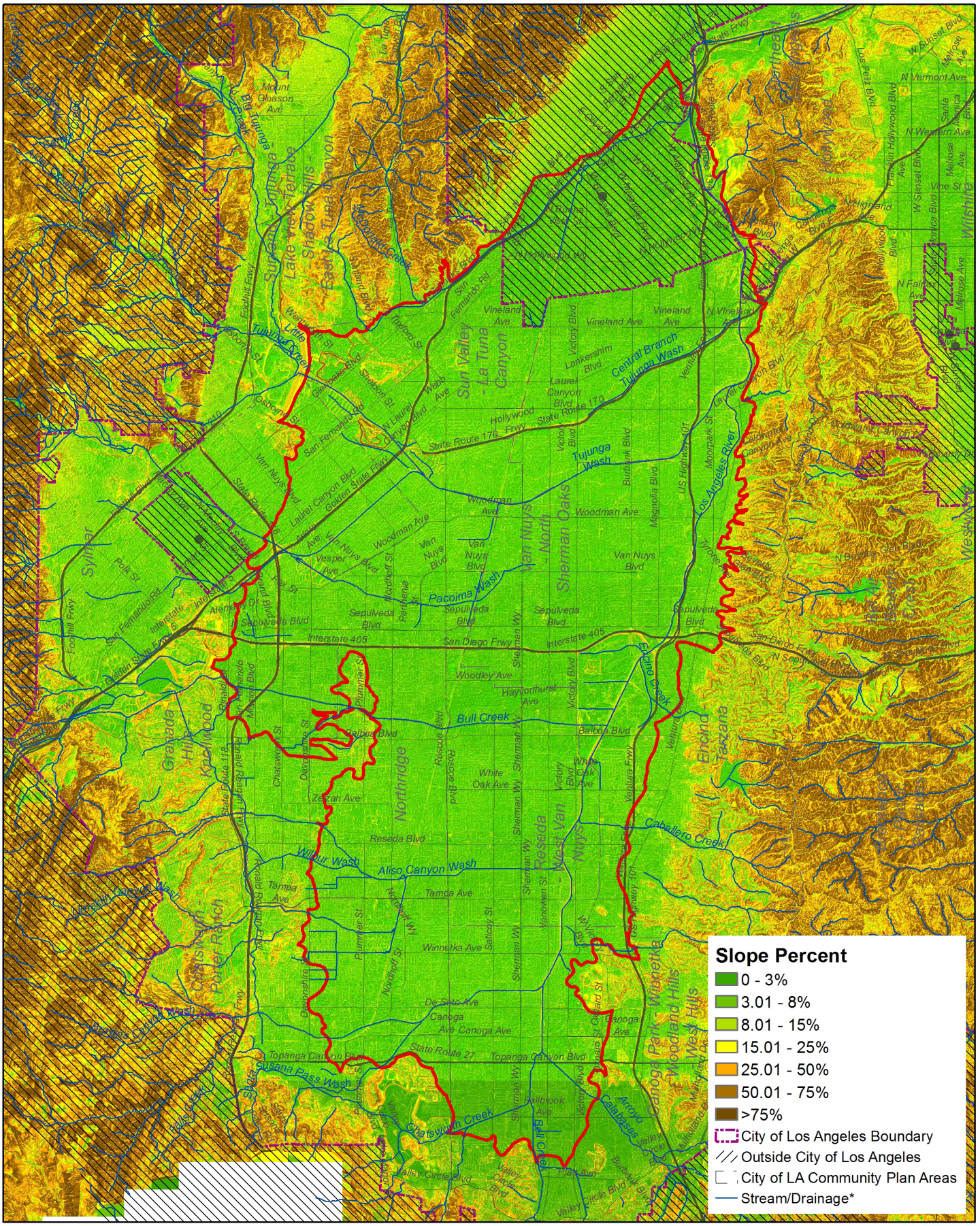
Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



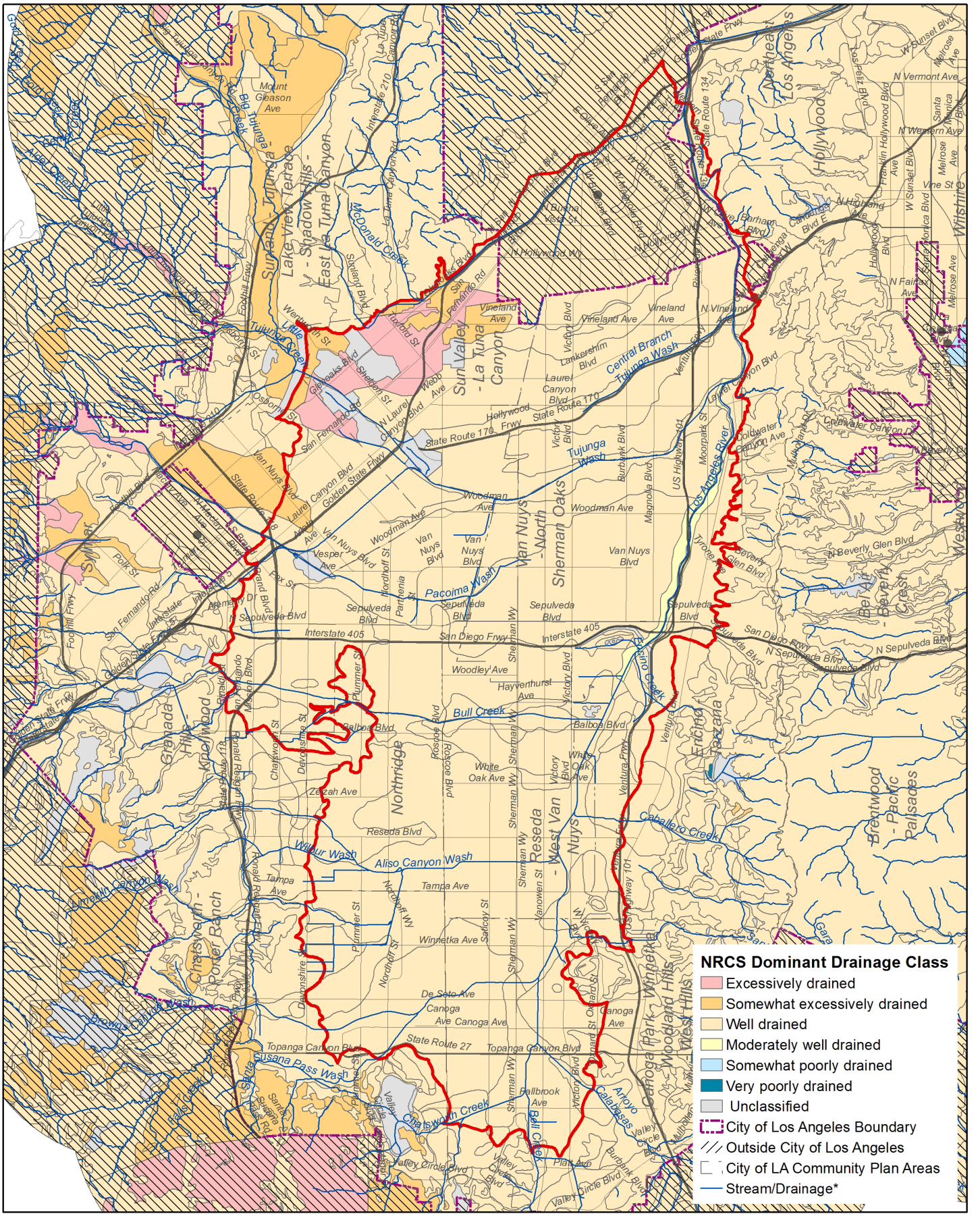
Aspect

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



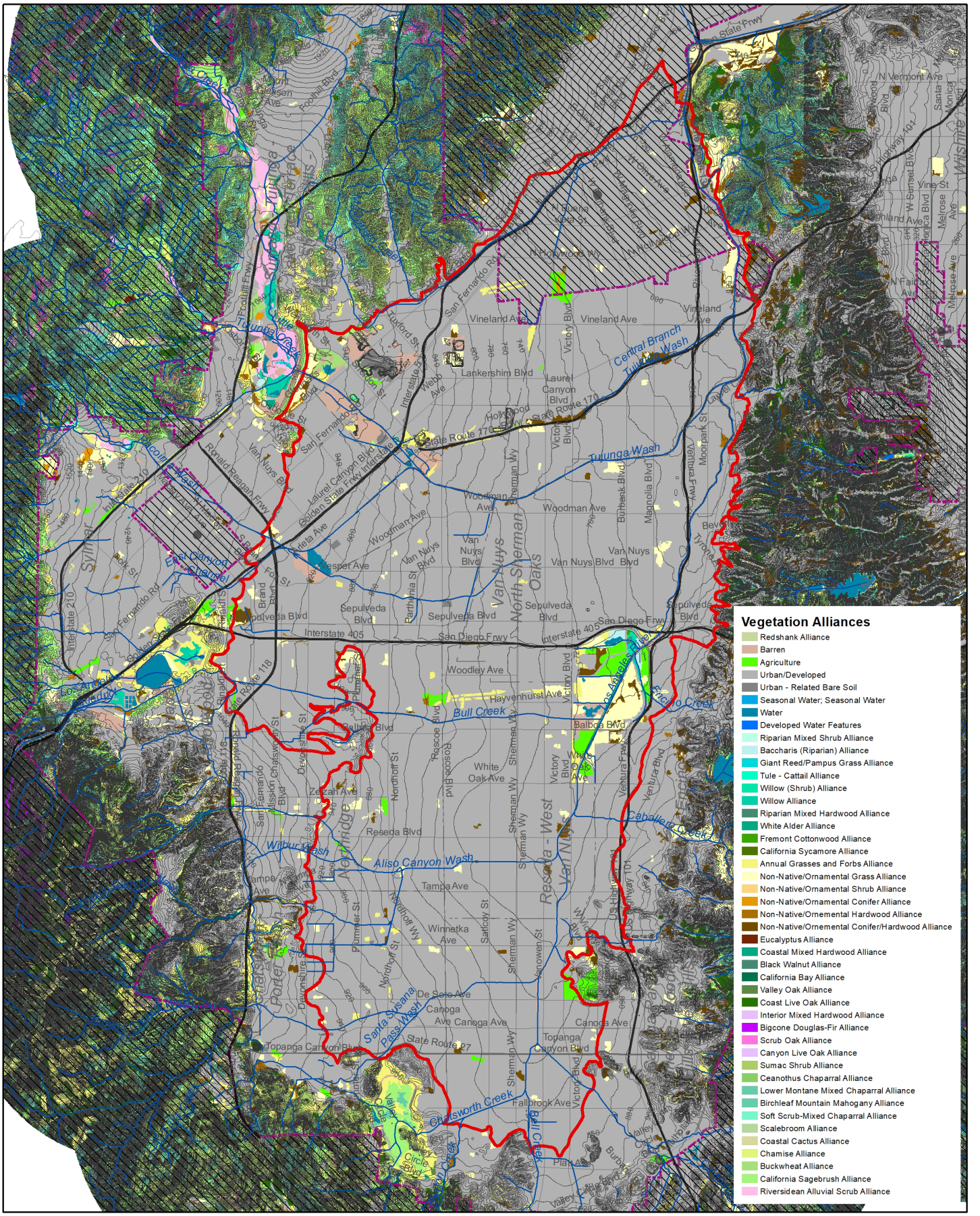
Slope Percent

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



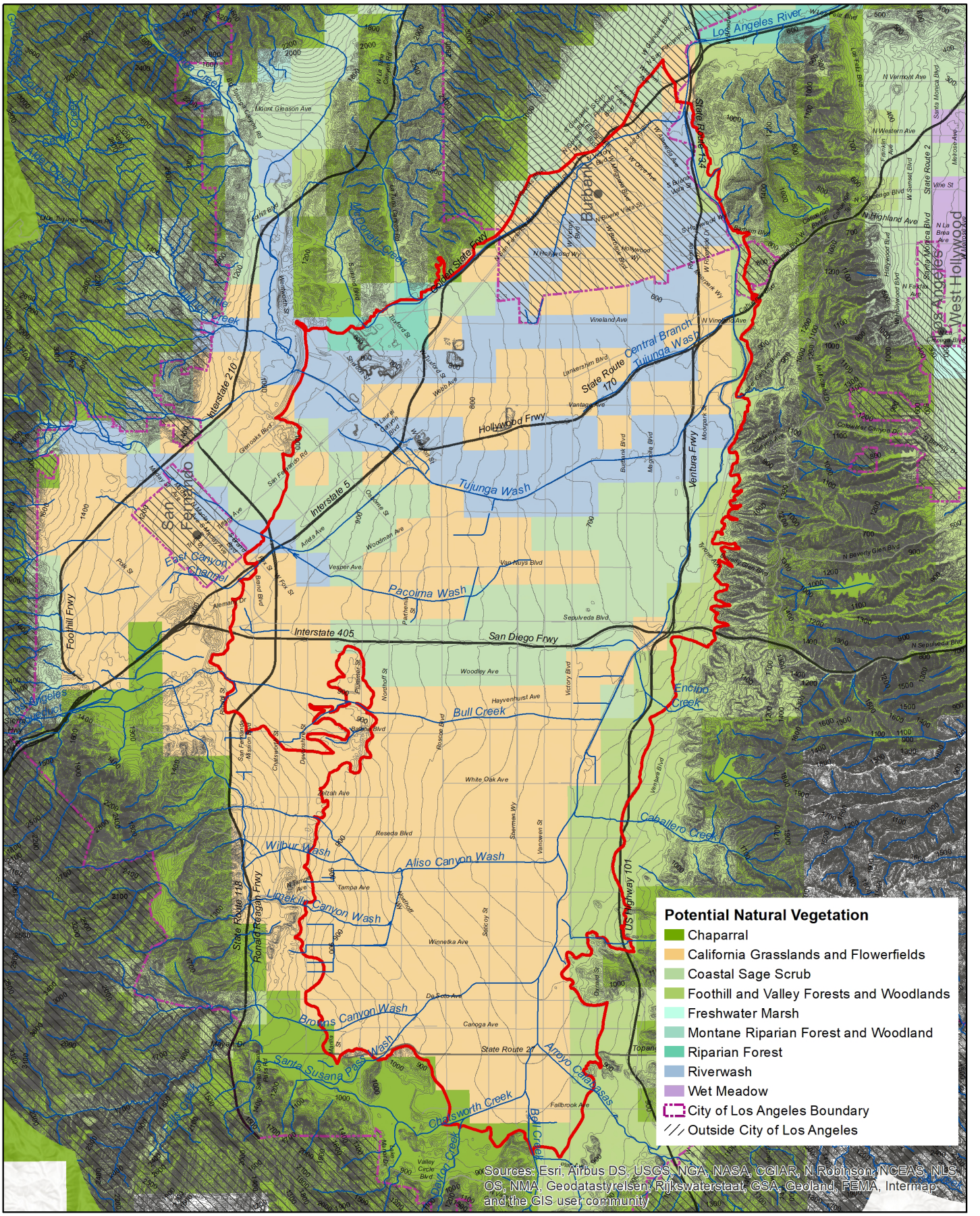
Drainage

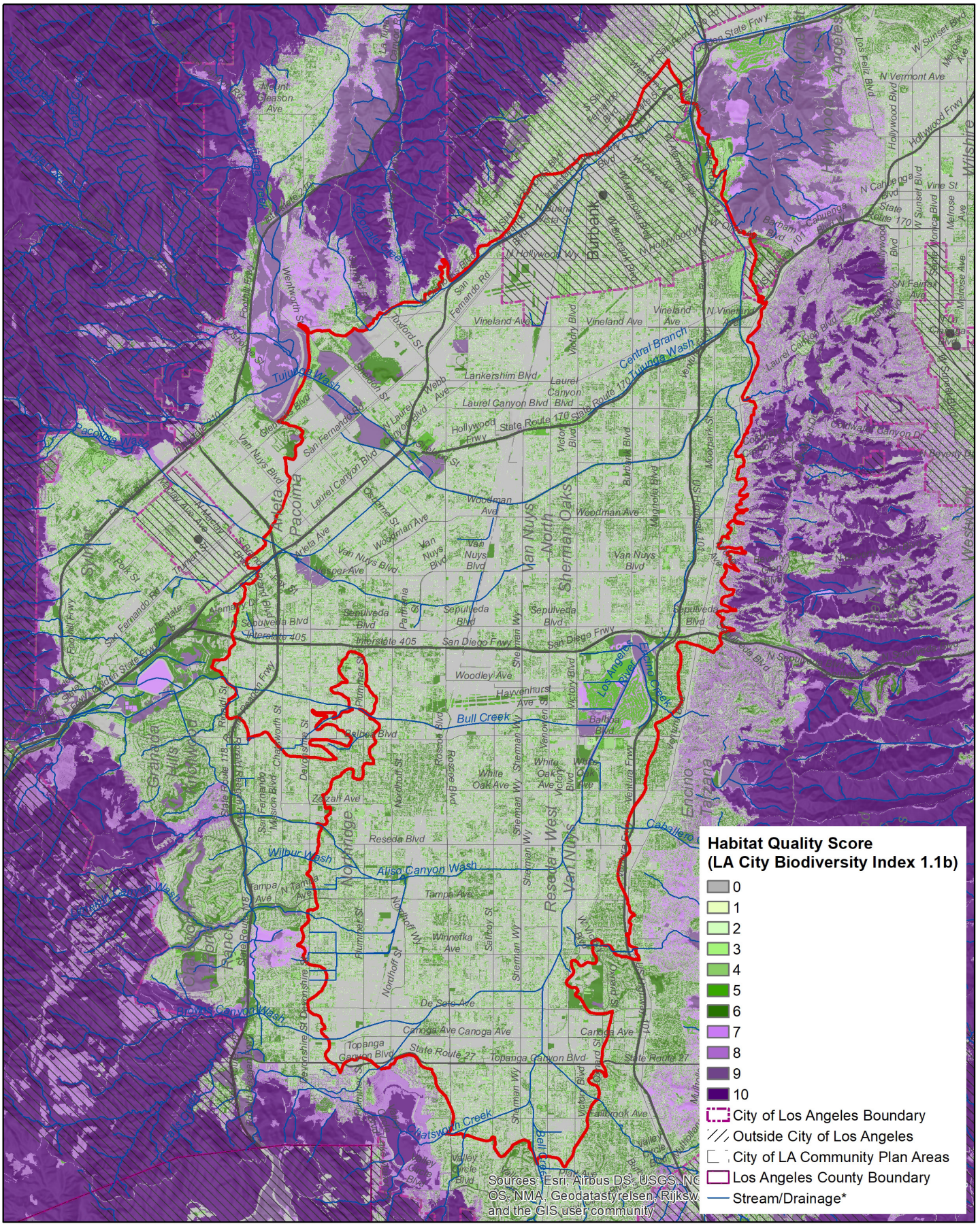
Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.



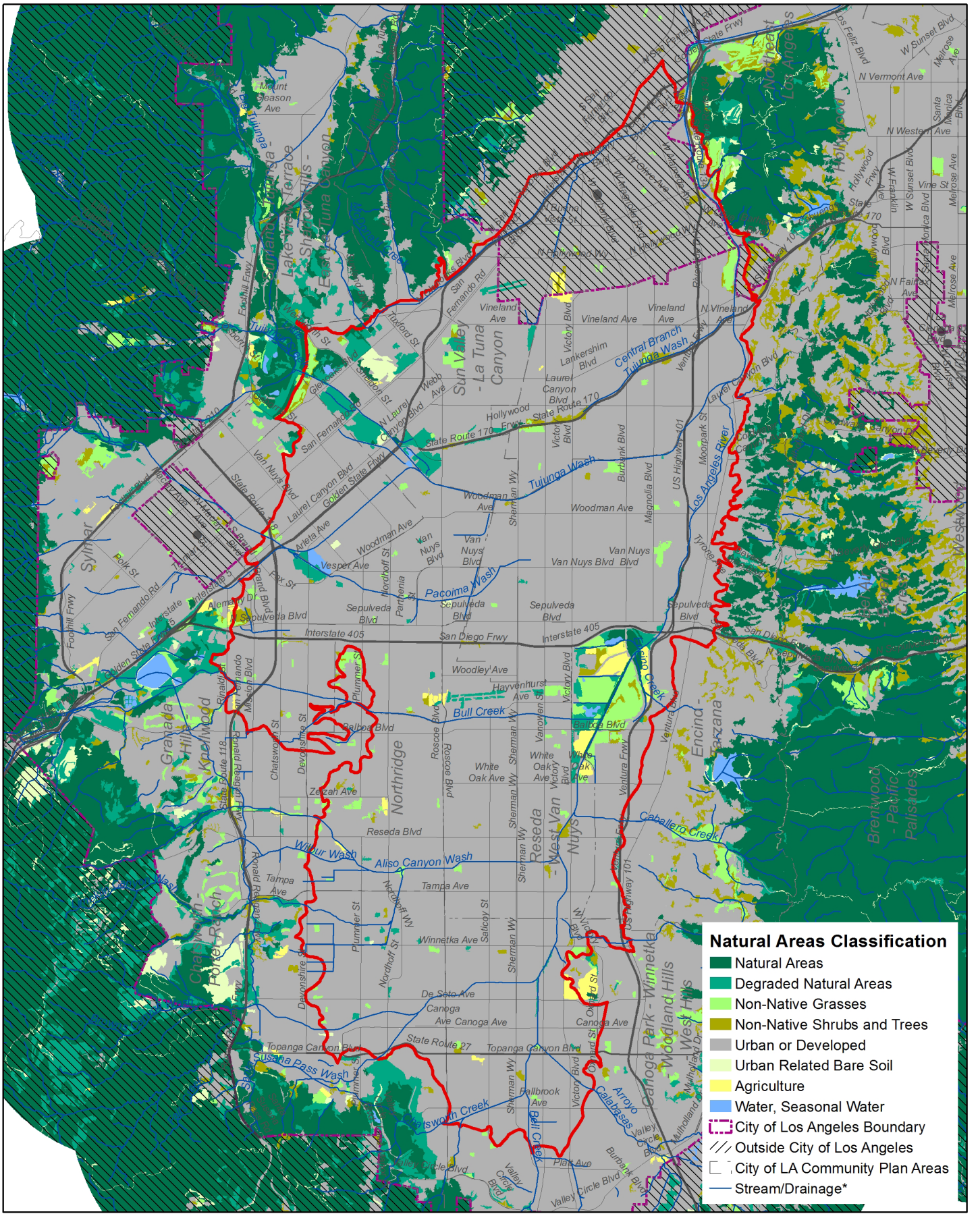
Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192


Potential Natural Vegetation
Chaparral
California Grasslands and Flowerfields
Coastal Sage Scrub
Foothill and Valley Forests and Woodlands
Freshwater Marsh
Montane Riparian Forest and Woodland
Riparian Forest
Riverwash
Wet Meadow
City of Los Angeles Boundary
Outside City of Los Angeles
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Los Angeles River
Burbank
Glendale
Los Angeles
West Hollywood
Golden State Frwy
Hollywood Frwy
Ventura Frwy
San Diego Frwy
Foothill Frwy
Interstate 210
Interstate 5
Interstate 405
State Route 170
State Route 118
State Route 27
US Highway 101
Ronald Reagan Frwy
Tujunga Wash
Pacoima Wash
Bull Creek
Encino Creek
Caballero Creek
Wilbur Wash
Aliso Canyon Wash
Limekiln Canyon Wash
Browns Canyon Wash
Santa Susana Pass Wash
Arroyo Calabasas
Chatsworth Creek
Bell Creek
Dayton Creek
Rattlesnake Creek
Verdugo Creek
Dunsmore Canyon
Mandeville Canyon
Mount Gleason Ave
Vineland Ave
Vantage Ave
Lankershim Blvd
Woodman Ave
Van Nuys Blvd
Sepulveda Blvd
Woodley Ave
Hayvenhurst Ave
White Oak Ave
Reseda Blvd
Tampa Ave
Winnetka Ave
De Soto Ave
Canoga Ave
Topanga
Failbrook Ave
Victory Blvd
Roscoe Blvd
Nordhoff St
Devonshire St
Zelzah Ave
Sherman Way
Vanowen St
Saticoy St
Ventura Blvd
Burbank Blvd
Magnolia Blvd
Moorpark St
Riverside Dr
Olive View Dr
Foothill Blvd
Glenoaks Blvd
San Fernando Rd
Osborne St
Arleta Ave
Vesper Ave
Alemany Dr
Paxton St
Pacoima
San Fernando
East Canyon Channel
Mayall St
Valley Circle Blvd
Victory Place
Sunland
Tujunga
Los Angeles International Airport
Sierra Hwy
Ventura
Malibu
Topanga Canyon Rd
Old Topanga Canyon Rd
Las Virgenes Rd
Las Virgenes Creek
Malibu Creek
Malibu Canyon
Cold Creek
Topanga Creek
Mulholland Dr
Mulholland Hwy
Coldwater Canyon Dr
Beverly Glen Blvd
N Sepulveda Blvd
Roscoe
Sunset Blvd
Hollywood Blvd
Santa Monica Blvd
Melrose Ave
Vine St
N Highland Ave
N La Brea Ave
N Fairfax Ave
N Western Ave
N Vermont Ave
N Beverly Glen Blvd
Cahuenga Blvd
Barham Blvd
Forest Lawn Dr
Riverside Dr
Los Feliz Blvd
Fletcher Dr
Glendale Blvd
Alameda Ave
Brand Blvd
N Fork St
Pearl St
Parthenia St
Sunland Blvd
Foothill Blvd
Sierra Hwy
Mission Rd
Glenoaks Blvd
Griffith Park
Griffith Park Dr
Los Feliz Blvd
Fletcher Dr
Riverside Dr
Forest Lawn Dr
Barham Blvd
Cahuenga Blvd
Hollywood Bowl
Hollywood Reservoir
Hollywood Sign
Mount Lee
Mount Hollywood

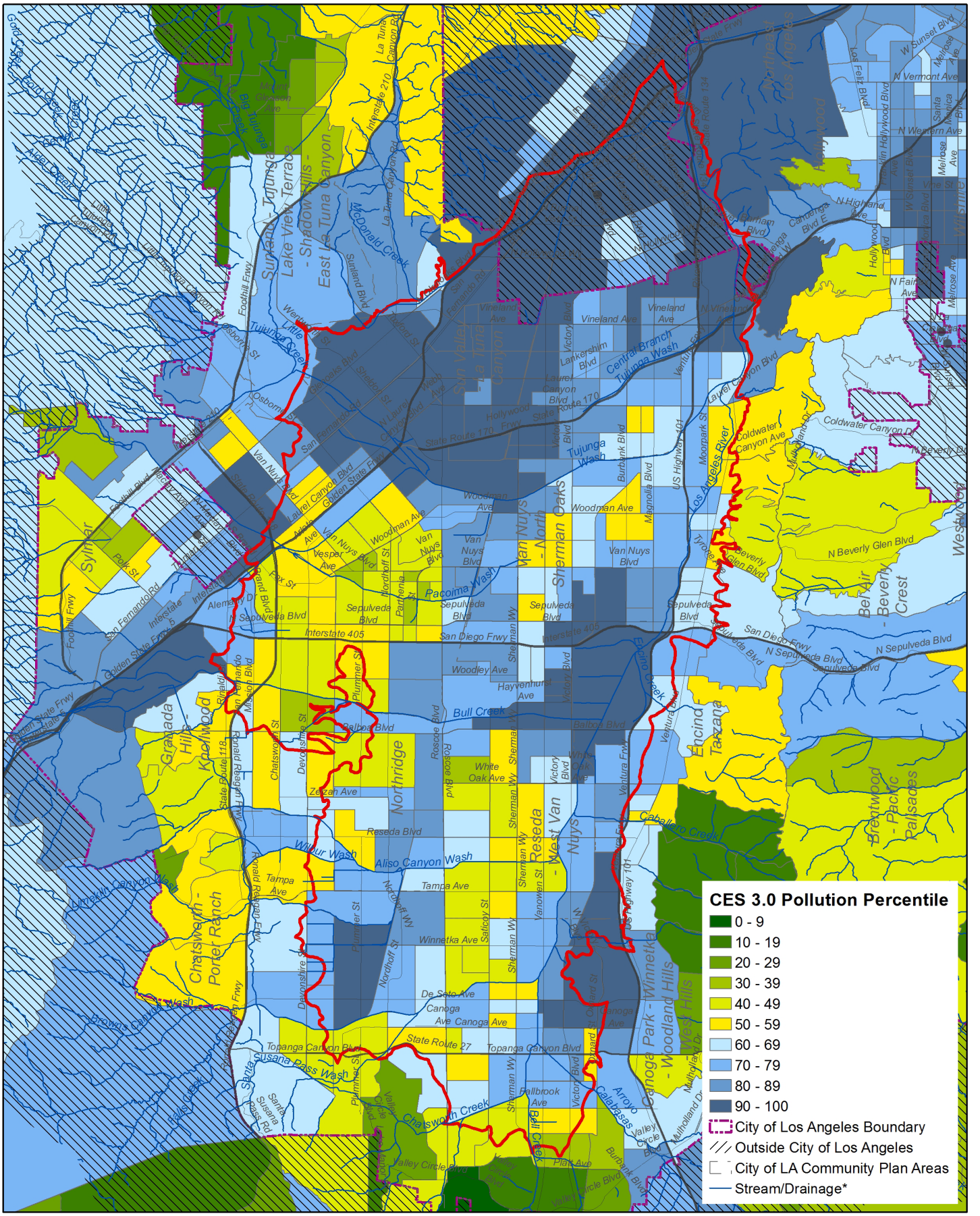


General Habitat Quality
Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



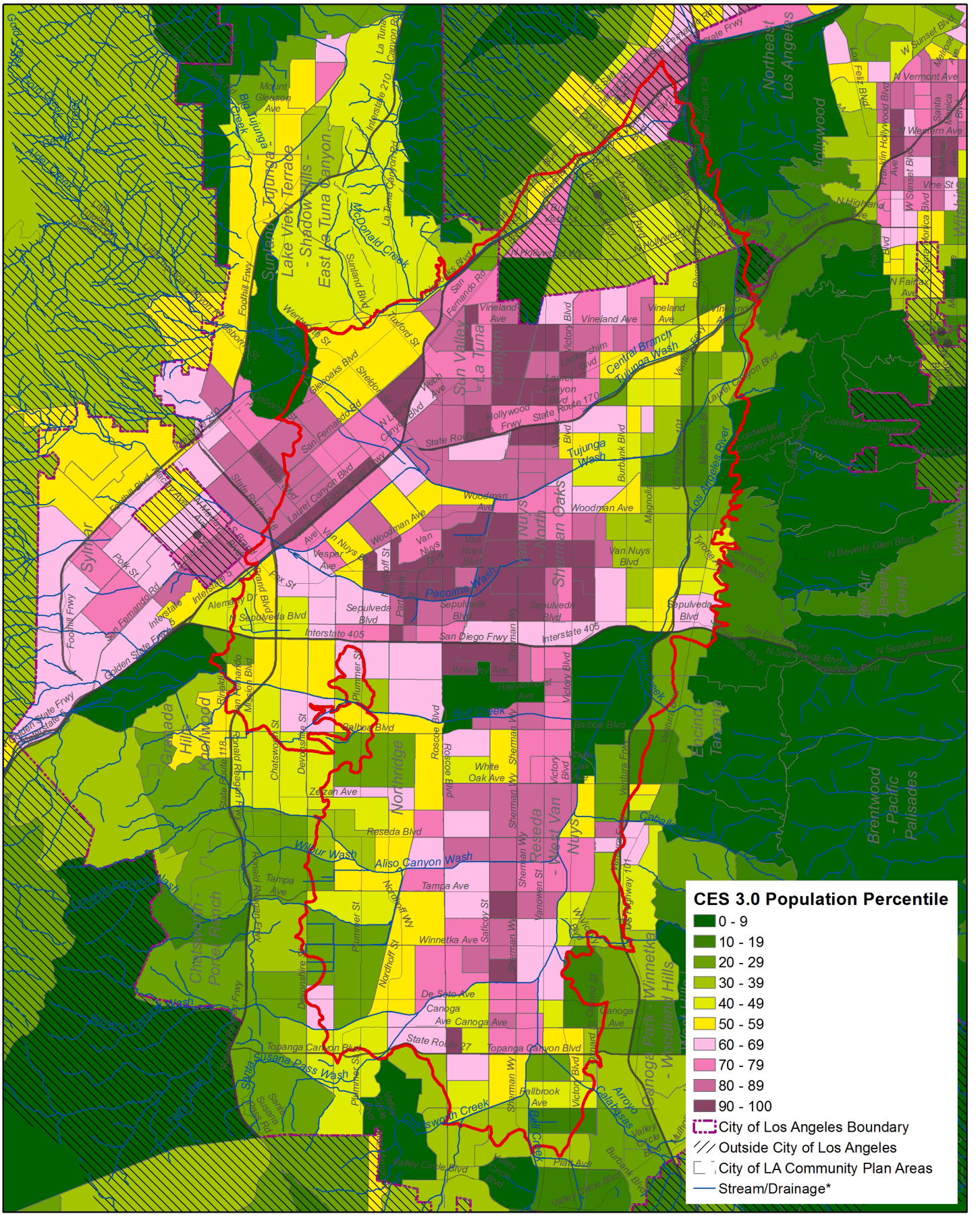
Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf



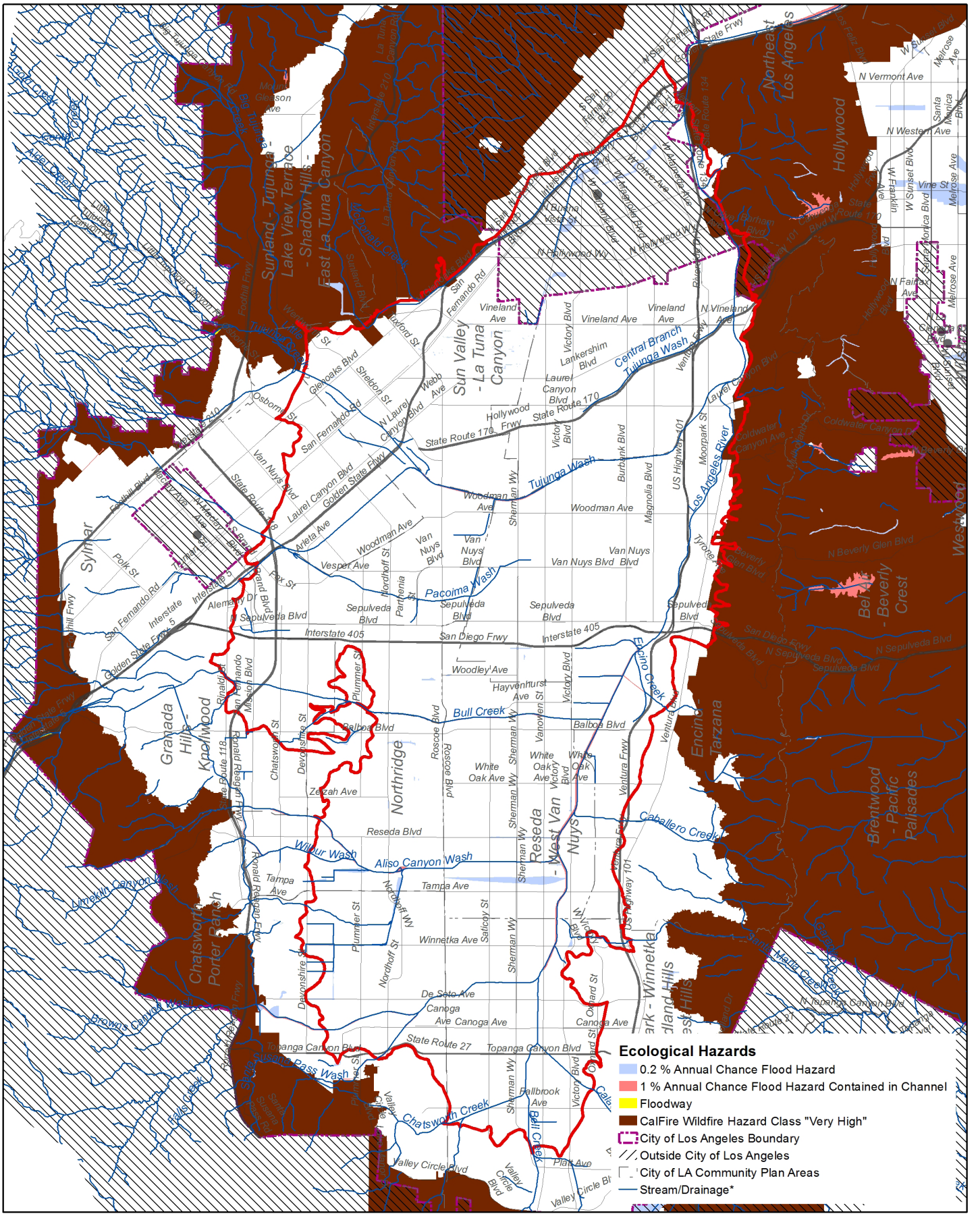
CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



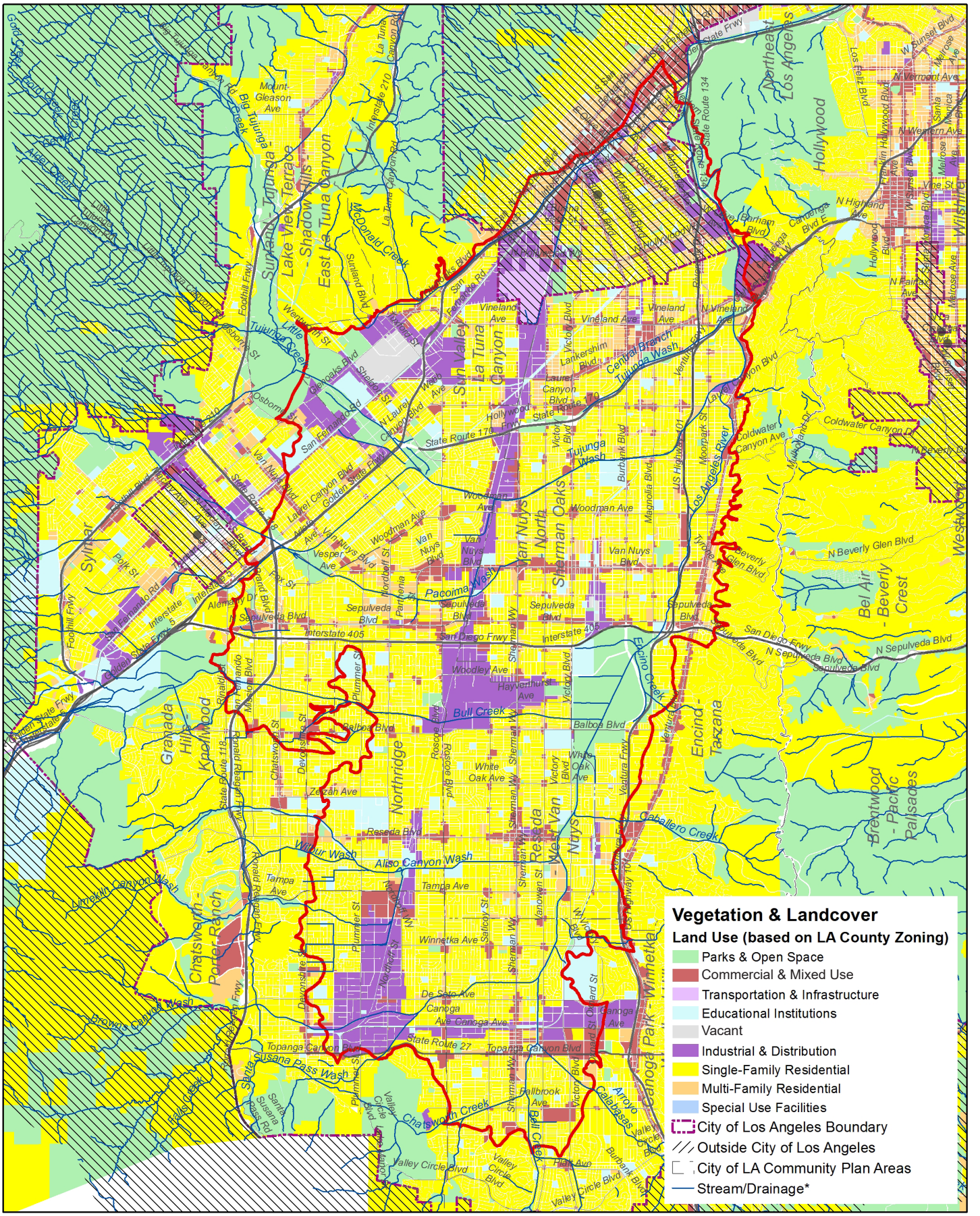
CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



Ecological Hazards

Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.

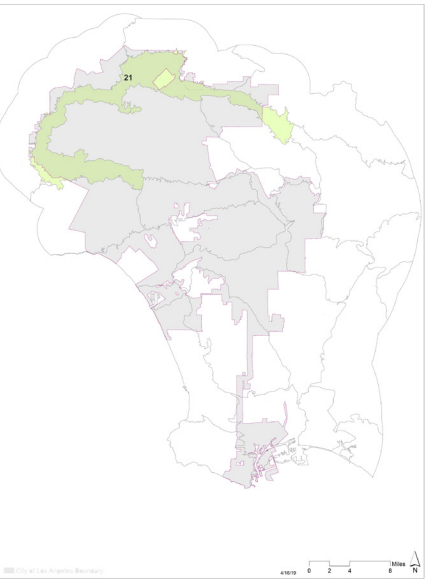


Land Use

Data source: 2008 Los Angeles County Countywide Zoning by the Southern California Association of Governments (SCAG). https://egis3.lacounty.gov/dataportal/2012/04/10/county-wide-zoning/

ECOTOPE 21: SAN FERNANDO VALLEY TERRACE

(Mostly within the City of Los Angeles)



LANDFORM

The San Fernando Valley Terrace ecotope comprises diverse landforms that form the transition between the adjacent hills and mountains that ring the San Fernando Valley (Upper Los Angeles River alluvial plain). Landforms include a mix of low hills, alluvial fans, terraces, and portions of alluvial plains. A large area of very coarse alluvial material occurs within the Hansen Dam/Big Tujunga area where the main branch of the LA River leaves the San Gabriel Mountains. The velocity and volume of flows in the River as it leaves the mountains are capable of moving relatively large boulders and cobbles, thus, the coarse alluvial plains present here. Much of the flatter landforms have been intensively developed here, while pockets of steeper or flood-prone terrain have been preserved.

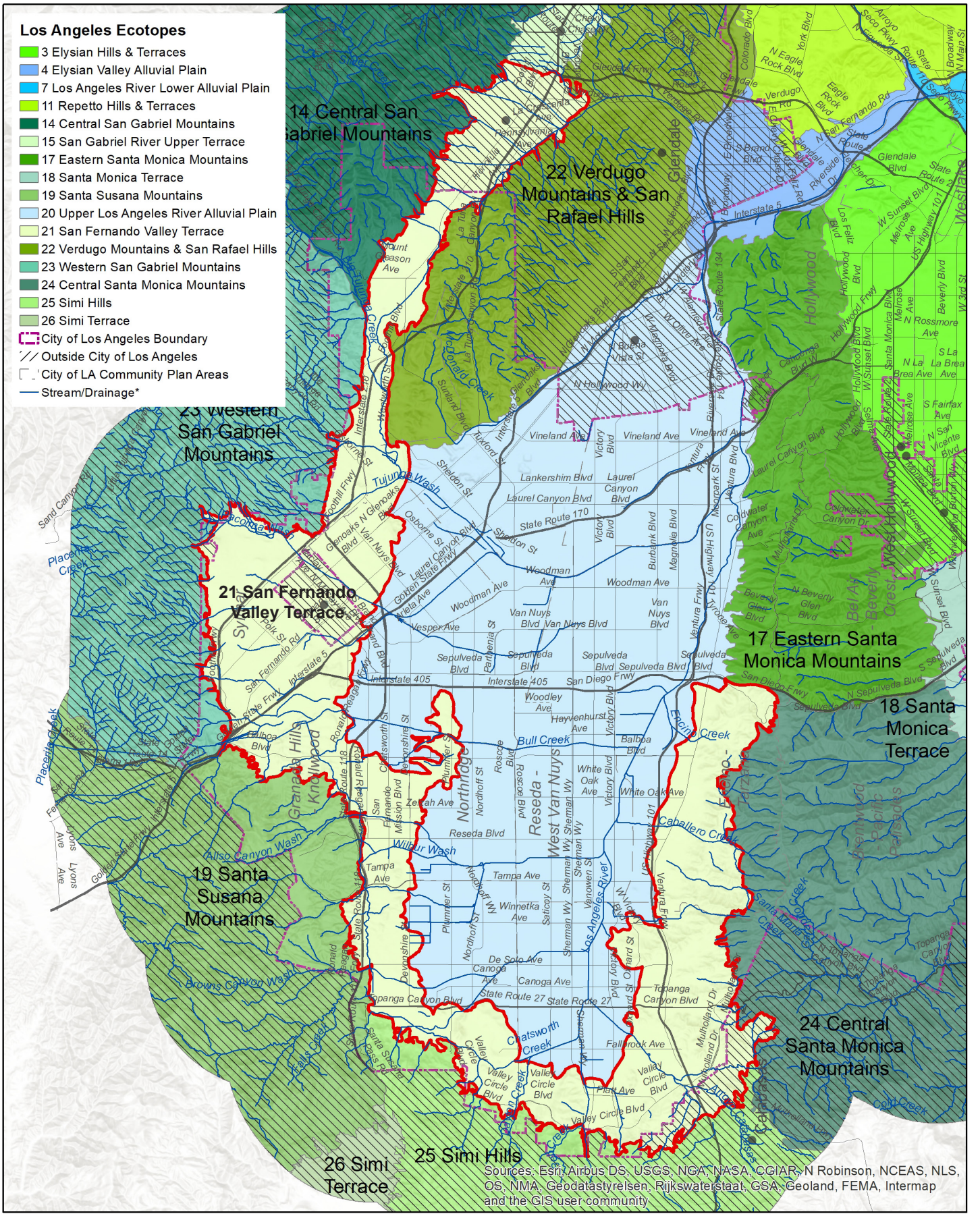
MICROCLIMATE

Sunset Climate Zone 19, Thermal Belts around the SoCal Interior Valleys, is a dominant feature differentiating this ecotope. Like the other thermal belts, this zone includes relatively moderate climatic conditions in winter since the elevation is below cooler temperatures of the mountains and above the valley floor, which exhibits the valley cooling effect with cooler nighttime temperatures and more frequent frost. This means that most areas in this ecotope, except valley bottoms such as around Big Tujunga, rarely receive heavy frost in winter and relatively warmer nights also result in an extended fall growing season and an earlier onset of favorable growing conditions in spring. Thus, like the other thermal belts, species of subtropical origin tend to do well here and this thermal belt was historically the location of some of the best citrus growing land in California. The lack of coastal influence also results in very high temperatures during summer months limiting species that may depend on the late spring and early summer fog that is more prevalent in coastal thermal belts and plains. Precipitation is also relatively variable across this ecotope due to the broad range of elevations and multiple interacting mountain ranges. Higher terrain along the Santa Monica Mountains and the San Gabriel Mountains near La Crescenta receives substantially more precipitation in winter months than areas closer to the valley floor.

VEGETATION & LANDCOVER

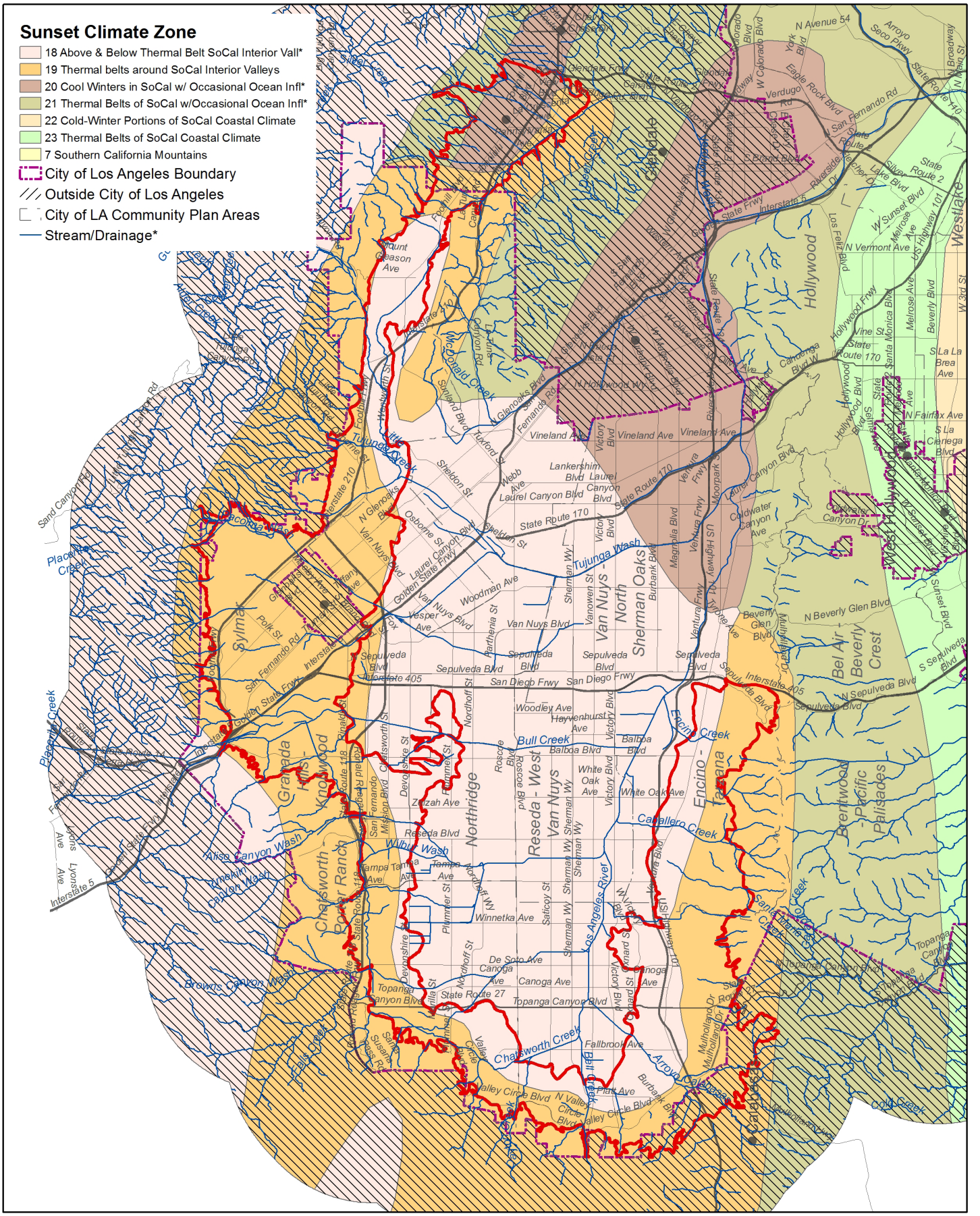
Just over 5% of natural vegetation remains across the ecotope. It tends to occur in, or adjacent to, relatively large patches on steeper terrain near the Santa Monica, Santa Susana, San Gabriel or Verdugo Mountains, and Simi Hills, within protected areas around Hansen Dam, and within the former Chatsworth Reservoir. Smaller patches of riparian vegetation remain in intact tributaries, washes, and drainages also adjacent to steeper slopes. Within the Big Tujunga/Hansen Dam Area, large areas of Riversidian alluvial scrub alliances occur on coarse alluvial fan substrates. The former Chatsworth Reservoir site, and nearby patches of natural vegetation, include a mix of coastal sage scrub and oak woodlands, including sensitive valley oak woodlands and savannas. Some chaparral types are present adjacent to the higher terrain of the Verdugo and San Gabriel Mountains within the Crescenta Valley. Other large patches of non-native annual grassland, likely mixed with native grasslands in places, are also present throughout the ecotope.

Many of these remaining natural and degraded natural areas are being lost to development and are a key area for conservation consideration in Los Angeles. In addition to remaining areas with habitat for sensitive species, the area along the western edge of the ecotope adjacent to the Simi Hills, including Chatsworth Reservoir, has been identified as a priority corridor for conservation within the California Essential Linkages project. While contiguous corridors are ideal, even spatially isolated patches within this ecotope are a priority because they serve as habitat stepping stones for bird, insect, and other highly mobile species moving through the region. Habitat patches within the Valley Terrace also support potential enhanced connections between the adjacent mountains and future restoration activities envisioned for the Los Angeles River main stem within the alluvial plain below.



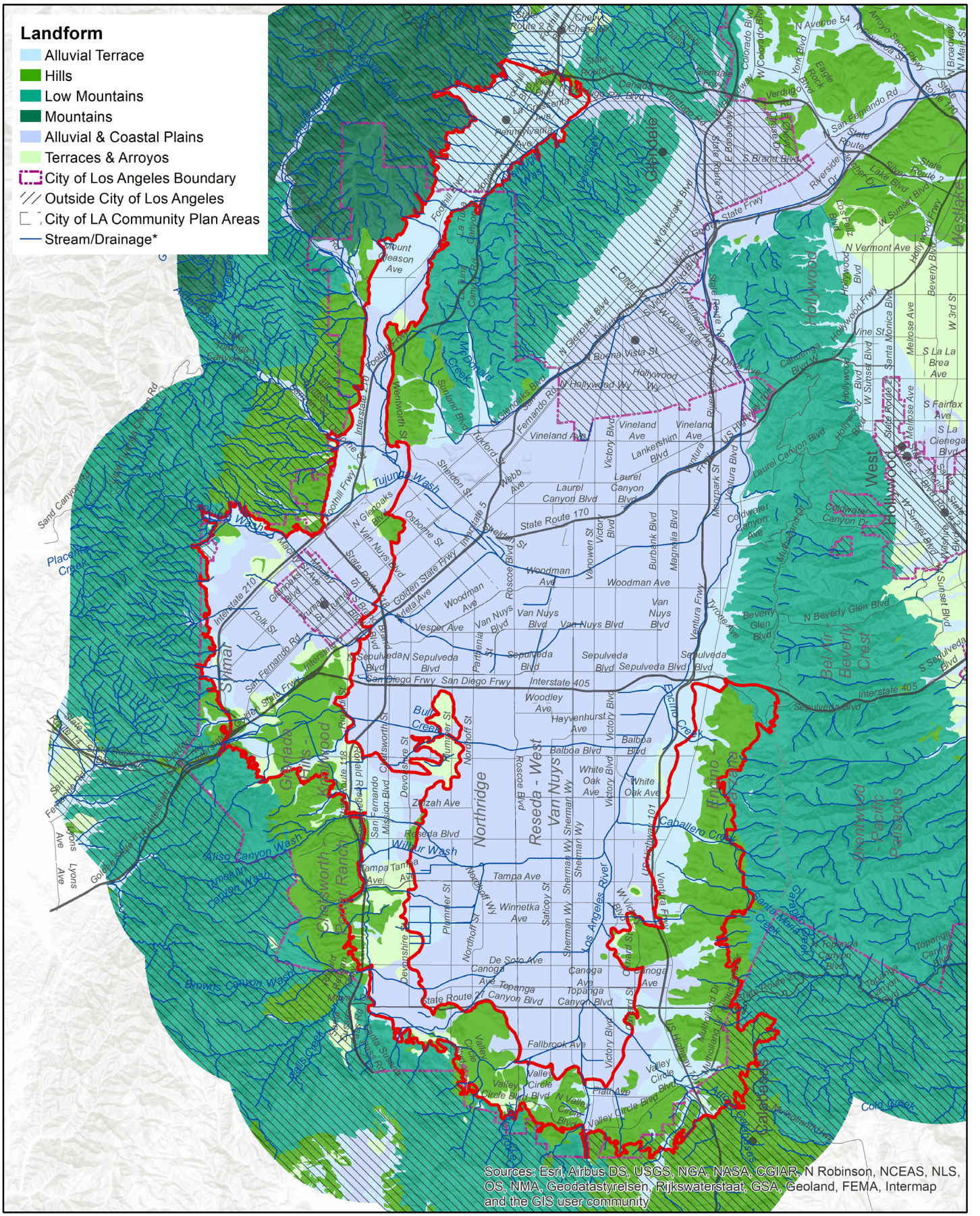
Ecotope 21 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map

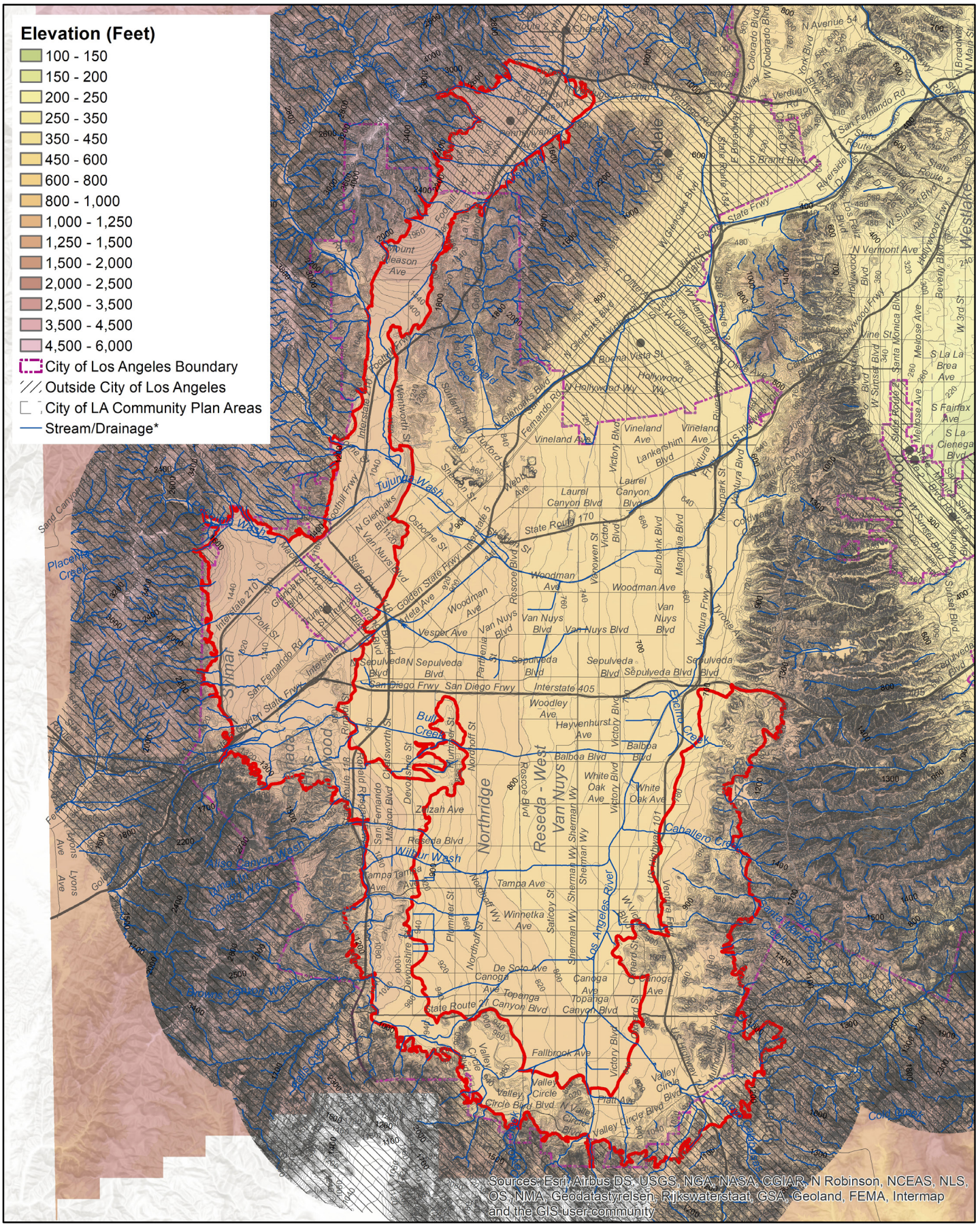


*Source: National Hydrography Dataset

Landform

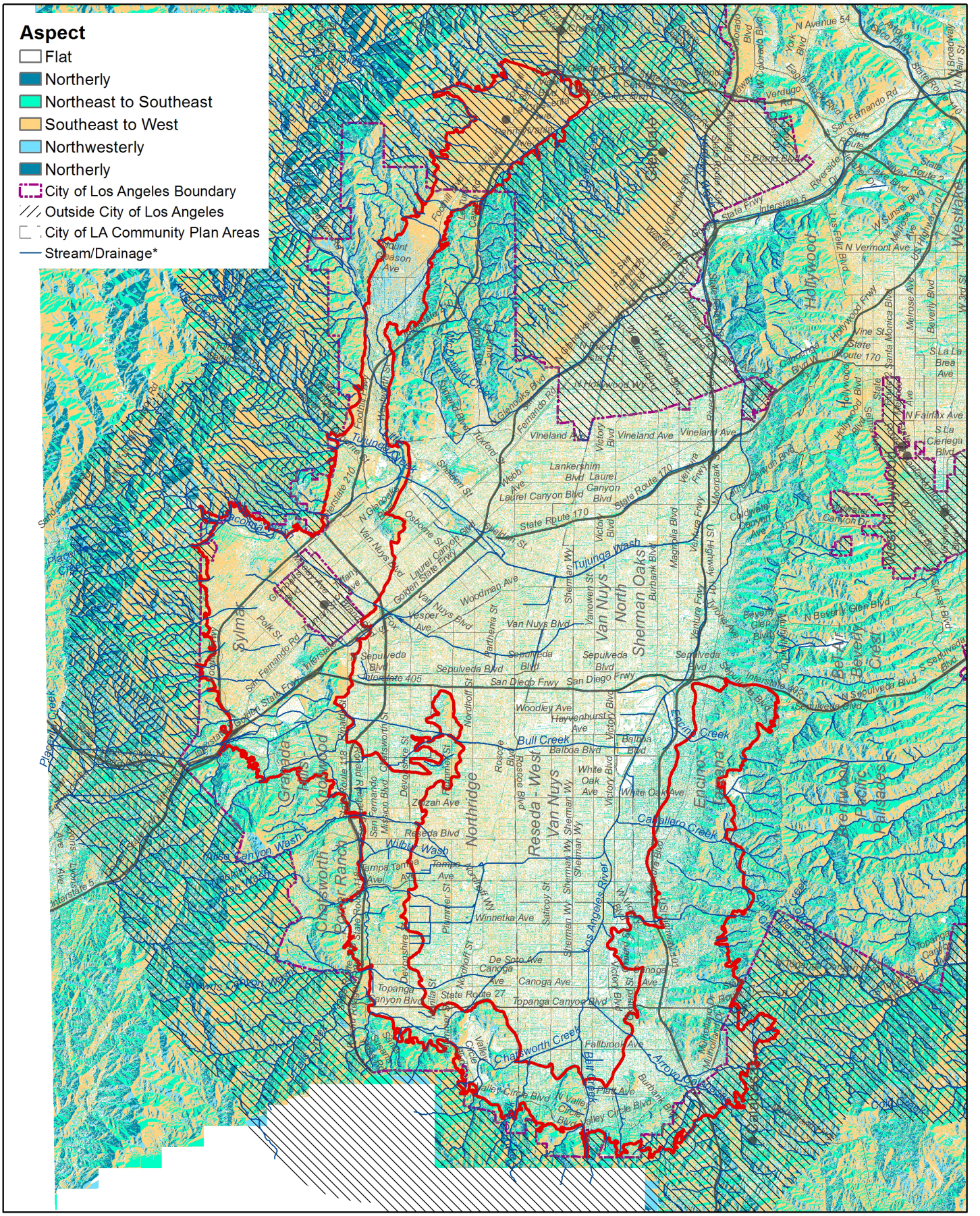
Data source: I. Brown (2019), https://escholarship.org/uc/item/4c81w4nr

0 1.25 2.5 5 Miles



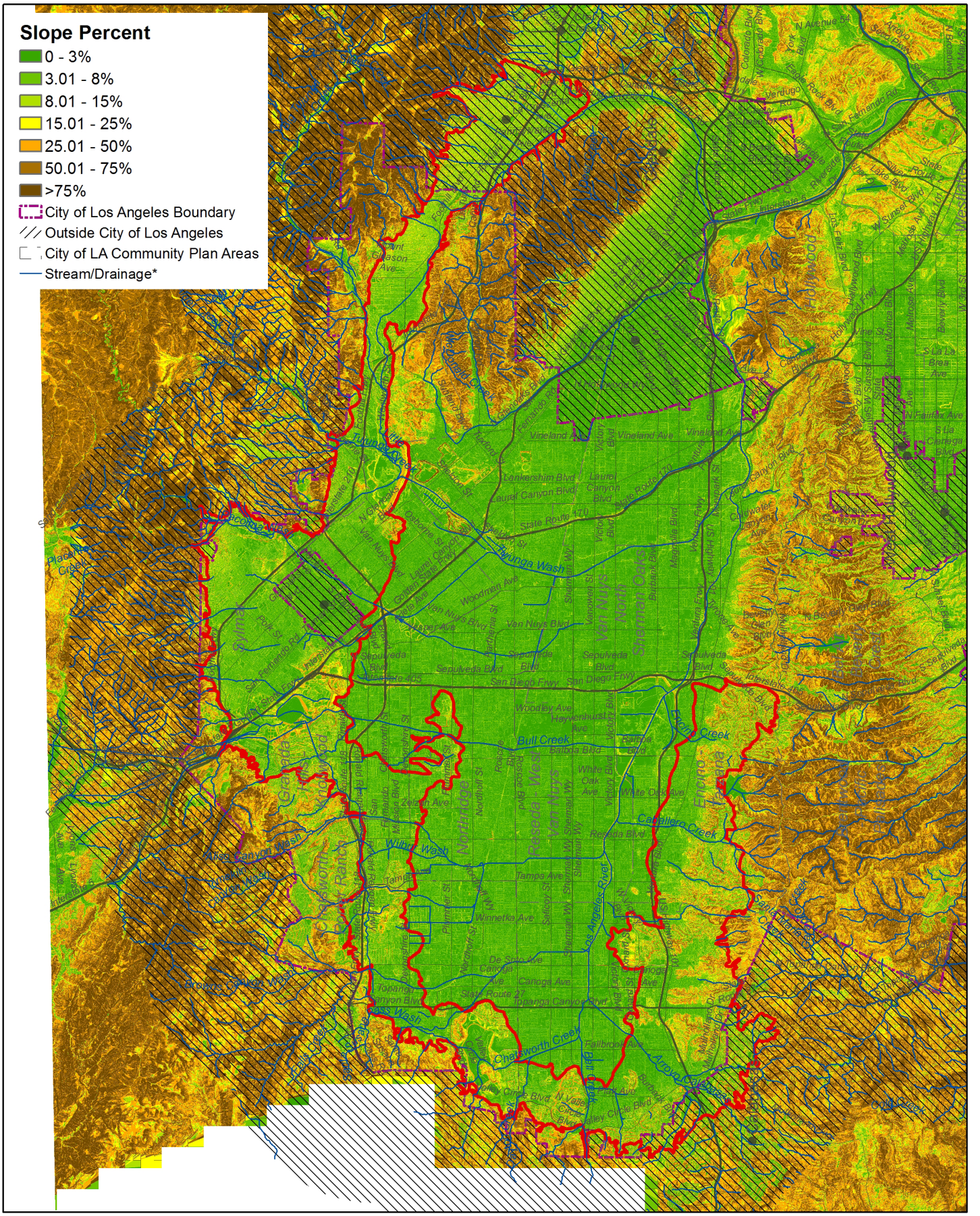
Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



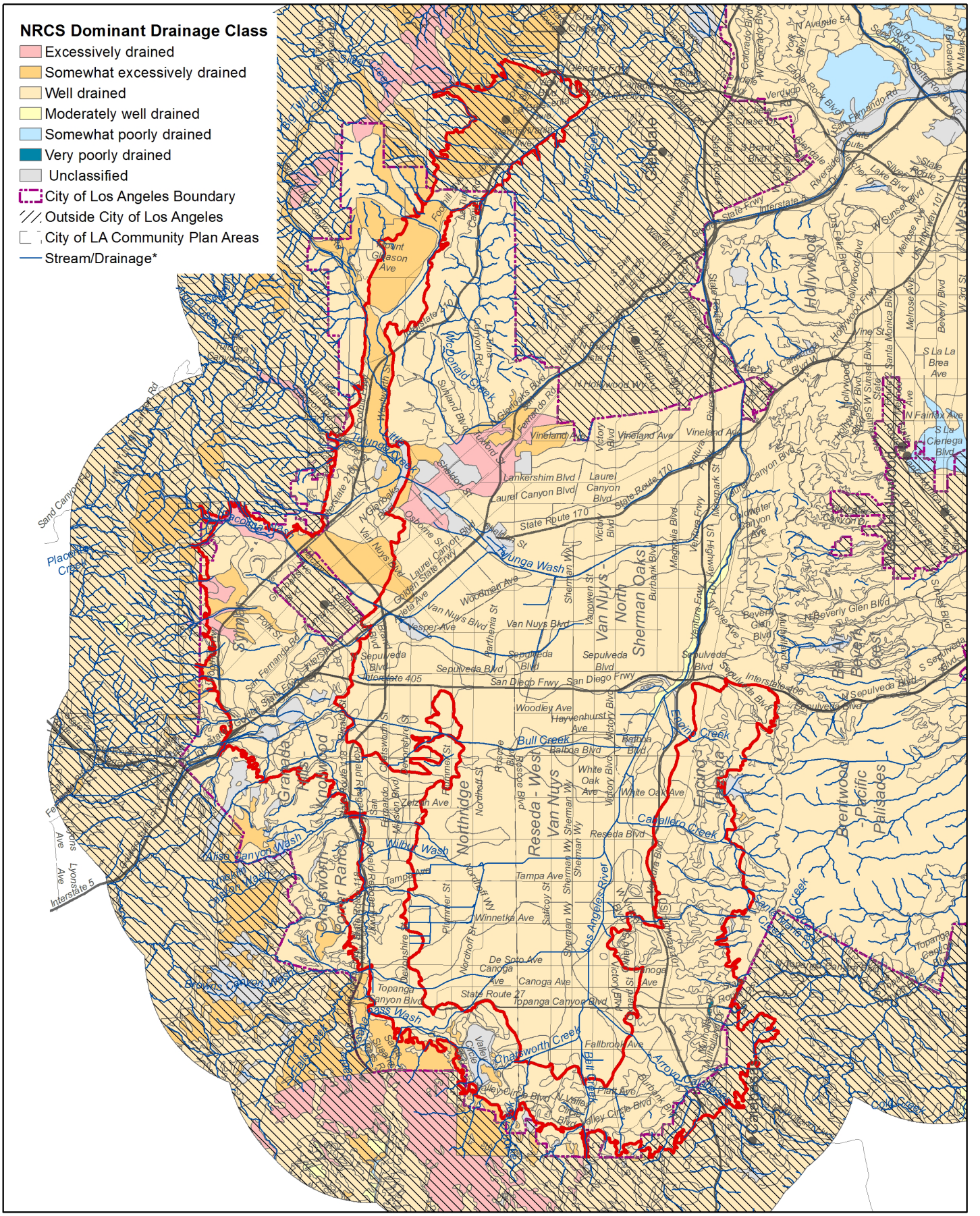
Aspect

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



Slope Percent

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/


NRCS Dominant Drainage Class
Excessively drained
Somewhat excessively drained
Well drained
Moderately well drained
Somewhat poorly drained
Very poorly drained
Unclassified
City of Los Angeles Boundary
Outside City of Los Angeles
City of LA Community Plan Areas
Stream/Drainage*
Tujunga Wash
Bull Creek
Encino Creek
Caballero Creek
Los Angeles River
Chatsworth Creek
Bell Creek
Aliso Canyon Wash
Wilbur Wash
Browns Canyon Wash
Bass Wash
McDonald Creek
Placerita Creek
Dry Canyon
Oat Creek
Hayvenhurst Ave
Woodley Ave
White Oak Ave
Reseda Blvd
Tampa Ave
Winnetka Ave
De Soto Ave
Canoga Ave
Topanga Canyon Blvd
State Route 27
Fallbrook Ave
Vanowen St
Sherman Way
Victory Blvd
Roscoe Blvd
Nordhoff St
Plummer St
Devonshire St
Chatsworth St
Lankershim Blvd
Laurel Canyon Blvd
State Route 170
Van Nuys Blvd
Woodman Ave
Sepulveda Blvd
San Diego Frwy
Interstate 405
Ventura Frwy
Interstate 5
Interstate 210
Foothill Blvd
Glenoaks Blvd
Osborne St
Balboa Blvd
Burbank Blvd
Magnolia Blvd
Victory Blvd
Vineland Ave
Sunland Blvd
Tuxford St
Shelburn St
Sheldon St
Mission Hills
Sylmar
Granada Hills
Knollwood
Porter Ranch
Northridge
Reseda - West Van Nuys
Van Nuys - North Sherman Oaks
Encino
Tarzana
Brentwood - Pacific Palisades
Beverly Crest
Hollywood
Westlake
Cahuenga Pass
Griffith Park
Glendale
Burbank
Chatsworth
Canoga Park
Woodland Hills
Tujunga
Sunland
Pacoima
Mount Gleason Ave
Foothill Blvd
Sand Canyon Rd
Little Tujunga Canyon Rd
Angeles Crest Hwy
Interstate 210
Glendale Fwy
Golden State Frwy
Ventura Frwy
Hollywood Frwy
Santa Monica Blvd
Melrose Ave
Beverly Blvd
Sunset Blvd
Vine St
Fairfax Ave
La Cienega Blvd
Laurel Canyon Blvd
Coldwater Canyon Ave
Beverly Glen Blvd
Sepulveda Blvd
Interstate 405
Topanga Canyon Blvd
Valley Circle Blvd
Mulholland Dr
Lake Hollywood Dr
Hollywood Bowl
Griffith Park
Los Feliz Blvd
Riverside Dr
Silver Lake Blvd
State Route 2
Interstate 5
Colorado Blvd
Eagle Rock Blvd
Verdugo Rd
San Fernando Rd
Broadway
Main St
Avenue 54
Figueroa St
Pasadena Fwy
Santa Monica Fwy
Hollywood Blvd
Western Ave
Normandie Ave
Vermont Ave
Alvarado St
Glendale Blvd
Sunset Blvd
Melrose Ave
Beverly Blvd
Wilshire Blvd
Olympic Blvd
Pico Blvd
Venice Blvd
Washington Blvd
Jefferson Blvd
Slauson Ave
Manchester Ave
Florence Ave
Gage Ave
Firestone Blvd
Imperial Hwy
Rosecrans Ave
Artesia Blvd
Del Amo Blvd
Carson St
Lomita Blvd
Pacific Coast Hwy
Torrance Blvd
Sepulveda Blvd
Western Ave
Vermont Ave
Normandie Ave
Figueroa St
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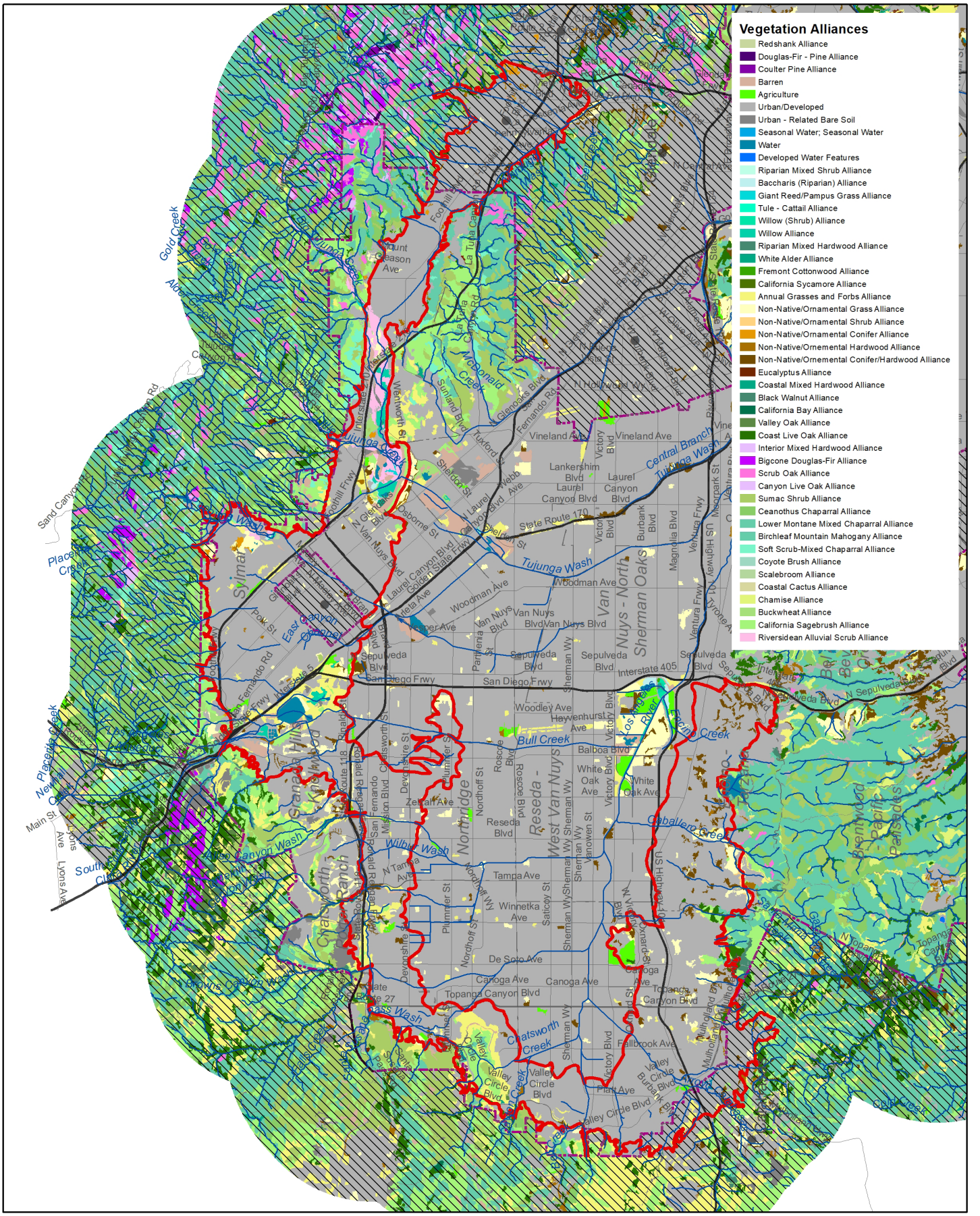
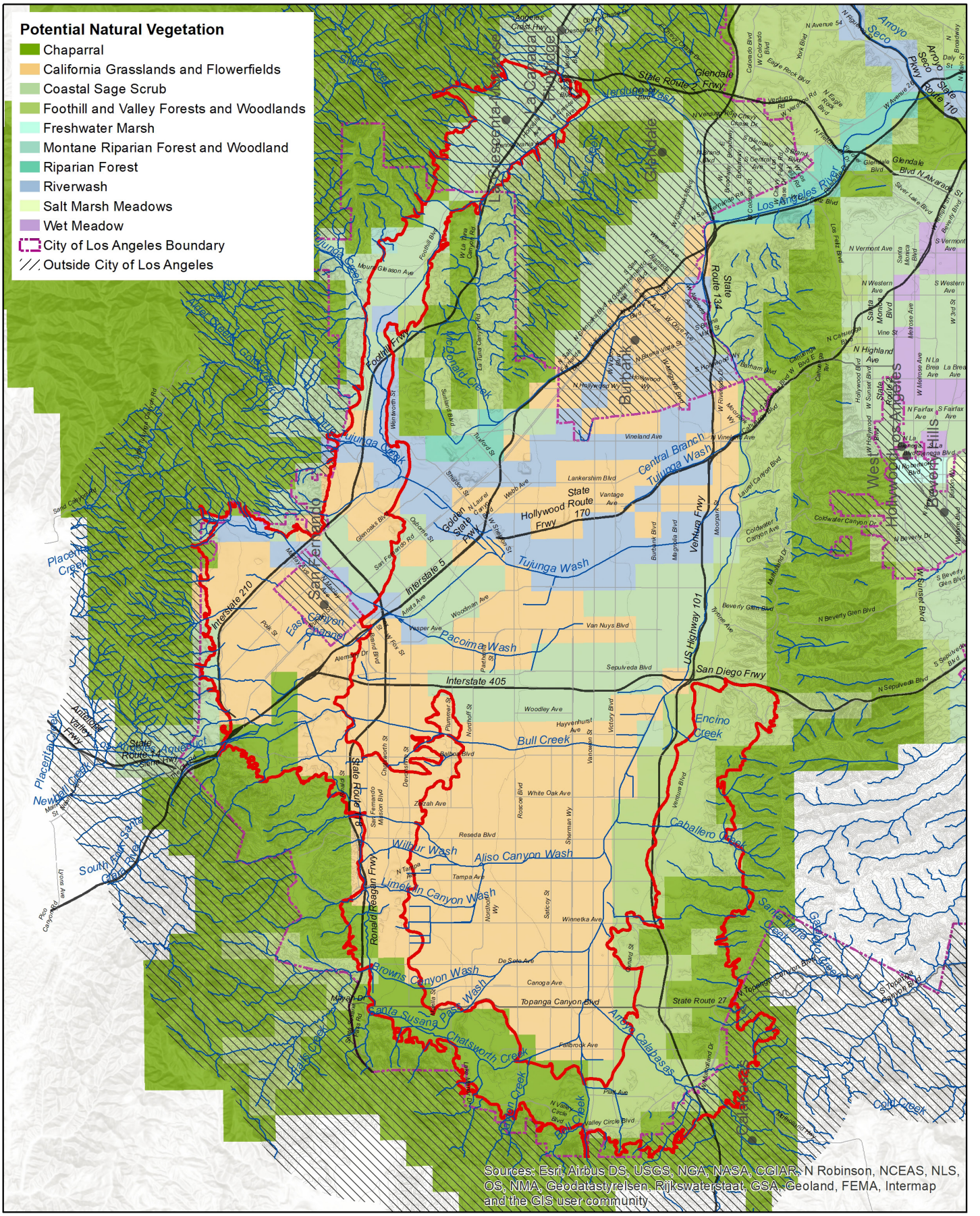
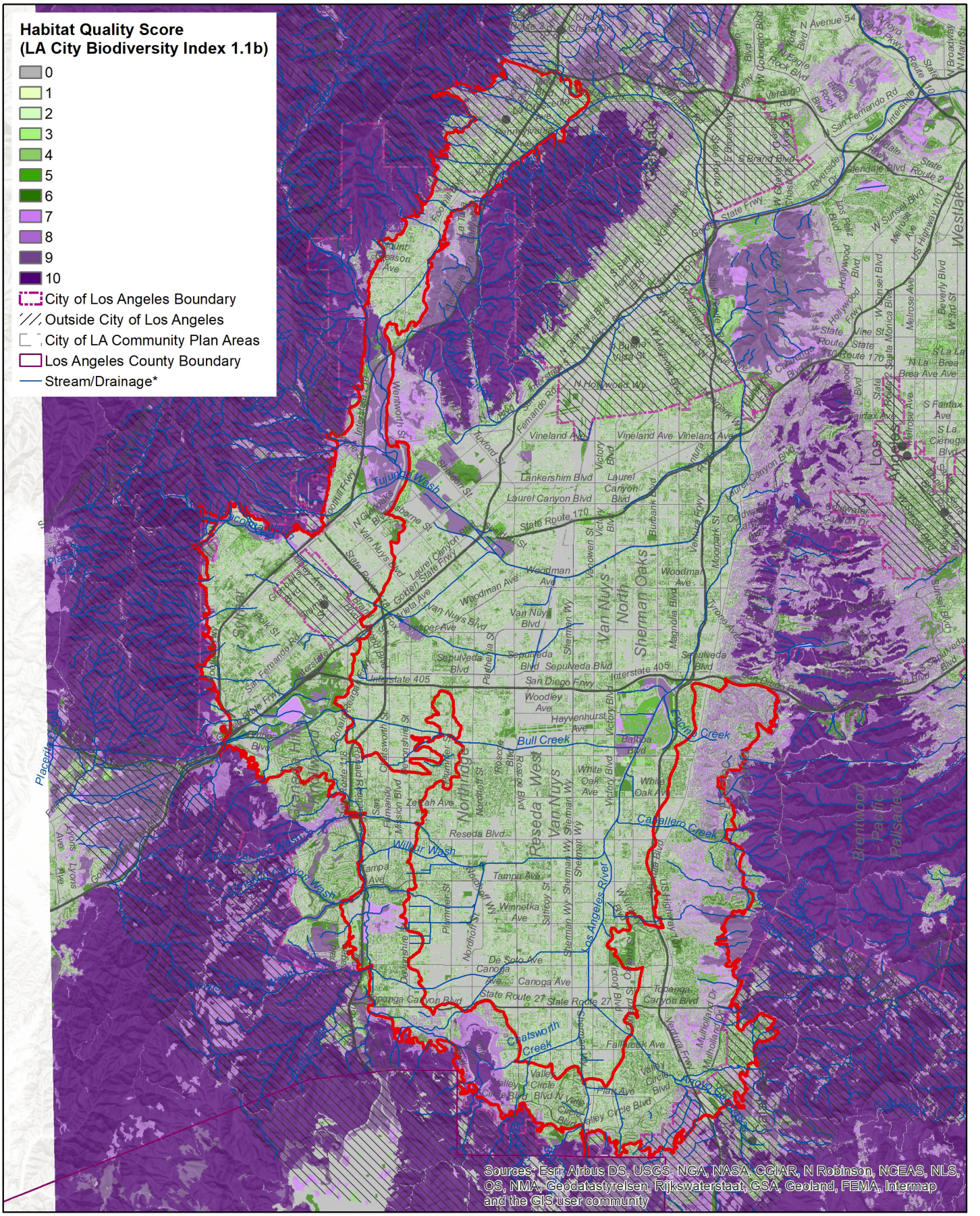
Long Beach Blvd
Atlantic Ave
Alameda St
Compton Blvd


Vegetation Alliances
Redshank Alliance
Douglas-Fir - Pine Alliance
Coulter Pine Alliance
Barren
Agriculture
Urban/Developed
Urban - Related Bare Soil
Seasonal Water; Seasonal Water
Water
Developed Water Features
Riparian Mixed Shrub Alliance
Baccharis (Riparian) Alliance
Giant Reed/Pampus Grass Alliance
Tule - Cattail Alliance
Willow (Shrub) Alliance
Willow Alliance
Riparian Mixed Hardwood Alliance
White Alder Alliance
Fremont Cottonwood Alliance
California Sycamore Alliance
Annual Grasses and Forbs Alliance
Non-Native/Ornamental Grass Alliance
Non-Native/Ornamental Shrub Alliance
Non-Native/Ornamental Conifer Alliance
Non-Native/Ornemental Hardwood Alliance
Non-Native/Ornemental Conifer/Hardwood Alliance
Eucalyptus Alliance
Coastal Mixed Hardwood Alliance
Black Walnut Alliance
California Bay Alliance
Valley Oak Alliance
Coast Live Oak Alliance
Interior Mixed Hardwood Alliance
Bigcone Douglas-Fir Alliance
Scrub Oak Alliance
Canyon Live Oak Alliance
Sumac Shrub Alliance
Ceanothus Chaparral Alliance
Lower Montane Mixed Chaparral Alliance
Birchleaf Mountain Mahogany Alliance
Soft Scrub-Mixed Chaparral Alliance
Coyote Brush Alliance
Scalebroom Alliance
Coastal Cactus Alliance
Chamise Alliance
Buckwheat Alliance
California Sagebrush Alliance
Riversidean Alluvial Scrub Alliance
Tujunga Wash
Bull Creek
Los Angeles River
Encino Creek
Caballero Creek
Wilbur Wash
Chatsworth Creek
Browns Canyon Wash
Aliso Canyon Wash
Bell Canyon Creek
Old Creek
Gold Creek
Placerita Creek
Newhall Creek
Sand Canyon
Sylmar
Van Nuys - North Sherman Oaks
Reseda - West Van Nuys
Northridge
Chatsworth
Canoga Park - Winnetka - Woodland Hills
Brentwood - Pacific Palisades
Bel Air - Beverly Crest
Interstate 5
State Route 118
State Route 27
State Route 170
San Diego Frwy
Interstate 405
Ventura Frwy
US Highway 101
Sepulveda Blvd
Van Nuys Blvd
Woodman Ave
Roscoe Blvd
Reseda Blvd
Tampa Ave
Winnetka Ave
De Soto Ave
Canoga Ave
Topanga Canyon Blvd
Victory Blvd
Vineland Ave
Lankershim Blvd
Laurel Canyon Blvd
Balboa Blvd
White Oak Ave
Zelzah Ave
Nordhoff St
Plummer St
Devonshire St
Chatsworth St
Saticoy St
Sherman Way
Vanowen St
Oxnard St
Valley Circle Blvd
Burbank Blvd
Victory Blvd
Foothill Frwy
Glendale Frwy
Golden State Frwy
Hollywood Frwy
Mulholland Dr
Mount Gleason Ave
Sunland Blvd
Glenoaks Blvd
Tuxford St
Webb Ave
Sheldon St
Osborne St
Woodley Ave
Haynenhurst Ave
Parthenia St
Roscoe Blvd
Saticoy St
Plummer St
Nordhoff St
Devonshire St
Chatsworth St
Oxnard St
Vanowen St
Sherman Way
Tampa Ave
Winnetka Ave
De Soto Ave
Canoga Ave
Topanga Canyon Blvd
Valley Circle Blvd
Victory Blvd
Burbank Blvd
Oakdale Ave
Fallbrook Ave
Plant Ave
Valley Circle Blvd
Mulholland Dr
Topanga Canyon Blvd
Old Topanga Canyon Rd
Sand Canyon Rd
Placerita Canyon Rd
Main St
Lyons Ave
Pico Canyon Rd
Foothill Blvd
Glenoaks Blvd
Laurel Canyon Blvd
Van Nuys Blvd
Woodman Ave
Roscoe Blvd
Reseda Blvd



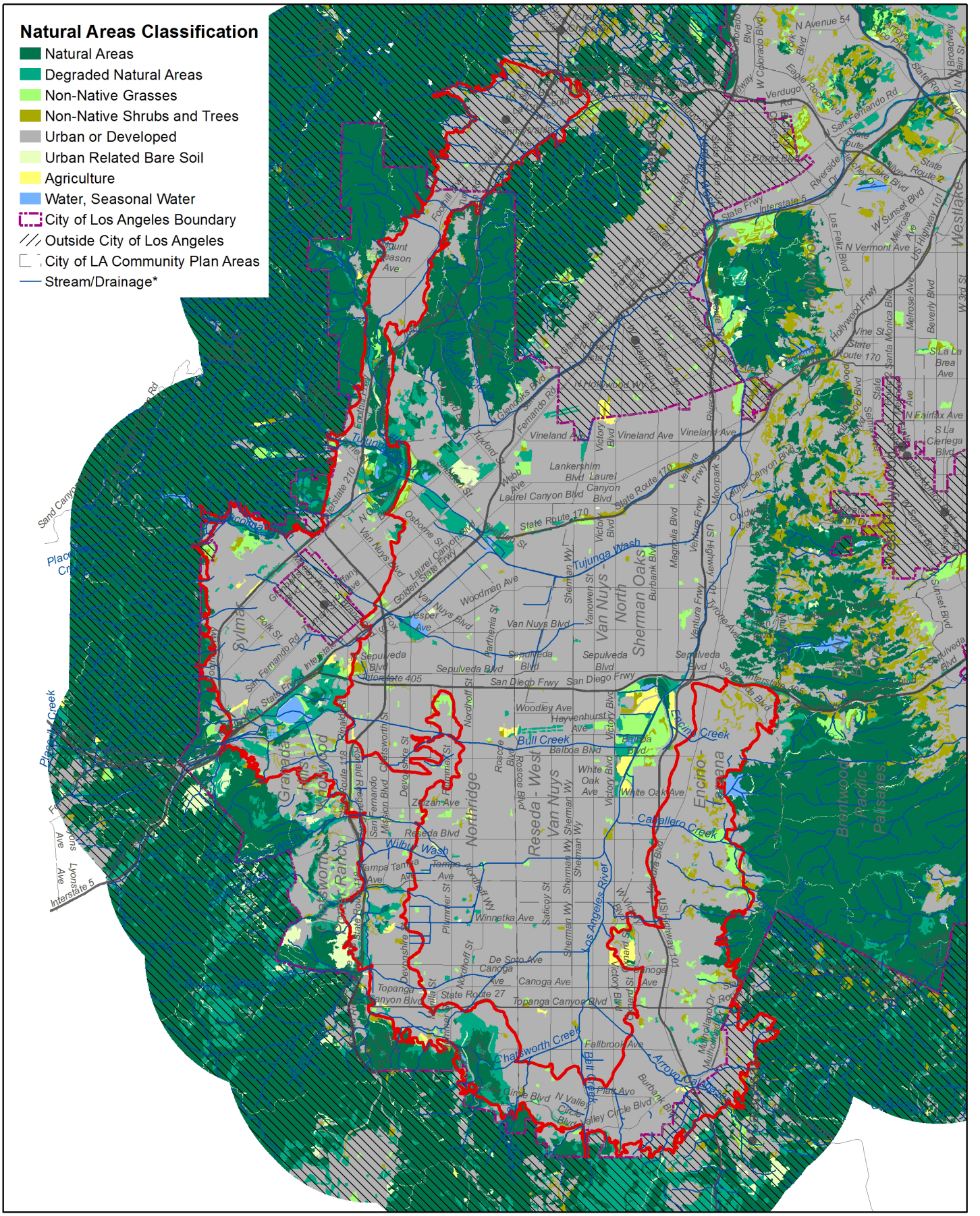
Hypothesized Potential Natural Vegetation

Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.



General Habitat Quality

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr

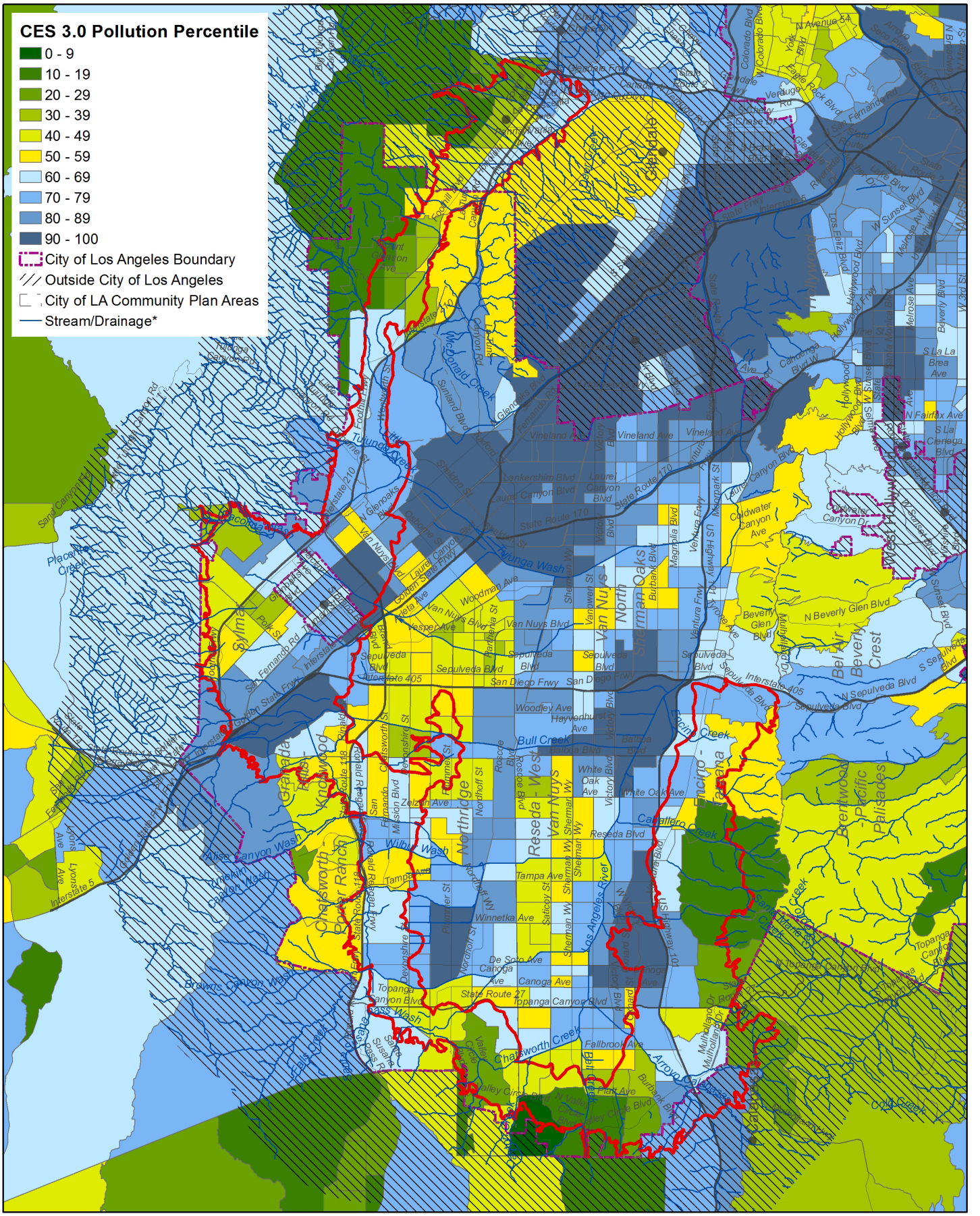


Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf

0 1.25 2.5 5 Miles

N

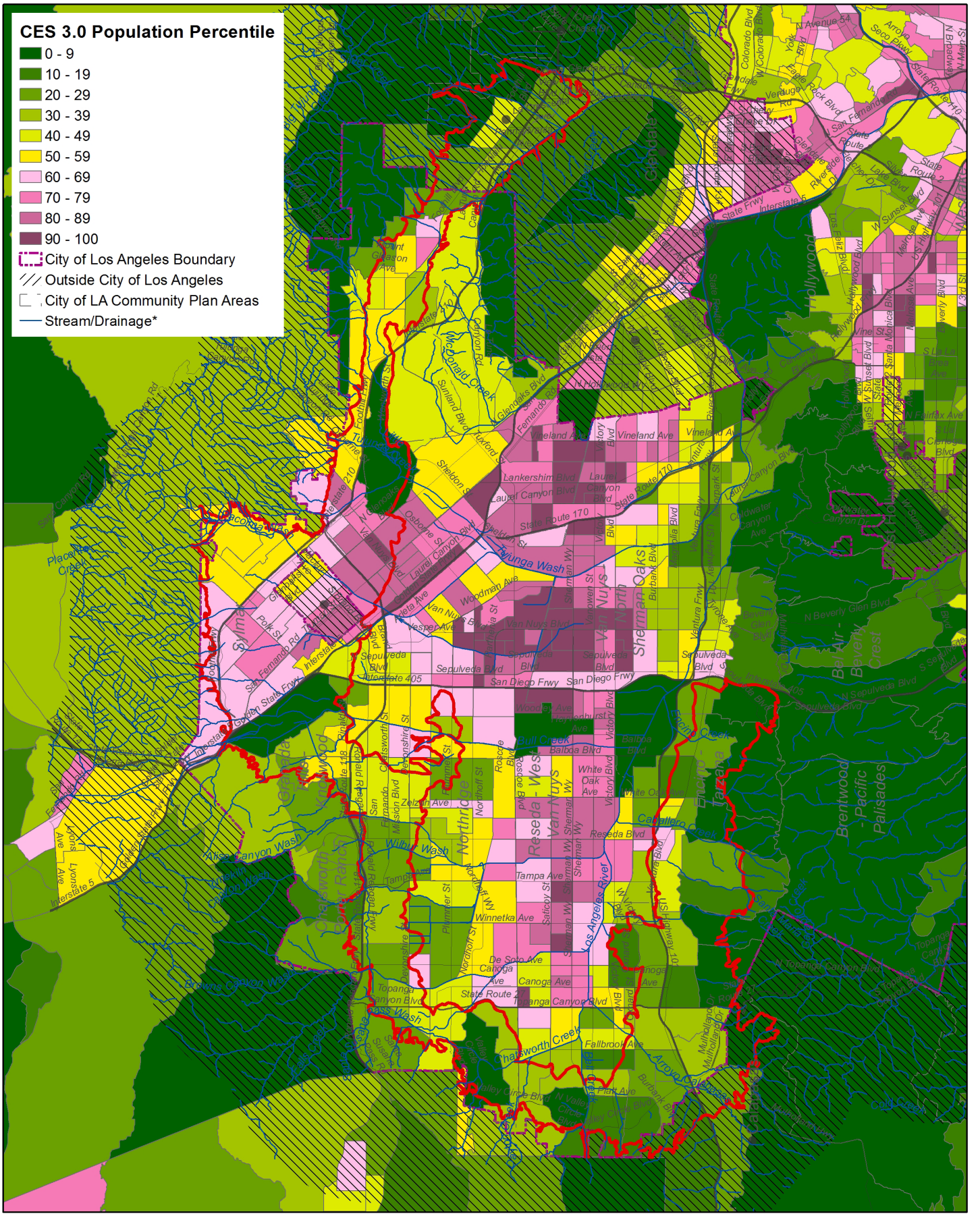


CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

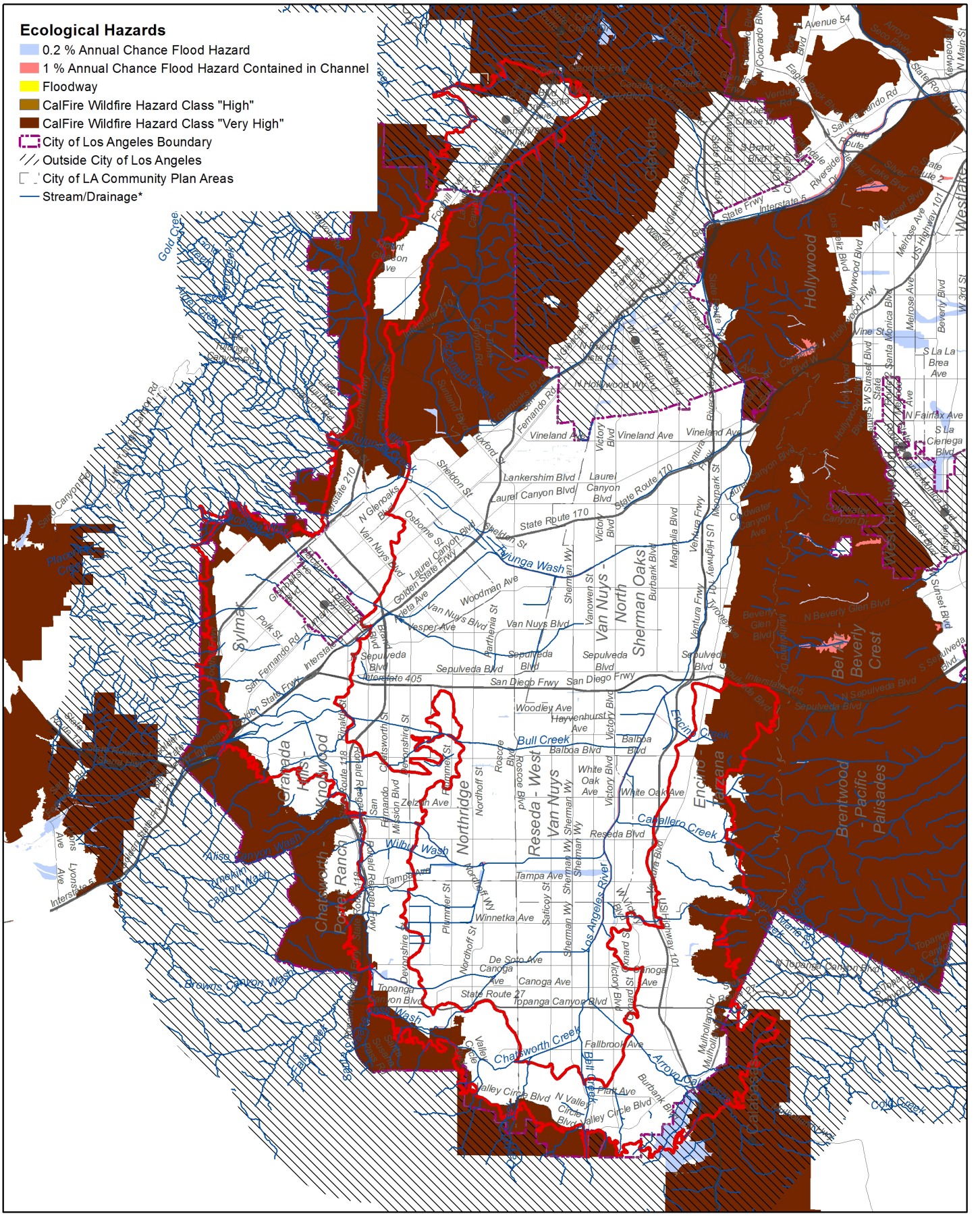
Miles
0 1.25 2.5 5

N



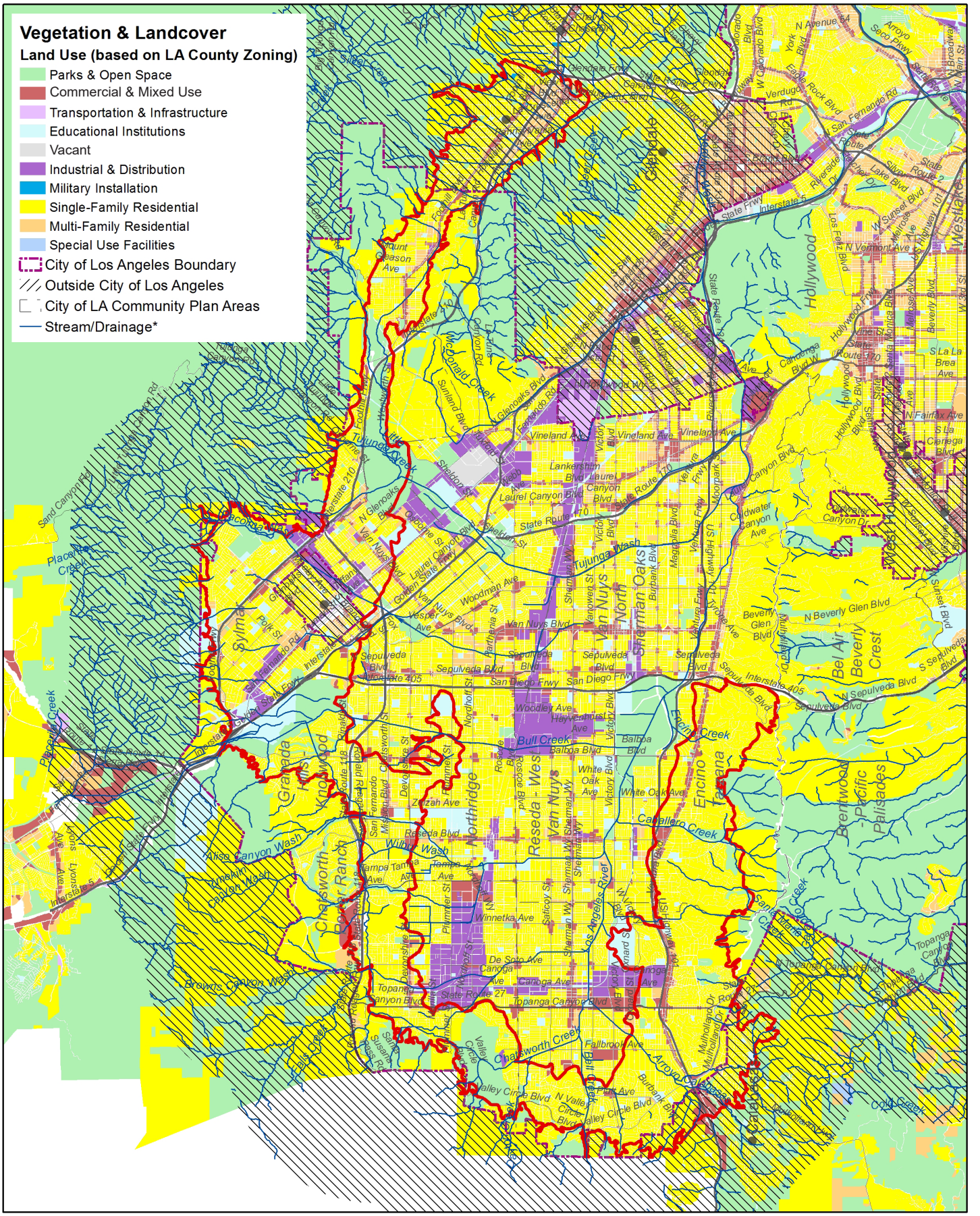
CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

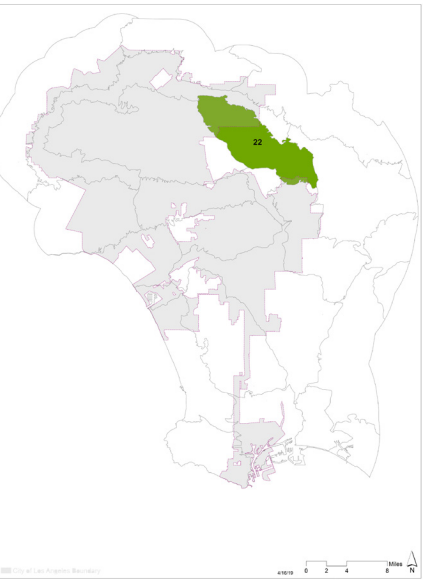


Ecological Hazards

Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.


Vegetation & Landcover
Land Use (based on LA County Zoning)
Parks & Open Space
Commercial & Mixed Use
Transportation & Infrastructure
Educational Institutions
Vacant
Industrial & Distribution
Military Installation
Single-Family Residential
Multi-Family Residential
Special Use Facilities
City of Los Angeles Boundary
Outside City of Los Angeles
City of LA Community Plan Areas
Stream/Drainage*
Glendale
Hollywood
Westlake
Sherman Oaks - North
Van Nuys - West
Reseda - West Van Nuys
Encino - Tarzana
Bel Air - Beverly Crest
Brentwood - Pacific Palisades
Granada Hills - Knollwood
Chatsworth - Porter Ranch
Northridge
Sylmar
Tujunga Wash
Bull Creek
Caballero Creek
Los Angeles River
Chatsworth Creek
Browns Canyon Wash
Miss Canyon Wash
Dayton Canyon
Placerita Creek
Interstate 405
Interstate 210
Interstate 5
State Route 118
State Route 170
State Route 27
State Route 2
State Route 134
Ventura Freeway
San Diego Freeway
Glendale Freeway
Hollywood Freeway
Golden State Freeway
Foothill Freeway
Sepulveda Blvd
Van Nuys Blvd
Laurel Canyon Blvd
Lankershim Blvd
Victory Blvd
Vineland Ave
Roscoe Blvd
Nordhoff St
Devonshire St
Reseda Blvd
Winnetka Ave
Canoga Ave
De Soto Ave
Topanga Canyon Blvd
Valley Circle Blvd
Fallbrook Ave
Woodley Ave
Balboa Blvd
White Oak Ave
Encino Creek
Hayvenhurst Ave
Woodman Ave
Vesper Ave
Tampa Ave
Zelzah Ave
Sunland Blvd
Foothill Blvd
Glenoaks Blvd
Sheldon St
Osborne St
Polk St
Glenoaks Canyon
Sand Canyon Rd
Placerita Canyon Rd
Mount Gleason Ave
Big Tujunga Canyon Rd
Angeles Crest Hwy
Lyons Ave
Soledad Canyon Rd
Santa Susana Pass Rd
Rinaldi St
Lindley Ave
Tampa Ave
Reseda Blvd
Wilbur Ave
Wilbur Wash
Sylmar Canyon Wash
Cayuga Canyon Wash
Browns Canyon Wash
Miss Canyon Wash
Placerita Creek
Tujunga Creek
McDonald Creek
Sunland Blvd
Glenoaks Blvd
Foothill Blvd
Sheldon St
Osborne St

ECOTOPE 22: VERDUGO MOUNTAINS & SAN RAFAEL HILLS



(Partially within the City of Los Angeles)

LANDFORM

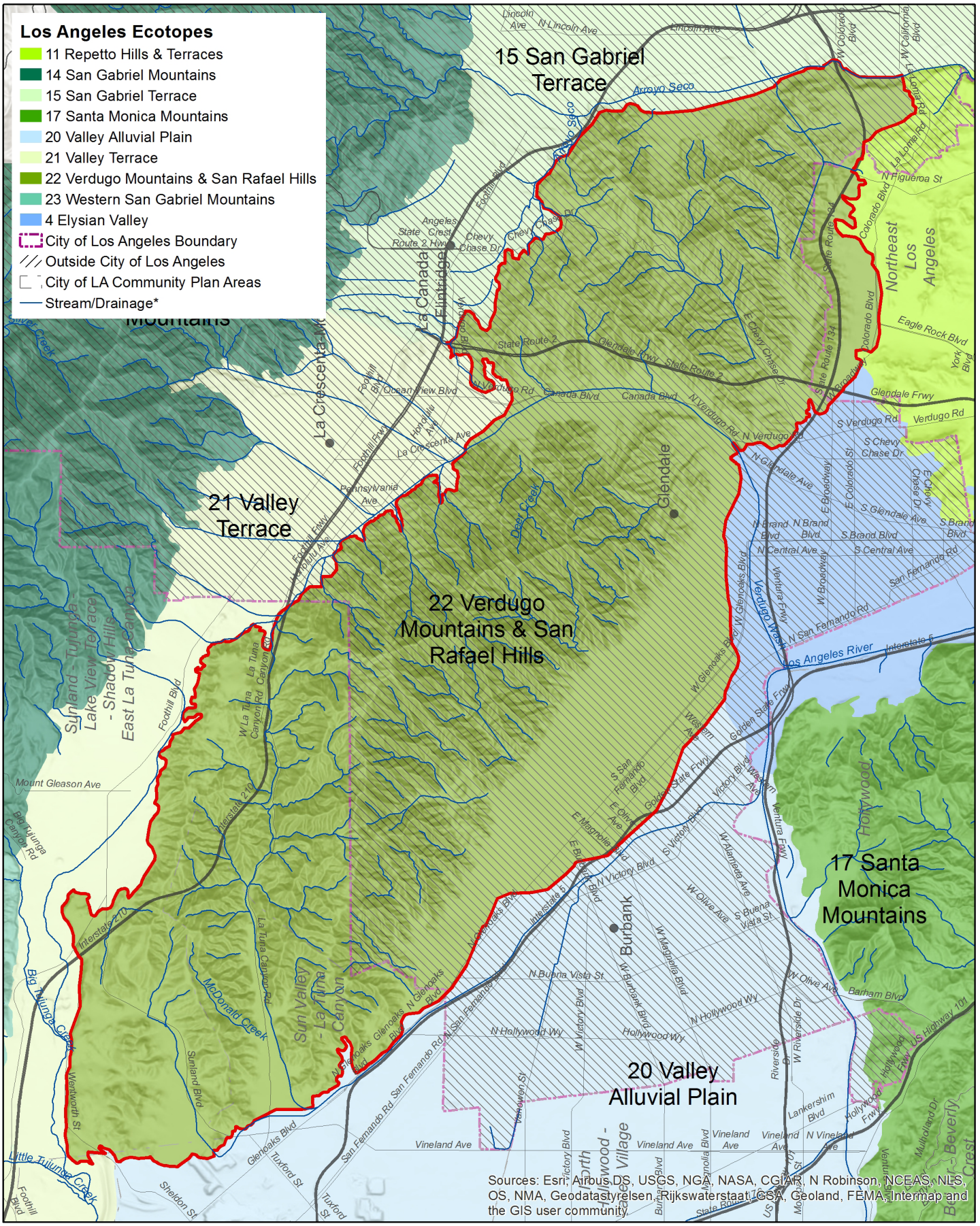
The Verdugo Mountains, rising to 3,126 feet above sea level at Verdugo Mountain, run parallel with the broader Transverse Range, but are disconnected from the adjacent San Gabriel Mountains by development within the La Crescenta Valley to the north. The San Rafael Hills, rising to an elevation of 1,800 feet, sit just to the east and are separated by the 2 freeway and Verdugo Wash. The terrain of the Verdugos is very steep, which has limited development within much of the ecotope. Development is more extensive in the San Rafael Hills, but large patches of undeveloped land remain on steep slopes. The steep terrain makes landslides a frequent hazard, along with very rapid wildfire spread as fires carry up steep slopes. The alluvial fans below the south-facing slopes of the Verdugos were included in the ecotope due to their relatively steep slopes compared to the adjacent San Fernando Valley alluvial plain.

MICROCLIMATE

Thermal belts dominate the microclimate, with occasional ocean influence, including orographic enhancement of precipitation during winter months. In summer, monsoon showers are more common here relative to more coastal areas. Southerly and northerly aspects dominate, producing very hot and dry conditions on south facing slopes and cooler, moister conditions on north facing slopes. Cooler winter nighttime temperatures occur at lower elevations on the alluvial fans near the base of the mountains and hills.

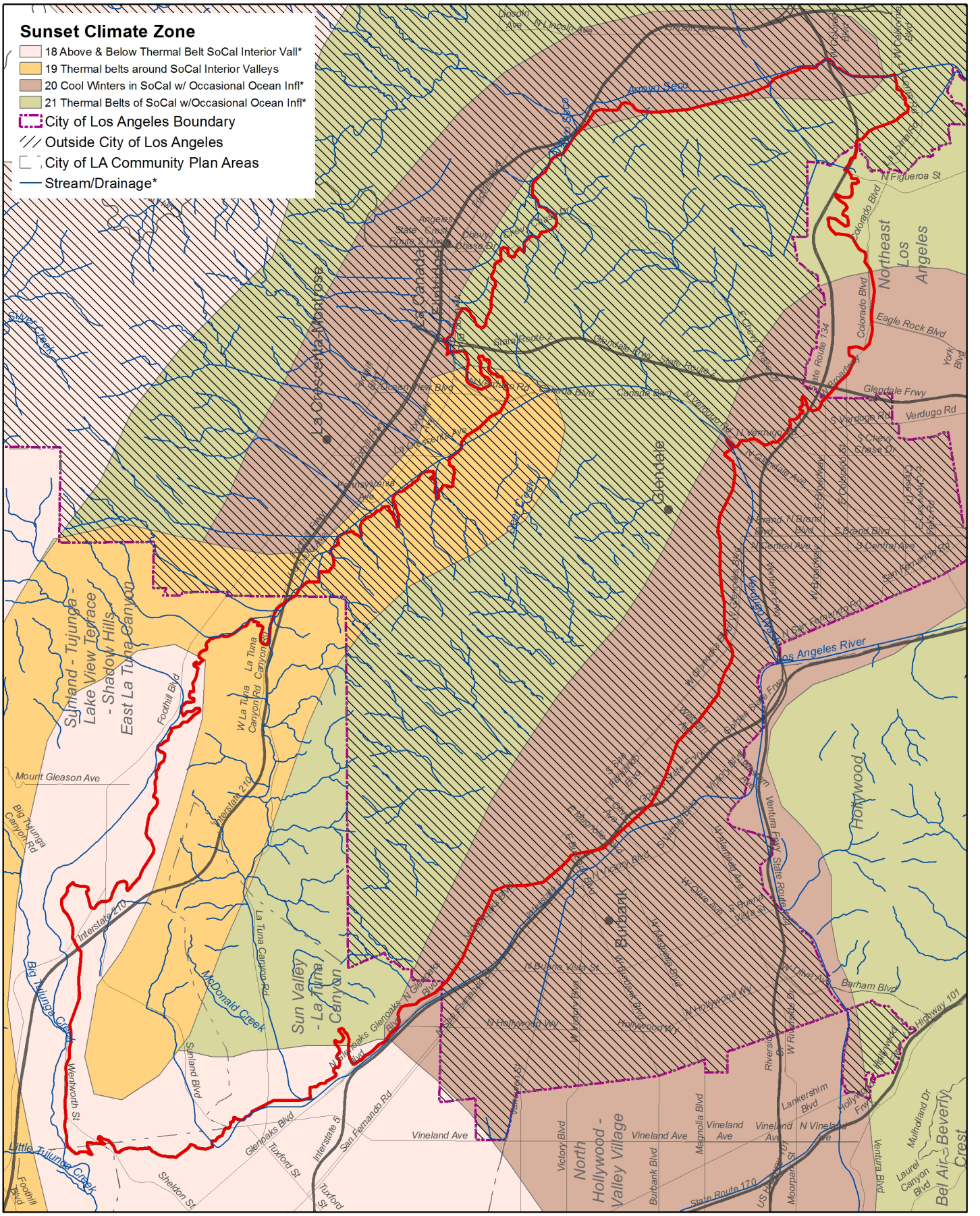
VEGETATION & LANDCOVER

Chaparral vegetation dominates the drier southerly slopes of the ecotope, while northern slopes and valley bottoms include extensive oak woodlands, riparian and mixed hardwood vegetation. While intensive development occurs on lower slopes, the ecotope quickly transitions to a highly intact contiguous natural area spanning more than 4,000 acres. Mountain lions (*Puma concolor*), black-tailed deer (*Odocoileus hemionus*), black bears (*Ursus americanus*), and many other species of wildlife reside in the Verdugo Mountains, with less presence in the San Rafael Hills. Since the ecotope is substantially disconnected from the San Gabriel Mountains to the northeast, habitat connectivity is a key conservation priority here. Enhancing connections to the Hansen Dam Area to the north, the Repetto Hills to the southeast, and the San Gabriels to the northeast are key priorities to support resilience of wildlife populations. Arroyo Seco, bordering the eastern edge of the San Rafael Hills provides a key connectivity opportunity north to the San Gabriel Mountains and south to the Elysian Hills, Repetto Hills, and Santa Monica Mountains. Internally, enhancing connectivity between the Verdugos and the San Rafael Hills along the Verdugo Wash and across the 2 freeway are key connectivity opportunities.



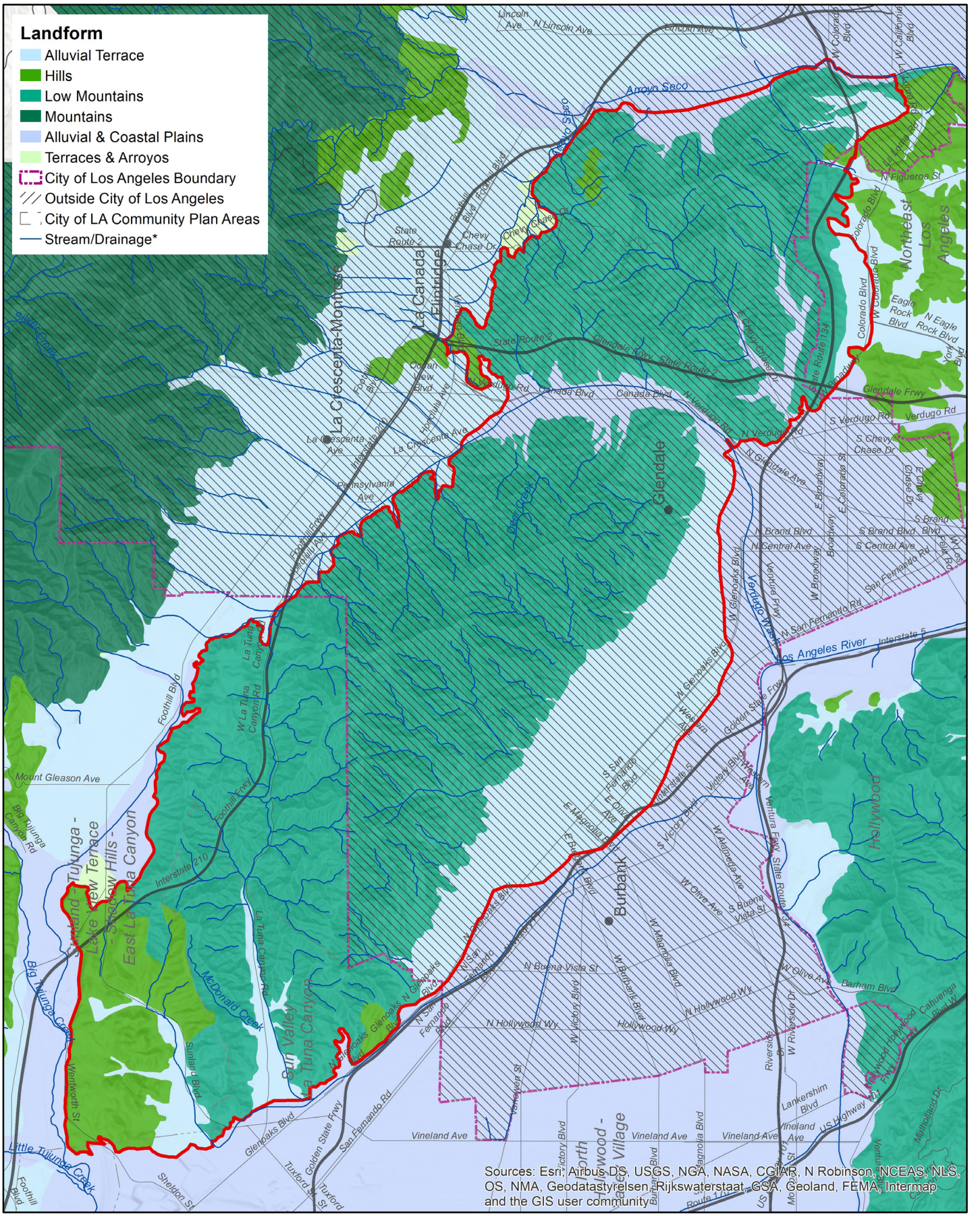
Ecotope 22 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



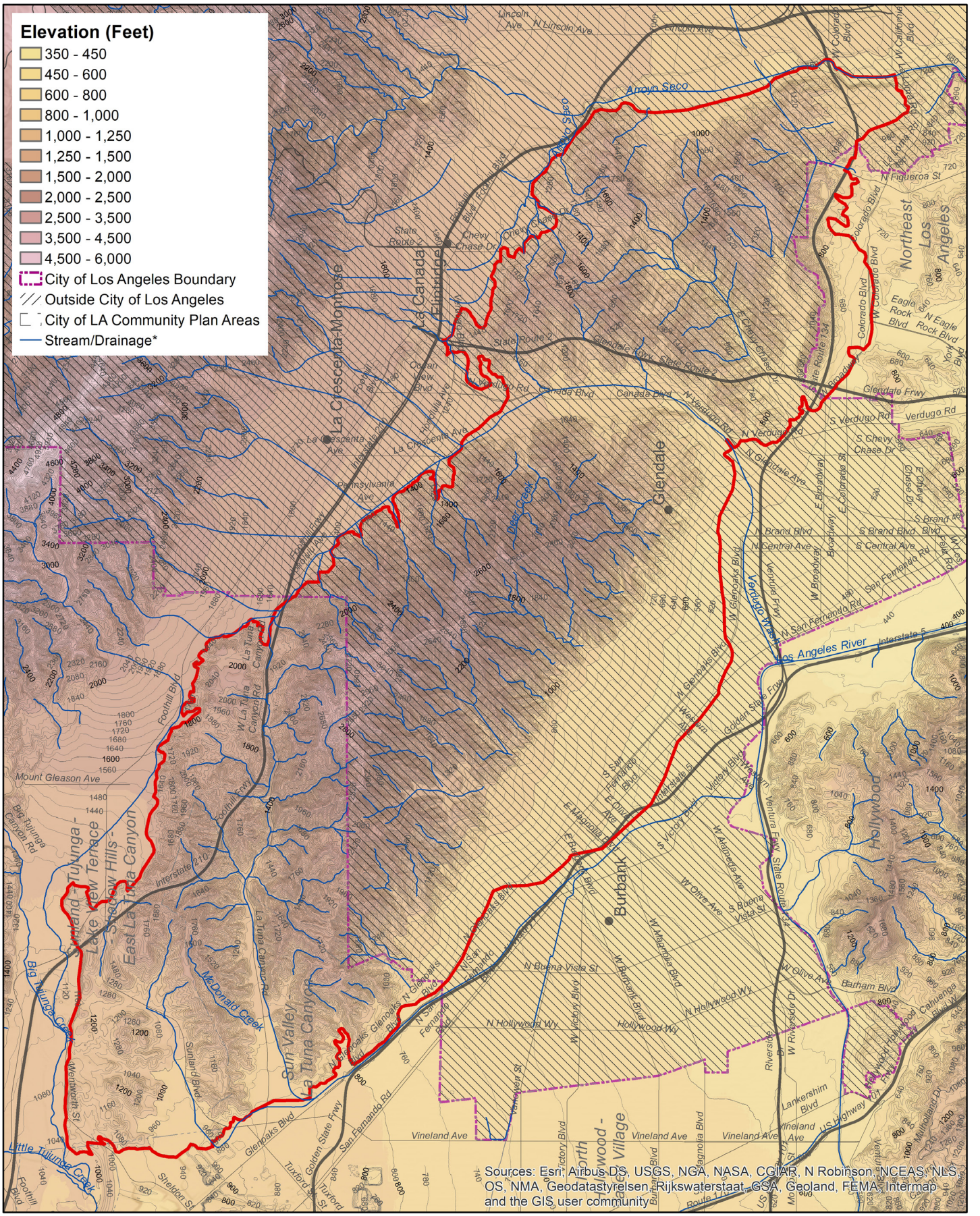
Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



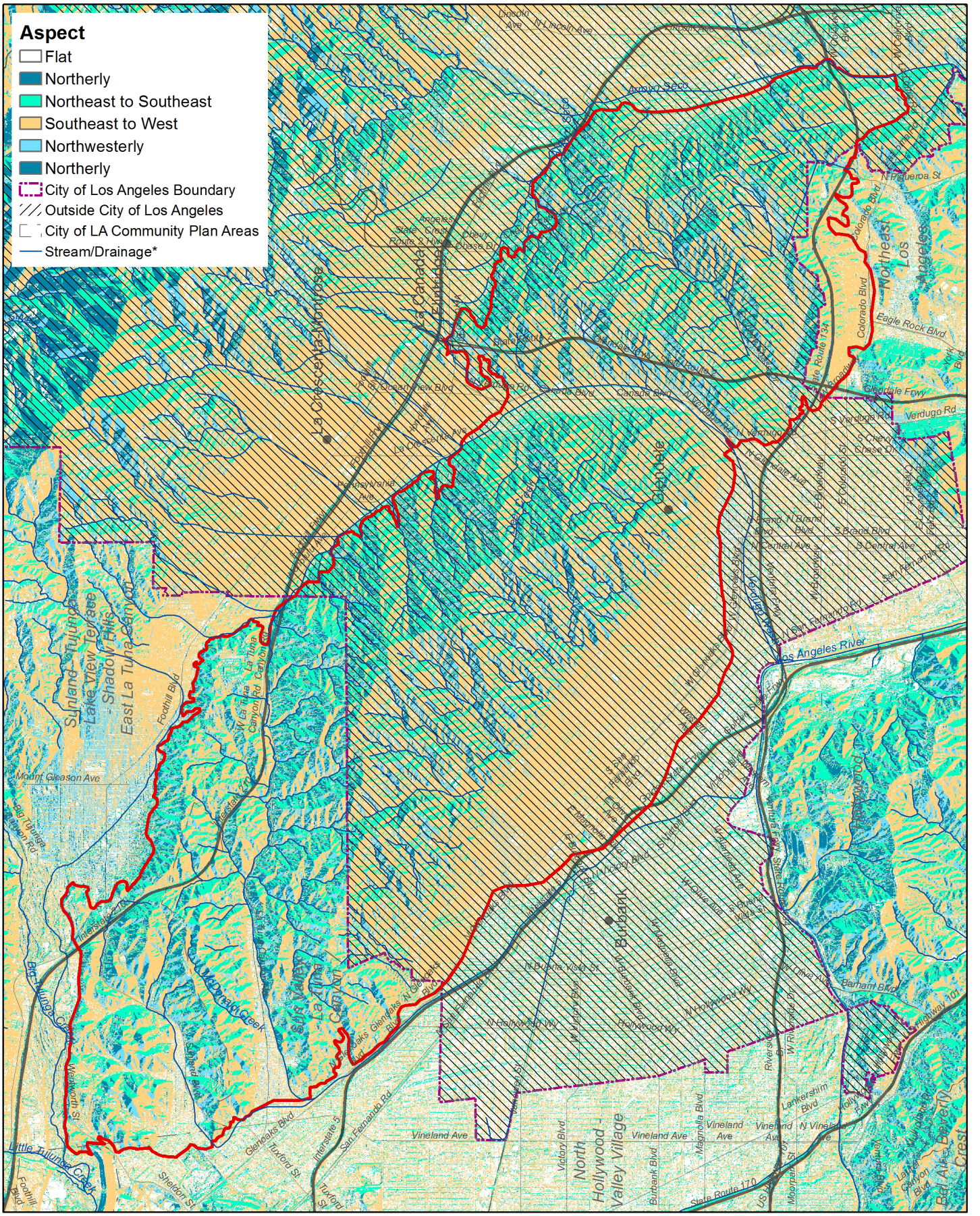
Landform

Data source: I. Brown (2019), https://escholarship.org/uc/item/4c81w4nr



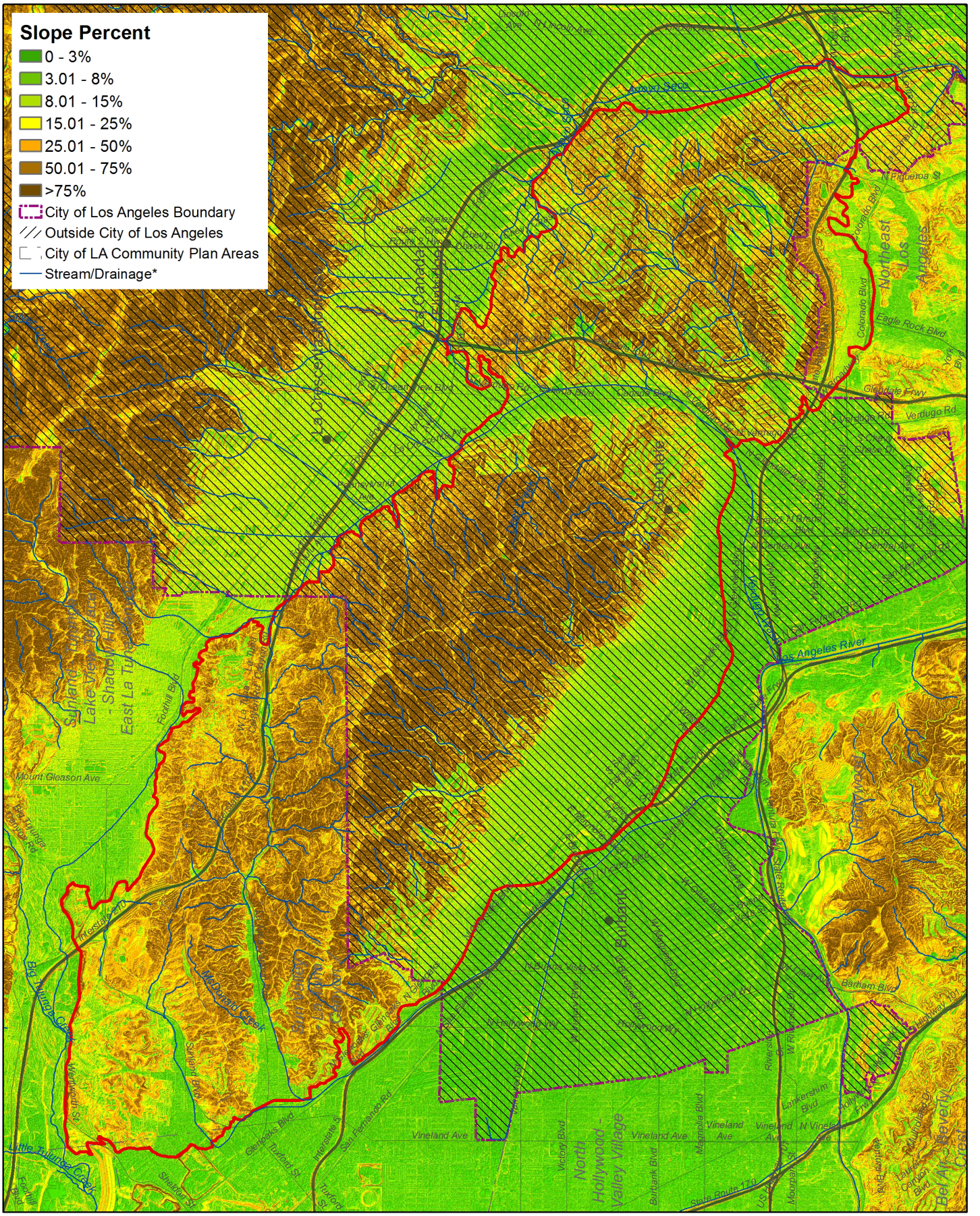
Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



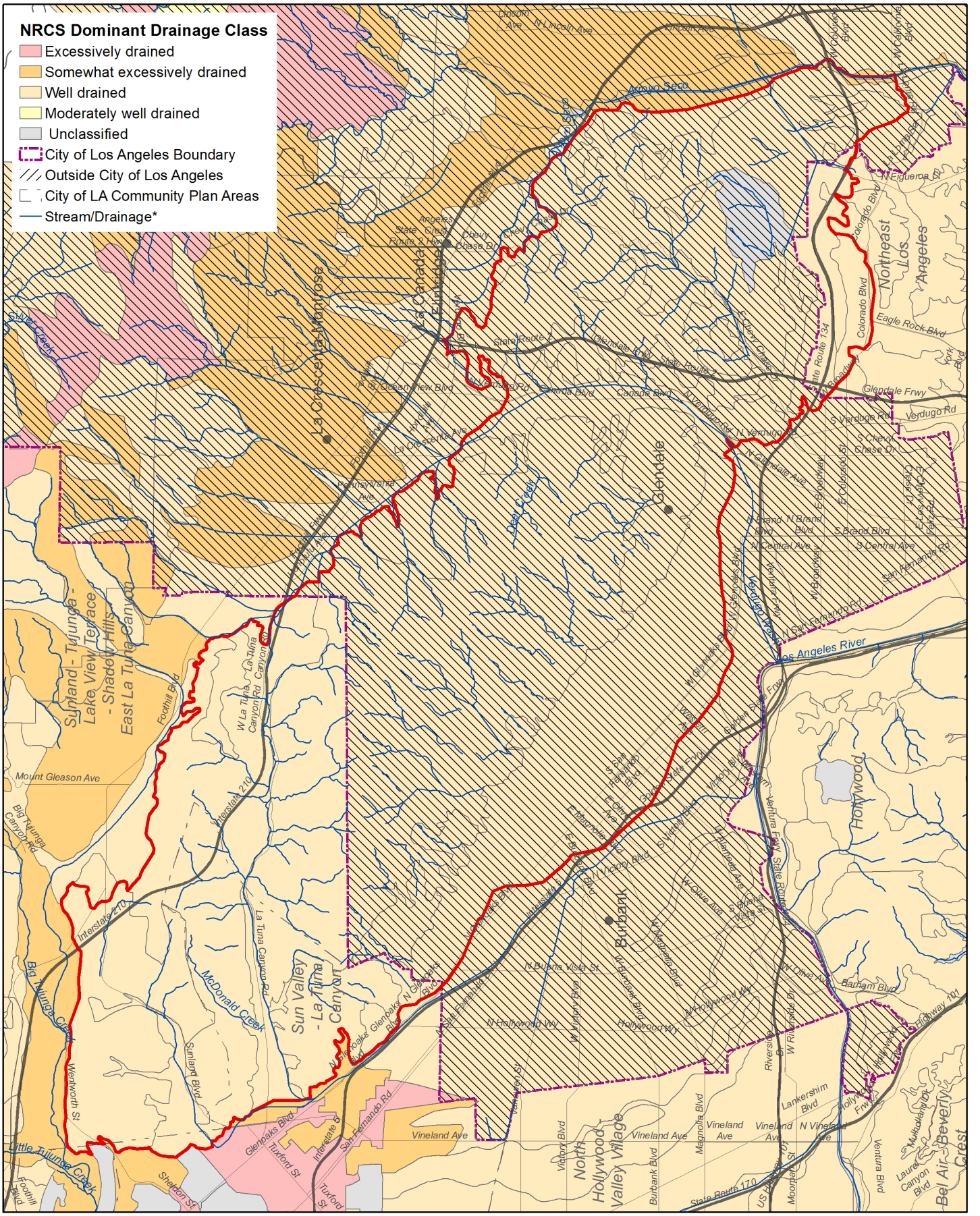
Aspect

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



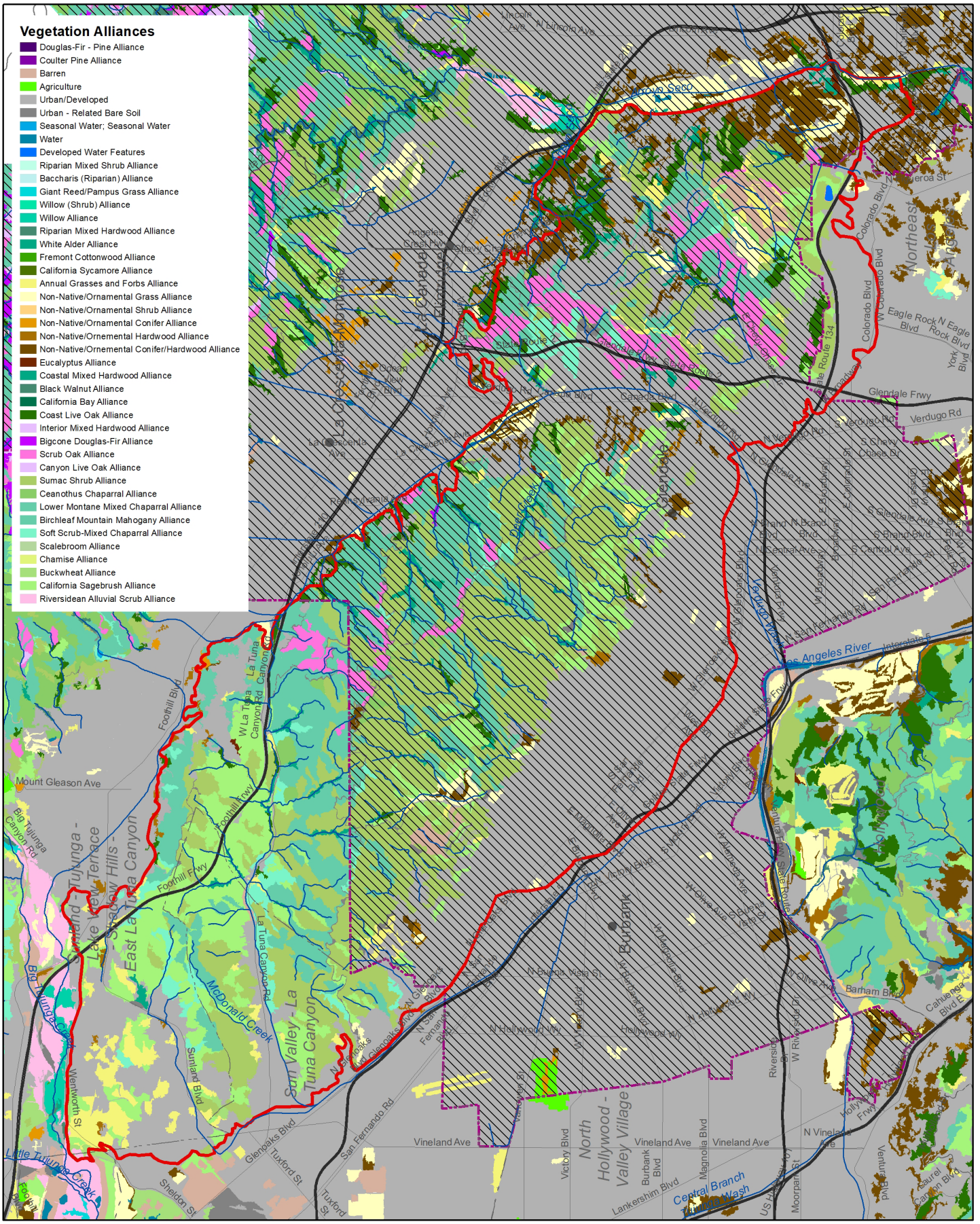
Slope Percent

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



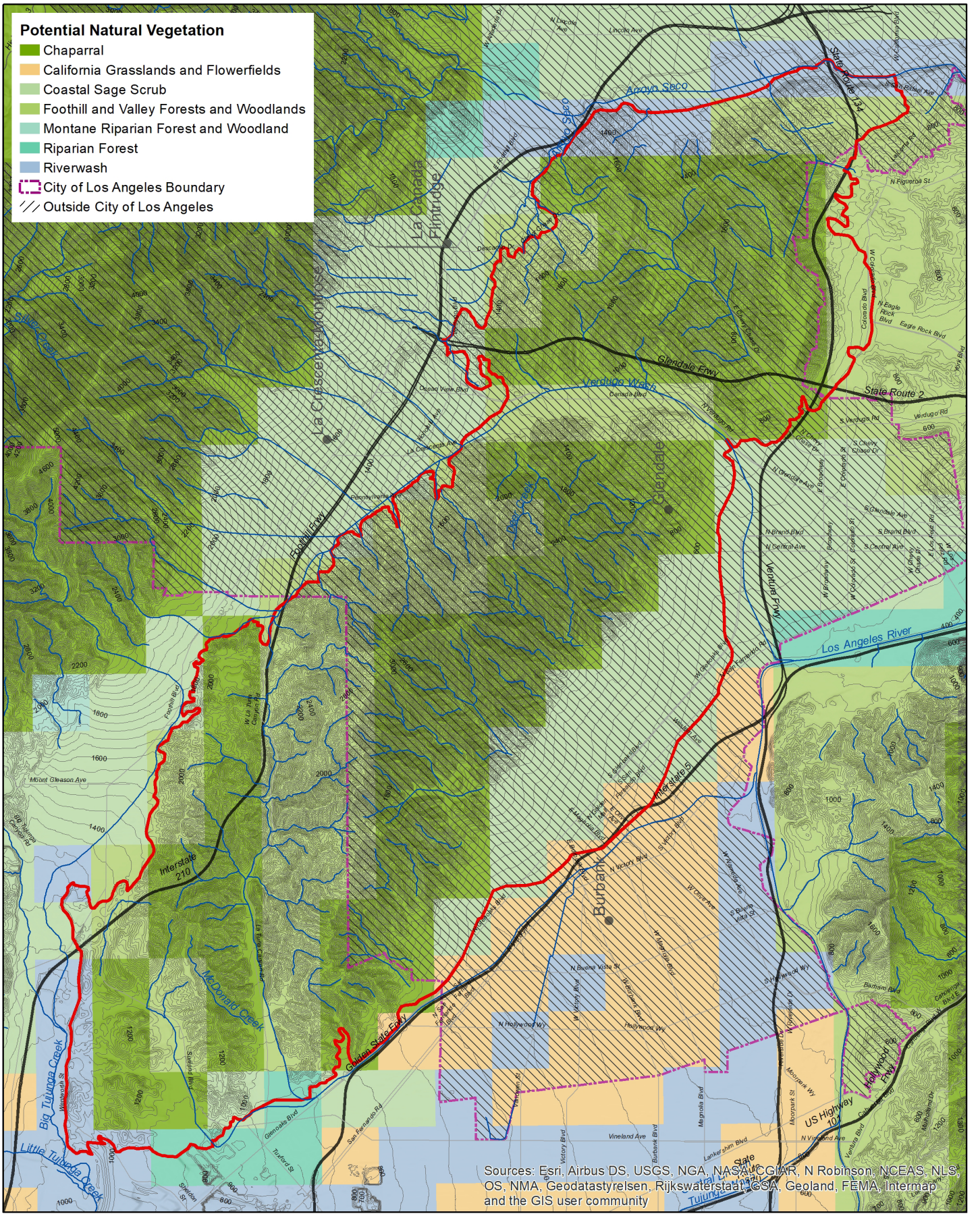
Drainage

Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.



Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192

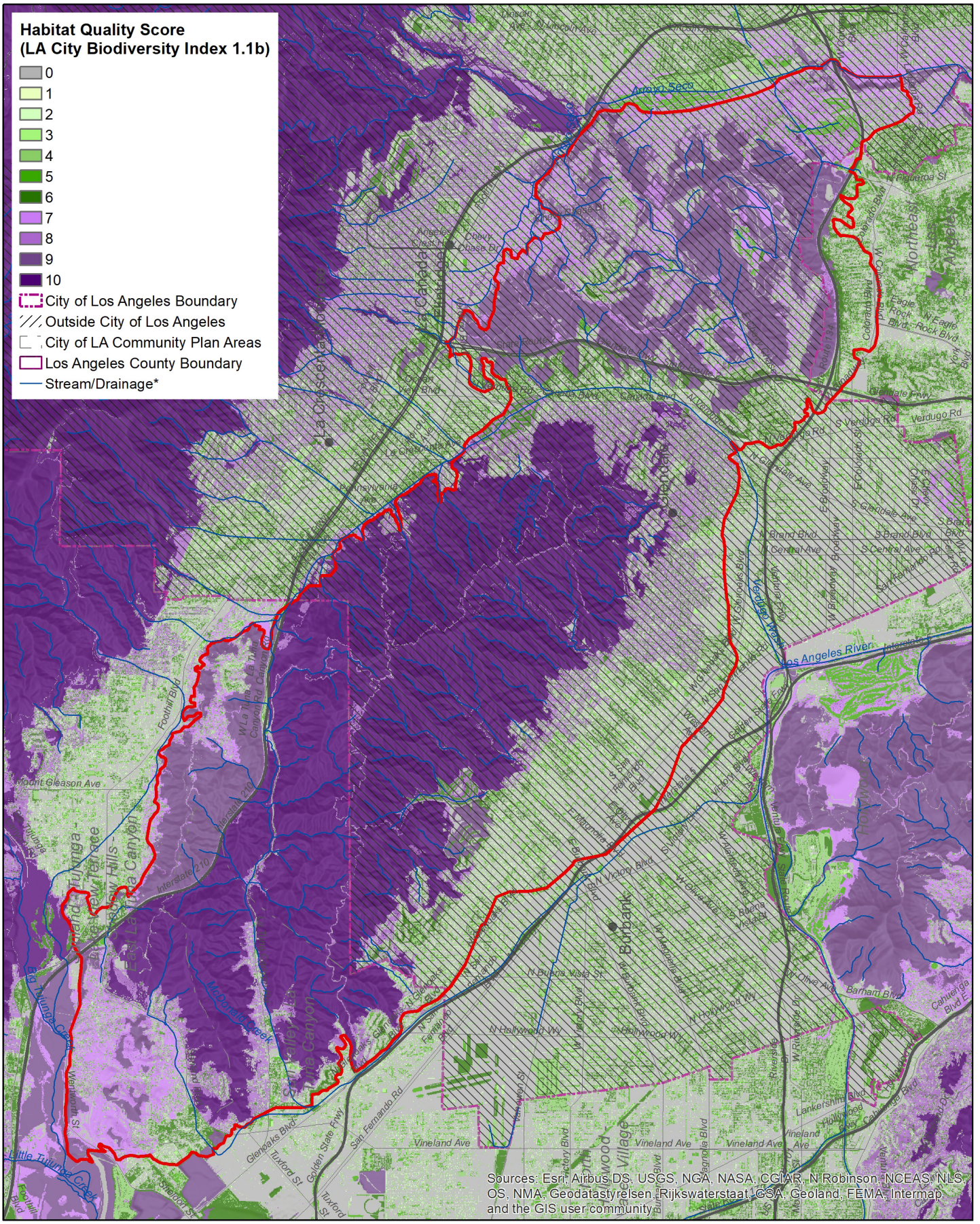


Hypothesized Potential Natural Vegetation

Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.

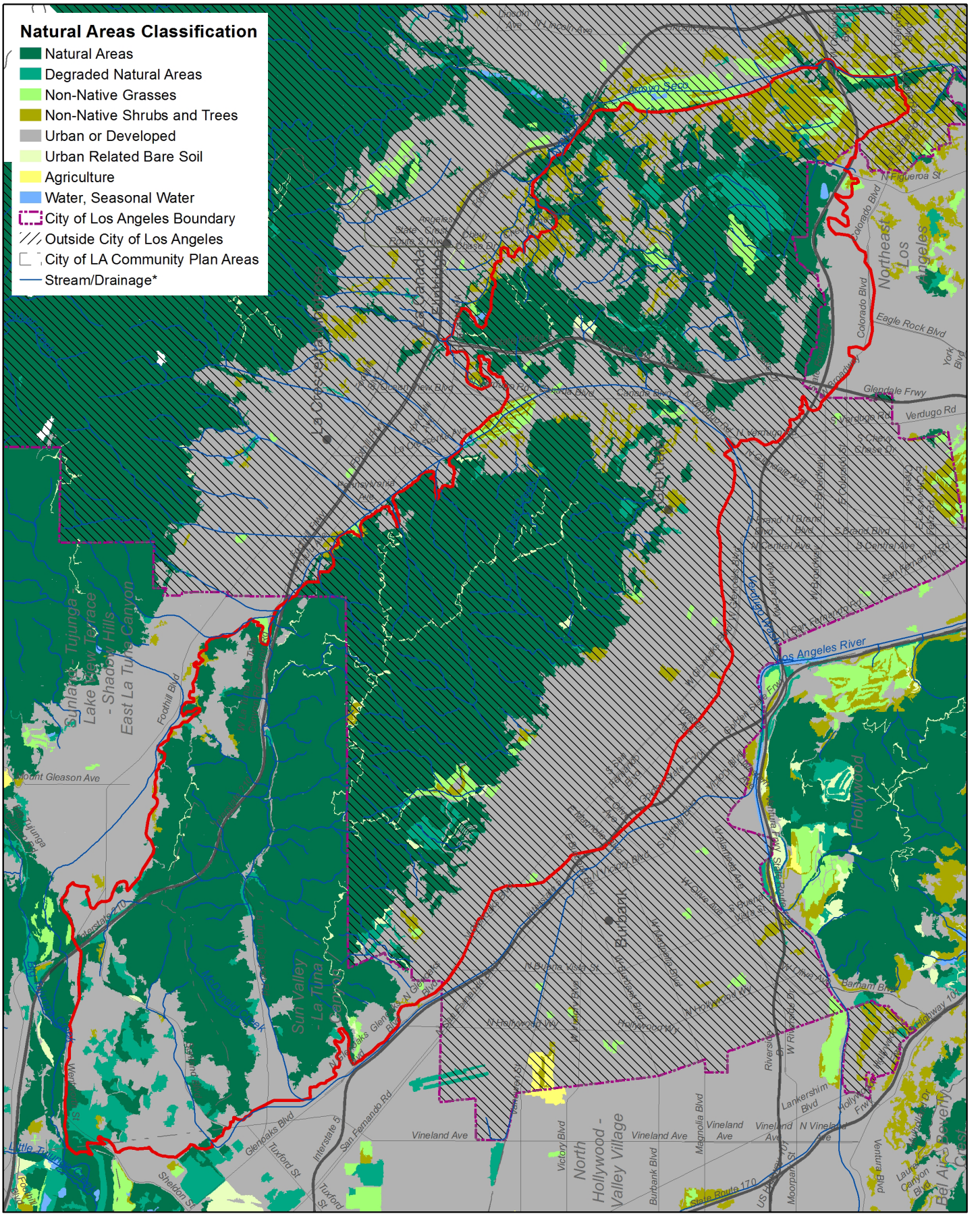
0 0.5 1 2 Miles

N



General Habitat Quality
Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr

0 0.5 1 2 Miles

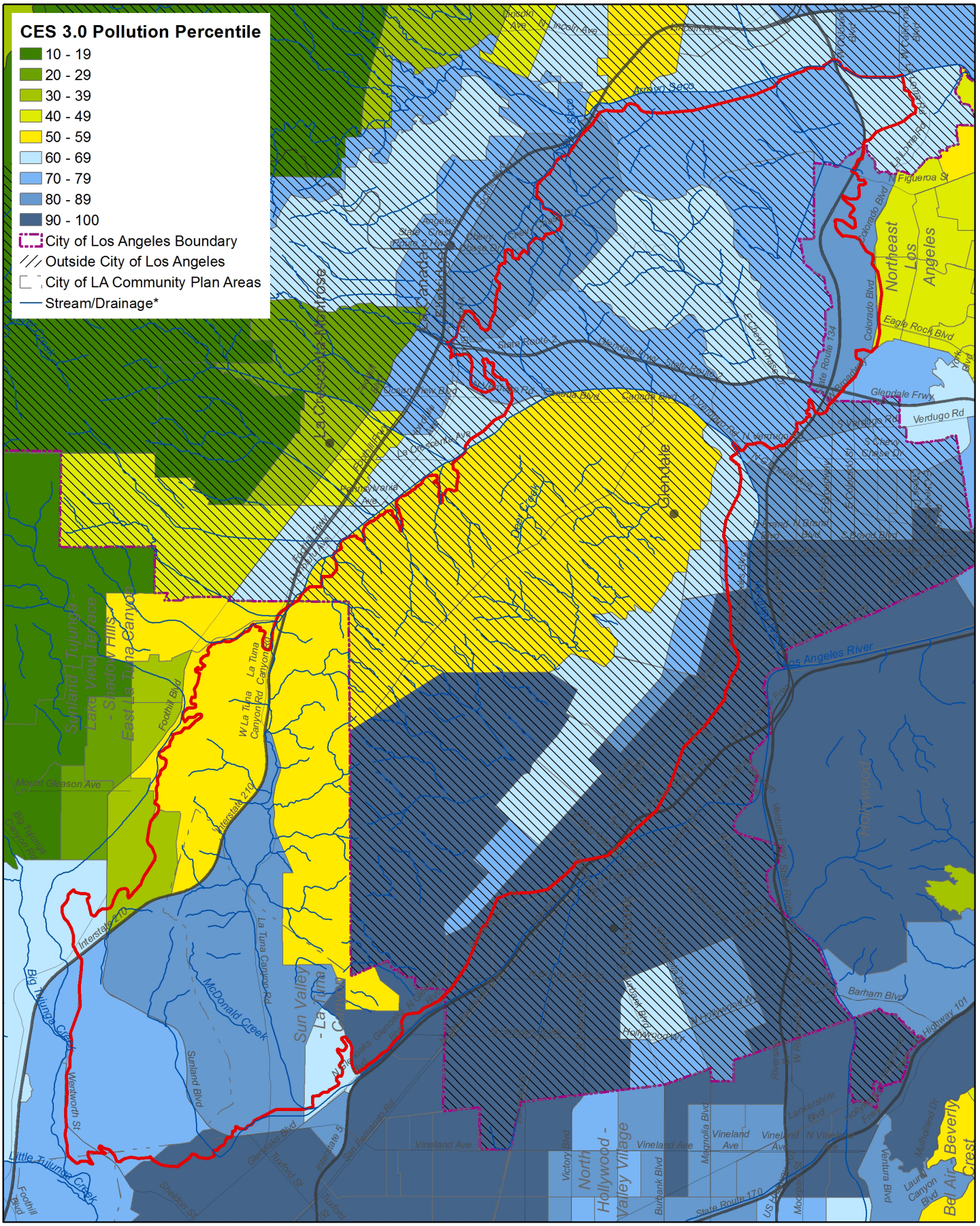


Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf

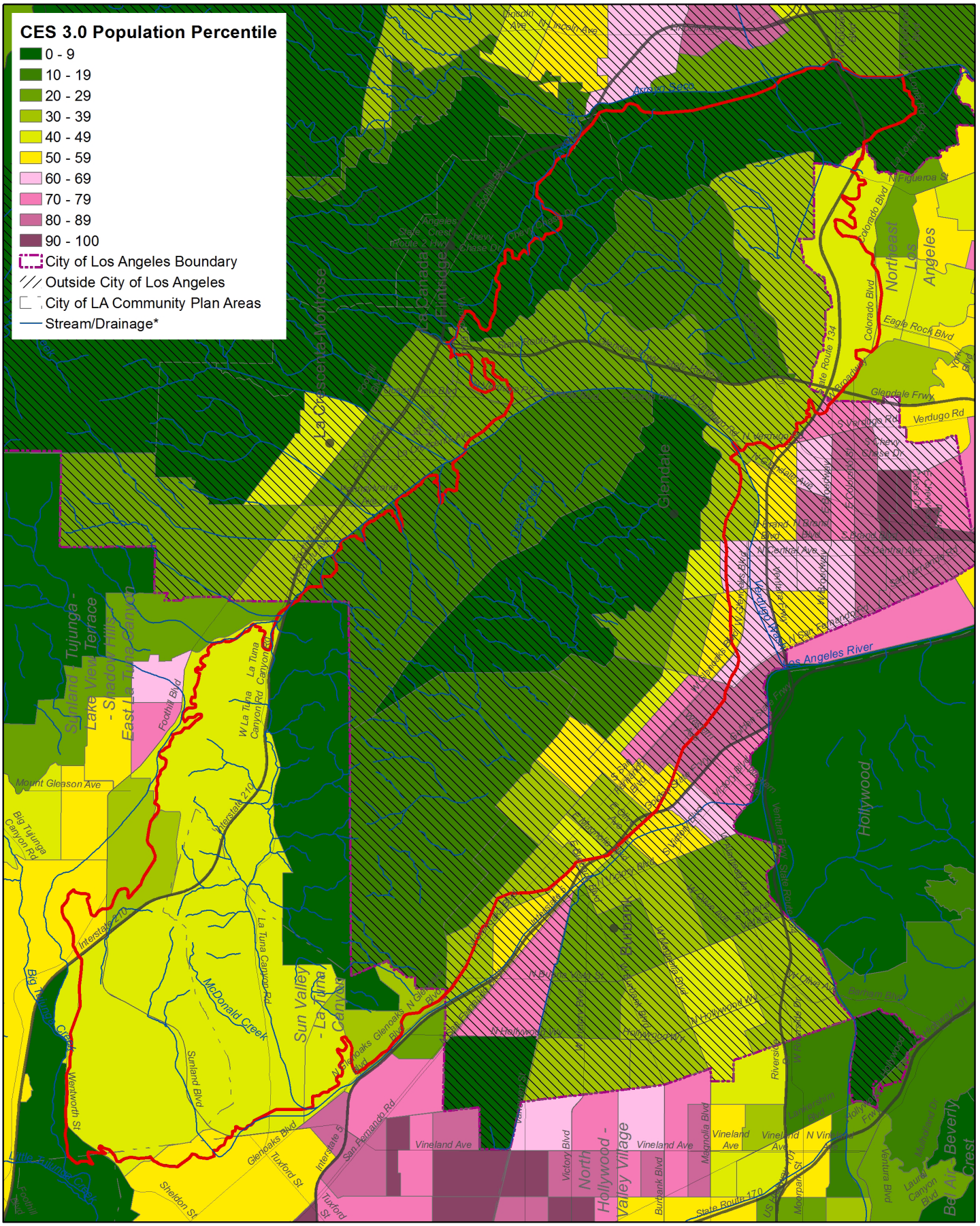
0 0.5 1 2 Miles

N



CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

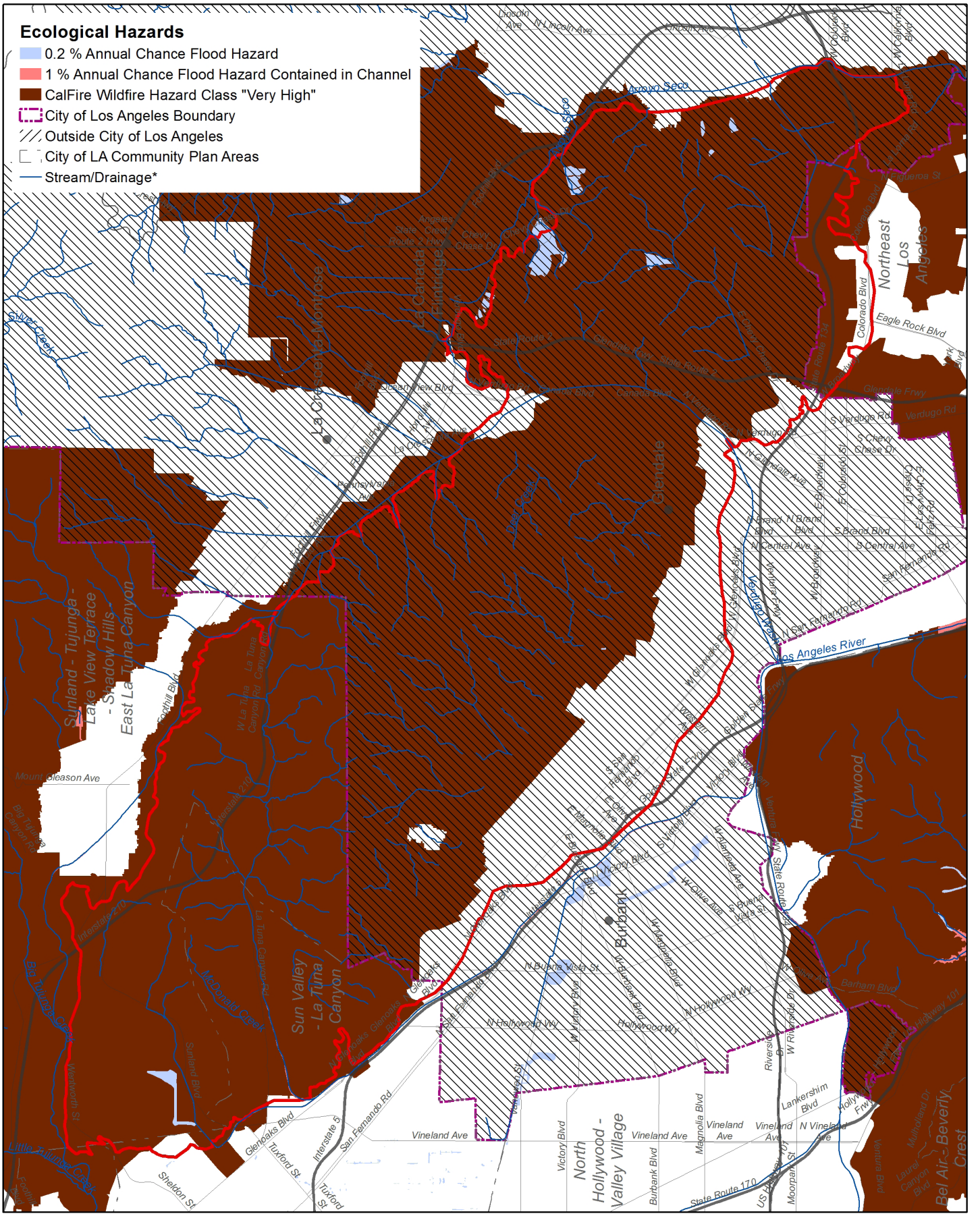


CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

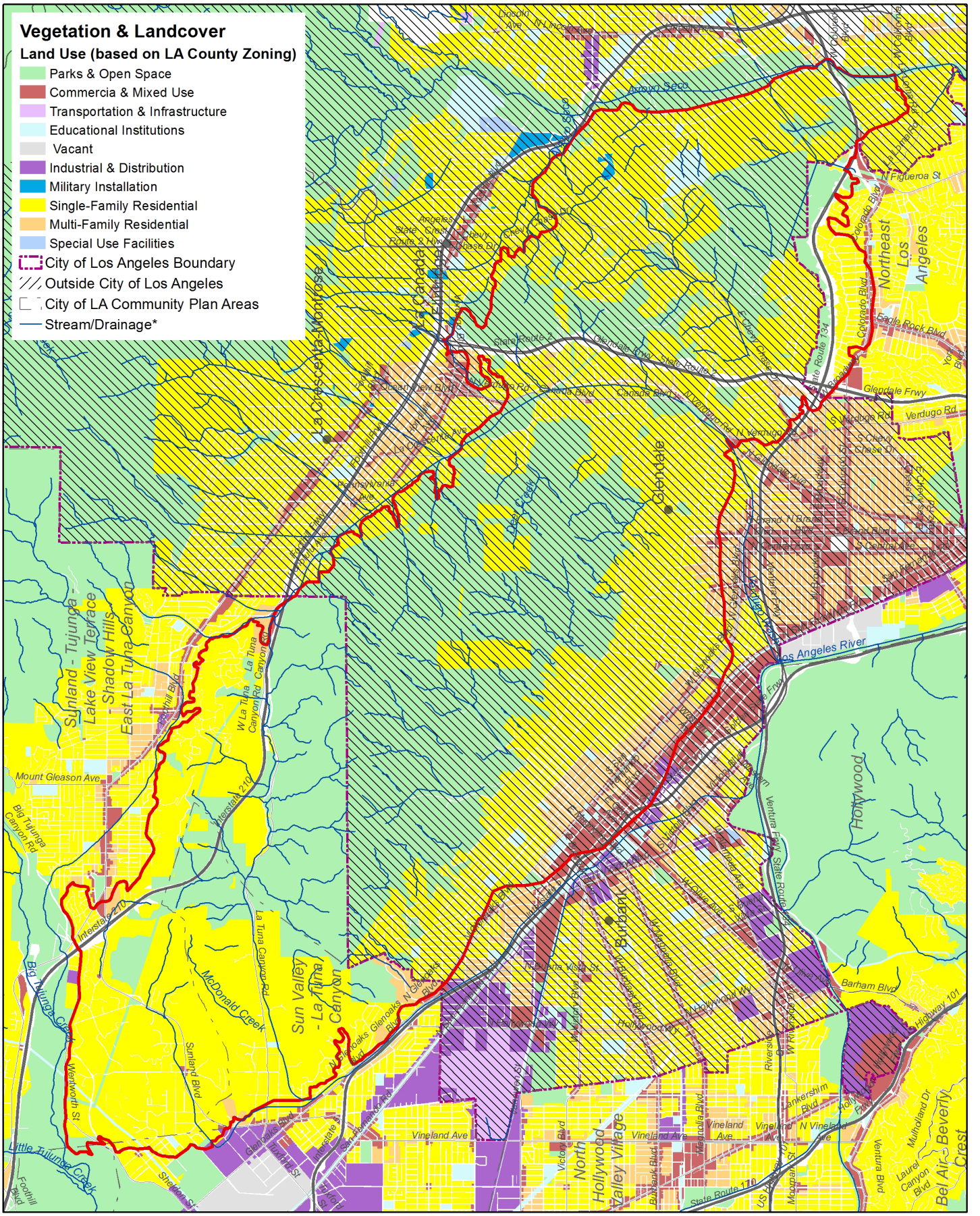
Miles
0 0.5 1 2

N



Ecological Hazards

Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.

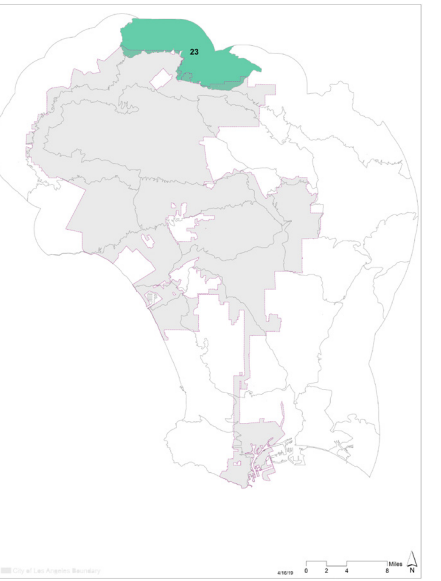


Land Use

Data source: 2008 Los Angeles County Countywide Zoning by the Southern California Association of Governments (SCAG). https://egis3.lacounty.gov/dataportal/2012/04/10/county-wide-zoning/

ECOTOPE 23: WESTERN SAN GABRIEL MOUNTAINS

(Partially within the City of Los Angeles)



LANDFORM

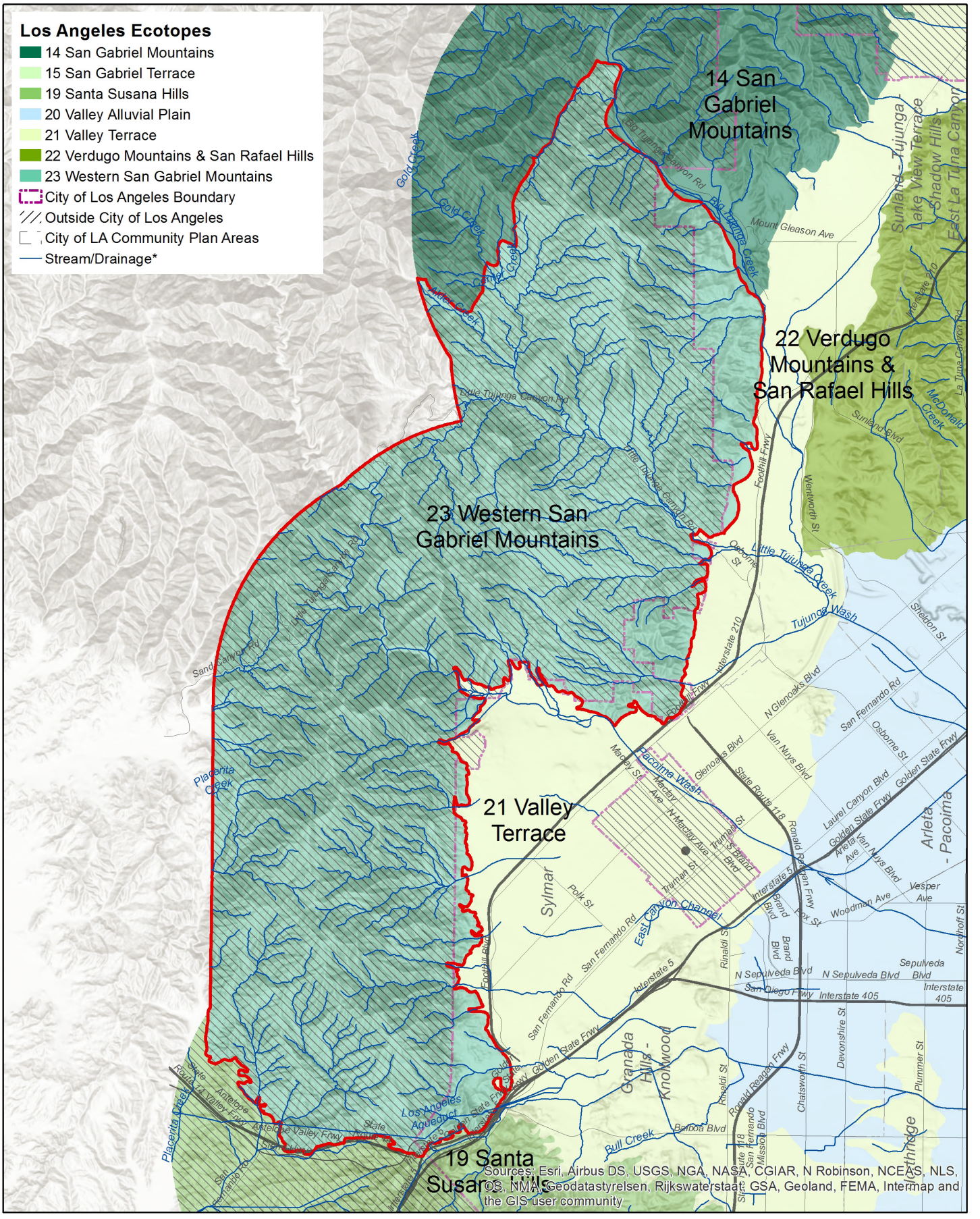
The Western San Gabriel Mountains include foothills and low mountains with maximum peak elevations of around 4,000'. The somewhat less rugged terrain compared to adjacent peaks to the east has allowed more extensive rural development across this ecotope over time, including some areas of historic agriculture. This development generally occurs along valley bottoms and adjacent terrace landforms. The 5 freeway forms the western boundary separating the ecotope from the Santa Susana Mountains to the west. Numerous perennial and year-round creeks, some with rare fish species including Santa Ana sucker (*Catostomus santaanae*) and arroyo chub (*Gila orcutti*), are present including the Los Angeles River and Big Tujunga Canyon, which form the eastern boundary of the ecotope.

MICROCLIMATE

Lower elevations include thermal belts while higher elevations exhibit cooler climates. Similar to the rest of the Transverse Range, mountains run in a west-east direction resulting in dominant northern and southern aspects. Very high temperatures occur at lower elevations and more southerly aspects during summer months. Summer monsoons are also relatively more frequent here. The area is prone to Santa Ana winds and wildfire frequency is relatively high.

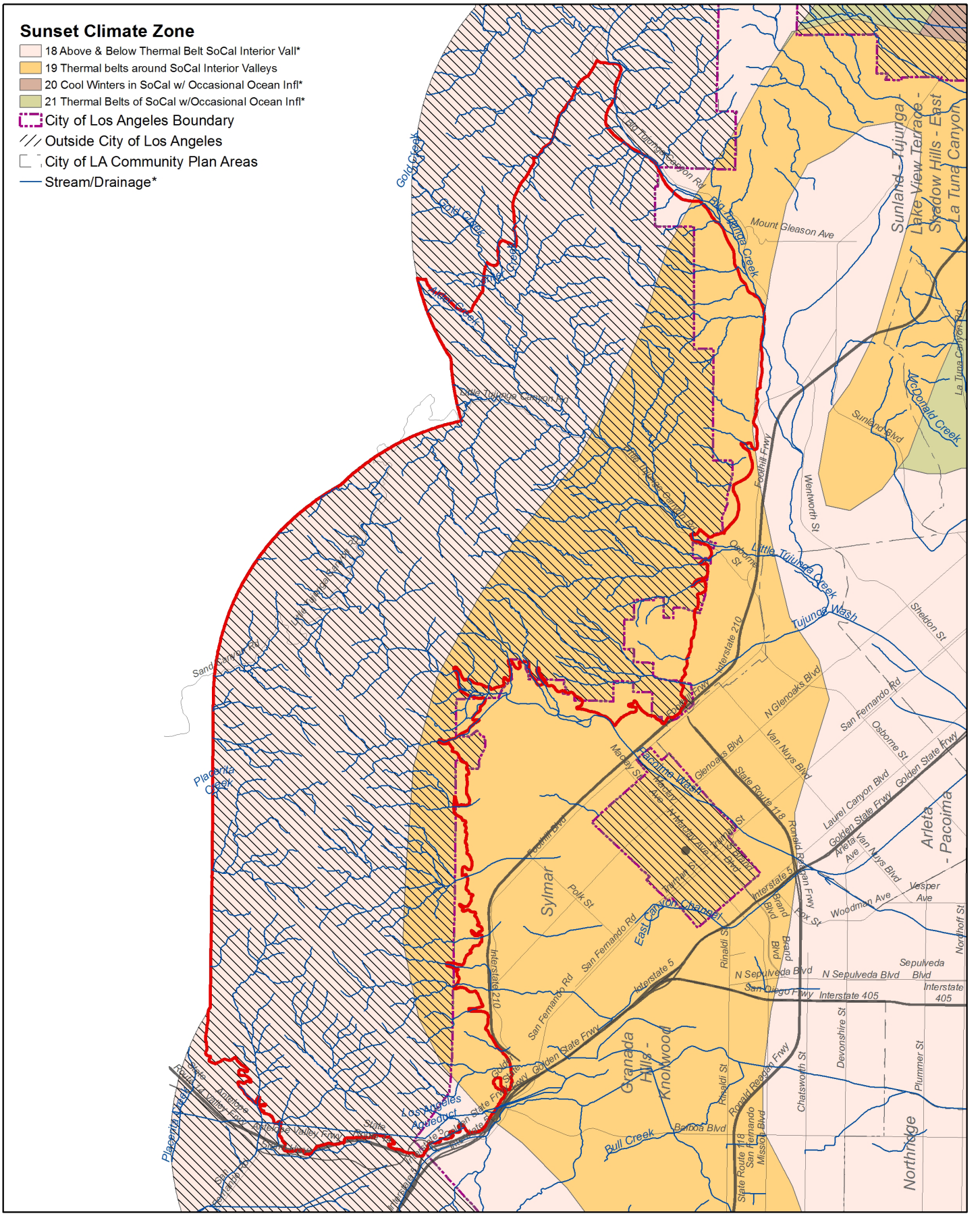
VEGETATION & LANDCOVER

Natural vegetation is highly intact across much of the ecotope; however, higher-than-natural fire frequency, combined with somewhat more intensive human land use history, has led to areas of non-native grasslands and invasive mustard species, especially at lower elevations adjacent to urban areas. Vegetation rapidly transitions from coastal sage scrub at lower elevations to chaparral, woodlands, and montane conifer alliances at higher elevations and northerly facing slopes. Chaparral vegetation types are most dominant. Valley bottoms include diverse riparian woodlands.



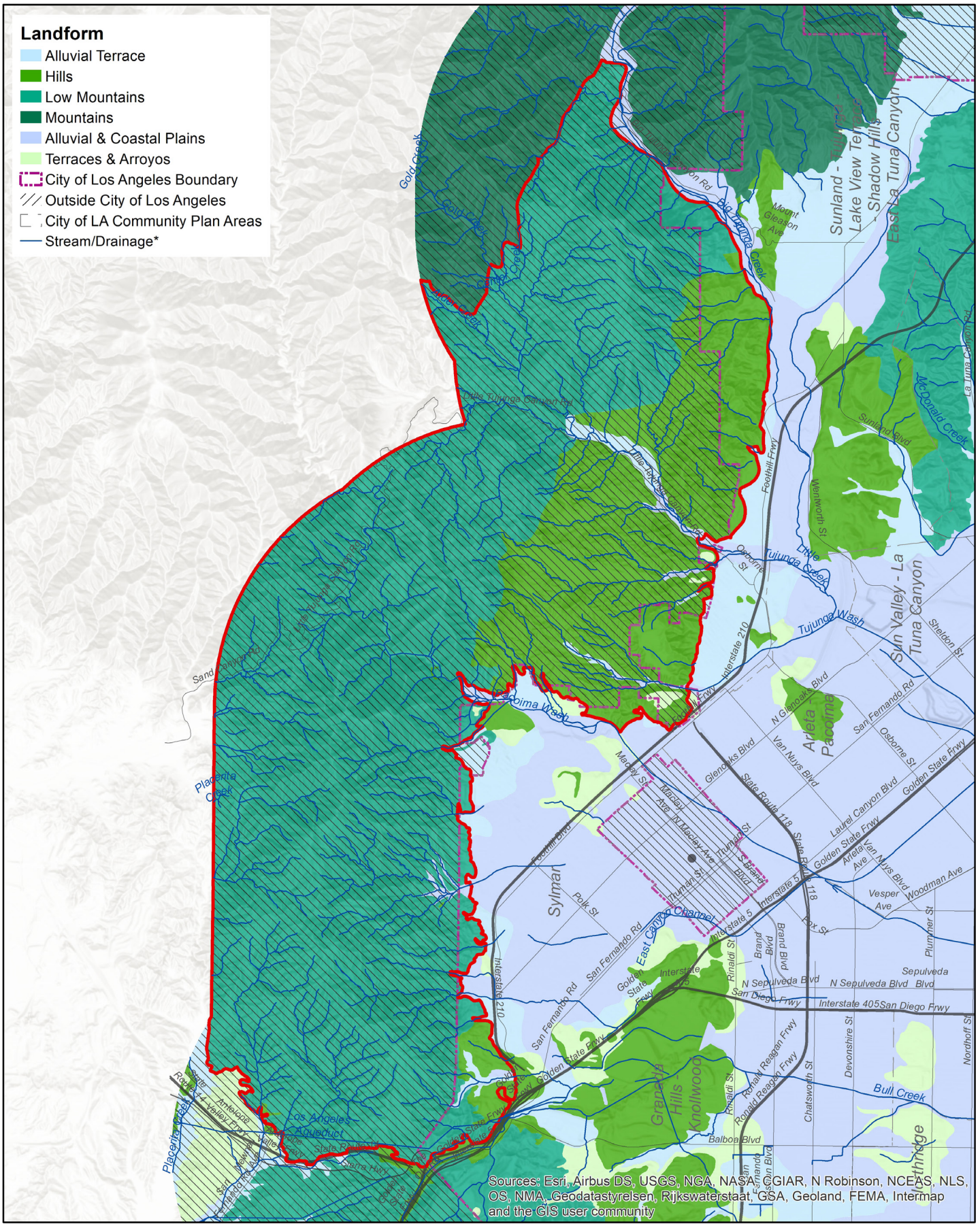
Ecotope 23 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



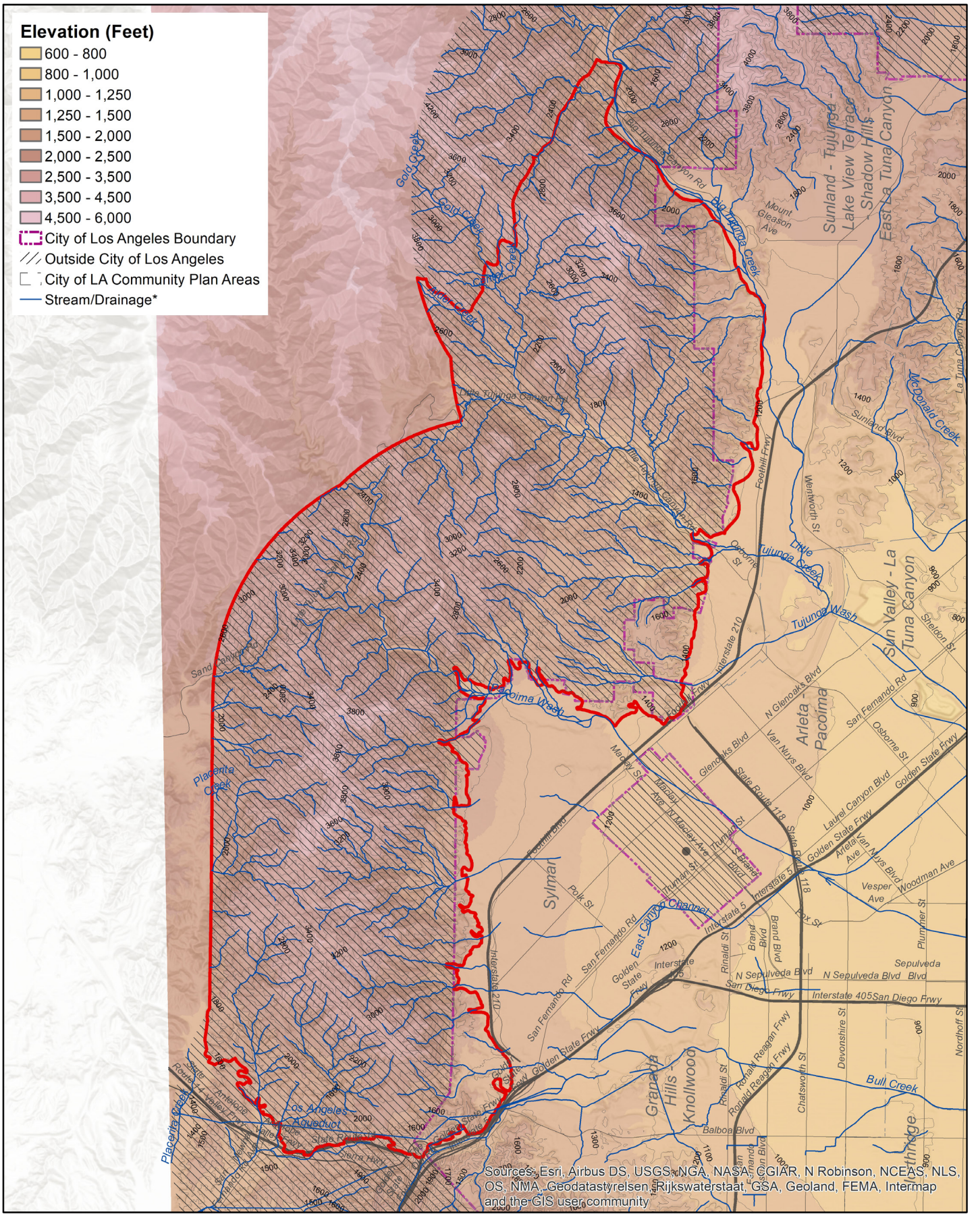
Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



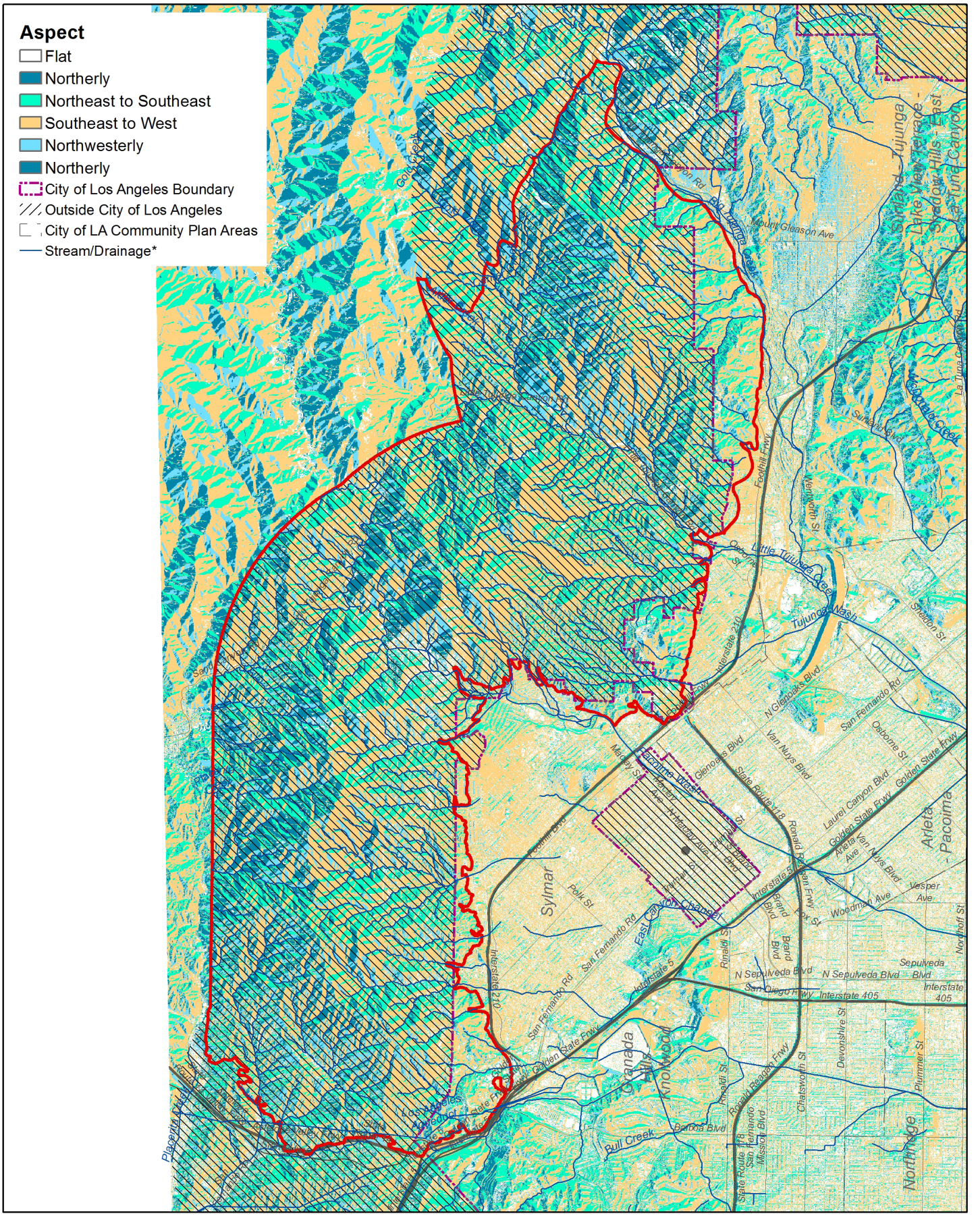
Landform

Data source: I. Brown (2019), https://escholarship.org/uc/item/4c81w4nr



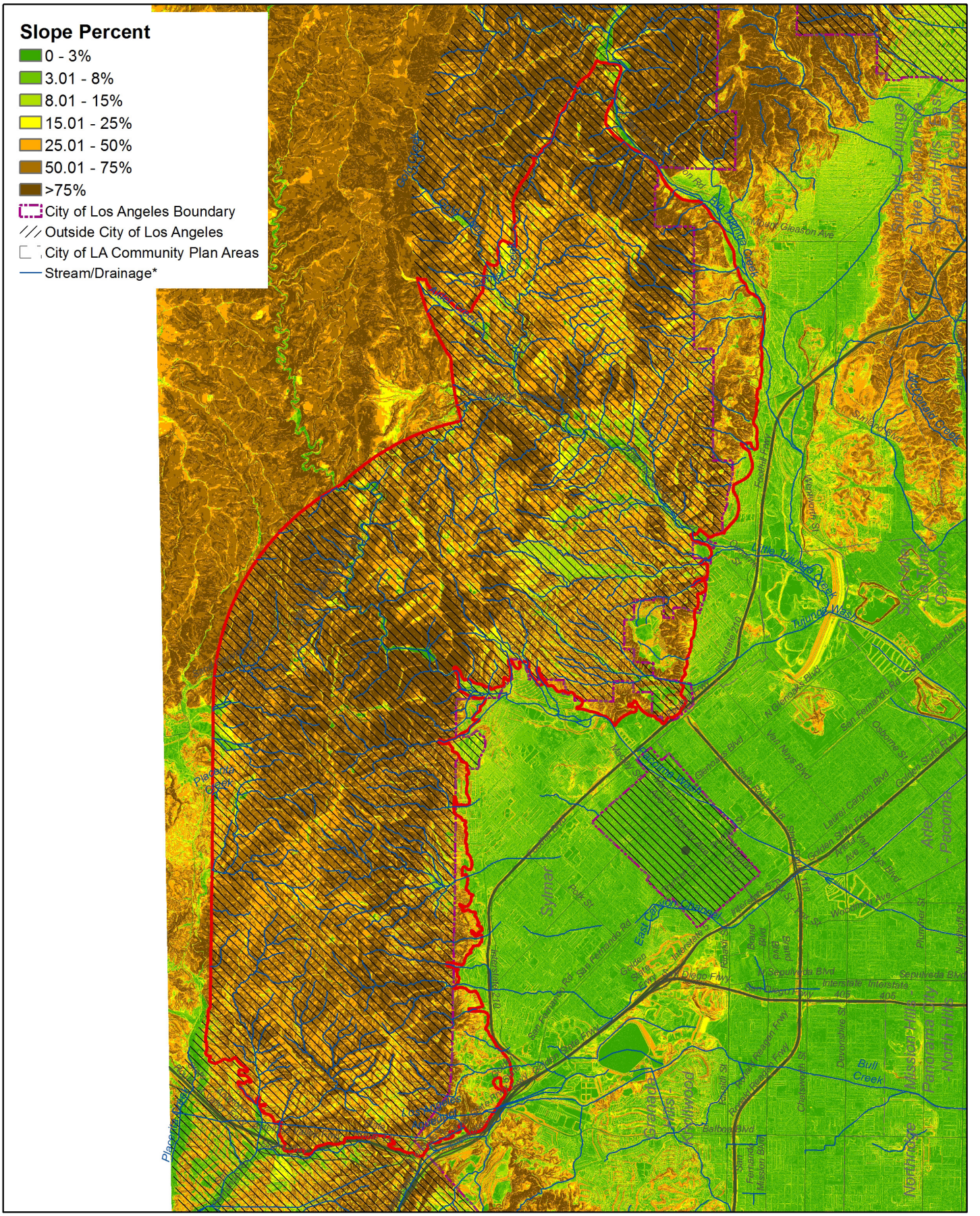
Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



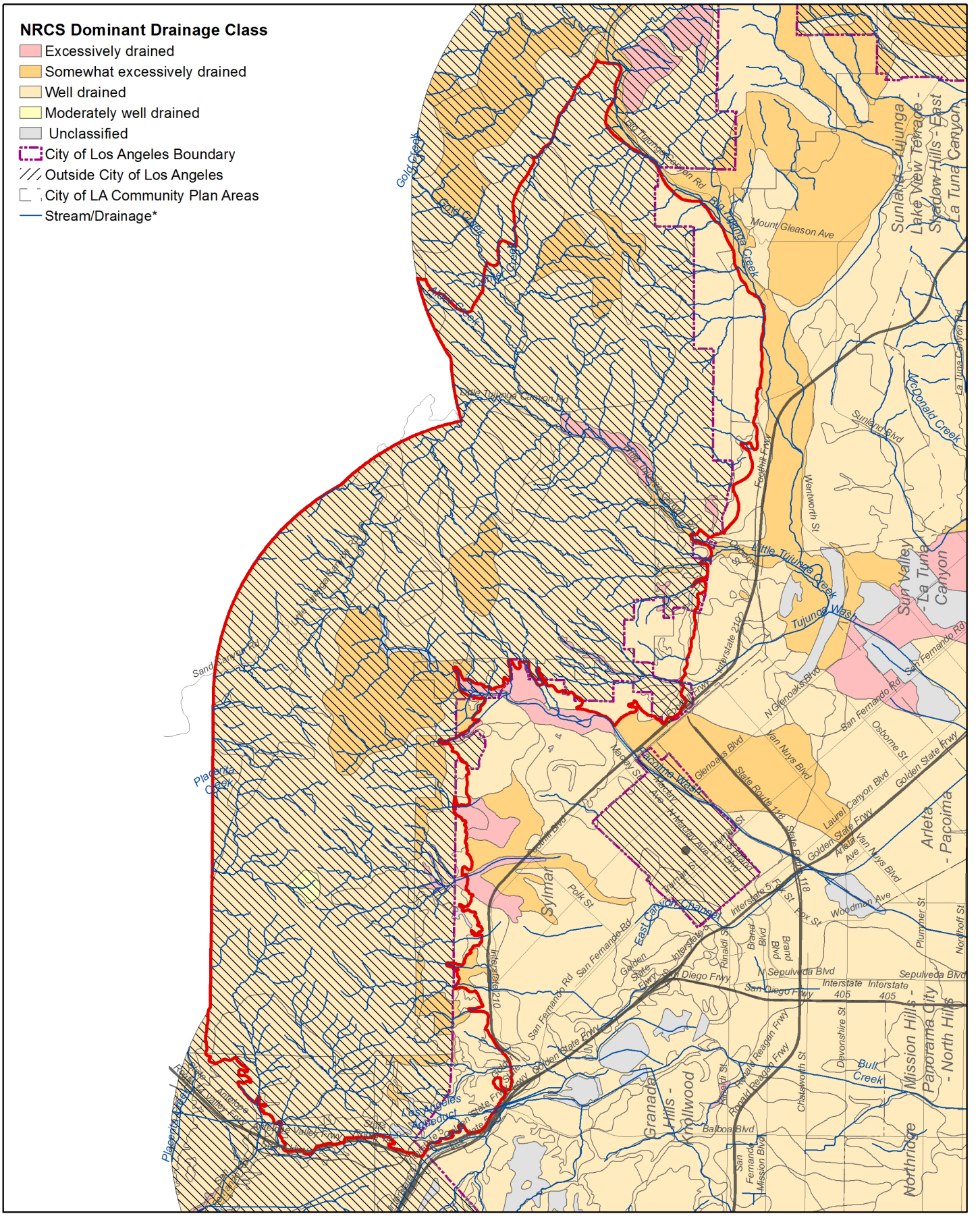
Aspect

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



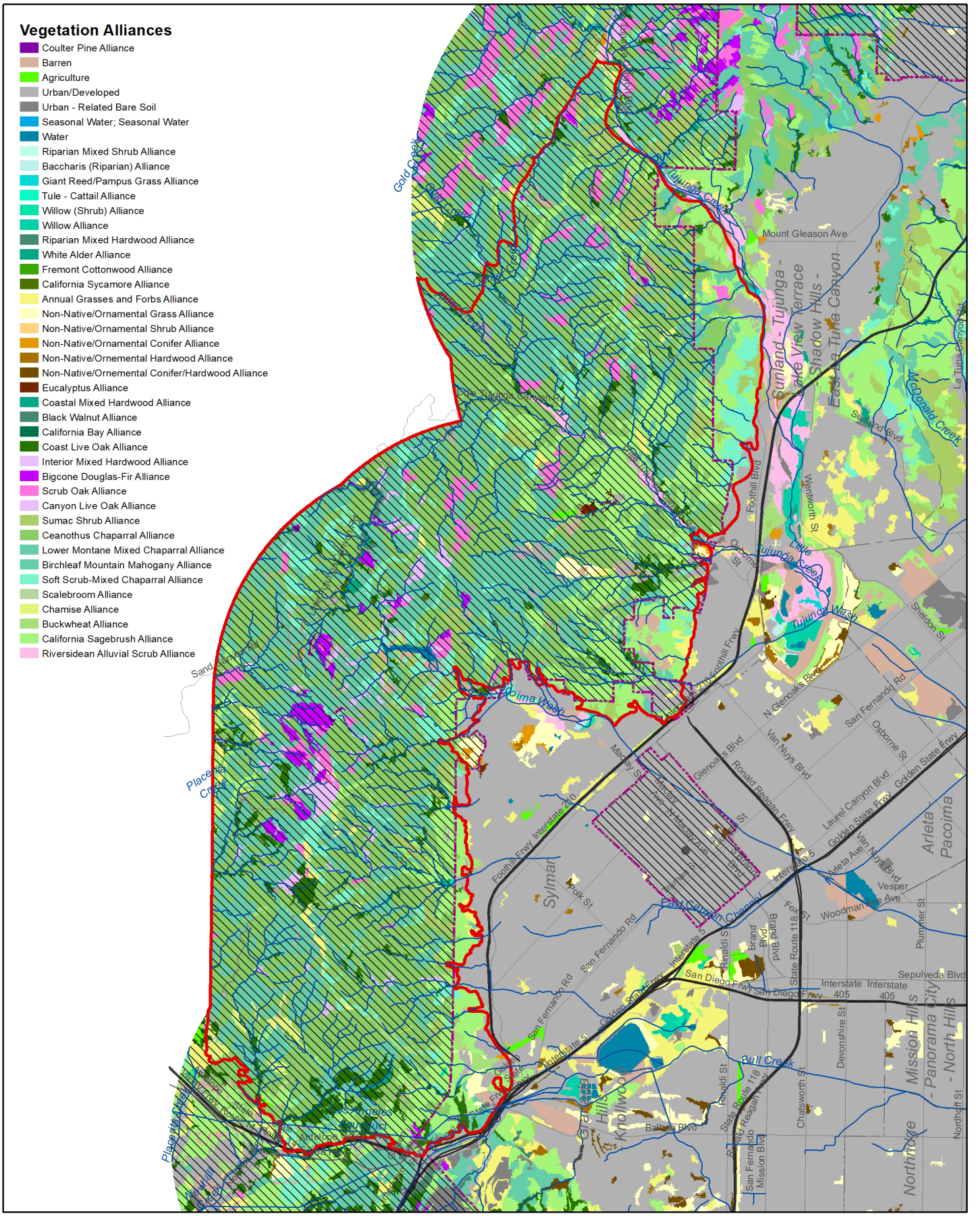
Slope Percent

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



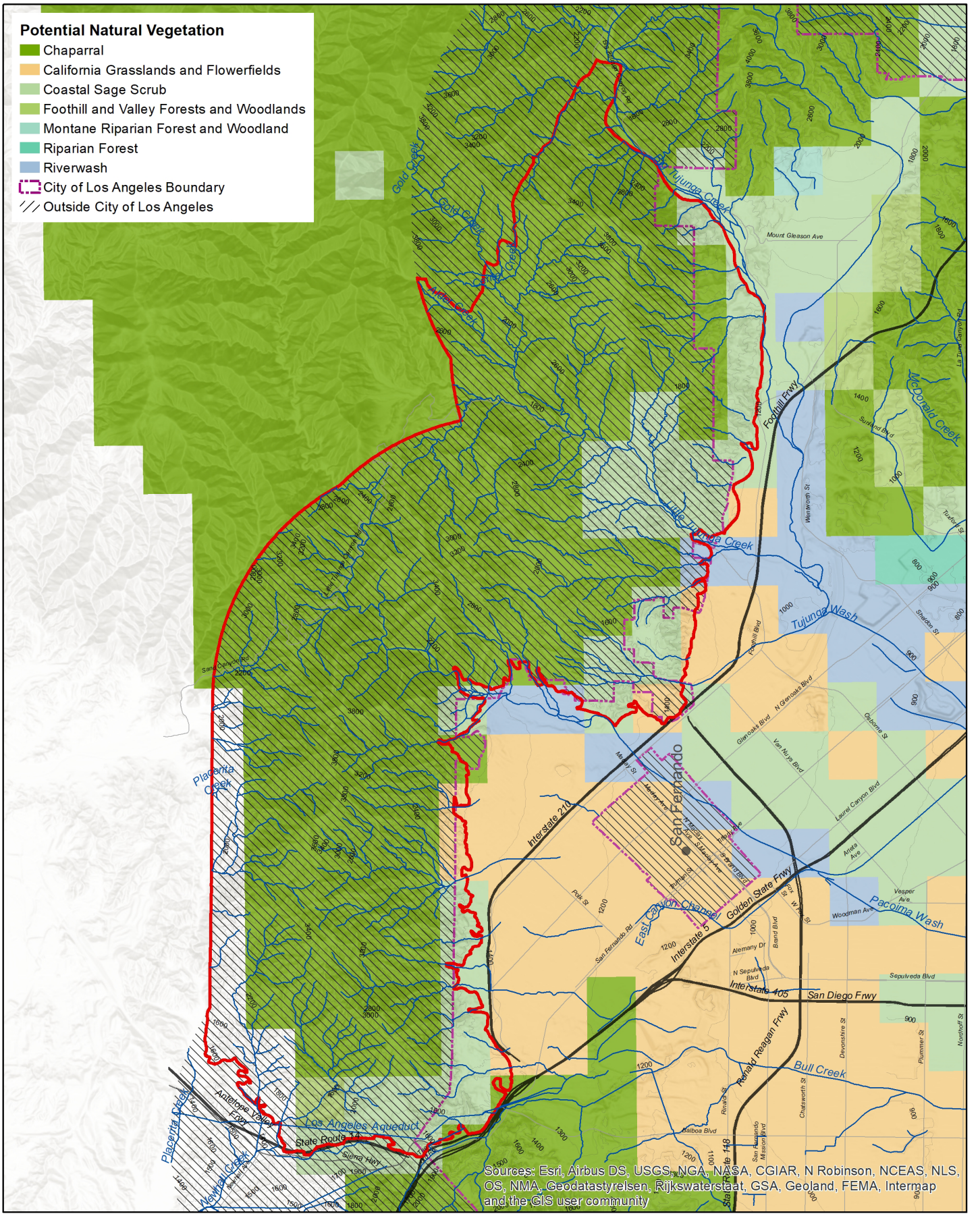
Drainage

Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.



Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192

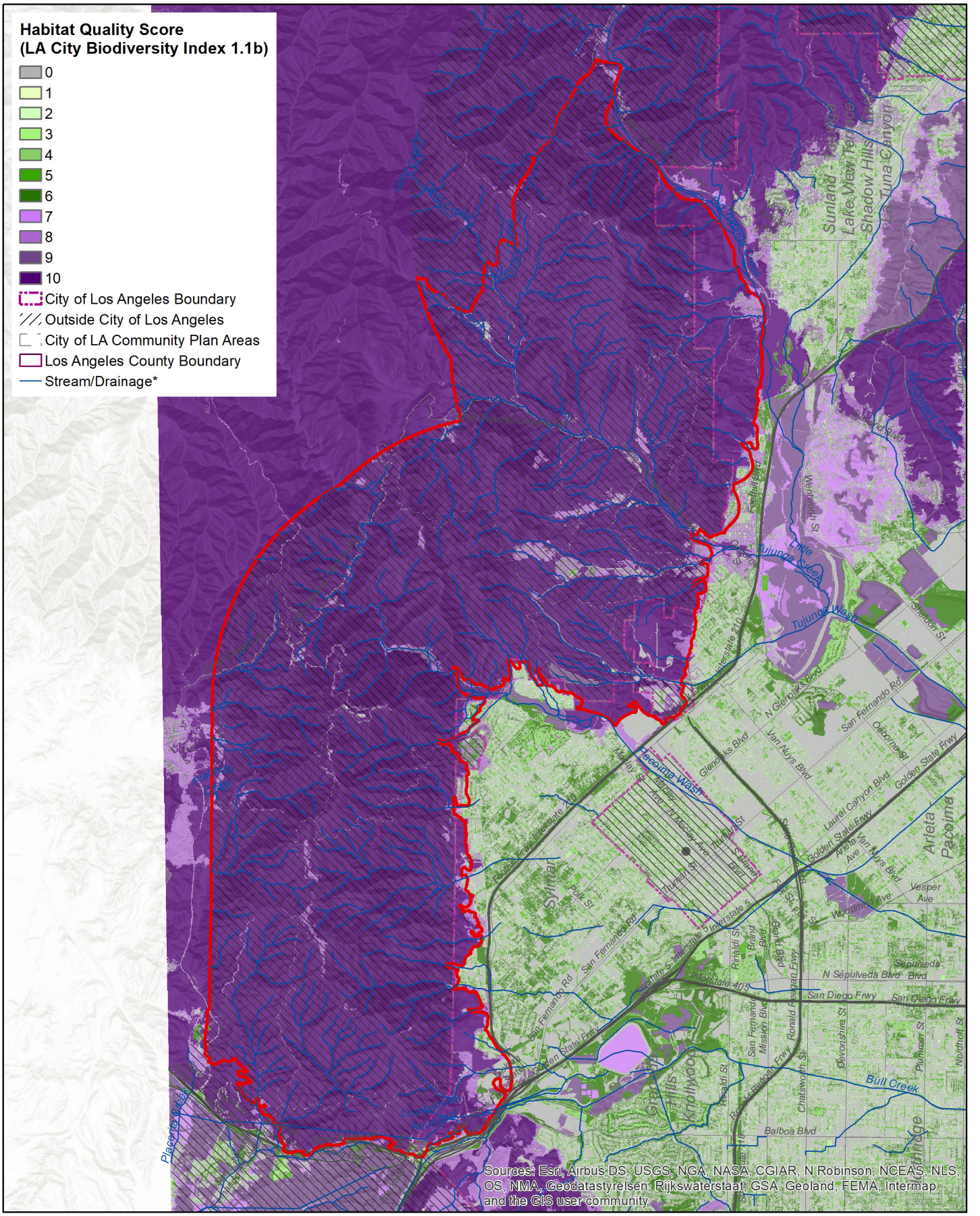


Hypothesized Potential Natural Vegetation

Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.

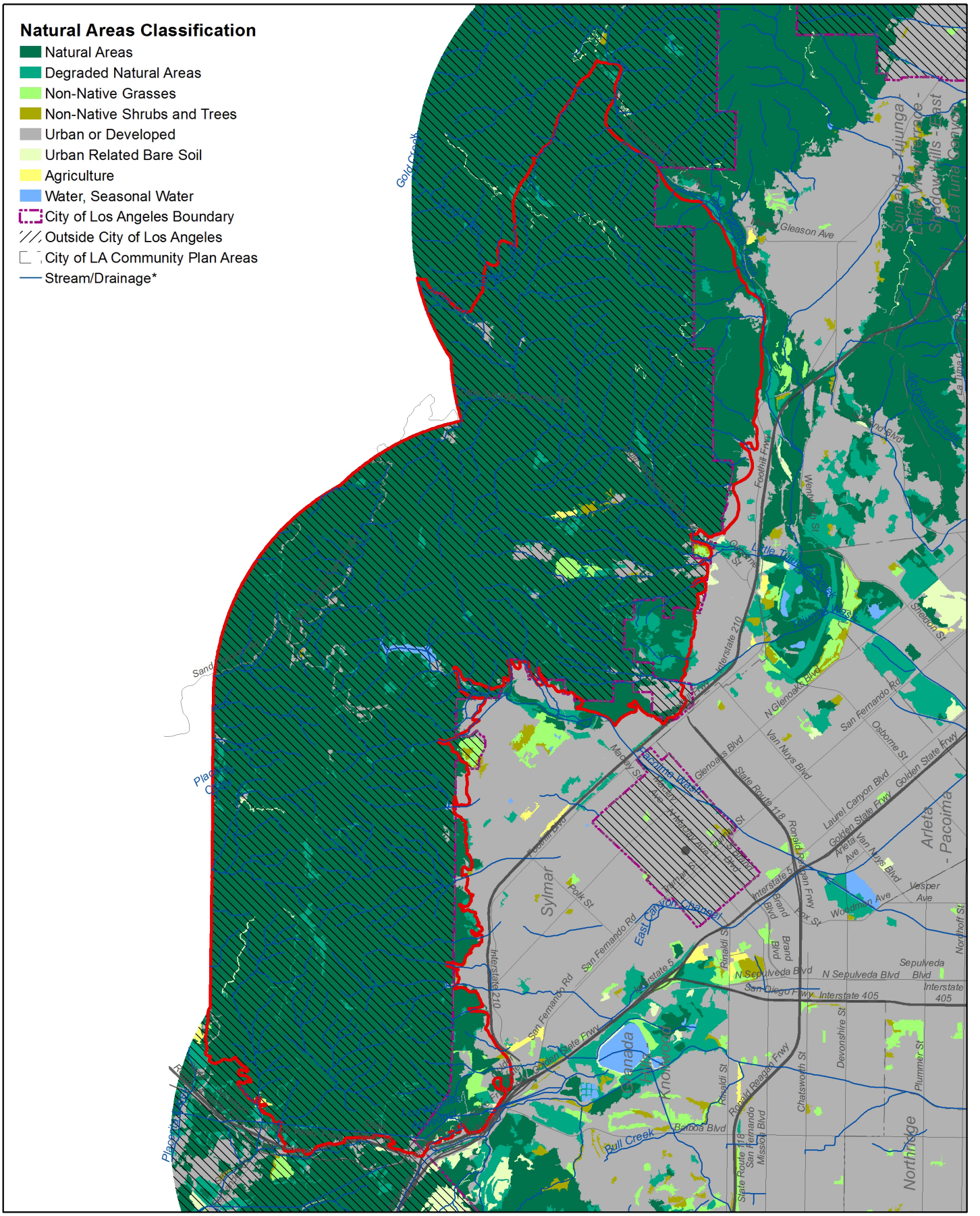
0 0.75 1.5 3 Miles

N



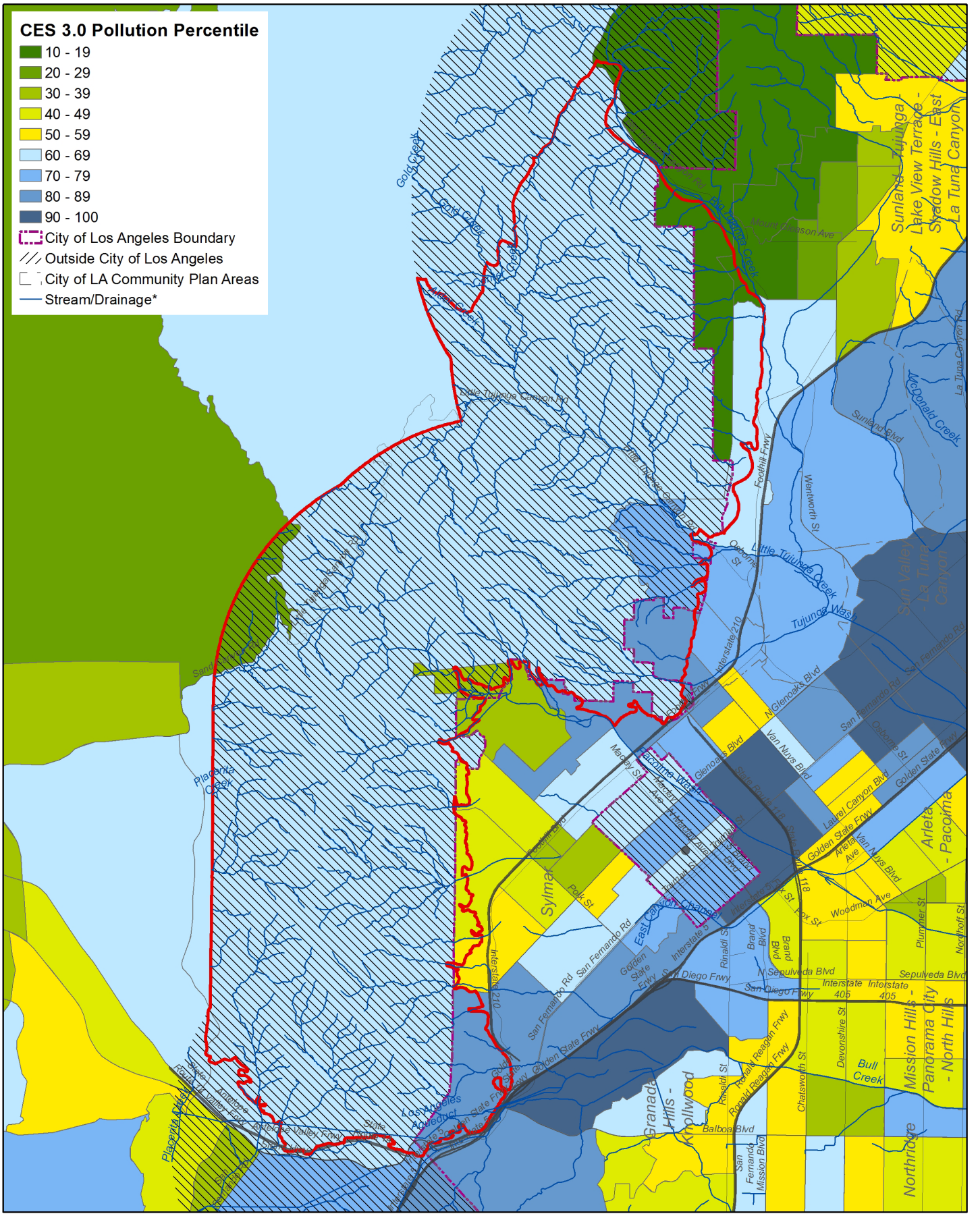
General Habitat Quality

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



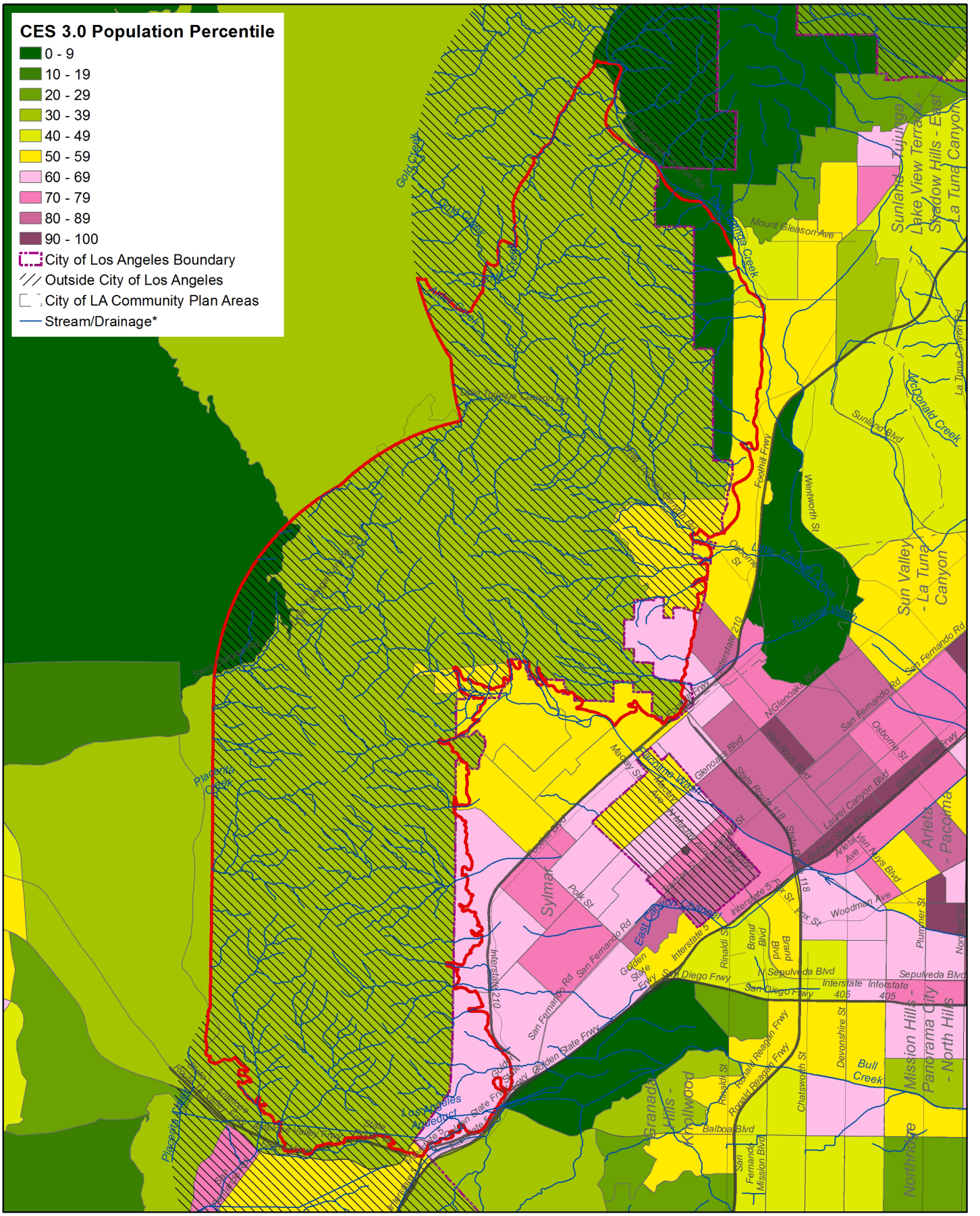
Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf



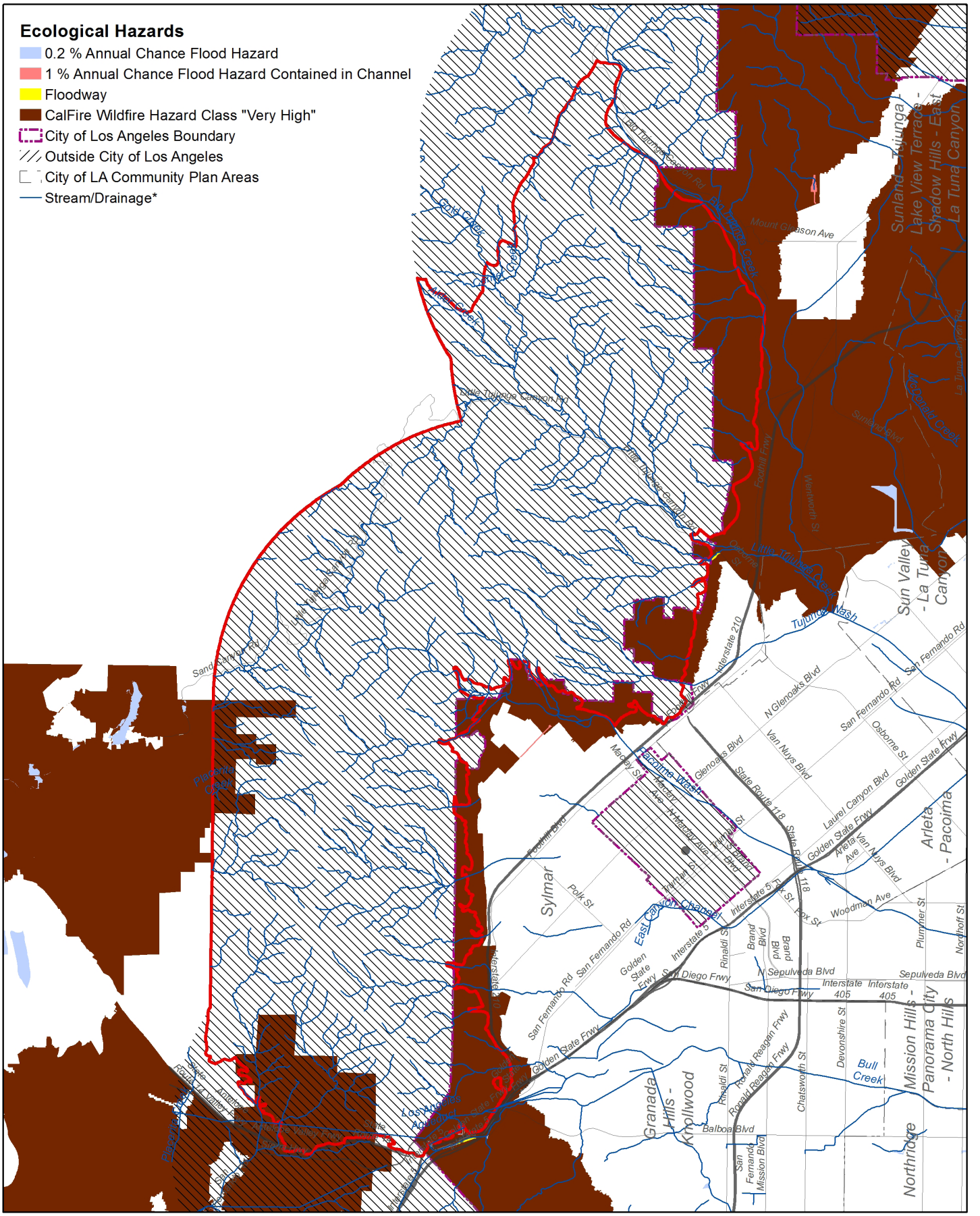
CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



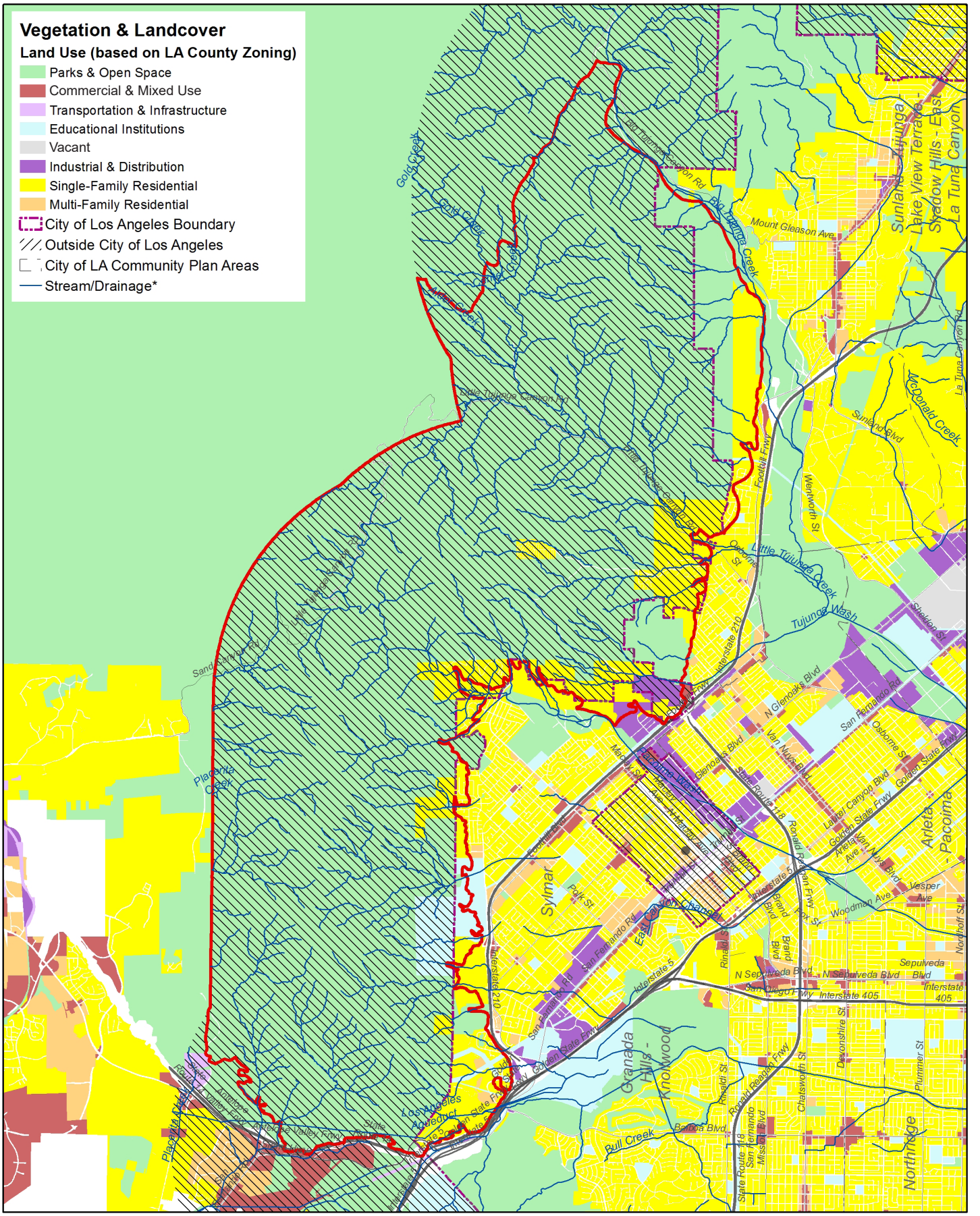
CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



Ecological Hazards

Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.

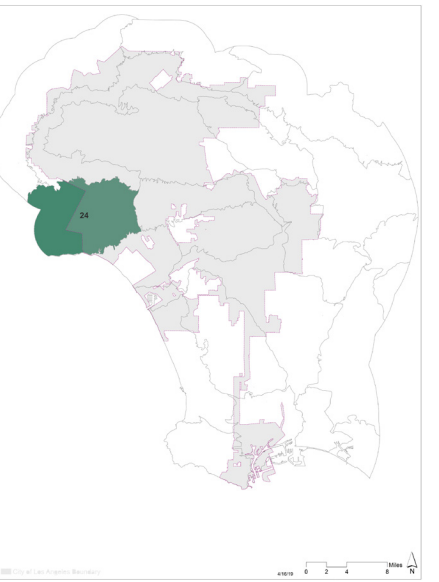


Land Use

Data source: 2008 Los Angeles County Countywide Zoning by the Southern California Association of Governments (SCAG). https://egis3.lacounty.gov/dataportal/2012/04/10/county-wide-zoning/

ECOTOPE 24: CENTRAL SANTA MONICA MOUNTAINS

(Partially within the City of Los Angeles)



LANDFORM

The Central Santa Monica Mountains include somewhat higher elevations and more rugged terrain than the Eastern Santa Monica Mountains ecotope. This has led to less development; however, low density residential development is common with some more intensive development areas, including the Topanga Canyon neighborhood. Peak elevations within the study area are at around 2,500 feet above sea level. Slopes are very steep resulting in extensive landslide and wildfire hazards. The Pacific Ocean forms the southern boundary of the ecotope with intertidal land/marine forms occurring there.

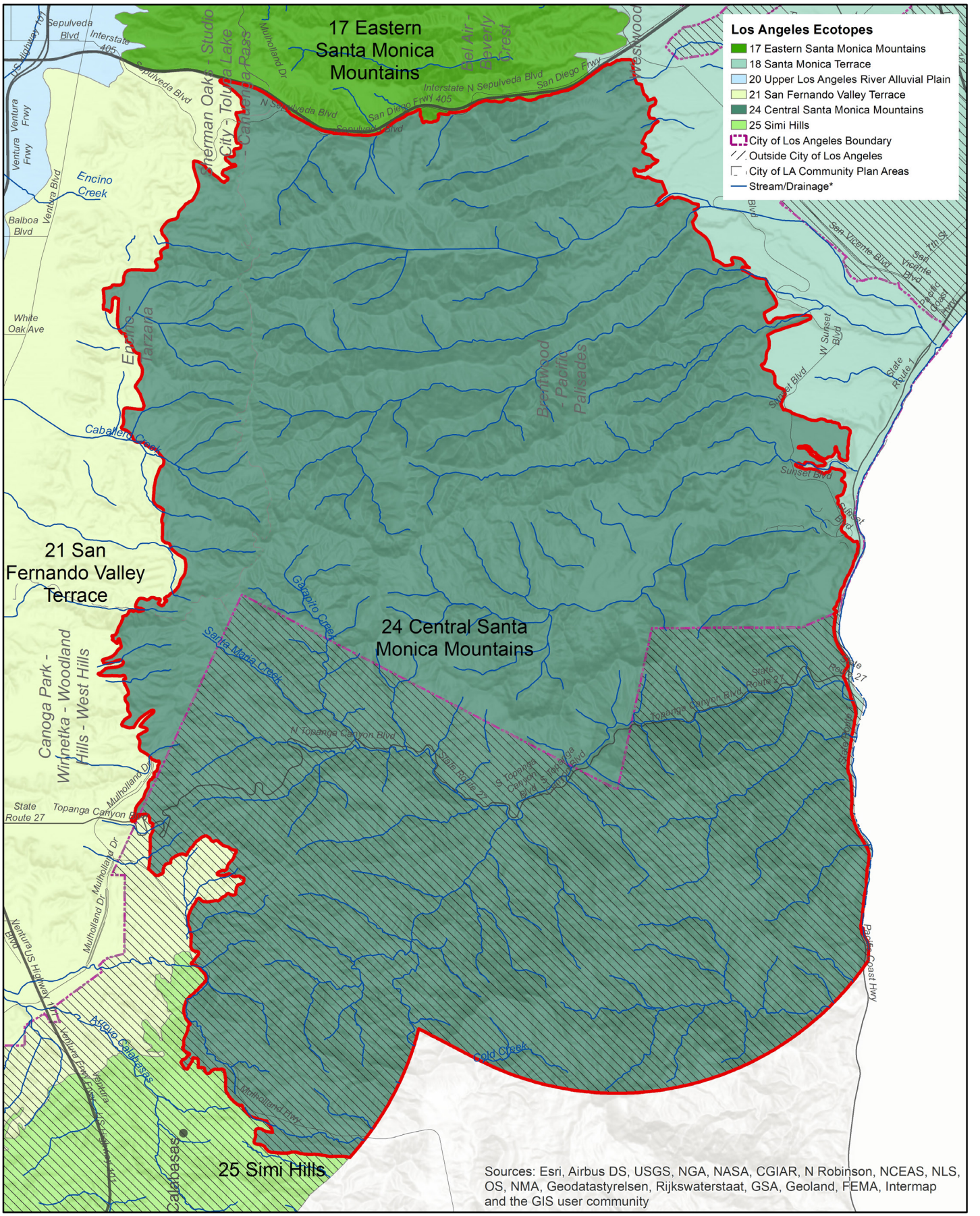
MICROCLIMATE

The ecotope is dominated by thermal belts with coastal influence to the south and continental influence to the north. While the mountain range runs generally east and west, diverse topography and long linear valleys running from the crest to the coast results in a diverse mix of aspects with many east- and west-facing slopes. Fog is more prevalent to the south due to more direct maritime influence. The southerly aspect of the mountain range also favors orographic enhancement of precipitation, with very high rates of precipitation possible. Some of the strongest and most frequent Santa Ana wind events in the region occur within the Central Santa Monica Mountains and the area exhibits extremely high fire danger.

VEGETATION & LANDCOVER

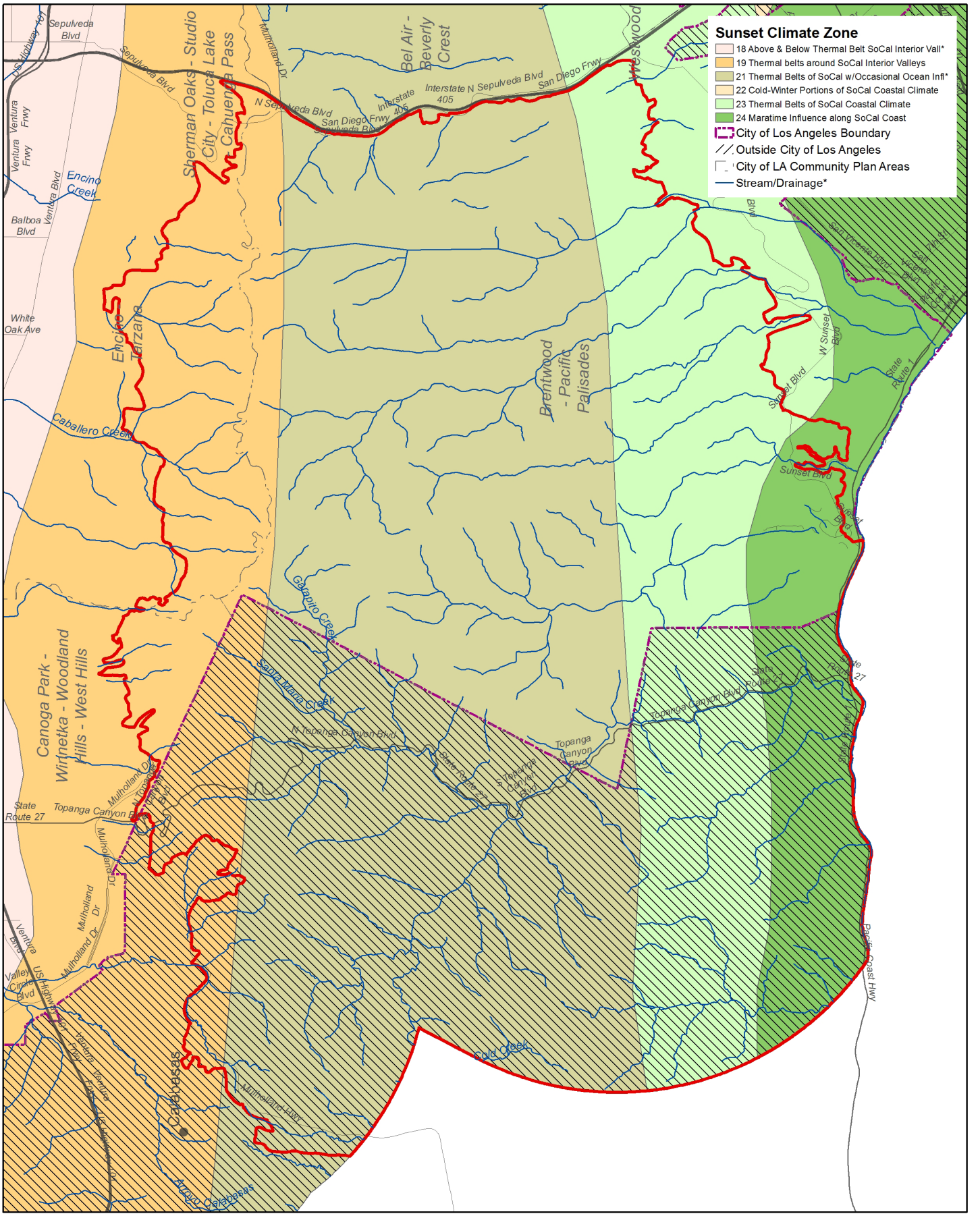
Just over 80% of the ecotope is classified as natural areas, with approximately 10% classified as developed. Diverse chaparral and coastal sage scrub vegetation types dominate natural areas, and a variety of woodland types occur on more northerly slopes and in valley bottoms. This relatively unique microclimate adjacent to the coast is a key driver of numerous rare and endemic species within the Santa Monica Mountains including Braunton's milkvetch (*Astragalus brauntonii*), Lyon's pentachaeta (*Pentachaeta lyonii*), Santa Monica Mountains dudleya (*Dudleya cymosa ovatifolia*), marcescent dudleya (*Dudleya cymosa. marcescens*), Southern California steelhead trout (*Oncorhynchus mykiss irideus*), tidewater goby (*Eucyclogobius newberryi*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), bald eagle (*Haliaeetus leucocephalus*), and many others (Los Angeles County 1, 2000). Many year-round creeks are present and the relatively moderate, ocean-influenced climate supports sensitive amphibian and freshwater fish populations including the red-legged frog (*Rana draytonii*) and a population of the Southern California steelhead in Malibu Creek.

The Santa Monica Mountains are relatively disconnected from natural areas to the north and habitat connectivity is a key conservation objective here. Connectivity between the Santa Monica Mountains and the Simi Hills to the north was identified as a connectivity priority in the California Missing Linkages project. A wildlife bridge over the 101 freeway is a key feature currently in the planning stages. Connectivity within the ecotope, and between the Eastern Santa Monica Mountains, is also a conservation concern due to ongoing development pressure.



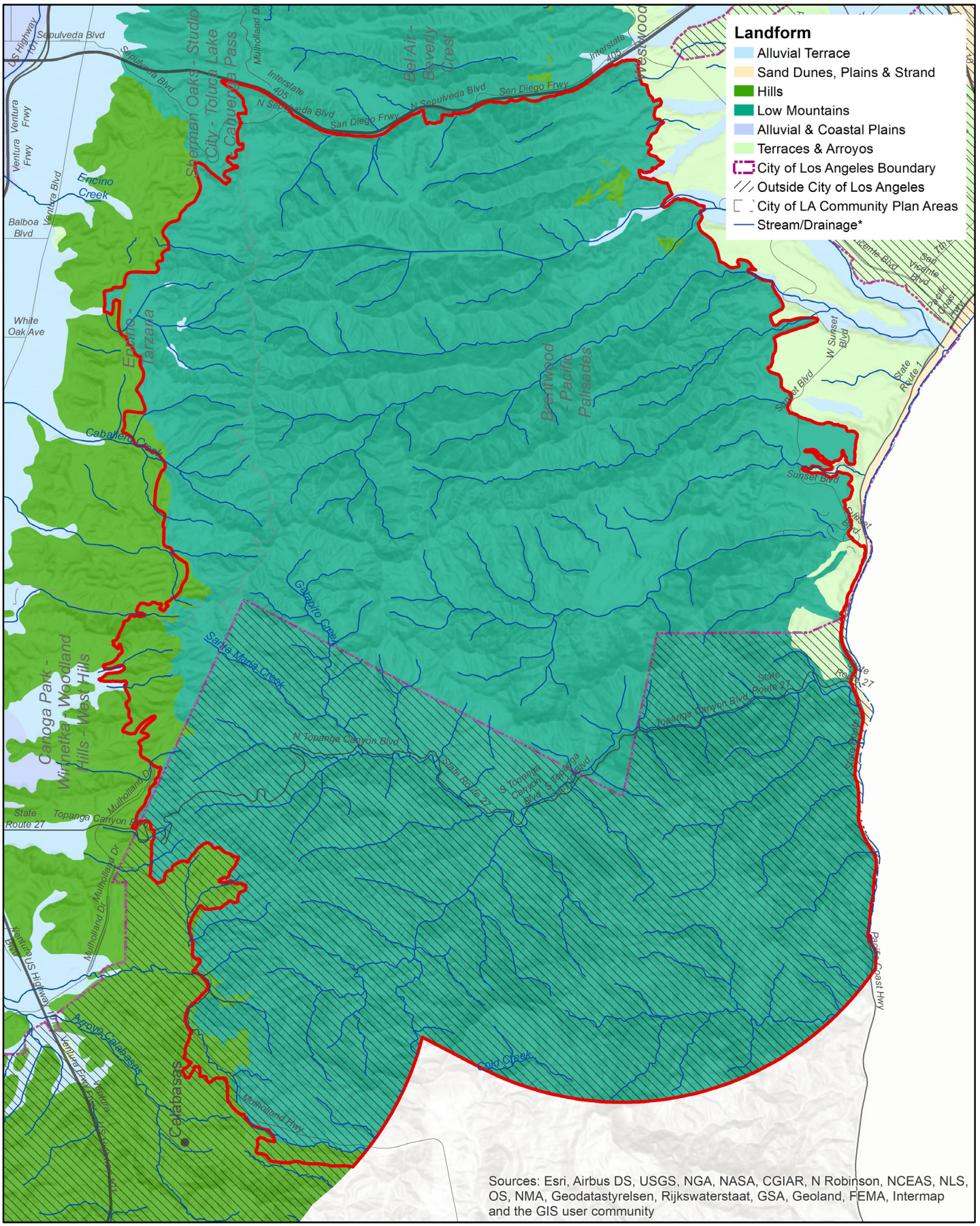
Ecotope 24 Context Map

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



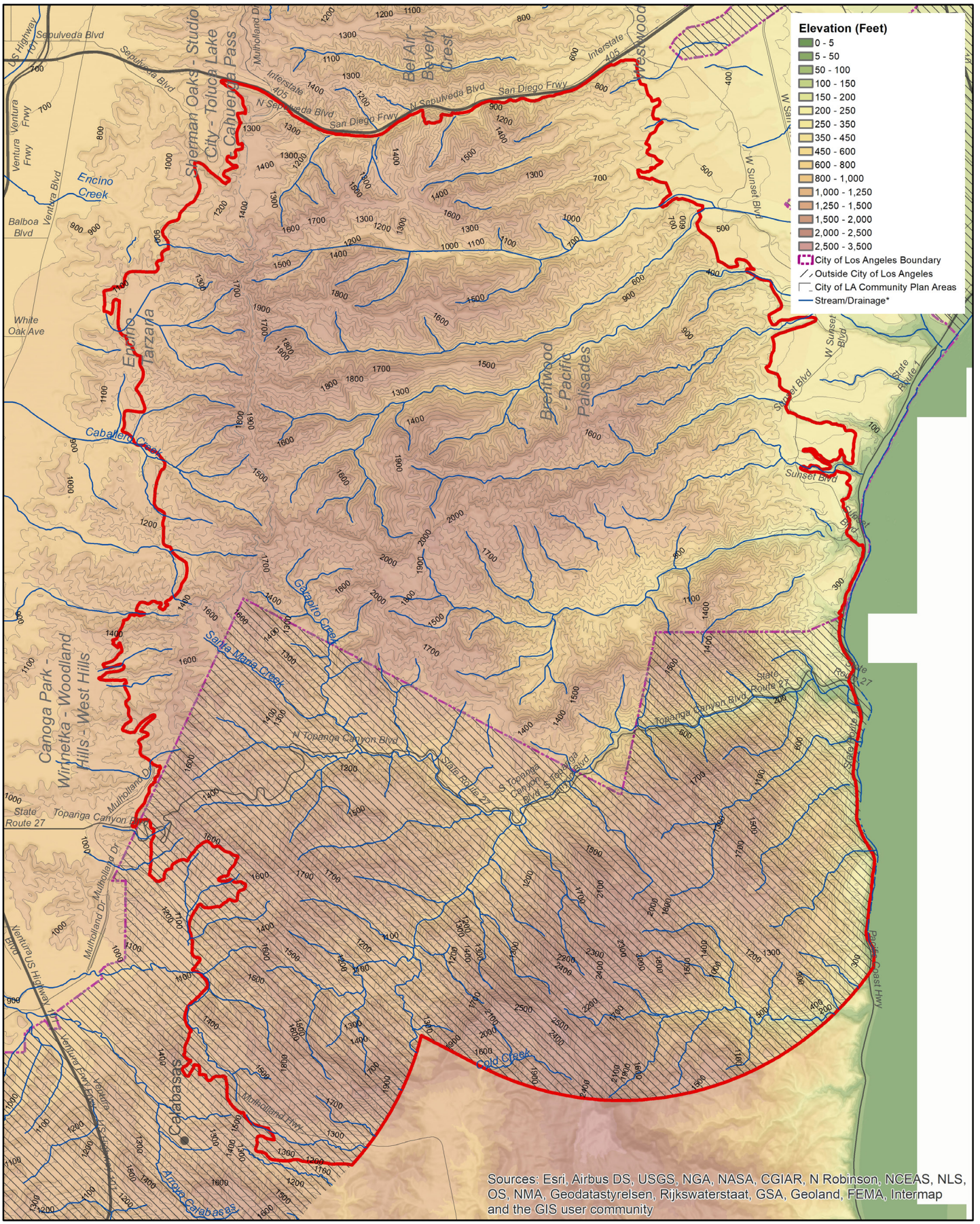
Microclimate

Data source: Sunset Magazine. http://www.sunset.com/garden/climate-zones/climate-zones-intro-us-map



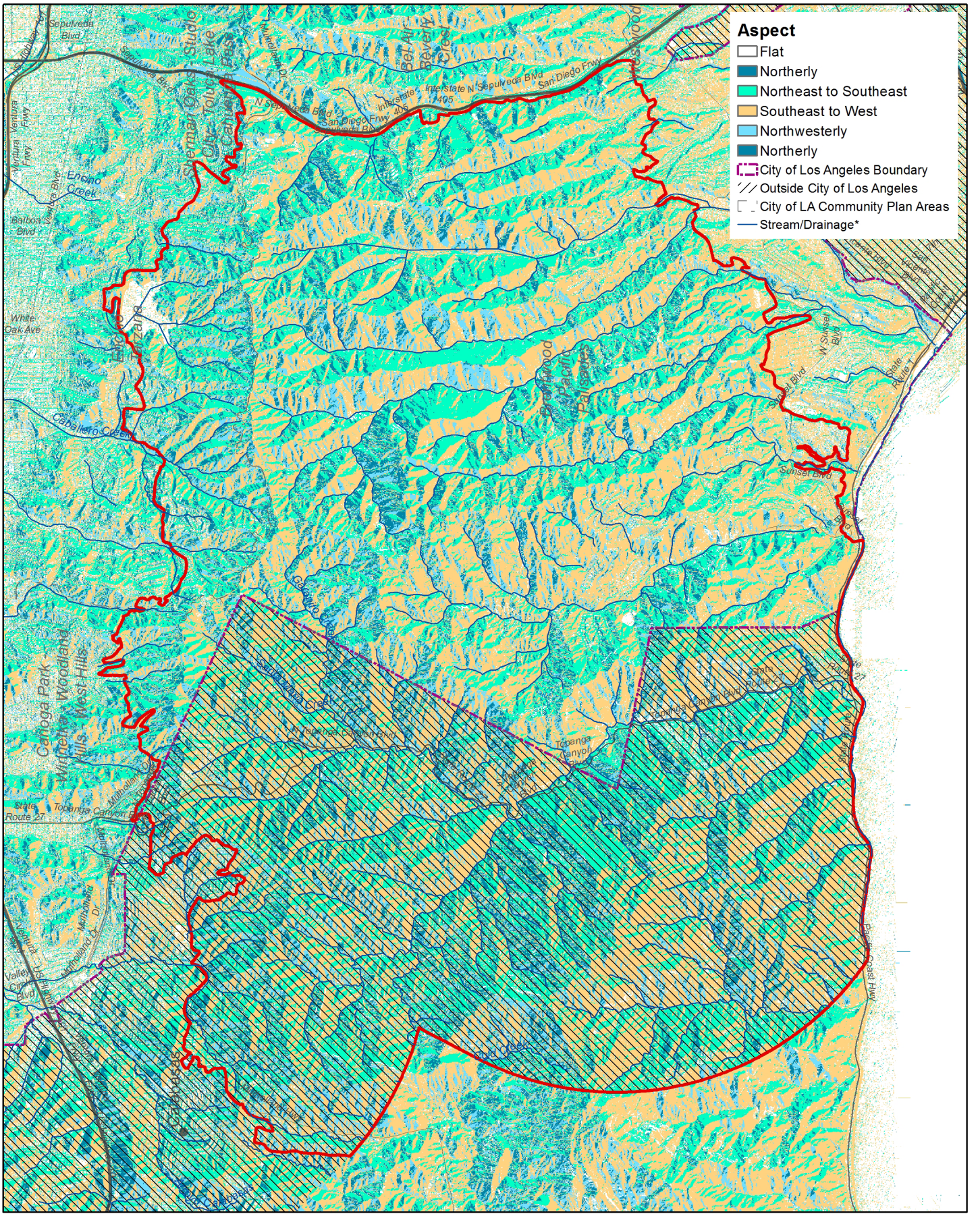
Landform

Data source: I. Brown (2019), https://escholarship.org/uc/item/4c81w4nr



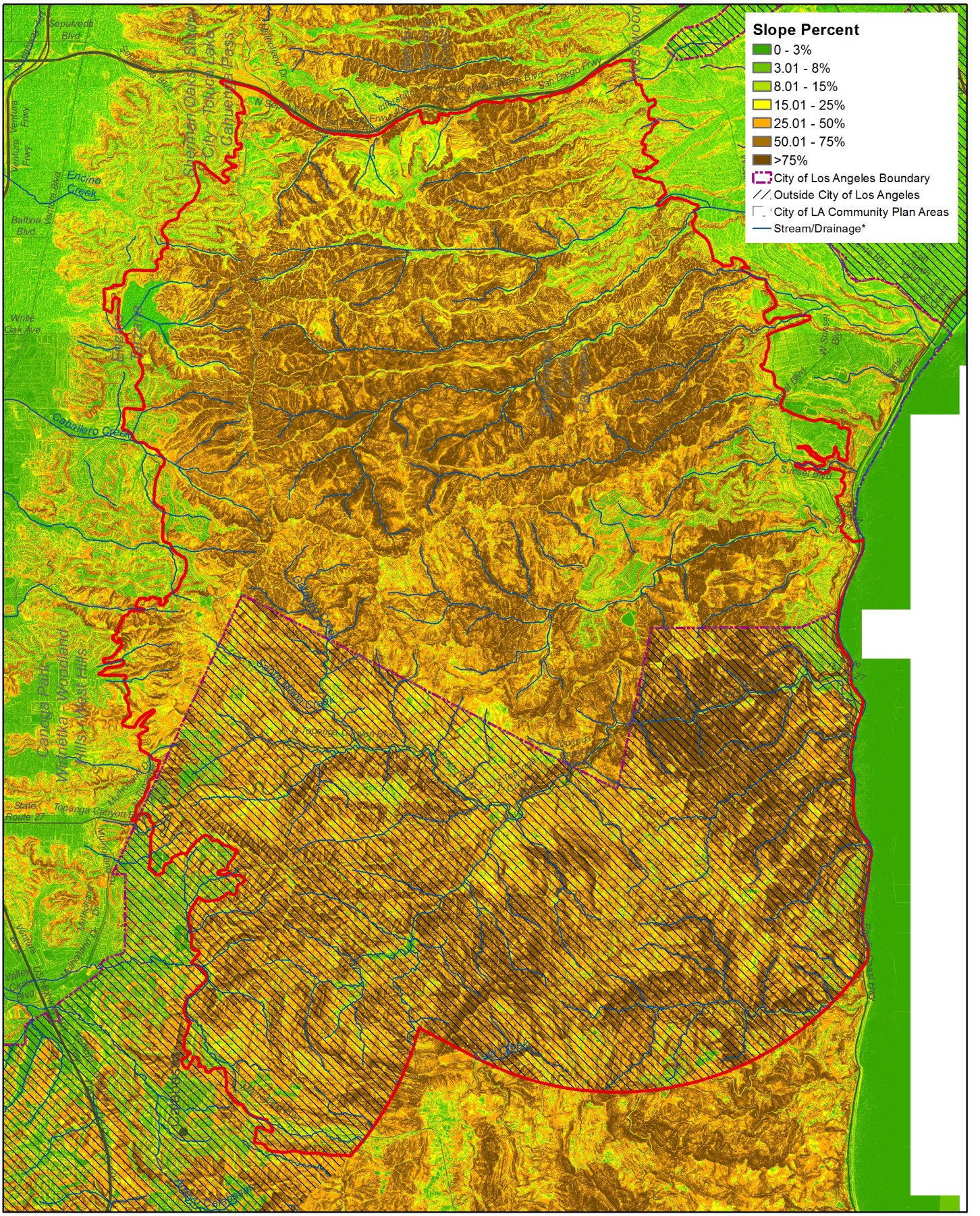
Elevation

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



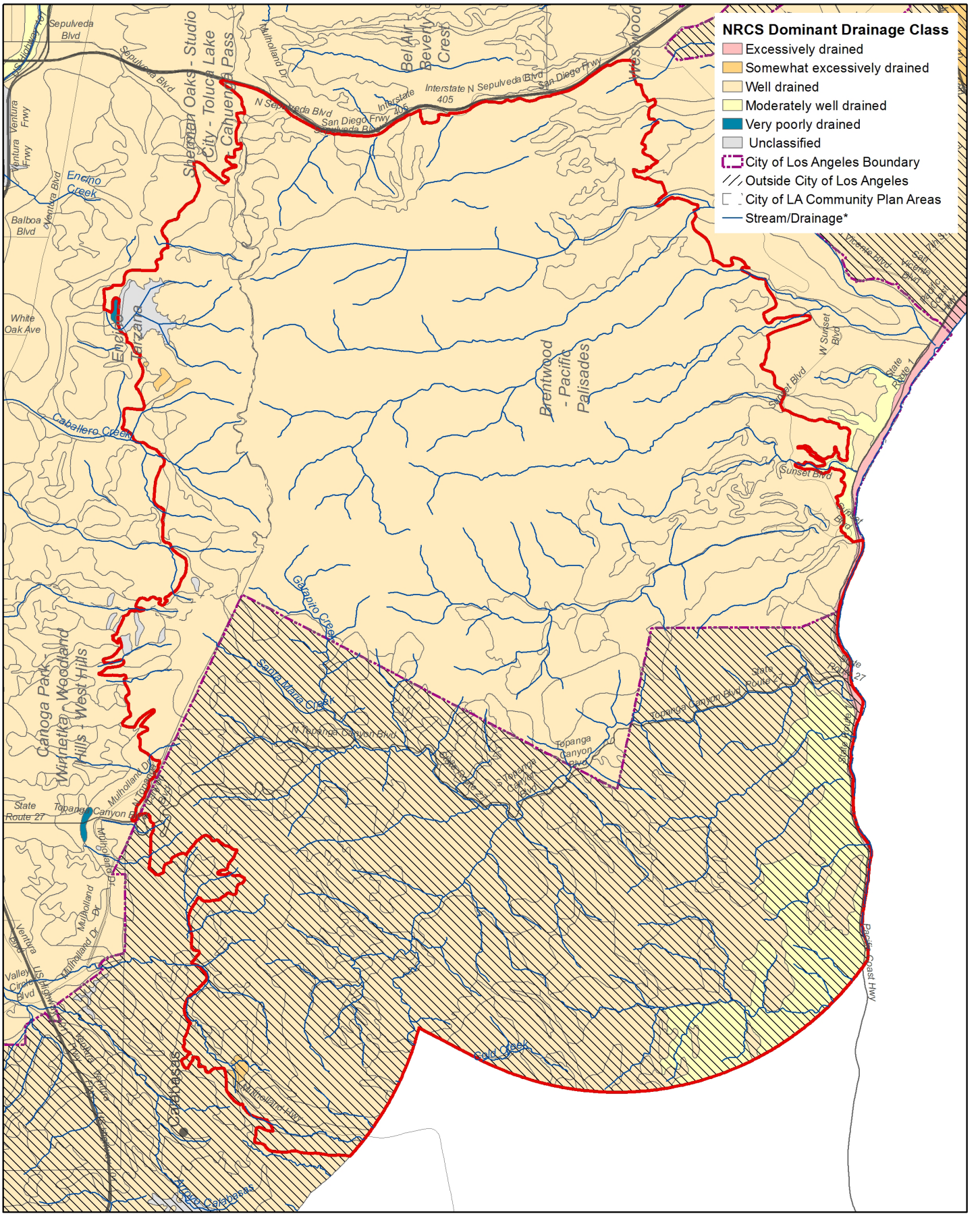
Aspect

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/



Slope Percent

Data source: 2006 10-foot Digital Elevation Model (DEM) – LARIAC – Public Domain. https://egis3.lacounty.gov/dataportal/2011/01/26/2006-10-foot-digital-elevation-model-dem-public-domain/

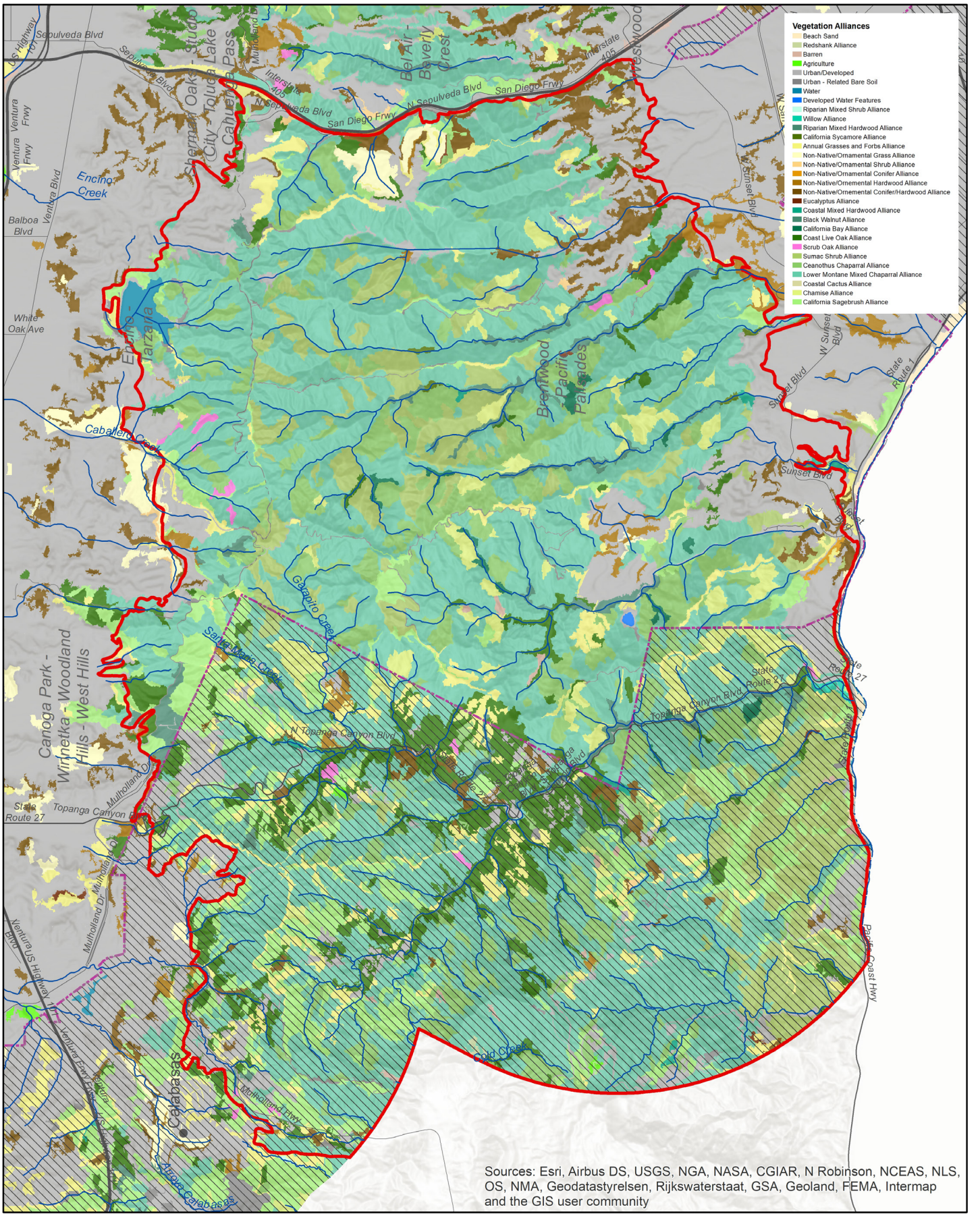


Drainage

Data source: Soil Survey Geographic (SSURGO) Database for Los Angeles County, Southeastern Part, CA; National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia. 2002-2016.

0 0.5 1 2 Miles

N

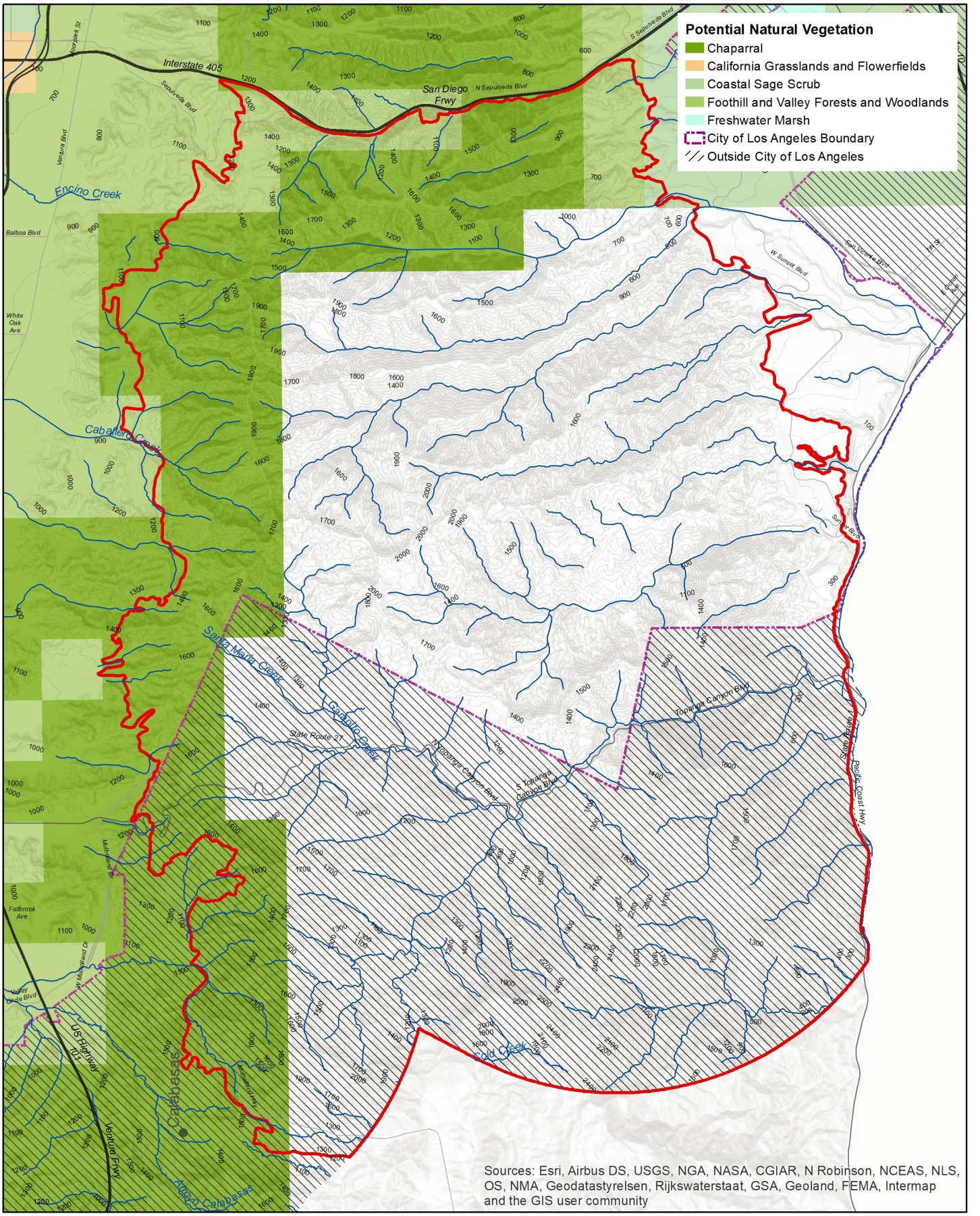


Vegetation Alliances

Data source: CALVEG. https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192

0 0.5 1 2 Miles

N

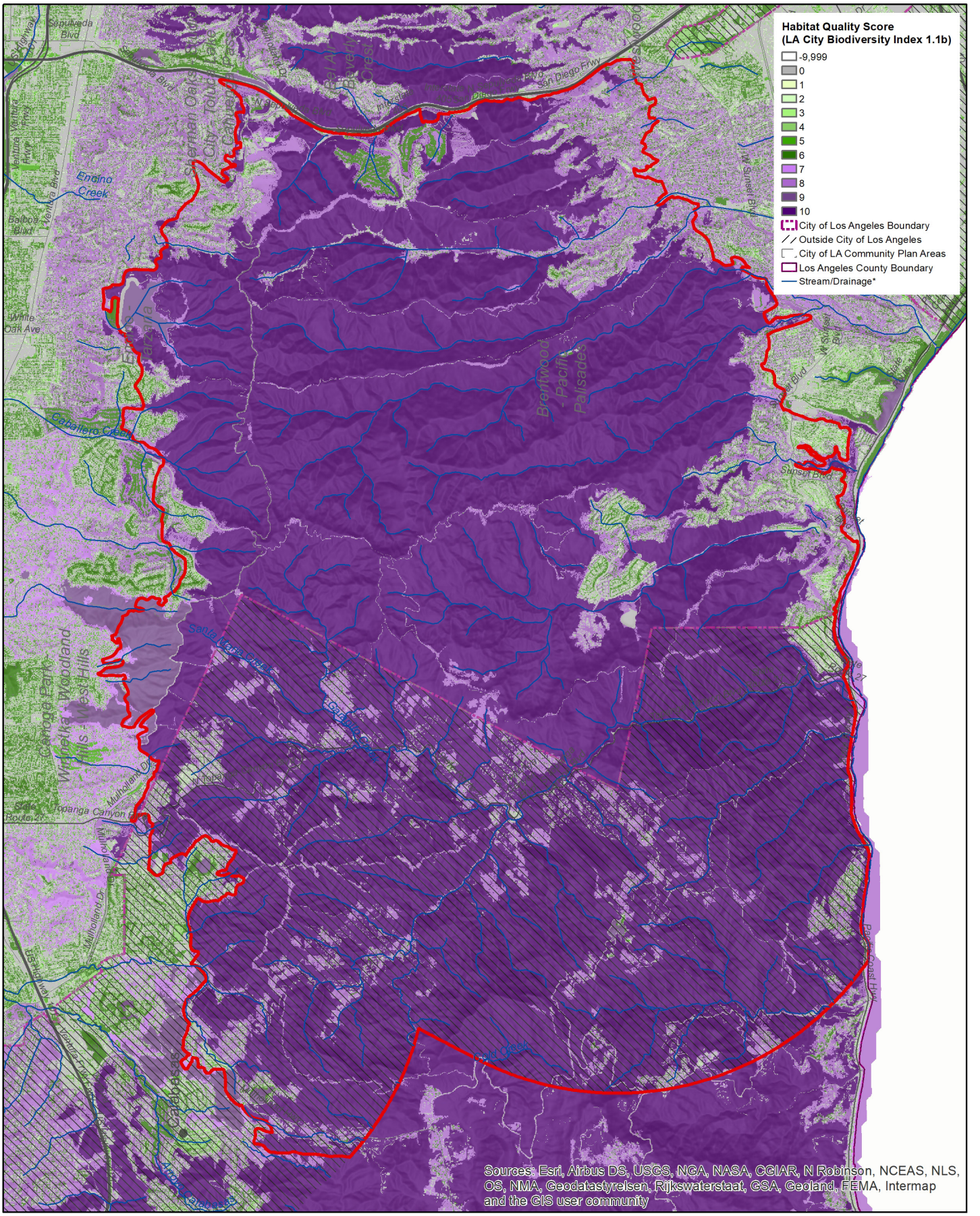


Hypothesized Potential Natural Vegetation

Data source: USC Spatial Sciences Institute/UCLA Institute of the Environment: Historical Ecology of the Los Angeles River Watershed Project.

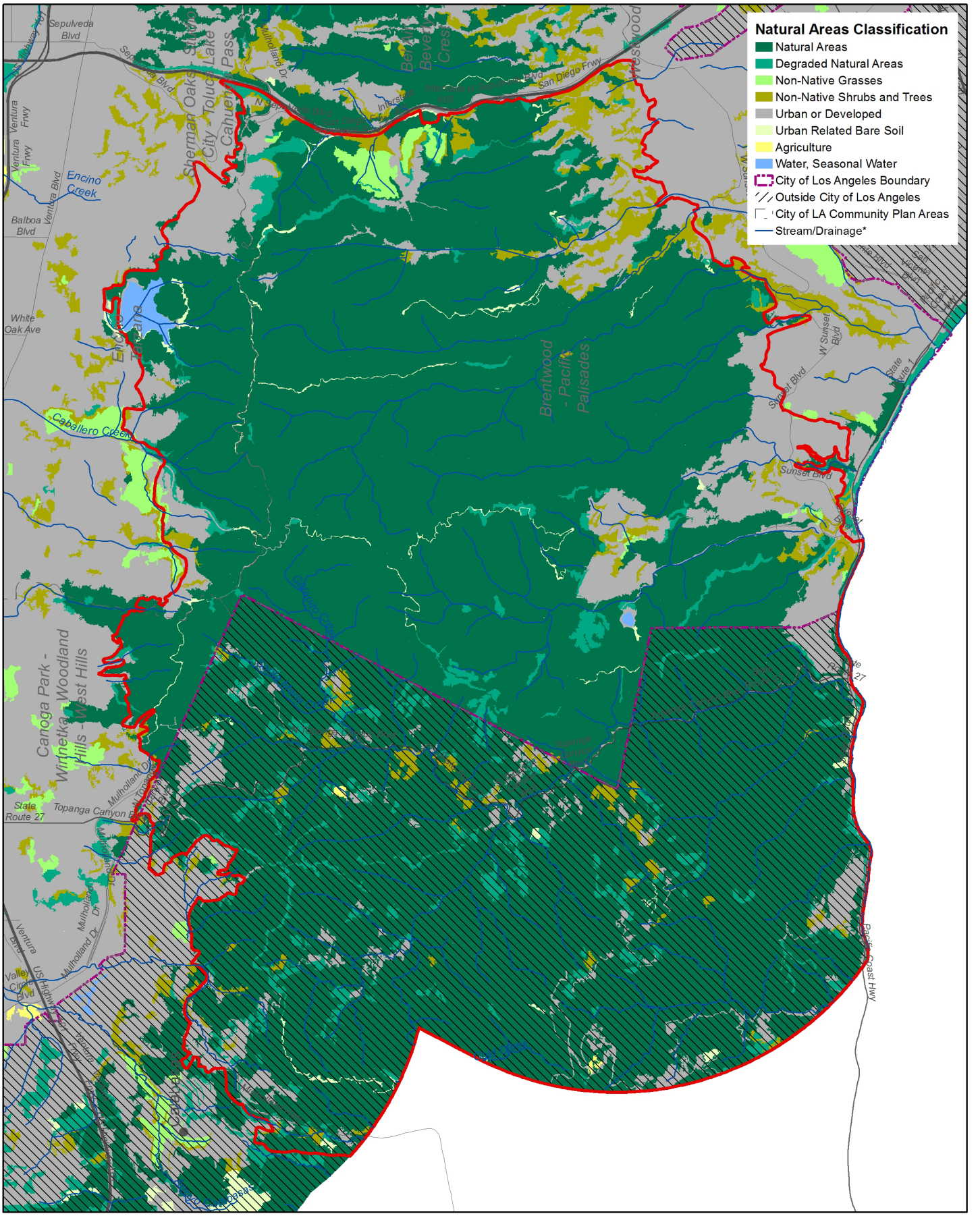
0 0.5 1 2 Miles

N



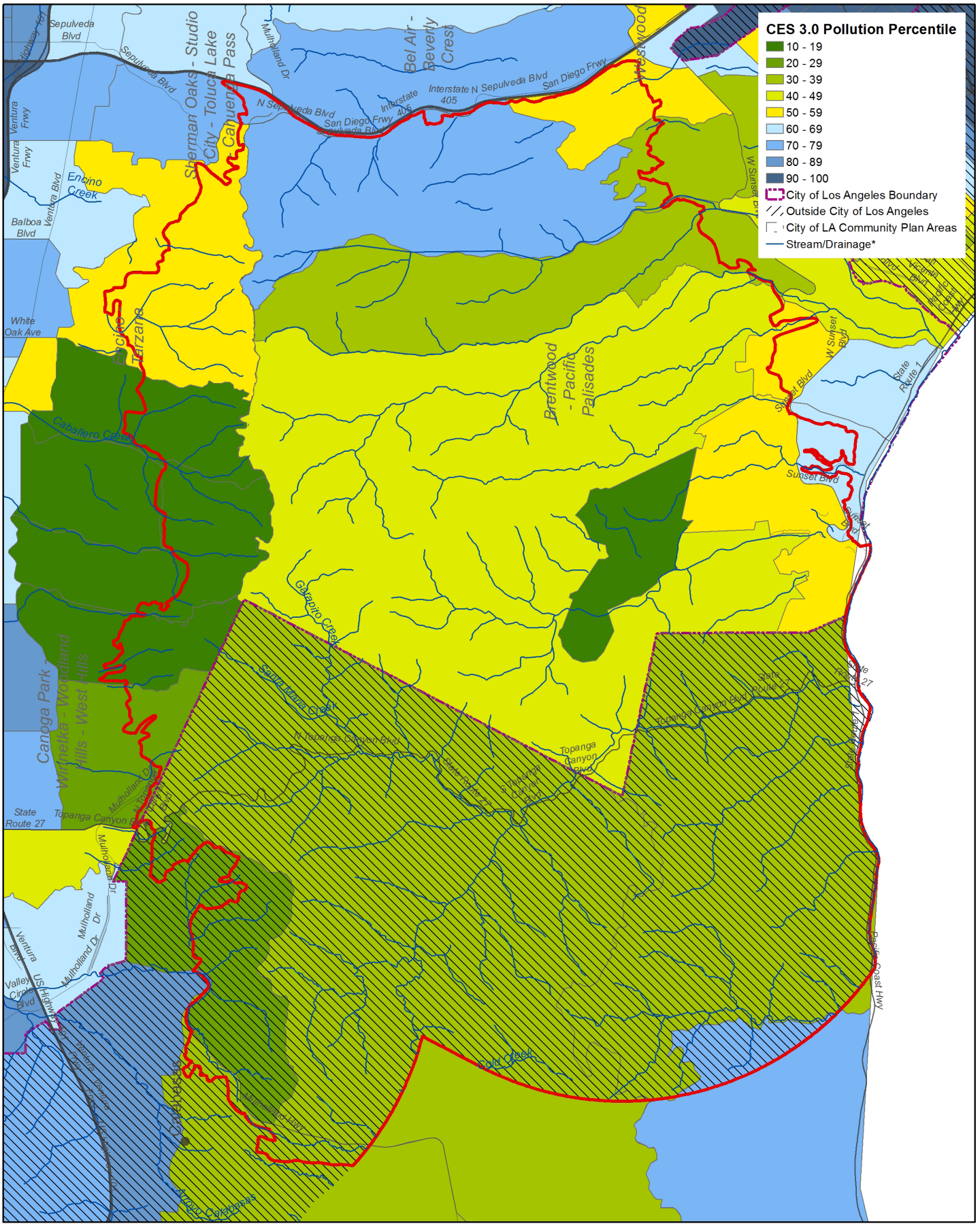
General Habitat Quality

Data source: I. Brown (2019). https://escholarship.org/uc/item/4c81w4nr



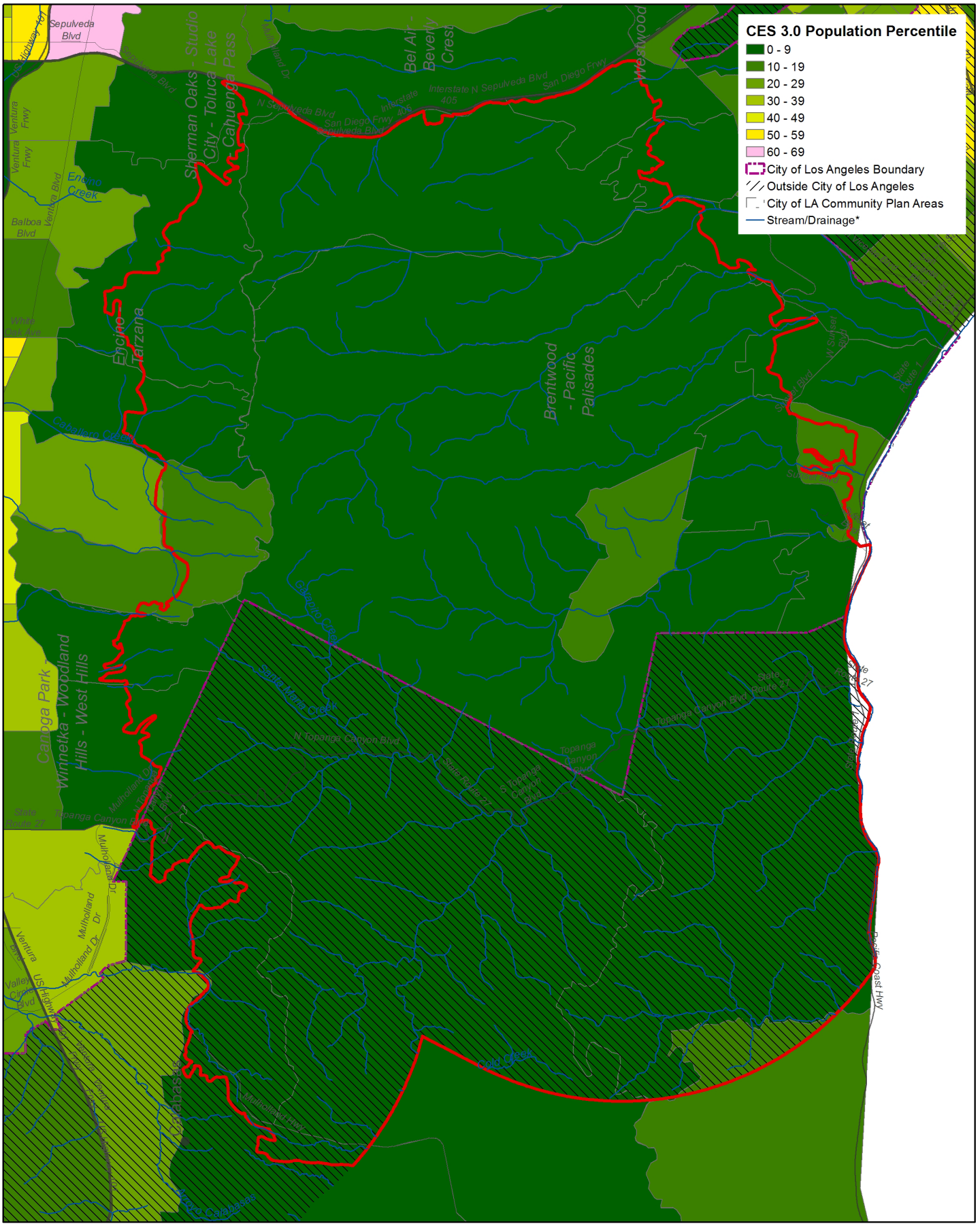
Natural Areas Classification

Data source: 2018 City of Los Angeles Biodiversity Report, Appendix B. https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdi0/~edisp/cnt024943.pdf



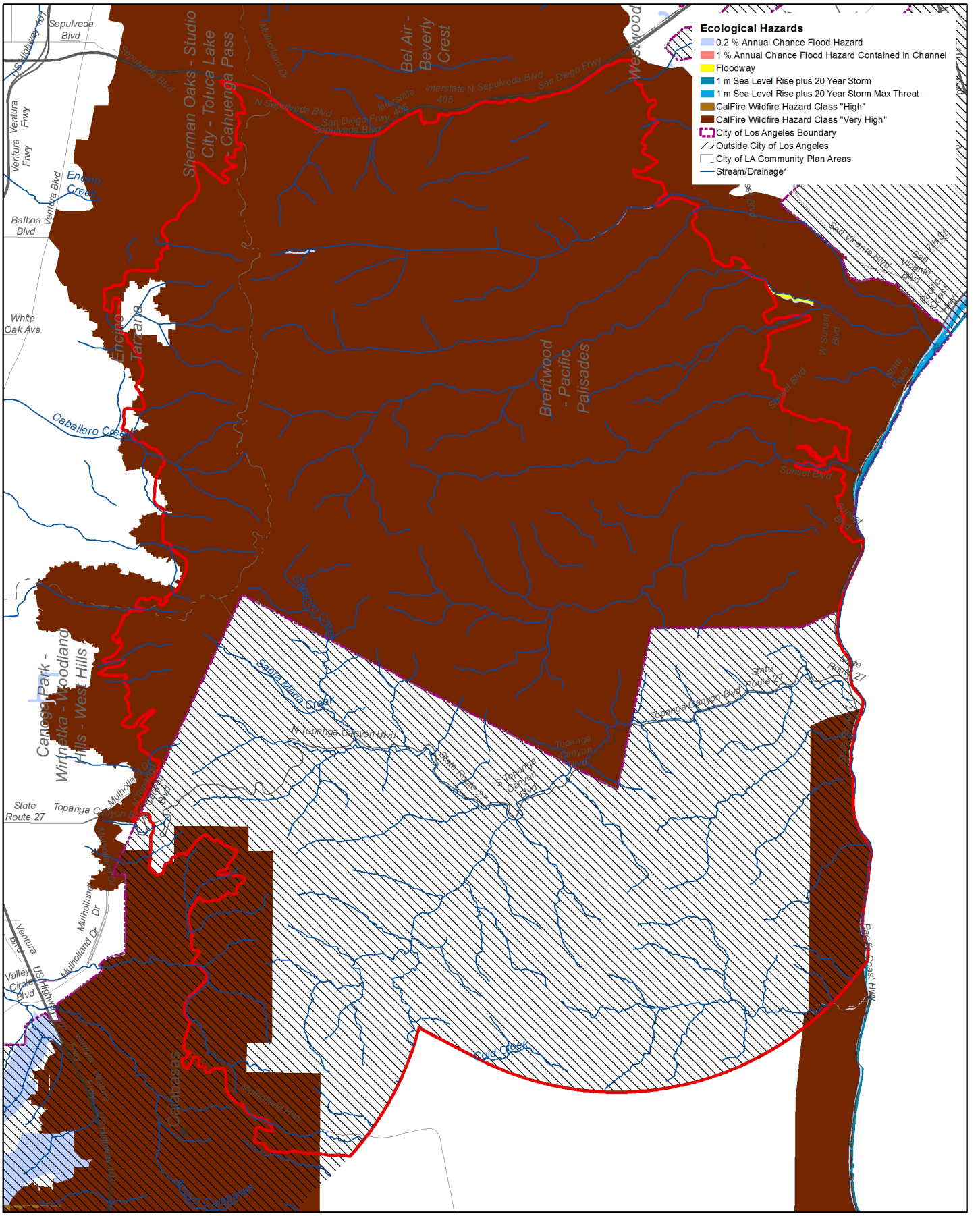
CalEnviroScreen Pollution Precentile (pollution exposure)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



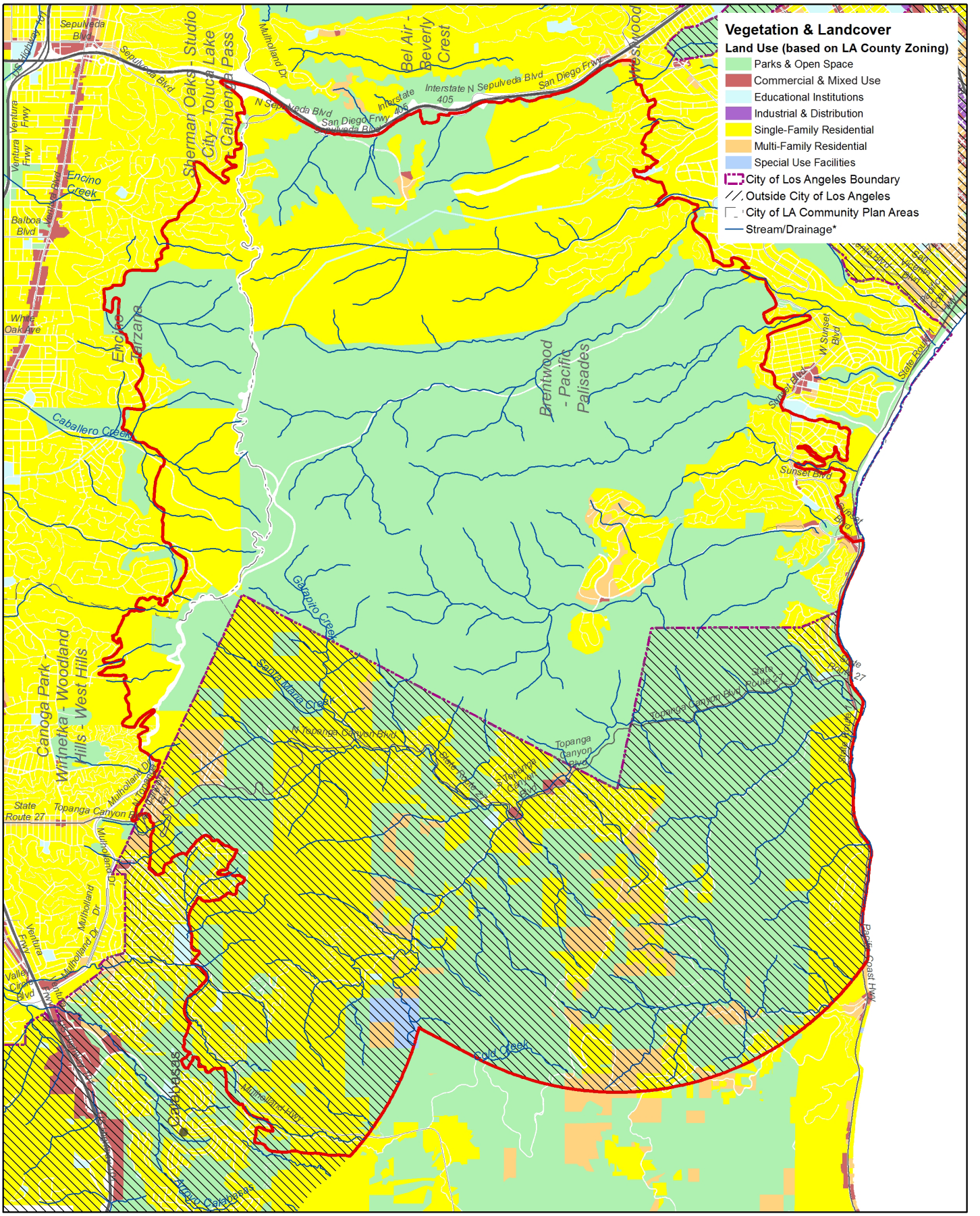
CalEnviroscreen Population Percentile (population vulnerability)

Data source: CalEnviroScreen 3.0. The California Office of Environmental Health Hazard Assessment (OEHHA). https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30



Ecological Hazards

Data sources: Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2; Calfire Fire Hazard Severity Zone Maps; Federal Emergency Management Agency, National Flood Hazard Layer, Version 1.1.1.0, 11/01/2016.


Vegetation & Landcover
Land Use (based on LA County Zoning)
Parks & Open Space
Commercial & Mixed Use
Educational Institutions
Industrial & Distribution
Single-Family Residential
Multi-Family Residential
Special Use Facilities
City of Los Angeles Boundary
Outside City of Los Angeles
City of LA Community Plan Areas
Stream/Drainage*
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
Bel Air - Beverly Crest
Encino - Tarzana
Brentwood - Pacific Palisades
Canoga Park - Winnetka - Woodland Hills - West Hills
Encino Creek
Caballero Creek
Calabasas
Arroyo Calabasas
Cold Creek
Topanga Canyon Blvd
State Route 27
Pacific Coast Hwy
Sepulveda Blvd
Mulholland Dr
Ventura Frwy
Interstate 405
San Diego Frwy
Sunset Blvd
W Sunset Blvd
Balboa Blvd
White Oak Ave
Valley Circle Blvd
Las Virgenes Rd
Malibu Canyon Rd
Las Virgenes Canyon
Las Virgenes Creek
Malibu Creek
Malibu Lake
Malibu Canyon
Las Virgenes

ECOTOPE 25: SIMI HILLS (SEE ECOTOPE 19)

Description of the Simi Hills is combined with the Santa Susana Mountains, Ecotope 19, in this document. These two ecotopes were differentiated as unique ecotopes late in the analysis and maps and quantitative data were initially combined during early iterations. Therefore, the discussion and environmental factors maps are combined at this time.

ECOTOPE 26: SIMI TERRACE (SEE ECOTOPE 19)

Description of the Simi Terrace ("Simi Valley") is combined with the Santa Susana Mountains, Ecotope 19, in this document. These two ecotopes were differentiated as unique ecotopes late in the analysis and maps and quantitative data were initially combined during early iterations. Therefore, the discussion and environmental factors maps are combined at this time.

ECOTOPE 27: COYOTE HILLS & TERRACES (SEE ECOTOPE 10)

Description for the Coyote Hills & Terraces is combined with the Puente Hills, Ecotope 10, in this document. The Coyote Hills & Terraces were differentiated as a unique ecotope from Ecotopes 10 and Ecotope 13, the San Gabriel River Lower Alluvial Plain, late in the analysis. Therefore, the discussion and environmental factors maps are combined at this time.

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