

Angeles Link – Phase 1 Quarterly Report (Q3 2024)

For the period of July 1, 2024 through September 30, 2024

Appendix 1G - Draft Reports: Environmental Analysis (Part 2 - Attachments A & B)

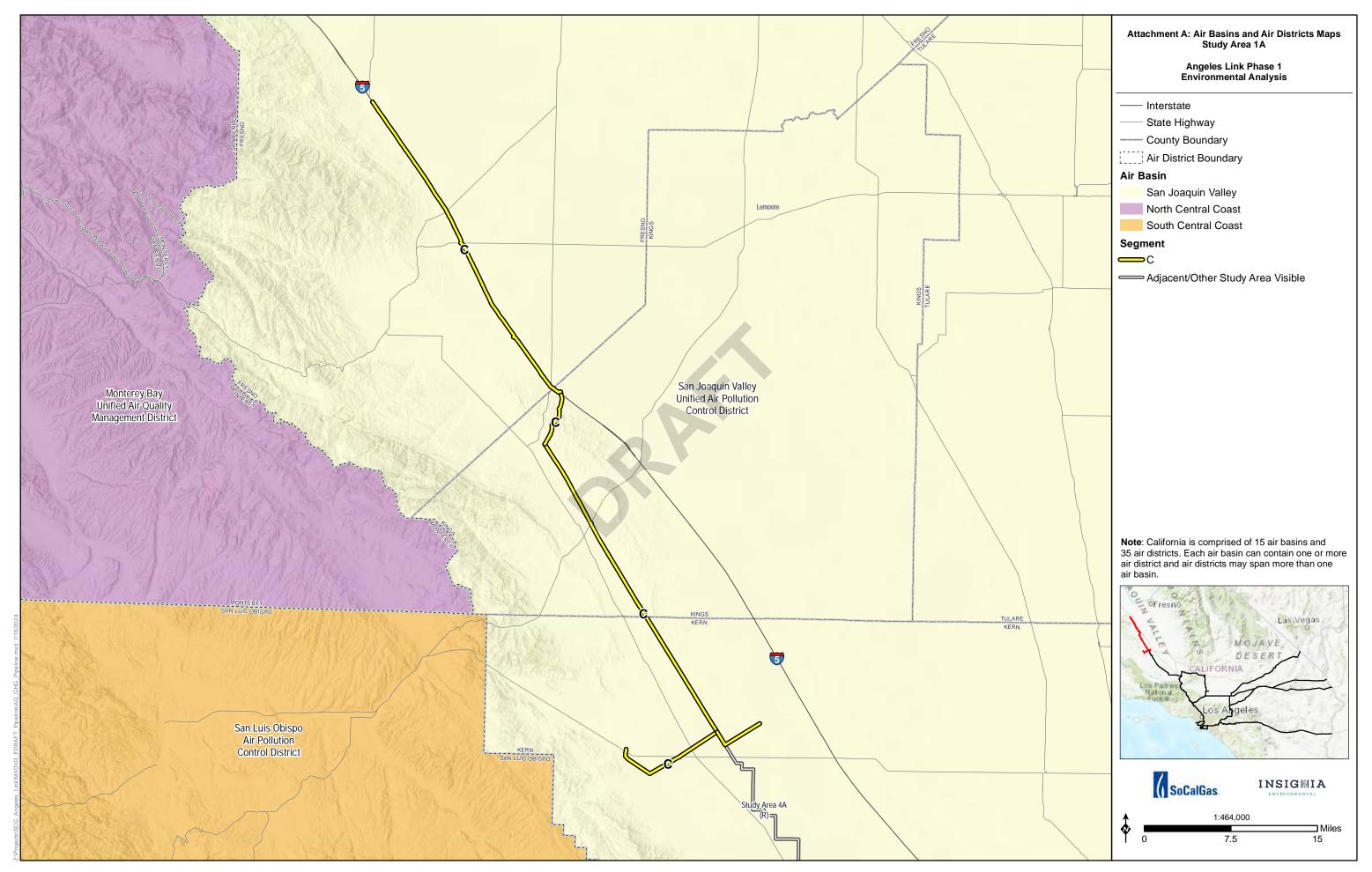


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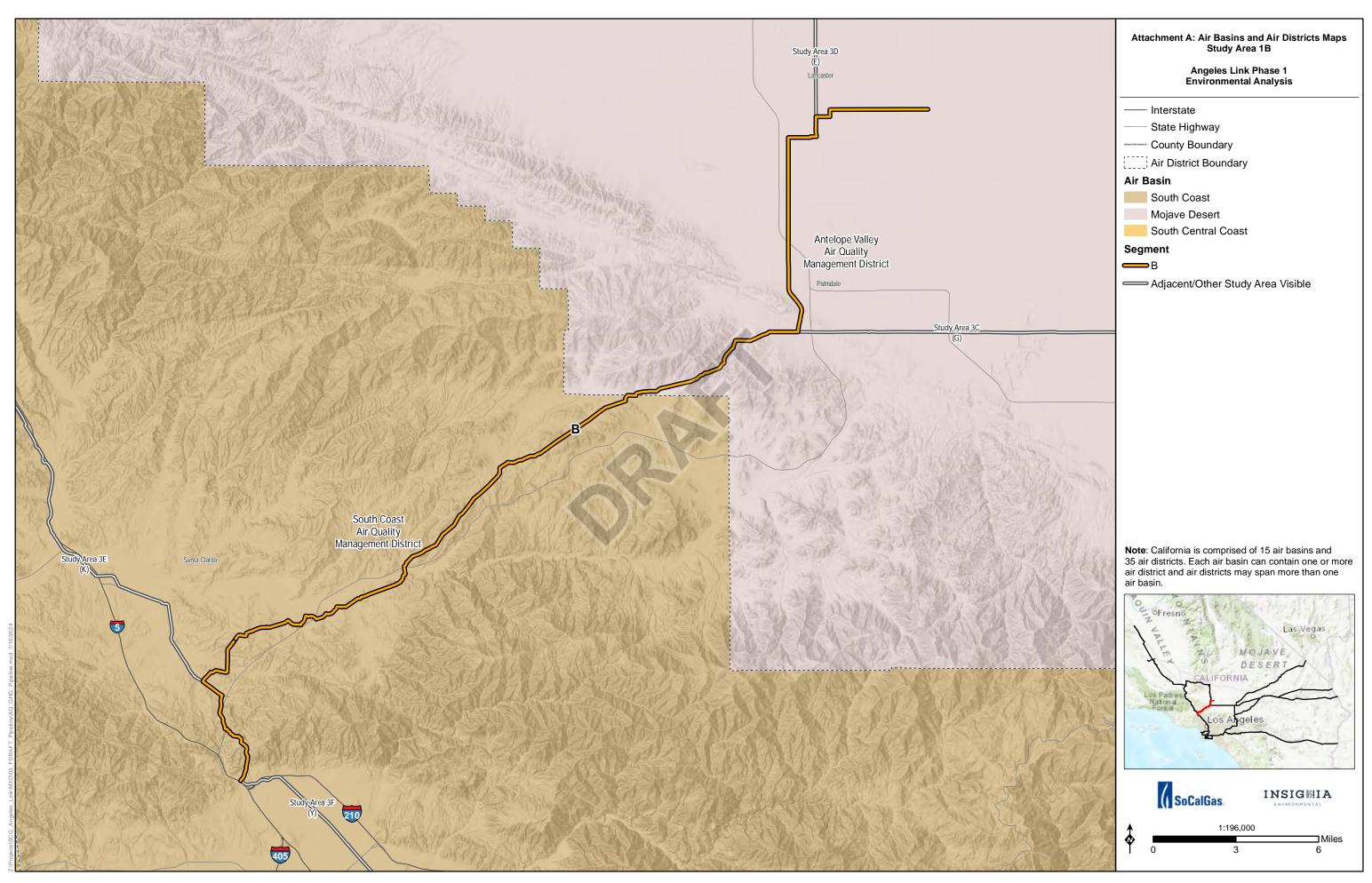
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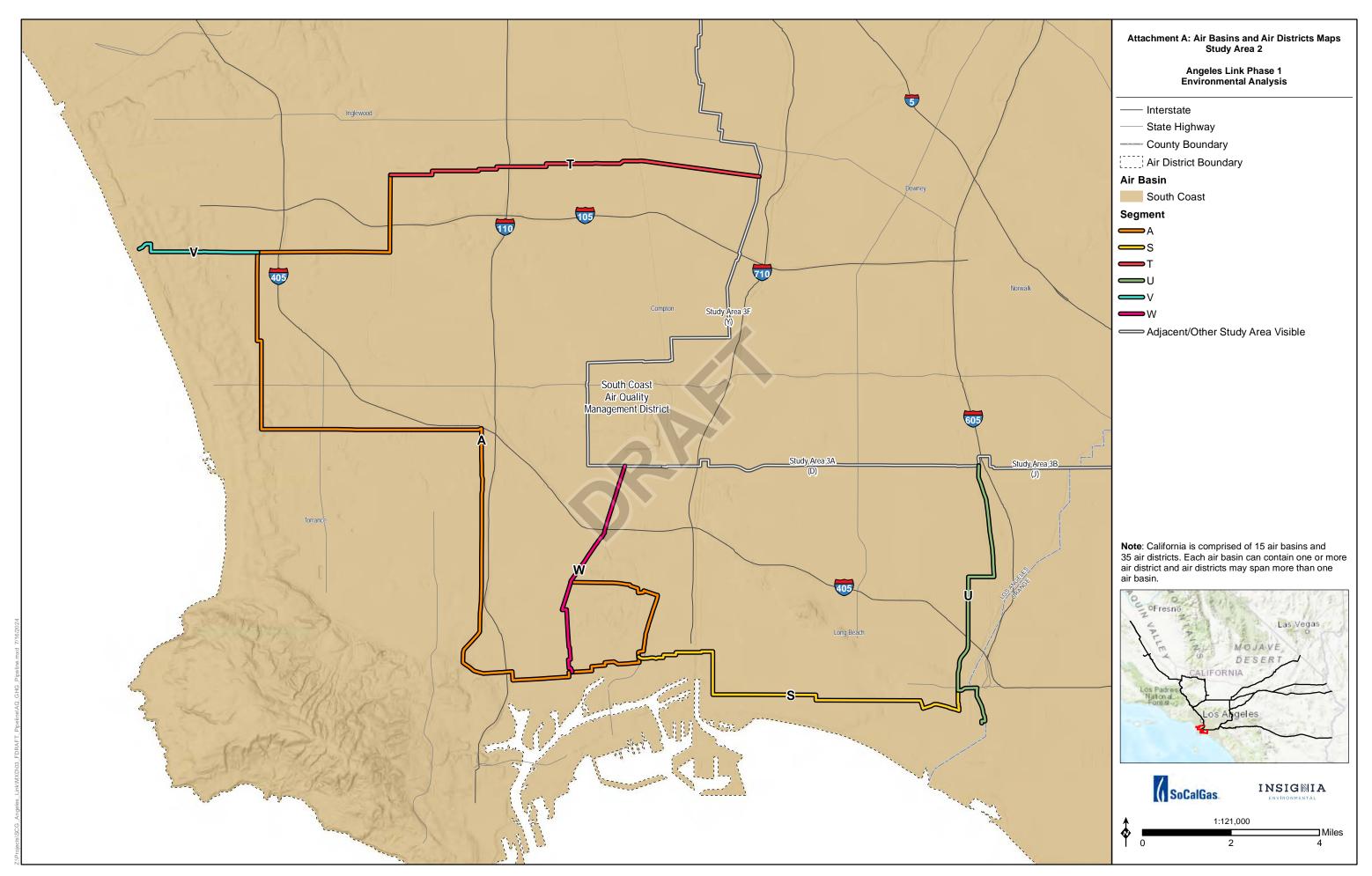
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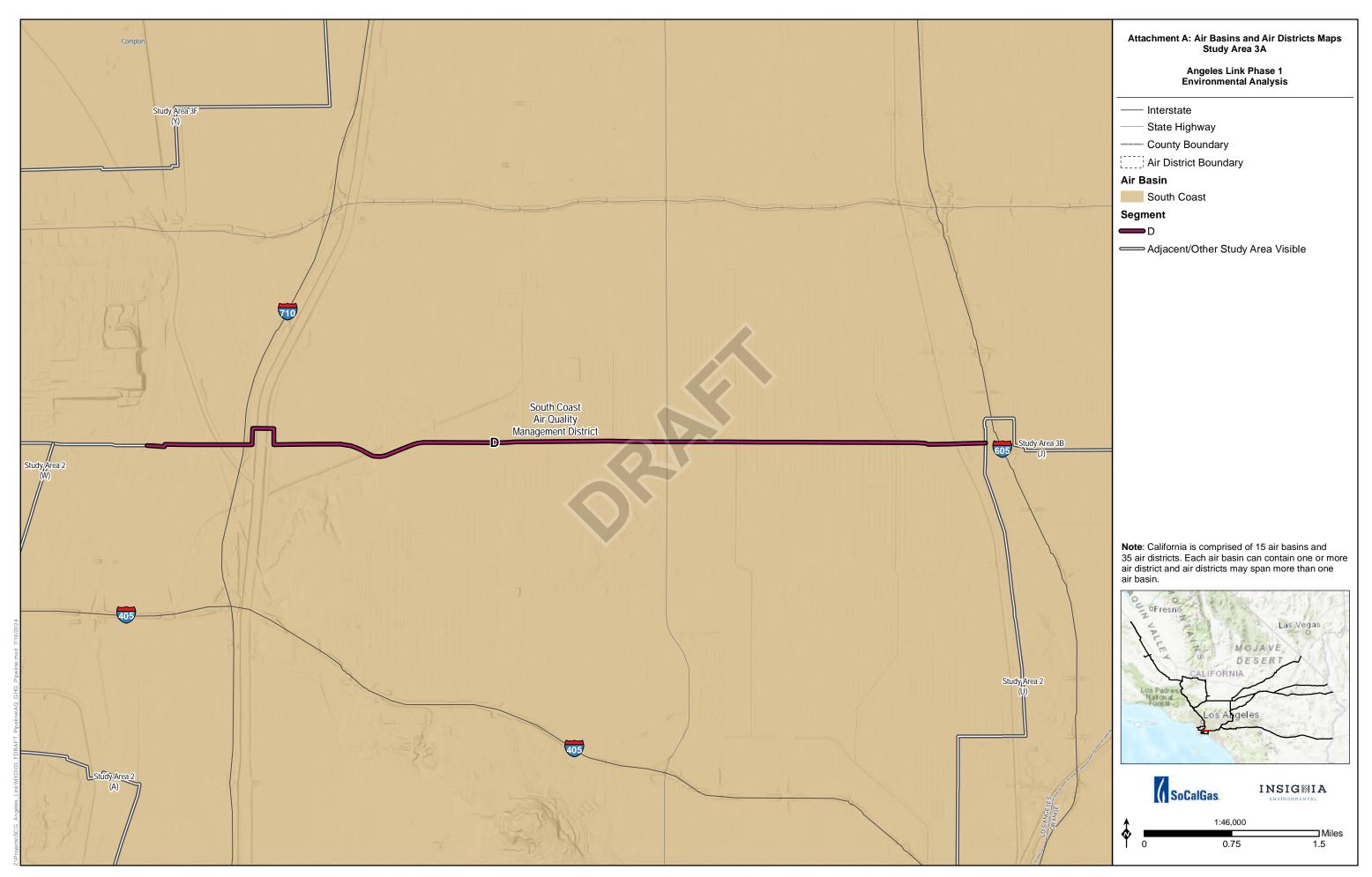
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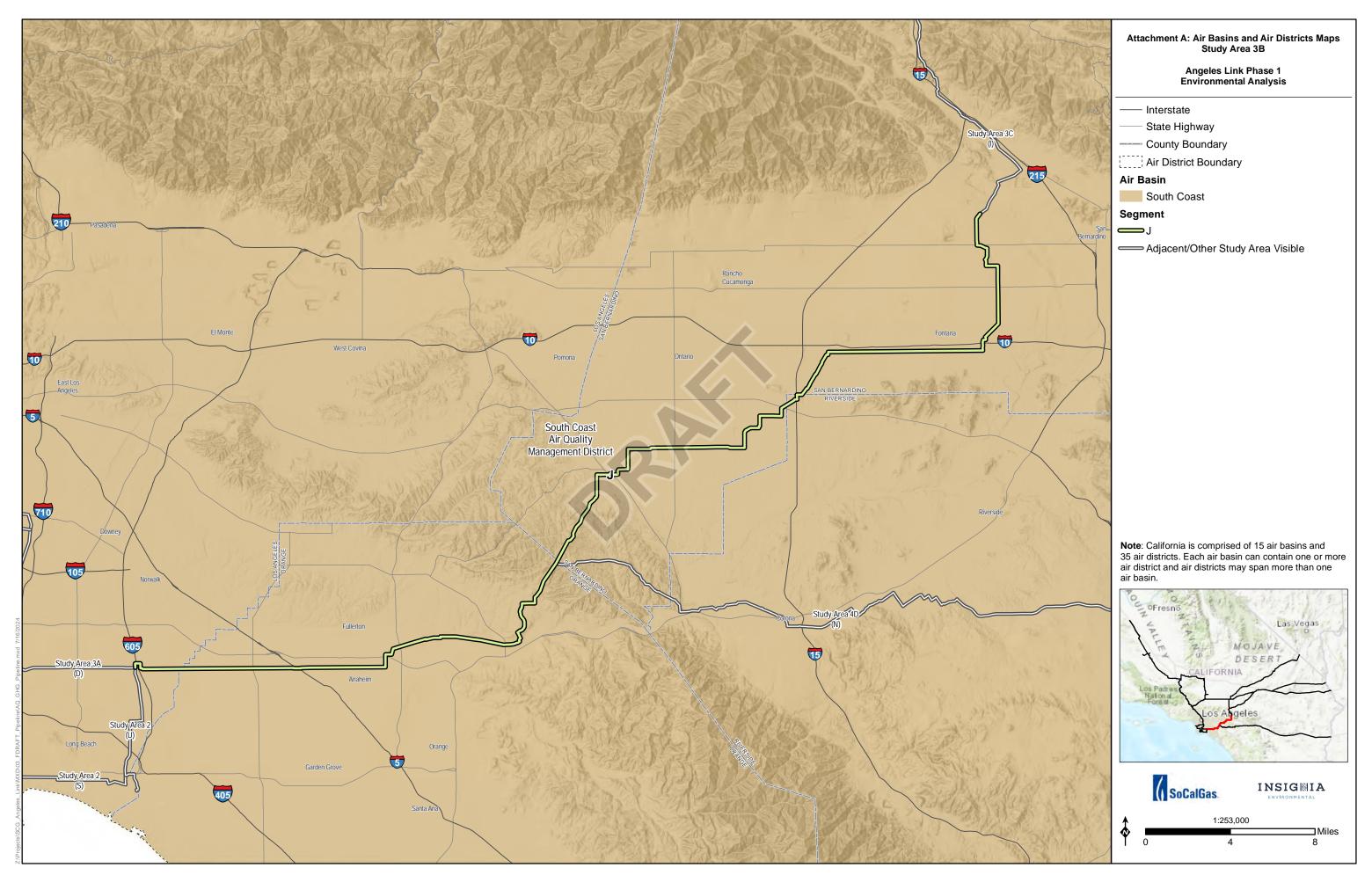
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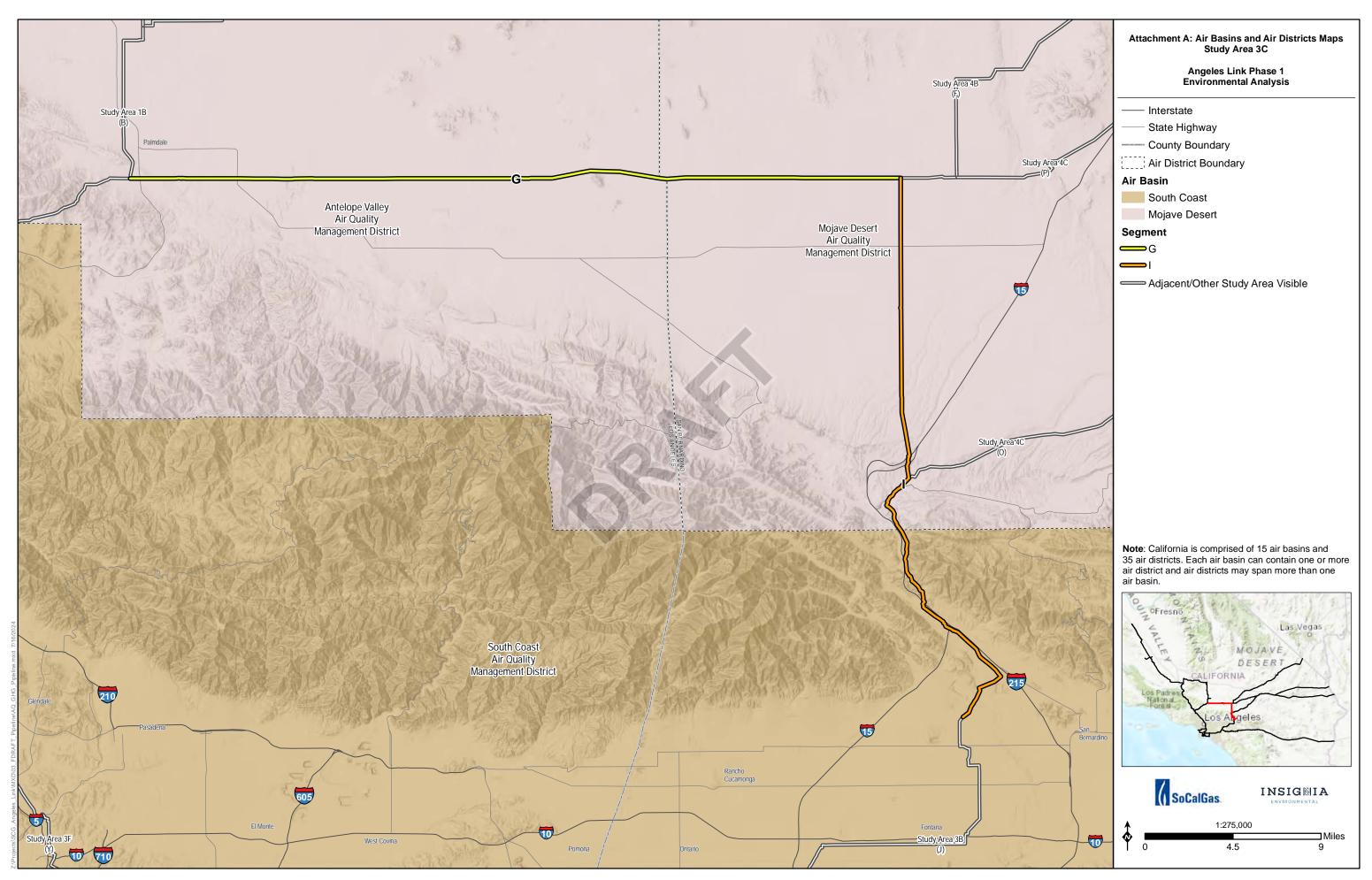
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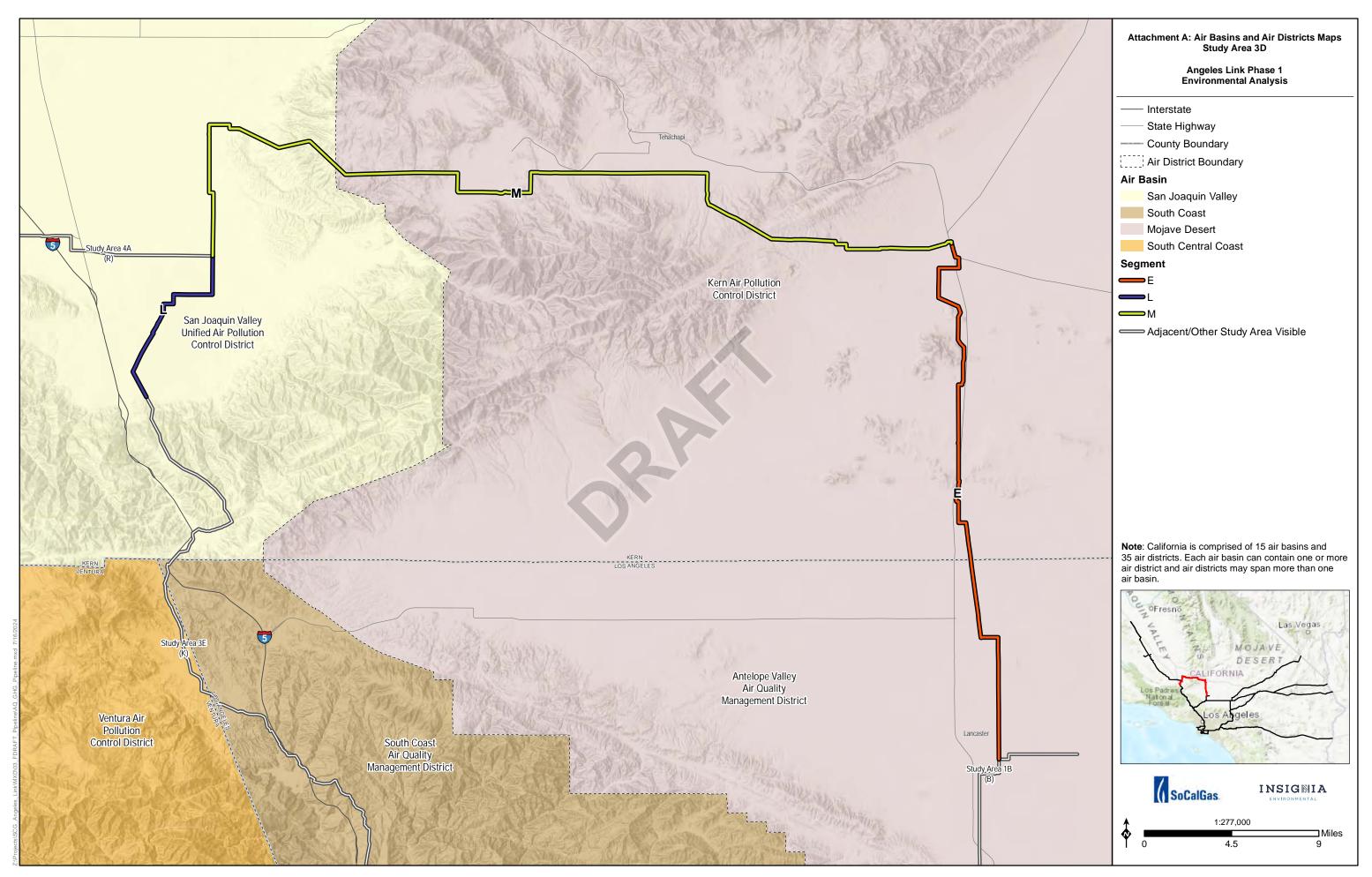
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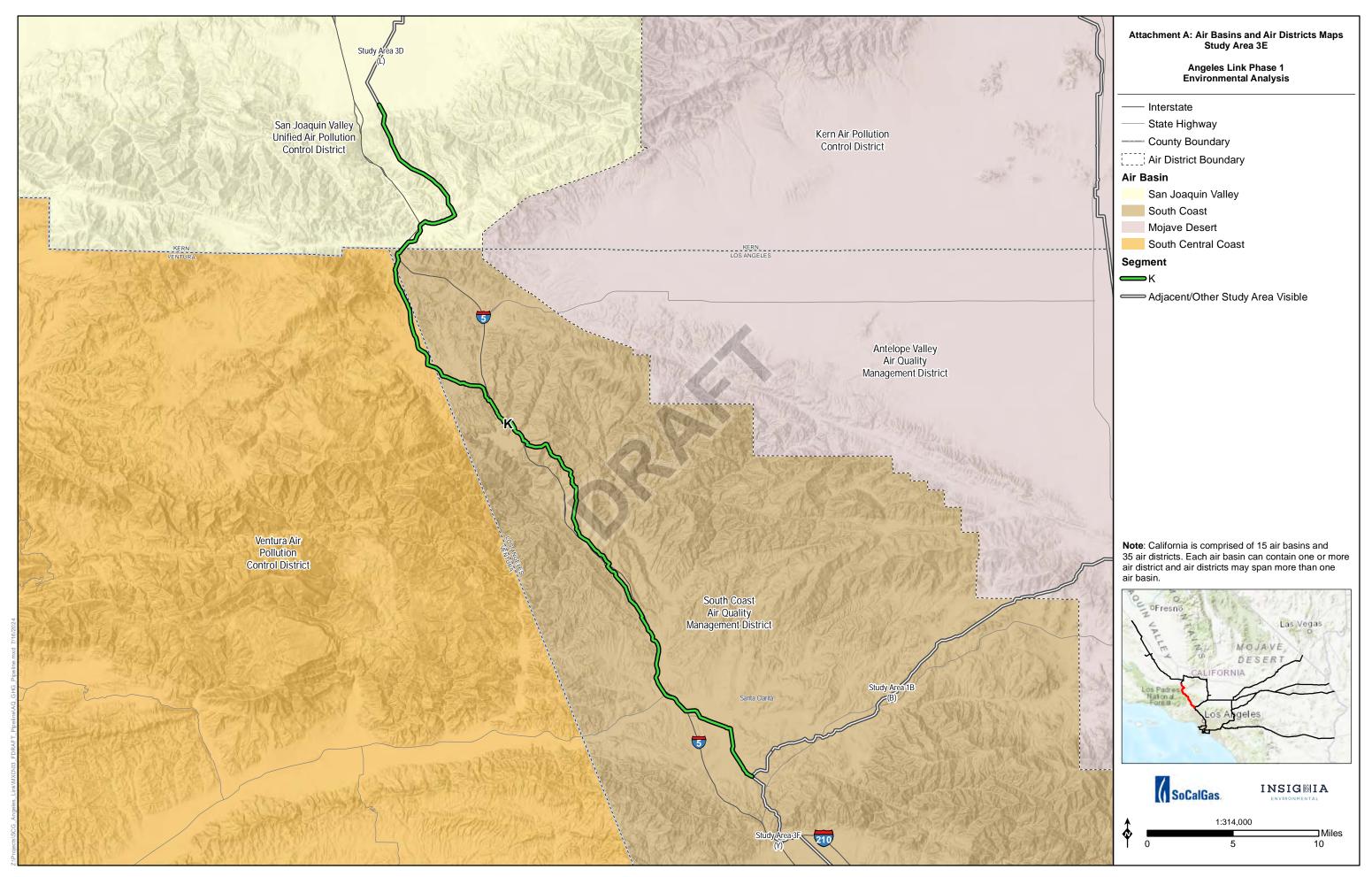
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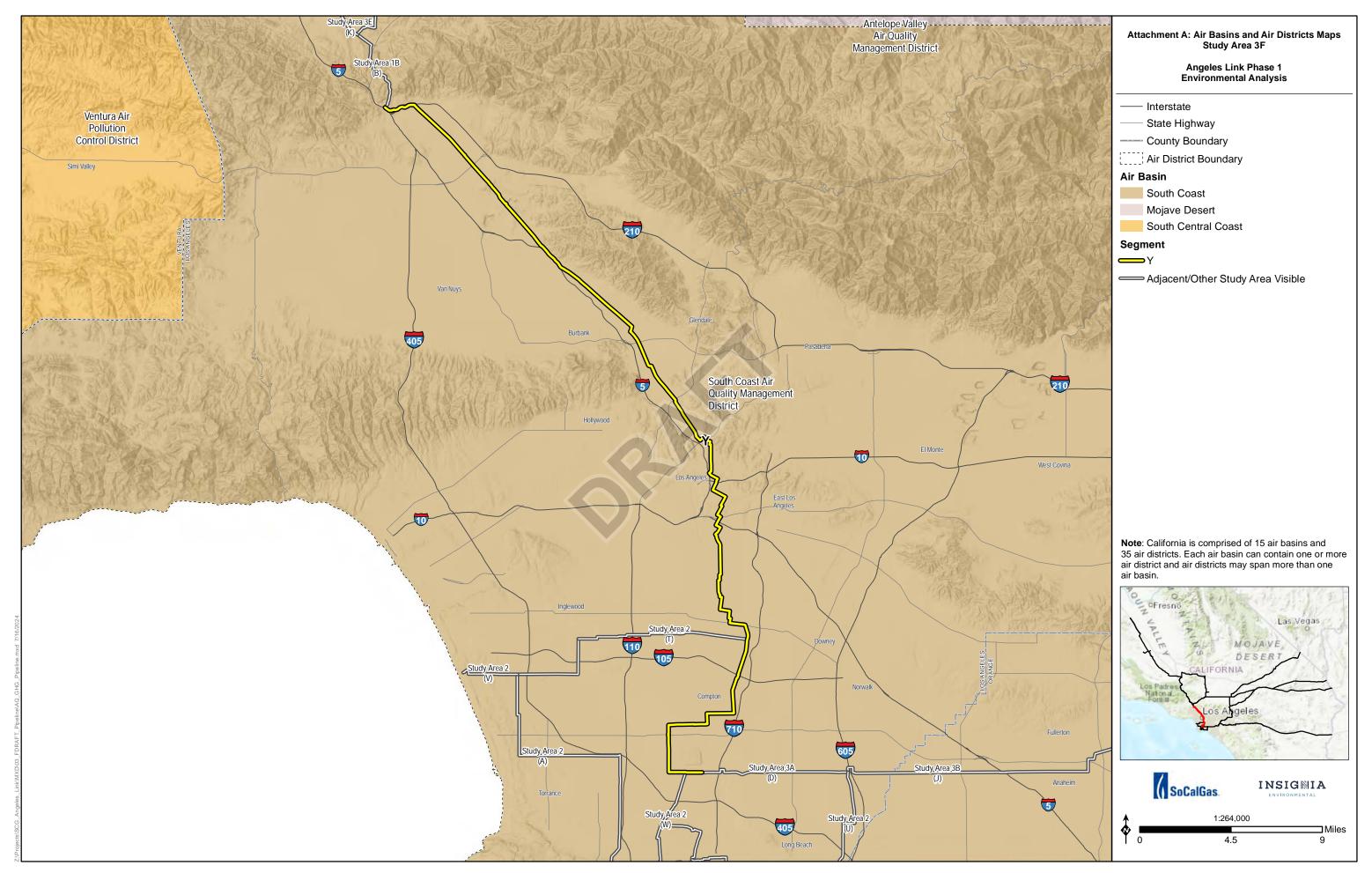
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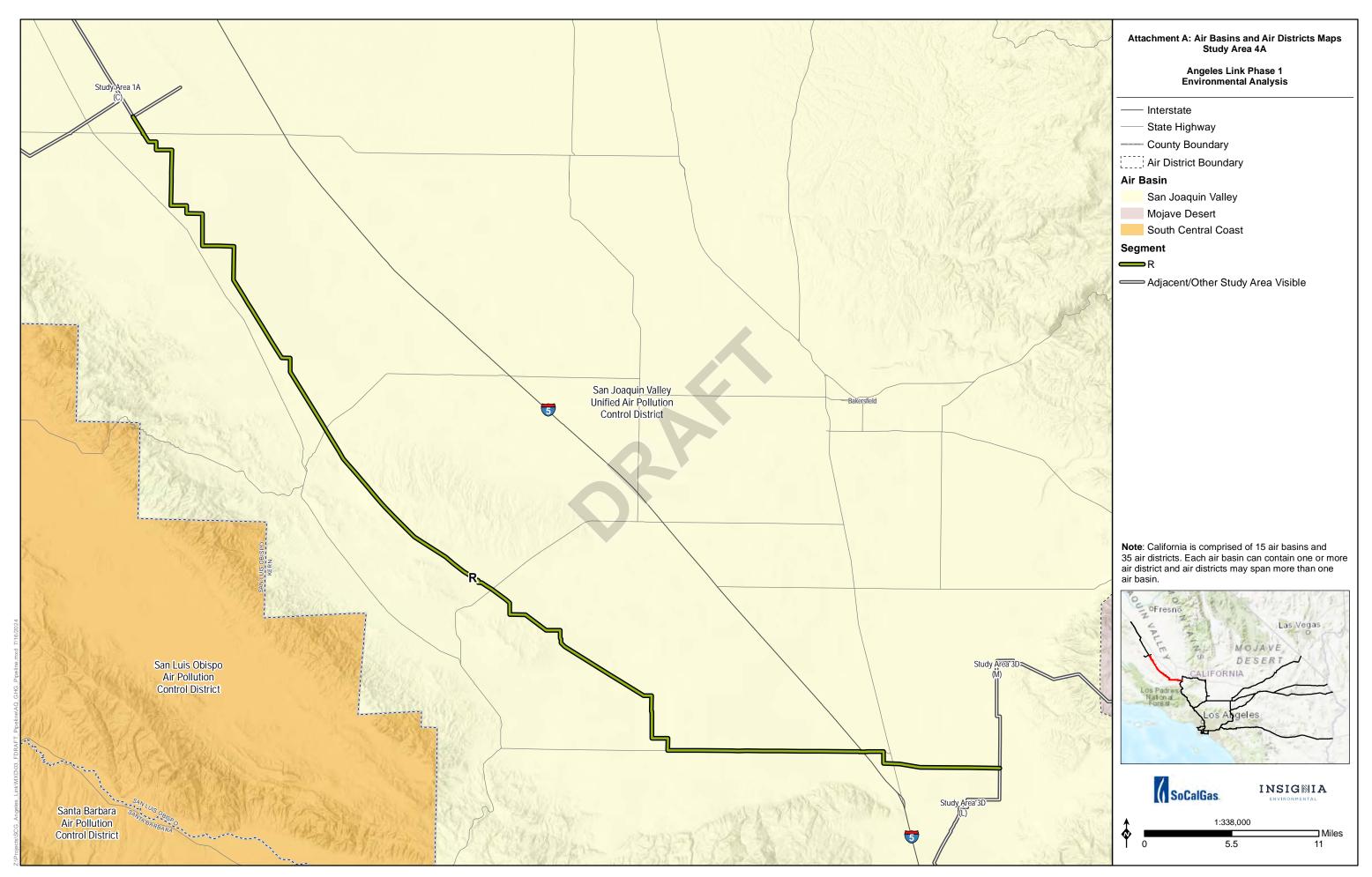
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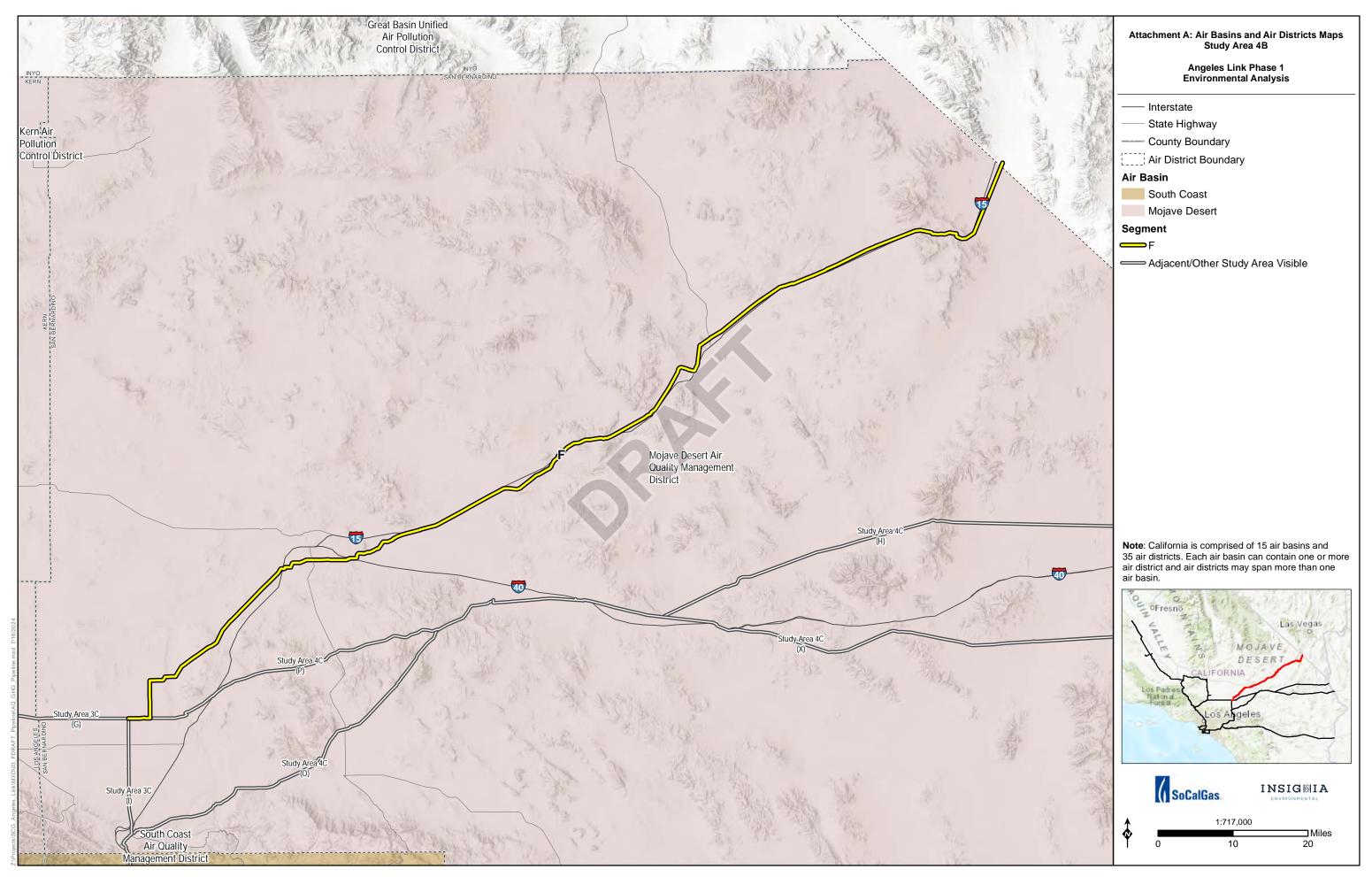
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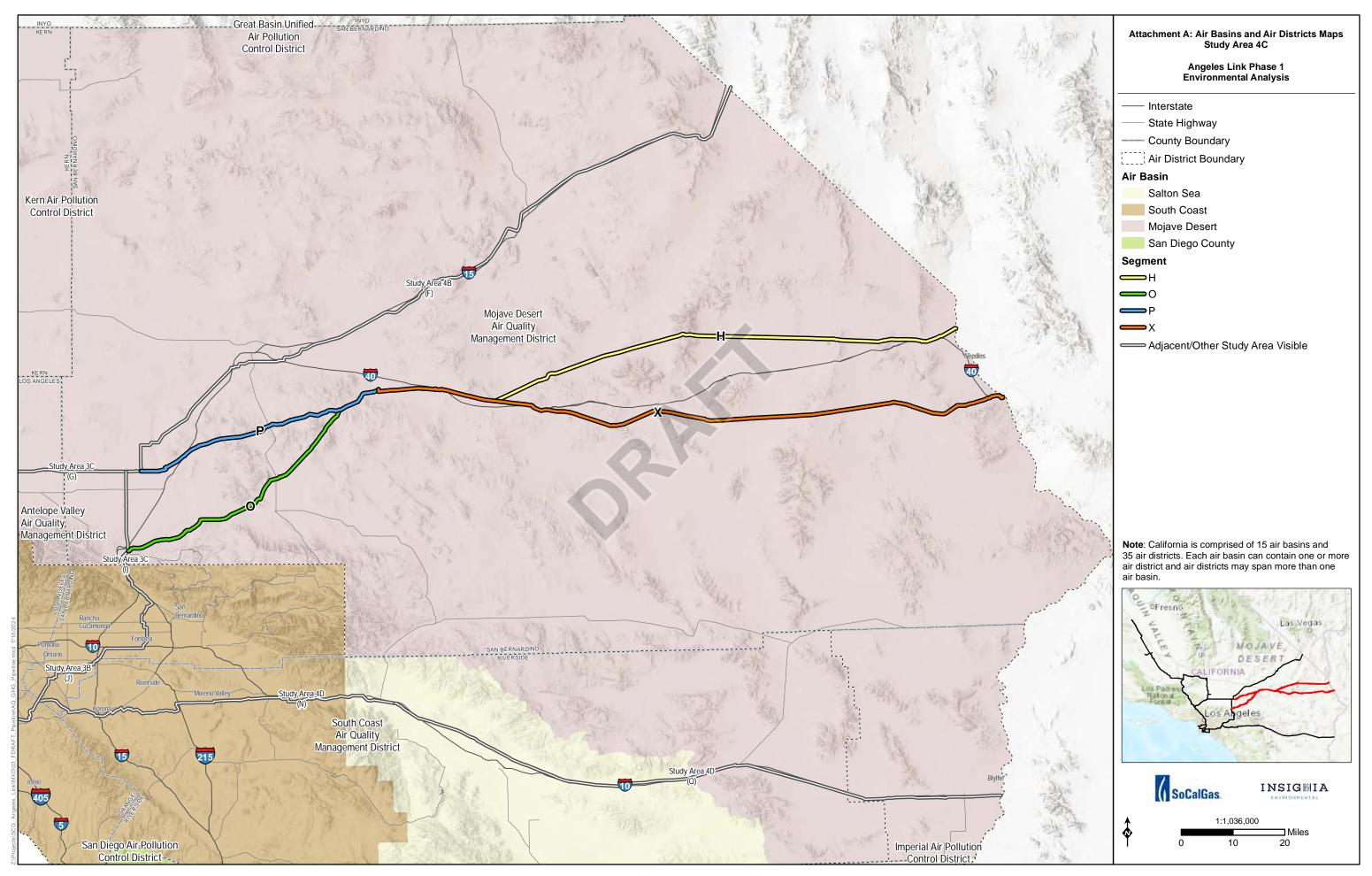
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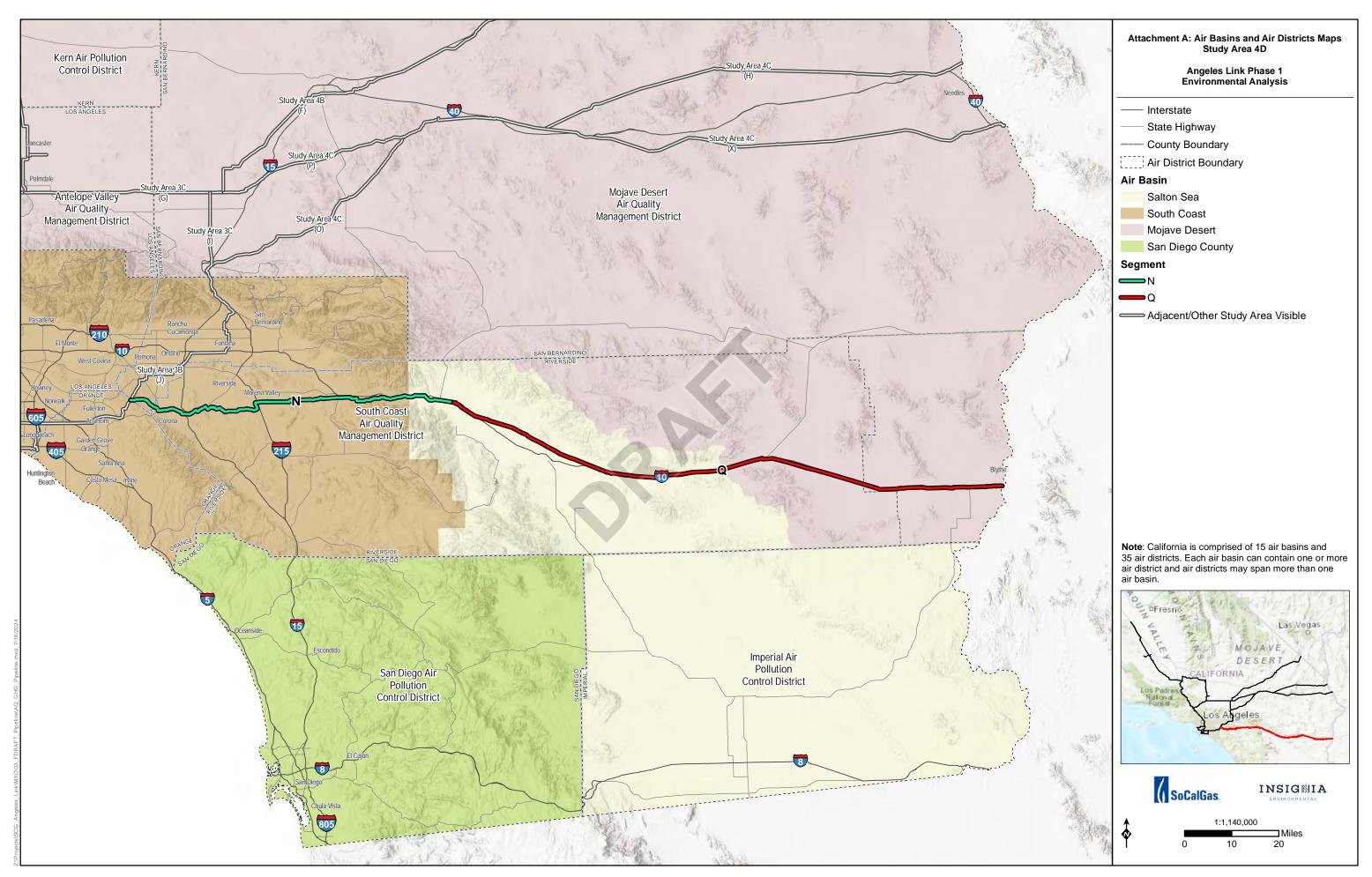
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ATTACHMENT B-1: VEGETATION COMMUNITIES WITHIN THE 200-FOO	OT-WIDE CORRIDOR

ATTACHMENT B-1: VEGETATION COMMUNITIES WITHIN THE 200-FOOT-WIDE CORRIDOR

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
Study Area 1	A	·	
	Alkali Desert Scrub	0.4	N/A
	Alkali Desert Scrub, Desert Scrub	4.6	0.2
	Annual Grassland	598.0	25.0
	Annual Grassland, Alkali Desert Scrub	51.9	2.1
	Barren	16.1	0.7
	Cropland	199.8	8.3
	Deciduous Orchard	0.1	N/A
С	Deciduous Orchard, Evergreen Orchard, Vineyard, Irrigated Row and Field Crops	731.8	31.1
	Dryland Grain Crops	27.3	0.9
	Evergreen Orchard	6.1	0.1
	Irrigated Hayfield	3.5	0.2
	Irrigated Row and Field Crops	18.2	0.8
	Urban	277.2	10.5
	Valley Foothill Riparian	0.7	<0.1
	Vineyard	0.2	N/A
tudy Area 1	В		
D	Alkali Desert Scrub	3.9	0.3
В	Annual Grassland	109.8	4.6

¹ For boxes in this column that are not applicable (N/A), it was determined that the pipeline centerline would not cross this habitat type.

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Barren	62.2	3.1
	Chamise-Redshank Chaparral	6.1	0.3
	Coastal Oak Woodland	18.3	0.6
	Coastal Scrub	122.2	4.9
	Desert Scrub	9.5	0.4
	Desert Wash	0.5	<0.1
	Irrigated Row and Field Crops	0.5	<0.1
	Joshua Tree	25.6	1.4
	Juniper	50.8	1.7
	Lacustrine	1.3	0.1
	Mixed Chaparral	177.6	7.1
	Montane Chaparral	8.5	0.2
	Sagebrush	56.3	2.2
	Urban	452.7	18.9
	Valley Foothill Riparian	2.1	<0.1
Study Area 2		·	
	Annual Grassland	5.2	0.1
	Barren	0.3	N/A
Α	Coastal Scrub	0.1	N/A
	Lacustrine	0.6	<0.1
	Urban	662.3	27.5
S	Annual Grassland	<0.1	N/A

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Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Barren	0.1	N/A
	Lacustrine	2.3	0.1
	Urban	219.2	9.1
Т	Urban	209.5	8.6
	Annual Grassland	9.2	0.4
	Barren	4.0	0.2
U	Lacustrine	0.2	<0.1
	Urban	159.2	6.6
V	Annual Grassland	0.1	N/A
V	Urban	70.8	2.9
	Annual Grassland	<0.1	N/A
W	Lacustrine	0.5	<0.1
	Urban	126.6	5.2
Study Area 3A			
	Barren	0.1	<0.1
D	Evergreen Orchard	0.2	<0.1
D	Lacustrine	1.4	0.1
	Urban	181.1	7.4
Study Area 3E	Study Area 3B		
	Annual Grassland	168.4	6.8
J	Barren	13.9	0.4
	Coastal Oak Woodland	3.6	0.1

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Coastal Scrub	15.9	0.8
	Deciduous Orchard	0.7	N/A
	Desert Wash	2.8	0.1
	Eucalyptus	0.3	<0.1
	Evergreen Orchard	0.9	<0.1
	Mixed Chaparral	21.0	0.8
	Pasture	112.6	4.6
	Urban	1118.1	46.6
Study Area 30	2	<u>.</u>	
	Alkali Desert Scrub	27.8	1.3
	Annual Grassland	44.6	1.5
	Barren	0.5	N/A
	Bitterbrush	2.8	0.1
	Desert Riparian	2.8	0.1
0	Desert Scrub	446.6	19.0
G	Desert Wash	14.7	0.6
	Irrigated Row and Field Crops	50.3	1.7
	Joshua Tree	70.6	3.0
	Juniper	13.9	0.6
	Sagebrush	48.1	2.1
	Urban	234.3	9.5
I	Annual Grassland	3.1	0.1

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Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Barren	21.1	1.3
	Chamise-Redshank Chaparral	16.4	0.7
	Chamise-Redshank Chaparral, Mixed Chaparral	7.5	0.3
	Coastal Scrub	5.3	<0.1
	Desert Riparian	4.9	0.2
	Desert Scrub	182.2	7.7
	Desert Scrub, Desert Wash	0.8	<0.1
	Desert Wash	75.4	2.7
	Irrigated Row and Field Crops	0.8	0.1
	Joshua Tree	37.8	1.7
	Juniper	1.0	N/A
	Lacustrine	1.1	<0.1
	Mixed Chaparral	245.6	9.8
	Riverine	0.5	N/A
	Sagebrush	34.3	1.6
	Urban	135.6	5.7
Study Area 30)		
	Alkali Desert Scrub	233.2	10.2
	Annual Grassland	30.0	0.6
Е	Desert Scrub	258.5	11.0
	Joshua Tree	7.0	0.3
	Sagebrush	3.0	0.1

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Urban	207.6	8.2
	Annual Grassland	74.2	3.0
	Deciduous Orchard, Evergreen Orchard, Vineyard, Irrigated Row and Field Crops	150.2	6.3
L	Lacustrine, Riverine	0.5	<0.1
	Valley Foothill Riparian, Desert Riparian	2.8	0.1
	Alkali Desert Scrub, Desert Scrub	3.2	0.2
	Annual Grassland	426.8	17.0
	Barren	11.6	0.4
	Blue Oak Woodland	53.2	2.1
	Blue Oak-Foothill Pine	16.6	0.7
	Blue Oak-Foothill Pine, Blue Oak Woodland	5.1	N/A
	Coastal Scrub	23.2	1.0
	Cropland	29.6	1.2
M	Deciduous Orchard, Evergreen Orchard, Vineyard, Irrigated Hay Field	62.1	2.5
	Deciduous Orchard, Evergreen Orchard, Vineyard, Irrigated Row and Field Crops	212.4	8.8
	Desert Riparian	0.7	<0.1
	Desert Scrub	94.6	3.9
	Desert Scrub, Desert Wash	6.3	0.3
	Desert Wash	2.6	0.1
	Joshua Tree	48.5	2.0
	Juniper	22.0	0.9
	Lacustrine	0.1	N/A

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Lacustrine, Riverine	0.3	<0.1
	Mixed Chaparral	14.5	0.6
	Montane Hardwood	0.6	<0.1
	Montane Riparian	0.9	<0.1
	Sagebrush	114.8	2.5
	Urban	84.4	6.6
	Valley Foothill Riparian	2.2	0.1
	Valley Oak Woodland	3.3	0.2
Study Area 3E			
	Annual Grassland	426.4	17.6
	Barren	78.5	4.3
	Blue Oak Woodland	5.8	0.1
	Chamise-Redshank Chaparral	18.4	0.8
	Coastal Oak Woodland	0.3	N/A
	Coastal Scrub	195.3	8.0
K	Desert Wash	0.1	N/A
	Juniper	6.9	0.2
	Mixed Chaparral	192.2	7.5
	Montane Hardwood	4.2	0.1
	Montane Riparian	2.4	0.1
	Pasture	5.1	0.2
	Pinyon-Juniper	2.6	0.1

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Sagebrush	103.6	4.1
	Urban	289.6	12.0
	Valley Foothill Riparian	5.7	0.2
	Valley Oak Woodland	1.5	<0.1
	Vineyard	0.2	N/A
	Wet Meadow	3.8	0.1
Study Area 3F			
	Annual Grassland	0.9	<0.1
	Barren	3.4	0.1
	Coastal Scrub	5.7	0.2
Υ	Evergreen Orchard	3.2	0.2
	Lacustrine	0.2	N/A
	Mixed Chaparral	<0.1	N/A
	Urban	1161.8	48.1
Study Area 4A			
	Alkali Desert Scrub	42.1	1.9
	Alkali Desert Scrub, Desert Scrub	419.7	15.4
	Annual Grassland	221.1	8.9
R	Annual Grassland, Alkali Desert Scrub	44.0	2.0
	Barren	90.3	5.6
	Deciduous Orchard, Evergreen Orchard, Vineyard, Irrigated Row and Field Crops	1105.0	45.2
	Desert Wash	40.0	1.6

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Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Lacustrine, Riverine	1.9	0.1
	Urban	14.7	0.9
	Valley Foothill Riparian, Desert Riparian	1.1	<0.1
Study Area 4E	3		
	Alkali Desert Scrub	176.7	7.2
	Annual Grassland	17.7	0.7
	Barren	69.2	2.8
	Bitterbrush	12.8	0.5
	Desert Riparian	83.9	3.5
	Desert Scrub	2426.7	100.6
	Desert Scrub, Desert Wash	5.3	0.2
F	Desert Succulent Shrub	77.0	3.1
	Desert Wash	150.4	6.4
	Irrigated Row and Field Crops	4.7	0.2
	Joshua Tree	426.7	17.5
	Perennial Grassland	99.2	4.1
	Sagebrush	0.9	N/A
	Urban	137.0	5.4
	Valley Foothill Riparian	1.0	<0.1
Study Area 40	Study Area 4C		
11	Barren	2.0	0.1
Н	Desert Scrub	1920.3	79.2

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Desert Succulent Shrub	142.5	5.9
	Desert Wash	156.6	6.5
	Urban	11.4	0.5
	Alkali Desert Scrub	185.1	7.7
	Annual Grassland	38.6	1.6
	Barren	19.3	0.8
	Deciduous Orchard, Vineyard	1.8	N/A
	Desert Riparian	<0.1	N/A
	Desert Scrub	493.8	20.9
	Desert Scrub, Desert Wash	35.6	1.5
0	Desert Succulent Shrub	118.0	4.7
	Desert Succulent Shrub, Desert Wash	22.6	0.9
	Desert Wash	5.4	0.3
	Joshua Tree	44.2	1.5
	Juniper	63.0	2.3
	Lacustrine	<0.1	N/A
	Mixed Chaparral	50.0	1.7
	Sagebrush	90.9	4.2
	Urban	110.2	4.7
	Alkali Desert Scrub	23.9	0.9
Р	Annual Grassland	27.3	1.1
	Barren	0.8	<0.1

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹		
	Desert Riparian	0.7	<0.1		
	Desert Scrub	1087.5	44.8		
	Desert Scrub, Desert Wash	8.4	0.3		
	Desert Succulent Shrub	11.0	0.4		
	Desert Succulent Shrub, Desert Wash	0.6	<0.1		
	Desert Wash	17.6	0.6		
	Riverine	0.5	<0.1		
	Urban	53.0	2.5		
	Alkali Desert Scrub	1.4	0.1		
	Barren	31.4	1.3		
Х	Desert Scrub	2740.9	113.3		
Χ	Desert Wash	241.2	9.8		
	Riverine	1.5	<0.1		
	Urban	7.6	0.3		
Study Area 4	Study Area 4D				
	Annual Grassland	360.0	14.6		
	Barren	56.8	2.4		
	Coastal Oak Woodland	9.1	0.3		
N	Coastal Scrub	127.9	5.3		
	Cropland	0.4	<0.1		
	Cropland, Orchard - Vineyard	112.2	4.5		
	Desert Scrub	137.9	5.4		

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Desert Wash	43.1	1.7
	Dryland Grain Crops	<0.1	N/A
	Eucalyptus	5.5	0.3
	Fresh Emergent Wetland	0.8	<0.1
	Lacustrine	2.4	0.1
	Mixed Chaparral	33.4	1.1
	Riverine, Lacustrine	2.8	0.1
	Urban	981.4	41.6
	Valley Foothill Riparian	13.2	0.5
	Alkali Desert Scrub	36.4	1.5
	Annual Grassland	0.1	N/A
	Barren	266.3	11.3
	Cropland	35.3	1.1
	Deciduous Orchard	0.5	N/A
	Deciduous Orchard, Vineyard	37.9	1.6
Q	Desert Riparian	0.5	<0.1
	Desert Scrub	2067.4	85.0
	Desert Scrub, Desert Wash	3.5	0.1
	Desert Wash	308.6	12.9
	Dryland Grain Crops	10.5	0.4
	Irrigated Hayfield	37.3	1.1
	Irrigated Row and Field Crops	11.6	0.4

Segment	Habitat Type	Approximate Area (acres)	Miles Crossed ¹
	Orchard - Vineyard	1.1	<0.1
	Pasture	0.5	<0.1
	Urban	153.1	6.9

ATTACHMENT B-2: HABITAT TYPE DESCRIPTIONS

DRAFT REPORT Attachment B-2: Habitat Type Descriptions

ATTACHMENT B-2: HABITAT TYPE DESCRIPTIONS

The habitat type descriptions included in the following table are derived directly from the habitat type's structure, composition, and physical setting information developed by the California Wildlife Habitat Relationships System California Department of Fish and Game (CDFG) California Interagency Wildlife Task Group¹ and originally published in 1988 by CDFG².

Habitat Type	Habitat Type Description
Alkali Desert Scrub	Generally subdivided into two phases: xerophytic and halophytic. The xerophytic phase is composed of primary species such as various species of shrubby saltbushes, especially allscale, desert holly, fourwing saltbush, Nuttall saltbush, big saltbush, Parry saltbush, shadscale, Torrey salt bush, and western Mojave saltbush. Some of the primary perennial shrub and subshrub species of the halophytic phase include arrow-weed, black greasewood, alkali goldenbush; species of kochia, iodinebush, alkali rubber rabbitbrush; species of seablite, in particular, alkali blite, and Mojave seablite; and species of saltbush and saltcedar. Alkali Scrub types can generally be found surrounding the receding shores of large prehistoric lakes or alkali playas that mark the locations of dry lake beds.
Annual Grassland	Introduced annual grasses such as include wild oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue are the dominant plant species in this habitat. Annual Grassland habitat occurs mostly on flat plains to gently rolling foothills. Common soil orders include Entisols and Alfisols.
Barren	Defined by the absence of vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or non-wildland species and <10% cover by tree or shrub species is defined this way. The physical settings for permanently barren habitat represent extreme environments for vegetation.
Bitterbrush	Only occasionally found in pure stands. Antelope bitterbrush often occurs as a codominant with big sagebrush or rubber rabbitbrush. It is also found with gray horsebrush, Douglas rabbitbrush, Mormon tea, curlleaf mountain mahogany, and desert peach. Bitterbrush is found on flats and slopes with deep, well-drained, rapidly permeable soils having a slightly acid reaction.
Blue Oak Woodland	Blue oak is the dominant species, comprising 85 to 100 percent of the trees present. Common associates in the canopy are coast live oak in the Coast Range, interior live oak in the Sierra Nevada, valley oak where deep soil has formed, and western juniper in the Cascade Range. In the Tehachapi and Paiute Ranges in Kern County, this habitat mixes with species from east of the mountains California juniper and single-leaf pinyon. Blue Oak Woodlands are usually associated with shallow, rocky, infertile, well-drained soils from a variety of parent materials.
Blue Oak-Foothill Pine	Blue oak and foothill pine typically comprise the overstory of this habitat, with blue oak usually most abundant. Stands dominated by foothill pine tend to lose their blue oak, which is intolerant of shade. The habitat occurs in a typically Mediterranean climate hot, dry summers and cool, wet winters.
Chamise-Redshank Chaparral	May consist of nearly pure stands of chamise or redshank, a mixture of both, or with other shrubs. The purest stands of chamise occur on xeric, south-facing slopes. Chamise-dominated stands are most common on south- and west-facing slopes; redshank is found on all aspects.
Coastal Oak Woodland	Composition of both overstory trees and understory of coastal oak woodland varies and reflects the environmental diversity over which this habitat occurs. From Sonoma County south, the coastal oak woodlands are usually dominated by coast live oak. In many coastal regions, coast live oak is the only overstory species. In mesic sites, trees characteristic of mixed evergreen forests mix with coast live oak, such as California bay, madrone, tanbark oak, and canyon live oak. On drier, interior sites, coast live oak mixes with valley oak, blue oak, and foothill pine. Coastal oak woodlands occupy a variety of mediterranean type climates that vary from north to south and west to east.
Coastal Scrub	No single species is typical of all Coastal Scrub stands. As with structure, composition changes most markedly with progressively more xeric conditions from north to south along the coast. With the change from mesic to xeric sites, dominance appears to shift from evergreen species in the north to drought-deciduous species in the south. Coastal Scrub seems to tolerate drier conditions than its associated habitats. It is typical of areas with steep, south-facing slopes; sandy, mudstone or shale soils; and average annual rainfall of less than 30 cm (12 in). However, it also regularly occurs on stabilized dunes, flat terraces, and moderate slopes of all aspects where average annual rainfall is up to 60 cm (24 in).
Cropland	Cropland vegetation is grown as a monoculture, using tillage or herbicides to eliminate unwanted vegetation. Croplands are located on flat to gently rolling terrain.
Deciduous Orchard	The understory in deciduous orchards often has herbaceous annuals and perennials during the winter months. Numerous grasses and legumes are planted as cover crops in deciduous orchards either as single species or in mixes. Deciduous orchards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. Though some deciduous orchards are non-irrigated, most are irrigated.
Desert Riparian	Dominant canopy species of Desert Riparian habitats vary. Overstory species include tamarisk, velvet ash, mesquite, screwbean mesquite, Fremont cottonwood, and willows such as Gooding, Hinds, and arroyo. The subcanopy includes smaller individuals of the canopy species as well as quailbush, Mojave seablight, desert lavender, seep willow, and arrowweed. Soils vary from silty alluvial to rocky, sandy, well-drained substrates.
Desert Scrub	Creasotebush is often considered a dominant of Desert Scrub habitats, but its dominance is usually owing to its tall stature rather than density. Generally, Desert Scrub habitats have low species diversity; however, many plant species are found in the habitat. These species include catclaw acacia, desert agave, coastal bladderpod, white brittlebush, burrobush, white bursage, barrel and hedgehog cactus, branched pencil and teddybear cholla, Palmer's coldenia, Wiggins croton, desert globemallow, jojoba, littleleaf krameria, ocotillo, beavertail pricklypear, Douglas and rubber rabbitbrush, desert sand verbena, desert senna, squaw waterweed, Anderson's wolfberry, and Mojave yucca. Desert Scrub habitats are well developed on valley floors and lower bajadas.

¹ More information about each habitat type can be found at https://wildlife.ca.gov/Data/CWHR/Wildlife-Habitats.

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² California Department of Fish and Game. 1988. A Guide to Wildlife Habitats of California. Kenneth E. Mayer and William F. Laudenslayer, Hr. (Eds.). Sacramento, CA.

Attachment B-2: Habitat Type Descriptions

DRAFT REPORT

Habitat Type	Habitat Type Description
Desert Succulent Shrub	Overstory dominants include succulents such as ocotillo, Mojave yucca, desert agave, buckhorn cholla, teddybear cholla, branched pencil cholla, beavertail pricklypear, grizzlybear pricklypear, hedgehog barrel cactus, barrel cactus, fishhook cactus, hedgehog cactus, and saguaro. The understory is comprised of species such as creosotebush, white bursage, and white brittlebush. Desert Succulent Shrub habitats are generally found on south facing slopes; however, bajadas with excellent drainage may also support stands
Desert Wash	The composition of desert wash plant assemblages depends on variables such as latitude, elevation, and precipitation. Generally, washes in the south are more diverse in plant species composition and vertical structure than washes to the north. Canopy species typically found in washes include blue palo verde, littleleaf paloverde, desert ironwood, smoketree, catclaw acacia, mesquite, screwbean mesquite, and tamarisk. Soils of Desert Wash habitats tend to be sandy; some wash plants (e.g., mesquite) may be found on a variety of soils. This habitat is often found in association with canyons, arroyos, washes, and other features that contain water for at least part of the year.
Dryland Grain Crops	Composed of crops such as barley, oats, wheat, and cereal rye. Non-irrigated grain and seed crops are often located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers.
Eucalyptus	Overstory composition is typically limited to one species of the genus, or mixed stands composed of other species of the same genus; few native overstory species are present within eucalyptus planted areas, except in small, cleared pockets. The most common species is blue gum followed by red gum. Eucalyptus habitats have been extensively planted throughout the state since their introduction in 1856 with large-scale planting operations beginning in 1870. As such, they are found in locations with highly variable site characteristics. Generally, they are found on relatively flat or gently rolling terrain, occasionally in the foothills.
Evergreen Orchard	Composed of crops such as avocados, dates, olives, grapefruit, lemon, oranges, and other citrus types. The understory in evergreen orchards usually consists of bare soil or in a few instances a cover crop of herbaceous plants. The cover crop can be composed of either naturalized or planted domesticated herbaceous plants. Evergreen orchards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. All are irrigated.
Fresh Emergent Wetland	On the upper margins of Fresh Emergent Wetlands, saturated or periodically flooded soils support several moist soil plant species including big leaf sedge, baltic rush, redroot nutgrass and on more alkali sites, saltgrass. On wetter sites, common cattail, tule bulrush, river bulrush, and arrowhead are potential dominant species. Fresh emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. However, they are most common on level to gently rolling topography. They are found in various landscape depressions or at the edge of rivers or lakes
Irrigated Hayfield	This habitat includes alfalfa fields and grass hayfields. This habitat occurs in variable climates, from hot and dry to cool and wet to cold and snowy.
Irrigated Row and Field Crops	Composed of crops such as asparagus, broccoli, carrots, cauliflower, and celery. Row and field crops are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain usually irrigated by sprinklers. Soils often dictate the crops grown.
Joshua Tree	Rarely found as pure stands but generally are associated with other overstory trees and shrubs. Coexisting overstory species include California juniper, Utah juniper, singleleaf pinyon, and Mojave yucca. Joshua Tree habitats occur in broad valleys where soils are deep, on alluvial or rocky slopes, and on pediments with minimal runoff surrounding desert mountains and mesas. Soils must be well drained but may vary considerably in other characteristics.
Juniper	Soil depth and components and moisture influence composition of plants in Juniper habitats. Associated tree and shrub species, depending in part on species of juniper and its distribution, include white fir, Jeffrey and ponderosa pine, singleleaf pinyon, curl leaf mountain-mahogany, antelope bitterbrush, and big sagebrush. Western Juniper Woodland occurs on gentle slopes, alluvial fans canyon slopes and steep, rocky escarpments; Mountain Juniper Woodland on canyon slopes, steep and rocky escarpments, and glaciated bedrock; California Juniper Woodland on ridges, slopes, alluvial fans, and valley bottoms on soils that are porous, rocky, coarse, sandy, or silty, and often very shallow; and Utah Juniper Woodland on pediments, slopes, ridges, and ravines, on rocky or alluvial soils that are commonly well drained.
Lacustrine	Typical lacustrine habitats include permanently flooded lakes and reservoirs (e.g., Lake Tahoe and Shasta Lake), intermittent lakes (e.g., playa lakes) and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not. The relatively calm waters of lakes and ponds offer environmental conditions that contrast sharply with those of running water.
Mixed Chaparral	A floristically rich type that supports approximately 240 species of woody plants. Composition changes between northern and southern California and with precipitation regime, aspect, and soil type. Dominant species in cismontane Mixed Chaparral include scrub oak, chaparral oak, and several species of ceanothus and manzanita. Mixed Chaparral occurs on all aspects, but at lower elevations, it generally is found on north-facing slopes. This pattern is especially true in southern California.
Montane Chaparral	Varies markedly throughout California. Species composition changes with elevational and geographical range, soil type, and aspect. One or more of the following species usually characterize montane chaparral communities: whitethorn ceanothus, snowbrush ceanothus, greenleaf manzanita, pinemat manzanita, hoary manzanita, bitter cherry, huckleberry oak, sierra chinquapin, juneberry, fremont silktassel, Greene goldenweed, mountain mahogany, toyon, sumac and California buckthorn. Montane chaparral can be found on shallow to deep soils, on all exposures, and from gentle to relatively steep slopes. It may dominate on more xeric sites, but occurs locally throughout the coniferous forest zone.
Montane Hardwood	In the Coast Range and Klamath Mountains, canyon live oak often forms pure stands on steep canyon slopes and rocky ridge tops. It is replaced at higher elevations by huckleberry oak. Canyon live oak and associates are found on a wide range of slopes, especially those that are moderate to steep. Soils are for the most part rocky, alluvial, coarse textured, poorly developed, and well drained.
Montane Riparian	In northwest California along streams west of the Klamath Mountains, black cottonwood is a dominant hardwood. In some areas, it is codominant with bigleaf maple. In either case, black cottonwood can occur in association with dogwood and boxelder. At high elevations black cottonwood occurs with quaking aspen and white alder. In northeastern California, black cottonwood, white alder and thinleaf alder dominate the

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Attachment B-2: Habitat Type Descriptions

Habitat Type	Habitat Type Description
	montane riparian zone. Oregon ash, willow and a high diversity of forbs are common associates. In the Sierra Nevada, characteristic species include thinleaf alder, aspen, black cottonwood, dogwood, wild azalea, willow and water birch (southern Sierra east of the crest), white alder and dogwood (north Sierra). In the southern Coast Range as well as Transverse and Peninsular ranges, bigleaf maple and California bay are typical dominants of montane riparian habitat. Fremont cottonwood is the most important cottonwood in the Sierra below 1524 m (5000 ft), much of the Coast Ranges and the Transverse and Peninsular ranges.
Orchard - Vineyard	Composed of crops categories including citrus, nuts, and fruit trees. The understory in both orchards and vineyards usually consists of bare soil or a cover crop of herbaceous plants. The cover crop can be composed of either natural or planted domesticated herbaceous plants. Orchards and vineyards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. Though some orchards are non-irrigated, most are irrigated.
Pasture	The mix of grasses and legumes varies according to management practices such as seed mixture, fertilization, soil type, irrigation, weed control, and the type of livestock on the pasture. Plant species seeded in pastures also vary with geographic area. In southern California, Bermuda grass is prevalent. Pastures are planted on flat and gently rolling terrain. Flat terrain is irrigated by the border and check method of irrigation, except on sandy soils or where water supplies are limited.
Perennial Grassland	Dominated by perennial grass species such as California oatgrass, Pacific hairgrass, and sweet vernalgrass. Perennial Grassland habitat typically occurs on ridges and south-facing slopes, alternating with forest and scrub in the valleys and on north-facing slopes. Perennial Grassland habitats are most often found on Mollisols.
Pinyon-Juniper	Overstory species composition at lower and mid-level elevations ranges from pure stands of pinyon, either singleleaf or Parry, to stands of pinyon mixed with juniper (western, Utah, or California), oaks (shrub live, California scrub, or canyon live), or Mojave yucca. At higher elevations, ponderosa and Jeffrey pine may be found in this habitat. Pinyon-juniper habitats generally are found on slopes that are steep, rocky, dry, and face east. Soils are mostly residual or recently weathered, typically rocky, coarse, porous, and well drained
Riverine	Intermittent or continually running water distinguishes rivers and streams. A stream originates at some elevated source, such as a spring or lake, and flows downward at a rate relative to slope or gradient and the volume of surface runoff or discharge.
Sagebrush	Often the habitat is composed of pure stands of big sagebrush, but many stands include other species of sagebrush, rabbitbrush, horsebrush, gooseberry, western chokecherry, curlleaf mountain mahogany, and bitterbrush. The Sagebrush habitat is a discontinuous strip along the east and northeast borders of California south to the 37th parallel.
Urban	Species composition in urban habitats varies with planting design and climate. Monoculture is commonly observed in tree groves and street tree strips. Urban habitats are not limited to any particular physical setting.
Valley Foothill Riparian	Dominant species in the canopy layer are cottonwood, California sycamore and valley oak. Subcanopy trees are white alder, boxelder and Oregon ash. Typical understory shrub layer plants include wild grape, wild rose, California blackberry, blue elderberry, poison oak, buttonbrush, and willows. Valley-foothill riparian habitats are found in valleys bordered by sloping alluvial fans, slightly dissected terraces, lower foothills, and coastal plains. They are generally associated with low velocity flows, flood plains, and gentle topography.
Valley Oak Woodland	Canopies of these woodlands are dominated almost exclusively by valley oaks. Tree associates in the Central Valley include California sycamore, Hinds black walnut, interior live oak, boxelder, and blue oak. This habitat occurs in a wide range of physiographic settings but is best developed on deep, well-drained alluvial soils, usually in valley bottoms. Most large, healthy valley oaks are probably rooted down to permanent water supplies.
Vineyard	Composed of crops such as boysenberries, olallieberries, rasperbbiers, grapes, and kiwi. The understory in vineyards usually consist of bare soil or a cover crop of herbaceous plants. The cover crop can be composed of either natural or planted domesticated herbaceous plants. Vineyards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. All are irrigated.
Wet Meadow	Occur with a great variety of plant species; therefore, it is not possible to generalize species composition. Species may differ, but several genera are common to Wet Meadows throughout the State. They include Agrostis, Carex, Danthonia, Juncus, Salix, and Scirpus. Wet Meadows occur where water is at or near the surface most of the growing season, following spring runoff. Hydrologically, they occupy lotic, sunken concave, and hanging sites.

Source: California Department of Fish and Game. 1988. A Guide to Wildlife Habitats of California. Kenneth E. Mayer and William F. Laudenslayer, Hr. (Eds.). Sacramento, CA.

ATTACHMENT B-3: PROTECTED SPECIES WITH THE POTENTIAL TO OCCUR

ATTACHMENT B-3: PROTECTED SPECIES WITH THE POTENTIAL TO OCCUR

					Linear	Miles of Segment	Crossed	Acres Cros	sed within the 0.25	-Mile Buffer ²	Total	ent within th 0.25-Mile
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	
		Bald eagle ³	Haliaeetus leucocephalus	SE, FDR, FP	0.0	79.8	0.0	0.0	25,542.2	0.0		
		Blunt-nosed leopard lizard	Gambelia sila	SE, FE, FP	26.7	34.0	19.2	8,446.3	10,744.9	6,351.0		
		California red-legged frog	Rana draytonii	FT	1.9	9.0	69.0	654.7	2,849.2	22,038.3		
		Crotch bumble bee	Bombus crotchii	SC	0.0	79.8	0.0	0.0	25,542.2	0.0		
		Giant kangaroo rat	Dipodomys ingens	SE, FE	28.2	51.7	0.0	8,562.2	16,980.0	0.0		
		Golden eagle	Aquila chrysaetos	FP	46.9	32.9	0.0	14,736.5	10,805.6	0.0		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	79.8	0.0	0.0	25,542.2	0.0		
		Nelson's antelope squirrel	Ammospermophilus nelsoni	ST	46.1	33.8	0.0	14,337.4	11,204.8	0.0		
1A	С	San Joaquin kit fox	Vulpes macrotis mutica	ST, FE	47.2	32.6	0.0	14,789.5	10,752.7	0.0	79.9	2,5542.2
		Swainson's hawk	Buteo swainsoni	ST	66.5	13.3	0.0	16,396.9	9,078.1	67.1		
		Temblor legless lizard	Anniella alexanderae	SC	0.0	5.4	74.5	0.0	1,774.5	23,767.6		
		Tipton kangaroo rat	Dipodomys nitratoides nitratoides	SE, FE	0.0	29.1	50.8	0.0	9,244.9	16,297.2		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	79.8	0.0	0.0	25,542.2	0.0		
		Western pond turtle	Emys marmorata	FPT	28.2	51.6	0.0	8,584.3	16,957.8	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	22.8	57.1	0.0	7,256.7	18,285.5		
		Western spadefoot	Spea hammondii	FPT	28.3	51.6	0.0	8594.0	16,948.1	0.0		
		White-tailed kite	Elanus leucurus	FP	40.8	39.1	0.0	10076.3	15,465.9	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.1	35.3	10.3	58.2	11,189.5	3,309.7		
1B	В	Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	31.6	14.1	0.0	10,037.0	4,520.4	45.7	14,557.5
ID	D	California condor	Gymnogyps californianus	SE, FE, FP	0.0	1.4	44.3	0.0	467.6	14,089.9	45.7	14,007.0
		Coastal California gnatcatcher	Polioptila californica californica	FT	1.6	27.0	17.1	570.9	8,492.0	5,494.6		

¹ Explanation of federal and state listing codes:

Federal listing codes:

California listing codes:

- FT: Federally listed as threatened

-SE: State-listed as endangered

- FE: Federally listed as endangered - FPT: Federally proposed as threatened -ST: State-listed as threatened

- FDR: Federally delisted (Recovered)

-SR: State-listed as rare -SC: State candidate for listing

⁻FP: CDFW-designated as fully protected

² The buffer includes 0.25 mile on either side of a segment centerline.

³ For bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*), a one-mile buffer on either side of a segment centerline was used.

					Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		California Orcutt grass	Orcuttia californica	SE, FE	8.7	19.1	17.9	2,726.0	6,024.2	5,807.2		
		California red-legged frog	Rana draytonii	FT	9.9	35.0	0.9	3,406.6	10,815.3	335.6		
		Crotch bumble bee	Bombus crotchii	SC	0.0	45.7	0.0	0.0	14,557.5	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	1.3	12.7	31.7	550.0	3,970.5	10,037.0		
		Golden eagle Error! Bookmark not defined.	Aquila chrysaetos	FP	23.0	22.2	0.5	7,639.1	6,704.5	213.8		
		Joshua tree	Yucca brevifolia	SC	1.4	16.2	28.1	255.4	5,352.9	8,949.1		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	36.6	9.0	22.9	11,539.8	2,994.7		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	45.7	0.0	0.0	14,557.5	0.0		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	0.0	26.9	18.8	0.0	8,464.8	6,092.6		
		San Fernando Valley spineflower	Chorizanthe parryi var. fernandina	SE	0.0	26.9	18.8	0.0	8,464.5	6,093.0		
		Santa Ana sucker	Catostomus santaanae	FT	0.0	0.1	45.6	0.0	62.7	14,494.8		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	27.0	18.7	0.0	8,467.0	6,090.4		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	28.6	17.1	0.0	9,018.8	5,538.7		
		Swainson's hawk	Buteo swainsoni	ST	10.1	4.0	24.6	3,180.3	1,341.0	10,036.2		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	16.6	29.1	3.8	5,366.7	9,187.0		
		Western pond turtle	Emys marmorata	FPT	9.7	23.9	12.2	3,450.6	7,192.3	3,914.6		
		Western spadefoot	Spea hammondii	FPT	2.0	13.1	30.7	482.5	4,291.3	9,783.6		
		White-tailed kite	Elanus leucurus	FP	24.0	21.7	0.0	7,694.5	6,862.9	0.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	27.6	0.0	0.0	8,791.8	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	8.9	18.7	28.9	2,697.0	6,066.0		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.0	26.2	1.4	10.2	8,264.2	517.4		
		California red-legged frog	Rana draytonii	FT	0.2	27.4	0.0	213.3	8,578.5	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	27.6	0.0	0.0	8,791.8	0.0		
2	А	Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	5.5	22.1	0.0	1,802.3	6,989.6	27.6	8791.8
		Lyon's pentachaeta	Pentachaeta Iyonii	SE, FE	1.6	0.0	26.0	473.6	0.0	8,318.3		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	27.6	0.0	0.0	8,791.8	0.0		
		Palos Verdes blue butterfly	Glaucopsyche lygdamus palosverdesensis	FE	13.7	0.0	13.9	4,492.1	0.0	4,299.7		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	27.6	0.0	52.6	8,739.3	0.0		

					Linear	Miles of Segment	Crossed	Acres Cros	sed within the 0.25	-Mile Buffer ²	Total	Total Area
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Western pond turtle	Emys marmorata	FPT	0.2	27.4	0.0	274.4	8,517.4	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	27.6	0.0	0.0	8,791.8	0.0		
		Western spadefoot	Spea hammondii	FPT	1.0	26.6	0.0	403.6	8,388.2	0.0		
		White-tailed kite	Elanus leucurus	FP	27.4	0.2	0.0	8,545.6	246.3	0.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	9.1	0.0	0.0	2,913.8	38.1		
		Belding's savannah sparrow	Passerculus sandwichensis beldingi	SE	0.0	2.0	7.1	44.7	721.6	2,185.6		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.0	9.1	0.0	11.3	2,940.5	0.0		
		California red-legged frog	Rana draytonii	FT	0.1	9.0	0.0	63.2	2,850.0	38.6		
		Crotch bumble bee	Bombus crotchii	SC	0.0	9.1	0.0	0.0	2,951.8	0.0		
		Green turtle	Chelonia mydas	FT	0.0	0.0	0.0	9.2	0.0	2,942.6		
2	S	Lyon's pentachaeta	Pentachaeta Iyonii	SE, FE	0.0	0.0	0.0	7.2	0.0	2,944.6	9.2	2,951.8
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	9.1	0.0	1.3	2,950.5	0.0		2,70 110
		Tricolored blackbird	Agelaius tricolor	ST	0.0	9.1	0.0	0.0	2,913.8	38.1		
		Western pond turtle	Emys marmorata	FPT	0.1	9.1	0.0	63.4	2,888.4	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	9.1	0.0	0.0	2,913.8	38.1		
		Western spadefoot	Spea hammondii	FPT	0.1	9.0	0.0	63.4	2,850.9	37.6		
		White-tailed kite	Elanus leucurus	FP	9.0	0.1	0.0	2,821.5	93.8	36.5		
		Bald eagleError! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	8.6	0.0	0.0	2,841.9	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	0.8	7.9	0.0	303.2	2,538.6		
		California red-legged frog	Rana draytonii	FT	0.0	8.6	0.0	16.2	2,825.6	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	8.6	0.0	0.0	2,841.9	0.0		
2	Т	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	8.6	0.0	0.0	2,841.9	0.0	8.6	2,841.9
		Tricolored blackbird	Agelaius tricolor	ST	0.0	8.6	0.0	0.0	2,841.9	0.0		
		Western pond turtle	Emys marmorata	FPT	0.0	8.6	0.0	16.2	2,825.6	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	4.4	4.3	0.0	1,415.1	1,426.7		
		Western spadefoot	Spea hammondii	FPT	0.0	8.6	0.0	16.2	2,825.6	0.0		
		White-tailed kite	Elanus leucurus	FP	8.6	0.0	0.0	2,825.6	16.2	0.0		
2	U	Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	7.1	0.0	0.0	2,341.7	0.0	7.1	2341.7
	U	Belding's savannah sparrow	Passerculus sandwichensis beldingi	SE	0.0	1.7	5.4	0.0	458.8	1,883.0	7.1	2341.1

					Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		California least tern	Sternula antillarum browni	FE, SE, FP	0.2	3.4	3.5	10.6	1,165.1	1,166.0		
		California red-legged frog	Rana draytonii	FT	0.5	6.6	0.0	81.4	2,260.4	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	7.1	0.0	0.0	2,341.7	0.0		
		Green turtle	Chelonia mydas	FT	0.1	0.0	7.0	94.5	0.0	2,247.2		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	7.1	0.0	6.2	2,335.5	0.0		
		Tricolored blackbird	Agelaius tricolor	ST	1.3	5.8	0.0	299.4	2,042.3	0.0		
		Western pond turtle	Emys marmorata	FPT	0.5	6.6	0.0	93.9	2,247.9	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	7.1	0.0	0.0	2,341.7	0.0		
		Western spadefoot	Spea hammondii	FPT	0.5	6.6	0.0	81.4	2,260.4	0.0		
		White-tailed kite	Elanus leucurus	FP	6.5	0.6	0.0	2,241.0	100.8	0.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	2.9	0.0	0.0	1,027.1	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	2.9	0.0	0.0	1,009.7	17.5		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.0	2.9	0.0	1.7	1,025.4	0.0		
		California red-legged frog	Rana draytonii	FT	0.0	2.3	0.6	6.6	824.7	195.8		
		Crotch bumble bee	Bombus crotchii	SC	0.0	2.9	0.0	0.0	1,020.9	6.2		
		El Segundo blue butterfly	Euphilotes battoides allyni	FE	0.3	0.2	2.4	69.2	111.8	846.1		
2	V	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.1	2.8	0.0	17.4	1,009.7	0.0	2.9	1,027.1
		Tricolored blackbird	Agelaius tricolor	ST	0.0	2.9	0.0	0.0	1,027.1	0.0		
		Western pond turtle	Emys marmorata	FPT	0.0	2.9	0.0	18.5	1,008.5	0.1		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	2.9	0.0	5.5	1,021.6	0.0		
		Western spadefoot	Spea hammondii	FPT	0.0	2.9	0.0	18.5	1,008.6	0.0		
		White-tailed kite	Elanus leucurus	FP	2.9	0.0	0.0	1,007.0	20.2	0.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	5.2	0.0	0.0	1,757.6	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	2.6	2.6	0.0	830.9	926.7		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.0	4.9	0.3	0.0	1,594.5	163.1		
2	W	California red-legged frog	Rana draytonii	FT	0.0	5.2	0.0	19.7	1,737.8	0.0	5.2	1,757.6
		Crotch bumble bee	Bombus crotchii	SC	0.0	5.2	0.0	0.0	1,757.6	0.0		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	2.6	2.6	0.0	830.9	926.7		
		Lyon's pentachaeta	Pentachaeta Iyonii	SE, FE	1.8	0.0	3.4	565.7	0.0	1,191.9		

					Linear	Miles of Segment	Crossed	Acres Cros	sed within the 0.25	Total	Total Area	
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.2	5.1	0.0	27.4	1,730.2	0.0		
		Palos Verdes blue butterfly	Glaucopsyche lygdamus palosverdesensis	FE	2.7	0.0	2.5	893.9	0.0	863.7		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	5.2	0.0	0.0	1,757.6	0.0		
		Western pond turtle	Emys marmorata	FPT	0.0	5.2	0.0	19.7	1,737.8	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	5.2	0.0	0.0	1,757.6	0.0		
		Western spadefoot	Spea hammondii	FPT	0.0	5.2	0.0	19.7	1,737.8	0.0		
		White-tailed kite	Elanus leucurus	FP	5.2	0.0	0.0	1,737.8	19.7	0.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	7.5	0.0	0.0	2,485.2	0.0		
		California red-legged frog	Rana draytonii	FT	0.1	7.5	0.0	22.1	2,463.1	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	7.5	0.0	0.0	2,485.2	0.0		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	7.5	0.0	0.0	2,485.2	0.0		
3A	D	Tricolored blackbird	Agelaius tricolor	ST	0.0	7.5	0.0	0.0	2,485.2	0.0	7.5	2,485.2
		Western pond turtle	Emys marmorata	FPT	0.1	7.5	0.0	22.1	2,463.1	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	7.5	0.0	0.0	2,485.2	0.0		
		Western spadefoot	Spea hammondii	FPT	0.1	7.5	0.0	22.1	2,463.1	0.0		
		White-tailed kite	Elanus leucurus	FP	7.4	0.1	0.0	2,456.3	28.9	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.0	16.1	44.1	18.5	5,124.3	13,913.5		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	60.2	0.0	0.0	19,056.4	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	1.8	35.9	22.5	472.3	11,773.2	6,810.8		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.1	0.0	60.1	53.5	0.0	19,002.9		
		California red-legged frog	Rana draytonii	FT	7.9	52.3	0.0	2193.7	16,862.6	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	60.2	0.0	0.0	19,056.4	0.0		
3B	J	Delhi Sands flower-loving fly	Rhaphiomidas terminatus abdominalis	FE	19.6	2.3	38.3	6,247.8	616.2	12,192.3	60.2	19,056.4
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	18.7	18.6	22.9	5,685.8	6,096.9	7,273.7		
		Joshua tree	Yucca brevifolia	SC	0.0	1.3	58.9	0.0	561.3	18,495.1		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.2	26.5	33.6	16.6	9,077.7	9,962.1		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	60.2	0.0	0.0	19,056.4	0.0		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	0.2	22.1	37.9	151.9	7,115.6	11,788.8		

					Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	-Mile Buffer ²	Total	Total Area
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Santa Ana River woollystar	Eriastrum densifolium ssp. sanctorum	SE, FE	0.0	2.7	57.5	0.0	1,258.4	17,798.0		
		Santa Ana sucker	Catostomus santaanae	FT	0.0	0.0	0.0	11.2	0.0	19,045.1		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	2.7	57.5	0.0	907.6	18,148.8		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	27.4	32.8	0.0	8,476.8	10,579.6		
		Stephens' kangaroo rat	Dipodomys stephensi	ST, FT	6.9	30.4	22.9	1,811.2	9,971.0	7,274.1		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	28.5	31.7	9.6	9,076.6	9,970.2		
		Western pond turtle	Emys marmorata	FPT	7.9	52.3	0.0	2,193.8	16,862.5	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	8.8	51.5	0.0	2,808.7	16,247.7		
		Western spadefoot	Spea hammondii	FPT	7.1	53.1	0.0	1,913.0	17,143.3	0.0		
		Western yellow-billed cuckoo	Coccyzus americanus occidentalis	SE, FT	0.0	14.9	0.0	0.0	4,691.8	14,364.6		
		White-tailed kite	Elanus leucurus	FP	46.8	13.4	45.3	14,920.3	4,136.0	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.0	10.1	29.4	39.6	3,255.1	9,453.4		
		California red-legged frog	Rana draytonii	FT	1.7	37.2	0.5	557.2	12,028.2	162.6		
		Crotch bumble bee	Bombus crotchii	SC	0.0	39.4	0.0	0.0	12,748.1	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	21.8	17.6	0.0	7,435.4	5,312.6	0.0		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	2.5	36.9	0.0	809.6	11,938.5	0.0		
		Joshua tree	Yucca brevifolia	SC	3.0	36.4	0.0	1,092.9	11,655.2	0.0		
3C	G	Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	4.5	35.0	0.0	1,486.1	11,262.0	39.5	12,748.1
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	39.4	0.0	0.0	12,748.1	0.0		
		Swainson's hawk	Buteo swainsoni	ST	9.1	7.7	22.7	2,972.6	2,456.4	7,319.1		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	8.9	30.6	39.3	2,861.3	9,847.5		
		Western pond turtle	Emys marmorata	FPT	0.1	1.2	38.2	51.1	424.6	12,272.4		
		White-tailed kite	Elanus leucurus	FP	9.9	29.5	0.0	3,123.8	9,624.3	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.4	18.1	13.3	304.8	5,617.0	4,335.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	13.1	18.8	0.0	4,161.4	6,095.3		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	9.4	22.5	0.0	3,029.5	7,227.2		
3C	1	California red-legged frog	Rana draytonii	FT	0.3	31.6	0.0	484.7	9,772.0	0.0	31.89	10,256.8
		Crotch bumble bee	Bombus crotchii	SC	0.0	31.9	0.0	0.0	10,256.8	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	9.3	9.5	13.1	2,774.8	3,320.8	4,161.2		
		Golden eagle ^{Error!} Bookmark not defined.	Aquila chrysaetos	FP	12.7	19.2	0.0	4,037.9	6,218.8	0.0		

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					Linear	Miles of Segment	Crossed	Acres Crossed within the 0.25-Mile Buffer ²			Total	Total Area
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Joshua tree	Yucca brevifolia	SC	1.7	22.4	7.8	514.8	7,263.9	2,478.0		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	18.8	13.1	0.0	6,025.0	4,231.8		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	31.9	0.0	0.0	10,256.8	0.0		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	5.7	13.6	12.6	1,993.0	4,175.8	4,088.0		
		Santa Ana River woollystar	Eriastrum densifolium ssp. sanctorum	SE, FE	0.3	8.1	23.5	82.3	2,644.0	7,530.4		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	17.5	14.4	0.0	5,602.8	4,654.0		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	19.3	12.6	0.0	6,168.6	4,088.2		
		Stephens' kangaroo rat	Dipodomys stephensi	ST, FT	0.1	9.1	22.7	153.0	2,785.8	7,318.0		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	3.9	28.0	3.6	1,211.8	9,041.4		
		Western pond turtle	Emys marmorata	FPT	0.3	26.1	5.5	486.7	7,935.2	1,834.9		
		Western spadefoot	Spea hammondii	FPT	0.1	15.7	16.0	307.2	4,781.3	5,168.2		
		White-tailed kite	Elanus leucurus	FP	5.7	22.3	3.9	1,853.7	7,180.9	1,222.1		
		California red-legged frog	Rana draytonii	FT	0.5	8.4	21.6	426.9	2,443.9	6,900.5		
		Crotch bumble bee	Bombus crotchii	SC	0.0	30.5	0.0	0.0	9,771.2	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	11.2	19.3	0.0	3,319.6	6,451.6	0.0		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	1.0	29.5	0.0	377.3	9,393.9	0.0		
		Joshua tree	Yucca brevifolia	SC	0.3	30.2	0.0	94.2	9,677.1	0.0		
3D	E	Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	4.3	26.2	0.0	1,379.6	8,391.6	30.5	9,771.2
	L	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	30.5	0.0	0.0	9,771.2	0.0	. 00.0	7,771.2
		Swainson's hawk	Buteo swainsoni	ST	9.6	20.9	0.0	3,263.5	6,507.7	0.0		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	30.5	0.0	0.0	9,771.2	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	1.6	28.9	0.0	445.6	9,325.6		
		White-tailed kite	Elanus leucurus	FP	8.7	21.8	0.0	2,823.2	6,948.0	0.0		
		Bakersfield cactus	Opuntia basilaris var. treleasei	SE, FE	0.0	5.7	4.8	0.0	1,846.5	1,574.6		
		Bald eagle ^{Error!} Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	1.9	8.5	0.0	570.3	2,850.7	0.0		
3D	ı	Blunt-nosed leopard lizard	Gambelia sila	SE, FE, FP	1.6	8.8	0.0	541.7	2,879.4	0.0	10.4	2 421 1
3D	L	California condor	Gymnogyps californianus	SE, FE, FP	3.5	6.9	0.0	1,193.6	2,227.5	0.0	10.4	3,421.1
		Crotch bumble bee	Bombus crotchii	SC	0.0	10.4	0.0	0.0	3,421.1	0.0		
		Giant kangaroo rat	Dipodomys ingens	SE, FE	0.1	6.4	3.9	95.5	2,018.4	1,307.1		

					Linear	Miles of Segment	Crossed	Acres Cros	sed within the 0.25	-Mile Buffer ²	Total	Total Area
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Golden eagle Error! Bookmark not defined.	Aquila chrysaetos	FP	0.1	10.3	0.0	95.5	3,325.6	0.0		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	10.4	0.0	0.0	3,421.1	0.0		
		Nelson's antelope squirrel	Ammospermophilus nelsoni	ST	0.1	10.3	0.0	95.5	3,325.6	0.0		
		San Joaquin kit fox	Vulpes macrotis mutica	ST, FE	0.1	10.3	0.0	100.5	3,320.5	0.0		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	5.7	4.8	0.0	1,846.6	1,574.5		
		Swainson's hawk	Buteo swainsoni	ST	0.2	10.3	0.0	119.6	3,300.1	1.4		
		Tipton kangaroo rat	Dipodomys nitratoides nitratoides	SE, FE	0.0	10.4	0.0	0.0	3,421.1	0.0		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	10.4	0.0	0.0	3,421.1	0.0		
		Western pond turtle	Emys marmorata	FPT	0.1	10.3	0.0	106.6	3,314.4	0.0		
		Western spadefoot	Spea hammondii	FPT	0.1	10.3	0.0	106.6	3,314.4	0.0		
		White-tailed kite	Elanus leucurus	FP	1.5	9.0	0.0	842.5	2,578.6	0.0		
		Bakersfield cactus	Opuntia basilaris var. treleasei	SE, FE	0.1	13.2	37.9	30.9	4,236.0	12,079.6		
		Bald eagleError! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	43.0	8.1	0.0	13,677.7	2,668.7		
		Blunt-nosed leopard lizard	Gambelia sila	SE, FE, FP	2.6	8.7	39.9	799.7	2,829.1	12,717.7		
		California condor	Gymnogyps californianus	SE, FE, FP	0.0	30.8	20.4	0.0	9,813.8	6,532.7		
		Crotch bumble bee	Bombus crotchii	SC	0.0	51.2	0.0	0.0	16,346.5	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	7.8	4.1	39.2	2,371.5	1,456.1	12,518.8		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	29.6	21.6	0.0	9,859.4	6,487.1	0.0		
		Joshua tree	Yucca brevifolia	SC	2.0	15.4	33.8	611.8	4,956.6	10,778.1		
		Kern mallow	Eremalche parryi ssp. kernensis	FE	0.0	0.0	0.0	14.9	0.0	16,331.6		
3D	M	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	51.2	0.0	0.0	16,346.5	0.0	51.2	16,346.5
		Nelson's antelope squirrel	Ammospermophilus nelsoni	ST	0.1	8.6	42.4	21.9	2,604.0	13,720.6		
		San Joaquin kit fox	Vulpes macrotis mutica	ST, FE	2.8	18.1	30.3	880.6	5,902.9	9,562.9		
		Southern rubber boa	Charina umbratica	ST	17.9	10.0	23.3	5,599.3	3,290.7	7,456.4		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	13.3	37.9	0.0	4,267.2	12,079.3		
		Swainson's hawk	Buteo swainsoni	ST	12.1	16.6	22.5	3,862.2	5,364.1	7,120.2		
		Tipton kangaroo rat	Dipodomys nitratoides nitratoides	SE, FE	0.0	20.8	30.3	0.0	6,729.9	9,616.6		
		Tracy's eriastrum	Eriastrum tracyi	SR	0.0	16.6	34.6	0.0	5,255.2	11,091.3		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	28.6	22.5	0.0	9,223.0	7,123.5		

					Linear	Miles of Segment	t Crossed	Acres Cros	sed within the 0.25	-Mile Buffer ²	Total	Total Area
Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Western pond turtle	Emys marmorata	FPT	25.9	17.2	8.1	8,640.0	5,039.0	2,667.5		
		Western spadefoot	Spea hammondii	FPT	3.3	8.6	39.3	1,142.3	2,665.0	12,539.2		
		White-tailed kite	Elanus leucurus	FP	6.0	22.6	22.5	2,428.4	6,794.6	7,123.5		
		Arroyo toad	Anaxyrus californicus	FE	0.4	40.9	14.1	471.7	12,667.8	4,534.8		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	55.4	0.0	72.5	17,601.8	0.0		
		Blunt-nosed leopard lizard	Gambelia sila	SE, FE, FP	1.1	0.0	54.3	397.2	39.6	17,237.5		
		California condor	Gymnogyps californianus	SE, FE, FP	5.1	50.3	0.0	1,664.4	15,995.3	14.6		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	41.7	13.8	3.4	13,224.8	4,446.1		
		California Orcutt grass	Orcuttia californica	SE, FE	7.6	34.0	13.8	2,474.4	10,753.8	4,446.1		
		California red-legged frog	Rana draytonii	FT	24.5	29.8	1.1	7,071.0	10,168.4	434.9		
		Crotch bumble bee	Bombus crotchii	SC	0.0	55.4	0.0	0.0	17,674.3	0.0		
		Giant kangaroo rat	Dipodomys ingens	SE, FE	1.1	0.0	54.3	397.2	39.6	17,237.5		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	39.3	16.1	0.0	12,759.8	4,914.5	0.0		
		Joshua tree	Yucca brevifolia	SC	0.0	11.8	43.6	0.0	3,710.6	13,963.7		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	1.3	40.3	13.8	268.2	12,960.0	4,446.1		
		Lyon's pentachaeta	Pentachaeta Iyonii	SE, FE	0.0	0.0	55.4	0.0	1.8	17,672.5		
3E	K	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	55.4	0.0	0.0	17,674.3	0.0	55.4	17,674.3
		Nelson's antelope squirrel	Ammospermophilus nelsoni	ST	1.1	0.0	54.3	397.2	39.6	17,237.5		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	0.0	35.9	19.5	0.0	11,504.4	6,169.9		
		San Fernando Valley spineflower	Chorizanthe parryi var. fernandina	SE	0.0	39.3	16.1	0.0	12,462.0	5,212.3		
		San Joaquin kit fox	Vulpes macrotis mutica	ST, FE	1.1	11.4	42.9	397.2	3,639.2	13,638.0		
		Santa Ana sucker	Catostomus santaanae	FT	0.1	0.0	55.3	136.7	0.0	17,537.5		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	23.1	32.3	0.0	7,361.2	10,313.1		
		Southern rubber boa	Charina umbratica	ST	3.9	22.8	28.7	1,241.5	7,119.9	9,312.9		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	41.6	13.8	123.8	13,104.4	4,446.1		
		Swainson's hawk	Buteo swainsoni	ST	0.3	0.0	55.1	120.1	39.0	17,515.1		
		Tipton kangaroo rat	Dipodomys nitratoides nitratoides	SE, FE	0.0	4.1	51.3	0.0	1371.9	16,302.4		
		Tracy's eriastrum	Eriastrum tracyi	SR	0.0	7.6	47.8	10.8	2374.9	15,288.6		
		Tricolored blackbird	Agelaius tricolor	ST	0.1	12.7	42.5	122.1	4,056.3	13,495.9		
		Unarmored threespine stickleback	Gasterosteus aculeatus williamsoni	SE, FE, FP	0.3	0.0	55.1	186.7	0.0	17,487.6		

Southern California Gas Company Angeles Link Project

	Segment	Common Name	Scientific Name	Listing Status ¹	Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area					Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Western pond turtle	Emys marmorata	FPT	26.4	29.0	0.0	8,117.5	9,556.8	0.0		
		Western spadefoot	Spea hammondii	FPT	2.6	15.7	37.0	1,183.2	4,747.0	11,744.0		
		White-tailed kite	Elanus leucurus	FP	19.9	35.5	0.0	6,210.7	11,463.6	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.0	18.9	29.7	25.0	6,007.4	9,319.6		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	48.6	0.0	0.0	15,352.0	0.0		
		Coastal California gnatcatcher	Polioptila californica californica	FT	0.0	14.6	34.0	0.0	4,681.5	10,670.5		
		California least tern	Sternula antillarum browni	FE, SE, FP	0.0	0.0	0.0	0.0	60.7	15,291.3		
		California Orcutt grass	Orcuttia californica	SE, FE	0.0	0.0	0.0	0.0	69.6	15,282.4		
		California red-legged frog	Rana draytonii	FT	0.2	48.3	0.0	288.7	15,063.3	0.0		
		Crotch bumble bee	Bombus crotchii	SC	0.0	48.6	0.0	17.3	15,334.7	0.0		
	Y	Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	8.5	40.0	0.0	2,771.6	12,580.4		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	48.6	0.0	0.0	15,352.0	0.0		
3F		Palos Verdes blue butterfly	Glaucopsyche lygdamus palosverdesensis	FE	0.0	8.5	0.0	163.3	0.0	15,188.7	48.56	15,352.0
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	0.0	0.0	0.0	0.0	69.6	15,282.4		
		San Fernando Valley spineflower	Chorizanthe parryi var. fernandina	SE	0.0	0.0	0.0	0.0	69.6	15,282.4		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	0.0	0.0	0.0	69.9	15,282.1		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	8.5	40.0	0.0	2771.2	12,580.8		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	48.6	0.0	27.9	15,324.2	0.0		
		Western pond turtle	Emys marmorata	FPT	0.2	48.3	0.0	288.7	15,063.3	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	10.1	38.5	0.0	3,225.3	12,126.7		
		Western spadefoot	Spea hammondii	FPT	0.0	48.5	0.0	166.1	15,185.9	0.0		
		White-tailed kite	Elanus leucurus	FP	48.4	0.2	0.0	14,934.1	417.9	0.0		
		Bakersfield cactus	Opuntia basilaris var. treleasei	SE, FE	0.0	16.6	65.1	0.0	5,357.2	20,715.9		
		Bald eagleError! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	81.7	0.0	0.0	26,073.1	0.0		
		Blunt-nosed leopard lizard	Gambelia sila	SE, FE, FP	31.6	50.1	0.0	10,483.2	15,589.9	0.0		
4A	R	California condor	Gymnogyps californianus	SE, FE, FP	0.0	1.7	80.0	0.0	592.5	25,480.6	81.7	26,073.1
		Crotch bumble bee	Bombus crotchii	SC	0.0	81.7	0.0	0.0	26,073.1	0.0		
		Giant kangaroo rat	Dipodomys ingens	SE, FE	31.2	46.9	3.7	10,485.4	143,55.6	1,232.1	I	
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	15.8	65.9	0.0	5,051.4	2,1021.7	0.0		

Study Area	Segment	Common Name	Scientific Name	Listing Status ¹	Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
					Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Kern mallow	Eremalche parryi ssp. kernensis	FE	2.4	40.8	38.4	457.5	13,319.2	12,296.3		Ĭ
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	81.7	0.0	0.0	26,073.1	0.0		
		Nelson's antelope squirrel	Ammospermophilus nelsoni	ST	39.2	42.5	0.0	12,346.8	13,726.3	0.0		
		San Joaquin kit fox	Vulpes macrotis mutica	ST, FE	39.6	42.0	0.0	12,745.1	13,328.0	0.0		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	9.5	72.2	0.0	3,088.2	22,984.9		
		Swainson's hawk	Buteo swainsoni	ST	25.1	35.4	21.2	5,136.3	14,263.7	6,673.1		
		Temblor legless lizard	Anniella alexanderae	SC	0.0	21.2	60.5	28.8	6,820.1	19,224.2		
		Tipton kangaroo rat	Dipodomys nitratoides nitratoides	SE, FE	0.2	62.0	19.6	35.1	19,759.1	6,278.9		
		Tricolored blackbird	Agelaius tricolor	ST	0.7	81.0	0.0	216.5	25,856.7	0.0		
		Western pond turtle	Emys marmorata	FPT	8.2	73.5	0.0	3,445.0	22,628.1	0.0		
		Western snowy plover	Charadrius nivosus nivosus	FT	0.0	33.0	48.6	0.0	10,542.8	15,530.3		
		Western spadefoot	Spea hammondii	FPT	31.5	50.2	0.0	10,749.1	15,324.0	0.0		
		White-tailed kite	Elanus leucurus	FP	21.0	60.7	0.0	4,115.9	21,957.2	0.0		
		Arroyo toad	Anaxyrus californicus	FE	0.0	8.4	144.2	6.7	2,671.7	46,197.9		
		Bonytail	Gila elegans	SE, FE	0.0	0.5	152.2	0.0	223.8	48,652.5		
		California red-legged frog	Rana draytonii	FT	0.3	13.3	139.2	172.0	4,185.1	44,519.2		
		Crotch bumble bee	Bombus crotchii	SC	0.0	43.2	109.5	0.0	13,748.4	35,127.9		
		Desert tortoise	Gopherus agassizii	SE, FT	137.5	14.7	0.5	43,199.7	5,455.6	221.0		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	4.7	147.6	0.5	1,567.8	47,087.4	221.0		
4B	F	Joshua tree	Yucca brevifolia	SC	17.5	41.9	93.4	5,783.0	13,235.6	29,857.6	152.7	48,876.3
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.2	4.6	148.0	47.9	1,468.7	47,359.6		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	152.7	0.0	0.0	48,876.3	0.0		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.4	8.7	143.7	101.8	2,786.3	45,988.1		
		Western pond turtle	Emys marmorata	FPT	0.8	17.9	134.1	284.5	5,666.6	42,925.1		
		White-tailed kite	Elanus leucurus	FP	2.8	36.8	113.2	958.3	11,612.2	36,305.8		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	2.4	89.7	0.0	816.1	28,767.1		
40	- 11	Bonytail	Gila elegans	SE, FE	0.0	0.0	0.0	0.0	10.5	29,572.7	92.1	20 502 2
4C	Н	Desert tortoise	Gopherus agassizii	SE, FT	91.7	0.4	0.0	29,289.9	283.8	9.5		29,583.2
		Golden eagle ^{Error! Bookmark} not defined.	Aquila chrysaetos	FP	0.1	92.0	0.0	36.0	29,537.7	9.5		

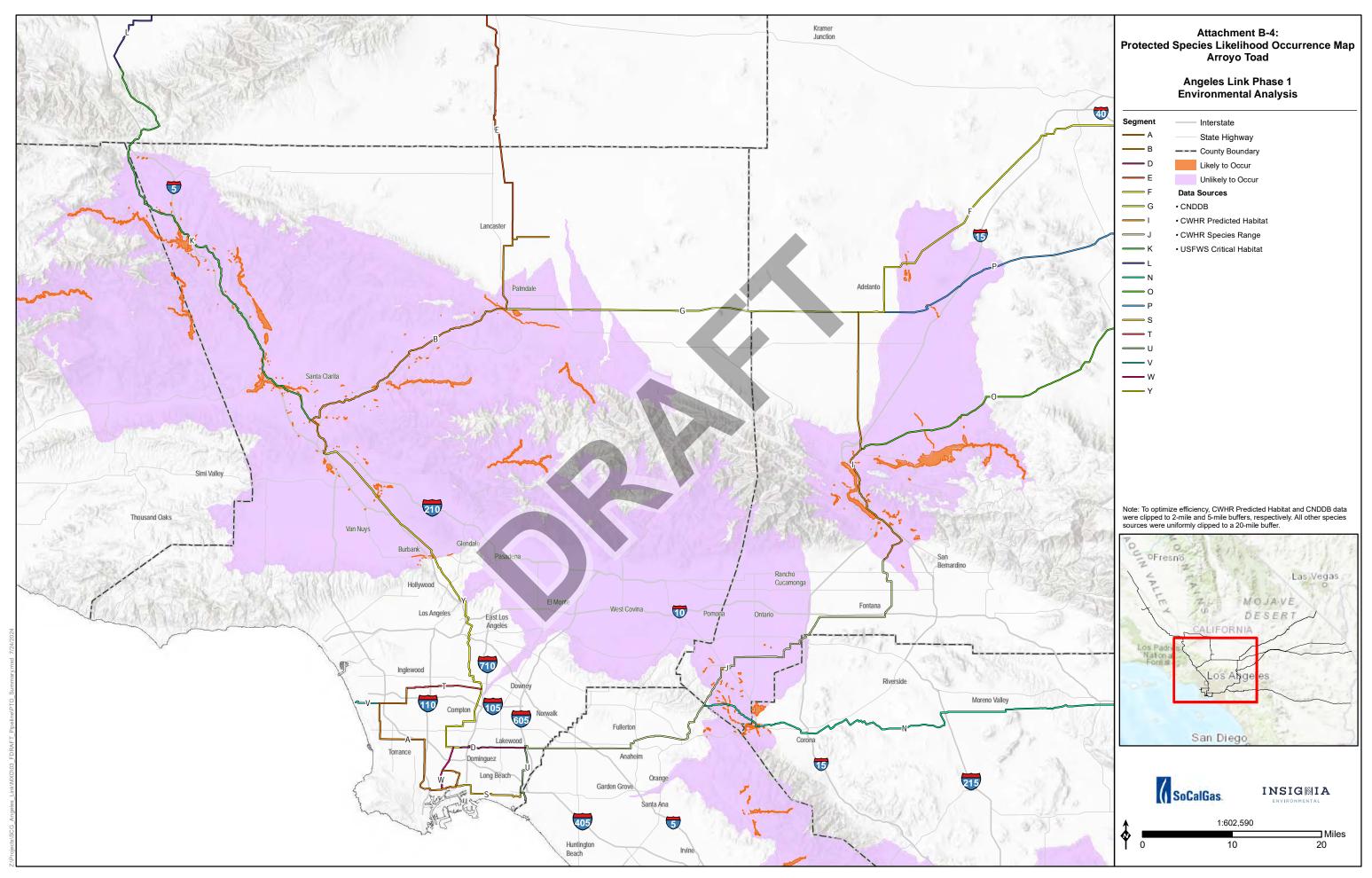
	Segment	Common Name	Scientific Name	Listing Status ¹	Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area					Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Joshua tree	Yucca brevifolia	SC	0.0	8.9	83.2	0.0	2,845.6	26,737.6		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	92.1	0.0	0.0	29,583.2	0.0		
		Razorback sucker	Xyrauchen texanus	SE, FE, FP	0.0	0.0	0.0	0.0	16.1	29,567.1		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	7.2	84.9	0.0	2,327.8	27,255.4		
		White-tailed kite	Elanus leucurus	FP	0.1	2.3	89.7	18.7	797.4	28,767.1		
		Western yellow-billed cuckoo	Coccyzus americanus occidentalis	SE, FT	0.0	9.0	83.0	0.0	2,888.1	26,695.1		
		Yuma Ridgway's rail	Rallus obsoletus yumanensis	ST, FE, FP	0.0	0.0	0.0	0.0	10.5	29,572.7		
		Arroyo toad	Anaxyrus californicus	FE	0.0	15.6	37.1	12.7	5,028.5	11,913.3		
		California red-legged frog	Rana draytonii	FT	1.6	23.3	27.9	373.0	7,486.8	9,094.7		
	0	Crotch bumble bee	Bombus crotchii	SC	0.0	52.7	0.0	0.0	16,954.5	0.0		
		Desert tortoise	Gopherus agassizii	SE, FT	33.5	19.2	0.0	10,728.3	6,226.2	0.0		
		Golden eagle Error! Bookmark not defined.	Aquila chrysaetos	FP	6.6	46.2	0.0	2,914.0	14,040.5	0.0	52.7	
		Joshua tree	Yucca brevifolia	SC	1.5	37.4	13.8	764.4	11,667.0	4,523.1		
4C		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	0.5	52.3	0.0	209.3	16,745.2		16,954.5
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	52.7	0.0	0.0	16,954.5	0.0		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	0.0	4.4	48.4	0.0	1,451.9	15,502.6		
		Slender-horned spineflower	Dodecahema leptoceras	SE, FE	0.0	4.4	48.4	0.0	1,451.9	15,502.6		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	20.4	32.3	0.0	6,563.3	10,391.1		
		Western pond turtle	Emys marmorata	FPT	0.7	11.2	40.8	213.4	3,643.0	13,098.1		
		White-tailed kite	Elanus leucurus	FP	1.4	12.0	39.3	479.0	3,873.7	12,601.8		
		Arroyo toad	Anaxyrus californicus	FE	0.0	13.6	37.2	2.0	4,307.2	12,008.2		
		California red-legged frog	Rana draytonii	FT	0.8	14.2	35.8	214.0	4,604.2	11,499.2		
		Crotch bumble bee	Bombus crotchii	SC	0.0	49.0	1.8	0.0	15,623.6	693.8		
		Desert tortoise	Gopherus agassizii	SE, FT	46.3	4.5	0.0	14,840.5	1,476.9	0.0	50.8	
4C	Р	Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	1.2	49.5	0.0	356.5	15,960.9	0.0		16,317.4
		Joshua tree	Yucca brevifolia	SC	0.0	25.1	25.7	0.0	8,054.9	8,262.5		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	8.5	42.3	19.7	2,662.8	13,634.8		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	50.8	0.0	0.0	16,317.4	0.0		

	Segment		Scientific Name	Listing Status ¹	Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area		Common Name			Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.1	8.4	42.3	53.6	2,629.0	13,634.8		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	0.0	0.0	17.4	0.0	16,300.0		
		Western pond turtle	Emys marmorata	FPT	0.0	2.7	48.0	36.5	848.0	15,432.8		
		White-tailed kite	Elanus leucurus	FP	2.0	3.4	45.3	563.9	1217.4	14,536.1		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	3.5	121.2	0.0	1,082.5	38,872.6		
		Bonytail	Gila elegans	SE, FE	0.1	1.3	123.4	61.1	428.1	39,465.9		
		Desert tortoise	Gopherus agassizii	SE, FT	124.1	0.6	0.1	39,505.8	355.4	94.0		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	1.3	123.4	0.1	491.1	39,369.8	94.3		
4C	X	Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	124.8	0.0	0.0	39,955.1	0.0	124.8	39,955.1
		Razorback sucker	Xyrauchen texanus	SE, FE, FP	0.0	0.1	124.7	0.2	64.1	39,890.8	_	
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	1.4	123.4	0.0	489.0	39,466.2		
		White-tailed kite	Elanus leucurus	FP	0.2	3.3	121.2	131.3	951.3	38,872.5		
		Western yellow-billed cuckoo	Coccyzus americanus occidentalis	SE, FT	0.0	4.7	120.0	0.0	1,486.8	38,468.3		
		Yuma Ridgway's rail	Rallus obsoletus yumanensis	ST, FE, FP	0.0	8.9	115.9	24.2	2,850.9	37,080.0		
		Arroyo toad	Anaxyrus californicus	FE	0.4	6.8	70.8	141.3	2,084.9	22,496.3		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.2	66.7	11.1	54.5	21,084.0	3,583.9		
		Coastal California gnatcatcher	Polioptila californica californica	FT	6.3	47.2	24.4	2,082.5	14,905.4	7,734.5		
		California red-legged frog	Rana draytonii	FT	22.3	51.5	4.2	7,211.2	16,131.8	1,379.4		
		Coachella Valley fringe-toed lizard	Uma inornata	SE, FT	7.4	3.6	66.9	2,348.3	1,235.8	21,138.4		
		Coachella Valley milk-vetch	Astragalus lentiginosus var. coachellae	FE	0.0	12.0	65.9	92.9	3,804.6	20,825.0		
		Crotch bumble bee	Bombus crotchii	SC	0.1	77.8	0.0	9.9	24,712.5	0.0		
4D	N	Delhi Sands flower-loving fly	Rhaphiomidas terminatus abdominalis	FE	0.0	0.6	77.4	0.0	179.8	24,542.6	77.9	24,722.4
		Desert tortoise	Gopherus agassizii	SE, FT	3.3	7.7	66.9	1,091.1	2,492.9	21,138.4	,	24,722.4
		Golden eagle Error! Bookmark not defined.	Aquila chrysaetos	FP	31.7	46.2	0.0	10,690.7	14,031.8	0.0		
		Least Bell's vireo	Vireo bellii pusillus	SE, FE	2.0	68.0	7.9	678.3	21,578.5	2,465.6		
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	77.9	0.0	0.0	24,722.4	0.0		
		San Bernardino kangaroo rat	Dipodomys merriami parvus	SE, FE	4.8	18.7	54.4	1,963.2	5,590.9	17,168.3		
		Santa Ana sucker	Catostomus santaanae	FT	0.0	0.0	77.9	25.7	9.1	24,687.7		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	77.9	0.0	0.0	24,690.5	31.9		

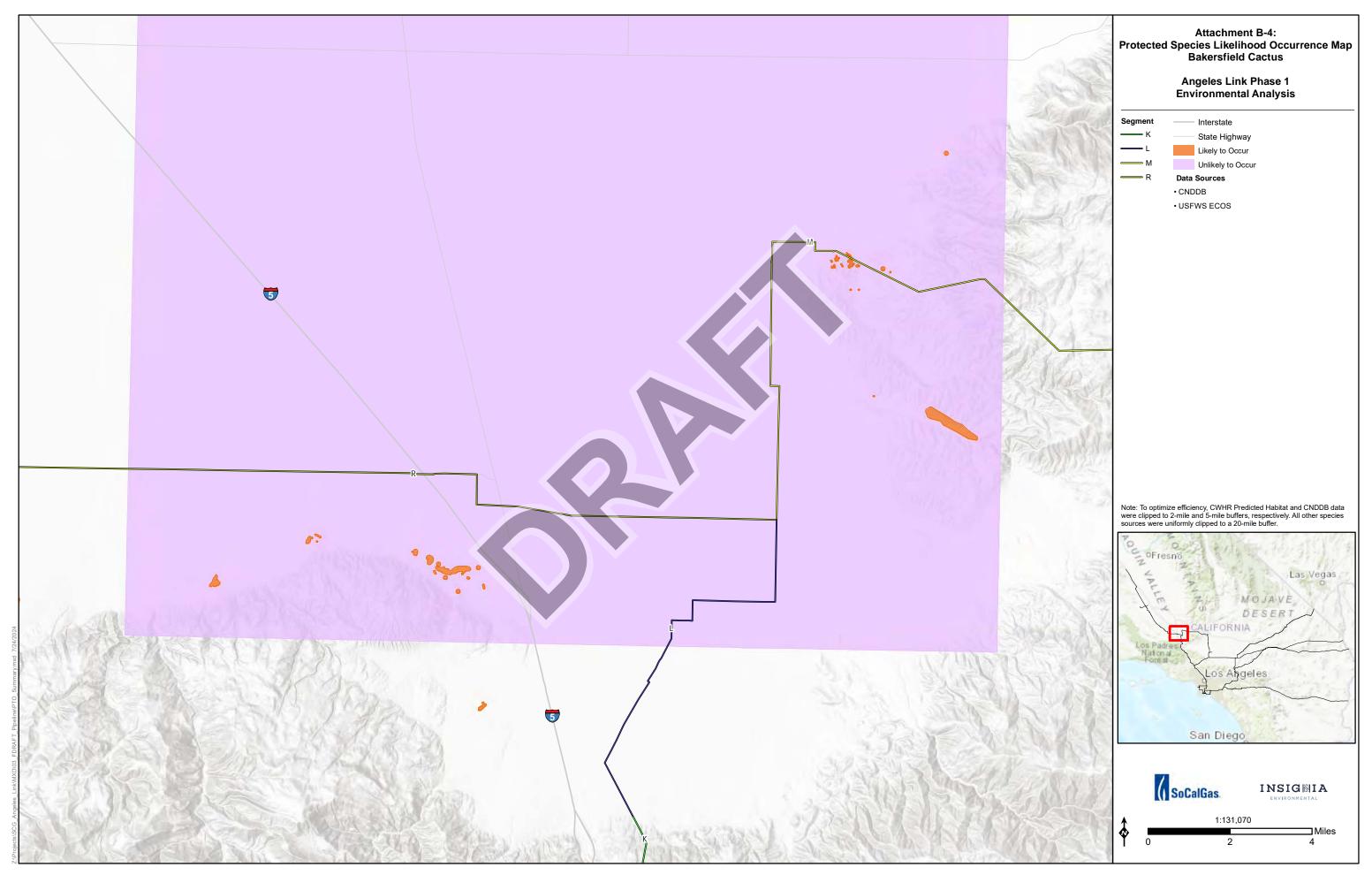
	Segment		Scientific Name	Listing Status ¹	Linear Miles of Segment Crossed			Acres Cros	sed within the 0.25	Total	Total Area	
Study Area		Common Name			Likely to Occur	Unlikely to Occur	Does Not Occur	Likely to Occur	Unlikely to Occur	Does Not Occur	Segment Length (Miles)	within 0.25-Mile Buffer (Acres)
		Stephens' kangaroo rat	Dipodomys stephensi	ST, FT	16.6	50.2	11.1	4,636.8	16,501.7	3,583.9		
		Tricolored blackbird	Agelaius tricolor	ST	0.3	44.6	33.0	161.7	14,294.7	10,266.0		
		Western pond turtle	Emys marmorata	FPT	22.9	55.0	0.0	7,591.2	17,131.2	0.0		
		Western spadefoot	Spea hammondii	FPT	15.3	47.6	15.0	4,272.3	15,631.3	4,818.8		
		White-tailed kite	Elanus leucurus	FP	49.2	28.7	0.0	15,174.2	9,548.2	0.0		
		Western yellow-billed cuckoo	Coccyzus americanus occidentalis	SE, FT	0.4	8.7	68.8	140.4	2,729.0	21,853.0		
		Bald eagle Error! Bookmark not defined.	Haliaeetus leucocephalus	SE, FDR, FP	0.0	2.2	120.3	0.0	726.8	38,519.6		
		Bonytail	Gila elegans	SE, FE	0.0	0.0	0.0	0.0	8.0	39,238.4		
		California red-legged frog	Rana draytonii	FT	0.0	0.2	122.3	0.0	81.4	39,165.1		
		Coachella Valley fringe-toed lizard	Uma inornata	SE, FT	35.3	0.9	86.3	11,137.0	474.5	27,634.9		
		Coachella Valley milk-vetch	Astragalus lentiginosus var. coachellae	FE	2.2	17.6	102.7	847.6	5,542.4	32,856.5		
		Crotch bumble bee	Bombus crotchii	SC	0.0	38.5	84.0	0.0	12,293.0	26,953.5		
		Desert tortoise	Gopherus agassizii	SE, FT	97.6	24.9	0.0	30,770.1	8,464.4	12.0		
		Elf owl	Micrathene whitneyi	SE	7.5	0.0	115.0	2,385.3	0.0	36,861.2		
		Golden eagleError! Bookmark not defined.	Aquila chrysaetos	FP	15.5	107.0	0.0	5,266.4	33,968.0	12.0		
4D	Q	Least Bell's vireo	Vireo bellii pusillus	SE, FE	0.0	7.1	115.4	0.0	2,328.0	36,918.5	122.5	39,246.5
		Monarch - California overwintering population	Danaus plexippus plexippus pop. 1	FC	0.0	122.5	0.0	0.0	39,246.5	0.0	_	
		Razorback sucker	Xyrauchen texanus	SE, FE, FP	0.0	0.0	0.0	31.2	0.0	39,215.2		
		Southwestern willow flycatcher	Empidonax traillii extimus	SE, FE	0.0	70.5	52.0	0.0	22,622.2	16,624.3		
		Tricolored blackbird	Agelaius tricolor	ST	0.0	38.3	84.2	1.8	12,276.3	26,968.4		
		Western pond turtle	Emys marmorata	FPT	0.0	3.9	118.6	0.7	1,337.8	37,908.0		
		White-tailed kite	Elanus leucurus	FP	2.0	38.6	82.0	1,120.5	11,886.0	26,240.0		
		Western yellow-billed cuckoo	Coccyzus americanus occidentalis	SE, FT	0.8	7.9	113.8	312.6	2,531.6	36,402.3		
		Yuma Ridgway's rail	Rallus obsoletus yumanensis	ST, FE, FP	0.0	17.0	105.5	0.0	5,478.8	33,767.7	_	

Sources: California Natural Diversity Database (California Department of Fish and Wildlife [CDFW] 2023d), Threatened and Endangered Species (CDFW 2023e), and Fully Protected Animals (CDFW 2023f)

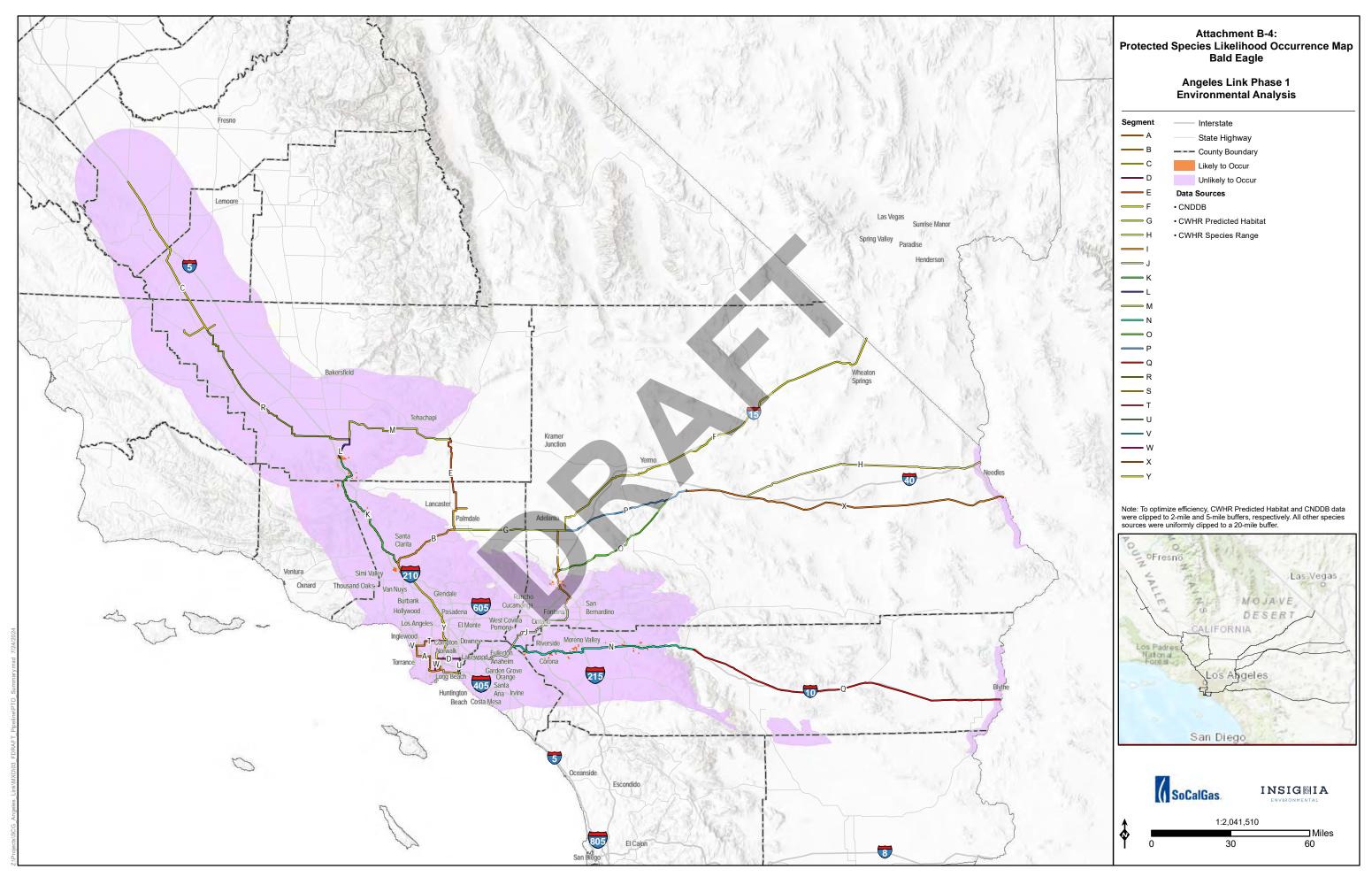
ATTACHMENT B-4: PROTECTED SPECIES LIKELIHOOD OCCURRENCE MAPS



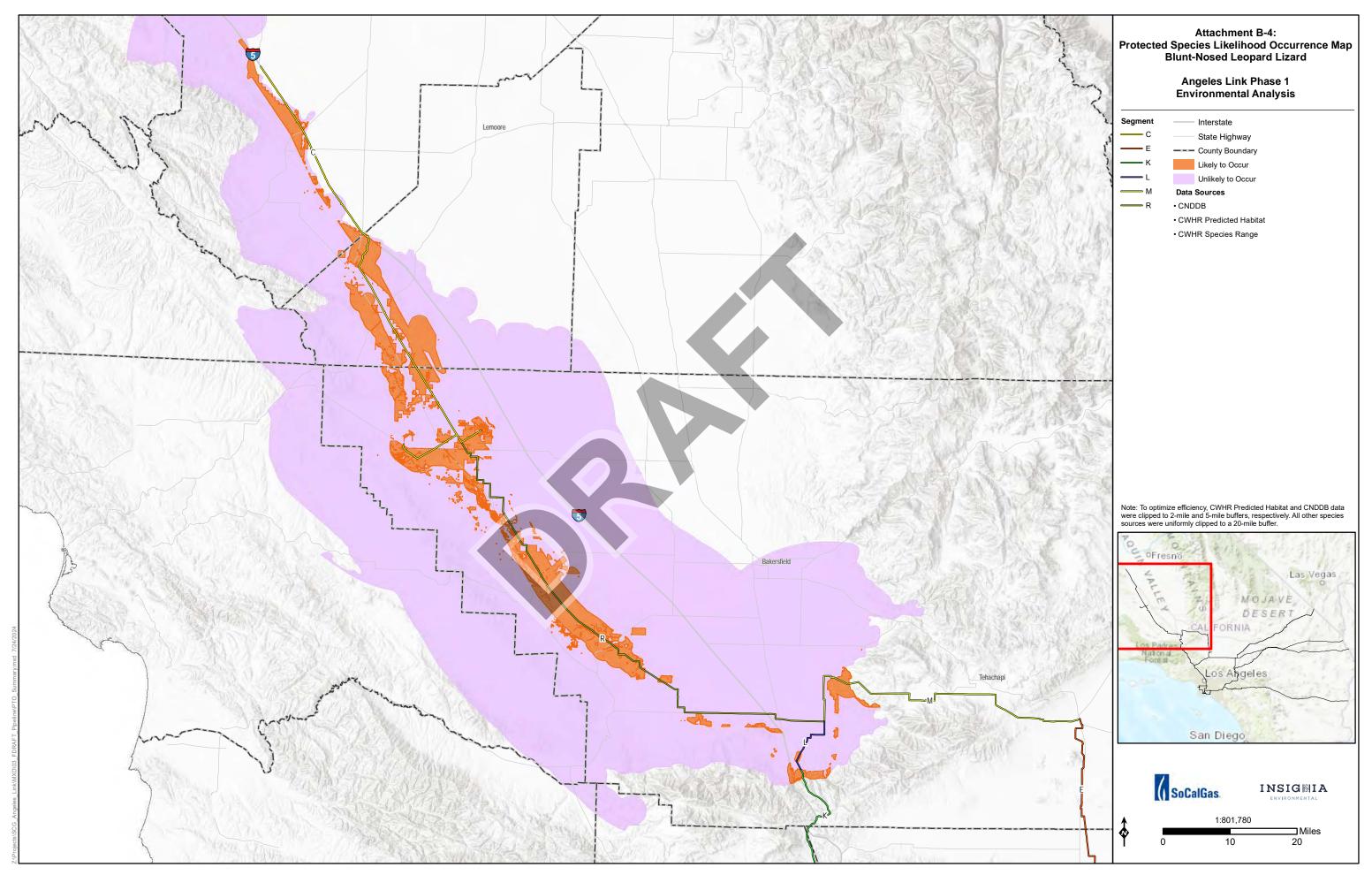
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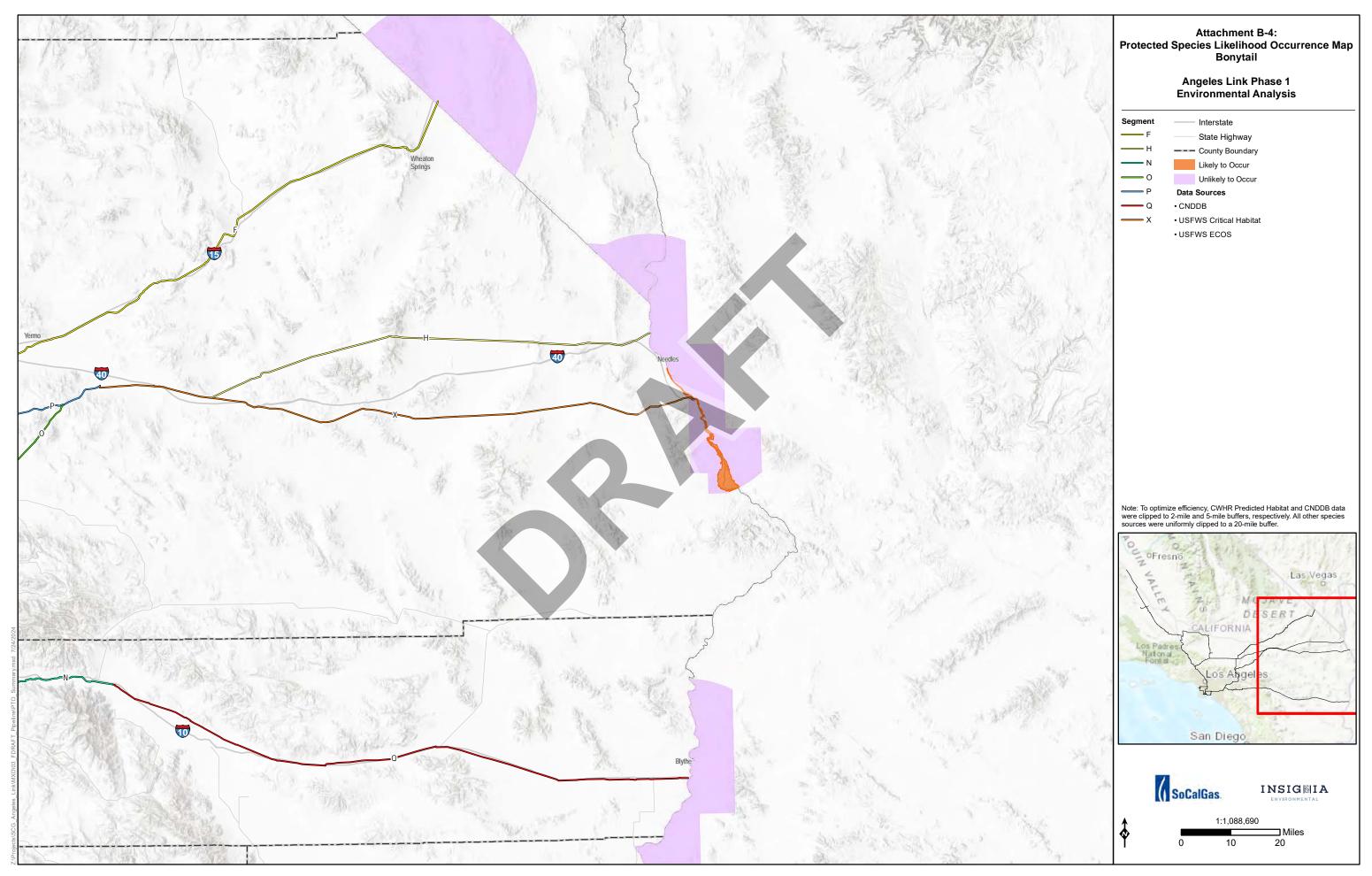
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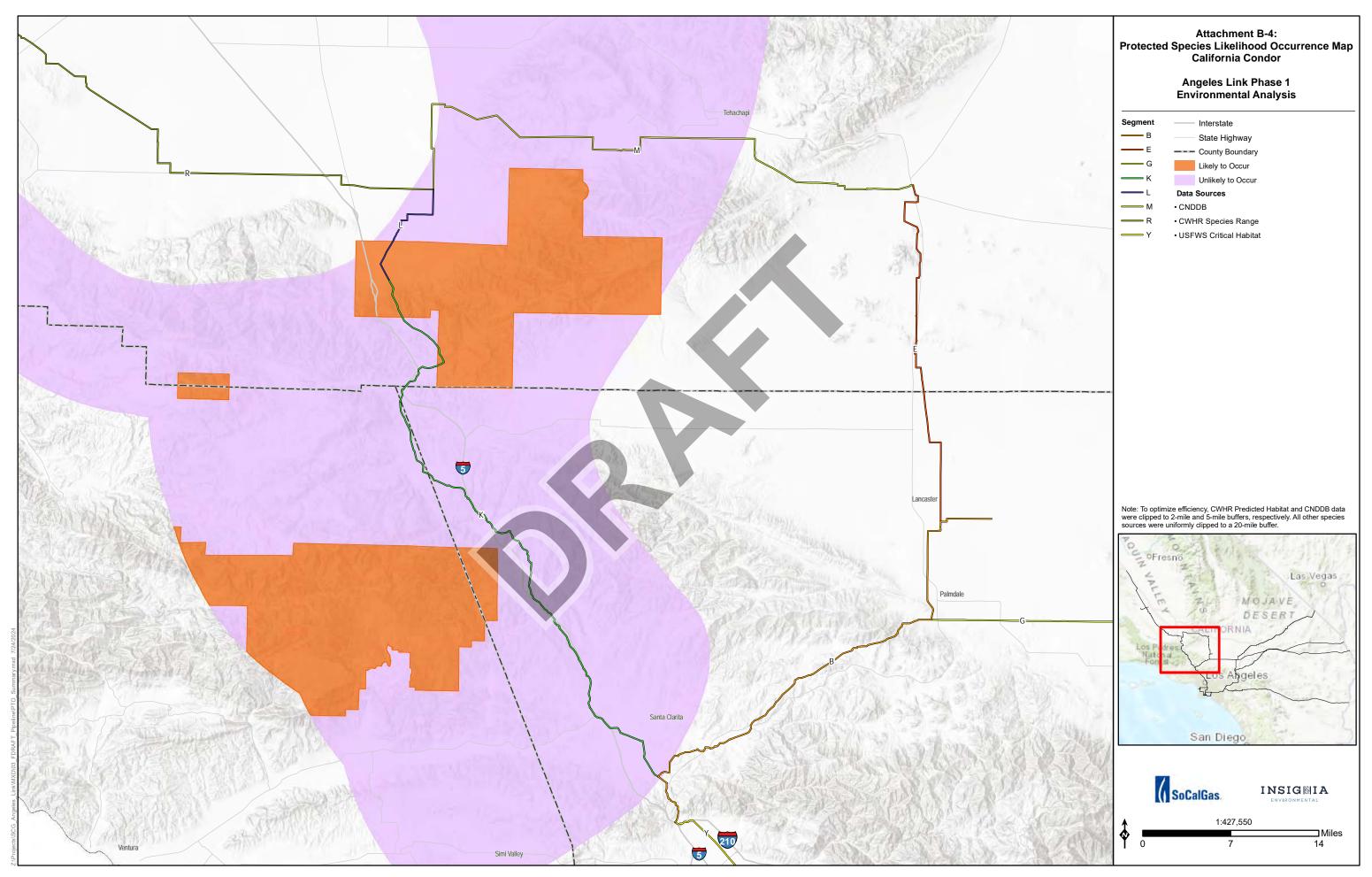
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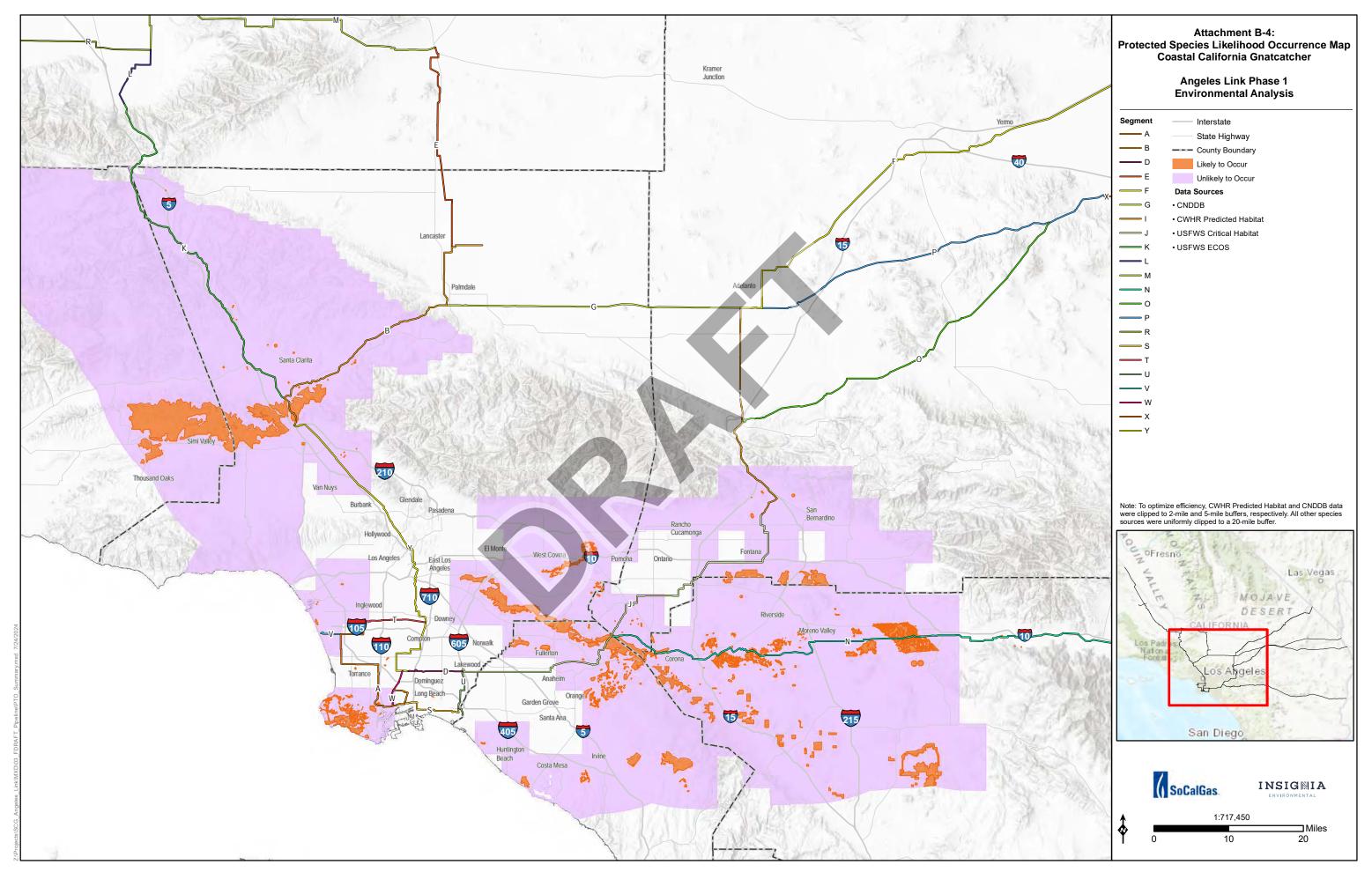
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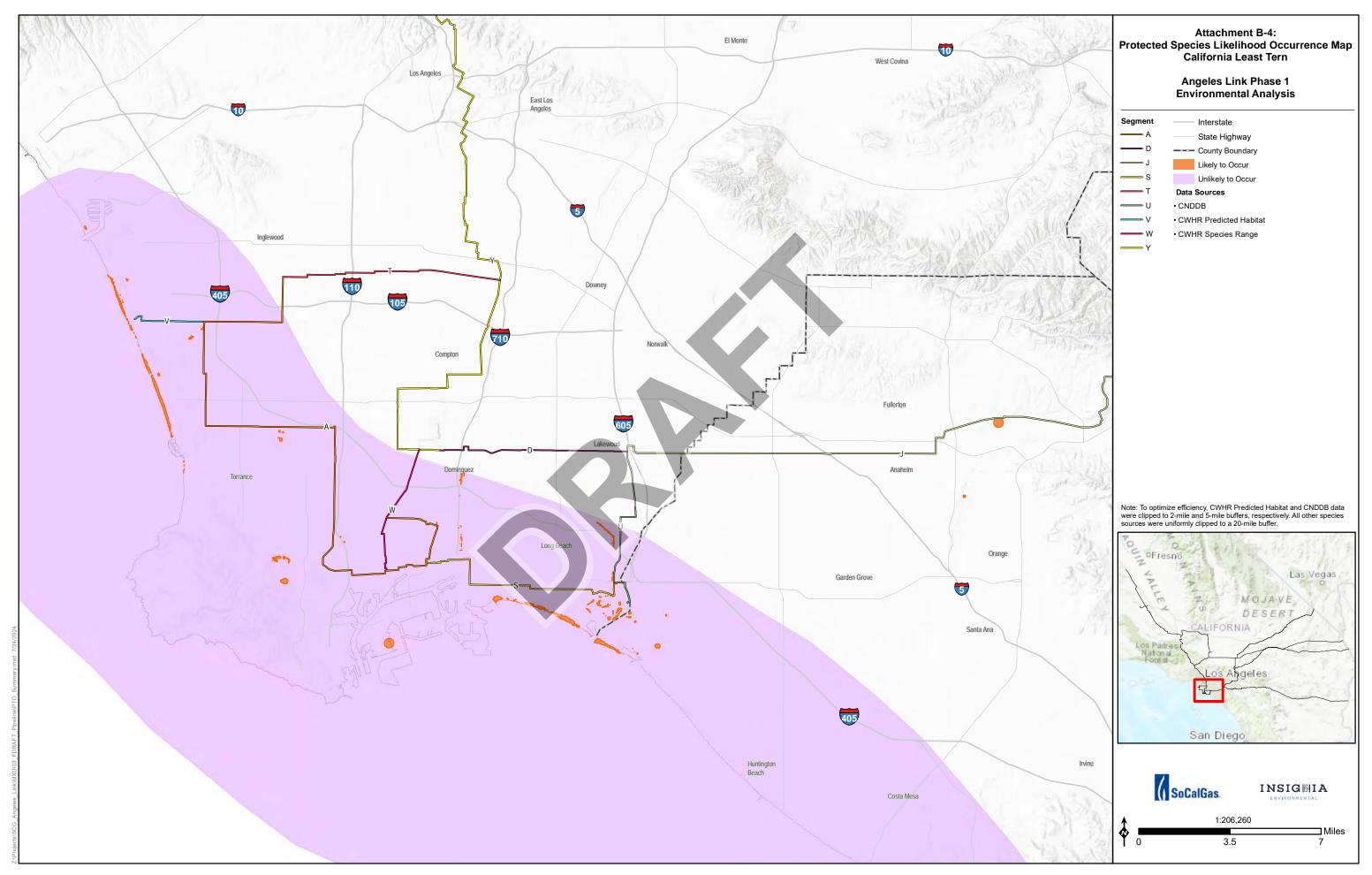
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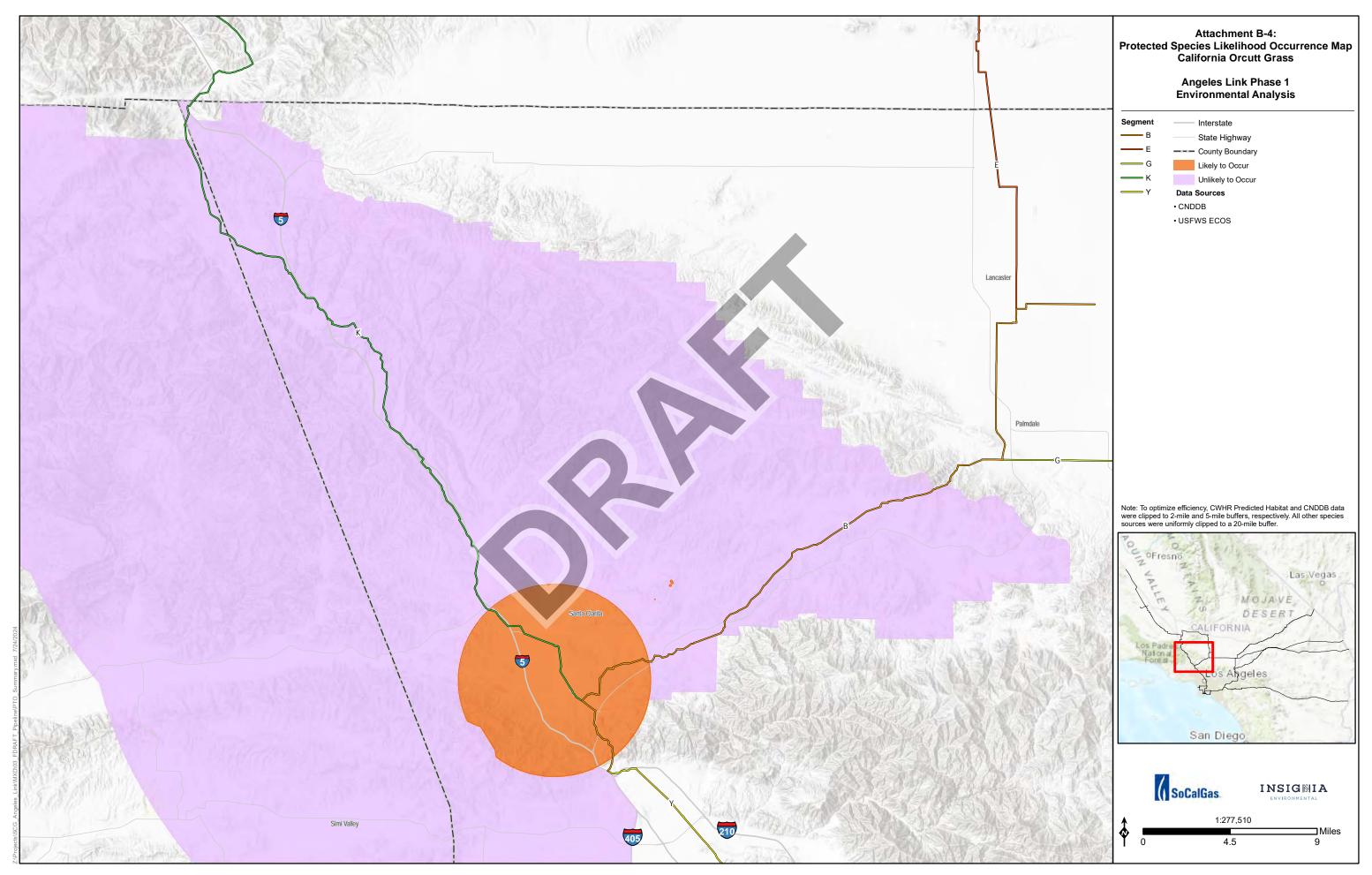
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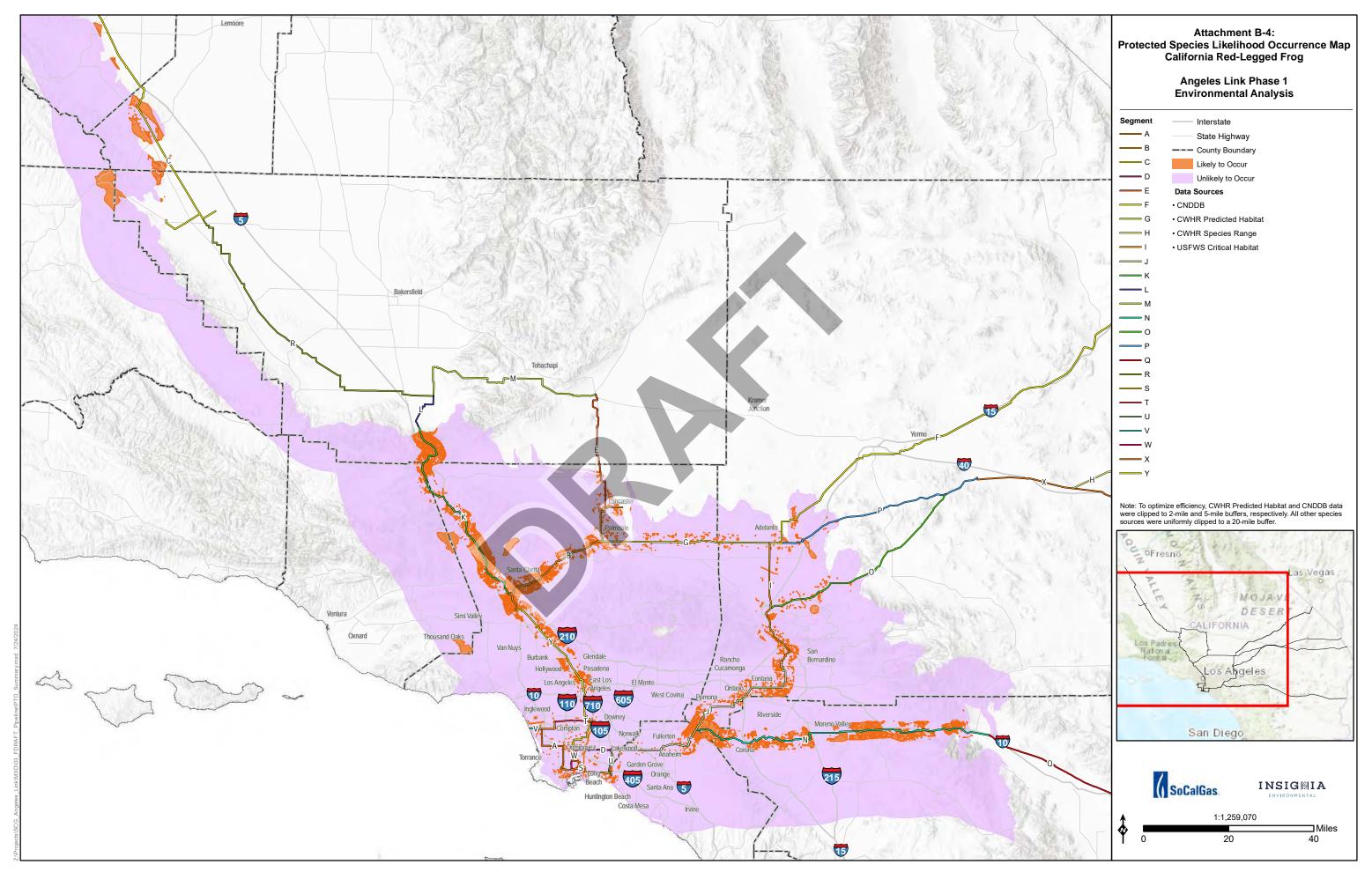
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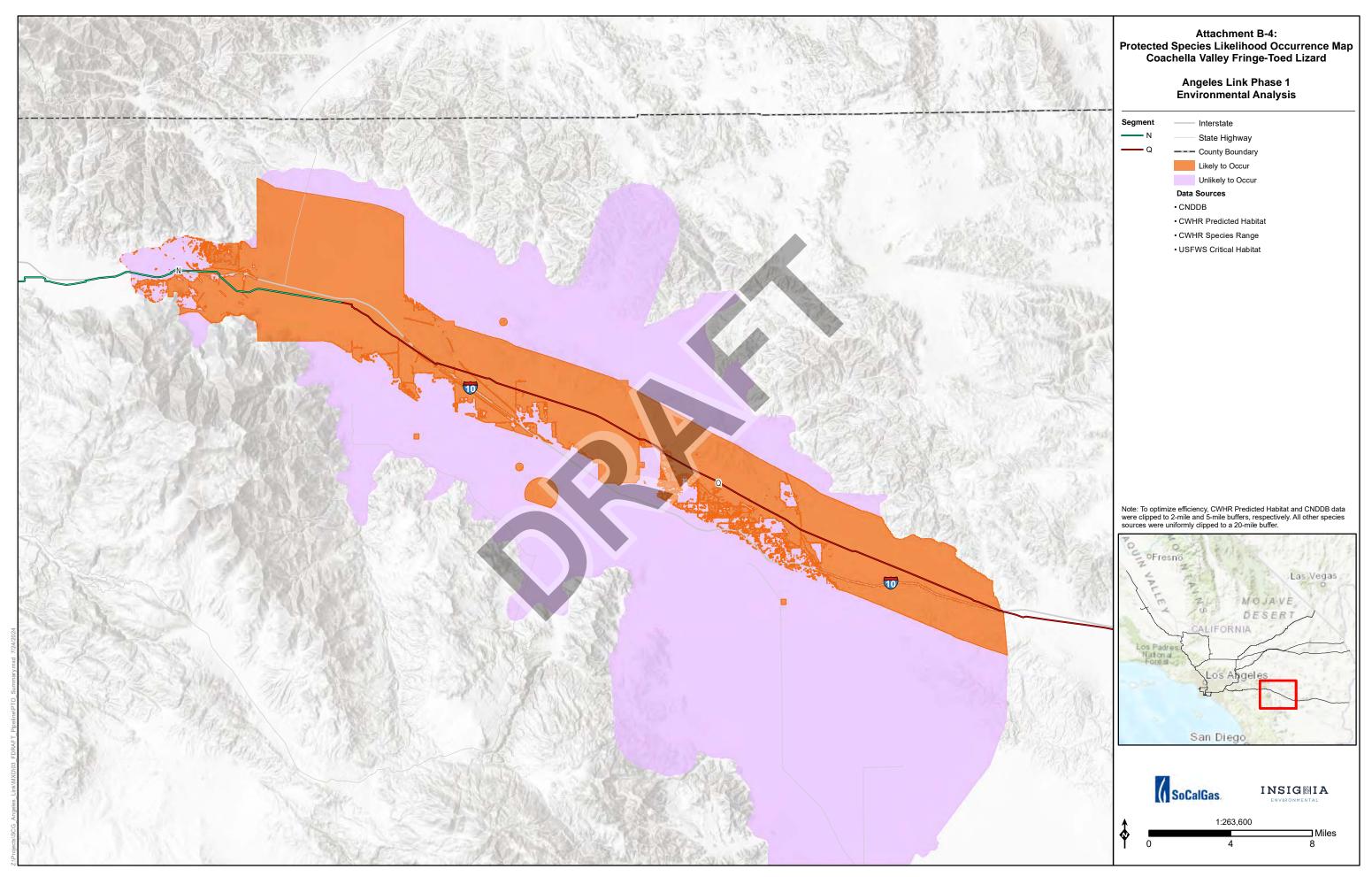
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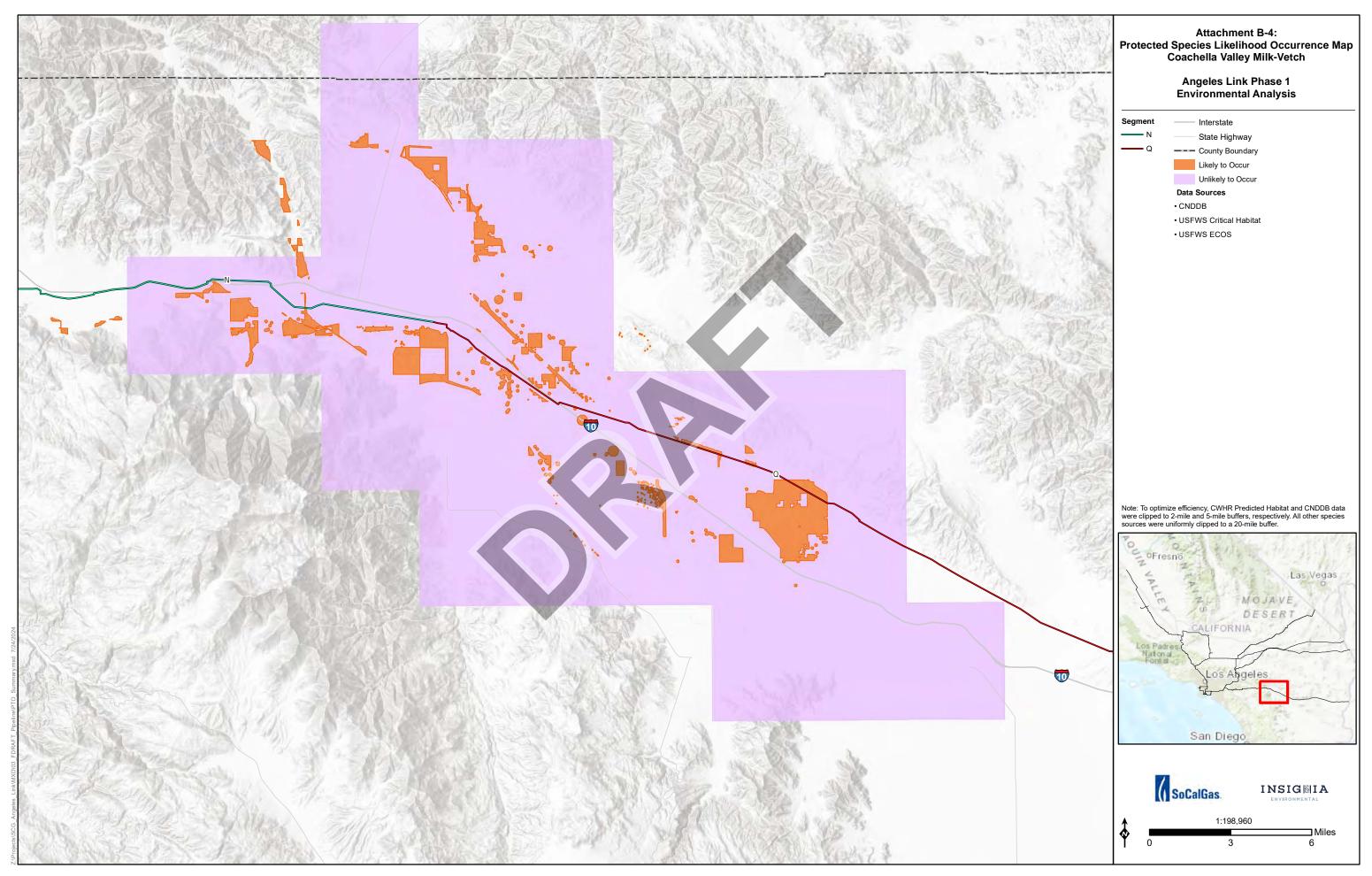
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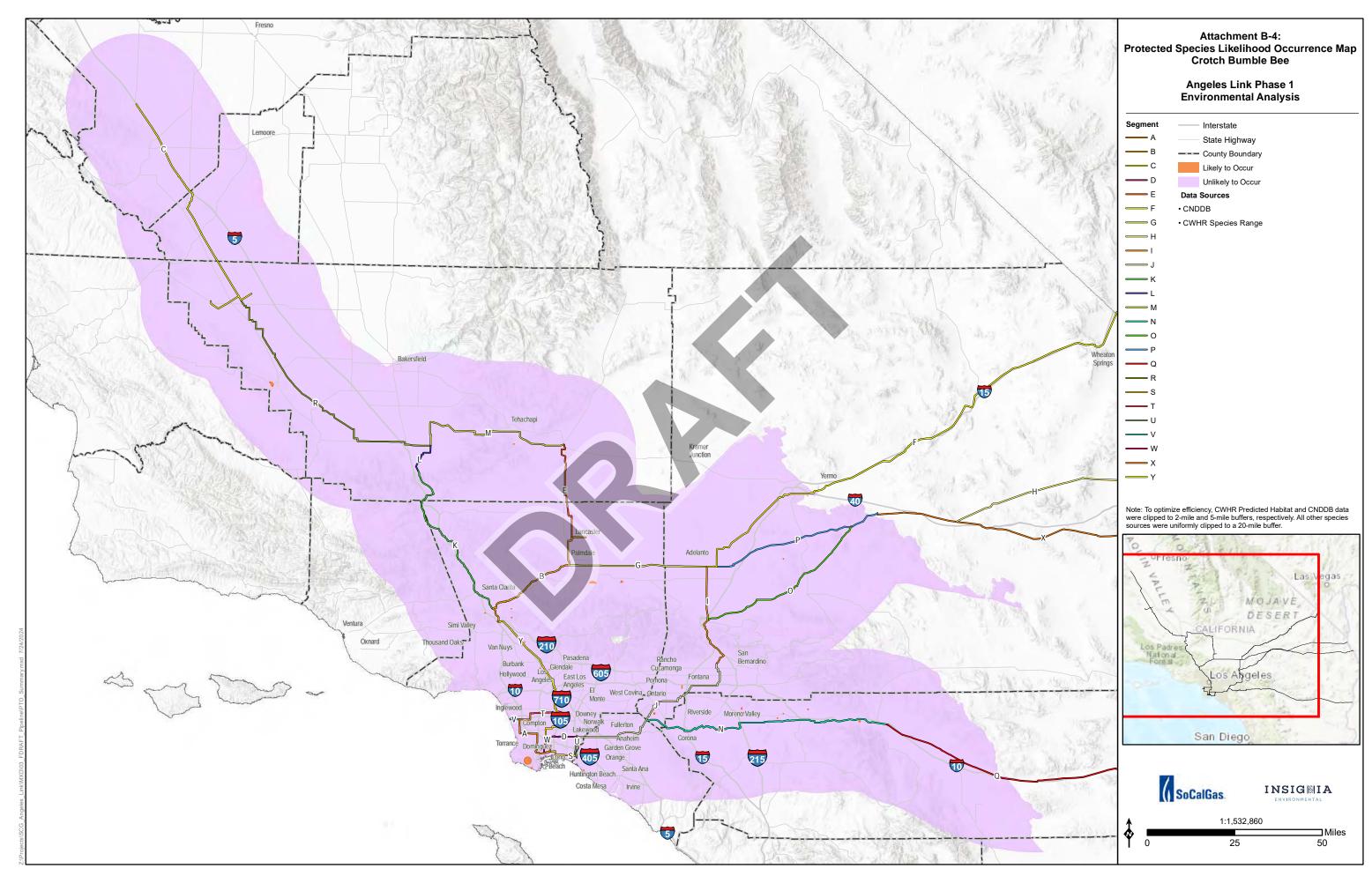
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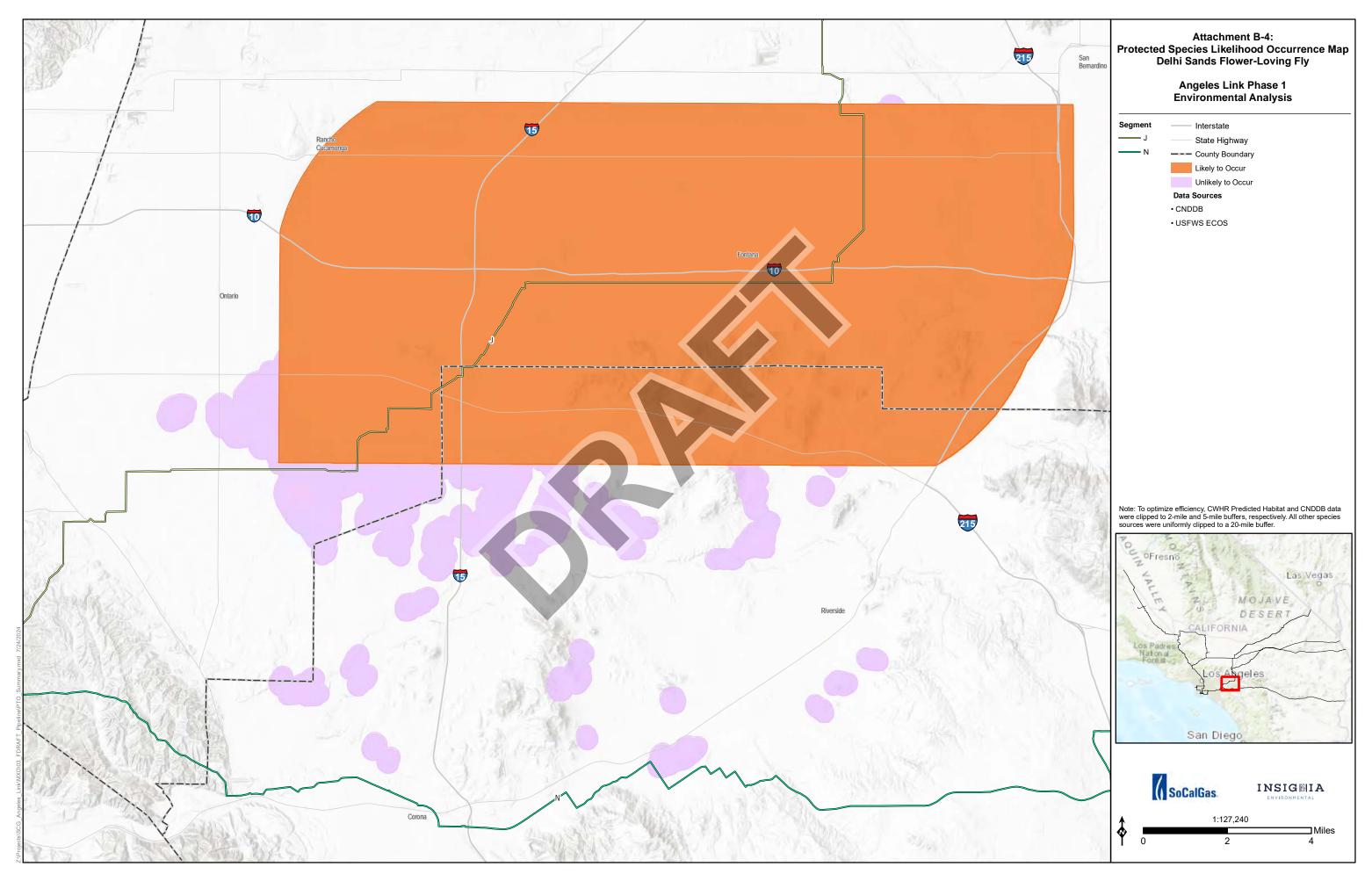
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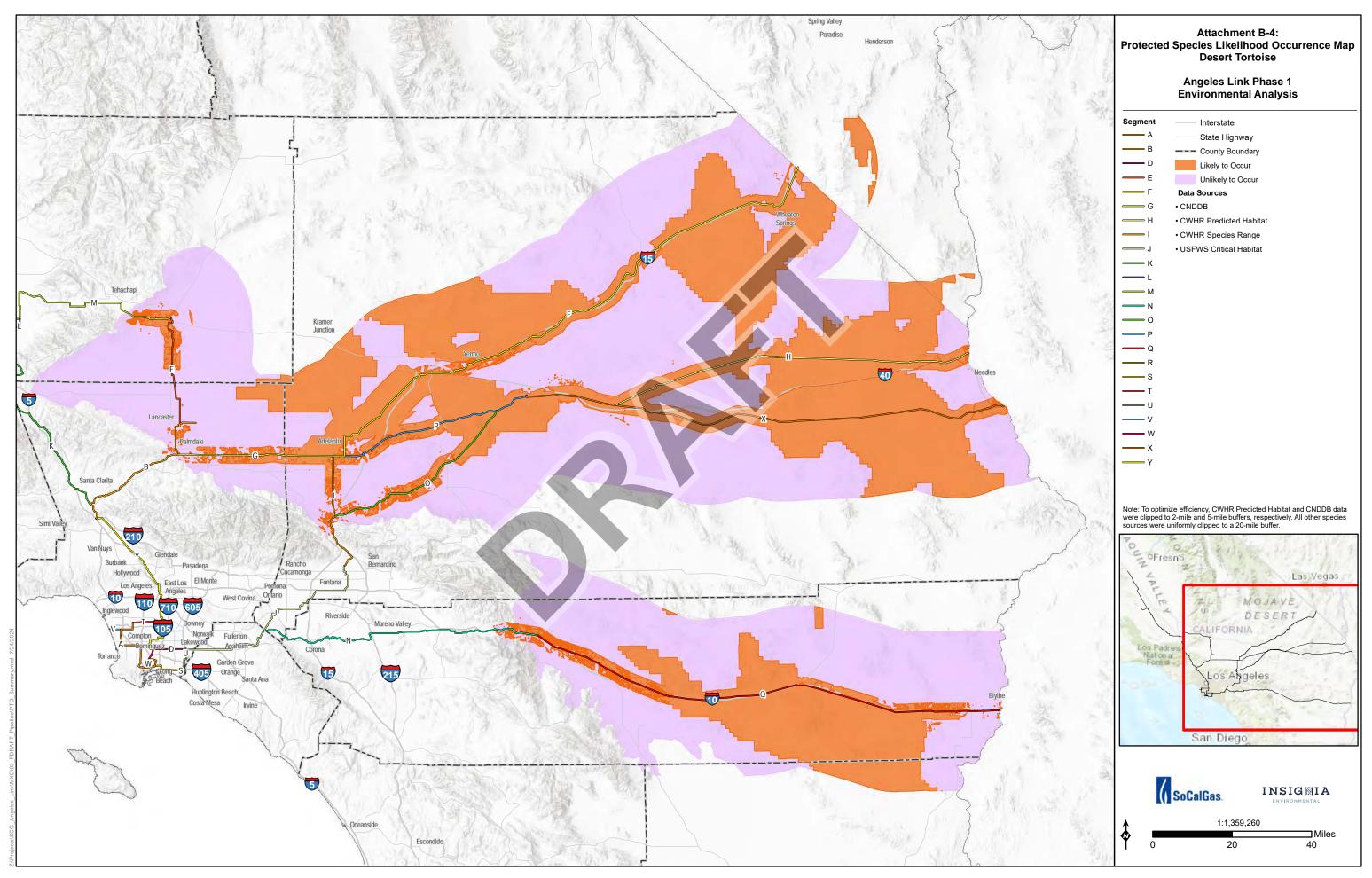
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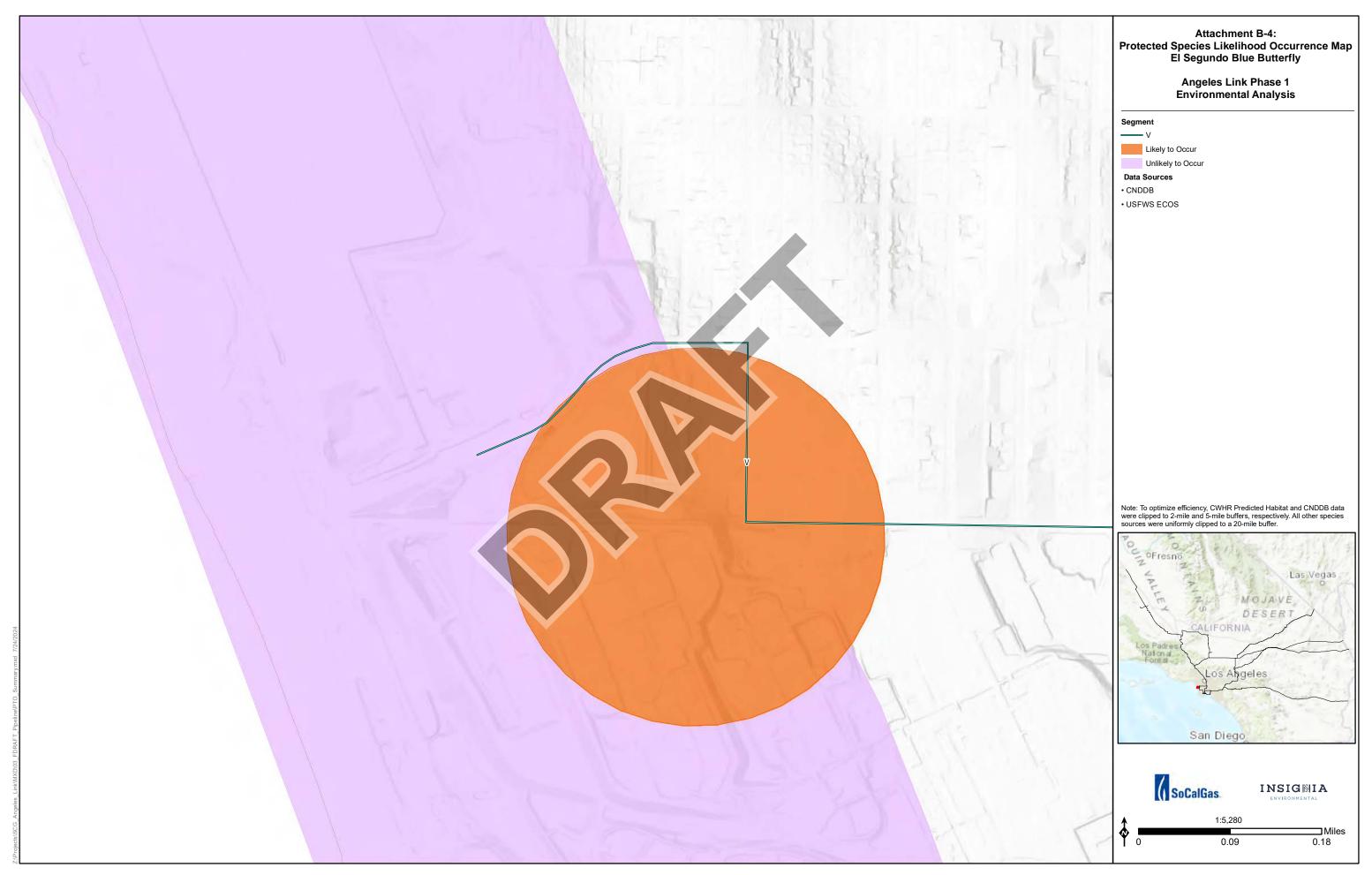
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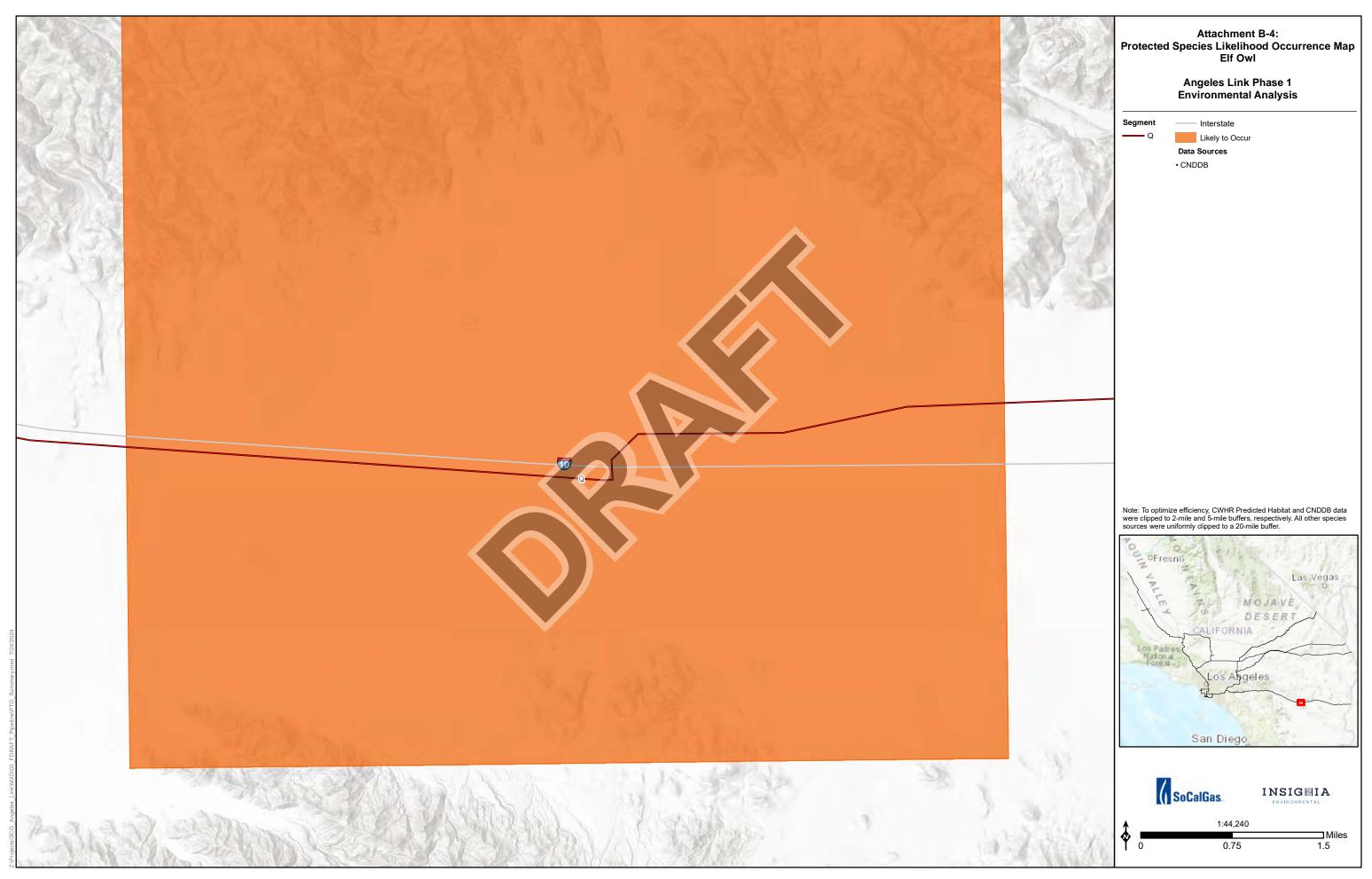
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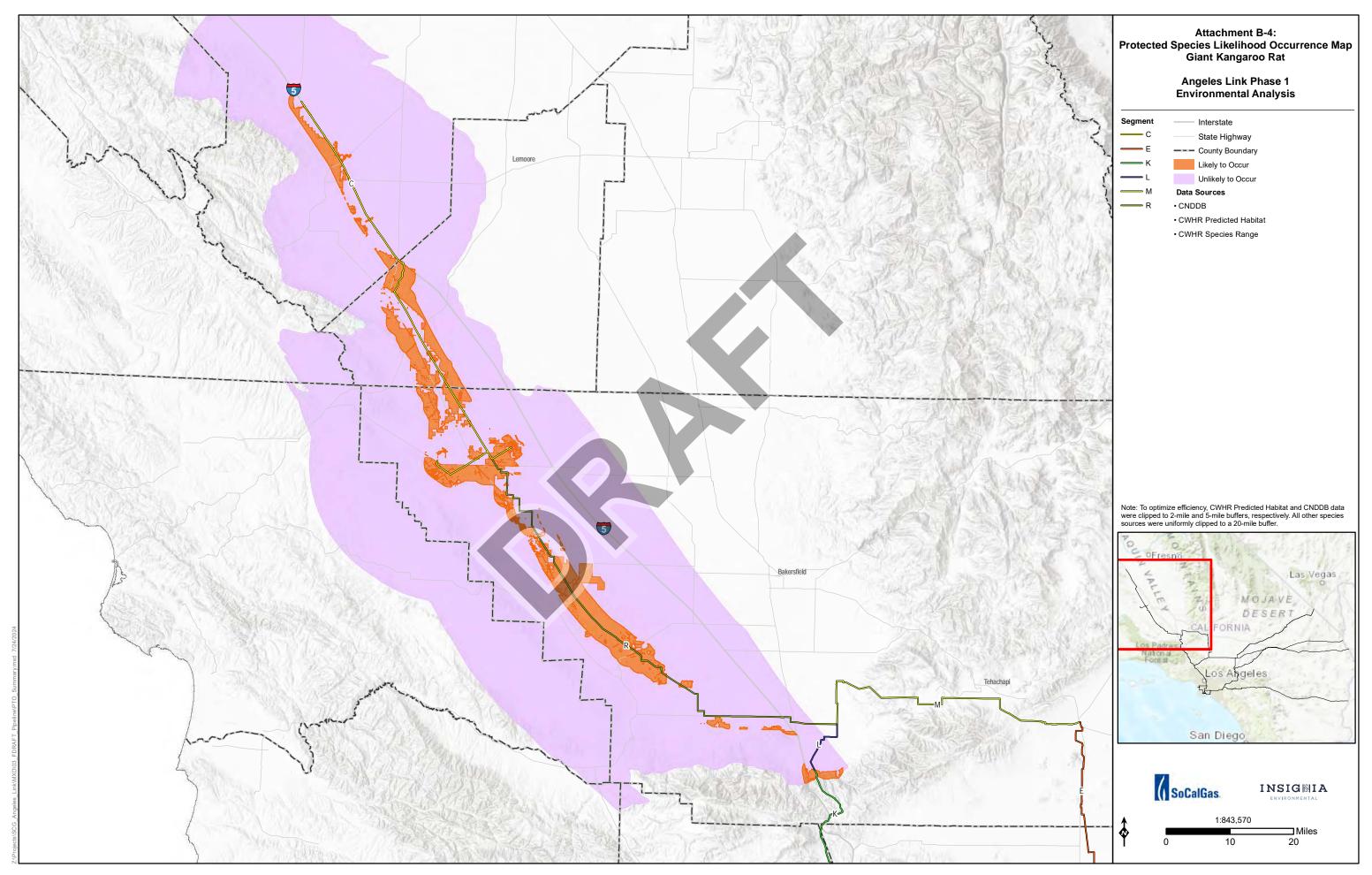
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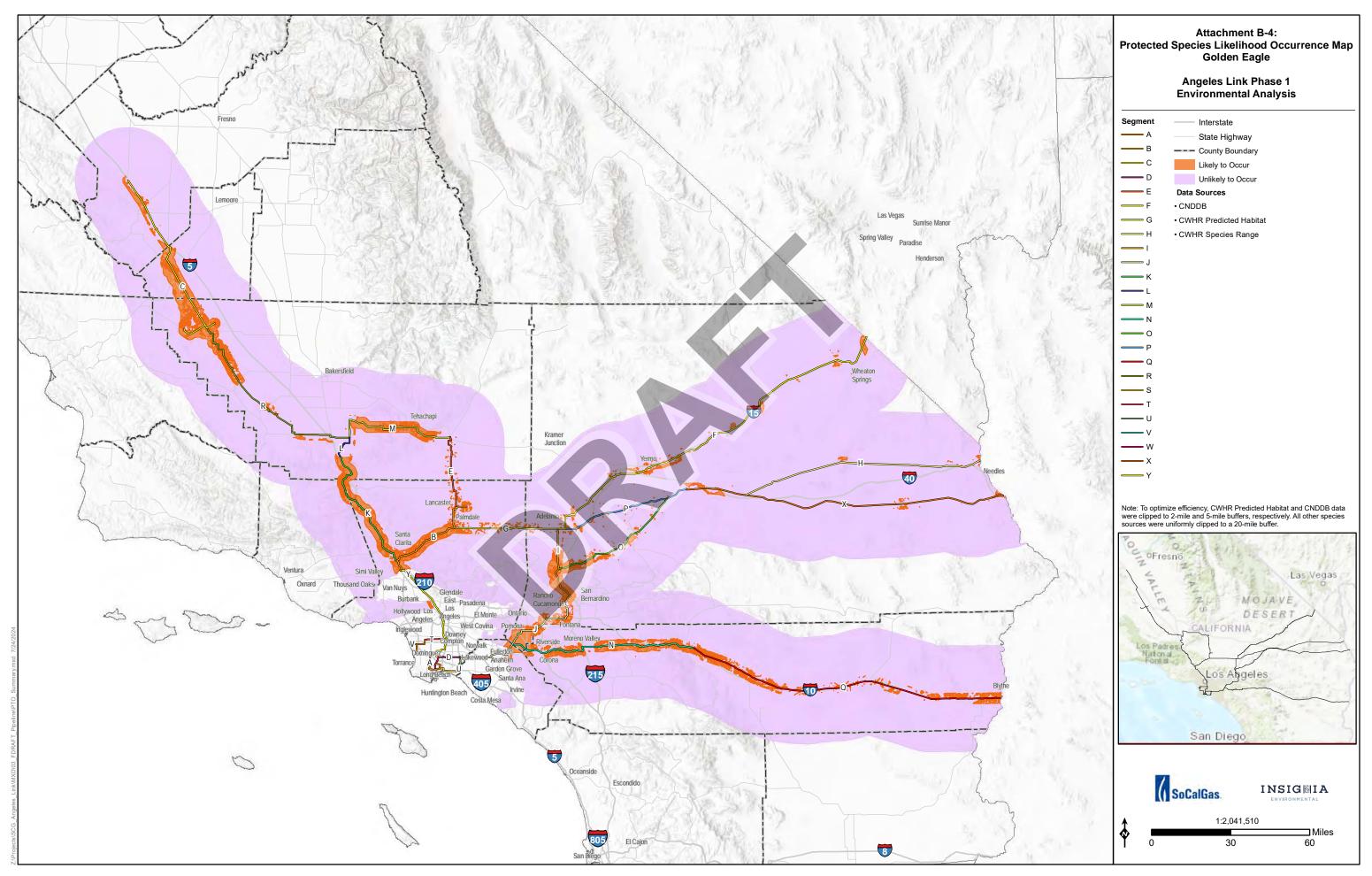
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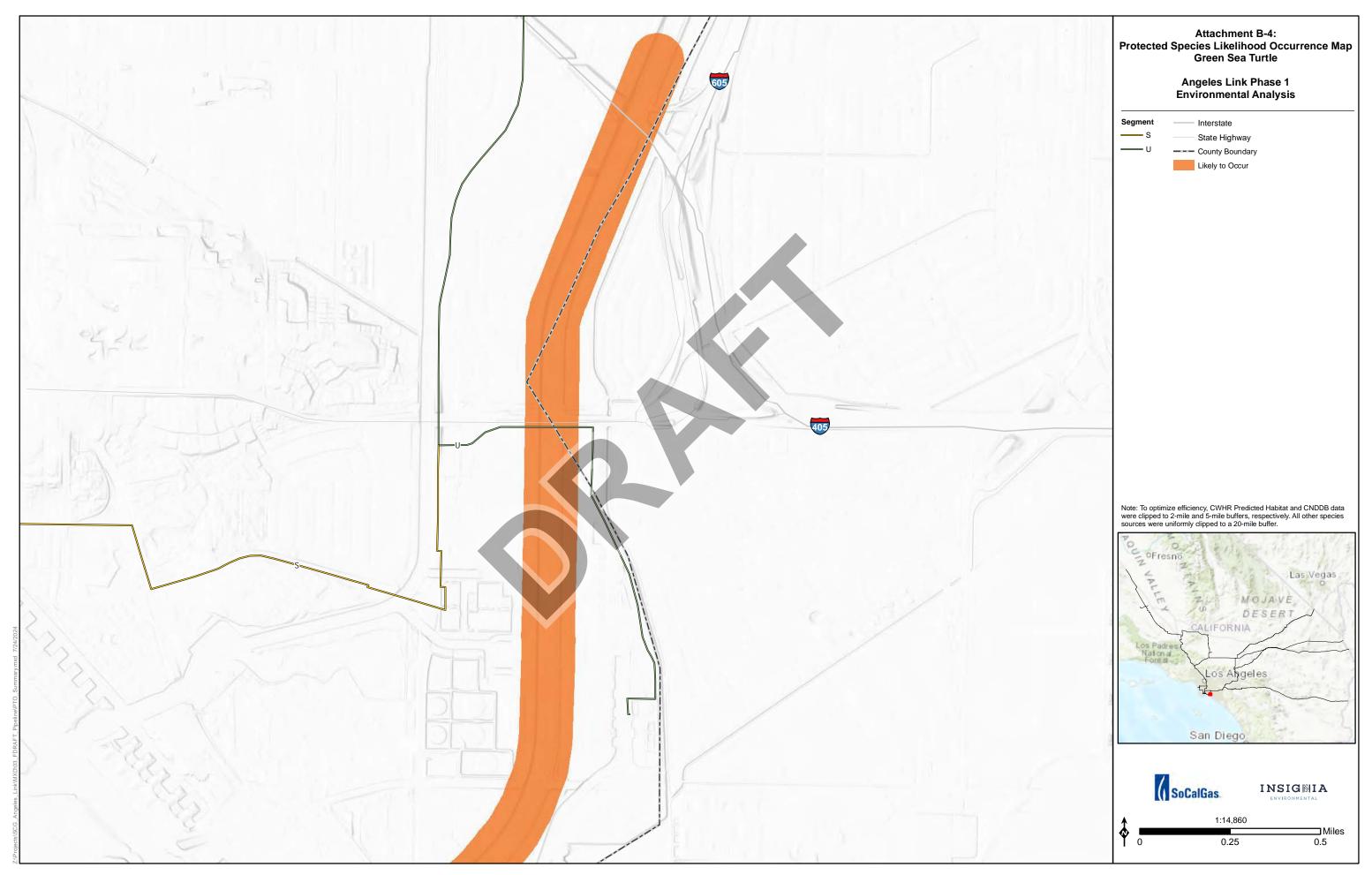
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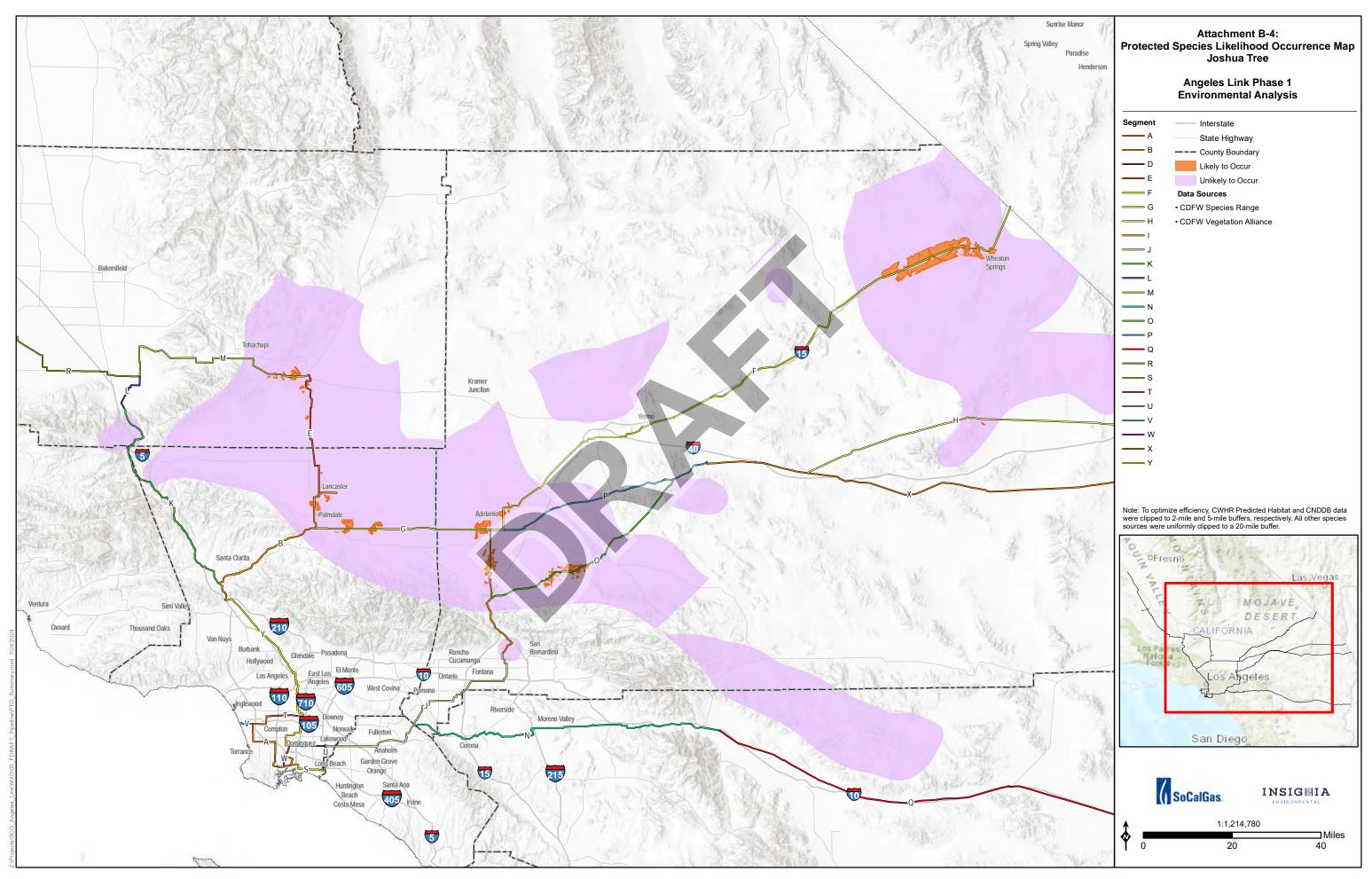
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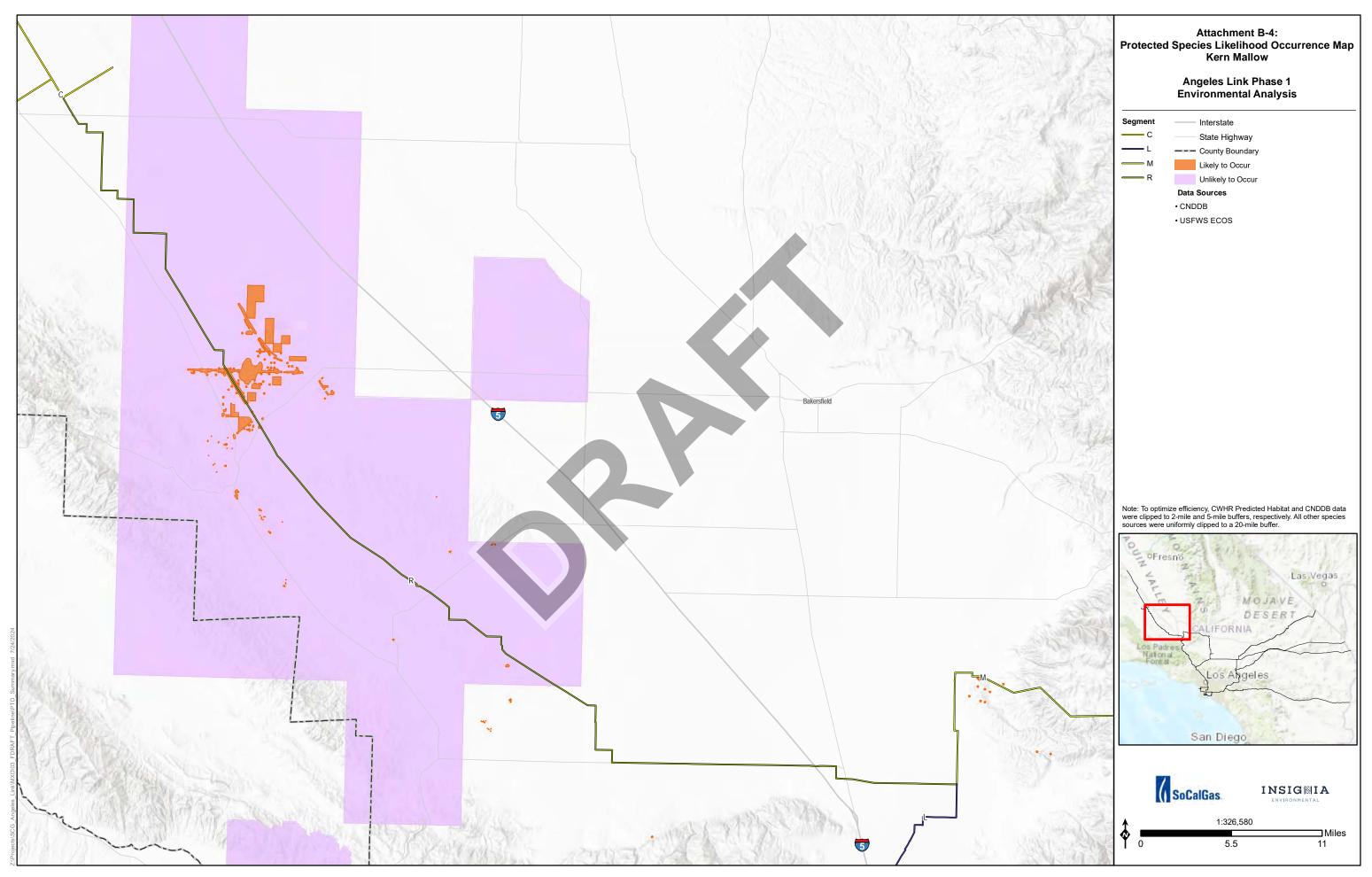
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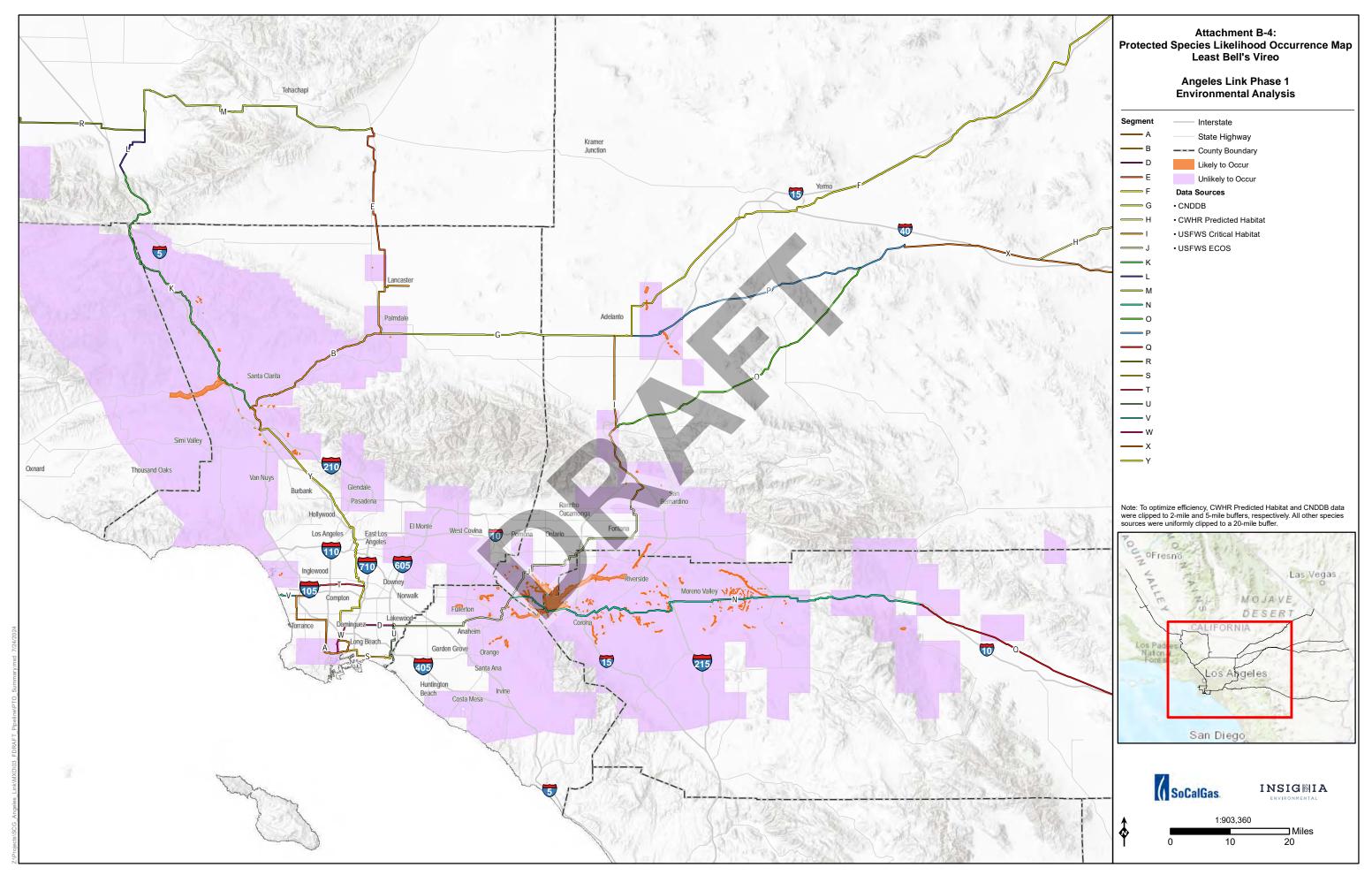
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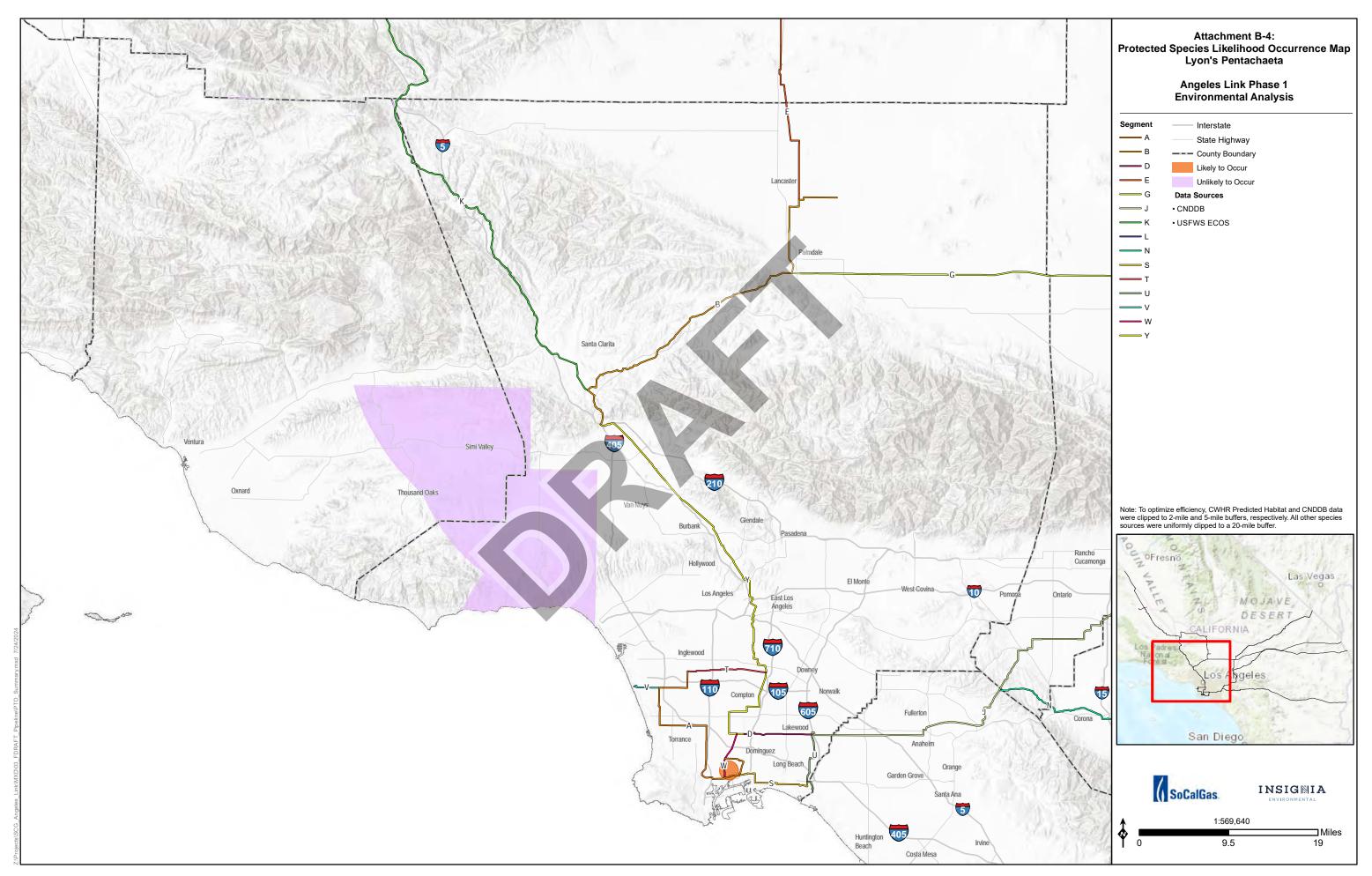
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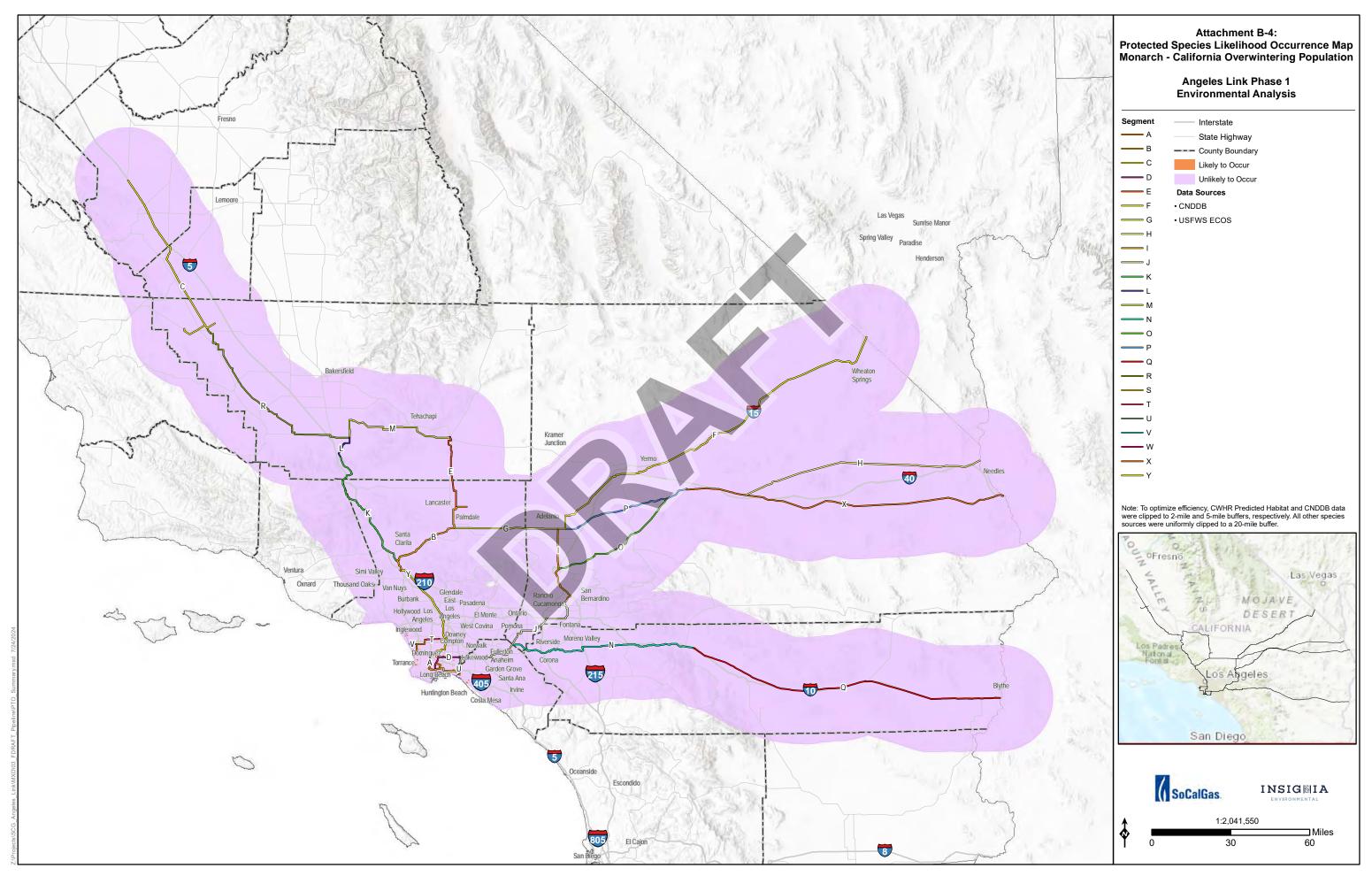
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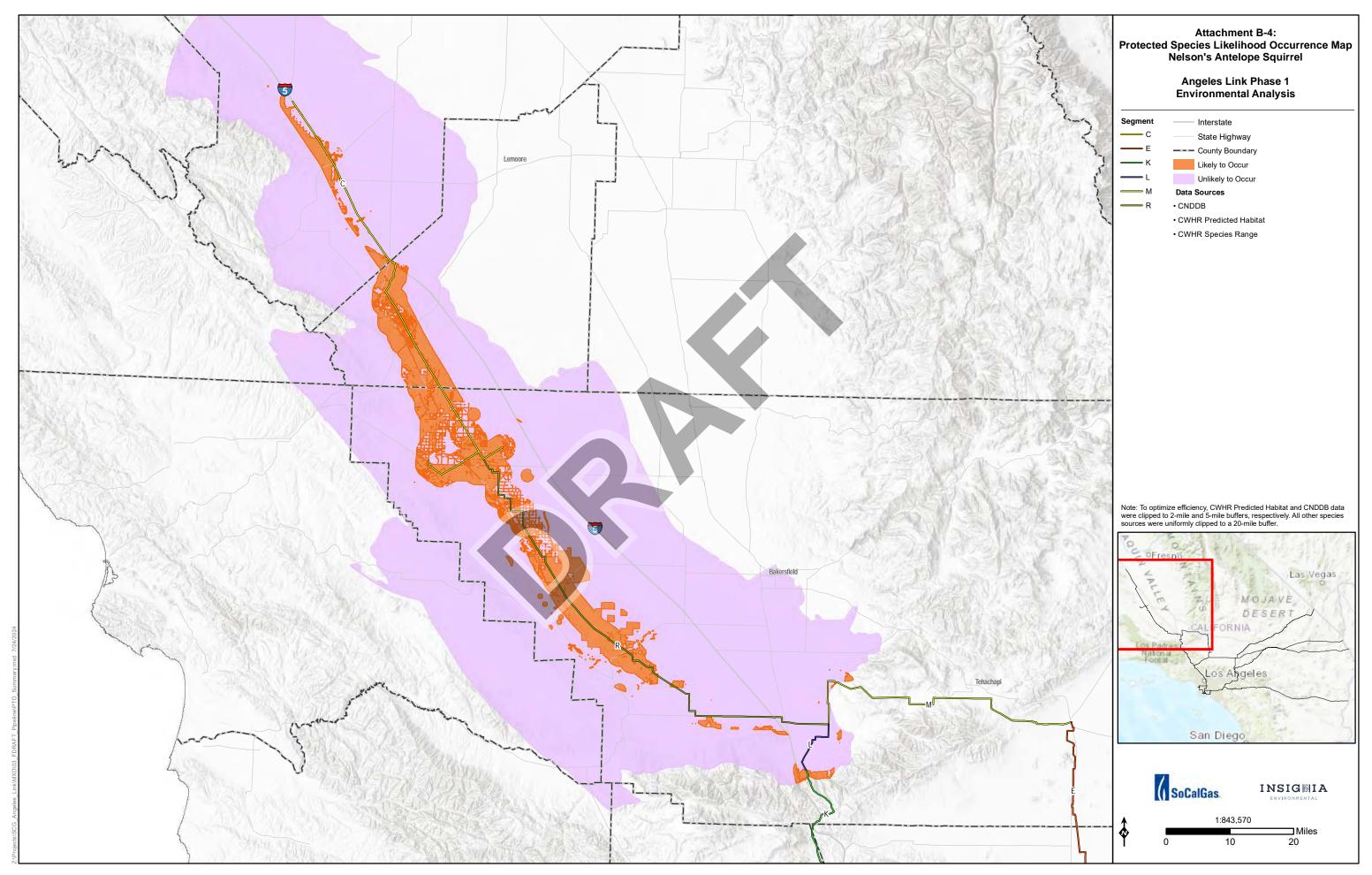
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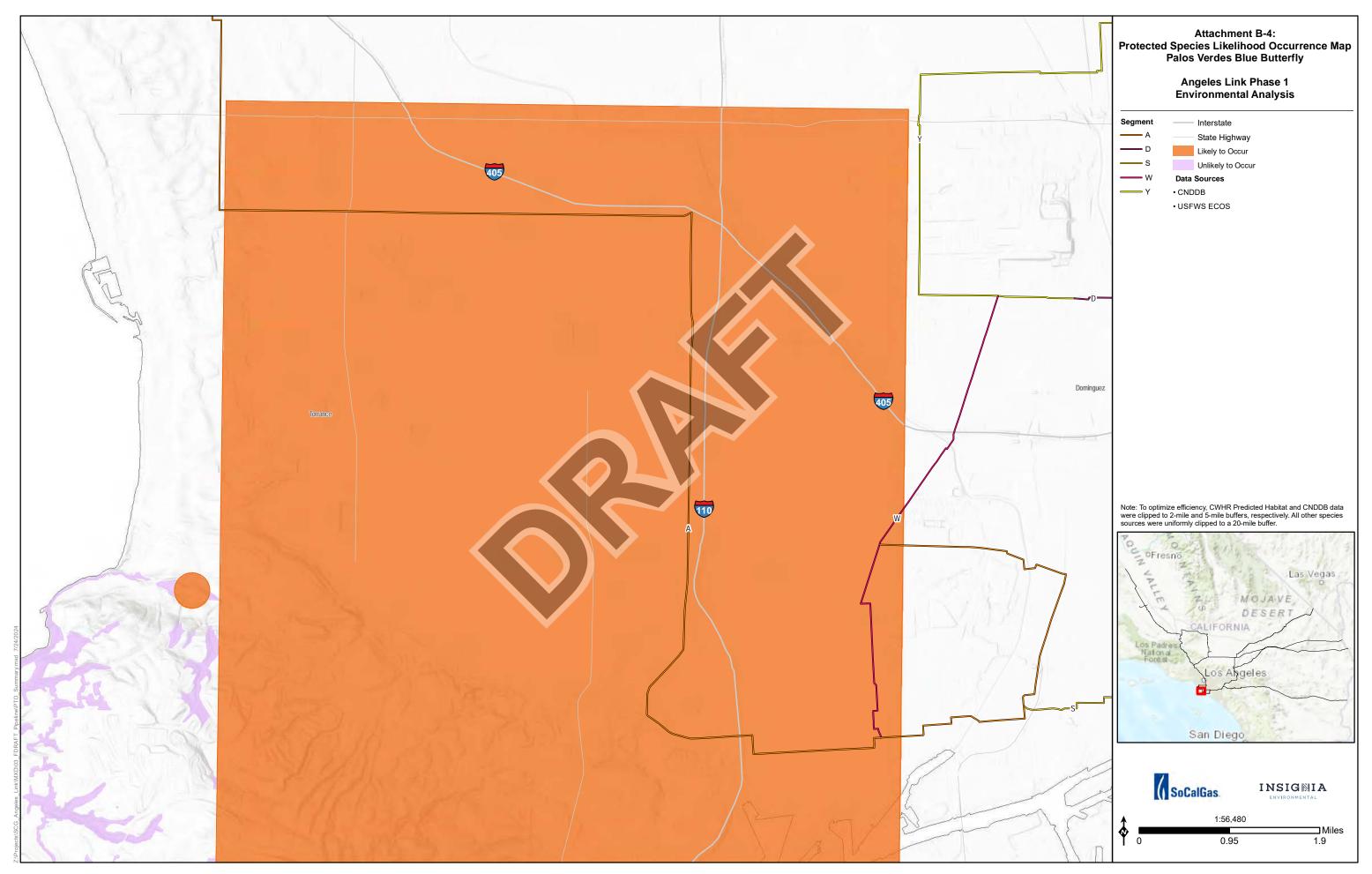
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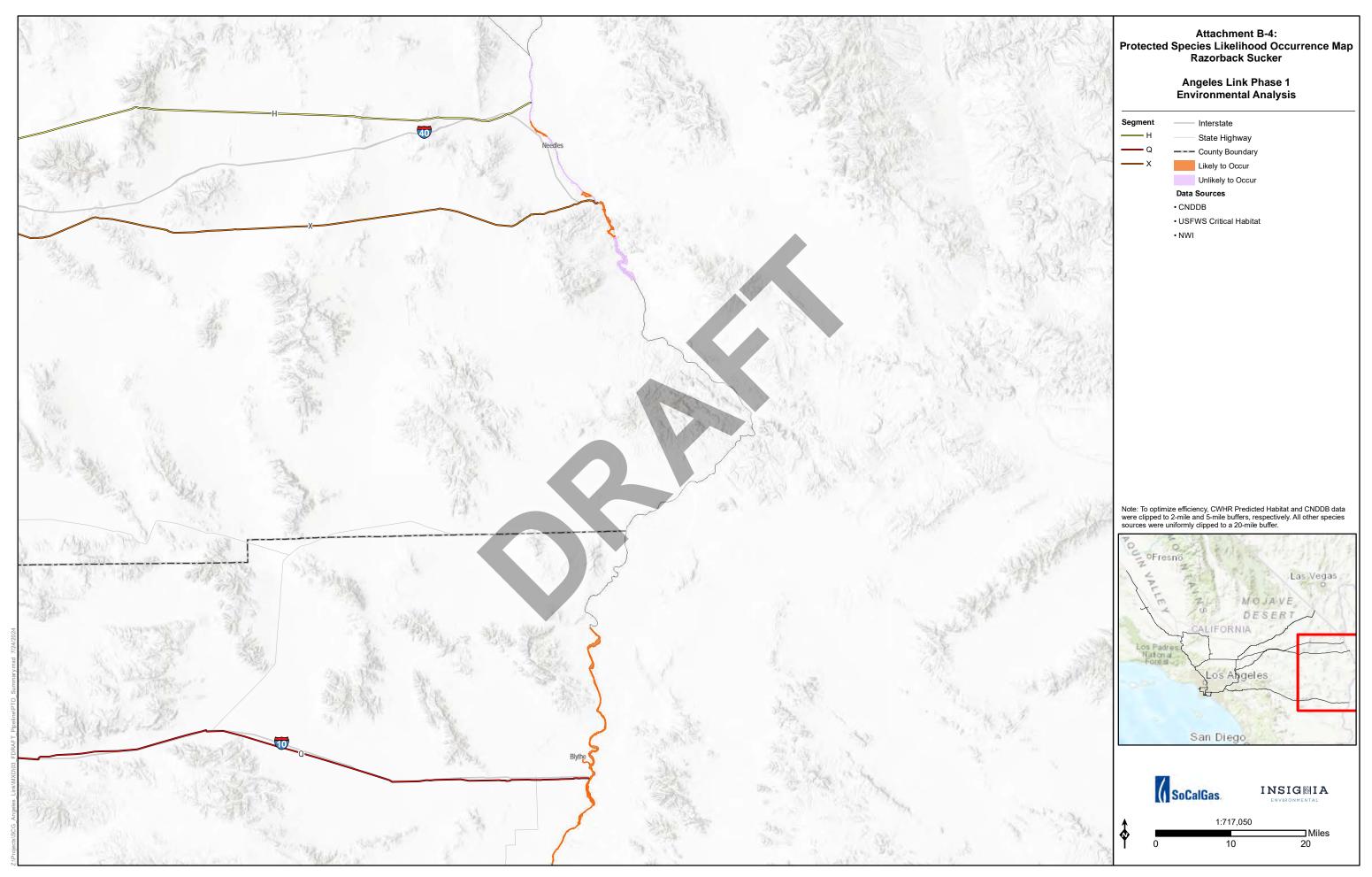
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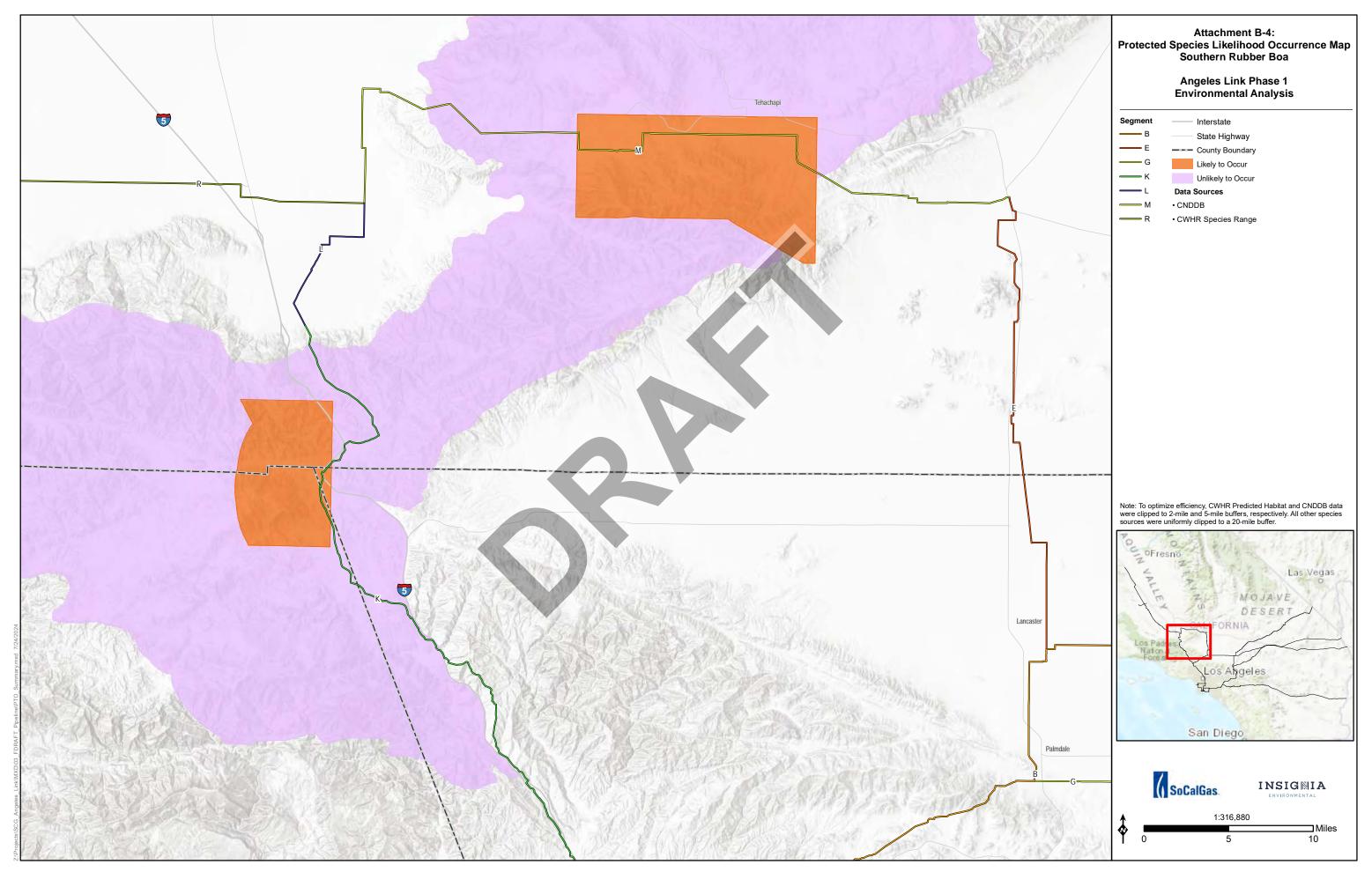
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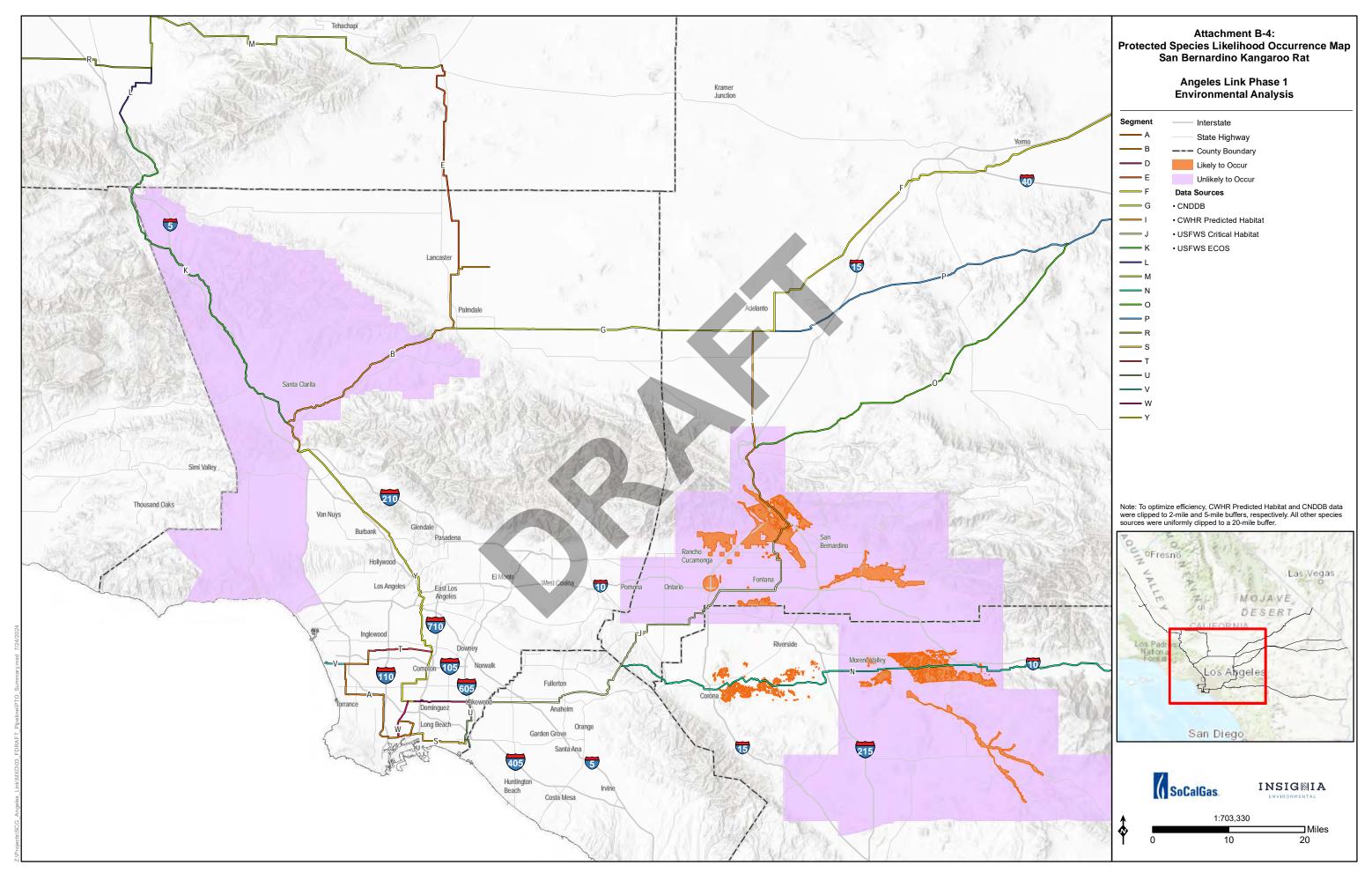
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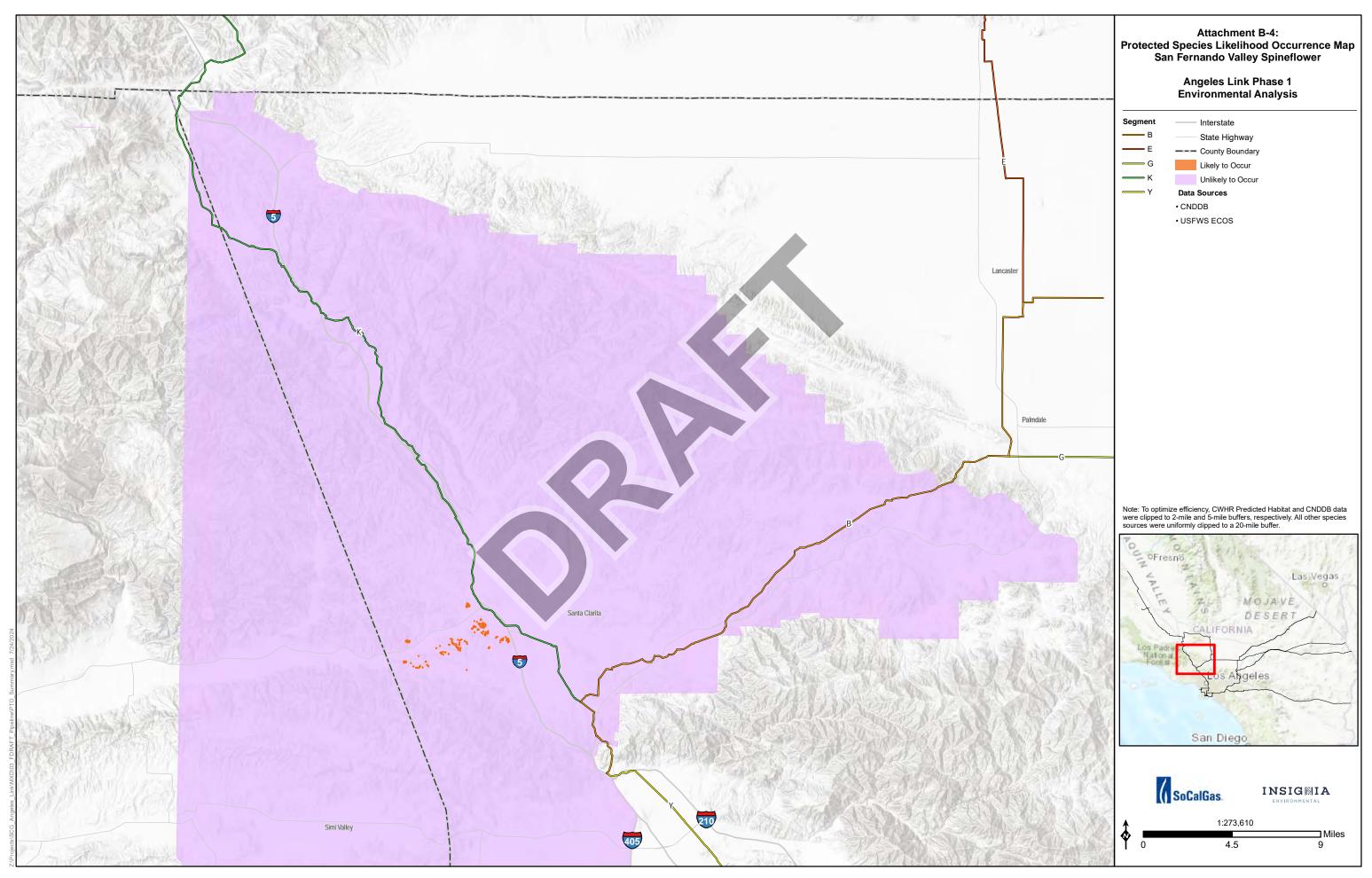
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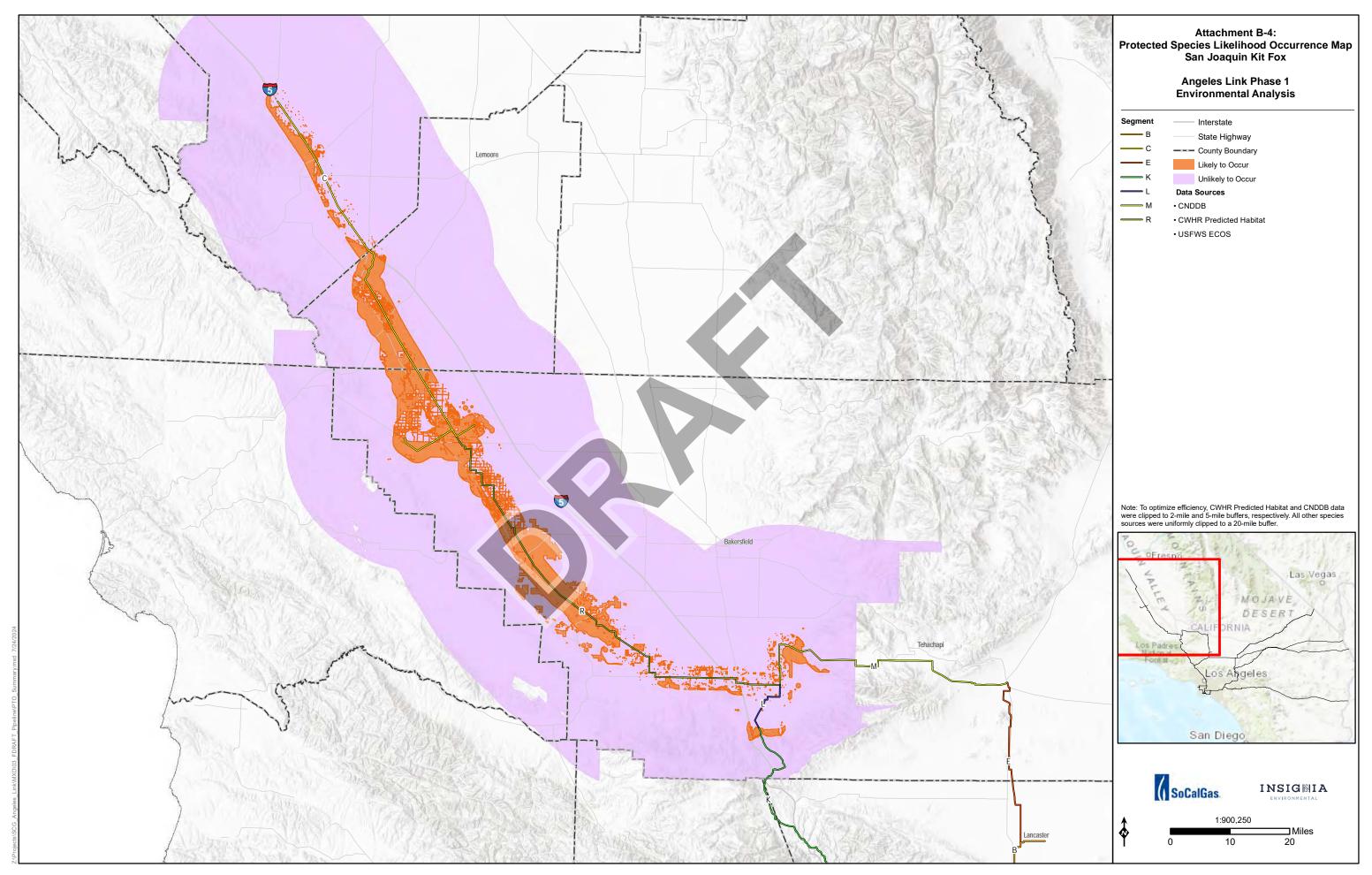
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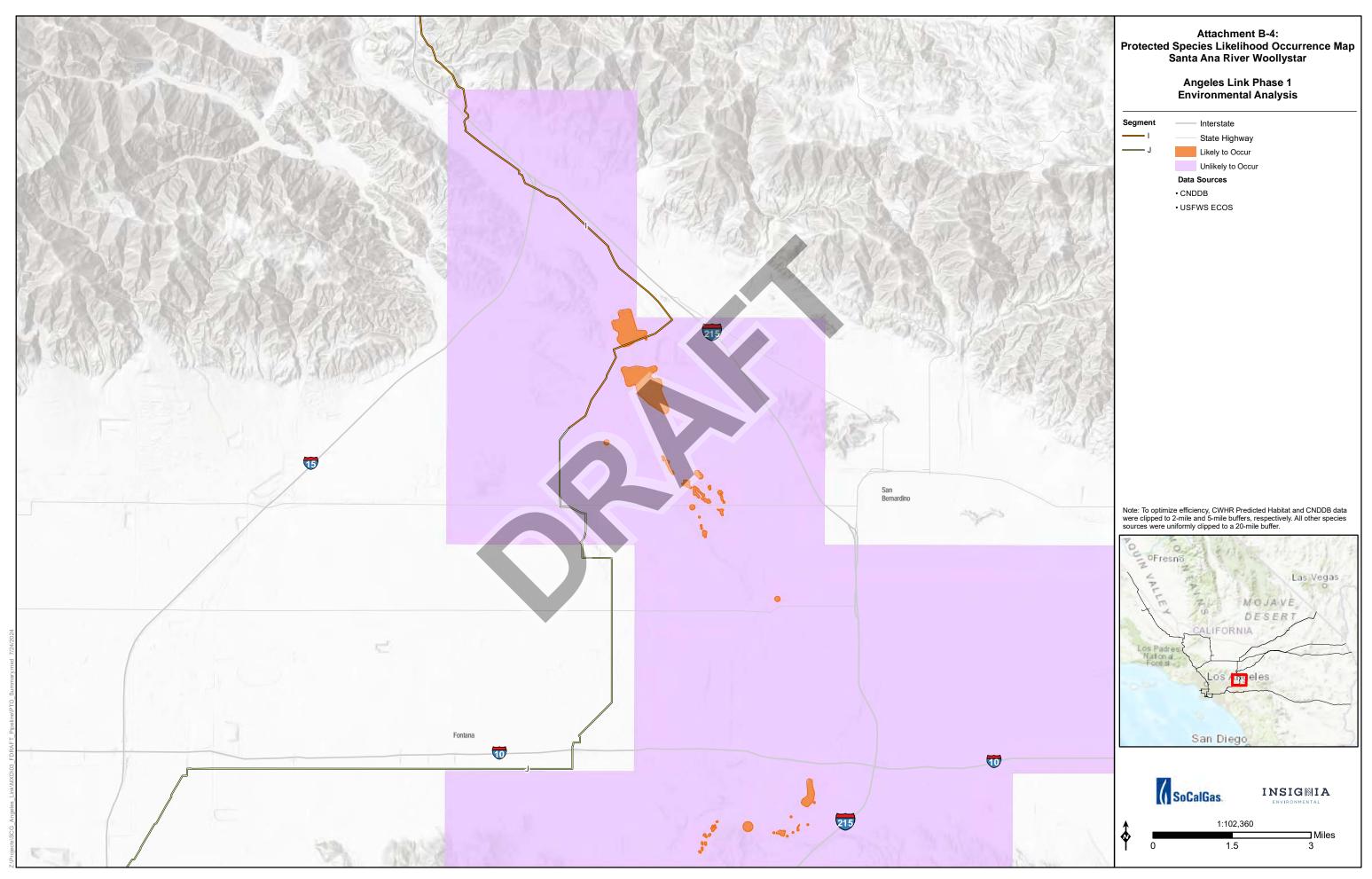
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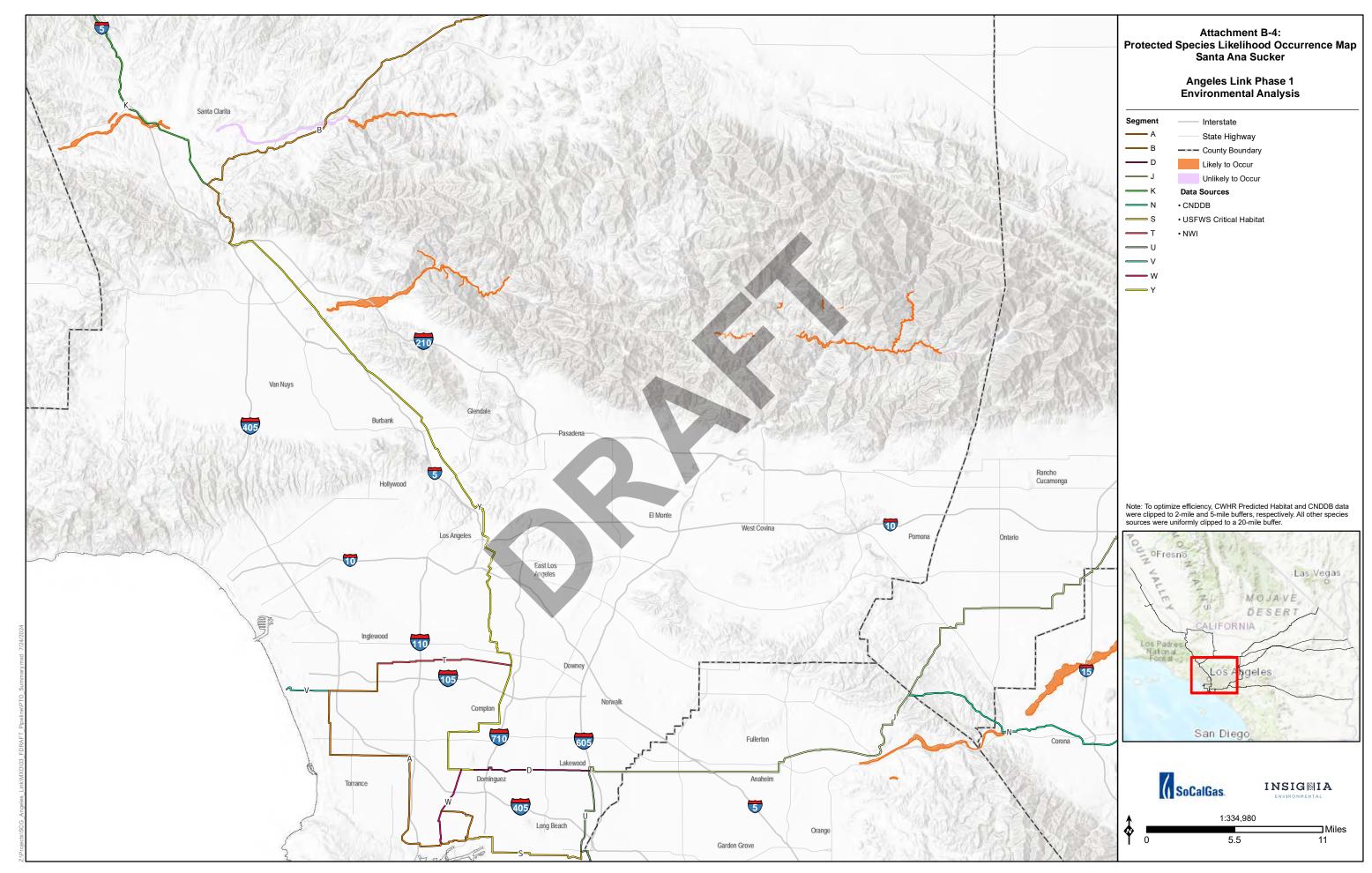
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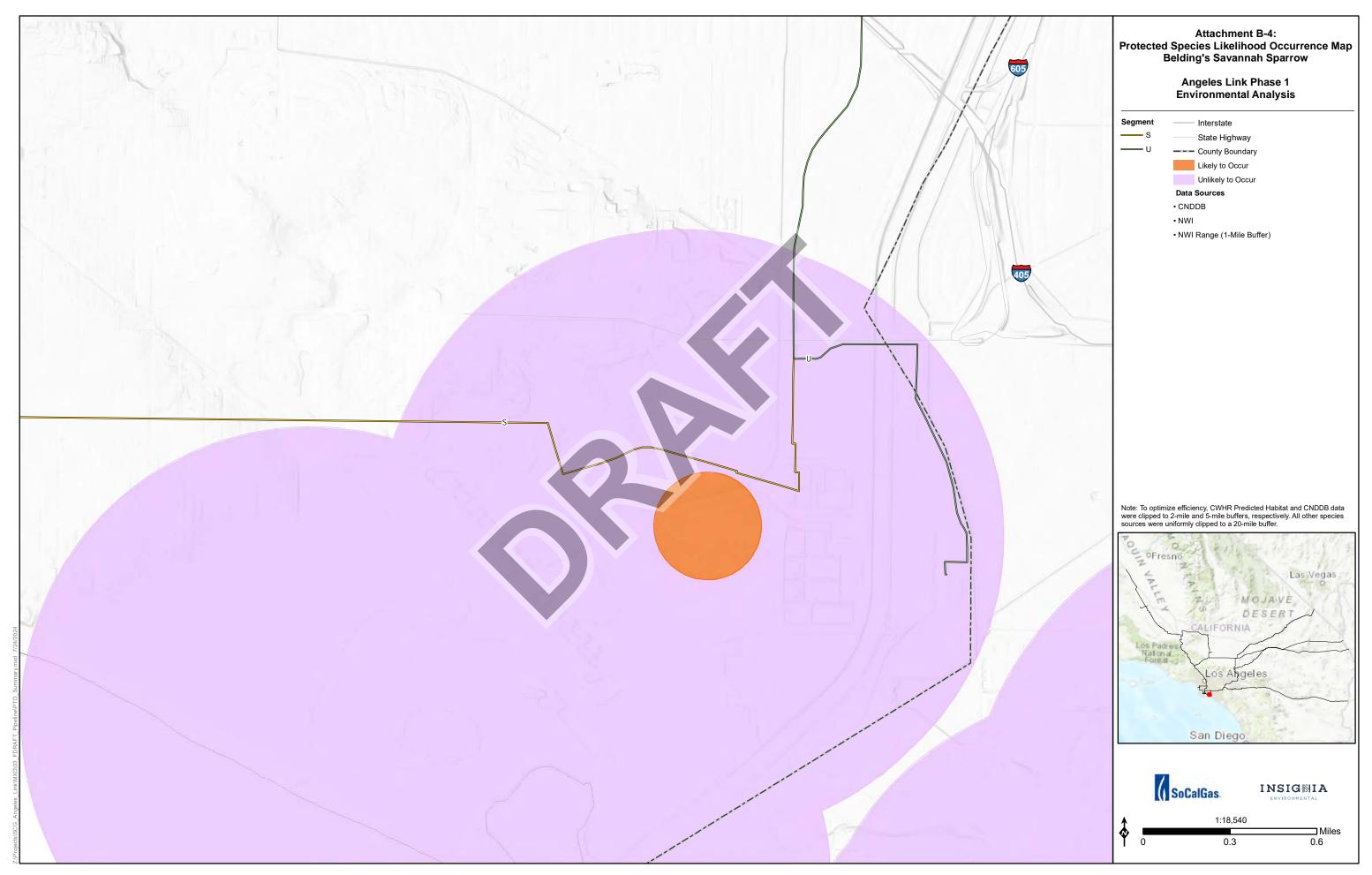
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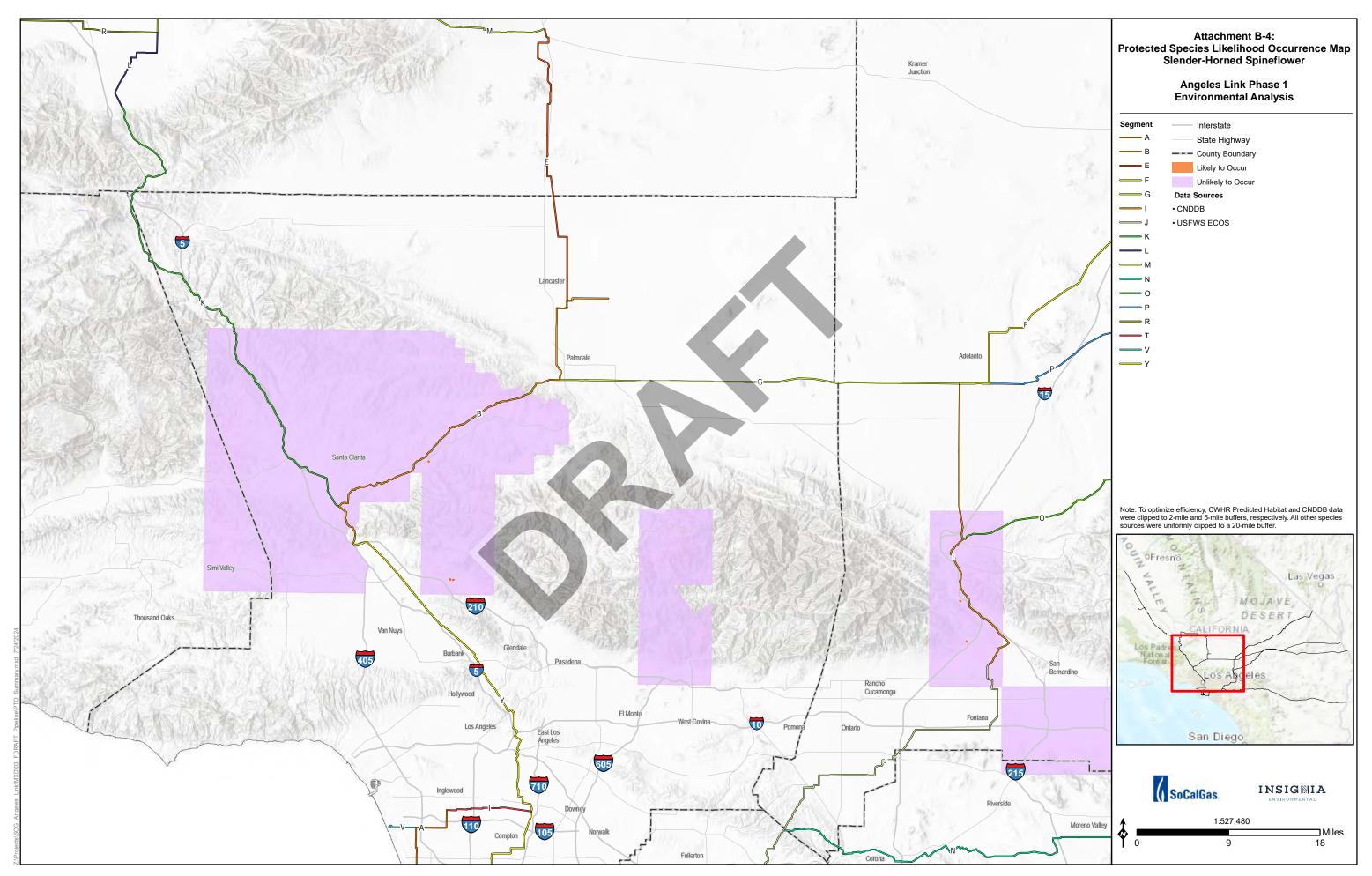
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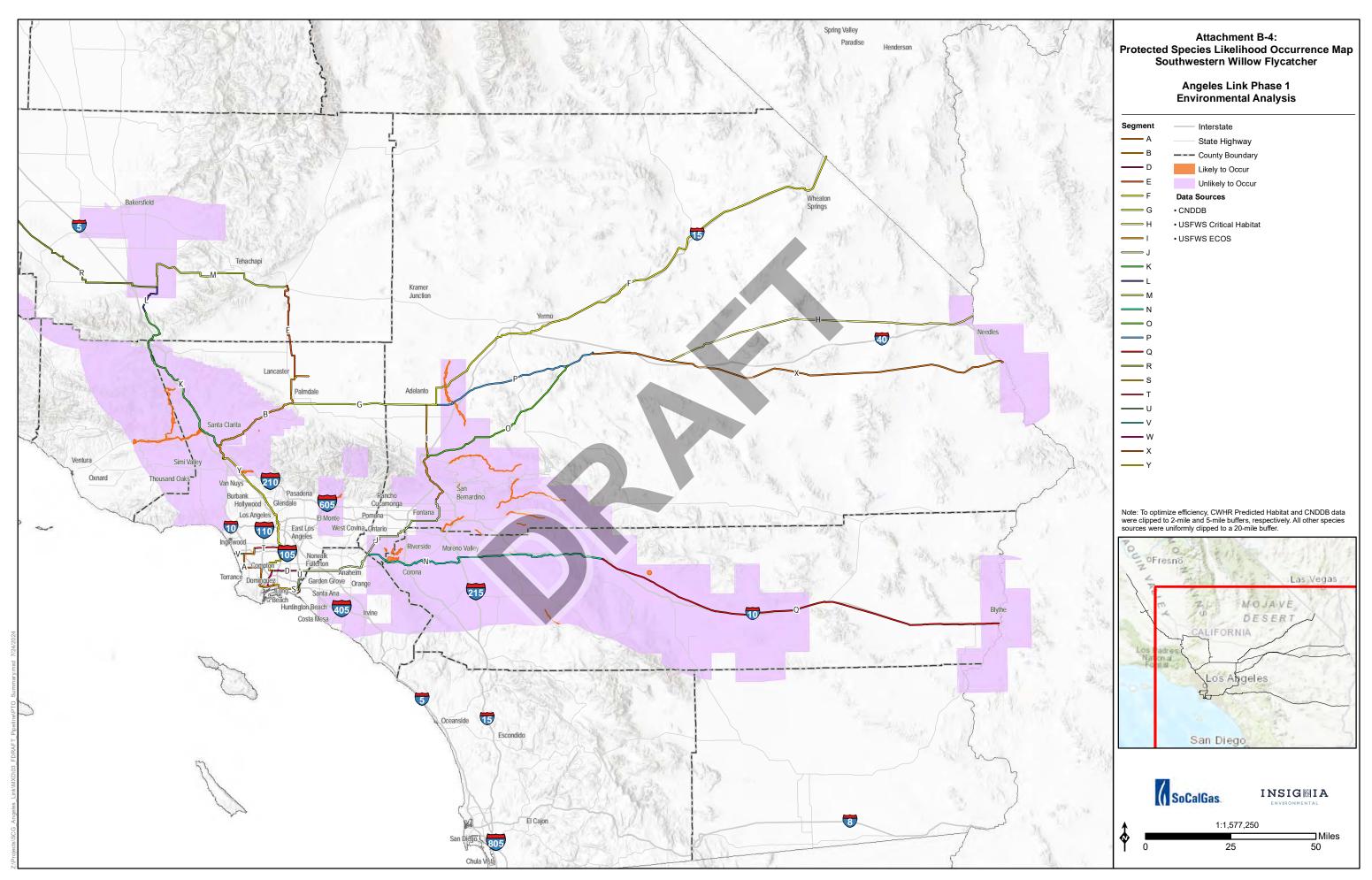
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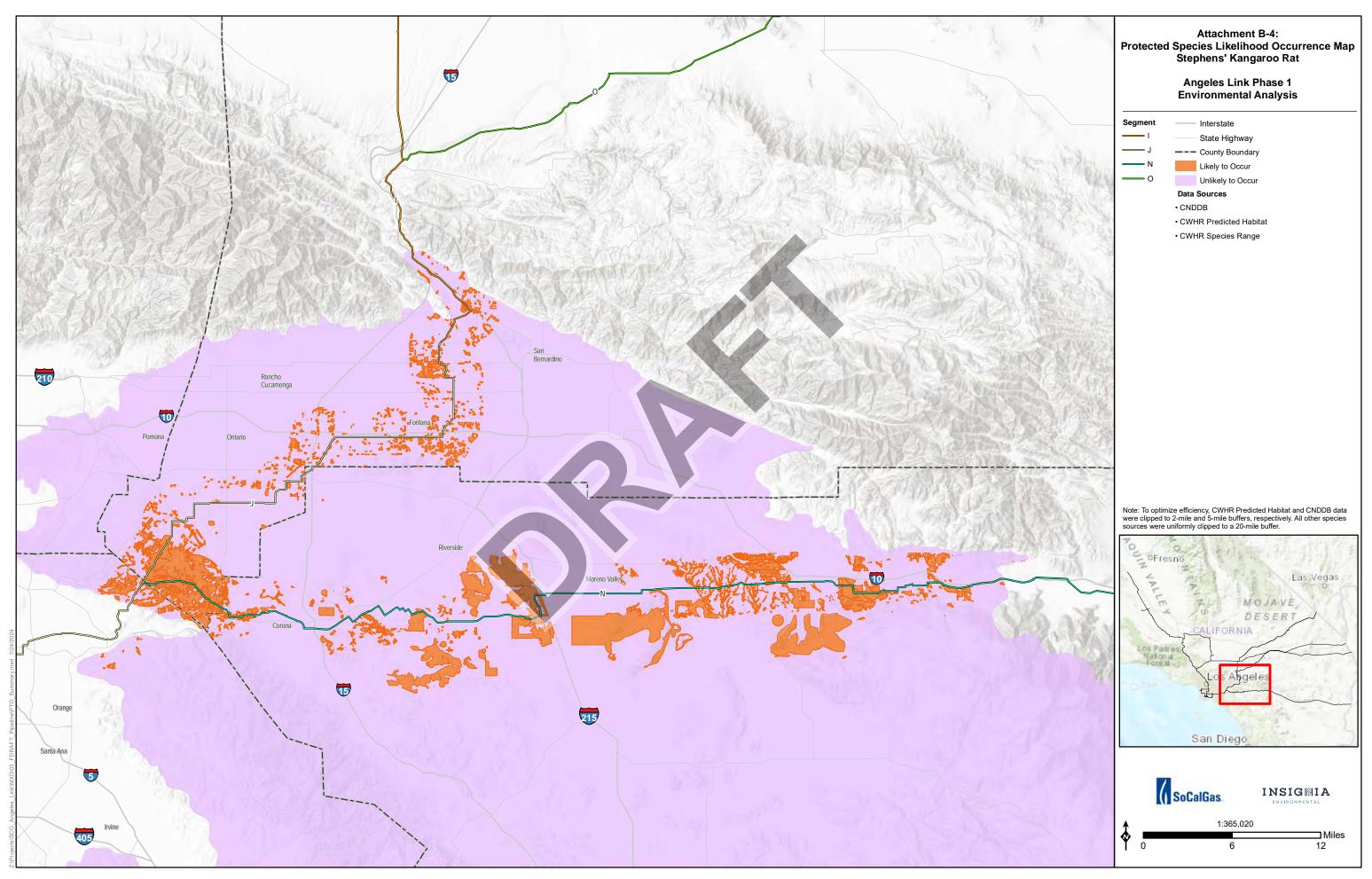
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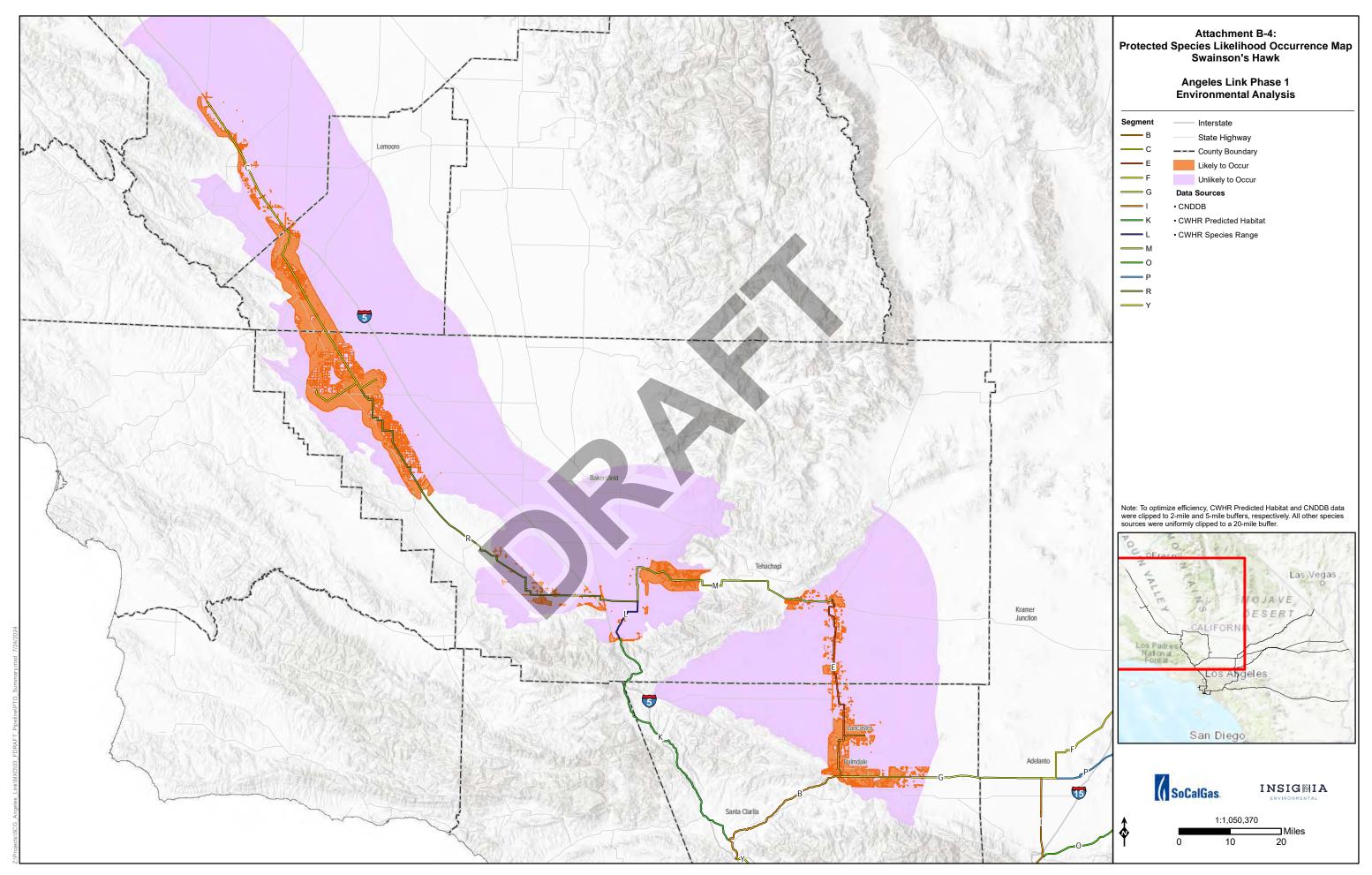
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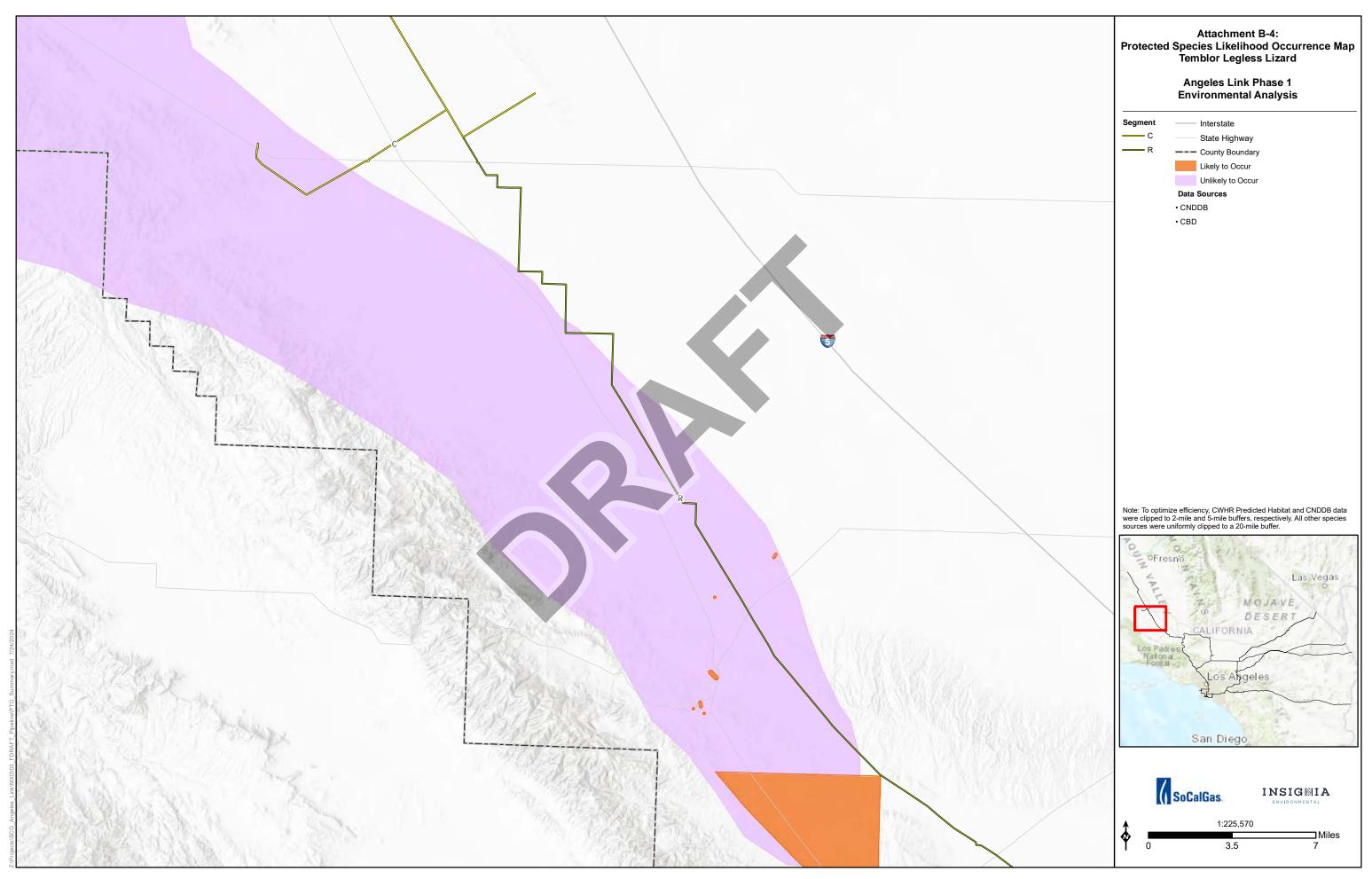
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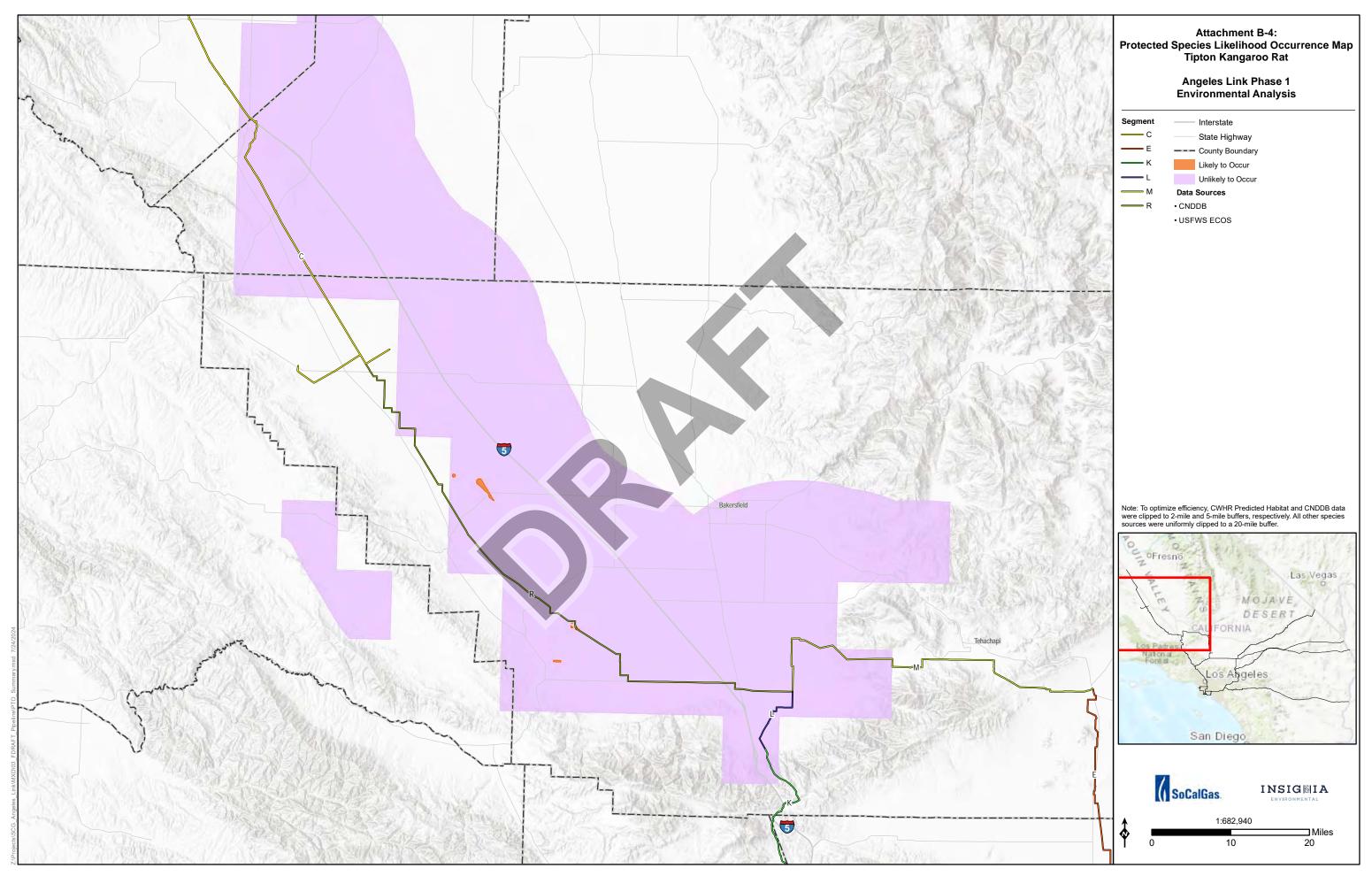
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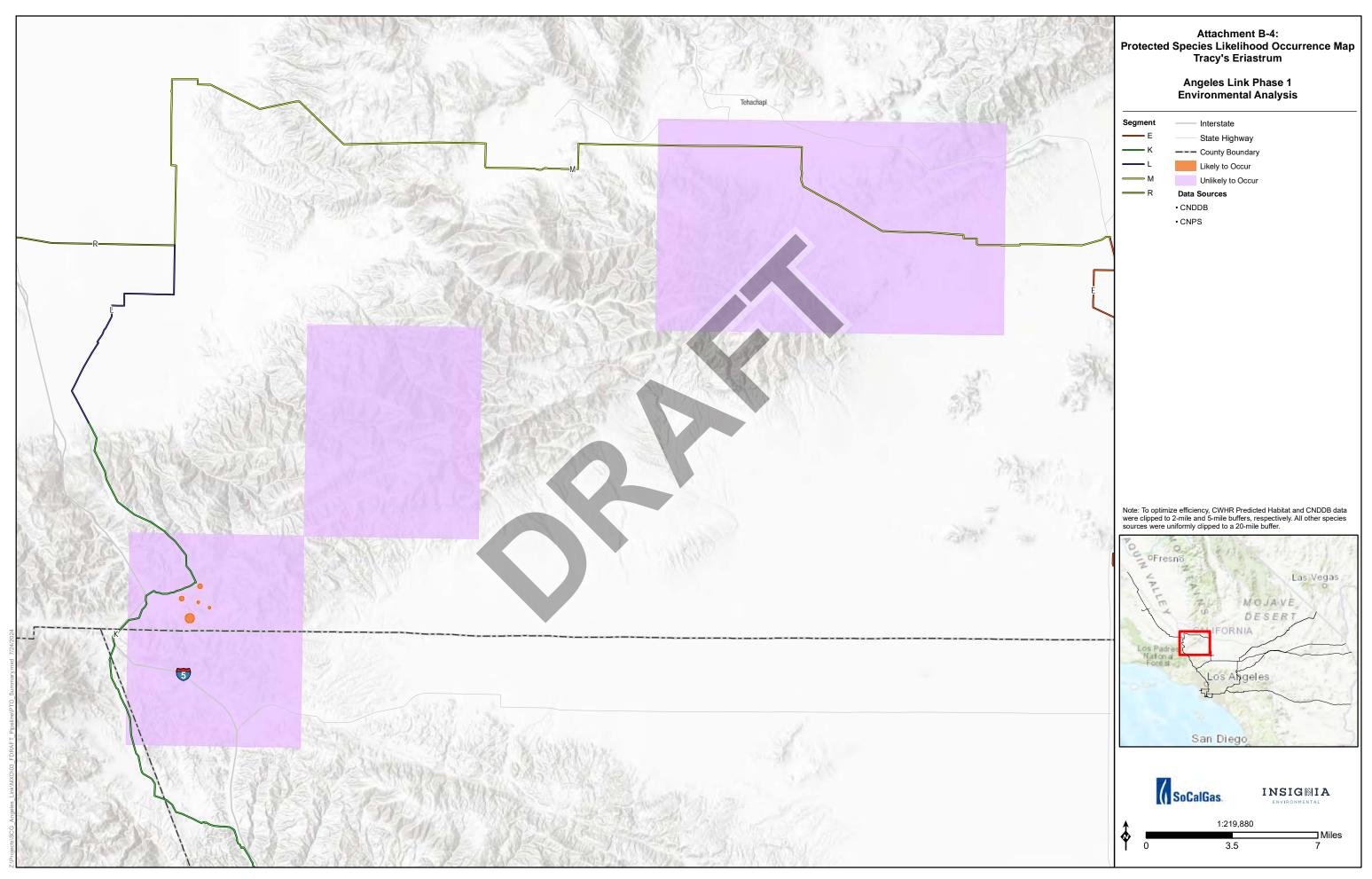
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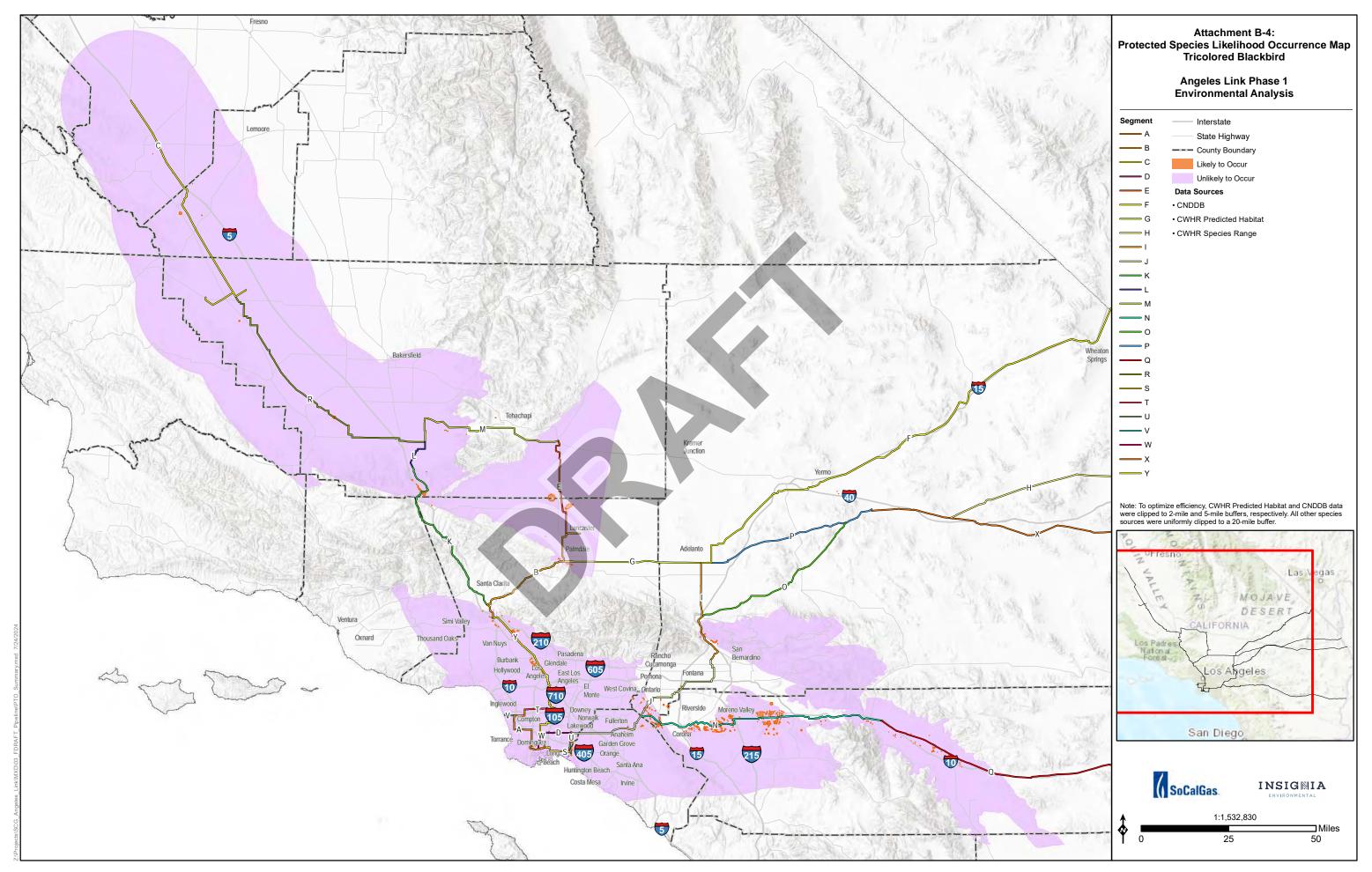
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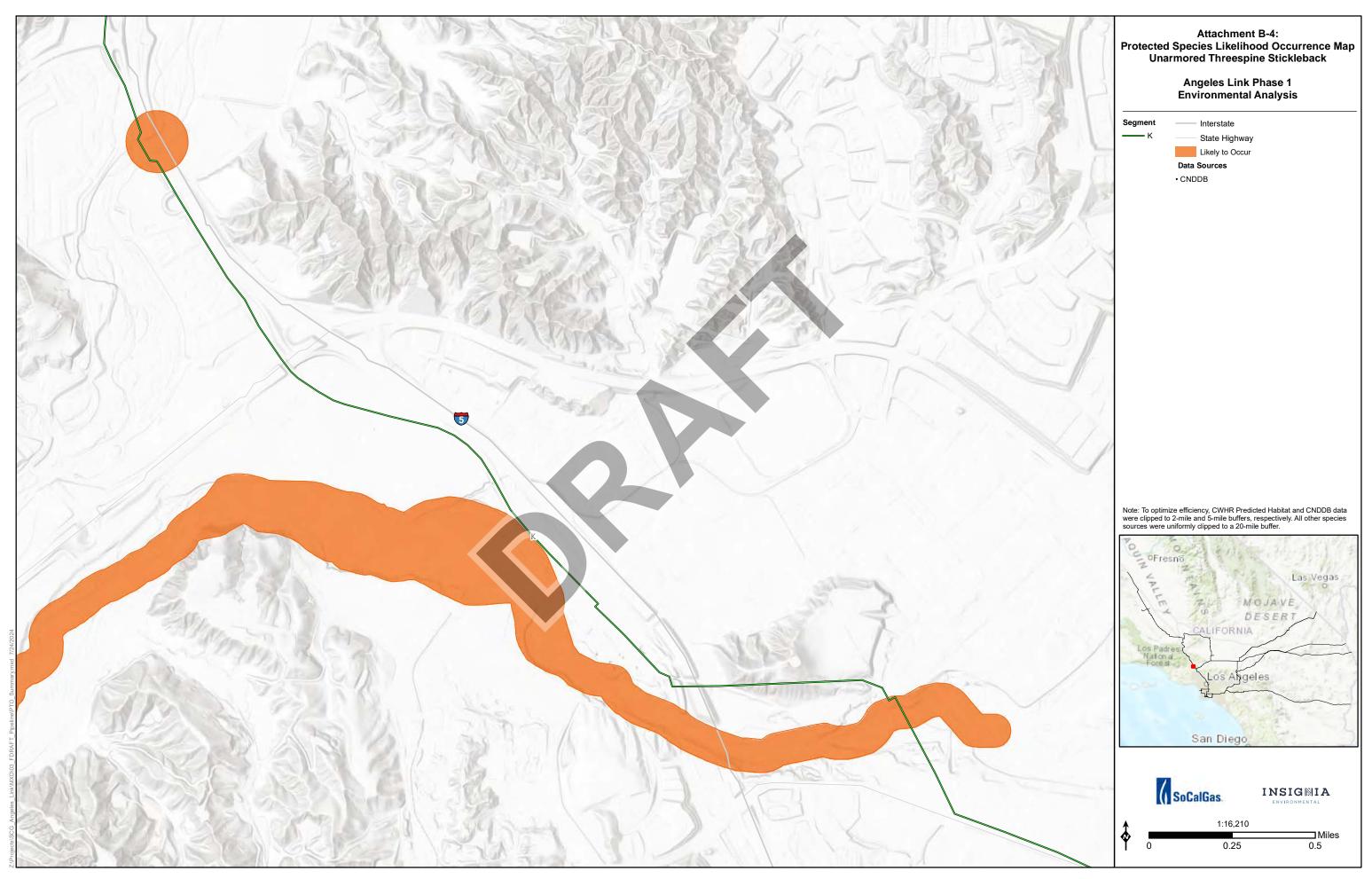
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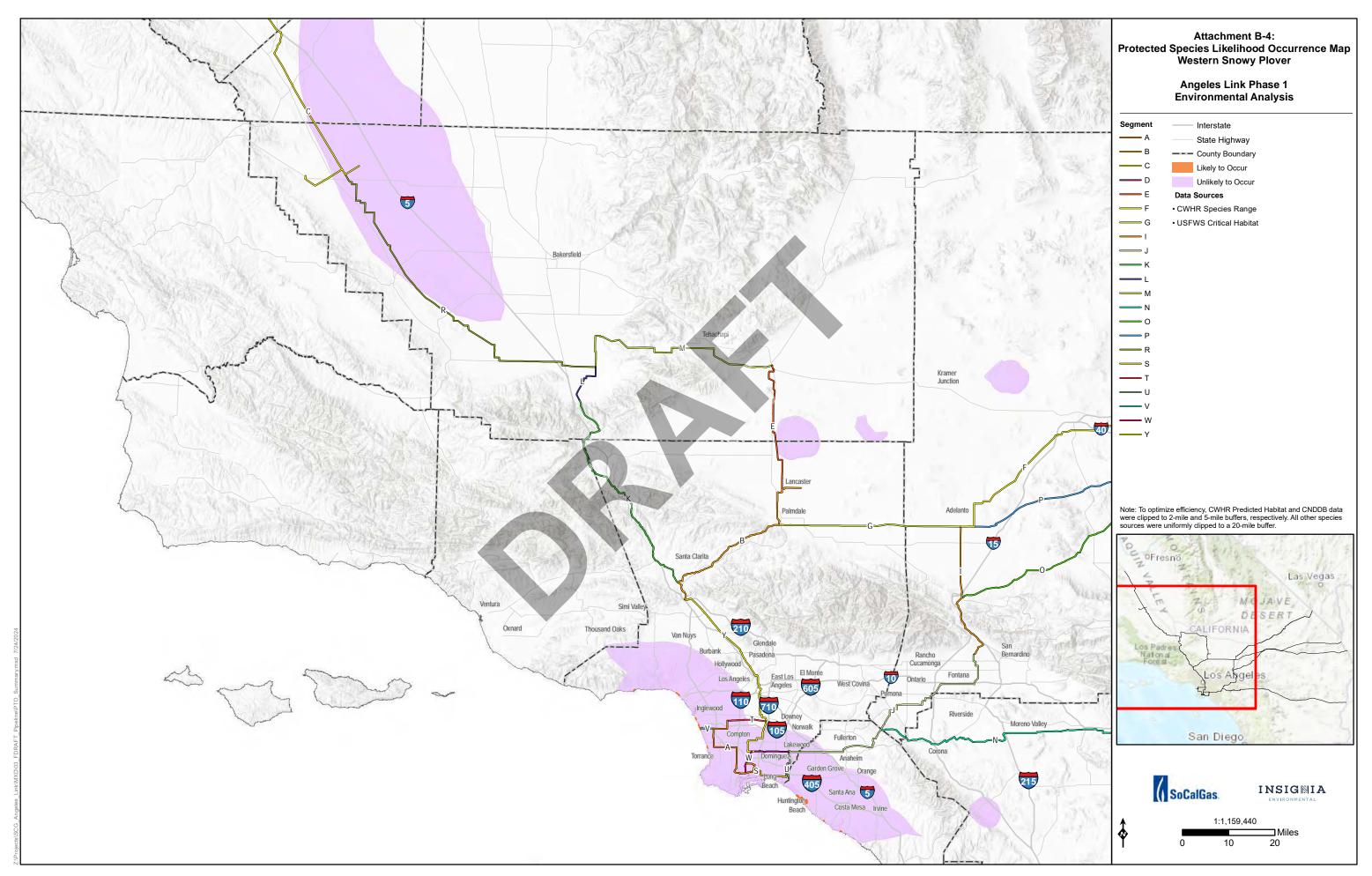
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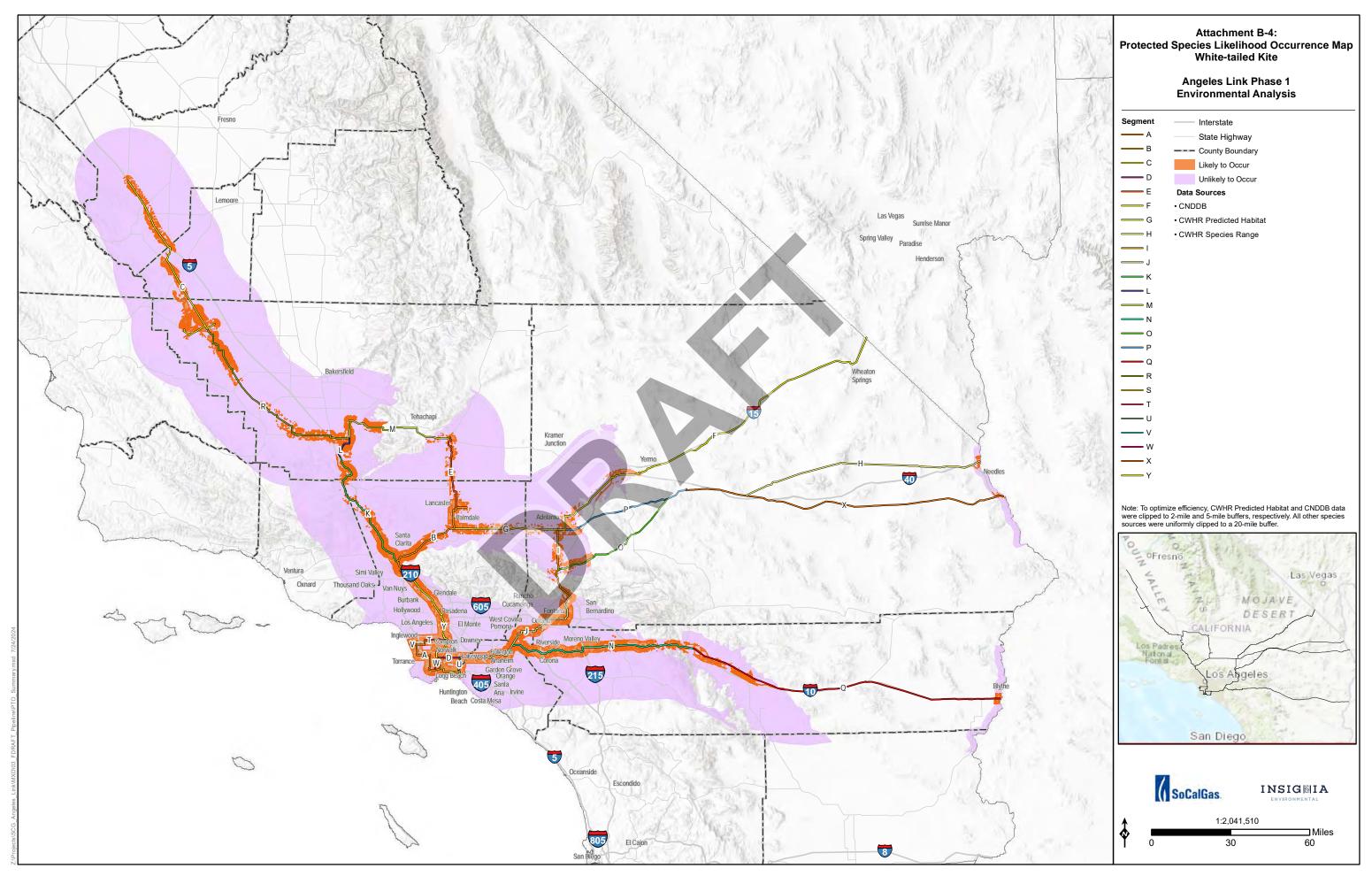
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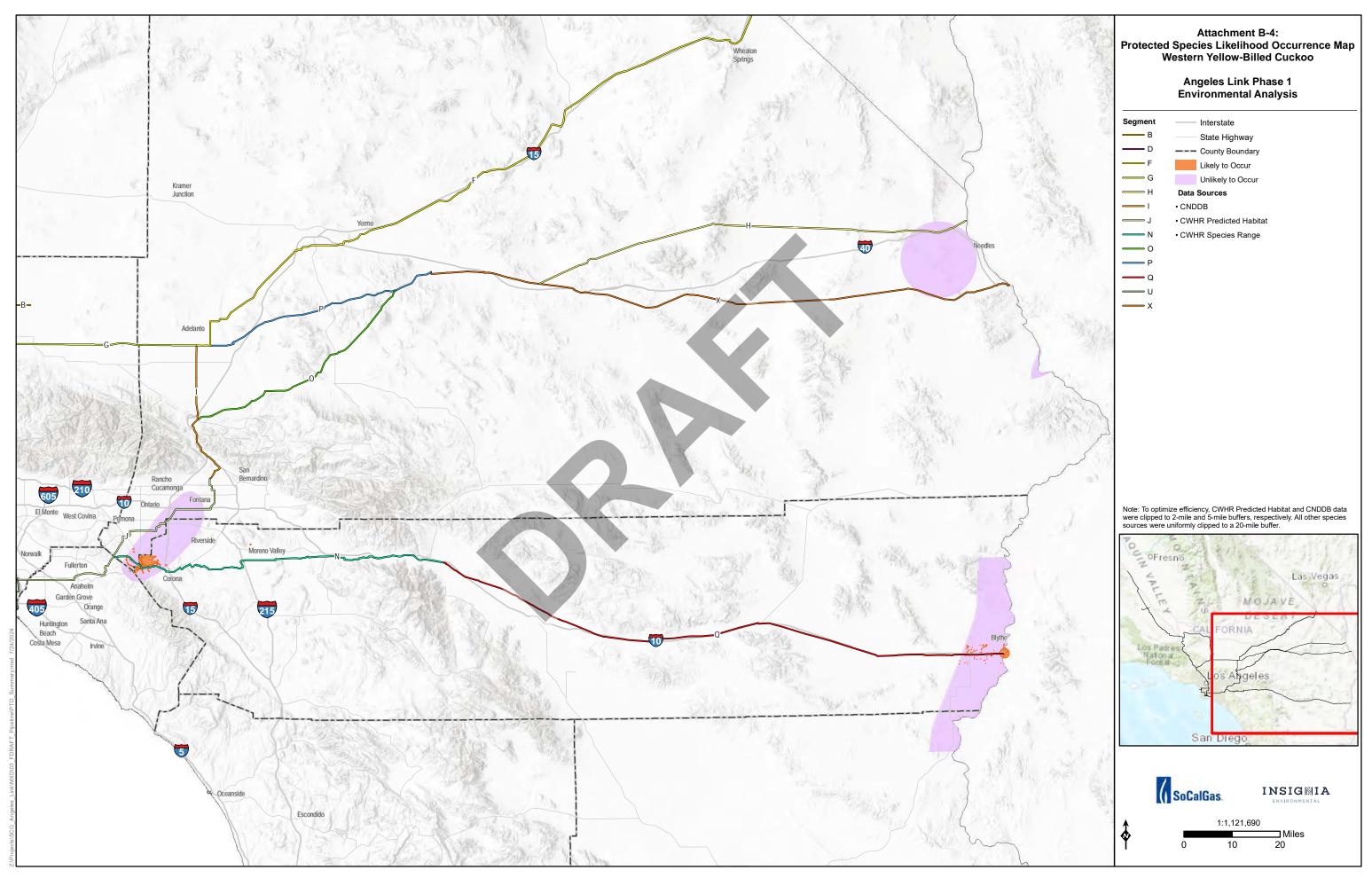
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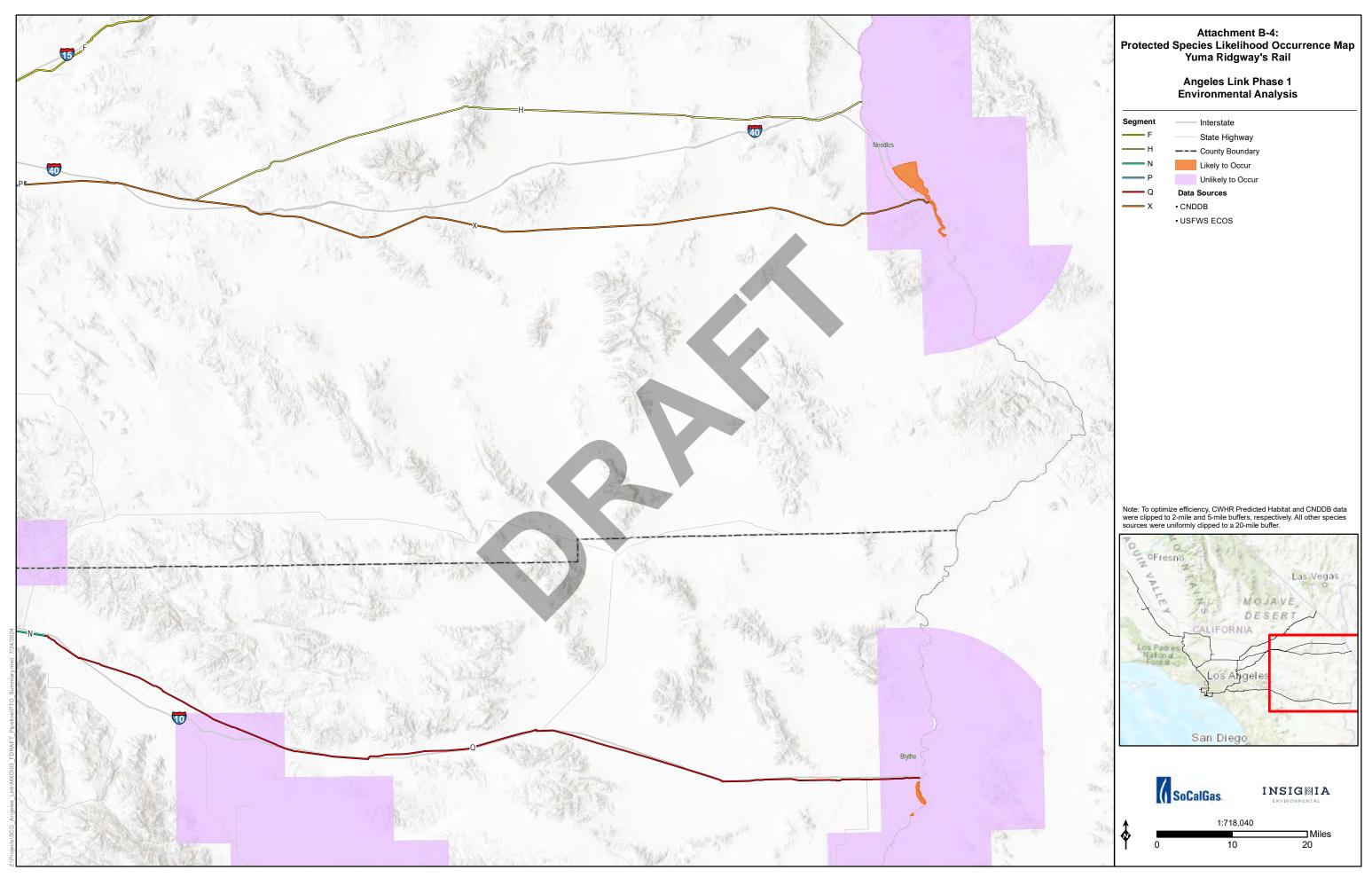
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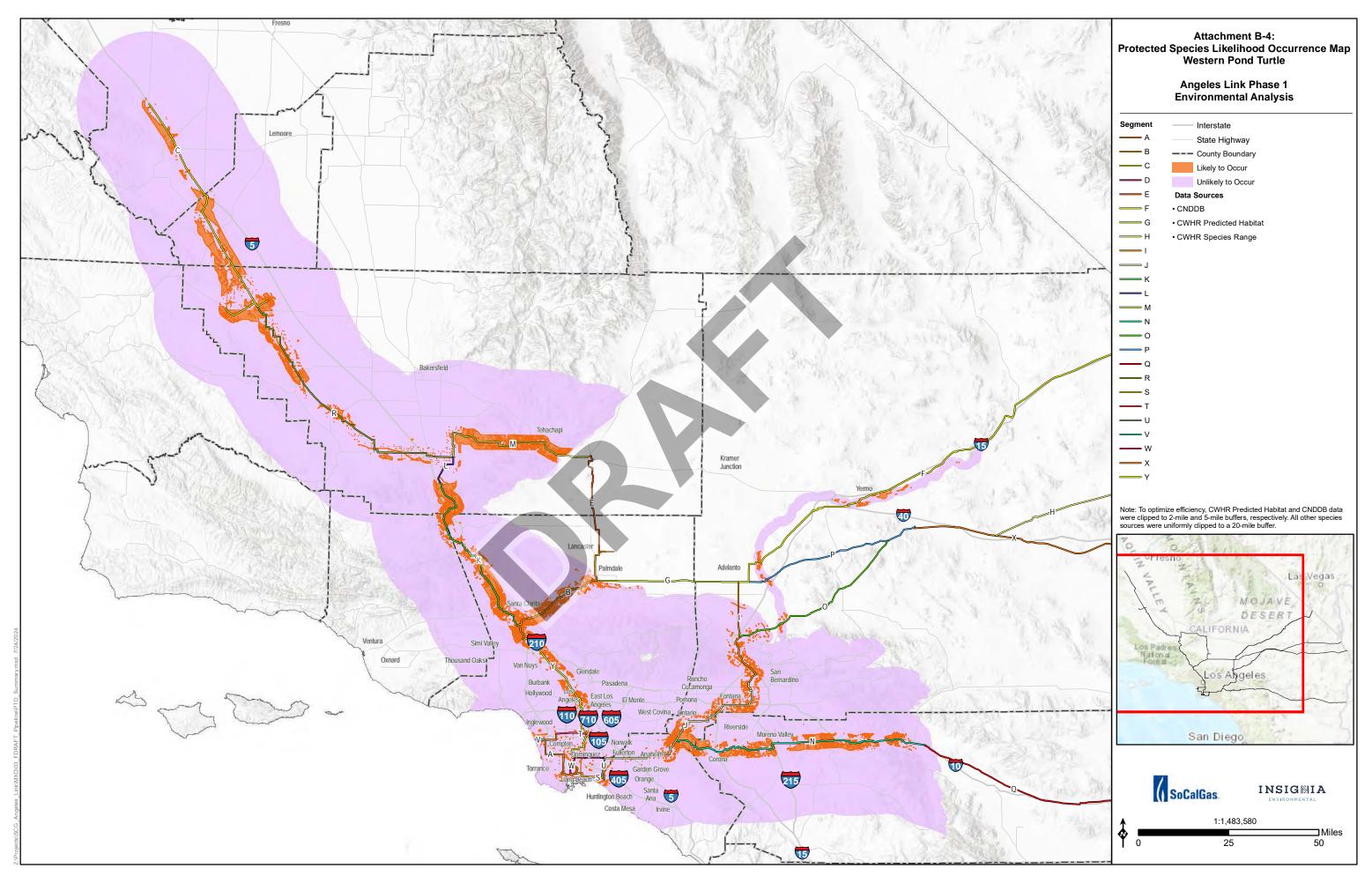
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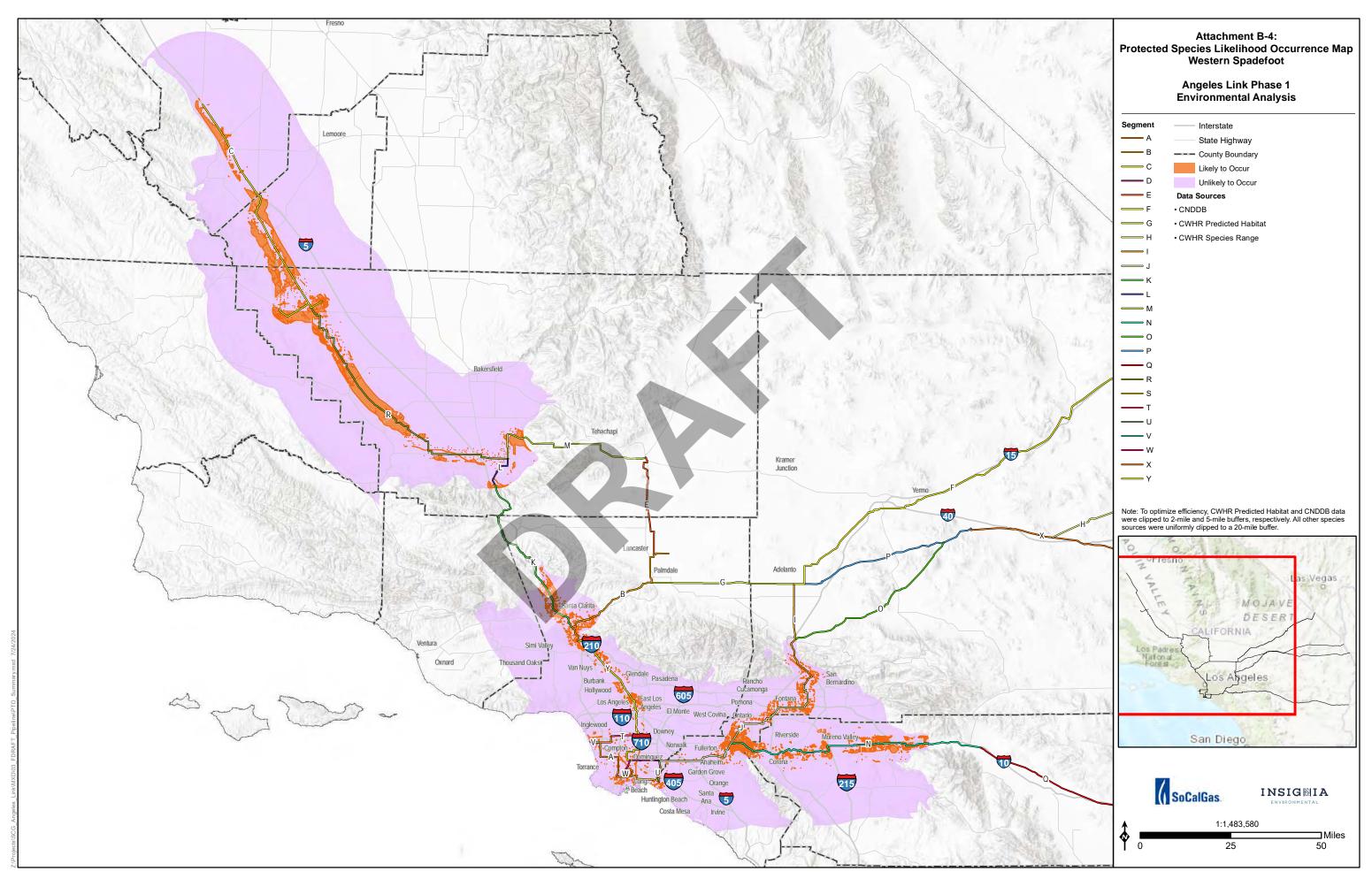
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