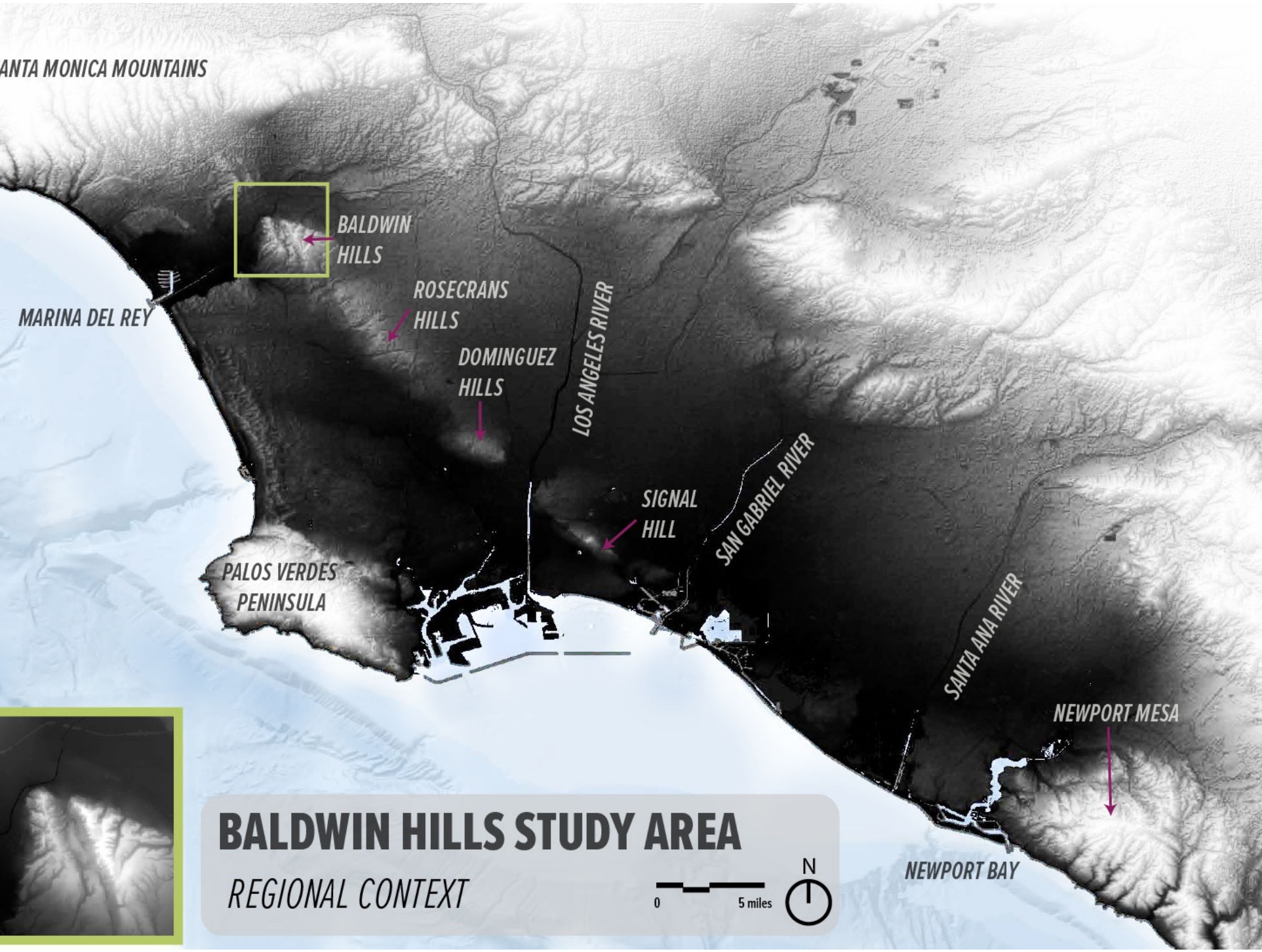
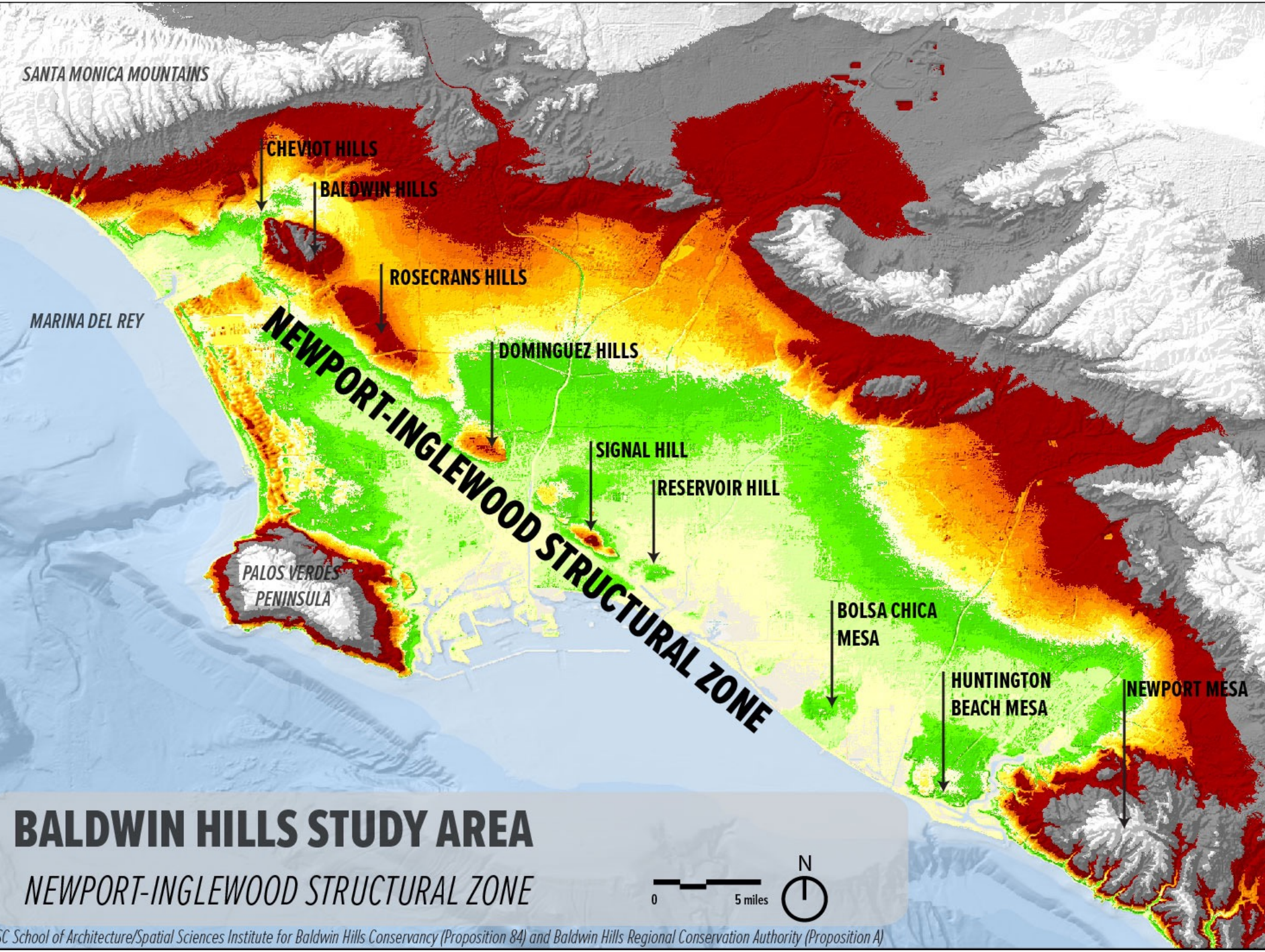
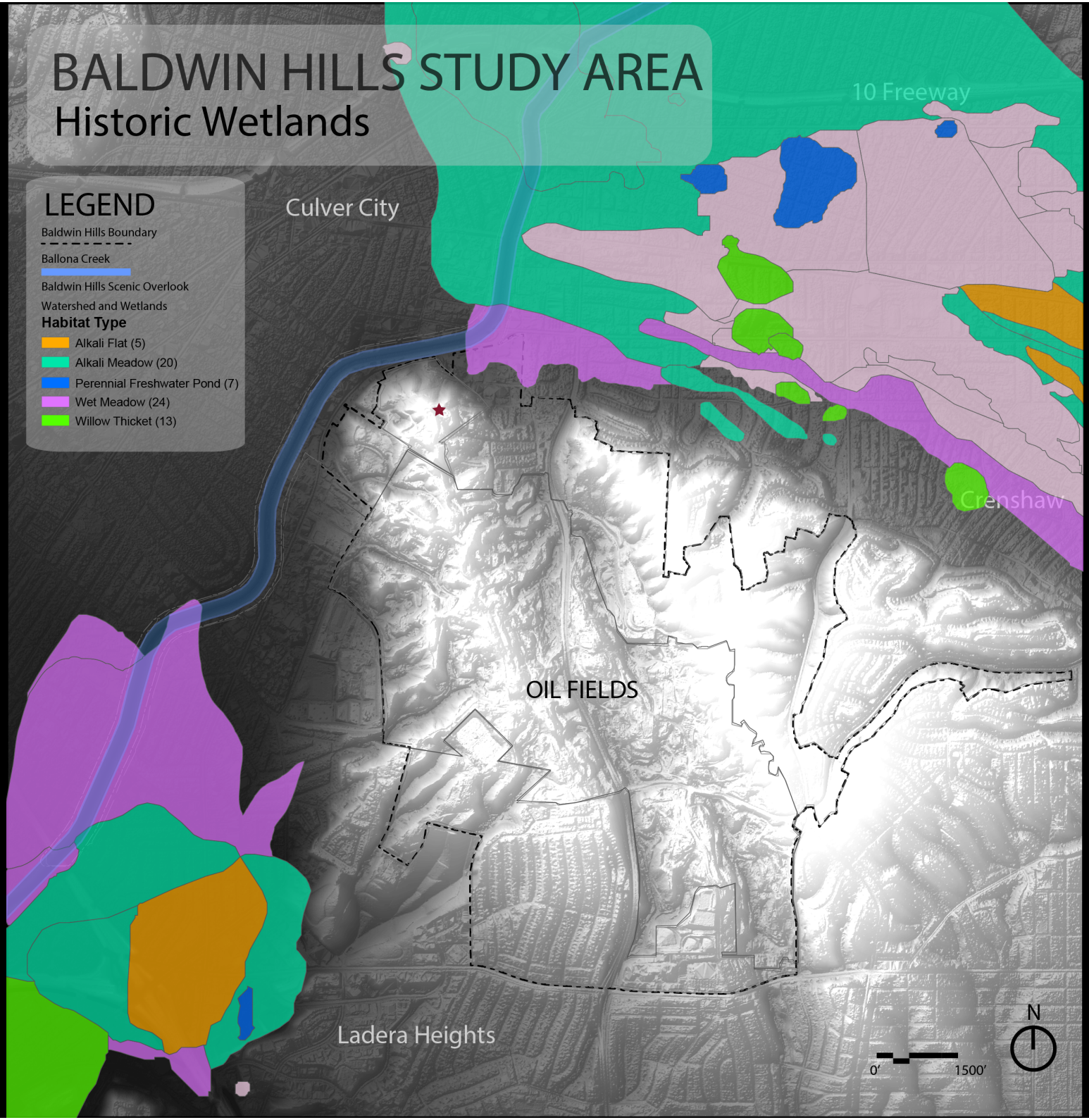
Urban Biodiversity Assessment: Baldwin Hills Biota Update

Travis Longcore, Ph.D.
University of Southern California

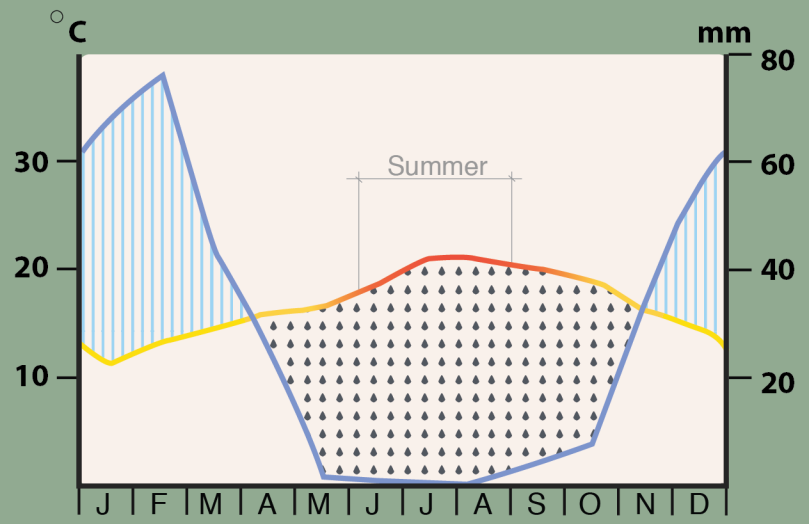

ANTA MONICA MOUNTAINS
BALDWIN HILLS
MARINA DEL REY
ROSECRANS HILLS
DOMINGUEZ HILLS
LOS ANGELES RIVER
SIGNAL HILL
SAN GABRIEL RIVER
PALOS VERDES PENINSULA
SANTA ANA RIVER
NEWPORT MESA
NEWPORT BAY
BALDWIN HILLS STUDY AREA
REGIONAL CONTEXT
0
5 miles
N



SC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)


BALDWIN HILLS STUDY AREA
Historic Wetlands
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Watershed and Wetlands
Habitat Type
Alkali Flat (5)
Alkali Meadow (20)
Perennial Freshwater Pond (7)
Wet Meadow (24)
Willow Thicket (13)
Culver City
10 Freeway
Crenshaw
OIL FIELDS
Ladera Heights
N
0'
1500'

CLIMATE OF THE BALDWIN HILLS



Temperature
Precipitation
Wet Period
Arid Period

Hot Dry Summers

Cool Moist Winters

AVERAGE TEMPERATURE

65.1 - 76.8 °F

RAINFALL

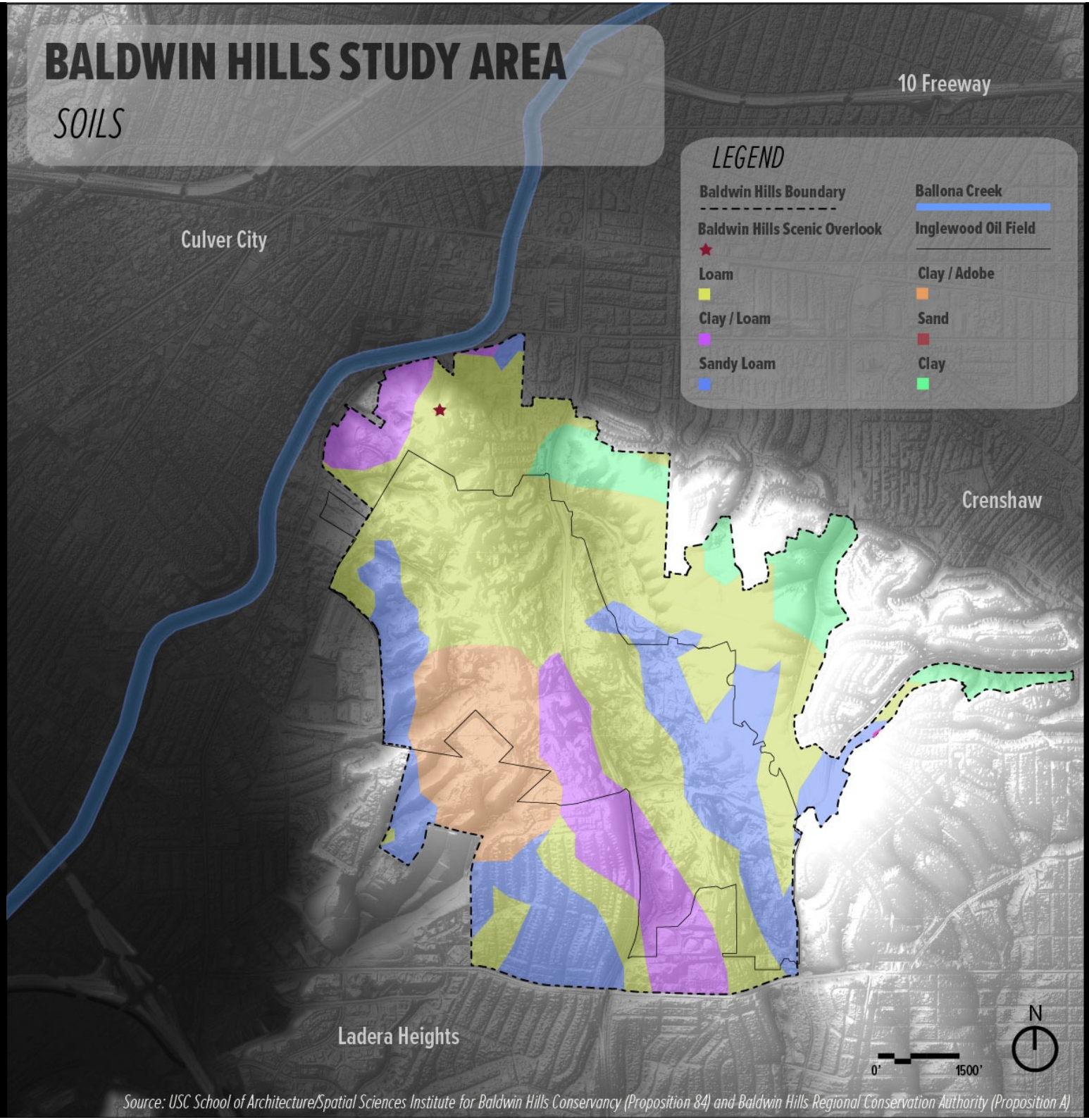
10 - 20 inches per year

11 in. median

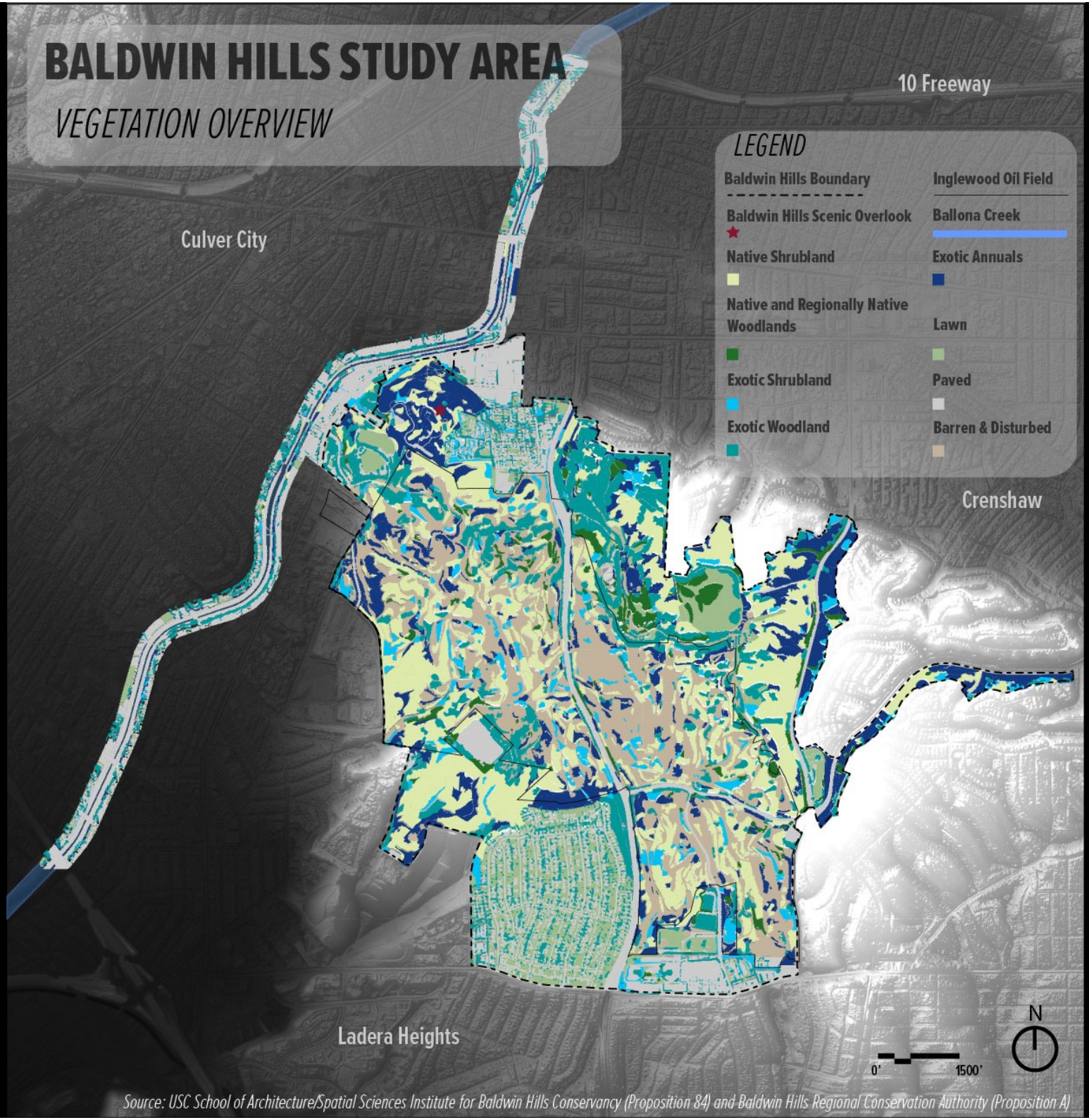
222

Cloudy or partly cloudy Days

44 days
extreme fog



Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)



Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

WHAT'S FLOWERING & FRUITING IN THE BALDWIN HILLS?

WINTER


Bush Sunflower


Toyon


Greenbark Ceanothus

SPRING


Blue-Eyed Grass


California Poppy


Dwarf Lupine

SUMMER


Prickly Pear


Sugar Bush


Wild Buckwheat

FALL

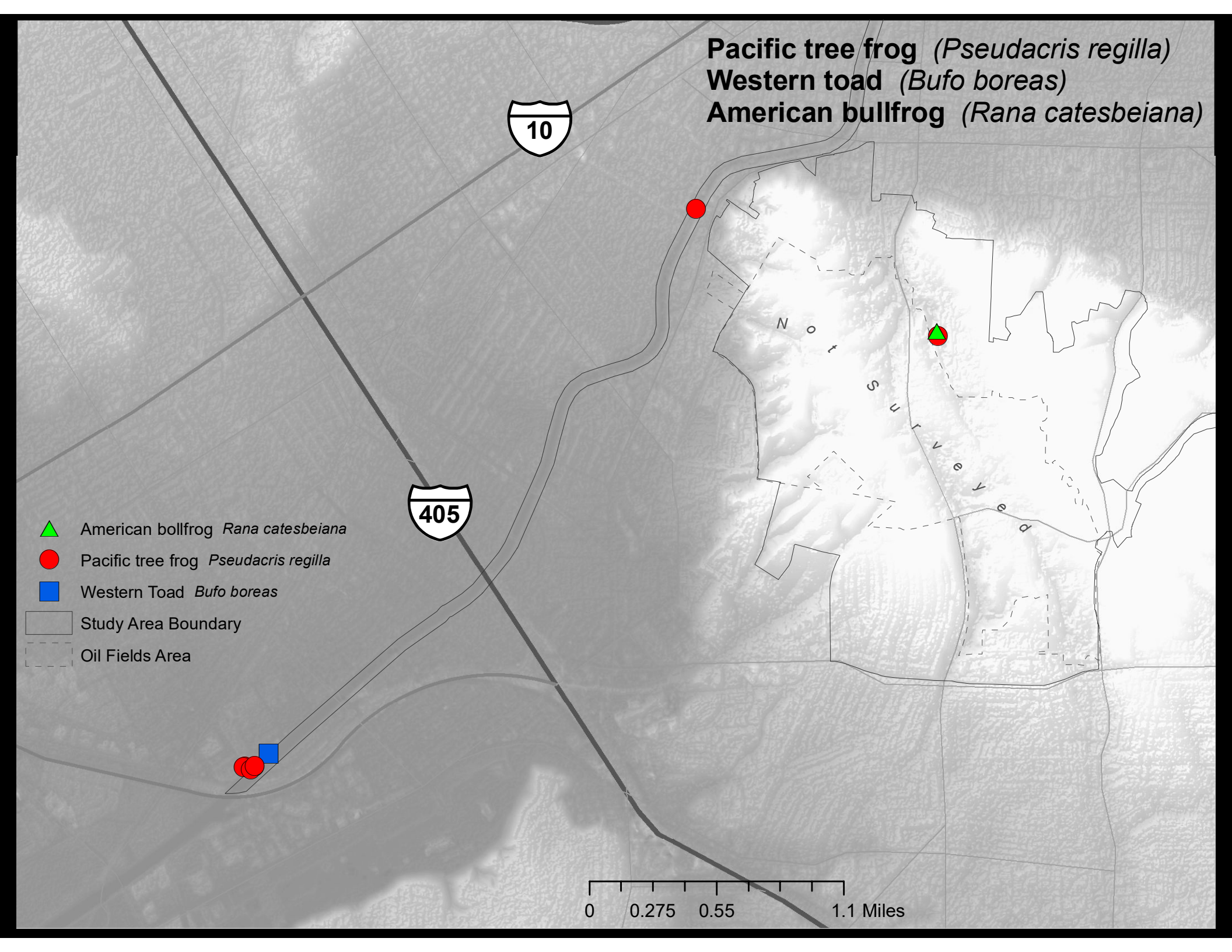

California Black Walnut

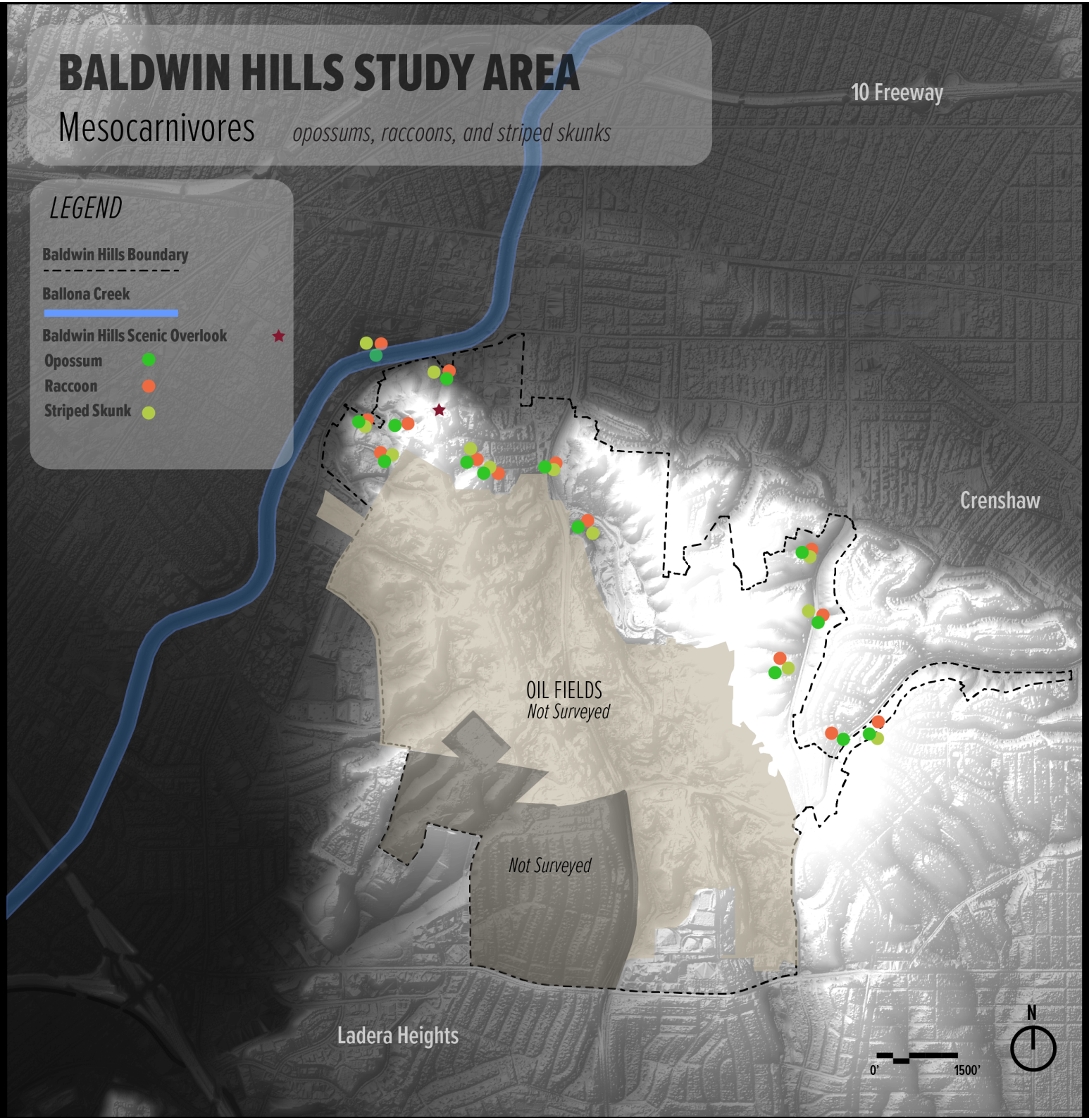

Blue Elderberry

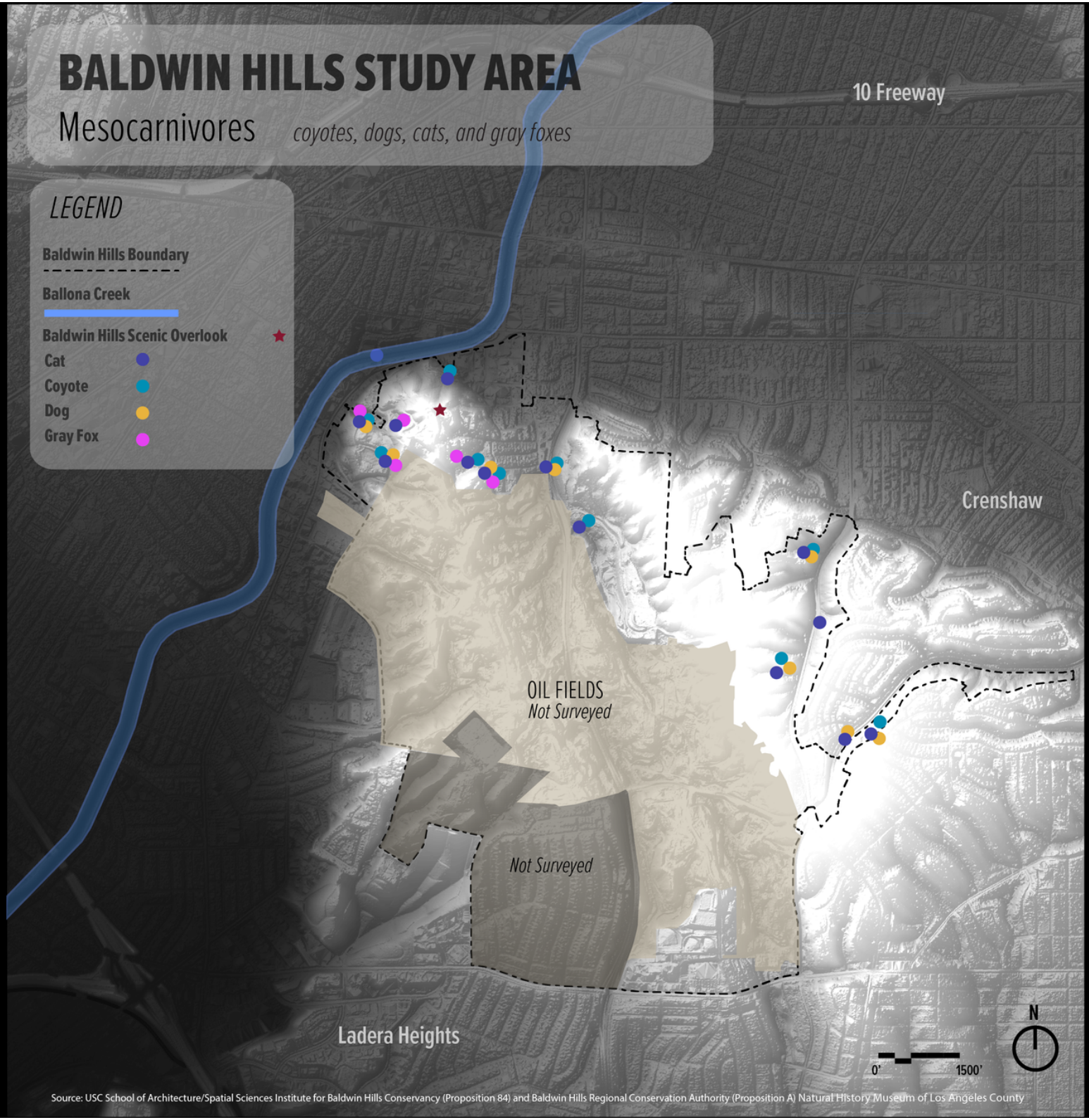

Western Sycamore

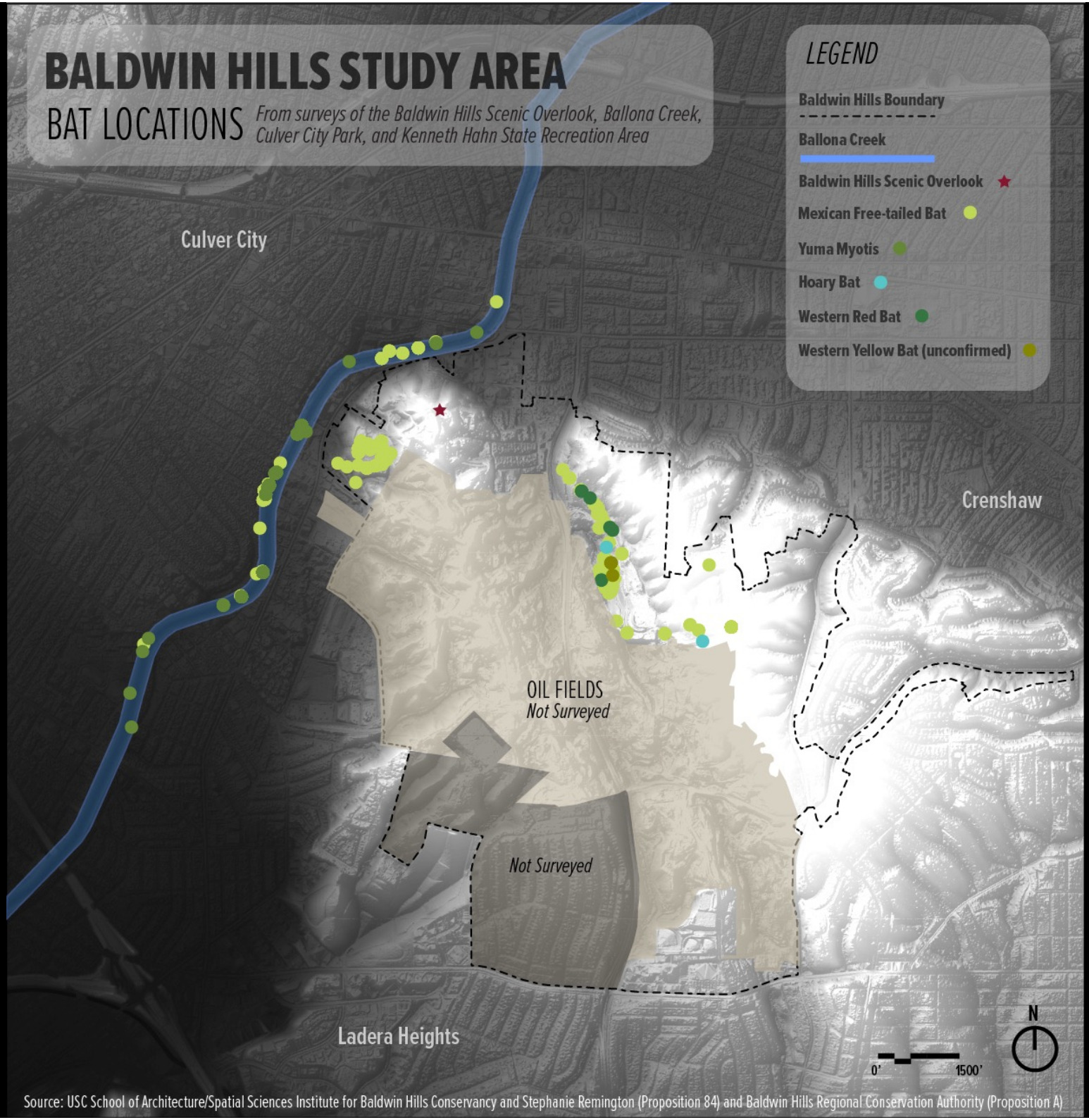
Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

Image Sources: Theodore Payne California Native Plant Database, California Native Plant Society, SelecTree, allisonmseward12 via flickr, Gorupka via flickr, docentjoyce via Wikimedia Commons, Jason Hollinger vs Wikimedia Commons, Stan Shebs via Wikimedia Commons, Cau-Vi Phung via Wikimedia Commons, Curtis Clark via Wikimedia Commons, Josh S Jackson via flickr, scott.zona via flickr


Pacific tree frog (Pseudacris regilla)
Western toad (Bufo boreas)
American bullfrog (Rana catesbeiana)
10
405
Not Surveyed
American bollfrog Rana catesbeiana
Pacific tree frog Pseudacris regilla
Western Toad Bufo boreas
Study Area Boundary
Oil Fields Area
0
0.275
0.55
1.1 Miles


BALDWIN HILLS STUDY AREA
Mesocarnivores
opossums, raccoons, and striped skunks
10 Freeway
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Opossum
Raccoon
Striped Skunk
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
N
0'
1500'


BALDWIN HILLS STUDY AREA
Mesocarnivores
coyotes, dogs, cats, and gray foxes
10 Freeway
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Cat
Coyote
Dog
Gray Fox
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
N
0'
1500'
Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A) Natural History Museum of Los Angeles County


BALDWIN HILLS STUDY AREA
BAT LOCATIONS
From surveys of the Baldwin Hills Scenic Overlook, Ballona Creek, Culver City Park, and Kenneth Hahn State Recreation Area
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Mexican Free-tailed Bat
Yuma Myotis
Hoary Bat
Western Red Bat
Western Yellow Bat (unconfirmed)
Culver City
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
N
0'
1500'
Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy and Stephanie Remington (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

BAT FACTS

4 CONFIRMED BAT SPECIES IN THE BALDWIN HILLS

1. MEXICAN FREE-TAILED BAT — MOST COMMON
2. YUMA MYOTIS — MOST COMMON
3. WESTERN RED BAT
4. HOARY BAT

HISTORICALLY DOCUMENTED BATS IN LA COUNTY

24 DOCUMENTED BAT SPECIES

11 CALIFORNIA SPECIES OF SPECIAL CONCERN

DID YOU KNOW?

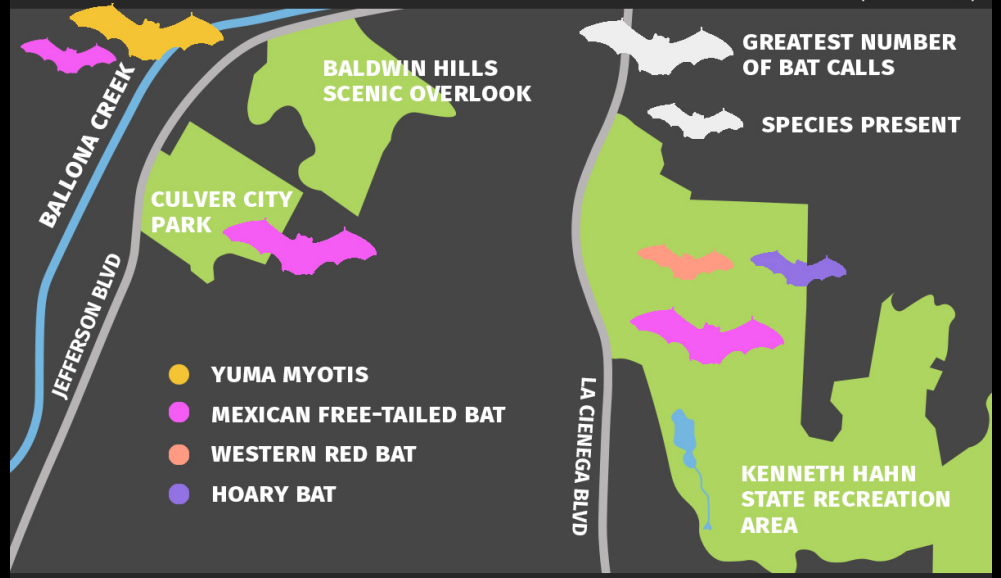
Bats eat tons of mosquitoes! A nursing mother can eat her body weight in insects every night.

They save the agricultural industry MILLIONS of dollars every year in pest control.

Bats are NOT blind! Not only can they see, but they can also use echolocation to catch insects.

BAT LOCATIONS IN THE BALDWIN HILLS

Based on recorded bat calls (2014-2015)



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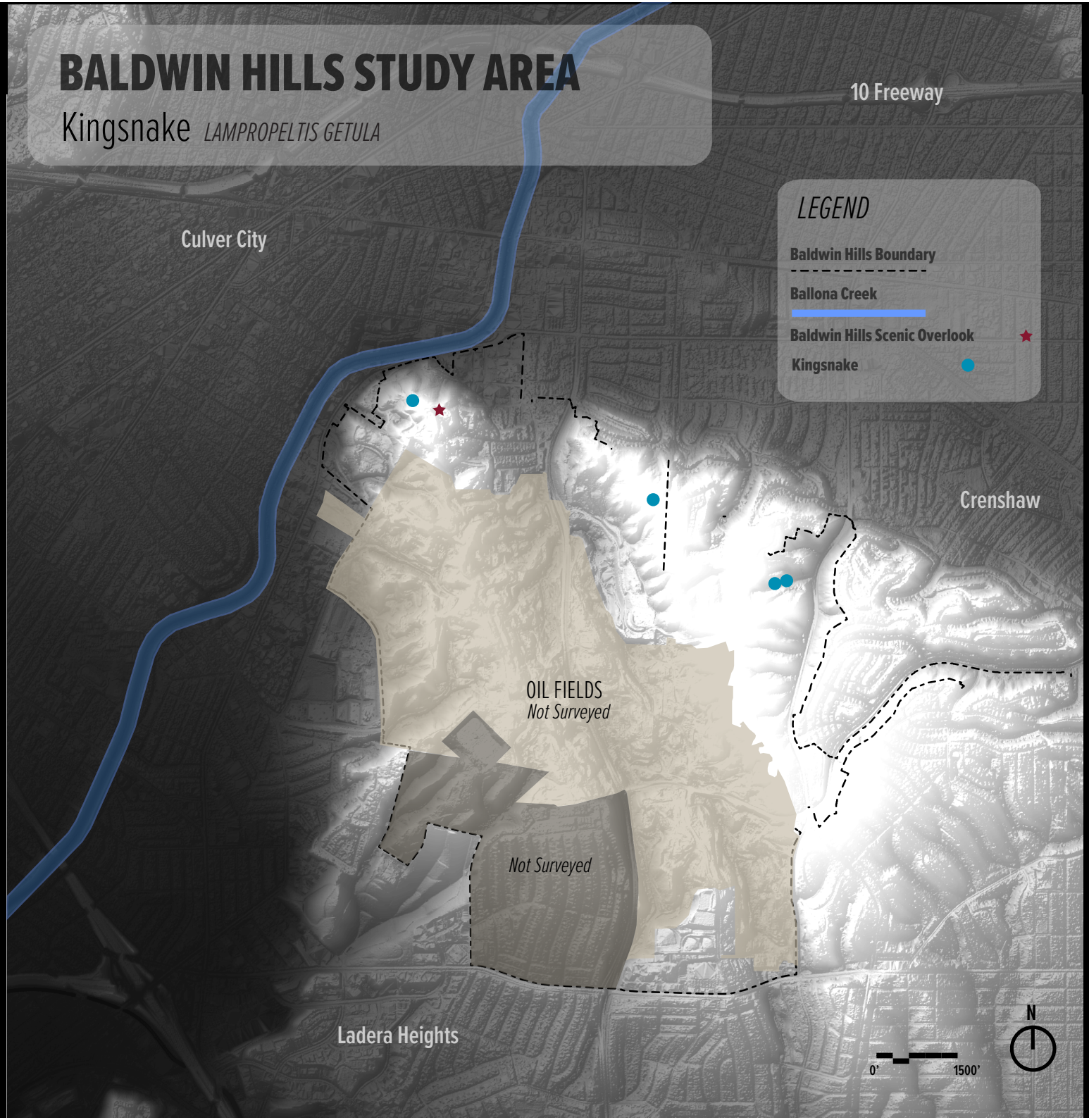

BALDWIN HILLS STUDY AREA
Kingsnake LAMPROPELTIS GETULA
10 Freeway
Culver City
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Kingsnake
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
N
0'
1500'

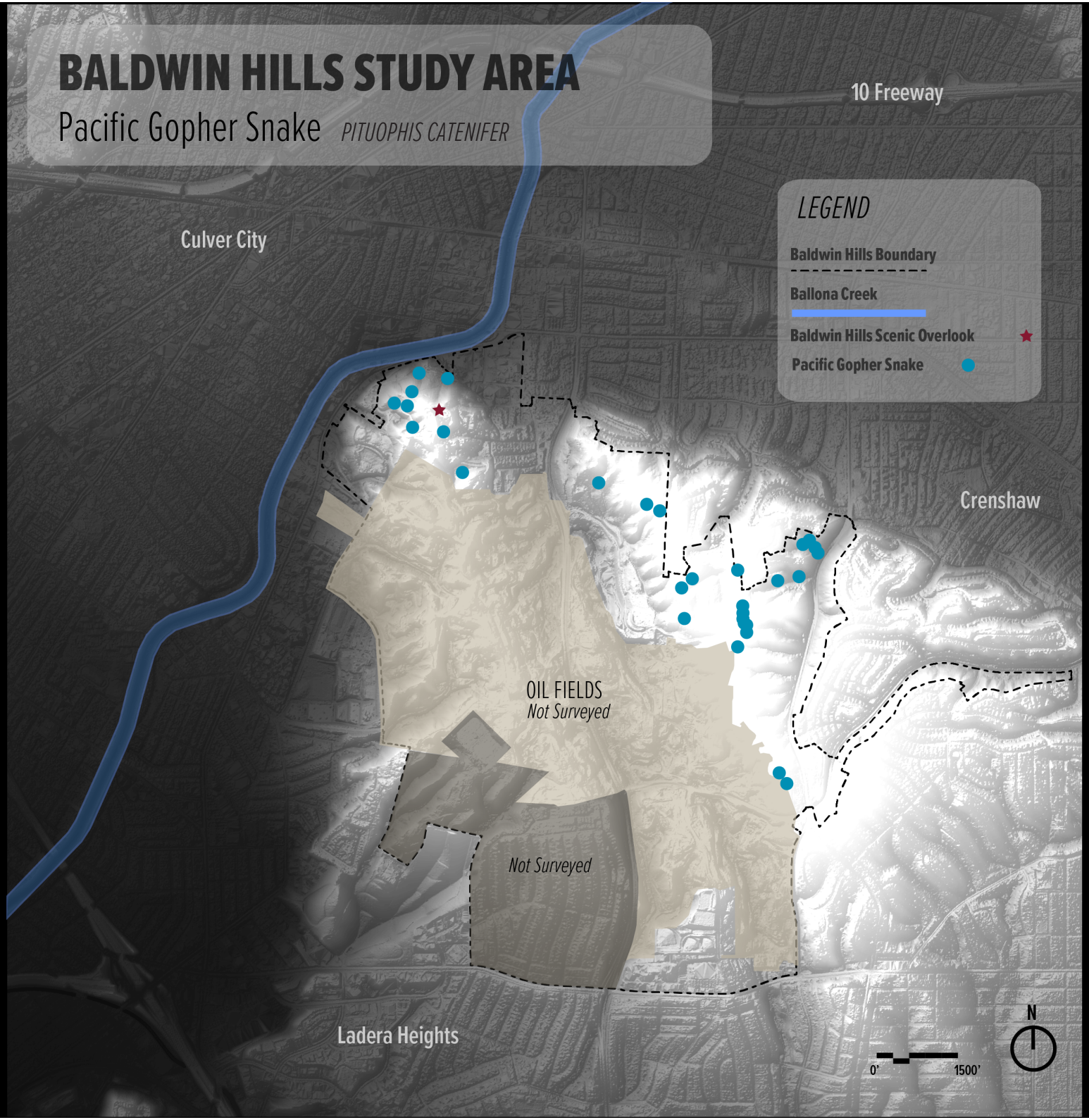
CALIFORNIA KINGSNAKE *Lampropeltis getula*

HABITAT CHARACTERISTICS:

- Diverse range of habitats: chaparral, grassland, and riparian
- Dense vegetation for hiding within
- Rocks and logs for hiding beneath

Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy and Natural History Museum of Los Angeles County (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

Informational Source: "Baldwin Hills Biota Update: Herpetofaunal Surveys" - Natural History Museum of Los Angeles County; California Herps - California Kingsnake
Image Sources: Mechanoid Dolly via flickr; Ragesoss via Wikimedia Commons; AfroBrazilian via Wikimedia Commons; Connor Long via Wikimedia Commons


BALDWIN HILLS STUDY AREA
Pacific Gopher Snake PITUOPHIS CATENIFER
10 Freeway
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Pacific Gopher Snake
Culver City
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
0'
1500'
N

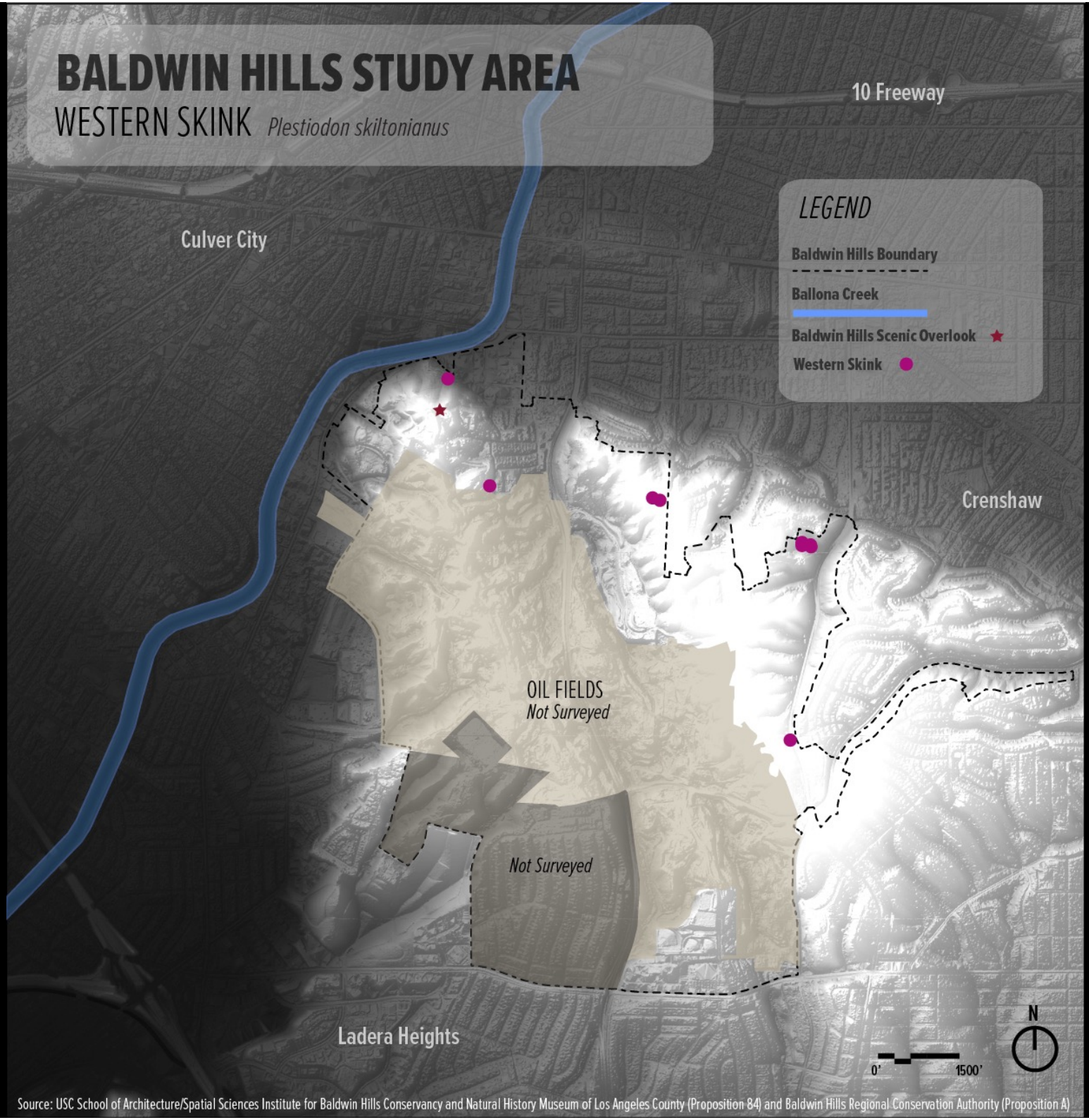
GOPHER SNAKE *Pituophis catenifer*

HABITAT CHARACTERISTICS:

- Diverse habitats: grasslands, chaparral, woodland
- Burrows, rock crevices, and climable features for hunting prey

Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy and Natural History Museum of Los Angeles County (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

Informational Source: "Baldwin Hills Biota Update: Herpetofaunal Surveys" - Natural History Museum of Los Angeles County; Animal Diversity Web - Gopher Snake
Image Sources: Mechanoid Dolly via flickr; Ragesoss via Wikimedia Commons; AfroBrazilian via Wikimedia Commons; Bill Bouton via Wikimedia Commons


BALDWIN HILLS STUDY AREA
WESTERN SKINK Plestiodon skiltonianus
10 Freeway
Culver City
LEGEND
Baldwin Hills Boundary
Ballona Creek
Baldwin Hills Scenic Overlook
Western Skink
Crenshaw
OIL FIELDS
Not Surveyed
Not Surveyed
Ladera Heights
N
0'
1500'
Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy and Natural History Museum of Los Angeles County (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

WESTERN SKINK *Plestiodon skiltonianus*

HABITAT CHARACTERISTICS:

- Areas with leaf litter, rocks, and bark to hide under
- Avoids dense vegetation

Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy and Natural History Museum of Los Angeles County (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

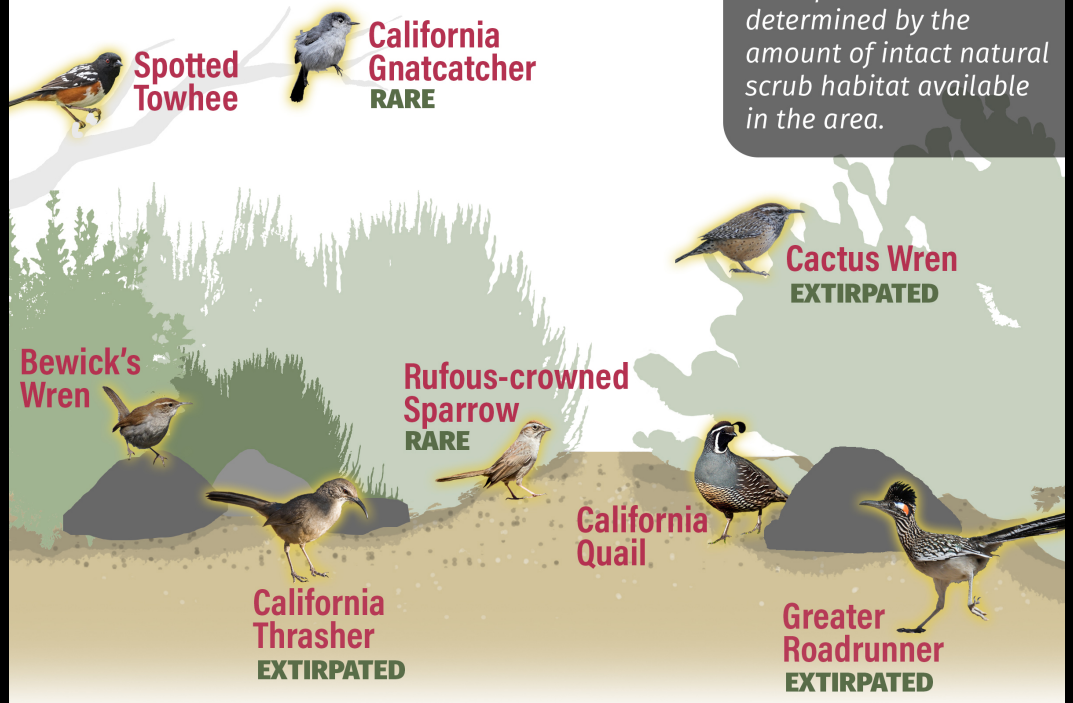
Informational Source: "Baldwin Hills Biota Update: Herpetofaunal Surveys" - Natural History Museum of Los Angeles County; "Skilton's Skink" - California Herps
Image Sources: Ragesoss via Wikimedia Commons; AfroBrazilian via Wikimedia Commons; Gary Chang via flickr

Coastal Scrub Obligates
in the Baldwin Hills

The following birds are currently found in the Baldwin Hills or were likely to have once occured here:

EXTIRPATED = LOCALLY EXTINCT

Coastal scrub obligates are birds that rely on coastal scrub vegetation. Their presence is determined by the amount of intact natural scrub habitat available in the area.



Absent or Very Rare

- **California Gnatcatcher** Very rare. One recent recording from 2016 on eBird.
- **Cactus Wren** Last confirmed sighting in 1996.
- **Greater Roadrunner** No confirmed records in the Baldwin Hills. Possible tracks documented in 1990.
- **California Thrasher** Rare sighting in the Baldwin Hills. Possible visitors from other habitat areas.
- **Rufous-crowned Sparrow** Rare sighting in the Baldwin Hills. Possibly extirpated.

Present

- **California Quail** Rare sighting but confirmed presence.
- **Spotted Towhee** Common documented species in the Baldwin Hills.
- **Bewick's Wren** Common documented species in the Baldwin Hills.

Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

Informational Sources:
Birds of the Baldwin Hils - Kimball L. Garrett (2001)

Image Sources:
Martin Ely via flickr; Anita Ritenour via flickr; Bettina Arrigoni via Wikimedia Commons; Mike's Birds via flickr; Ron Knight via Wikimedia Commons; Dominic Sherony via Wikimedia Commons; Mike Baird via Wikimedia Commons; Dominic Sherony via flickr

WHERE ARE ALL THE CACTUS WRENS?

The Cactus Wren is a large native wren that once made its home in the prickly pear cactus stands of the Baldwin Hills.

It has been 20 years since it was last seen.

LAST CONFIRMED SIGHTING: 1996

WHY DID THEY DISAPPEAR?

Loss of large native predators leads to...

Increase in small predators that prey on birds

Increase in exotic plants leads to native habitat loss

Loss of habitat due to increased urbanization

Increasing isolation from other areas of natural scrub habitat

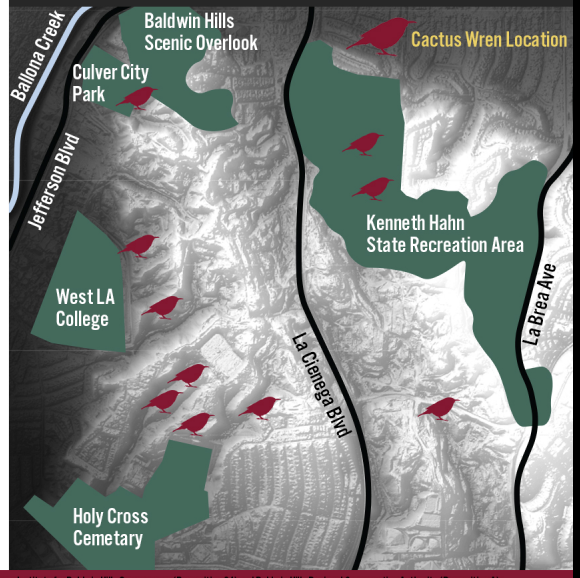
Decreased native habitat due to oil extraction

Did you know?

In 2009, students from nearby Dorsey High School planted prickly pear cactus, elderberry, cholla, and black walnut trees in an effort to bring back the Cactus Wren.

The Cactus Wren highlights the importance of preserving the native vegetation in the Baldwin Hills.

HISTORICAL SIGHTINGS 1975-1996



Source: USC School of Architecture/Spatial Sciences Institute for Baldwin Hills Conservancy (Proposition 84) and Baldwin Hills Regional Conservation Authority (Proposition A)

Image Sources: Image by Martin Ely via flickr; Image by Marshal Hedin via flickr; Image by Stan Shebs via Wikimedia Commons

Informational Sources: Birds of the Baldwin Hills - Kimball L. Garrett (2001); "Cactus Wren gets another chance in Culver City" - Louis Sahagun, Los Angeles Times (2009)

iNaturalist.org

http://www.inaturalist.org/guides/3102?view=card

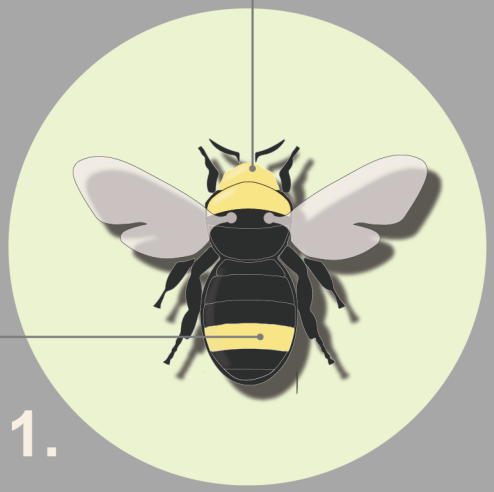
eBird

http://ebird.org/ebird/hotspot/L688203?m=&yr=last10&changeDate=Set

BEES OF BALDWIN HILLS

Color Guide

Head Yellow Coloring

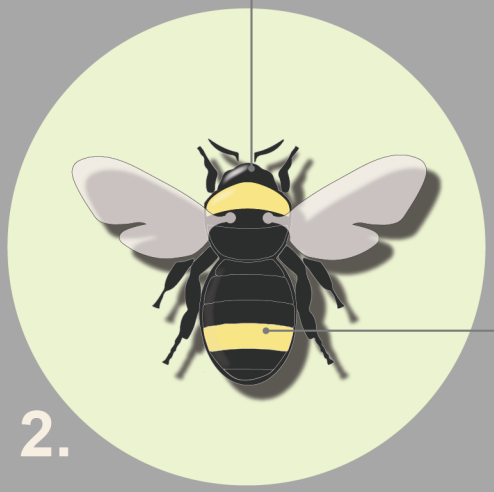


1.

Yellow-faced Bumble Bee
(Bombus vonesenskii)

Typical Female Yellow Coloring on the T4 segment (males have additional yellow coloring on the sides)

Black Head Coloring

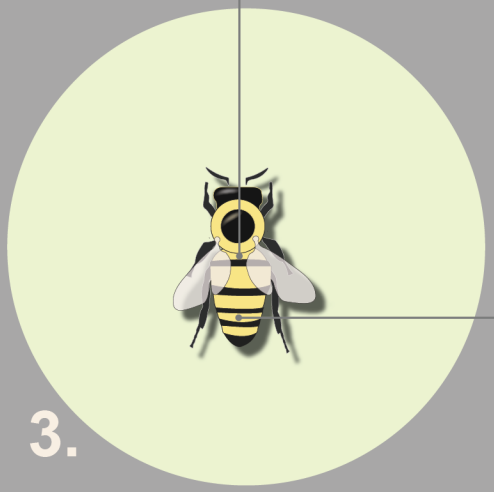


2.

California Bumble Bee
(Bombus Californicus)

The Female California bumble bee also has yellow coloring on the T4 segment of the thorax. The male California bumble bee can exhibit 3 different types of coloring (see SFSU link for additional information).

Smaller and More Slender Than Bumble Bee Counterparts



3.

European Honeybee
(Apis Mellifera)

Alternating Yellow and Black Coloring

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Edited by

Travis Longcore
University of Southern California

September 2016

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Baldwin Hills Conservancy
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Proposition A