ADVANCE MITIGATION PROGRAM

Central Coastal, Monterey Bay, Pajaro, Salinas, and San Francisco Coastal South Sub-basins Regional Advance Mitigation Needs Assessment

Appendices

Version 1.0

Establishing Caltrans' Need for Advance Mitigation in the vicinity of Monterey Bay, forecast fiscal years 2017/2018 to 2026/2027

California Department of Transportation – District 5

May 2021

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APPENDICES

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APPENDIX A: GIS SOURCES

This RAMNA relies on maps to convey information. At the bottom of each map figure is a citation that lists the GIS source identification numbers. These source identification numbers refer to Table A-1, where the metadata documentation is provided. When available, the source date and/or website address to access the data layer online are also provided.

Table A-1. District 5 RAMNA GIS Sources

ID	GIS Layer	Source Agency	Source Date	Download Date	Website
1	State Highway Network	Caltrans	8/1/2018	10/11/2018	http://www.dot.ca.gov/hq/tsip/gis/datalibrary/Metadata/NHS.html
2	SHOPP	Caltrans	2/27/2019	2/27/2019	Caltrans System Planning
3	STIP	California Transportation Commission	3/18/2019	3/18/2019	Caltrans System Planning
4	Monterey Ecoregion Section (GAI)	USFS	5/1/2017	10/18/2018	https://data.fs.usda.gov/geodata/edw/datasets.php?xmlKeyword=Ecomap
5	Monterey Ecological Subsections	USFS	5/1/2017	10/17/2018	https://data.fs.usda.gov/geodata/edw/datasets.php?xmlKeyword=Ecomap
6	Calfish PAD (Passage Assessment Database)	CDFW	4/19/2019	5/1/2019	Not available
7	Landscape Blocks for the California Bay Area Linkage Network [ds853]	CDFW	4/23/2014	2/18/2019	https://map.dfg.ca.gov/metadata/ds0853.html?5.83.12
8	Linkage Design for the California Bay Area Linkage Network [ds852]	CDFW	4/23/2014	2/18/2019	https://map.dfg.ca.gov/metadata/ds0853.html?5.83.12
9	Key Riparian Corridors for the California Bay Area Linkage Network	South Coast Wildlands	4/23/2014	2/18/2019	https://www.bayarealands.org/maps-data/
10	ACE Climate Resilience	CDFW	2/22/2018	10/17/2018	https://map.dfg.ca.gov/metadata/ds2738.html?5.66.18
11	CEHC	CDFW	10/1/2017	10/17/2018	Layer is a merge of Essential Connectivity Areas and Landscape Blocks
12	Essential Connectivity Areas - CEHC	CDFW	1/1/2014	10/17/2018	https://map.dfg.ca.gov/metadata/ds0620.html?5.66.18

ID	GIS Layer	Source Agency	Source Date	Download Date	Website
13	Natural Landscape Blocks - CEHC	CDFW	10/1/2017	10/17/2018	https://map.dfg.ca.gov/metadata/ds0621.html?5.66.18
14	Potential Riparian Connections - CEHC	CDFW	3/1/2010	10/17/2018	https://map.dfg.ca.gov/metadata/ds0622.html?5.66.18
15	SWAP Terrestrial Targets - 2015	CDFW	2/1/2018	10/29/2018	https://map.dfg.ca.gov/metadata/ds1966.html?5.66.18
16	CalWater Hydrologic Areas	California Department of Water Resources	11/1/2016	10/19/2018	https://catalog.data.gov/dataset/calwater-2-233fac
17	California Conservation Easements	California Protected Areas Database	12/1/2016	10/11/2018	http://www.calands.org/cced
18	California Protected Areas Holdings	California Protected Areas Database	8/1/2017	10/11/2018	http://www.calands.org/data
19	U.S. Military Installations	U.S. Census Bureau	12/1/2017	10/11/2018	https://www.census.gov/cgi-bin/geo/shapefiles/index.php
20	County Boundaries	U.S. Census Bureau	7/8/2016	10/11/2018	https://data.ca.gov/dataset/ca-geographic-boundaries
21	USFWS Critical Habitat	FWS	10/1/2018	10/1/2018	https://ecos.fws.gov/ecp/report/table/critical-habitat.html
22	County Parcels (Monterey, San Francisco, San Mateo, Santa Cruz, Santa Clara, San Benito, San Luis Obispo)	Monterey, San Francisco, San Mateo, Santa Cruz, Santa Clara, San Benito, San Luis Obispo Counties	4/30/2019	4/30/2019	Parcel data is distributed by the Department of Technology to internal Caltrans users through an FTP
23	National Hydrology Dataset	USGS	9/26/2014	10/19/2018	https://www.usgs.gov/core-science-systems/ngp/national-hydrography
24	Corps Regulatory In-Lieu Fee & Bank Information Tracking System	Mitigation Service Banks	Not available	1/28/2019	https://ribits.usace.army.mil/ribits_apex/f?p=107:2

ID	GIS Layer	Source Agency	Source Date	Download Date	Website
25	CDFW Approved Mitigation Service Areas	Mitigation Service Banks	7/23/2018	1/28/2019	https://map.dfg.ca.gov/metadata/ds2782.html?5.76.22
26	Conservation Plan Boundaries, HCP and NCCP	CDFW, FWS	12/12/2017	1/28/2019	https://map.dfg.ca.gov/metadata/ds0760.html?5.80.28l
27	Vegetation D4/D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018	SAMNA	1/1/2017	2/6/2019	http://www.dot.ca.gov/env/advancemitigation/
28	Waters/Wetlands D4/D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018	SAMNA	1/1/2017	2/6/2019	http://www.dot.ca.gov/env/advancemitigation/
29	National Flood Hazard Layer	FEMA	6/29/2018	9/25/2019	https://www.fema.gov/national-flood-hazard-layer-nfhl
30	RCIS Draft Boundaries	CDFW	9/10/2019	9/25/2019	Requested on 9/25/19, source date is 9/10/2019
31	Terrestrial Connectivity - ACE [ds2734]	CDFW	8/28/2019	9/25/2019	https://map.dfg.ca.gov/metadata/ds2734.html?5.80.28l
32	Terrestrial Biodiversity Summary - ACE [ds2739]	CDFW	2/22/2018	7/3/2019	https://map.dfg.ca.gov/metadata/ds2739.html?5.80.28l
33	Aquatic Biodiversity Summary - ACE [ds2768]	CDFW	2/22/2018	7/3/2019	https://map.dfg.ca.gov/metadata/ds2768.html?5.80.28l
34	Coastal Zone and LCP Layer	California Coastal Commission	3/1/2018	3/1/2018	https://www.coastal.ca.gov/maps/czb/; https://www.coastal.ca.gov/maps/lcp/

ID	GIS Layer	Source Agency	Source Date	Download Date	Website
35	Salmonid Essential Fish Habitats	NOAA Fisheries	1/1/2014	3/17/2020	https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-groundfish-and-salmon
36	National Watershed Boundary Dataset	USGS	9/26/2014	10/19/2018	https://www.usgs.gov/core-science-systems/ngp/national-hydrography
37	Vernal Pools, South Coast Ranges [ds948]	FWS	12/18/2013	7/30/2020	https://map.dfg.ca.gov/metadata/ds0948.html?5.89.14c
38	Fish Passage Priorities	CDFW	4/27/2020	9/22/2020	https://map.dfg.ca.gov/metadata/ds2868.html?5.92.26
39	Big Sur River - National Wild and Scenic Rivers	National Wild and Scenic Rivers System	11/1/2016	10/15/2020	https://www.rivers.gov/rivers/big-sur.php
40	Areas of Special Biological Significance	California State Water Board	1/1/2005	10/15/2020	https://www.waterboards.ca.gov/water_issues/programs/ocean/asbs_map.shtml
41	California Tiger Salamander Connectivity	South Coast Wildlands	11/17/2014	12/22/2020	https://map.dfg.ca.gov/metadata/ds0885.html

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APPENDIX B: ECOREGION SUBSECTION DESCRIPTIONS

This RAMNA uses the USFS ecosystem classification and mapping hierarchy to describe the GAI. Documented in Cleland et al. (2007), 13 subsections occur in the portions of the Central California Coast and Central California Coast Ranges Sections located in the Central Coastal, Monterey, Pajaro, Salinas, and San Francisco Coastal South sub-basins that make up the GAI. Each subsection's brief description, from Cleland et al. (2007), is provided in Table B-1.

Table B-1. Ecoregion Subsection Descriptions

Subsection	Code[a]	Brief Description	Acreage[b]	Subsection as Percentage of GAI
Diablo Range	M262Ac	The Diablo Range subsection includes mountains with rounded ridges, moderately steep to steep slopes, narrow canyons, and valleys. This range includes sedimentary, volcanic, and metamorphic rocks. Vegetation communities include blue oak woodland, black oak-mixed conifer woodland, Jeffrey pine forest, mixed chaparral, and chamise chaparral.	465,631	10.9%
Fremont-Livermore Hills and Valleys	M262Aa	The Fremont-Livermore Hills and Valleys subsection includes gently sloping hills and alluvial plains. Vegetation communities include blue oak woodland, coast live oak woodland, valley oak woodland, California sycamore woodland, and native grassland.	4,615	0.1%
Gabilan Range	M262Af	The Gabilan Range subsection includes steep mountains consisting of granitic, metamorphic, and volcanic rocks and is located between the San Andreas Fault on the northeast and the Salinas Valley on the southwest. Vegetation communities include coast live oak woodland, blue oak woodland, black oak-mixed conifer woodland, and chamise chaparral.	564,199	13.2%
Interior Santa Lucia Range	M262Ae	The Interior Santa Lucia Range subsection includes steep mountains underlain by sedimentary rocks and marine sediments. Vegetation communities include blue oak woodland, coast live oak woodland, chamise chaparral, mixed chaparral, and annual grassland.	750,850	17.5%

Subsection	Code[a]	Brief Description	Acreage[b]	Subsection as Percentage of GAI
Leeward Hills	261Ag	The Leeward Hills subsection include mountains and hills with rounded ridges, moderately steep to steep slopes, and narrow canyons. They consist of sedimentary and volcanic rock substrates, and occur inland from the Santa Cruz Mountains. Common vegetation in this subsection includes annual grassland, coast live oak woodland, California bay forest, and chaparral.	75,474	1.8%
North Coastal Santa Lucia Range	261Aj	The North Coastal Santa Lucia Range subsection consists of mountains with rounded ridges, steep slopes, and narrow canyons. It consists of granitic, metamorphic, and sedimentary rocks. Vegetation communities include coast live oak woodland, canyon live oak woodland, California sagebrush-black sage scrub, scrub oak chaparral, and chamise chaparral.	596,293	13.9%
Paso Robles Hills and Valleys	M262Ah	The Paso Robles Hills and Valleys subsection occurs on a dissected plain with low, rolling to moderately steep hills underlain by both nonmarine and marine sediments. Vegetation communities include blue oak savanna, valley oak woodland, chamise chaparral, and annual grassland. Ranching and livestock grazing are a dominant land use in this subsection.	277,054	6.5%
Santa Clara Valley	261Ae	The Santa Clara Valley subsection consists of an alluvial plain. Vegetation communities include valley oak woodland, coast live oak woodland, and native grassland. Most of the valley has been converted to agricultural or urban land uses.	126,161	2.9%
Santa Cruz Mountains	261Af	The Santa Cruz Mountains subsection includes the western and southwestern parts of the range. Vegetation communities include redwood forest, Douglas-fir forest, coast live oak woodland, California bay forest, coastal scrub, and chaparral.	379,504	8.8%
Santa Maria Valley	261Al	The Santa Maria Valley subsection occurs on alluvial plains along the Santa Maria River and includes coastal dunes and sand hills. Historic vegetation included valley oak woodland, coast live oak woodland, grasslands, willow riparian scrub, and chaparral. Most of the area has been converted to agricultural, urban, and military land uses.	39,065	0.9%

Subsection	Code[a]	Brief Description	Acreage[b]	Subsection as Percentage of GAI
South Coastal Santa Lucia Range	261Ak	The South Coastal Santa Lucia Range subsection includes mountains and hills with rounded ridges, steep slopes, narrow canyons, coastal marine benches and terraces, and sand dunes. The substrate consists of metamorphic and sandstone rocks. Vegetation communities include coast live oak woodland, chaparral, and annual grassland.	501,494	11.7%
Watsonville Plain-Salinas Valley	261Ah	The Watsonville Plain-Salinas Valley subsection includes gently sloping alluvial plains, stream terraces, and floodplains. Vegetation communities include valley oak woodland and native grassland, but most of the area has been converted to agricultural use.	383,449	8.9%
Western Diablo Range	M262Ab	The Western Diablo Range subsection includes hills with coast live oak woodland, blue oak woodland, valley oak woodland, and chamise chaparral.	125,024	2.9%
		Total	**4,288,813**	**100%**

Source: Griffith et al. (2016)
[a] USFS ecological unit subsection codes
[b] Numbers were rounded to the nearest whole number.

References

Cleland, D. T., Freeouf, J. A., Keys, Jr., J. E., Nowacki, G.J., Carpenter, C.A., McNab, W. H. 2007. *Ecological Subregions: Sections and Subsections of the Conterminous United States* [1:3,500,000] [CDROM]. Gen. Tech. Report WO-76D. Washington, D.C.: USDA, USFS.

Griffith, G. E., J. M. Omernik, D. W. Smith, T. D. Cook, E. Tallyn, K. Moseley, and C. B. Johnson. 2016. “Ecoregions of California (poster).” USGS Open-File Report 2016-1021. Accessed October 2019. https://www.calflora.org/entry/help/epa-er4.html.

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APPENDIX C: LAND COVER TYPES

Land cover types in the GAI were excerpted from the SAMNA Reporting Tool's vegetation layer, which was developed by merging CDFW's CWHR Vegetation Classification and Mapping Program GIS database, the USFS Classification and Assessment with LandSat of Visible Ecological Groupings, and the California Department of Forestry and Fire Protection vegetation layer (Caltrans 2017, 2019). A general description of each land cover type found in the GAI is provided below, and complete descriptions can be found in Mayer and Laudenslayer (1988). Table C-1 indicates which USFS subsections of the Central California Coast and Central California Coast Ranges sections these habitat types occur in; subsection names and numbers are provided. A key map is provided after Table C-1 that references mapbook pages including zoomed in views of locations in the GAI and mapped land cover types.

Land cover types that occur in the GAI, based on the SAMNA Reporting Tool, are generally described below (CDFW 2019). Table C-1 indicates which subecoregion each of these habitat types occur in.

Tree-dominated Habitats: Tree-dominated habitats have at least 10 percent total tree canopy crown closure. In the GAI, tree-dominated habitats include blue oak woodland, blue oak-foothill pine, closed-cone pine-cypress, coastal oak woodland, desert riparian, eucalyptus, hardwood, Jeffrey pine, juniper, montane hardwood, montane hardwood-conifer, montane riparian, ponderosa pine, redwood, Sierran mixed conifer, unknown conifer type, valley foothill riparian, and valley oak woodland, which are found in all 13 subecoregions.

Shrub-dominated Habitats: Shrub-dominated habitats have at least 10 percent total cover by shrub species and less than 10 percent cover by tree species. In the GAI, shrub-dominated habitats include alkali desert scrub, chamise-redshank chaparral, coastal scrub, desert wash, mixed chaparral, montane chaparral, and unknown shrub type, which are found in all 13 subecoregions.

Herbaceous-dominated Habitats: Herbaceous-dominated habitats have at least 2 percent total cover by herbaceous species and less than 10 percent total cover by tree or shrub species. In the GAI, herbaceous-dominated habitats include annual grassland, fresh emergent wetland, pasture, perennial grassland, saline emergent wetland, and wet meadow, which are found in all 13 subecoregions.

Aquatic Habitats: Aquatic habitats have at least 98 percent total cover by open water and no more than 2 percent total cover by vegetation in the continually exposed shore zone. In the GAI, aquatic habitats include estuarine, lacustrine, marine, riverine, and water, which are found in all 13 subecoregions.

Developed Habitats: Developed habitats have at least 2 percent total cover by non-wildland vegetation grown for food, fiber, or landscaping and do not meet criteria for any wildland habitat. In the GAI, developed habitats include agriculture, cropland, deciduous orchard, dryland grain crops, evergreen orchard, irrigated grain crops, irrigated row and field crops, orchard-vineyard, urban, and vineyard, which are found in all 13 subecoregions.

Non-vegetated Habitats: Non-vegetated habitats include barren areas, characterized by less than 2 percent cover by herbaceous species. In the GAI, non-vegetated habitats consist of barren areas, which are found in 6 subecoregions.

References

Caltrans. 2017. "Vegetation_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018" (data file). Accessed February 6, 2019. http://www.dot.ca.gov/env/advancemitigation/.

———. 2019. *Statewide Advance Mitigation Needs Assessment Report*. State Highway Operation and Protection Program Ten-Year Project Book Second Quarter 2017/2018 Fiscal Year. Caltrans Headquarters Office of Strategic Biological Planning, Advance Mitigation and Innovation, Division of Environmental Analysis. Sacramento, California.

CDFW. 2019. California Wildlife Habitat Relationships (CWHR) System supported by the California Interagency Wildlife Task Group and maintained by the CDFW. Database Version 9.0.

Mayer, Kenneth E. and William F. Laudenslayer, Jr., eds. 1988. "A Guide to Wildlife Habitats of California." State of California, Resources Agency, Department of Fish and Game. Sacramento, California. Including Revisions and Updates. Accessed February 6, 2019. https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats.

Table C-1. Land Cover Types in the Central California Coast and Central California Coast Ranges Sections within the GAI

Land Cover Type	Diablo Range Subecoregion (M262Ac)	Fremont-Livermore Hills and Valleys Subecoregion (M262Aa)	Gabilan Range Subecoregion (M262Af)	Interior Santa Lucia Range Subecoregion (M262Ae)	Leeward Hills Subecoregion (261Ag)	North Coastal Santa Lucia Range Subecoregion (261Aj)	Paso Robles Hills and Valleys Subecoregion (M262Ah)	Santa Clara Valley Subecoregion (261Ae)	Santa Cruz Mountains Subecoregion (261Af)	Santa Maria Valley Subecoregion (261Al)	South Coastal Santa Lucia Range Subecoregion (261Ak)	Watsonville Plain-Salinas Valley Subecoregion (261Ah)	Western Diablo Range Subecoregion (M262Ab)
Tree-dominated Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Blue Oak Woodland	Present	Present	Present	Present	Present	Present	Present	Present	NP	Present	Present	Present	Present
Blue-Oak Foothill Pine	Present	Present	Present	Present	Present	Present	Present	Present	Present	NP	Present	Present	Present
Blue Oak-Foothill Pine; Blue Oak Woodland	Present	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Closed-Cone Pine-Cypress	Present	NP	Present	Present	NP	Present	NP	NP	Present	NP	Present	Present	NP
Coastal Oak Woodland	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Desert Riparian	NP	NP	Present	NP	NP	NP	Present	NP	NP	NP	NP	NP	NP
Eucalyptus	NP	NP	Present	Present	Present	Present	NP	NP	Present	Present	Present	Present	NP
Hardwood	NP	NP	NP	NP	Present	NP	NP	Present	Present	NP	NP	NP	NP
Jeffrey Pine	Present	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Juniper	Present	NP	Present	NP	NP	NP	Present	NP	NP	NP	NP	NP	NP
Montane Hardwood	Present	Present	Present	Present	NP	Present	Present	NP	Present	Present	Present	Present	Present
Montane Hardwood-Conifer	Present	NP	Present	Present	Present	Present	Present	NP	Present		Present	Present	NP
Montane Riparian	NP	NP	NP	NP	Present	Present	NP	NP	Present	NP	Present	NP	Present
Ponderosa Pine	NP	NP	NP	NP	NP	Present	NP	NP	Present	NP	Present	NP	NP
Redwood	NP	NP	NP	NP	Present	Present	NP	NP	Present	NP	Present	Present	NP
Sierran Mixed Conifer	Present	NP	Present	Present	Present	Present	NP	Present	Present	NP	Present	NP	NP
Unknown Conifer Type	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Valley Foothill Riparian	Present	NP	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Valley Oak Woodland	Present	Present	Present	Present	Present	Present	Present	Present	Present	NP	Present	Present	Present
Shrub-dominated Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Alkali Desert Scrub	Present	NP	Present	Present	NP	NP	Present	NP	NP	NP	NP	NP	NP
Chamise-Redshank Chaparral	Present	Present	Present	Present	Present	Present	Present	Present	Present	NP	Present	Present	Present
Coastal Scrub	Present	NP	Present	Present	Present	Present	Present	NP	Present	Present	Present	Present	NP
Desert Wash	NP	NP	Present	Present	NP	NP	Present	NP	NP	NP	NP	NP	NP
Mixed Chaparral	Present	Present	Present	Present	NP	Present	Present	Present	Present	NP	Present	Present	Present

Land Cover Type	Diablo Range Subecoregion (M262Ac)	Fremont-Livermore Hills and Valleys Subecoregion (M262Aa)	Gabilan Range Subecoregion (M262Af)	Interior Santa Lucia Range Subecoregion (M262Ae)	Leeward Hills Subecoregion (261Ag)	North Coastal Santa Lucia Range Subecoregion (261Aj)	Paso Robles Hills and Valleys Subecoregion (M262Ah)	Santa Clara Valley Subecoregion (261Ae)	Santa Cruz Mountains Subecoregion (261Af)	Santa Maria Valley Subecoregion (261Al)	South Coastal Santa Lucia Range Subecoregion (261Ak)	Watsonville Plain-Salinas Valley Subecoregion (261Ah)	Western Diablo Range Subecoregion (M262Ab)
Montane Chaparral	NP	NP	Present	Present	NP	NP	NP	NP	NP	NP	NP	NP	NP
Unknown Shrub Type	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Herbaceous-dominated Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Annual Grassland	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Annual Grassland; Perennial Grassland	Present	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Fresh Emergent Wetland	Present	NP	NP	Present	NP	Present	NP	NP	NP	NP	Present	Present	NP
Pasture	Present	NP	Present	Present	NP	Present	Present	NP	Present	Present	Present	Present	NP
Perennial Grassland	Present	NP	Present	Present	NP	NP	Present	NP	NP	NP	Present	Present	NP
Saline Emergent Wetland	NP	NP	NP	NP	NP	Present	Present	NP	Present	NP	NP	Present	NP
Wet Meadow	Present	NP	Present	Present	NP	Present	Present	NP	Present	NP	NP	Present	NP
Aquatic Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Estuarine	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Present	NP
Lacustrine	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Marine	NP	NP	NP	NP	NP	Present	NP	NP	NP	NP	NP	Present	NP
Riverine	Present	NP	NP	Present	NP	Present	Present	NP	NP	NP	Present	Present	NP
Water	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Developed Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Agriculture	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Cropland	NP	NP	NP	Present	NP	NP	NP	Present	Present	NP	Present	Present	NP
Deciduous Orchard	Present	NP	Present	Present	NP	Present	Present	NP	Present	Present	Present	Present	NP
Dryland Grain Crops	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Evergreen Orchard	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Present	Present	NP
Irrigated Grain Crops	Present	NP	Present	Present	NP	NP	Present	NP	NP	Present	Present	NP	NP
Irrigated Row and Field Crops	Present	Present	Present	Present	Present	NP	Present	Present	Present	Present	Present	Present	Present
Orchard-Vineyard	NP	Present	Present	NP	Present	NP	NP	Present	Present	NP	NP	NP	NP
Urban	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Land Cover Type	Diablo Range Subecoregion (M262Ac)	Fremont-Livermore Hills and Valleys Subecoregion (M262Aa)	Gabilan Range Subecoregion (M262Af)	Interior Santa Lucia Range Subecoregion (M262Ae)	Leeward Hills Subecoregion (261Ag)	North Coastal Santa Lucia Range Subecoregion (261Aj)	Paso Robles Hills and Valleys Subecoregion (M262Ah)	Santa Clara Valley Subecoregion (261Ae)	Santa Cruz Mountains Subecoregion (261Af)	Santa Maria Valley Subecoregion (261Al)	South Coastal Santa Lucia Range Subecoregion (261Ak)	Watsonville Plain-Salinas Valley Subecoregion (261Ah)	Western Diablo Range Subecoregion (M262Ab)
Non-vegetated Habitats	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Barren	Present	NP	NP	NP	Present	NP	Present	NP	Present	Present	Present	NP	NP

Sources: Caltrans 2017, 2019

NP = Not Present

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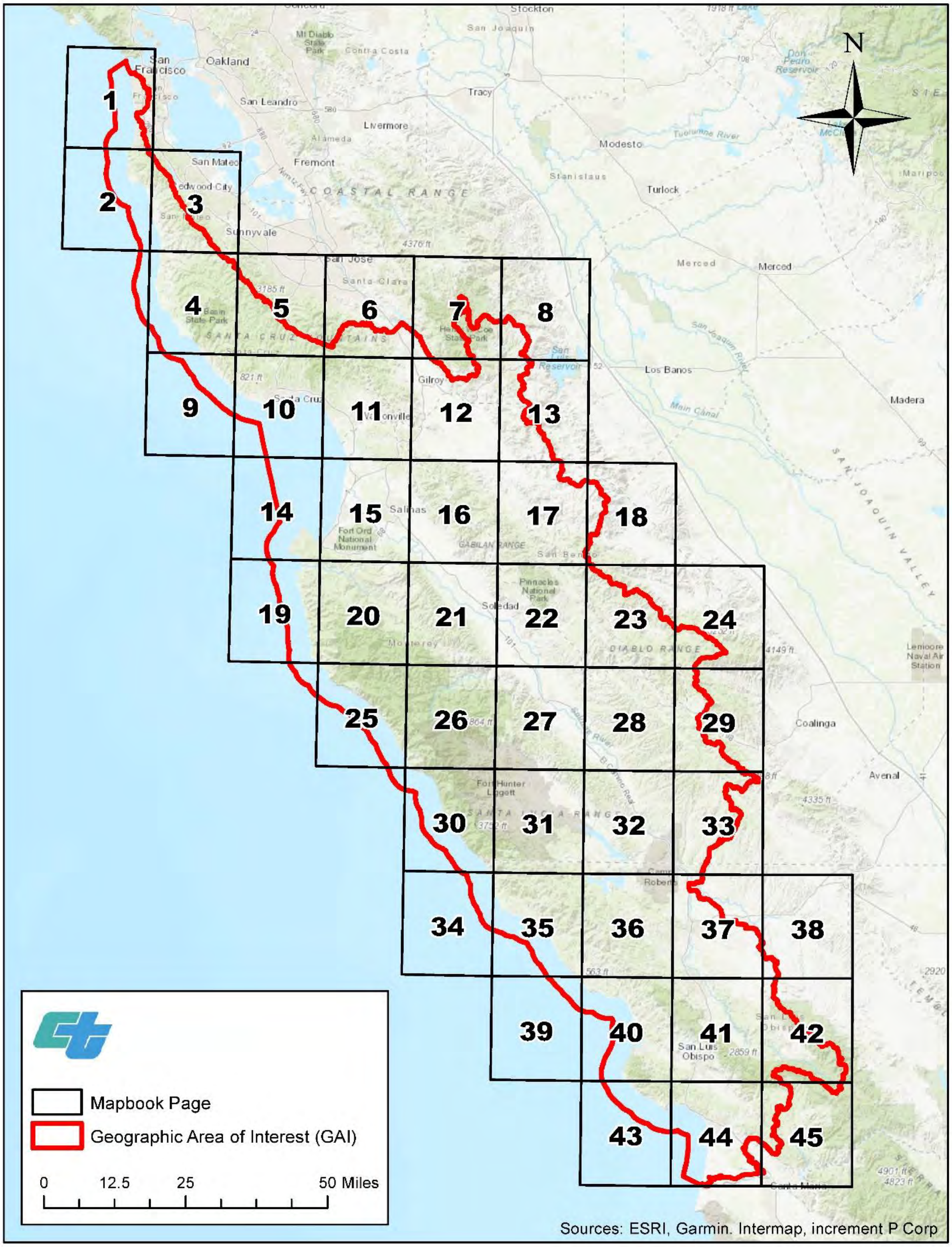
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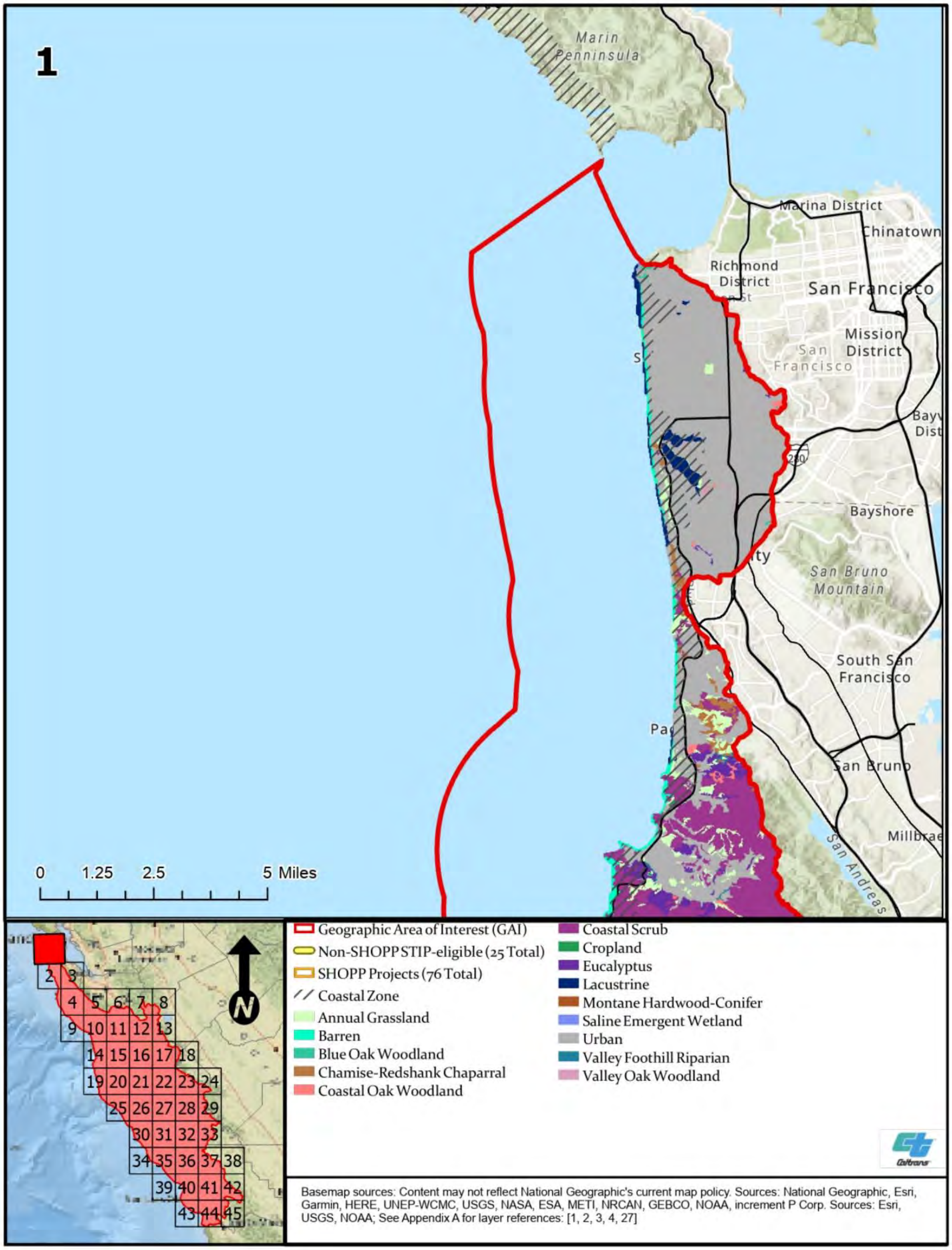
Sources: ESRI, Garmin. Intermap, increment P Corp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San Bruno Mountain
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Millbrae
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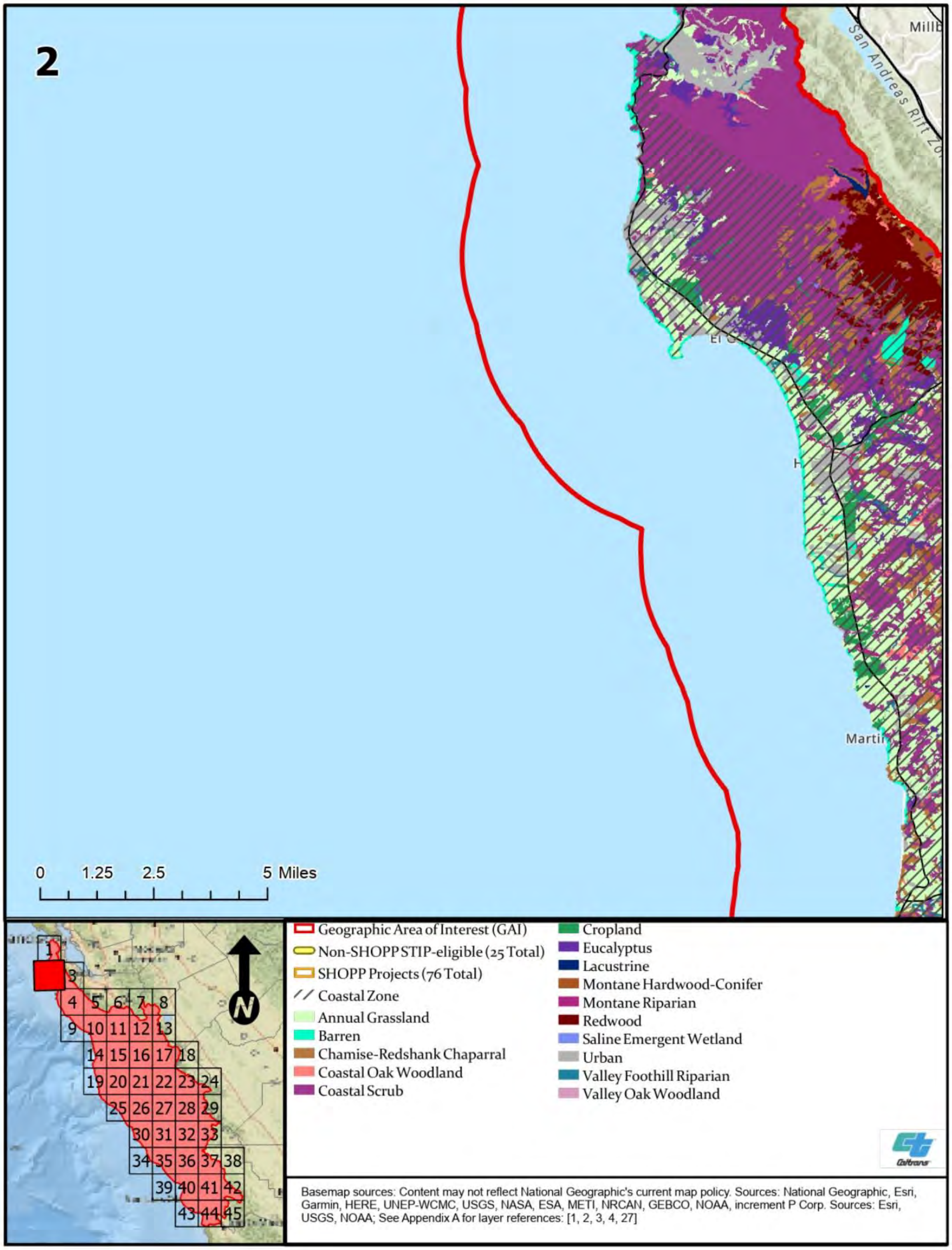
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Montane Hardwood-Conifer
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


2
San Andreas Rift Zo
Mill
El G
H
Marti
0
1.25
2.5
5 Miles
1
3
4
5
6
7
8
9
10
11
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17
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19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Montane Hardwood-Conifer
Montane Riparian
Redwood
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Valley Oak Woodland
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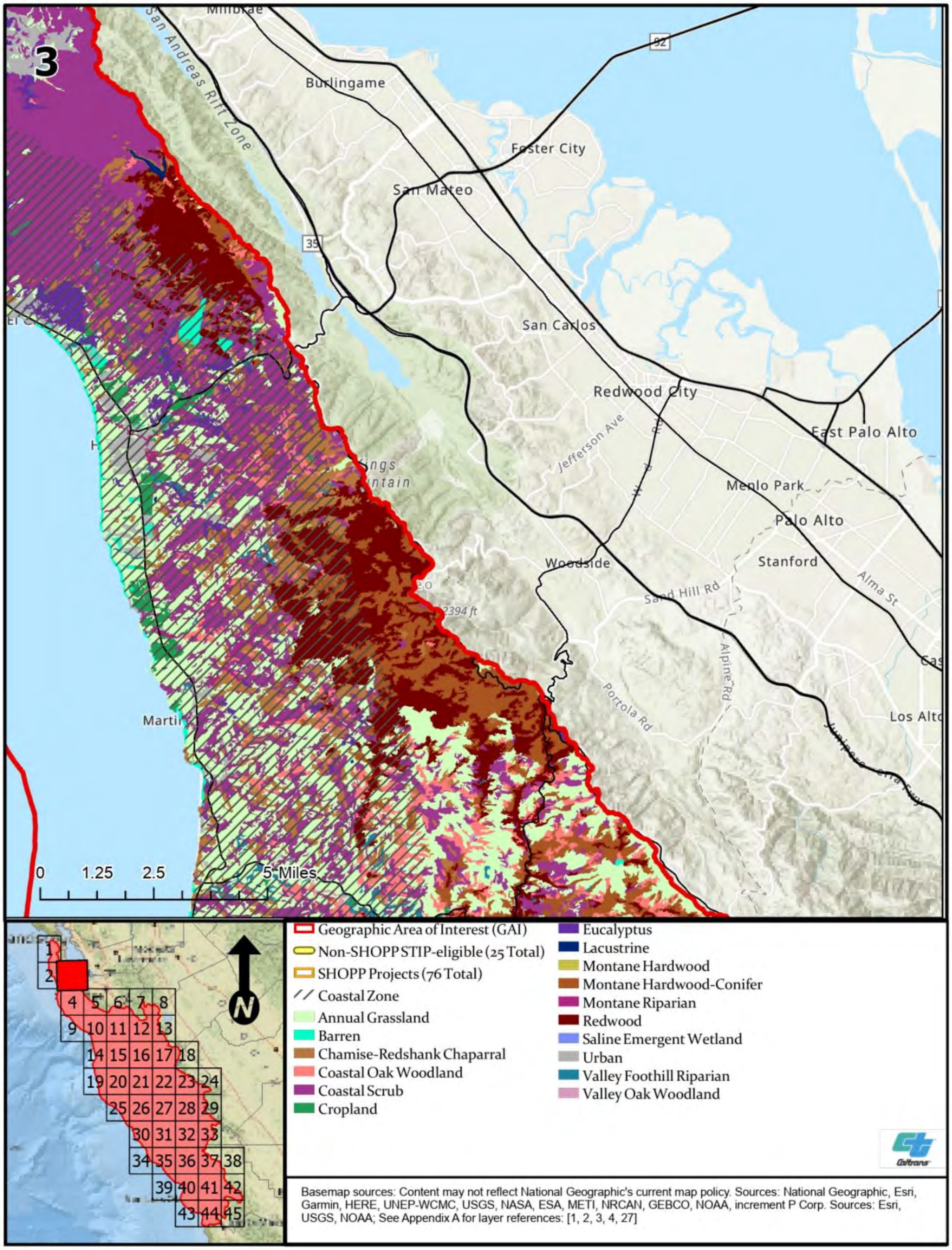
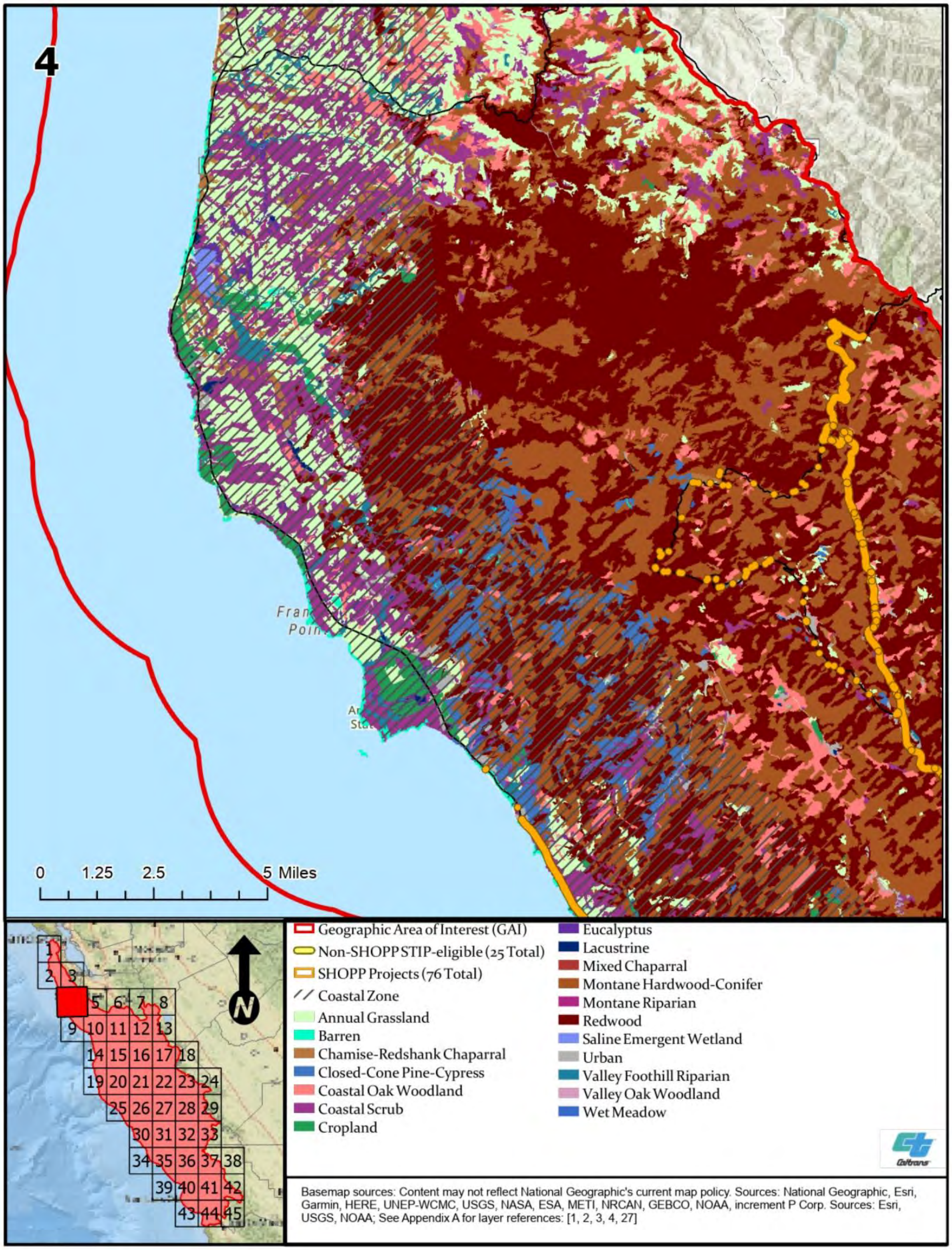
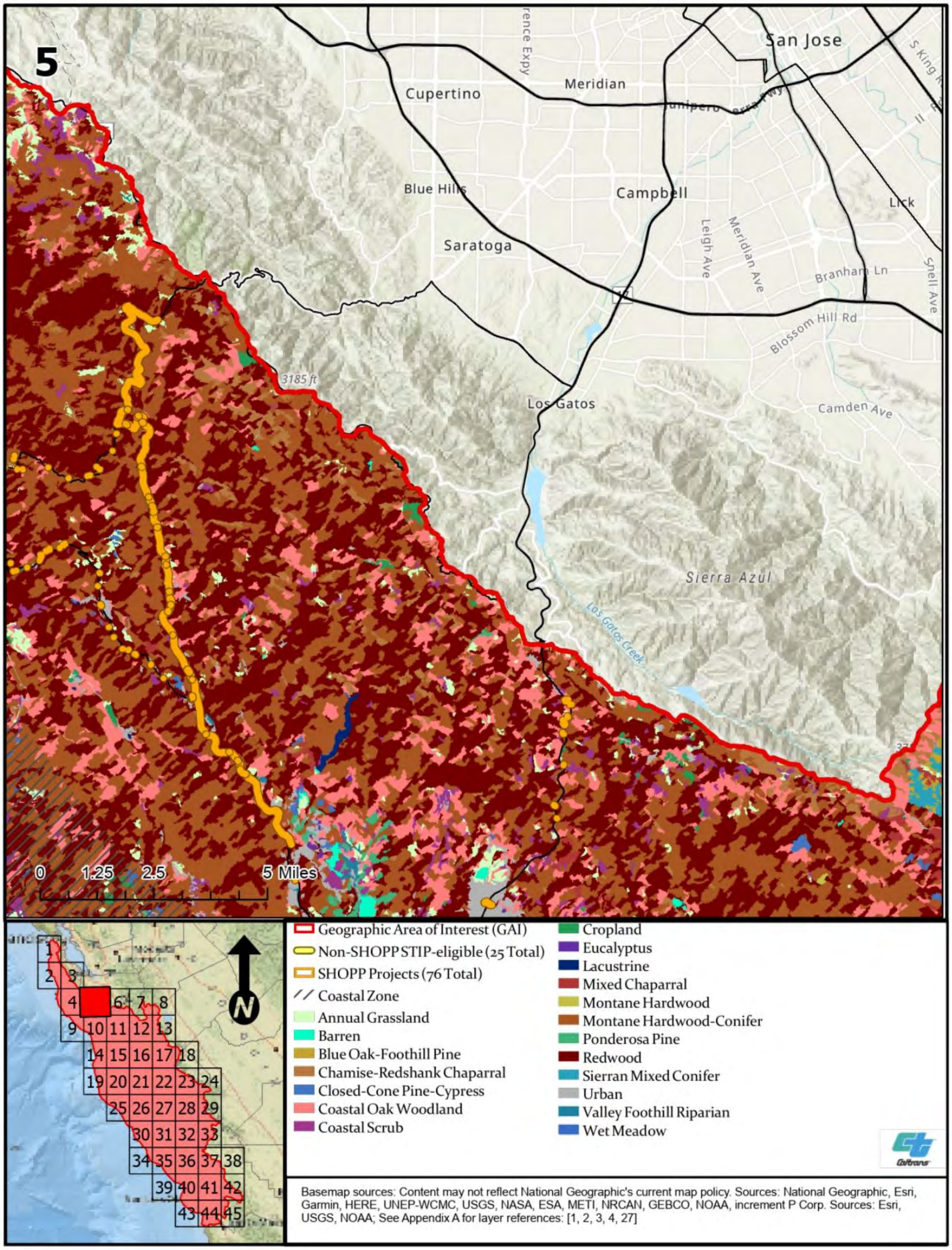
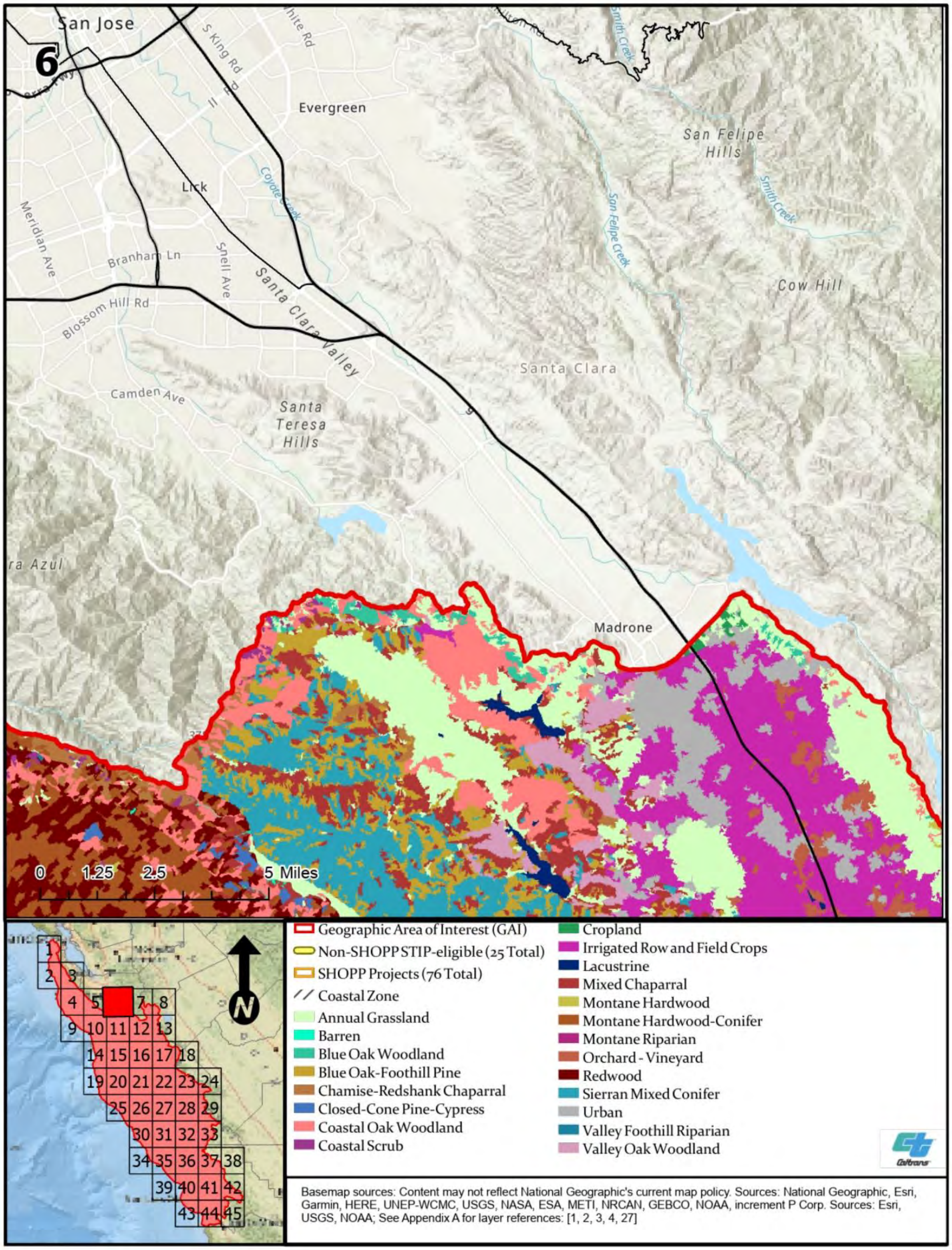
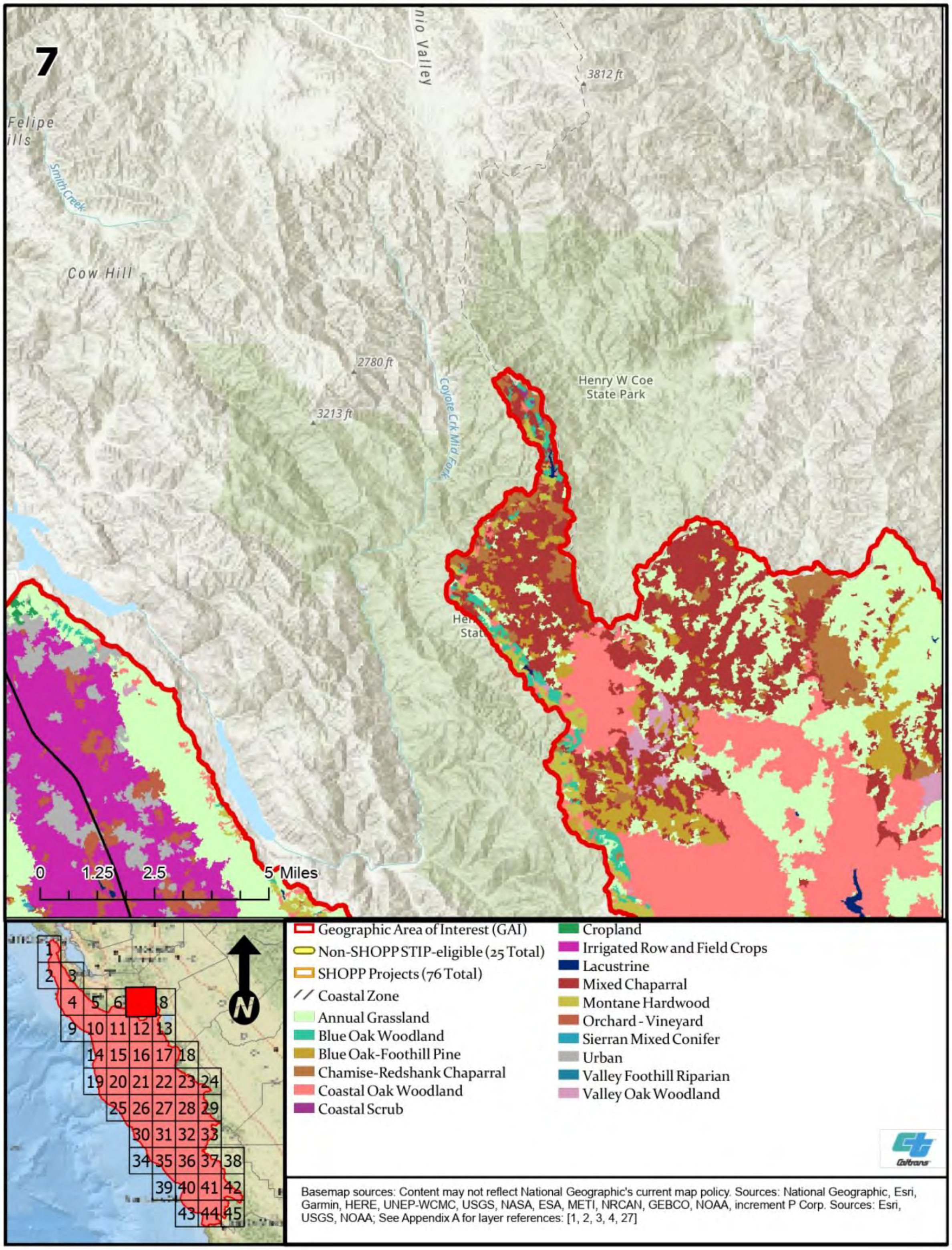
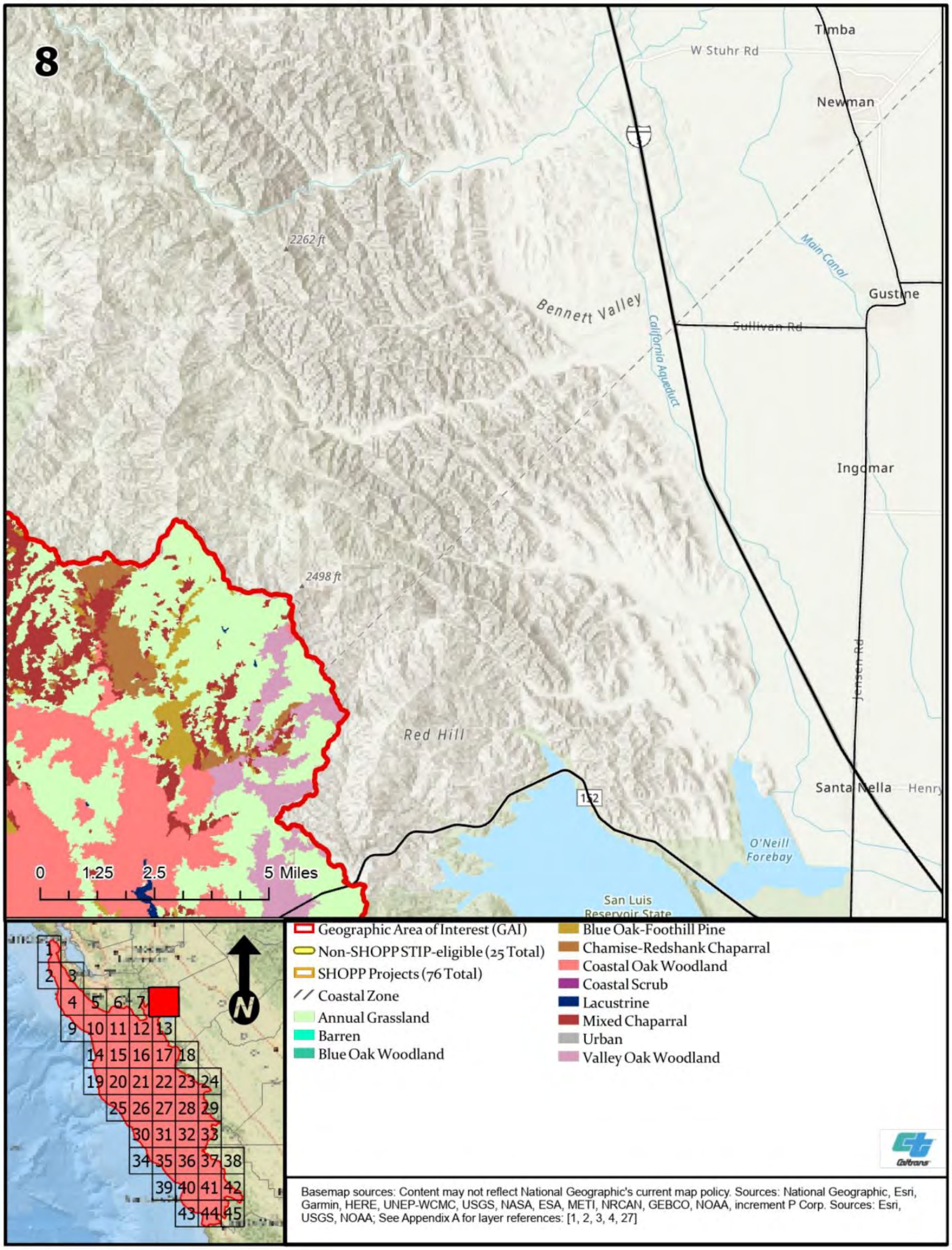

3
Burlingame
Foster City
San Mateo
San Andreas Rift Zone
San Carlos
Redwood City
East Palo Alto
Menlo Park
Palo Alto
Stanford
Woodside
Sand Hill Rd
Alpine Rd
Portola Rd
Los Altos
Jefferson Ave
Alma St
0 1.25 2.5 5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Redwood
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


4
Fran
Poin
0 1.25 2.5 5 Miles
1
2 3
5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Mixed Chaparral
Montane Hardwood-Conifer
Montane Riparian
Redwood
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Valley Oak Woodland
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


5
San Jose
Cupertino
Meridian
Blue Hills
Campbell
Saratoga
Los Gatos
Sierra Azul
0 1.25 2.5 5 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Ponderosa Pine
Redwood
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


San Jose
6
Evergreen
Lick
Meridian Ave
Branham Ln
Snell Ave
Blossom Hill Rd
Santa Clara Valley
Camden Ave
Santa Teresa Hills
San Felipe Hills
San Felipe Creek
Smith Creek
Cow Hill
Santa Clara
Coyote Creek
S King Rd
Madrone
0 1.25 2.5 5 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Irrigated Row and Field Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Orchard - Vineyard
Redwood
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
N
1 2 3 4 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


7
Felipe
ills
Smith Creek
Cow Hill
2780 ft
3213 ft
3812 ft
Coyote Crk Mid Fork
Henry W Coe
State Park
0
1.25
2.5
5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Irrigated Row and Field Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Orchard - Vineyard
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


8
Tumba
W Stuhr Rd
Newman
2262 ft
Main Canal
Gustine
Bennett Valley
Sullivan Rd
California Aqueduct
Ingomar
2498 ft
Jensen Rd
Red Hill
152
Santa Nella
Henry
O'Neill Forebay
San Luis Reservoir State
0 1.25 2.5 5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Lacustrine
Mixed Chaparral
Urban
Valley Oak Woodland
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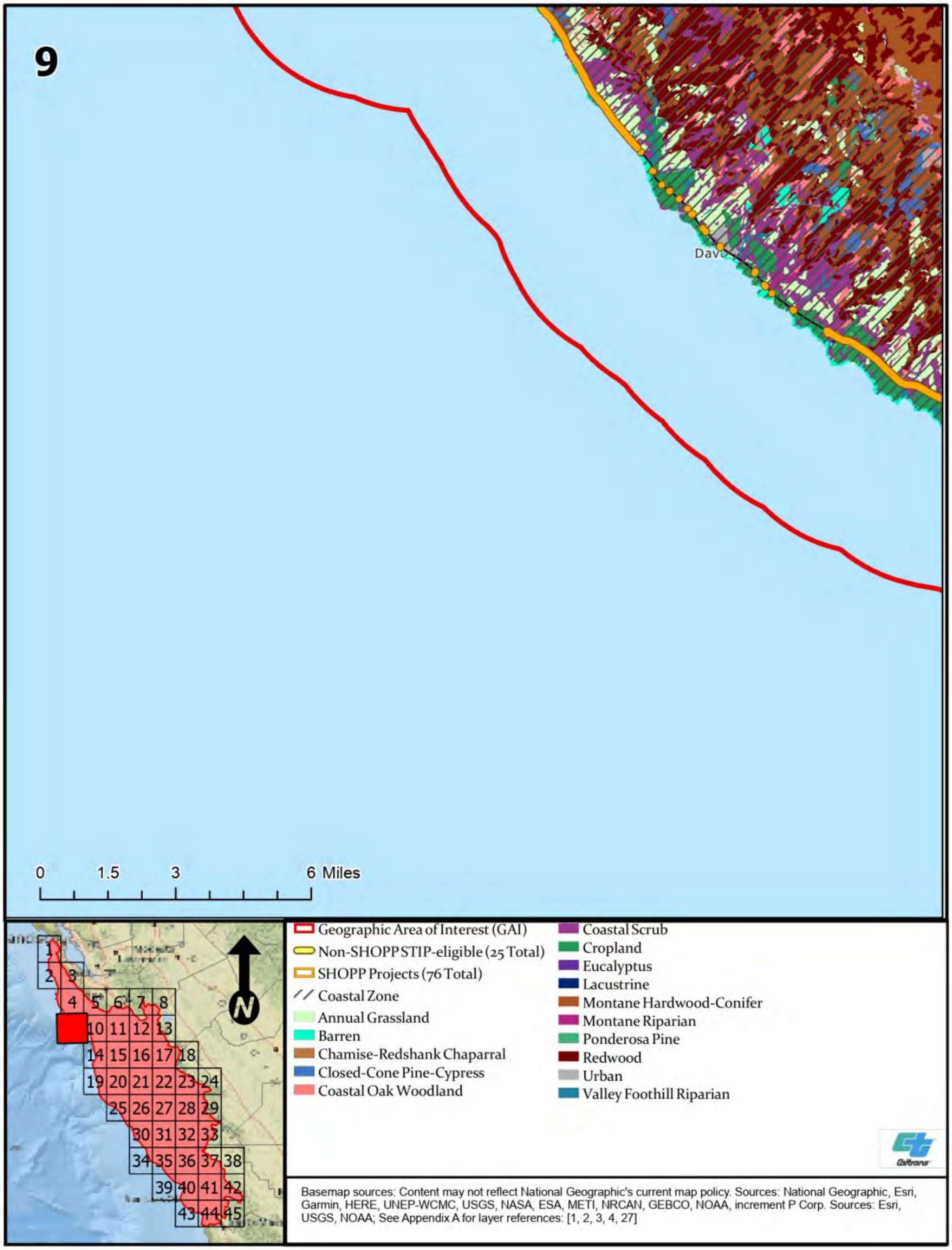
9
Dav
0
1.5
3
6 Miles
N
1
2
3
4
5
6
7
8
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17
18
19
20
21
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38
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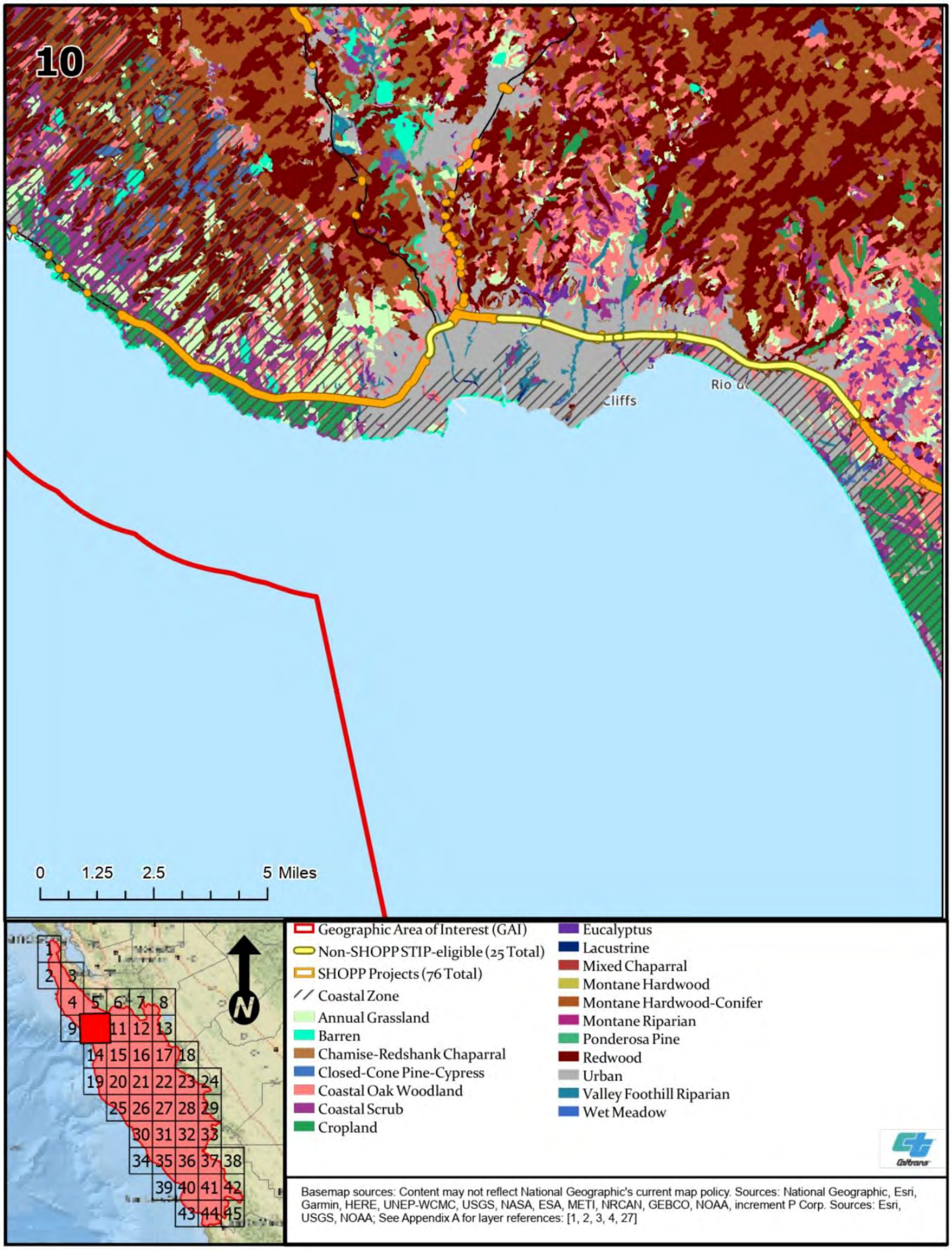
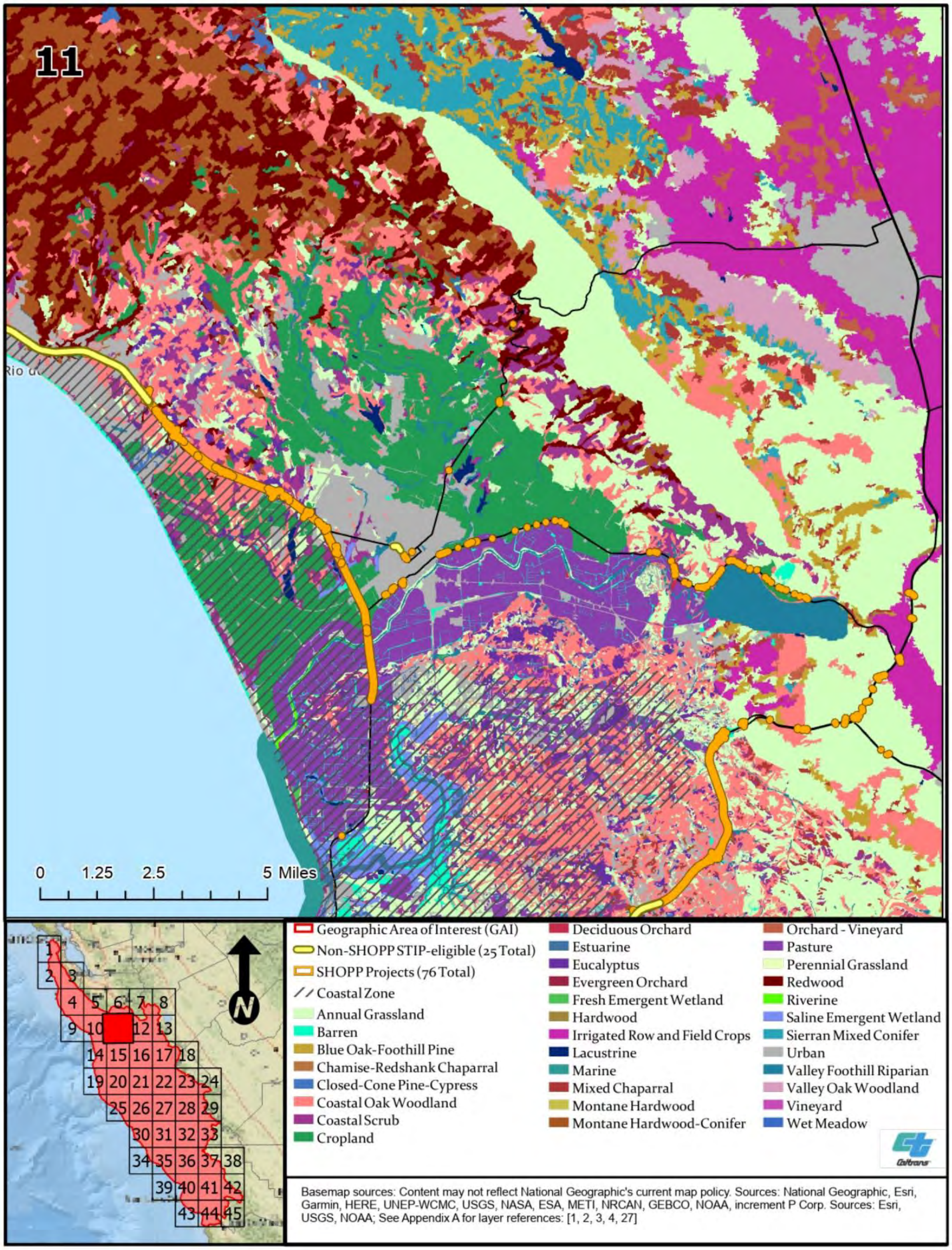
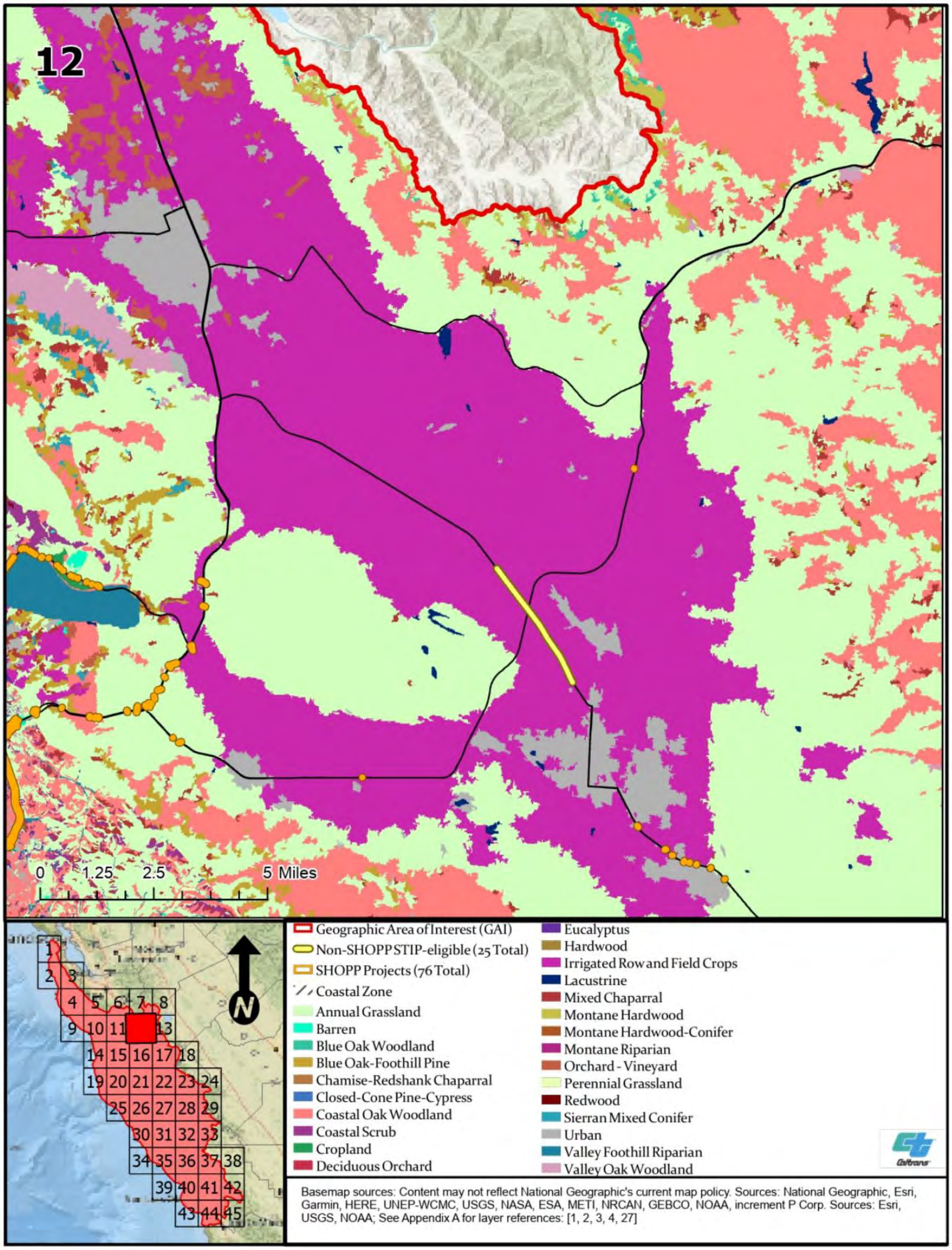
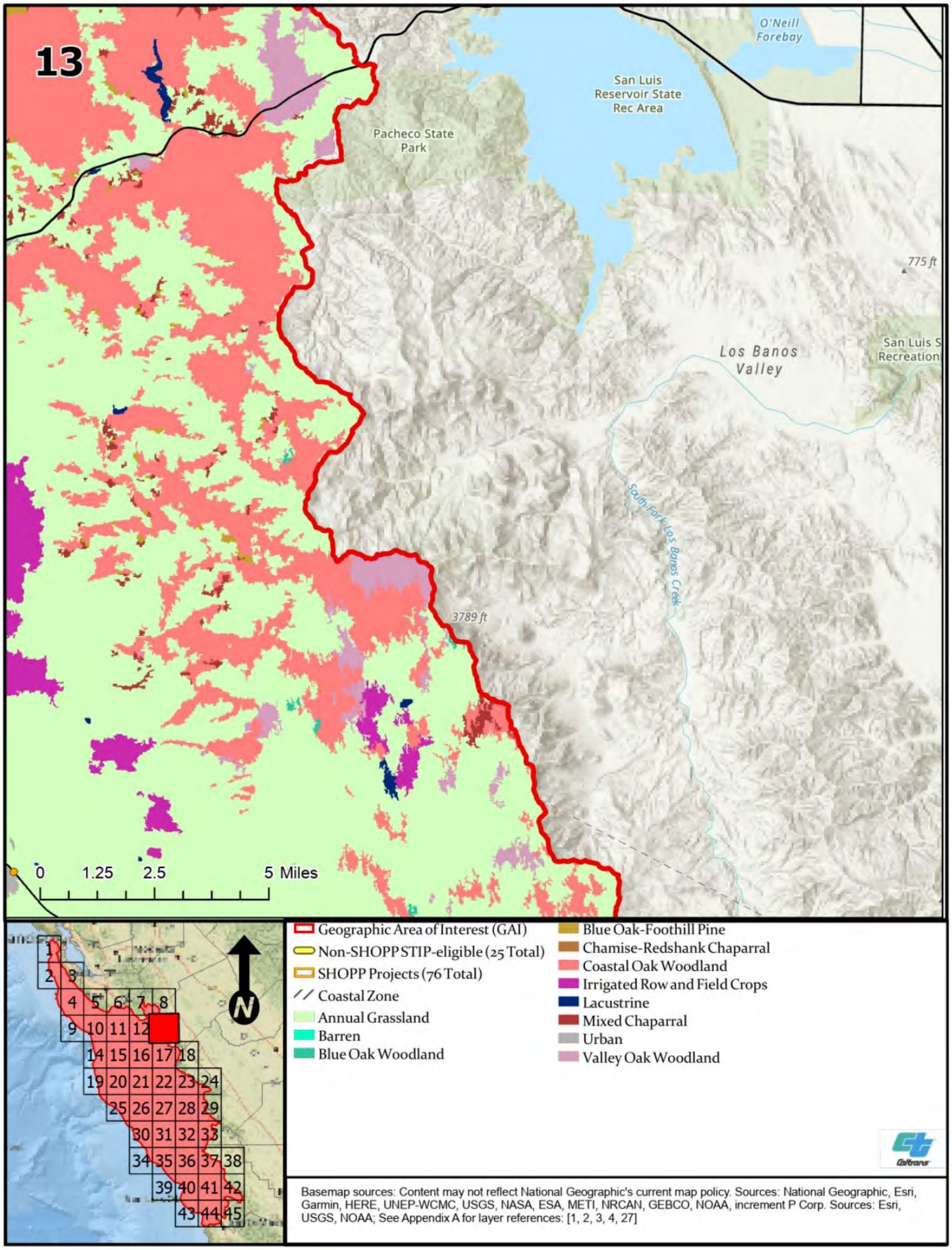
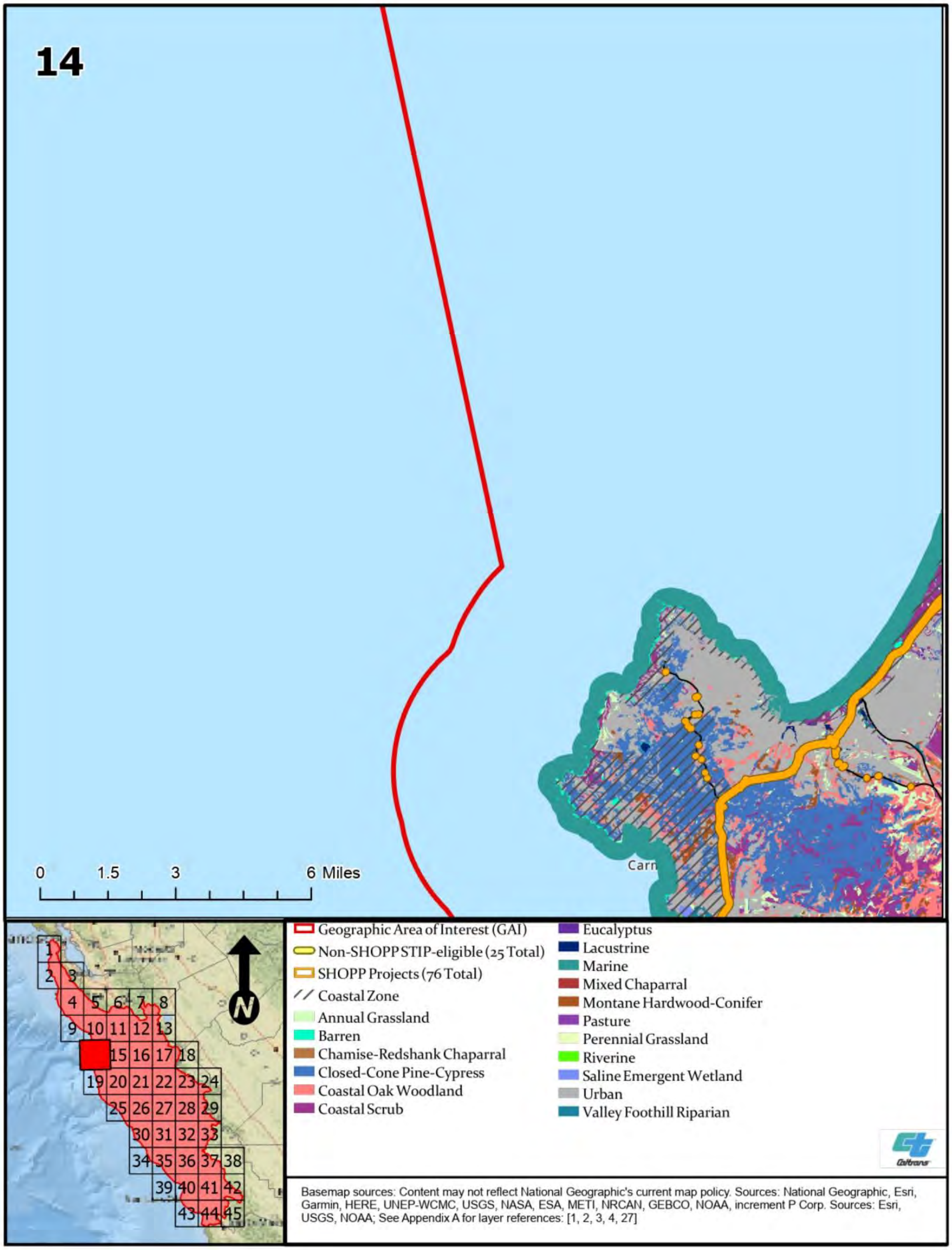
40
41
42
43
44
45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Montane Hardwood-Conifer
Montane Riparian
Ponderosa Pine
Redwood
Urban
Valley Foothill Riparian
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

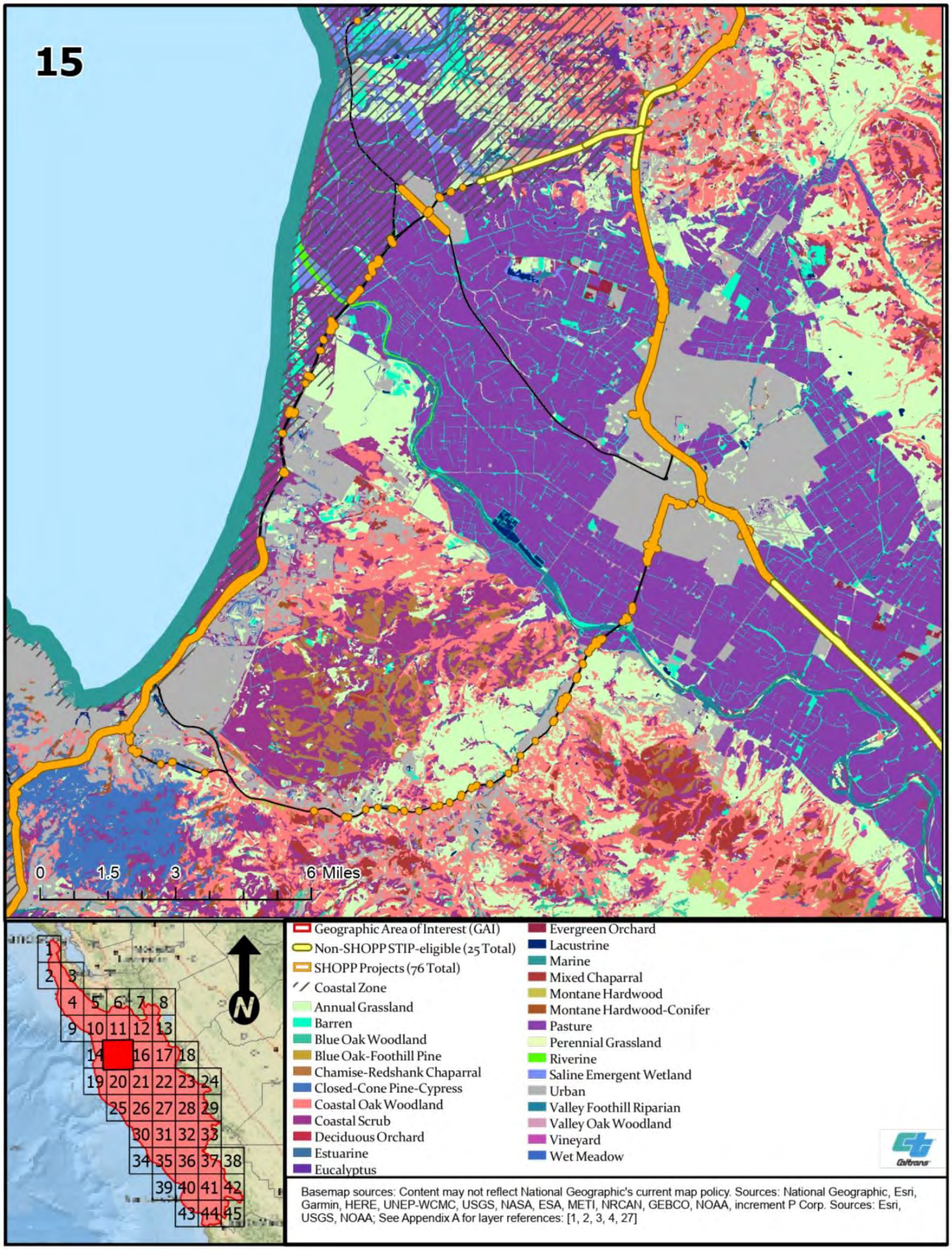

10
Cliffs
Rio
0 1.25 2.5 5 Miles
N
1 2 3 4 5 6 7 8 9 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Ponderosa Pine
Redwood
Urban
Valley Foothill Riparian
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

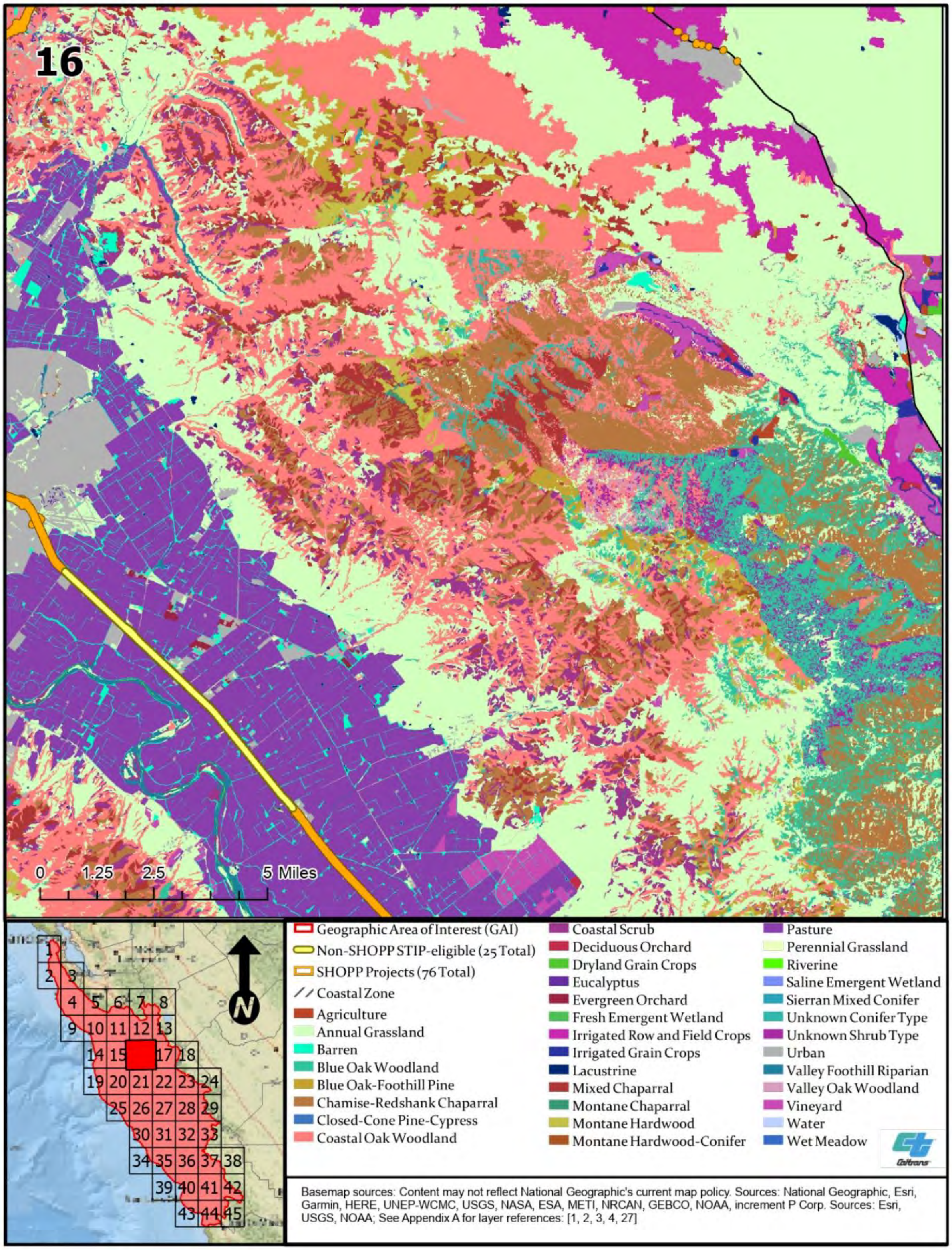

11
0 1.25 2.5 5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Estuarine
Eucalyptus
Evergreen Orchard
Fresh Emergent Wetland
Hardwood
Irrigated Row and Field Crops
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Orchard - Vineyard
Pasture
Perennial Grassland
Redwood
Riverine
Saline Emergent Wetland
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

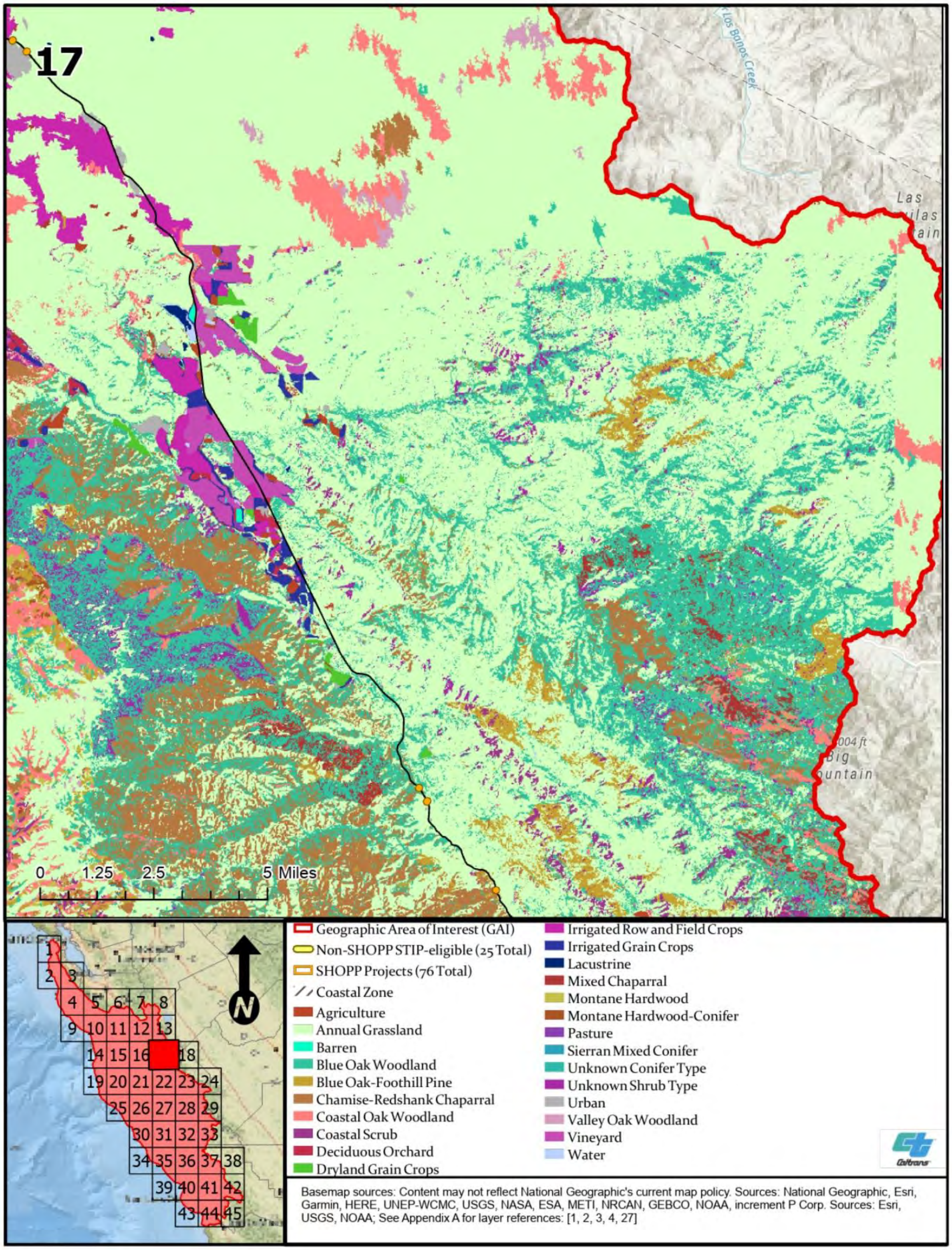

12
0 1.25 2.5 5 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Eucalyptus
Hardwood
Irrigated Row and Field Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Orchard - Vineyard
Perennial Grassland
Redwood
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

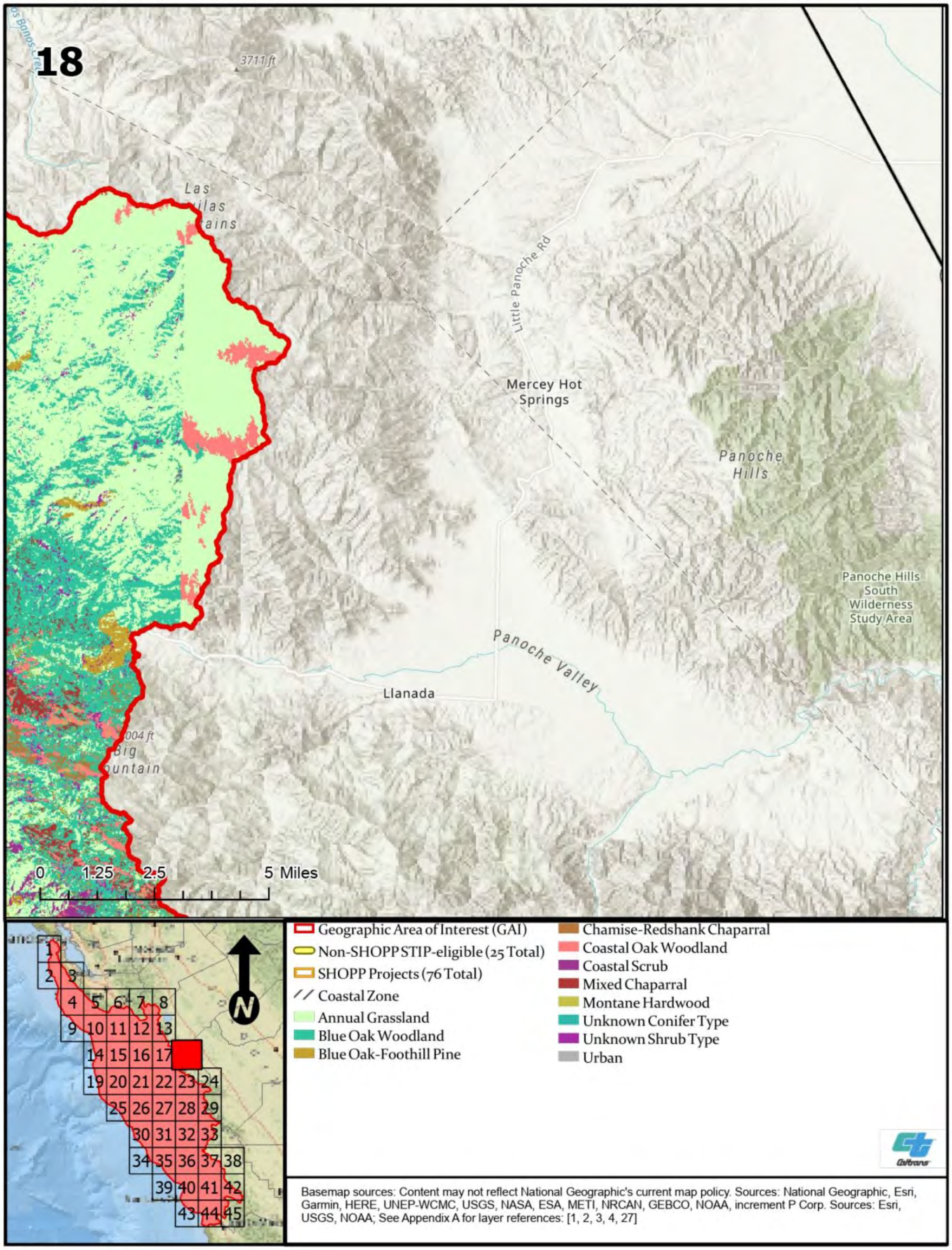

13
O'Neill Forebay
San Luis Reservoir State Rec Area
Pacheco State Park
775 ft
Los Banos Valley
San Luis S Recreation
South Fork Los Banos Creek
3789 ft
0 1.25 2.5 5 Miles
1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Irrigated Row and Field Crops
Lacustrine
Mixed Chaparral
Urban
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


14
0
1.5
3
6 Miles
Carn
1
2
3
4
5
6
7
8
9
10
11
12
13
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Eucalyptus
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


15
0
1.5
3
6 Miles
1
2
3
4
5
6
7
8
9
10
11
12
13
14
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Estuarine
Eucalyptus
Evergreen Orchard
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


16
0 1.25 2.5 5 Miles
N
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Dryland Grain Crops
Eucalyptus
Evergreen Orchard
Fresh Emergent Wetland
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Saline Emergent Wetland
Sierran Mixed Conifer
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


17
Los Banos Creek
Las
ilas
ain
004 ft
Big
ountain
0 1.25 2.5 5 Miles
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Dryland Grain Crops
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Sierran Mixed Conifer
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Oak Woodland
Vineyard
Water
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


18
3711 ft
Las
ilas
tains
Little Panoche Rd
Mercey Hot
Springs
Panoche
Hills
Panoche Hills
South
Wilderness
Study Area
Panoche Valley
Llanada
004 ft
Big
ountain
0
1.25
2.5
5 Miles
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
19
20
21
22
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24
25
26
27
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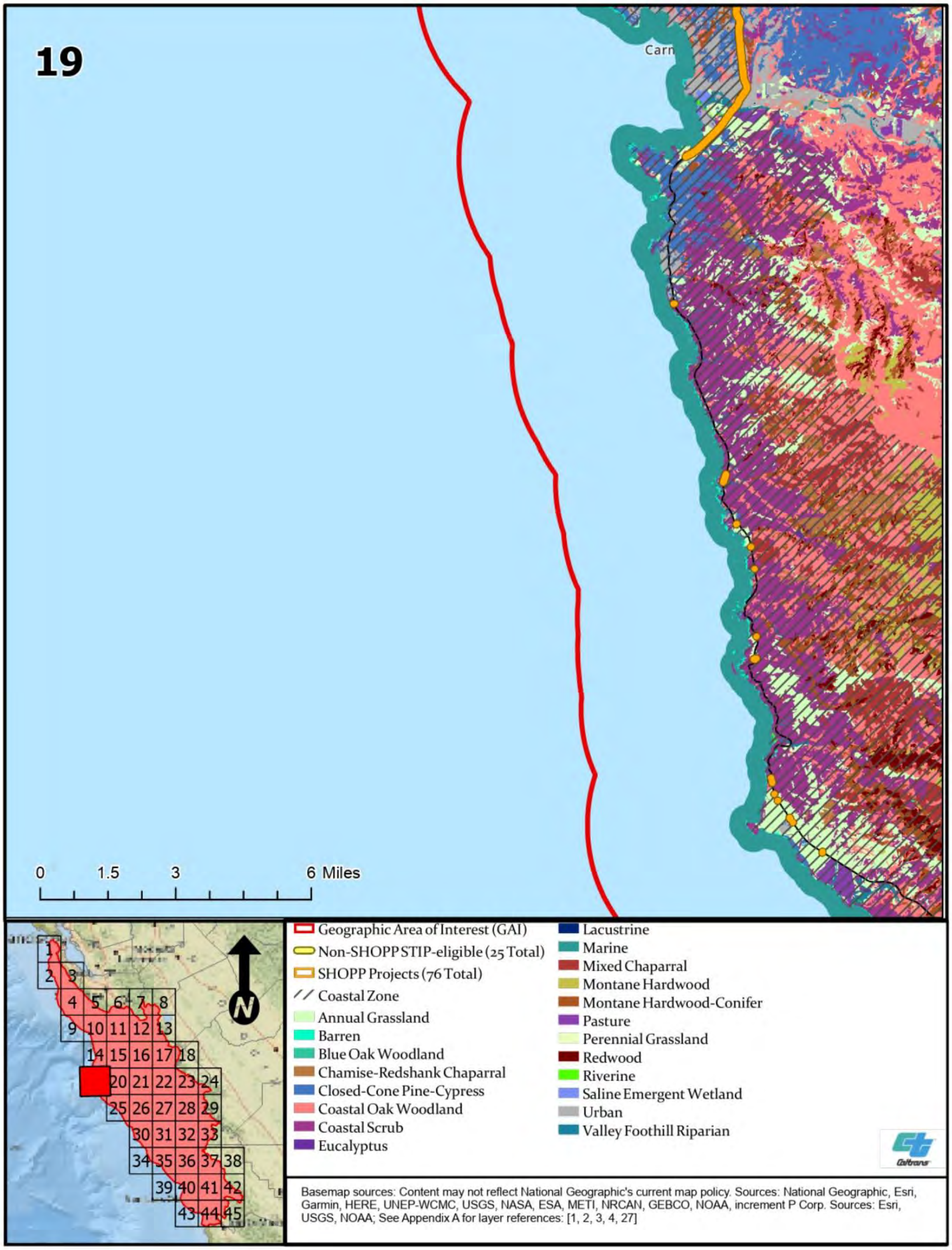
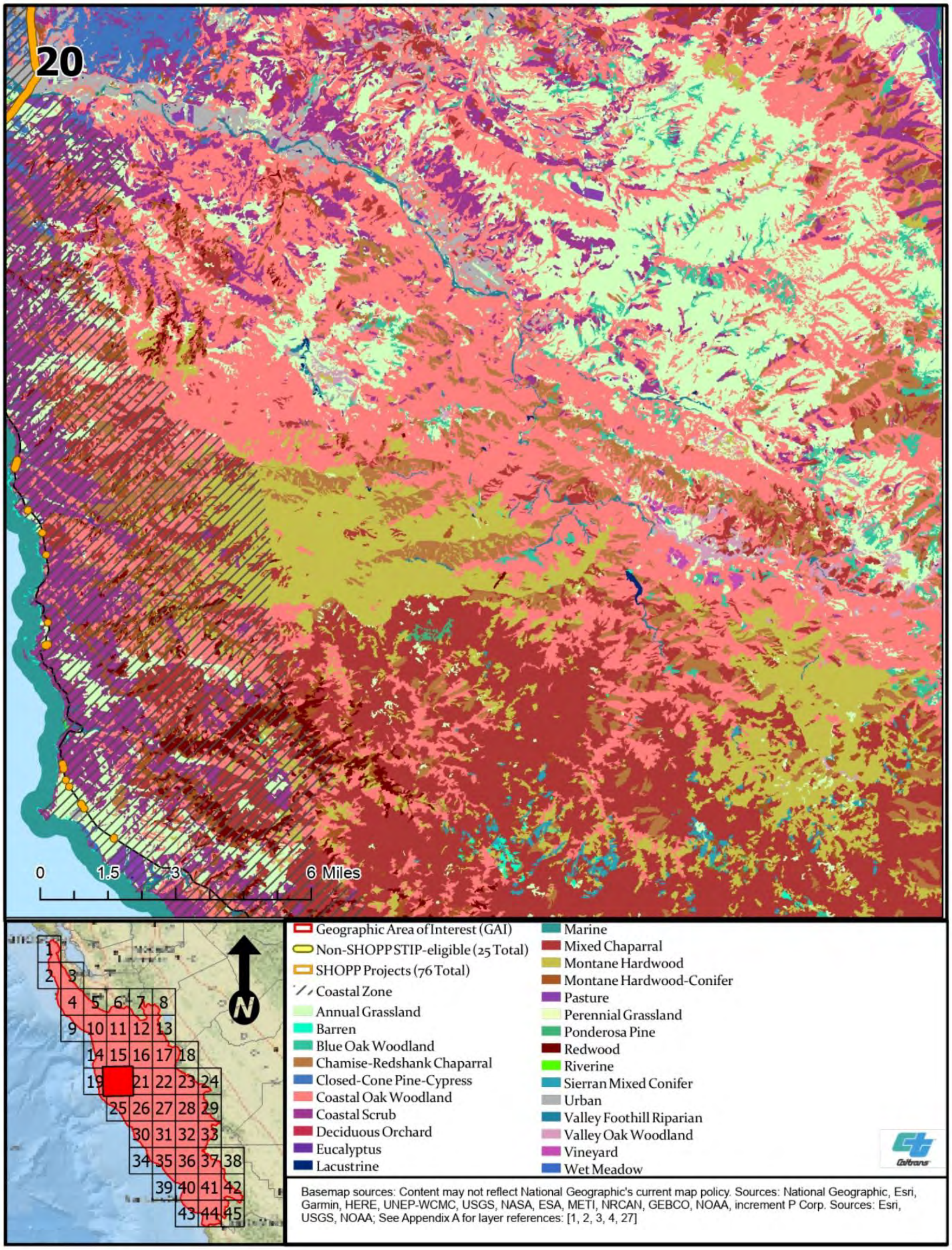
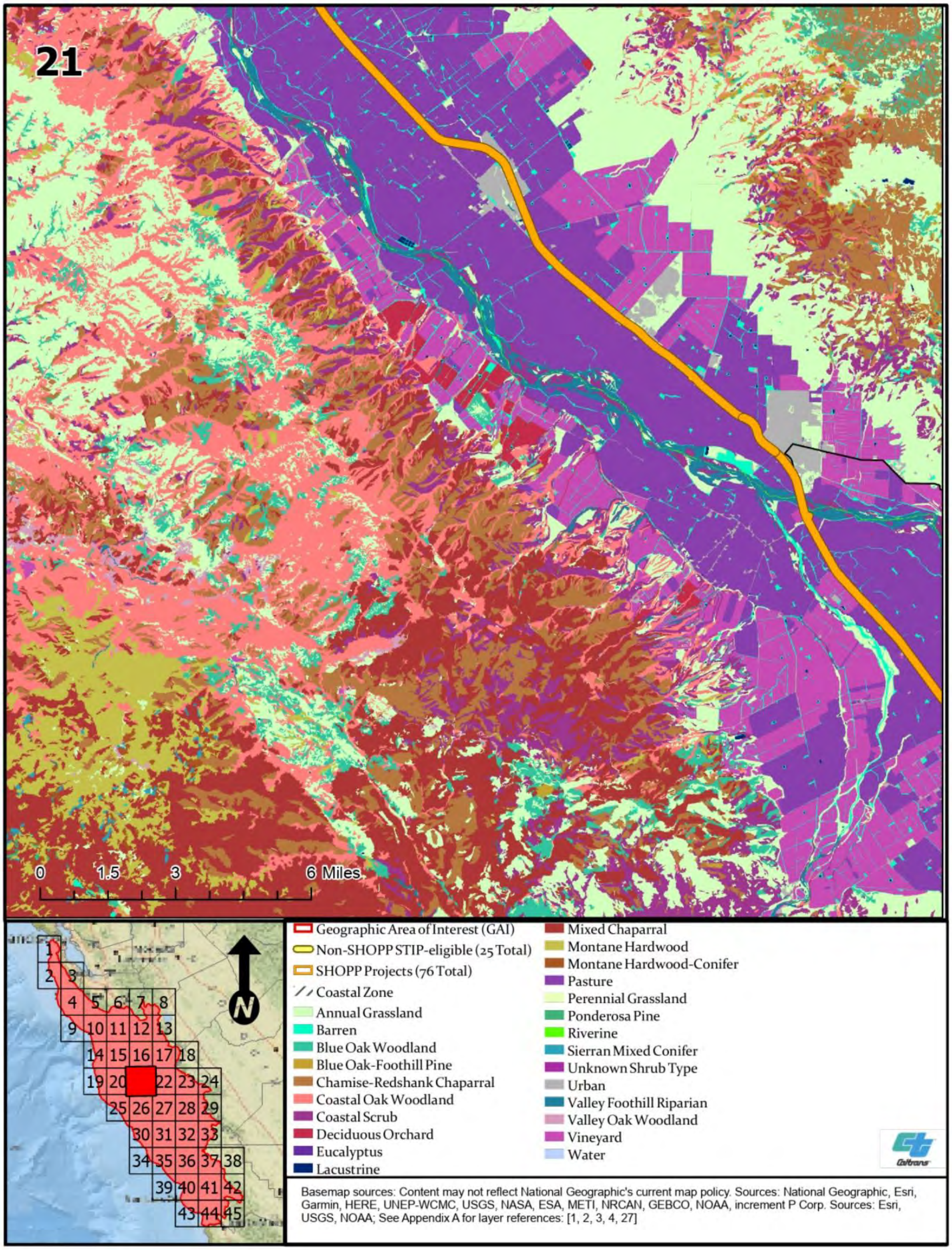
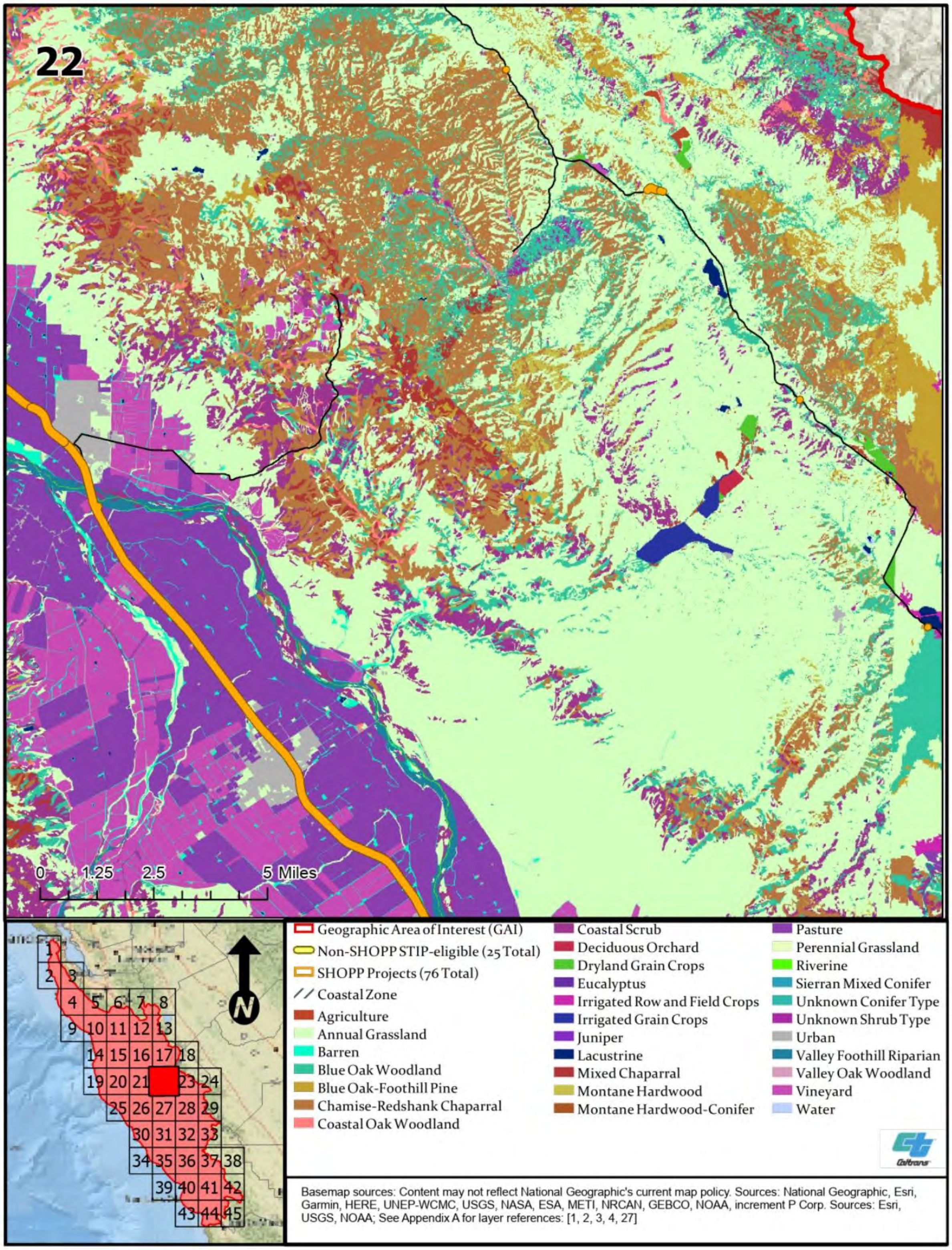
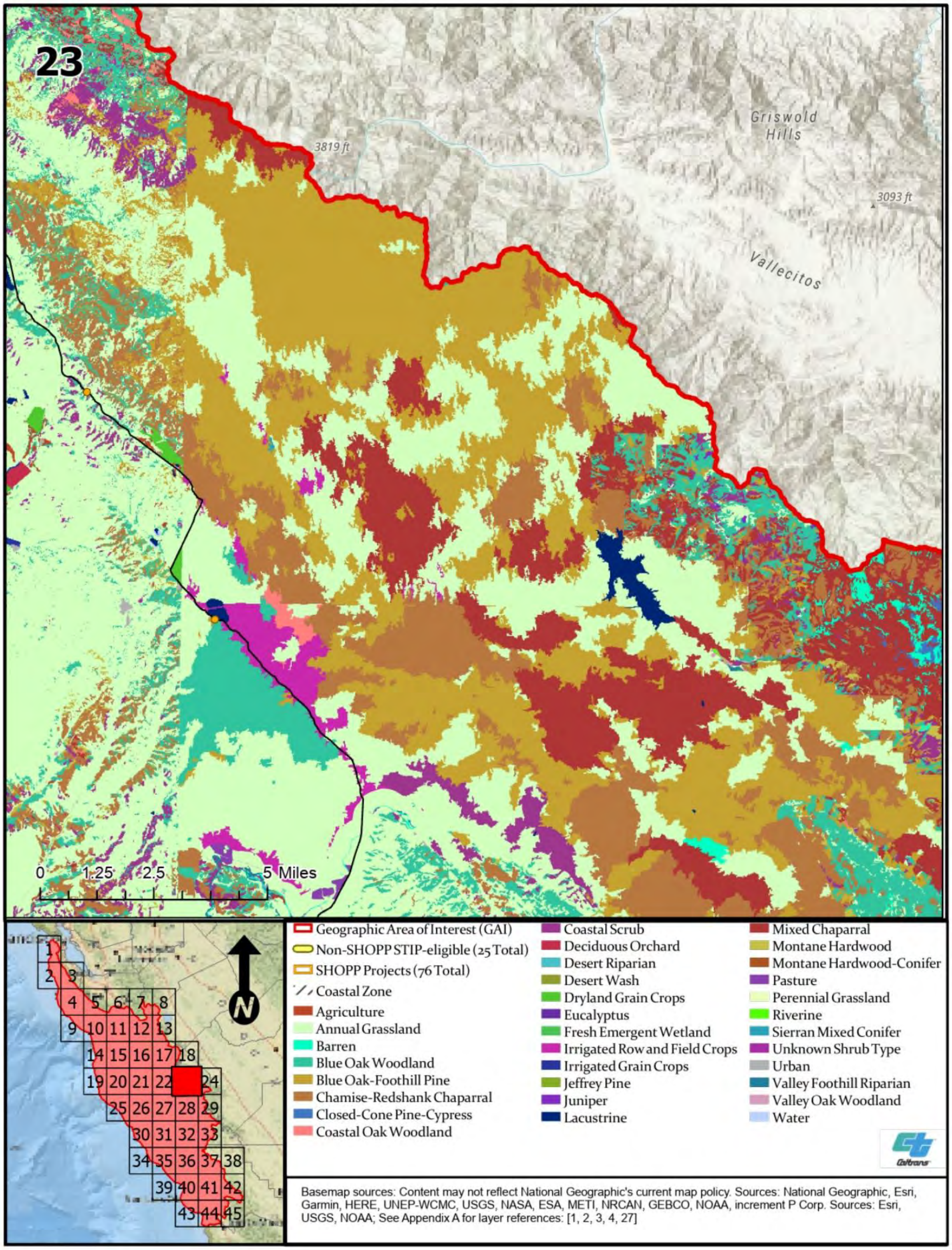
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Mixed Chaparral
Montane Hardwood
Unknown Conifer Type
Unknown Shrub Type
Urban
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

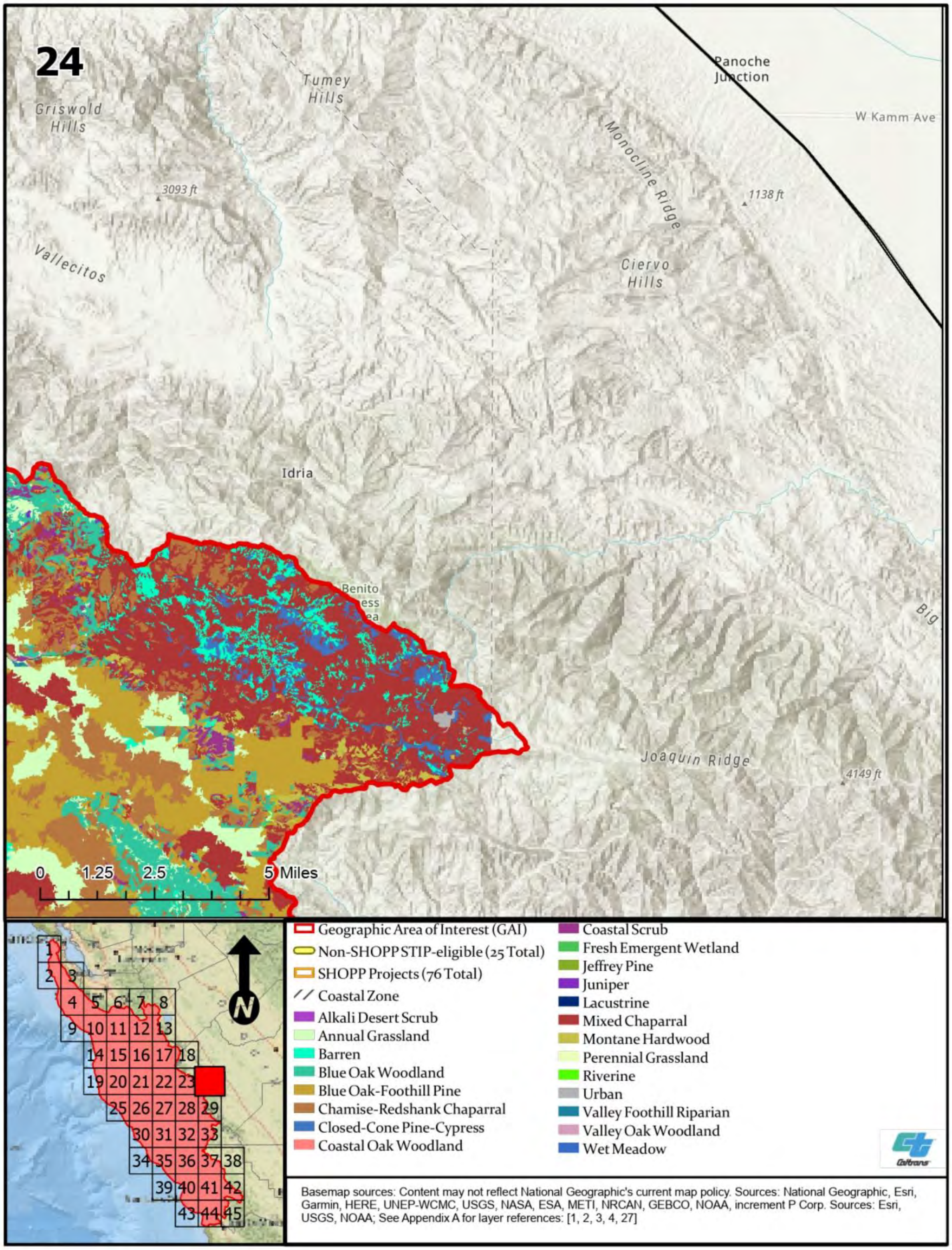

19
0 1.5 3 6 Miles
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Eucalyptus
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Redwood
Riverine
Saline Emergent Wetland
Urban
Valley Foothill Riparian
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

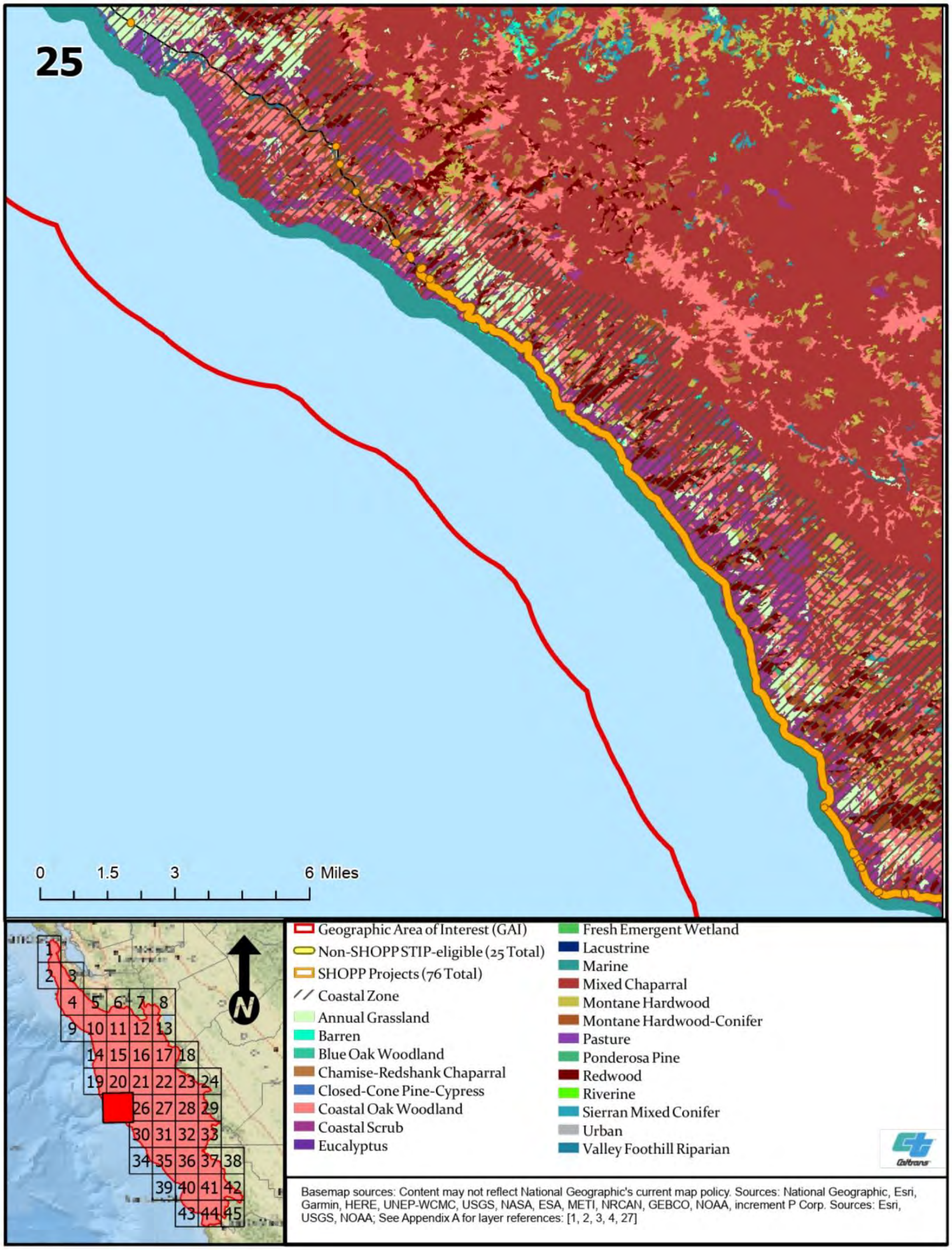

20
0
1.5
3
6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Eucalyptus
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Ponderosa Pine
Redwood
Riverine
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Wet Meadow
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

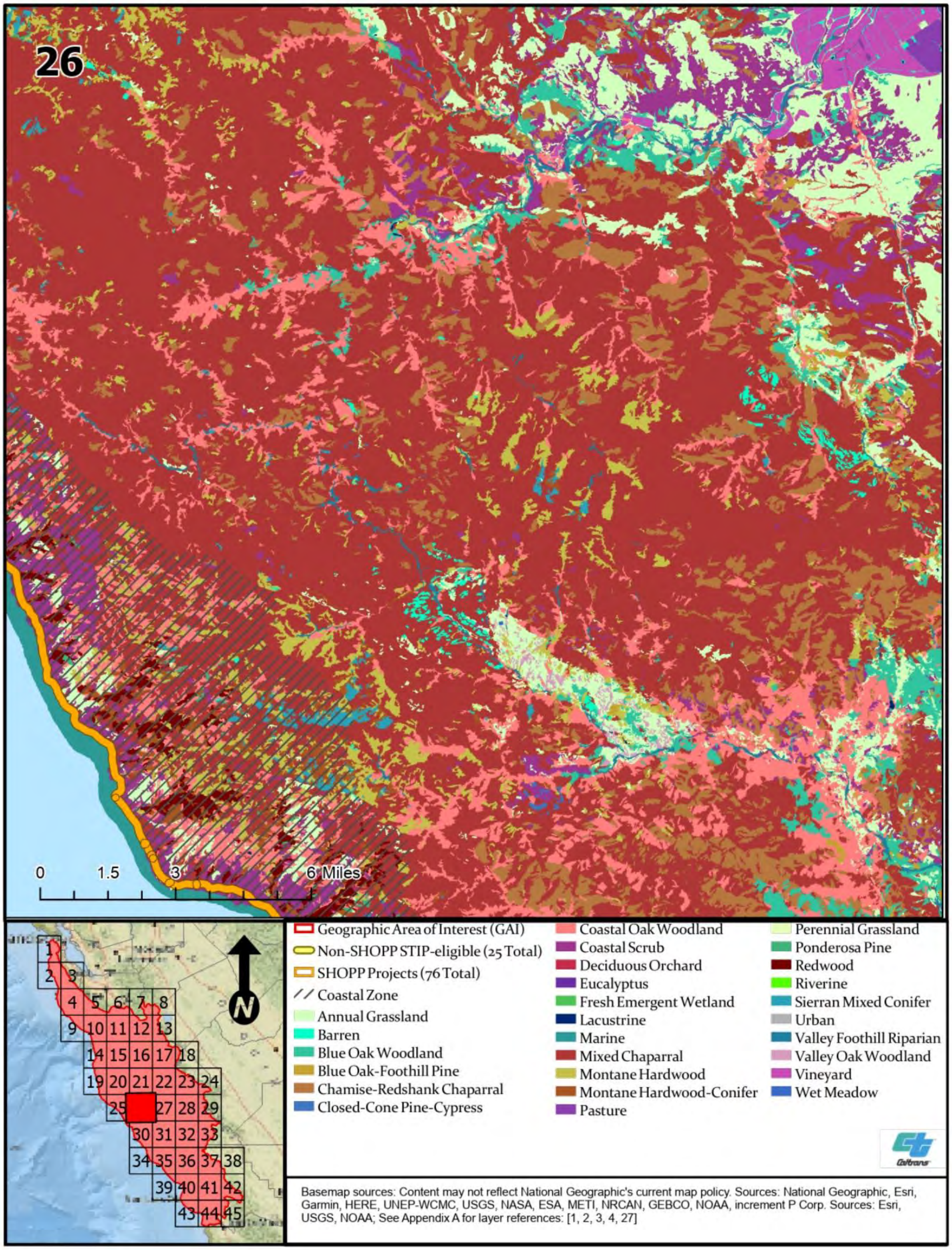

21
0
1.5
3
6 Miles
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Eucalyptus
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Ponderosa Pine
Riverine
Sierran Mixed Conifer
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

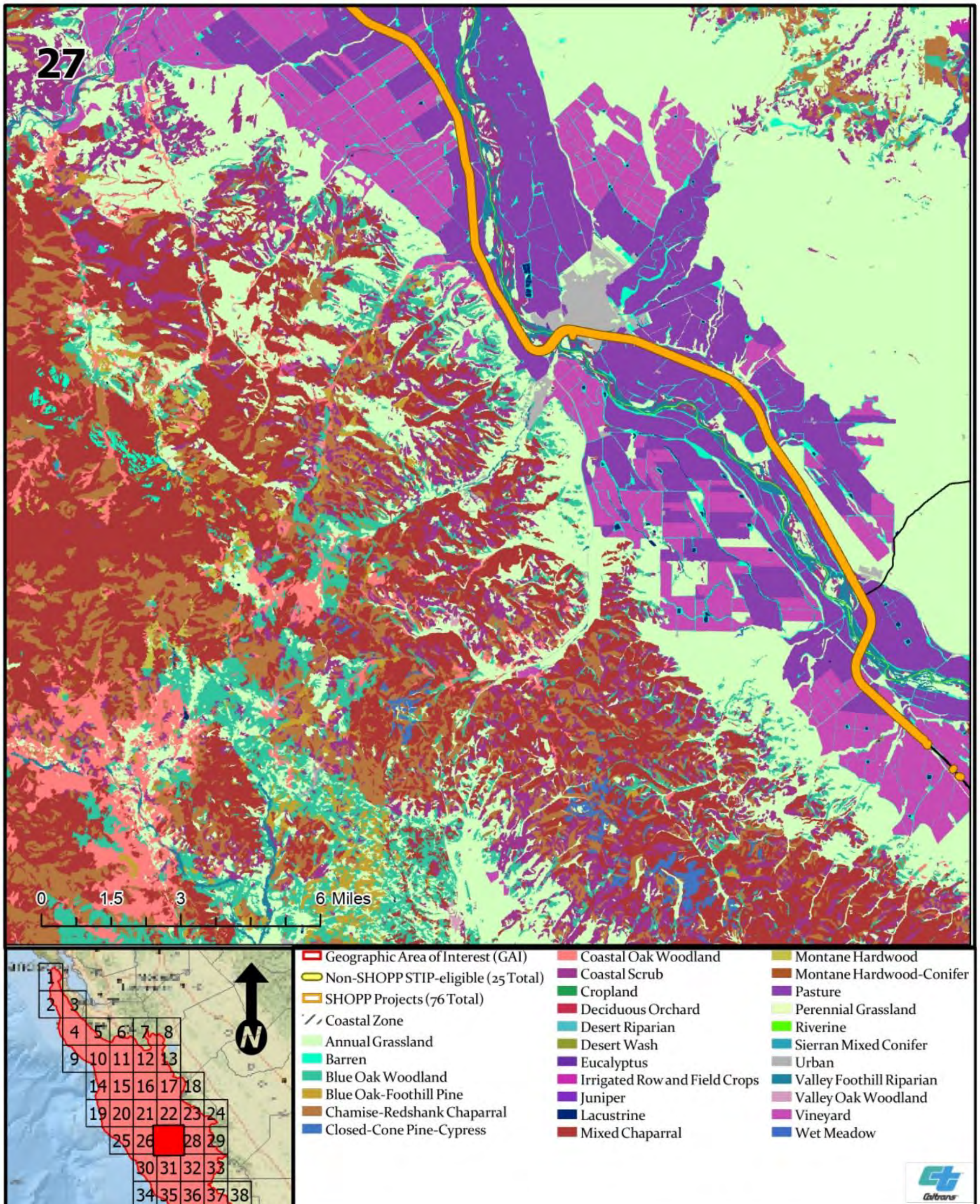

22
0 1.25 2.5 5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Dryland Grain Crops
Eucalyptus
Irrigated Row and Field Crops
Irrigated Grain Crops
Juniper
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Sierran Mixed Conifer
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


23
Griswold Hills
3819 ft
3093 ft
Vallecitos
0 1.25 2.5 5 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Desert Riparian
Desert Wash
Dryland Grain Crops
Eucalyptus
Fresh Emergent Wetland
Irrigated Row and Field Crops
Irrigated Grain Crops
Jeffrey Pine
Juniper
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Sierran Mixed Conifer
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


24
Griswold Hills
Tumey Hills
Panoche Junction
W Kamm Ave
Monocline Ridge
3093 ft
1138 ft
Vallecitos
Ciervo Hills
Idria
Big
Joaquin Ridge
4149 ft
0 1.25 2.5 5 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Alkali Desert Scrub
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Fresh Emergent Wetland
Jeffrey Pine
Juniper
Lacustrine
Mixed Chaparral
Montane Hardwood
Perennial Grassland
Riverine
Urban
Valley Foothill Riparian
Valley Oak Woodland
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


25
0 1.5 3 6 Miles
N
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Eucalyptus
Fresh Emergent Wetland
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Ponderosa Pine
Redwood
Riverine
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


26
0 1.5 3 6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Eucalyptus
Fresh Emergent Wetland
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Ponderosa Pine
Redwood
Riverine
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]



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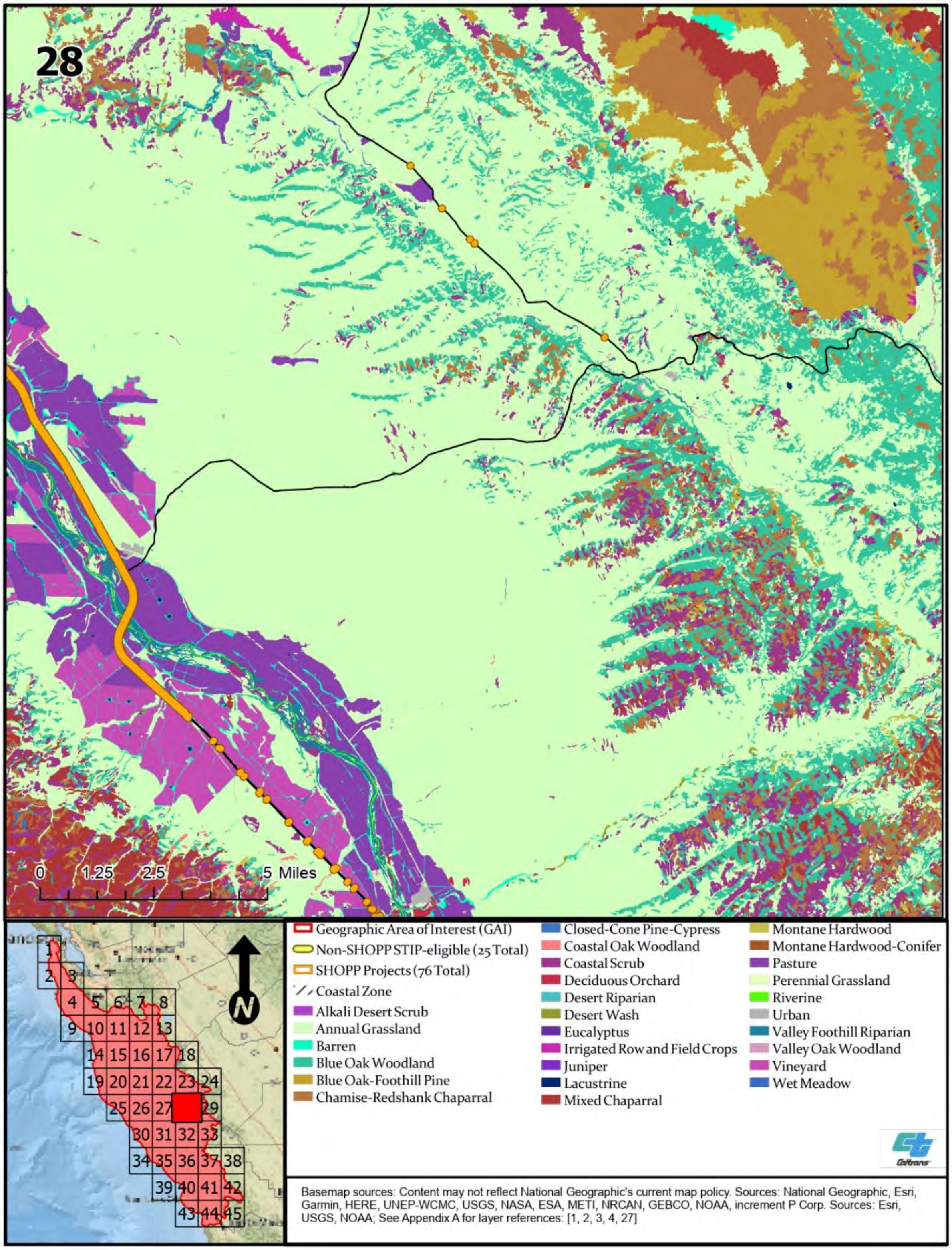
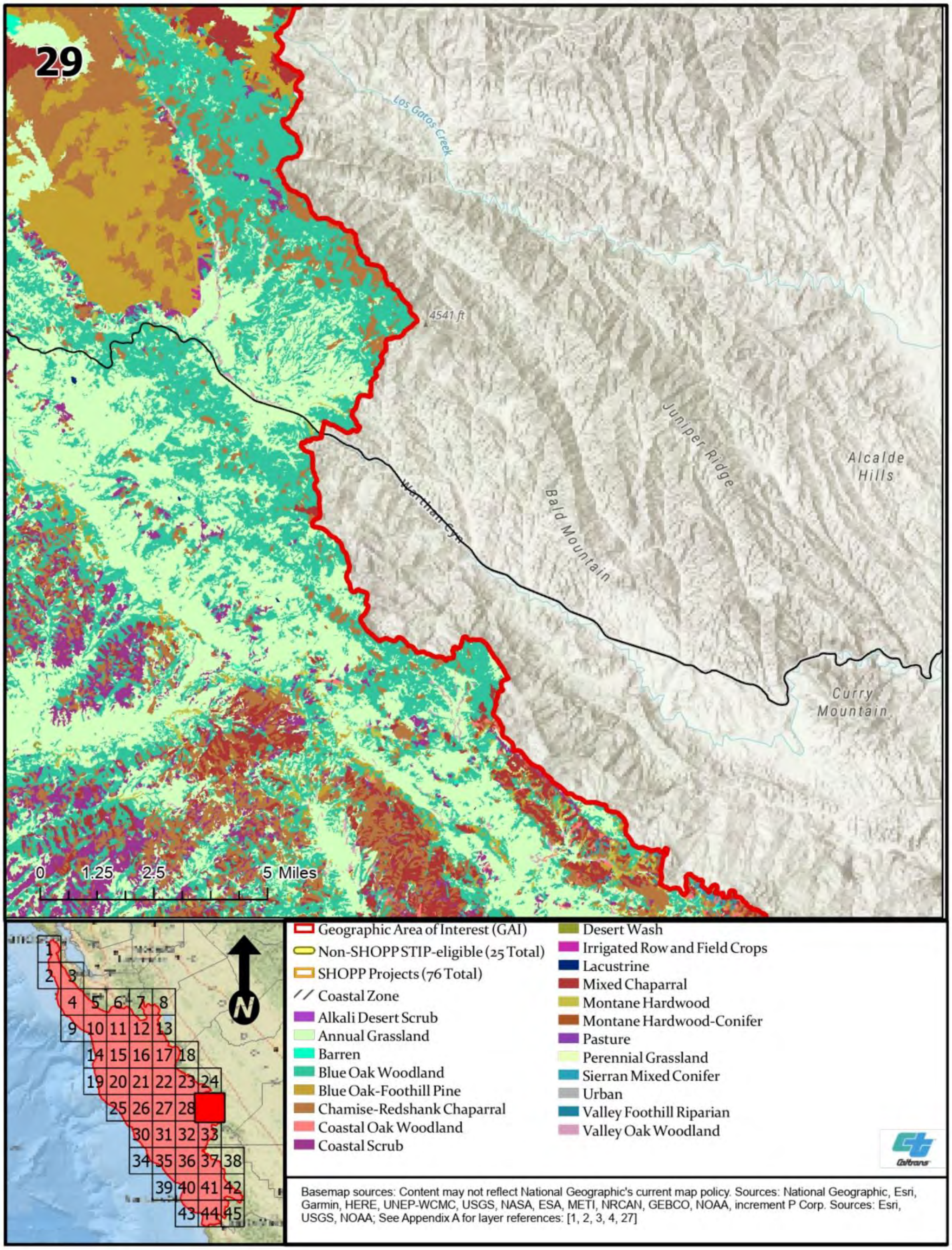
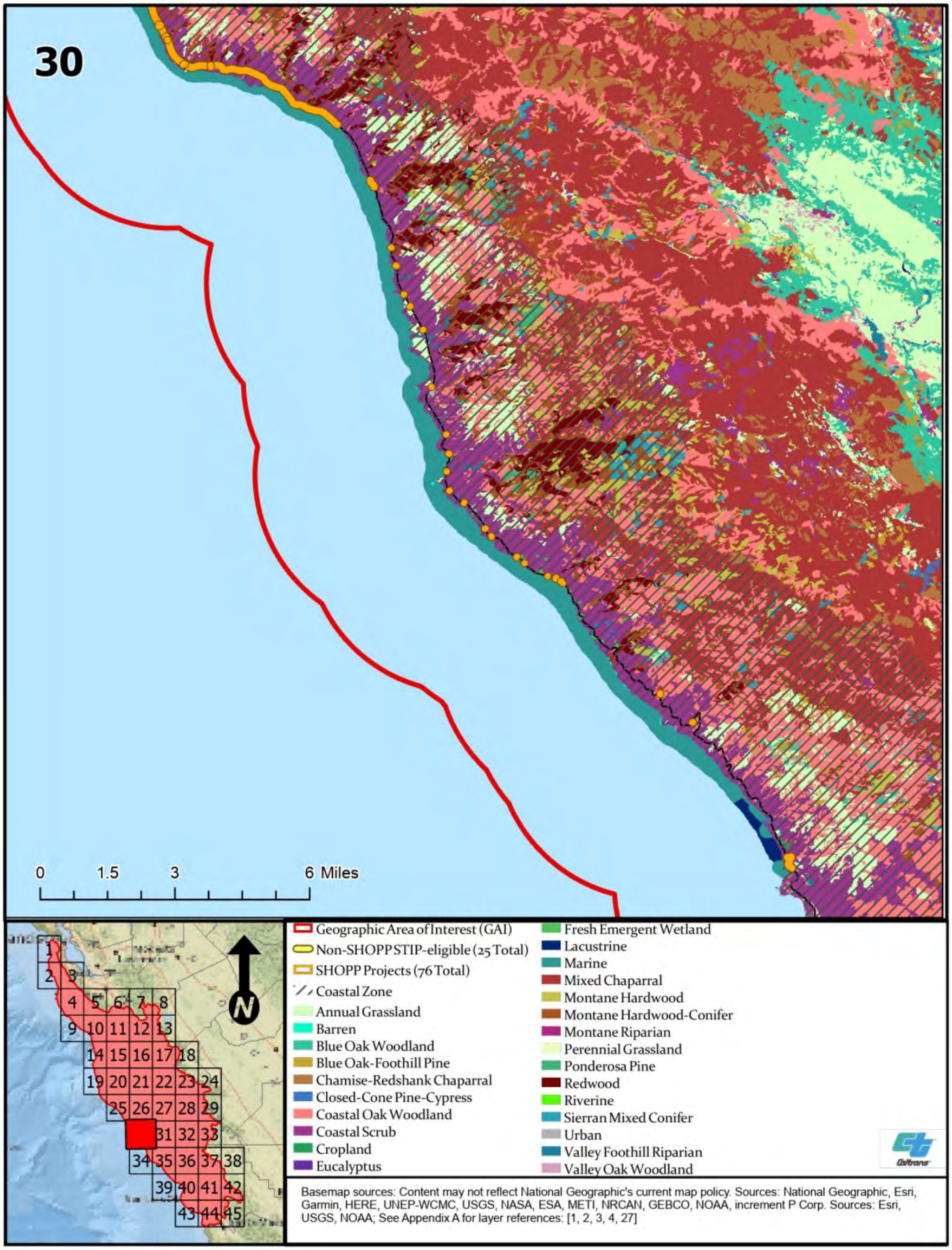
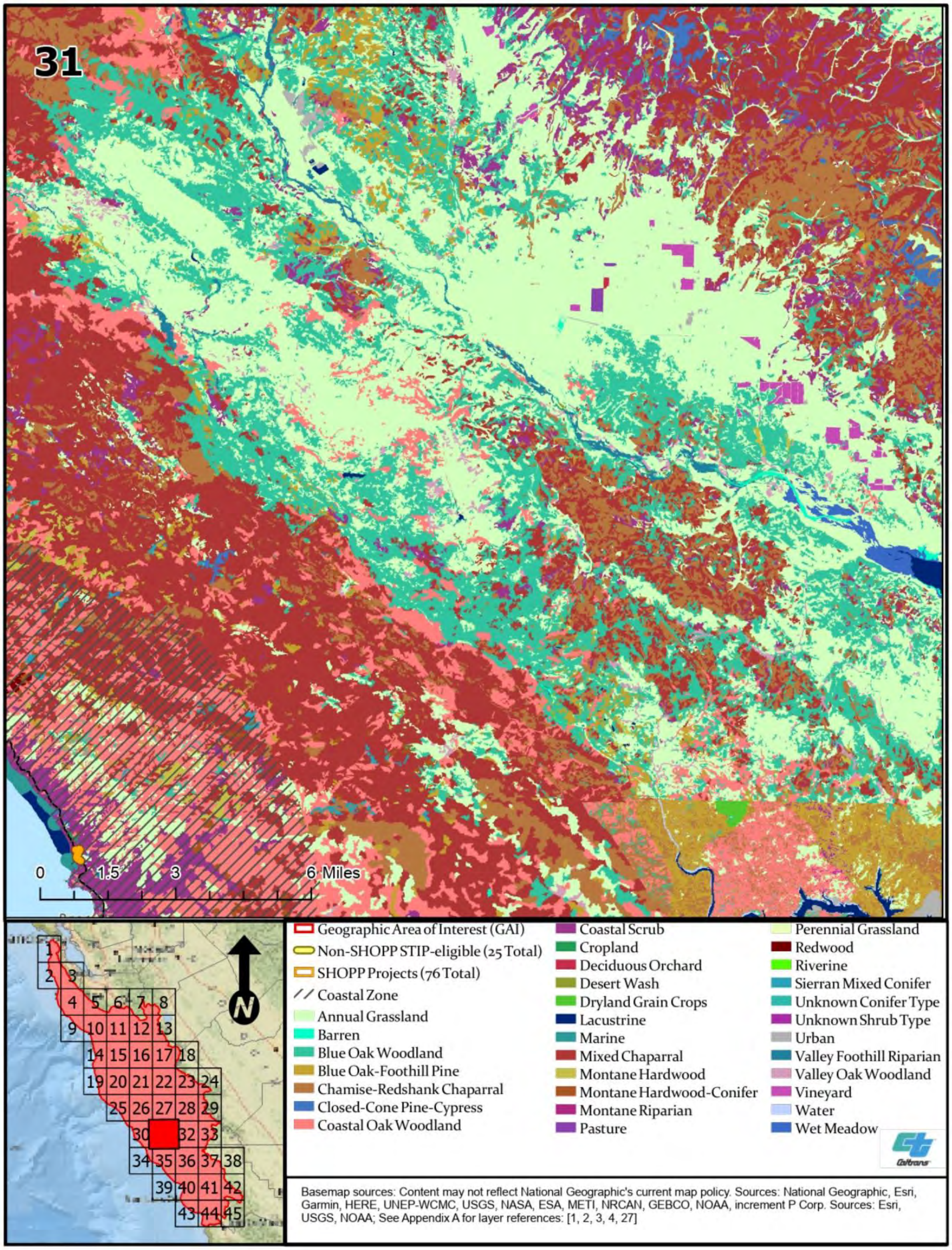

28
0
1.25
2.5
5 Miles
N
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Alkali Desert Scrub
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Desert Riparian
Desert Wash
Eucalyptus
Irrigated Row and Field Crops
Juniper
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


29
Los Gatos Creek
4541 ft
Juniper Ridge
Alcalde Hills
Bald Mountain
Curry Mountain
0 1.25 2.5 5 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Alkali Desert Scrub
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Desert Wash
Irrigated Row and Field Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


30
0
1.5
3
6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Eucalyptus
Fresh Emergent Wetland
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Perennial Grassland
Ponderosa Pine
Redwood
Riverine
Sierran Mixed Conifer
Urban
Valley Foothill Riparian
Valley Oak Woodland
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


31
0
1.5
3
6 Miles
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
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32
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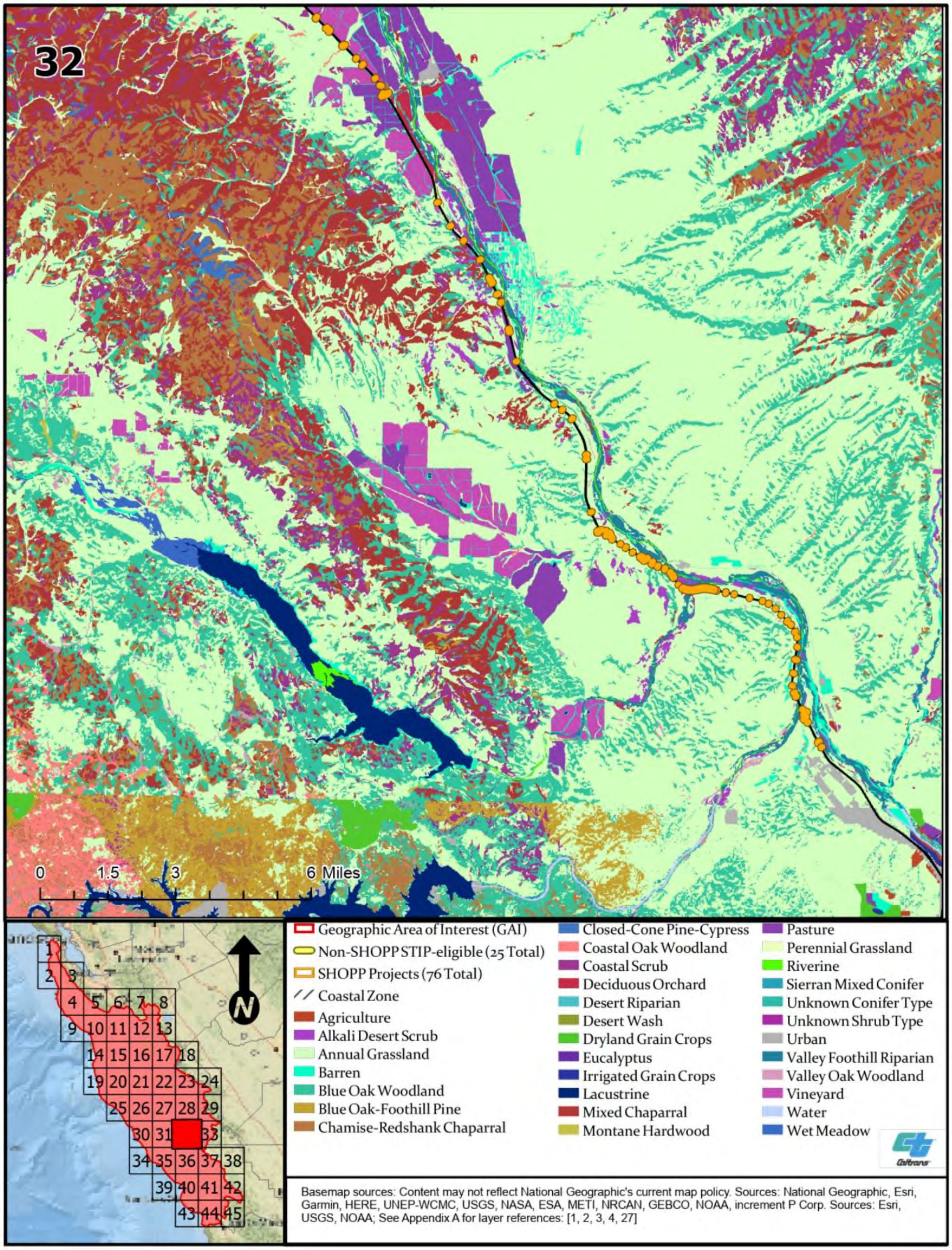
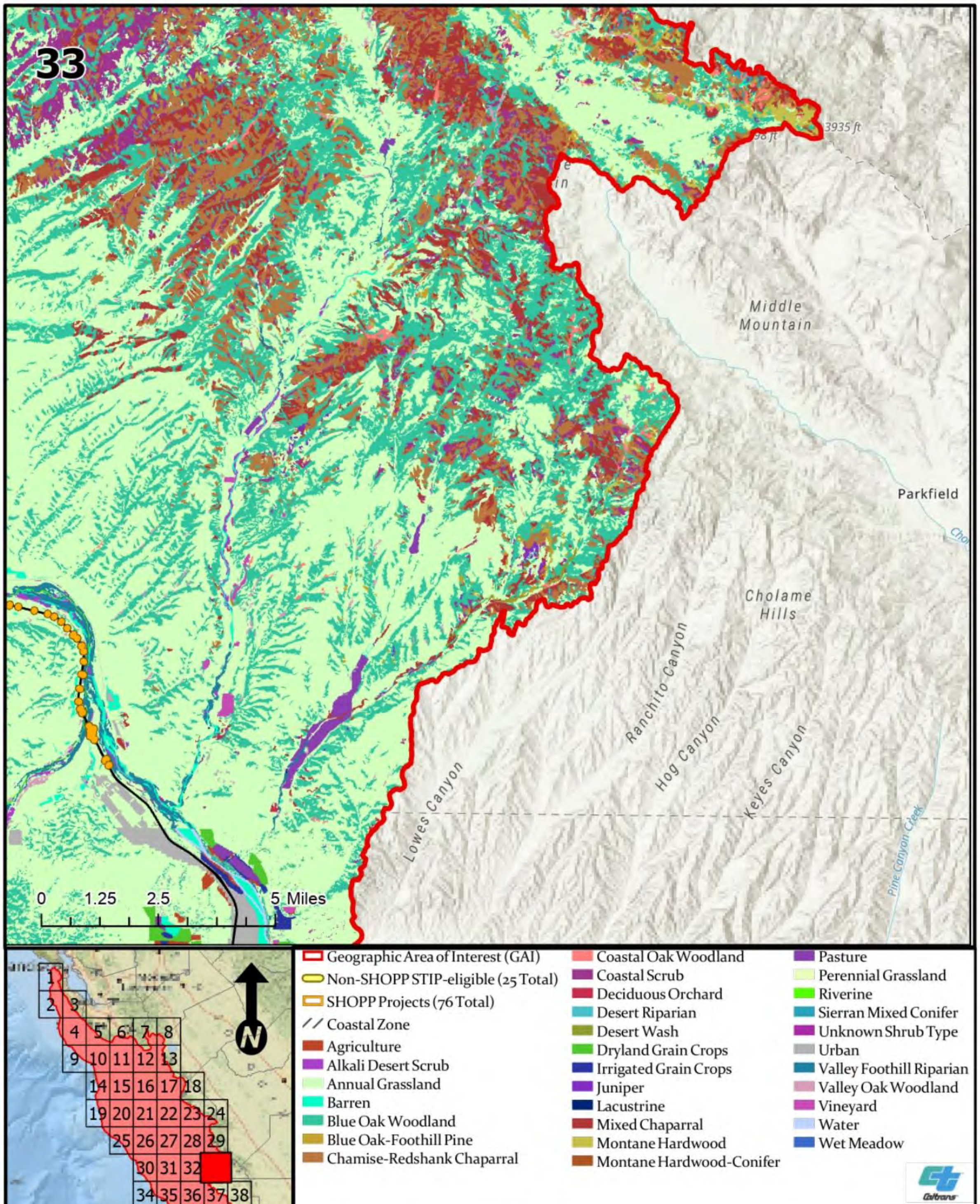
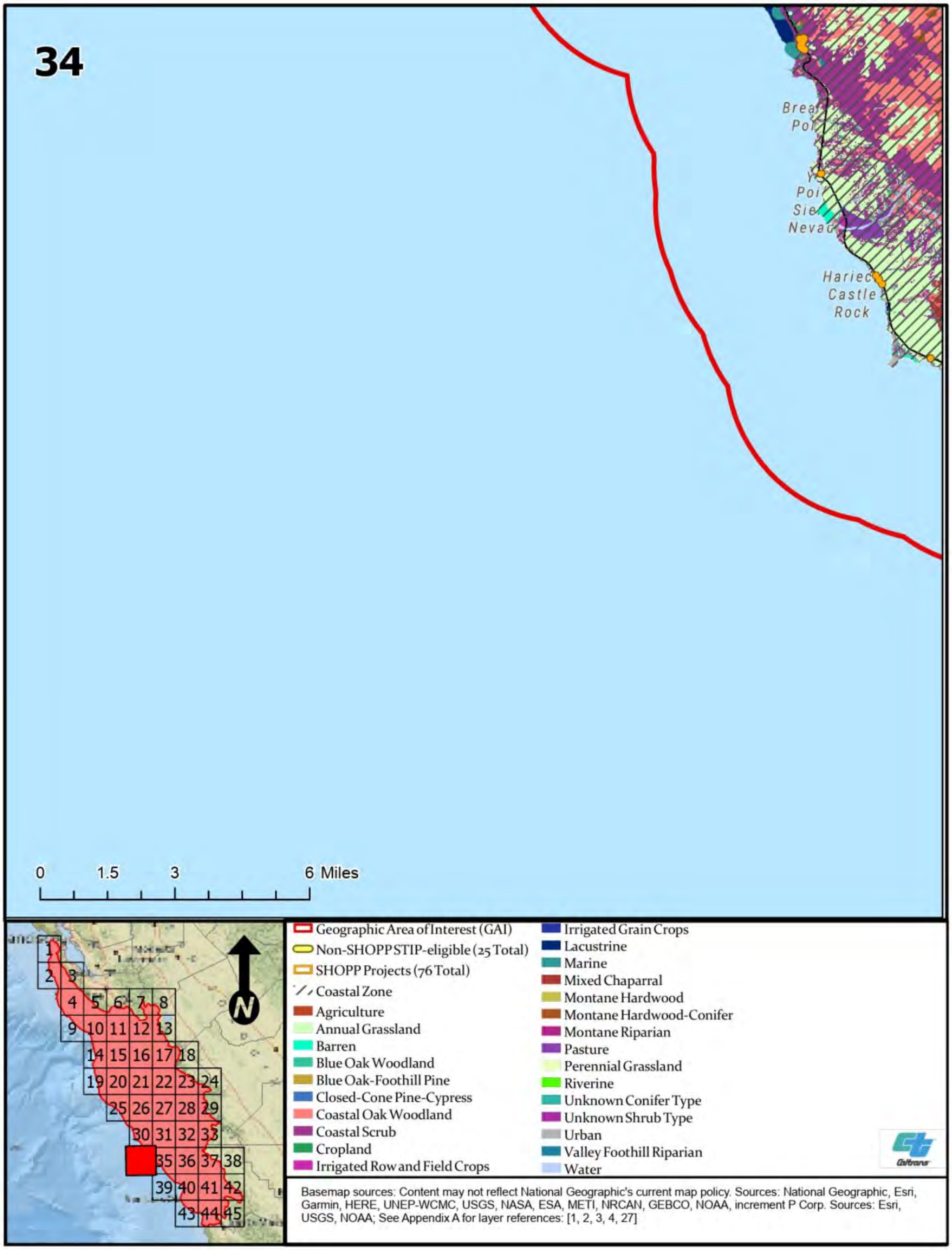
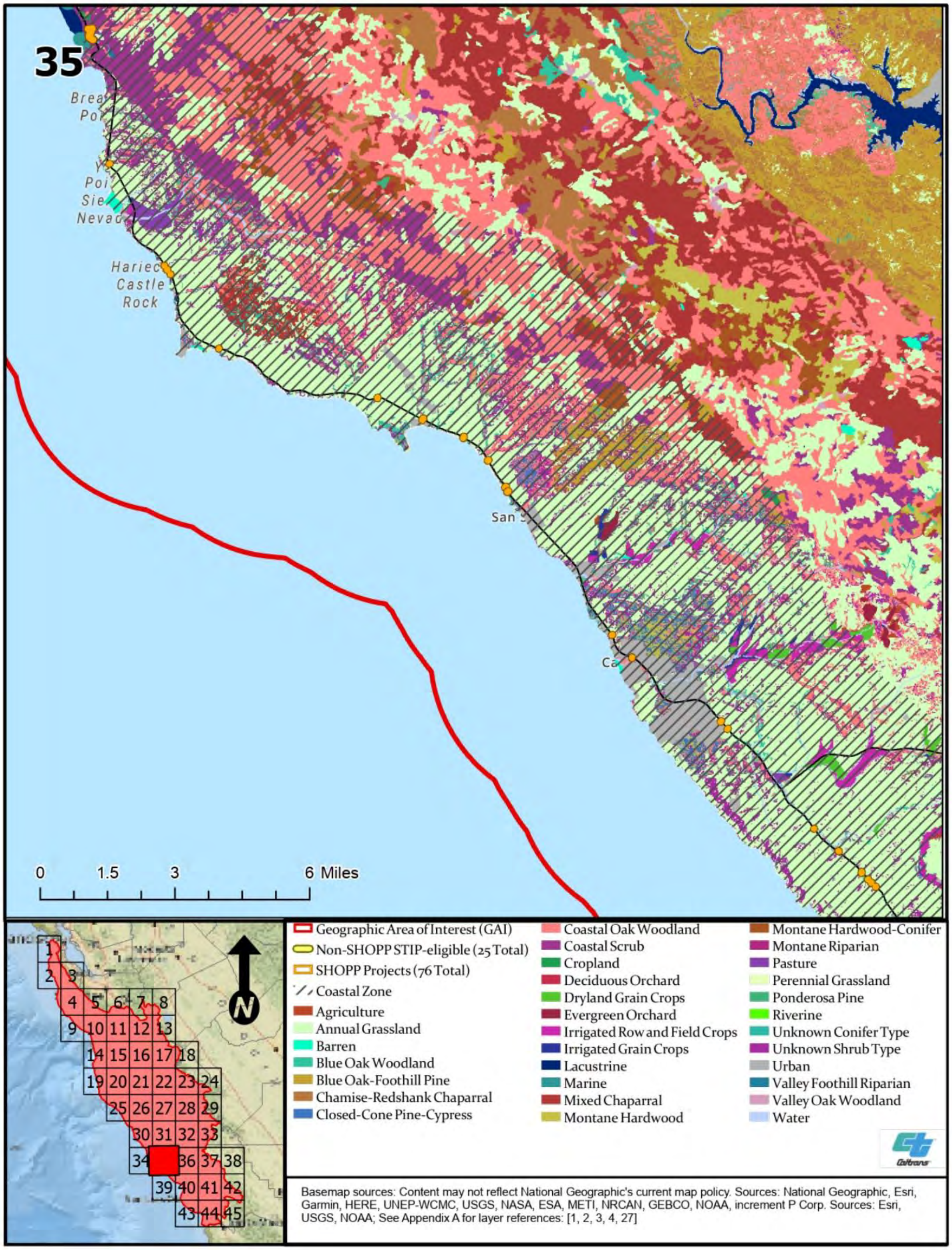
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Desert Wash
Dryland Grain Crops
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Pasture
Perennial Grassland
Redwood
Riverine
Sierran Mixed Conifer
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Wet Meadow
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

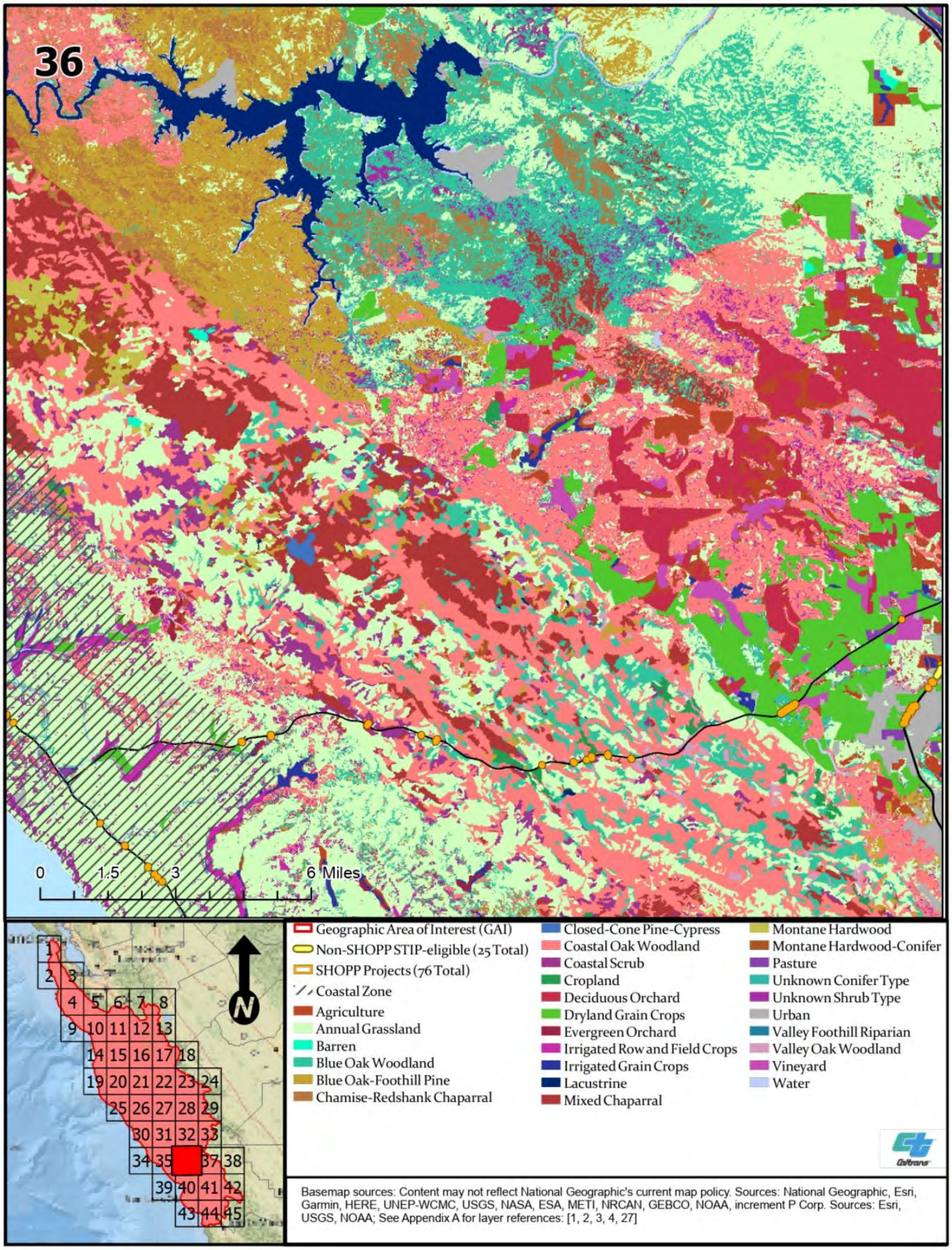

32
0 1.5 3 6 Miles
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41 42 43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Alkali Desert Scrub
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Desert Riparian
Desert Wash
Dryland Grain Crops
Eucalyptus
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Pasture
Perennial Grassland
Riverine
Sierran Mixed Conifer
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Wet Meadow
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

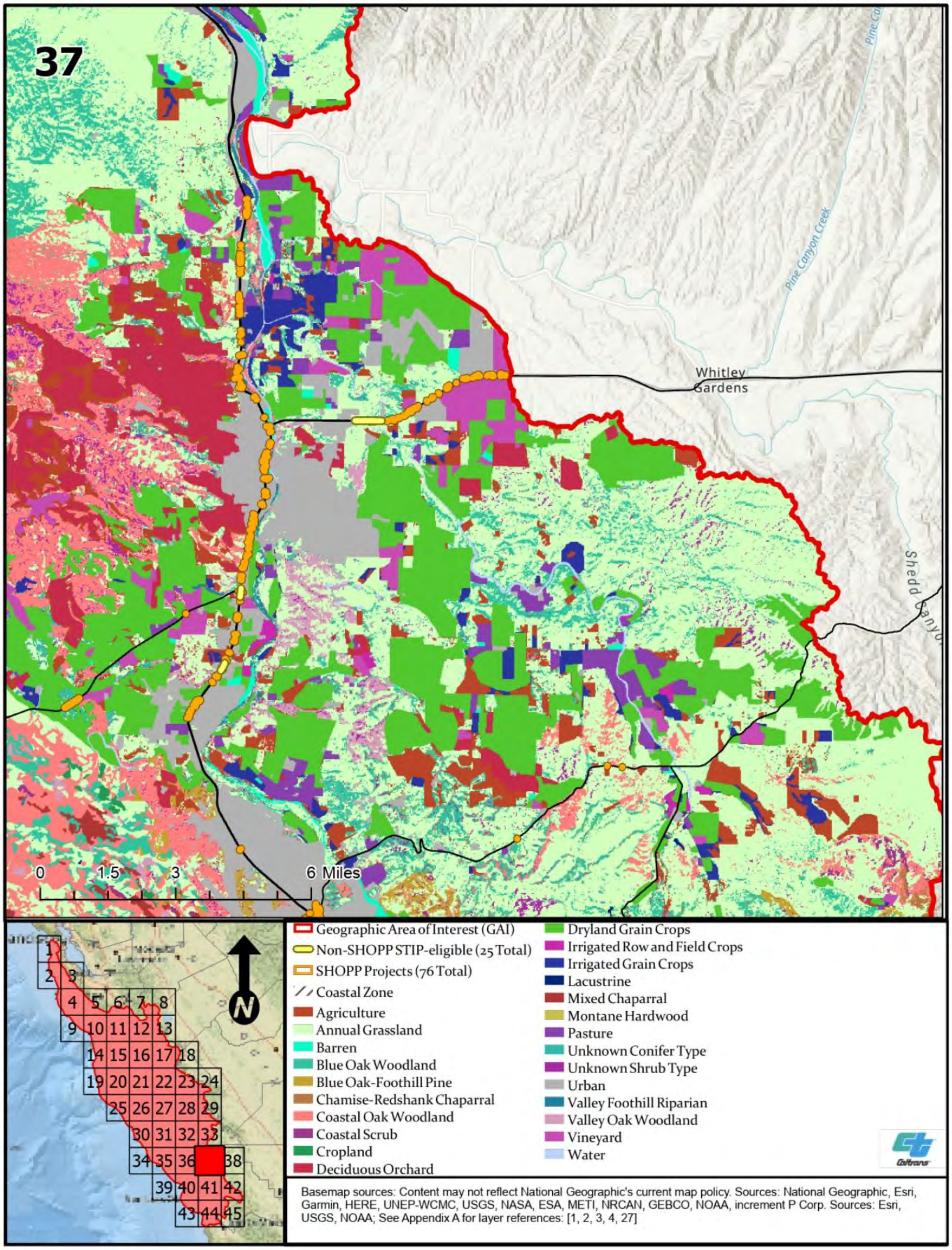


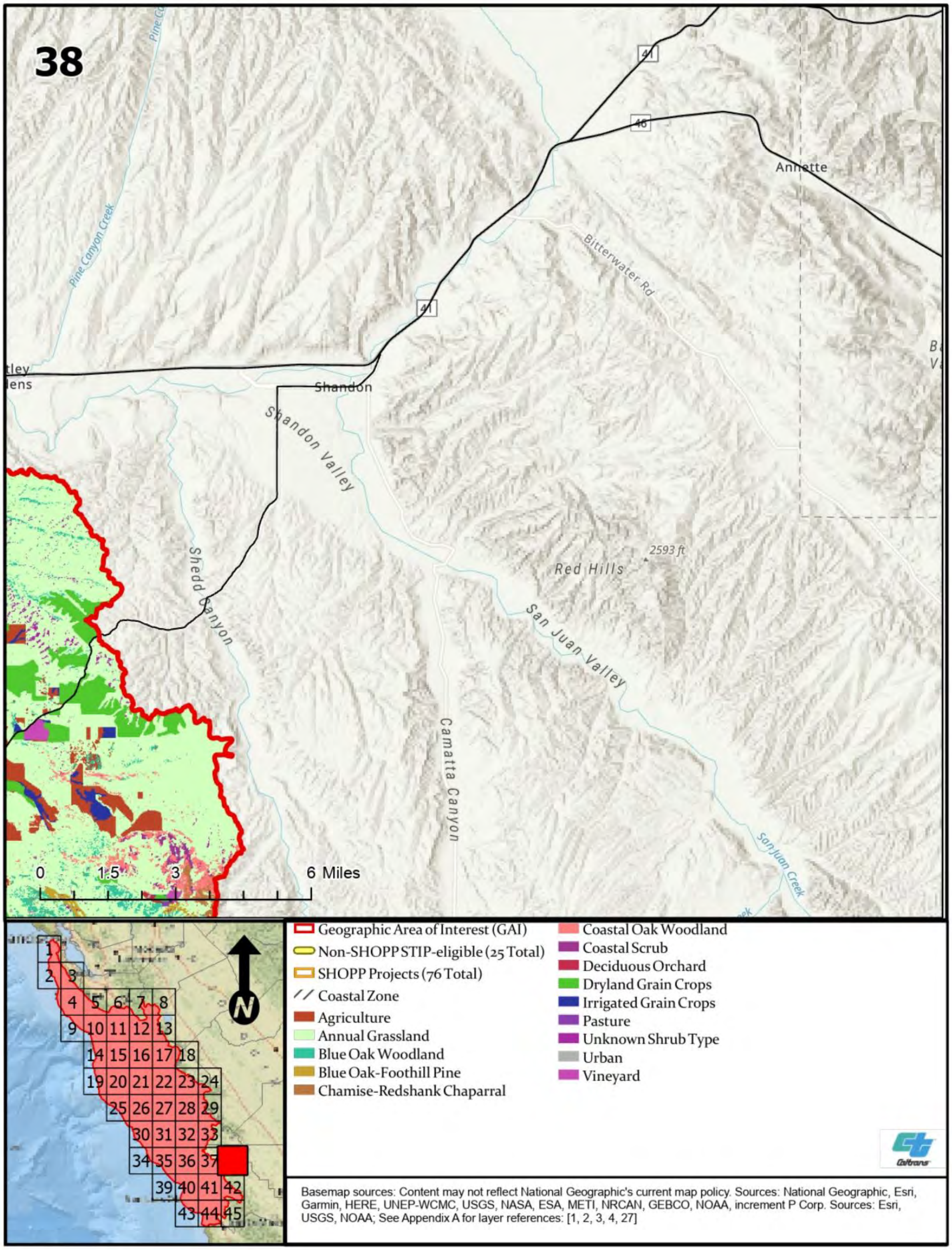
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

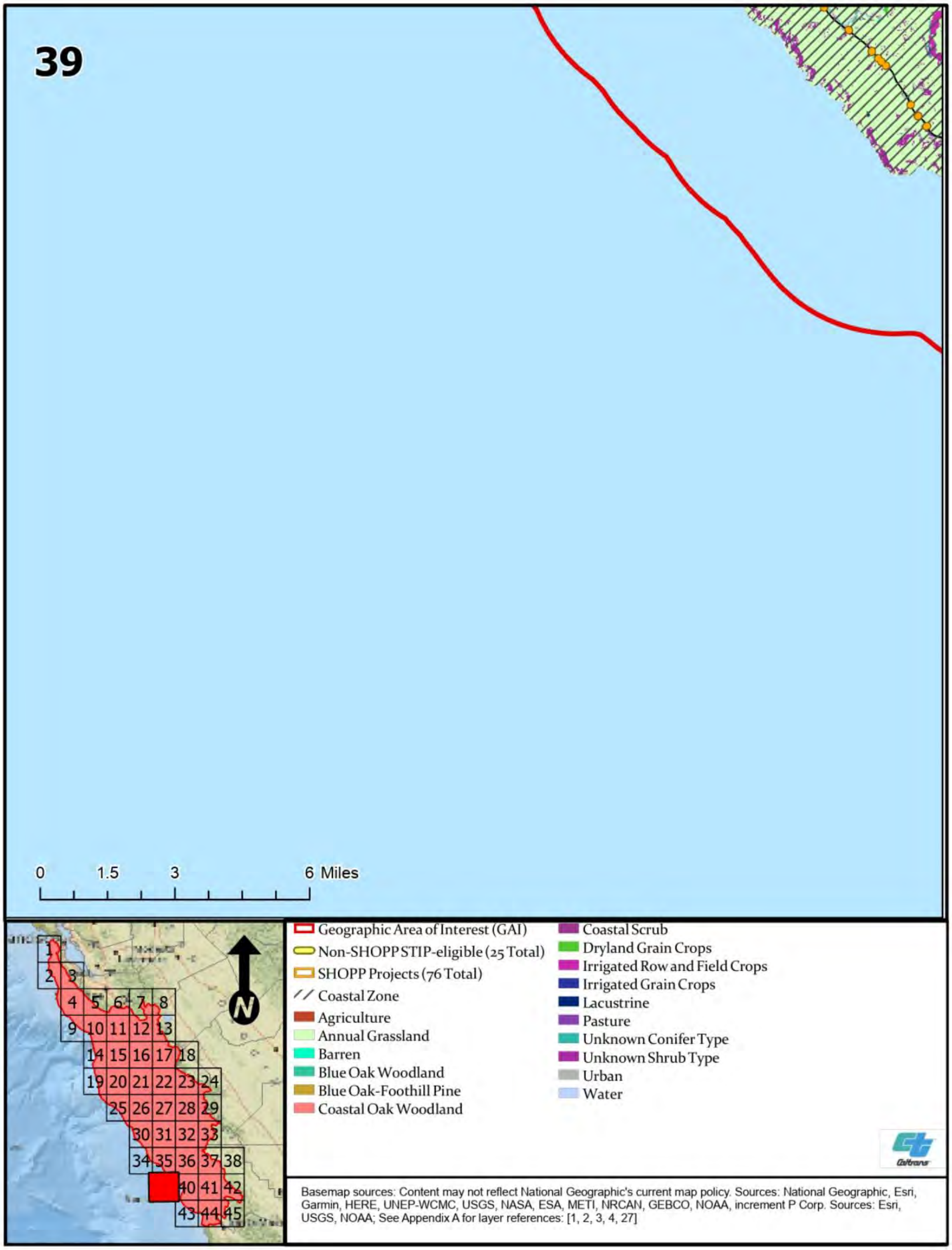

34
Breakers Point
Point Sierra Nevada
Harlech Castle Rock
0 1.5 3 6 Miles
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
35 36 37 38
39 40 41 42
43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Pasture
Perennial Grassland
Riverine
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

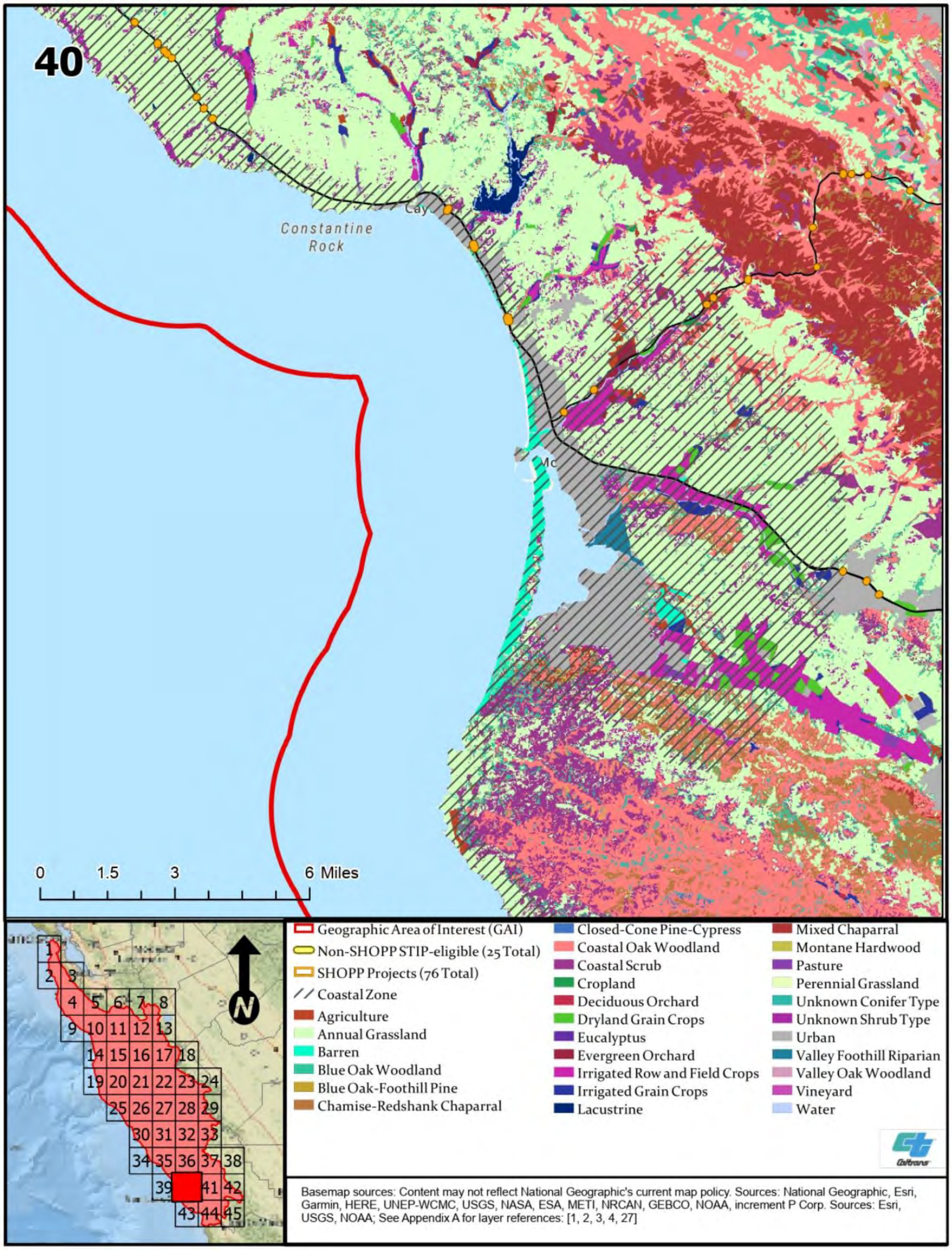

35
Castle
Rock
0 1.5 3 6 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Evergreen Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Marine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Montane Riparian
Pasture
Perennial Grassland
Ponderosa Pine
Riverine
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

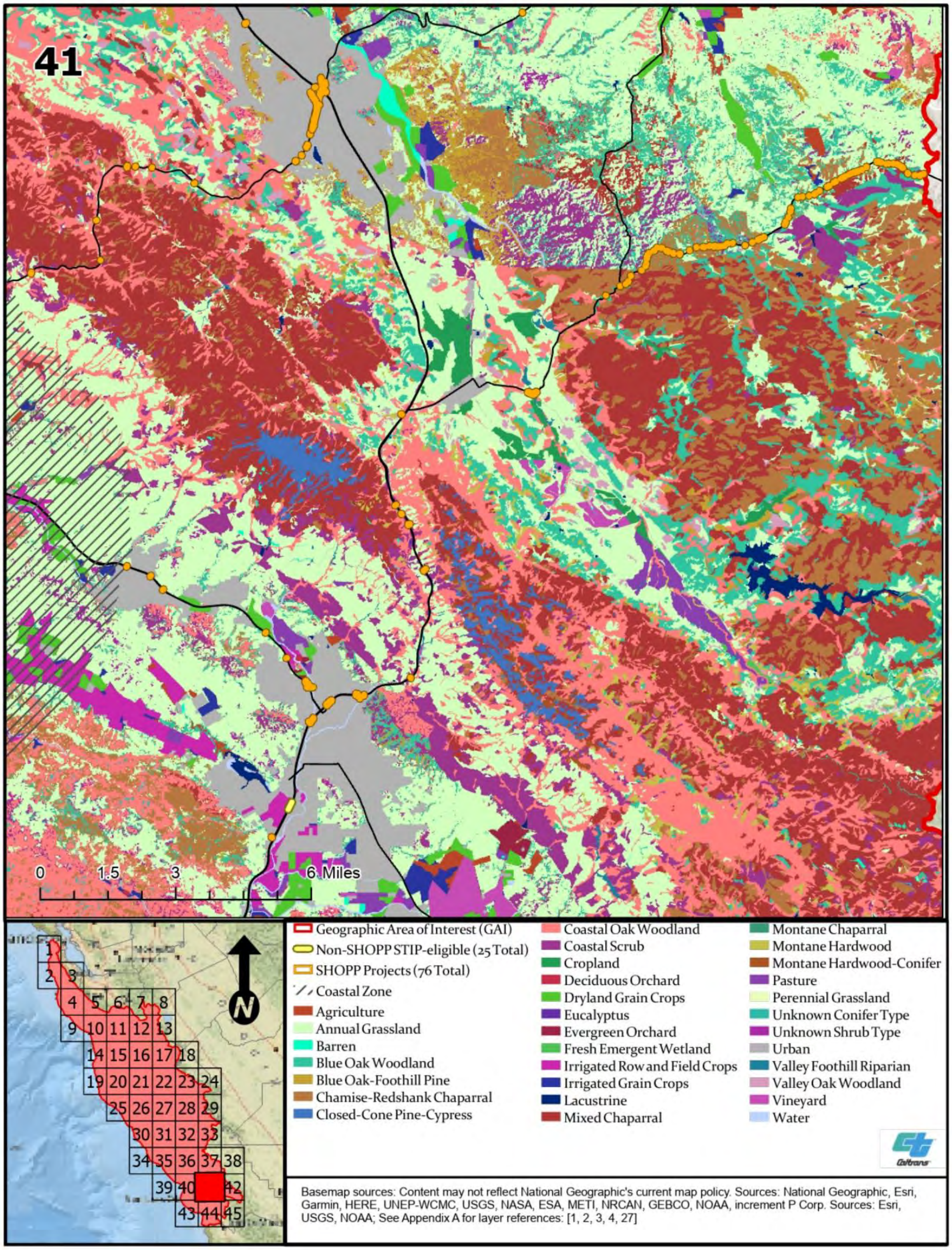

36
0
1.5
3
6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Evergreen Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

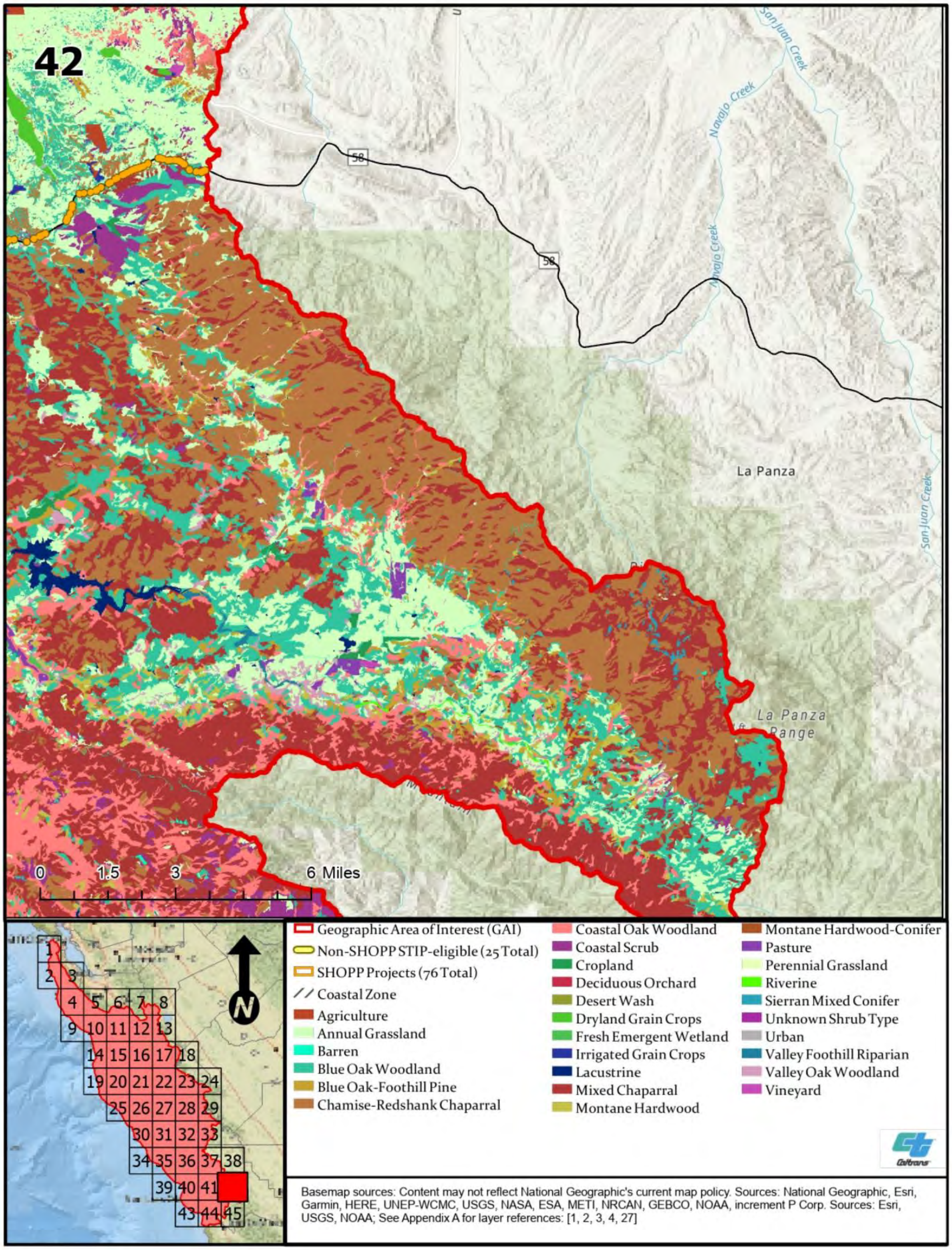

37
Whitley Gardens
Pine Canyon Creek
Shedd Canyon
0 1.5 3 6 Miles
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 38 39 40 41 42 43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Pasture
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

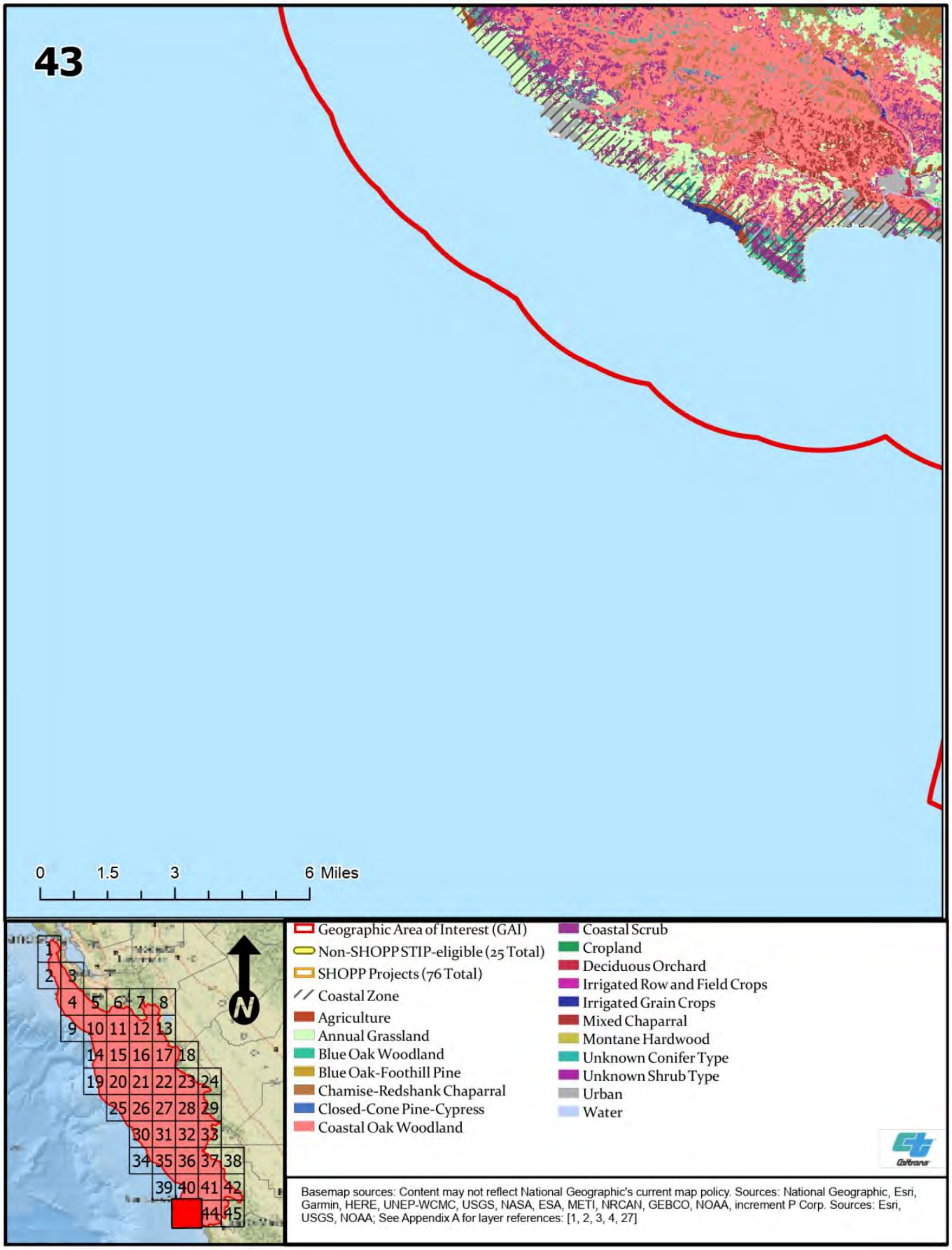

38
Shandon
Annette
Shandon Valley
Shedd Canyon
Bitterwater Rd
Red Hills
2593 ft
San Juan Valley
Camatta Canyon
Pine Canyon Creek
San Juan Creek
41
46
0
1.5
3
6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Deciduous Orchard
Dryland Grain Crops
Irrigated Grain Crops
Pasture
Unknown Shrub Type
Urban
Vineyard
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

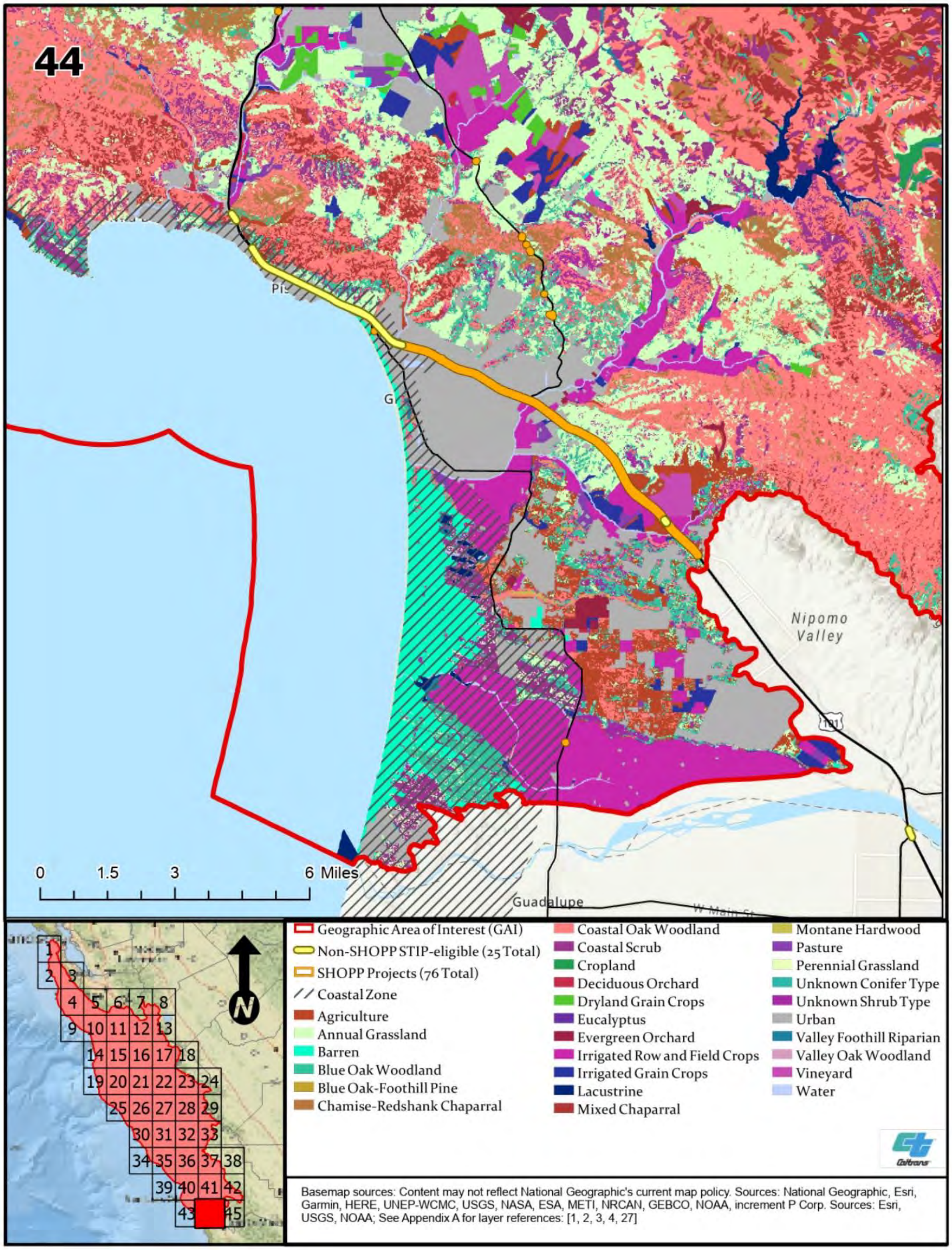

39
0 1.5 3 6 Miles
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 40 41 42 43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Coastal Oak Woodland
Coastal Scrub
Dryland Grain Crops
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Pasture
Unknown Conifer Type
Unknown Shrub Type
Urban
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

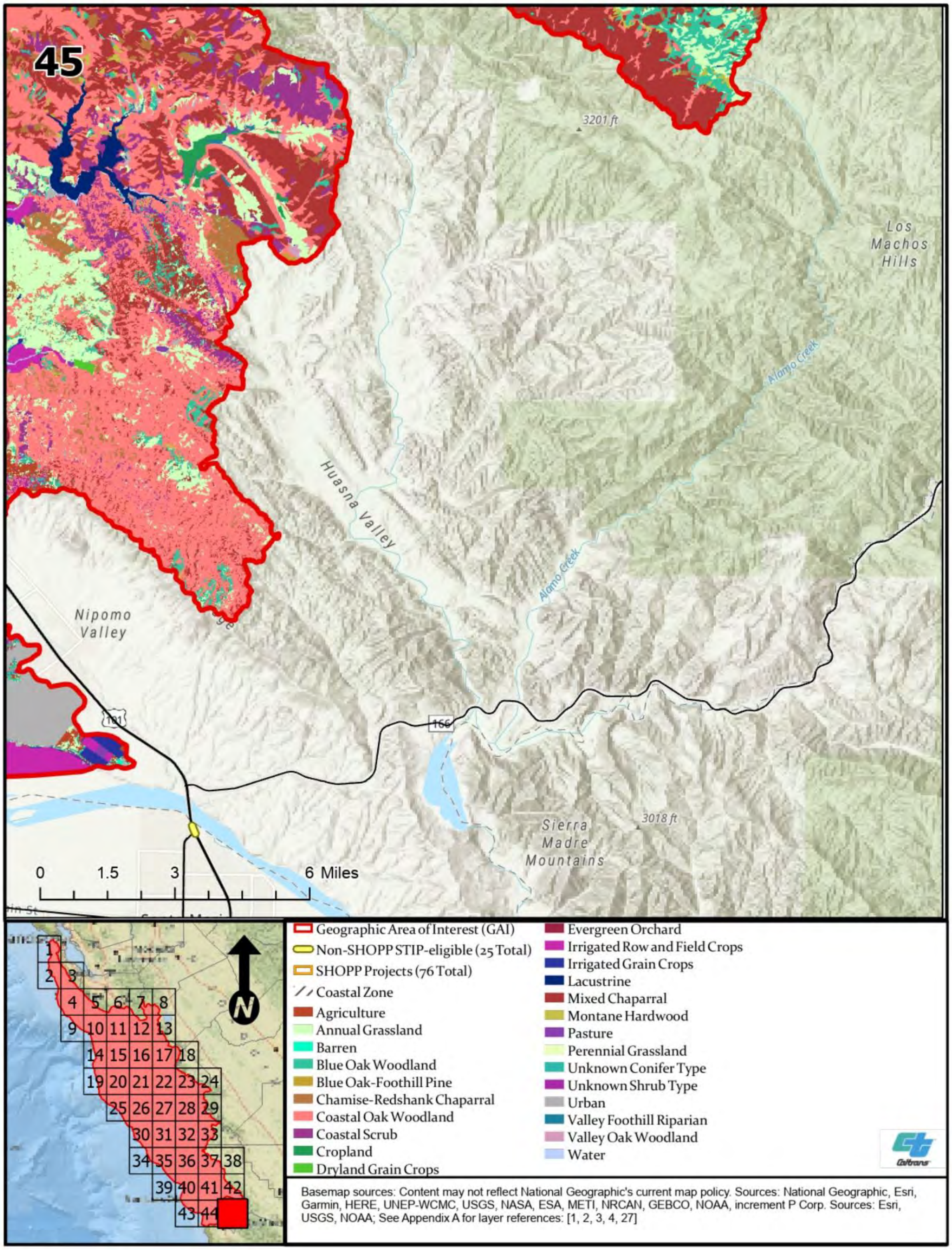

40
Constantine
Rock
0
1.5
3
6 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Eucalyptus
Evergreen Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Pasture
Perennial Grassland
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


41
0 1.5 3 6 Miles
N
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 42
43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Eucalyptus
Evergreen Orchard
Fresh Emergent Wetland
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


42
San Juan Creek
Navajo Creek
58
La Panza
La Panza Range
0
1.5
3
6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Desert Wash
Dryland Grain Crops
Fresh Emergent Wetland
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Montane Hardwood-Conifer
Pasture
Perennial Grassland
Riverine
Sierran Mixed Conifer
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


43
0 1.5 3 6 Miles
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Closed-Cone Pine-Cypress
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Mixed Chaparral
Montane Hardwood
Unknown Conifer Type
Unknown Shrub Type
Urban
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


44
Nipomo Valley
Guadalupe
0 1.5 3 6 Miles
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Deciduous Orchard
Dryland Grain Crops
Eucalyptus
Evergreen Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Pasture
Perennial Grassland
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Vineyard
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]


45
3201 ft
Los Machos Hills
Alamo Creek
Huasna Valley
Nipomo Valley
101
166
Sierra Madre Mountains
3018 ft
0 1.5 3 6 Miles
N
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Coastal Zone
Agriculture
Annual Grassland
Barren
Blue Oak Woodland
Blue Oak-Foothill Pine
Chamise-Redshank Chaparral
Coastal Oak Woodland
Coastal Scrub
Cropland
Dryland Grain Crops
Evergreen Orchard
Irrigated Row and Field Crops
Irrigated Grain Crops
Lacustrine
Mixed Chaparral
Montane Hardwood
Pasture
Perennial Grassland
Unknown Conifer Type
Unknown Shrub Type
Urban
Valley Foothill Riparian
Valley Oak Woodland
Water
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 27]

APPENDIX D: LOCAL COASTAL PROGRAMS

LCPs are planning tools used to guide development in the coastal zone through preparation of land use plans ("LUPs") and implementation of zoning ordinances. Although federal lands are excluded from CCC jurisdiction, the CCC has the authority to review and make a consistency determination of projects on federal land in the coastal zone under the Coastal Act. LCP jurisdictions and associated LCP plans and LUPs in the GAI are provided in Table D-1 by HUC-8. Certified LCPs were excerpted from the CCC's LCP areas maps by county (CCC 2018). Table D-1 also includes the acreage of each LCP in the GAI, segments within LCP areas (for example, the Golden Gate National Recreation Area within the City and County of San Francisco LCP areas), ADCs, and other uncertified areas. LCPs identify designated ESHAs within the LCP area. Caltrans will review applicable LCPs and consider ESHAs during advance mitigation project scoping. ESHAs and/or criteria for identifying ESHAs are provided in the LCPs or LUPs, accessible from website links provided in Table D-1.

Caltrans identified the following number of certified LCPs included in Table D-1 that were excerpted from the CCC's LCP areas maps for each sub-basin in the GAI:

- 8 in the San Francisco Coastal South Sub-basin
- 14 in the Monterey Bay Sub-basin
- 11 in the Central Coastal Sub-basin
- 3 in the Pajaro Sub-basin
- 2 in the Salinas Sub-basin

The City of Monterey Laguna Grande/Roberts Lake area LCP is the only LCP listed in Table D-1 that has not been certified by the CCC.

A key map is provided after Table D-1 that references mapbook pages. These zoomed in mapbook pages include LCP areas, segments, uncertified areas, and ADCs within the coastal zone in the GAI.

LCPs address aquatic resources in the coastal zone. Locations of these resources, excerpted from the SAMNA Reporting Tool's water and wetland layers, are shown by HUC-8 sub-basin in Appendix H (Caltrans 2017a, 2017b).

References

Caltrans. 2017a. "Waters_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018" (data file). Accessed February 6, 2019. http://www.dot.ca.gov/env/advancemitigation/.

———. 2017b. "Wetlands_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018" (data file). Accessed February 6, 2019. http://www.dot.ca.gov/env/advancemitigation/.

CCC (California Coastal Commission). 2020. "Maps: Local Coast Program Areas." Accessed December 29, 2020. https://www.coastal.ca.gov/maps/lcp/.

Table D-1. Local Coastal Programs in the GAI, by HUC-8

Mapbook Grid Number	HUC-8 Name	LCP Jurisdiction/Plan Area or Name	Description	Website	Total Acres of LCP[a]
1	San Francisco Coastal South	City and County of San Francisco/*Western Shoreline Area Plan* (1986, amended 2018)	LCP is incorporated into the City of San Francisco General Plan Western Shoreline Element.	https://generalplan.sfplanning.org/Western_Shoreline.htm	1,711
1	San Francisco Coastal South	City and County of San Francisco/Olympic Club	Included in the City and County of San Francisco LCP (*Western Shoreline Area Plan*). Requires retention of the open space quality of the Olympic Country Club area, including the protection of the westerly bluffs.	https://generalplan.sfplanning.org/Western_Shoreline.htm	N/A
1	San Francisco Coastal South	City and County of San Francisco/Golden Gate National Recreation Area	Included in the City and County of San Francisco LCP (*Western Shoreline Area Plan*).	https://generalplan.sfplanning.org/Western_Shoreline.htm	N/A
1	San Francisco Coastal South	City and County of San Francisco/Fort Miley Military Reservation	Included in the Golden Gate National Recreation Area part of the City and County of San Francisco LCP (*Western Shoreline Area Plan*).	https://generalplan.sfplanning.org/Western_Shoreline.htm	N/A
1	San Francisco Coastal South	City of Daly City/*Daly City Coastal Element Local Coastal Program* (1984)	LCP from the City of Daly City General Plan.	https://www.dalycity.org/363/General-Plan http://www.dalycity.org/DocumentCenter/View/898/Coastal-Element-PDF	N/A
1	San Francisco Coastal South	City of Pacifica/Shell Dance Nursery Area of Deferred Certification (ADC)[b]	The Shell Dance Nursery ADC is located within the City of Pacifica LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	N/A
1	San Francisco Coastal South	City of Pacifica/Quarry Area ADC	The Quarry Area ADC is located within the City of Pacifica LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	N/A
1, 2	San Francisco Coastal South	City of Pacifica/*City of Pacifica Local Coastal Land Use Plan* (1980)	Includes a goal to restore and/or enhance all riparian vegetation in the City of Pacifica's portion of the coastal zone. Municipal code for implementing the LCP for the City of Pacifica. Policies created by the City of Pacifica, the California Coastal Conservancy, and CCC (2018) related to including sea level rise in permitting decisions.	https://www.cityofpacifica.org/civicax/filebank/blobdload.aspx?BlobID=7043 https://library.municode.com/ca/pacifica/codes/code_of_ordinances?nodeId=TIT9PLZO_CH4ZO_ART43COZOCODI https://www.cityofpacifica.org/civicax/filebank/blobdload.aspx?t=65377.05&BlobID=15842	N/A
1, 2, 3, 4	San Francisco Coastal South	San Mateo County/*County of San Mateo Local Coastal Program* (1980)	Requires buffer zones of 50 feet from perennial riparian corridors, 30 feet from intermittent riparian corridors, and 100 feet from wetlands, lakes, and ponds. Requires habitat enhancement for Pillar Point Marsh and Pescadero Marsh. LCP Policies (2013).	https://planning.smcgov.org/documents/local-coastal-program SMC_Midcoast_LCP_2013.pdf (smcgov.org)	28
2	San Francisco Coastal South	San Mateo County/Pillar Point Air Force Station – United States Air Force	Included in the area covered by the *County of San Mateo LCP* (1980).	https://planning.smcgov.org/documents/local-coastal-program	N/A
2, 3	San Francisco Coastal South	City of Half Moon Bay/*City of Half Moon Bay Local Coastal Program Land Use Plan* (1993)	LCP for the City of Half Moon Bay. This document bans development in wetlands or riparian areas.	https://www.half-moon-bay.ca.us/154/Local-Coastal-Program-Land-Use-Plan	N/A
4, 5, 6, 7, 8	San Francisco Coastal South, Monterey Bay, Pajaro	Santa Cruz County/*1994 General Plan and Local Coastal Program for the County of Santa Cruz, California*	LCP and General Plan for Santa Cruz County. Prohibits development within the 100-foot riparian corridor of all wetlands.	http://www.sccoplanning.com/PlanningHome/SustainabilityPlanning/GeneralPlan.aspx	86,186
7	Monterey Bay	Santa Cruz County/Santa Cruz Harbor	Included in the area covered by the Santa Cruz County LCP.	http://www.sccoplanning.com/PlanningHome/SustainabilityPlanning/GeneralPlan.aspx	N/A

Mapbook Grid Number	HUC-8 Name	LCP Jurisdiction/Plan Area or Name	Description	Website	Total Acres of LCP[a]
7	San Francisco Coastal South, Monterey Bay	City of Santa Cruz/*City of Santa Cruz Local Coastal Program and Coastal Land Use Policies and Maps* (1992, amended 2007)	Includes goals for enhancement of the San Lorenzo River and Neary Lagoon. Requires a buffer of 100 feet from the center of a riparian feature and 100 feet from the edge of a wetland plus any riparian vegetation that exceeds the buffer. County of Santa Cruz Required LCP Program Amendments	https://www.cityofsantacruz.com/home/showdocument?id=51167 http://www.co.santa-cruz.ca.us/Portals/0/cemex/SC%20Coastal%20Restoral%20and%20Reuse%20Plan/Part%20VIII%20-%20Required%20Local%20Coastal%20Amendments.pdf	4,208
7	San Francisco Coastal South	Santa Cruz County/UC Santa Cruz – Long Marine Lab/*UC Santa Cruz Marine Science Campus Coastal Long Range Development Plan* (2008)	LCP for the Long Marine Lab and adjacent Natural Reserve System Younger Lagoon Reserve.	https://lrdp.ucsc.edu/Final2008CLRDP/clrdp08.pdf	154
7	Monterey Bay	City of Capitola/*Land Use Plan: City of Capitola Local Coastal Program* (1981, revised 2005)	Includes a recommendation to enhance Soquel Creek. Includes a buffer of 25 feet from the top of riparian banks and a recommendation to increase the buffer to 50 feet.	https://www.cityofcapitola.org/communitydevelopment/page/current-planning Sewage Treatment (cityofcapitola.org)	1,104
7	Monterey Bay	City of Santa Cruz/Westside Agricultural Lands (Remainder) ADC	The Westside Agricultural Lands (Remainder) ADC is located within the City of Santa Cruz LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	17
7	Monterey Bay	City of Santa Cruz/Westside Agricultural Lands NOAA	Included in the area covered by the City of Santa Cruz LCP.	https://www.cityofsantacruz.com/home/showdocument?id=51167	4
8, 10	Pajaro, Monterey Bay, Salinas	Monterey County – North/*Monterey County North County Land Use Plan Local Coastal Program* (1982, updated 1995)	LCP for the North County segment of Monterey County's land use plan. Requires buffer zones of 150 feet from perennial streams, 50 feet from intermittent streams, and 100 feet from coastal wetlands.	https://www.co.monterey.ca.us/home/showdocument?id=37939	60,197
8	Pajaro	City of Watsonville/*Watsonville 2005 Local Coastal Program: City of Watsonville* (1982, amended 2000)	LCP from the City of Watsonville. Requires buffer zones of 100 feet from any wetland or riparian system in Zone R. Identifies California red-legged frog as occurring in the Watsonville coastal zone vicinity and inhabiting the west branch of Struve Slough.	https://www.cityofwatsonville.org/DocumentCenter/View/2545/Local-Coastal-Program---Land-Use-Plan-2005?bidId=	54
9	Central Coastal	City of Pacific Grove/Hayward Lumber Site ADC	The Pacific Grove/Hayward Lumber Site ADC is located within the City of Pacific Grove LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	1
9, 10	Monterey Bay	City of Monterey/*City of Monterey Cannery Row Local Coastal Program Land Use Plan* (2004)	One segment of the City of Monterey LCP for Cannery Row.	https://www.monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Cannery-Row.pdf	72
9, 10	Monterey Bay	City of Monterey/*City of Monterey Del Monte Beach Local Coastal Program Land Use Plan* (2003)	Development in wetlands is banned in this area.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Del-Monte-Beach.pdf	245
9, 10	Monterey Bay	City of Monterey/*Monterey Harbor Land Use Plan: City of Monterey Local Coastal Program* (2003)	One segment of the City of Monterey LCP for the Harbor.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Monterey-Harbor.pdf	138
9, 10	Monterey Bay	City of Monterey/*Land Use Plan for the Laguna Grande/Roberts Lake Local Coastal Program* (1981, amended 2000)[c]	LCP for the City of Monterey and City of Seaside for Laguna Grande and Roberts Lake. Prevents development where coastal oaks and freshwater marsh occur.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Laguna-Grande.pdf	42
9, 10	Monterey Bay, Central Coastal	City of Monterey/*City of Monterey Skyline Local Coastal Program Land Use Plan* (1992)	One segment of the City of Monterey LCP for the Skyline and Presidio.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Skyline.pdf	488

Mapbook Grid Number	HUC-8 Name	LCP Jurisdiction/Plan Area or Name	Description	Website	Total Acres of LCP[a]
9, 10	Monterey Bay, Central Coastal	City of Pacific Grove/*City of Pacific Grove Land Use Plan and Implementing Ordinances* (2020)	Includes Pacific Grove LCP. Bans development in freshwater wetlands, particularly in Crespi Pond and Majella Slough. Requires a buffer of 100 feet from wetlands and 50 feet from the outer edge of riparian vegetation, or 100 feet from the top of an unvegetated streambank.	https://www.cityofpacificgrove.org/living/community-development/planning/local-coastal-program	739
9, 10	Monterey Bay	City of Sand City/*Sand City Local Coastal Program Land Use Plan* (1982)	LCP for the City of Sand City.	https://www.govinfo.gov/content/pkg/CZIC-ht168-c2-s26-1984/html/CZIC-ht168-c2-s26-1984.htm	354
9, 10	Monterey Bay	City of Seaside/*City of Seaside Local Coastal Program Land Use Plan* (2013)	Development in wetlands is banned. Requires a development buffer of at least 50 feet from wetlands and riparian areas. Identifies suitable tidewater goby habitat in a 129-acre area located partially in the City of Seaside.	http://www.ci.seaside.ca.us/272/Local-Coastal-Program	140
9, 10	Monterey Bay	City of Monterey/Coast Guard Pier – United States Coast Guard	LCP policies for the Coast Guard Pier in Monterey are included within the City of Monterey LCP Monterey Harbor Land Use Plan.	https://www.monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Monterey-Harbor.pdf	4
9, 10	Monterey Bay	City of Monterey/Lower Presidio Historic Park	Included in the area covered by the City of Monterey LCP Monterey Harbor Land Use Plan.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Monterey-Harbor.pdf	58
9, 10	Monterey Bay	Monterey County/Fort Ord Transfer Area (Fort Ord Dunes State Park ADC)	The former Fort Ord Transfer Area within the coastal zone is Fort Ord Dunes State Park, which is located within the Monterey County LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/reports/2018/7/w6a/w6a-7-2018-report.pdf	1,611
9, 10	Monterey Bay	City of Monterey/Naval Post-Graduate School – United States Navy	Included in the area covered by the City of Monterey LCP Del Monte Beach Land Use Plan.	https://monterey.org/Portals/0/Policies-Procedures/Planning/LandUse/Coastal/Land-Use-Plan-Del-Monte-Beach.pdf	104
9, 10	Monterey Bay	City of Sand City/South of Bay Avenue ADC	The South of Bay Avenue ADC is located within the City of Sand City LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCP StatusSummaryChart.pdf	36
9, 10	Monterey Bay	City of Pacific Grove/Stanford University Hopkins Marine Lab	Included in the City of Pacific Grove LCP.	https://www.cityofpacificgrove.org/living/community-development/planning/local-coastal-program	24
9, 10, 11, 12	Central Coastal	City of Carmel/*Carmel-by-the-Sea General Plan/Coastal Land Use Plan* (2003)	Coastal Resource Management Element from the Carmel General Plan/Coastal Land Use Plan. Municipal code for implementing the City of Carmel LCP.	https://ci.carmel.ca.us/sites/main/files/file-attachments/coastal_resource_mngmt.pdf?1510257815 https://www.codepublishing.com/CA/CarmelbytheSea/#!/Carmel17/Carmel1720.html	1,078
9, 10, 11, 12	Monterey Bay, Central Coastal	Monterey County/*Carmel Area Land Use Plan Local Coastal Program* (1983, updated 1995)	LCP for the Carmel Area segment of Monterey County's land use plan. Requests a fish ladder for steelhead at the diversion dam on San Jose Creek and requires buffer zones 100 feet from coastal wetlands.	https://www.co.monterey.ca.us/home/showdocument?id=37889	12,691
9, 10, 11, 12	Monterey Bay, Central Coastal	Monterey County/*Del Monte Forest Area Land Use Plan: Monterey County Local Coastal Program* (2012)	LCP for the Del Monte Forest segment of Monterey County's land use plan. Requires buffer zones 100 feet from coastal wetlands and 100 feet from riparian corridors in Lots 1 through 7 in Area V.	https://www.co.monterey.ca.us/home/showdocument?id=38135	6,766
10	Monterey Bay	Monterey County/California State University Monterey Bay –Moss Landing Marine Lab	The Moss Landing Community Plan, part of the Monterey County LCP, is Chapter 5 of the North County Land Use Plan. Identifies ESHAs in and around Moss Landing Harbor and the California State University Monterey Bay – Moss Landing Marine Lab.	https://www.co.monterey.ca.us/home/showpublisheddocument?id=97823	34

Mapbook Grid Number	HUC-8 Name	LCP Jurisdiction/Plan Area or Name	Description	Website	Total Acres of LCP[a]
10	Monterey Bay, Salinas	City of Marina/*City of Marina LCP Volume II Implementation Plan* (1982, amended 2013)	Requires a development buffer of at least 100 feet from wetlands, vernal pools, and varying buffers for riparian areas based on project type.	https://www.cityofmarina.org/171/Local-Coastal-Land-Use-Plan	1,428
10	Monterey Bay	City of Marina/Fort Ord Transfer Area	This part of the Fort Ord Transfer Area is located within the City of Marina LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	119
10	Monterey Bay, Salinas	Monterey County/Salinas River National Wildlife Refuge – National Park Service	Included in the North County Land Use Plan LCP.	https://www.co.monterey.ca.us/home/showdocument?id=37939	180
11	Central Coastal	Monterey County/Malpaso Beach Area ADC	The Malpaso Beach Area ADC is located within the Monterey County – Carmel Area LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	1
11	Central Coastal	Monterey County/Yankee Beach Area ADC	The Yankee Beach Area ADC is located within the Monterey County – Carmel Area LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	2
11, 12, 13	Central Coastal	Monterey County/Point Sur Lighthouse Reservation – United States Coast Guard	Included in the Big Sur Coast Land Use Plan.	https://documents.coastal.ca.gov/reports/1998/1/T10b-1-1998.pdf	78
11, 12, 13, 14, 15, 16	Central Coastal, Salinas	Monterey County/Los Padres Nat. Forest - USFS	Included in the Big Sur Coast Land Use Plan. Land Management Plan incorporating enforceable policies of the California Coastal Act.	https://www.co.monterey.ca.us/home/showdocument?id=37879	270
11, 12, 13, 14, 15, 16	Central Coastal	Monterey County/*Monterey County Big Sur Coast Land Use Plan Local Coastal Program* (1986, amended 1996)	LCP for the Big Sur Coast segment of Monterey County's land use plan. Requires buffer zones of 150 feet of streams.	https://www.co.monterey.ca.us/home/showdocument?id=37879	83
15, 16, 17, 18, 19, 20, 21, 22, 23, 24	Central Coastal	San Luis Obispo County/*County of San Luis Obispo Coastal Plan Policies* (1988, revised 2007)	Policies for the County of San Luis Obispo's implementation of its' LCP.	https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements.aspx	141,063
18, 19	Central Coastal	San Luis Obispo County/Cambria Air Force Station – United States Air Force	Amendments to the San Luis Obispo County LCP changing the land use designation of the Cambria Air Force Station from Public Facility to Recreation.	https://www.coastal.ca.gov/slorevf.pdf	11
21	Central Coastal	City of Morro Bay/*Plan Morro Bay* (2020)	This plan is the City of Morro Bay's General Plan and LCP Land Use Plan. Bans development in freshwater systems. Identifies a goal to preserve and protect existing habitat for tidewater goby and California red-legged frog.	http://www.morro-bay.ca.us/943/PlanMB	4,558
21	Central Coastal	City of Morro Bay/Morro Bay	Included in the City of Morro Bay's General Plan and LCP Land Use Plan.	http://www.morro-bay.ca.us/943/PlanMB	520
21	Central Coastal	City of Morro Bay/State Park Basin	Included in the City of Morro Bay's General Plan and LCP Land Use Plan.	http://www.morro-bay.ca.us/943/PlanMB	10
21	Central Coastal	San Luis Obispo County/Otto Property - South Bay ADC	The Otto Property - South Bay ADC is located within the San Luis Obispo County LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	109
21	Central Coastal	San Luis Obispo County/Morro Bay	Morro Bay is addressed in the LCP for San Luis Obispo County.	https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements.aspx	2,438
21	Central Coastal	San Luis Obispo County/Sweet Springs Marsh ADC	The Sweet Springs Marsh ADC is located within the San Luis Obispo County LCP jurisdiction but is an uncertified area.	https://documents.coastal.ca.gov/assets/rflg/FY17_18_LCPStatusSummaryChart.pdf	56
23, 24	Central Coastal	City of Pismo Beach/*City of Pismo Beach General Plan and Local Coastal Program* (1992, amended 2014)	LCP for the City of Pismo Beach.	http://www.pismobeach.org/901/General-PlanLocal-Coastal-Plan-Update	2,358

Mapbook Grid Number	HUC-8 Name	LCP Jurisdiction/Plan Area or Name	Description	Website	Total Acres of LCP[a]
24	Central Coastal	City of Grover Beach – *City of Grover Beach Local Coastal Program* (1981, amended 2014)	Requires permanent protection for riparian and marsh vegetation along the western branch of Meadow Creek.	http://www.grover.org/DocumentCenter/Home/View/1808	613
24	Central Coastal	County of Santa Barbara/*Santa Barbara County Comprehensive Plan Coastal Land Use Plan* (1982, republished 2019)	LCP for the County of Santa Barbara. Requires a 100-foot buffer maintained in natural condition along the periphery of all wetlands.	https://cosantabarbara.app.box.com/s/cx95k0r4hnfo58hg291fi5gzf5rrdurd	12,438

Source: CCC 2020

[a] Numbers were rounded to the nearest whole number.

[b] ADC: Refers to a geographic area that has not been officially segmented for purposes of LCP preparation and during certification review of the LCP, was not certified. An Uncertified Area may be an area that was created through annexation or was subsequently identified but may not have been included in any LCP segment. The CCC retains permit authority until an LCP is effectively certified for these areas.

[c] LCP has not been certified by the CCC.

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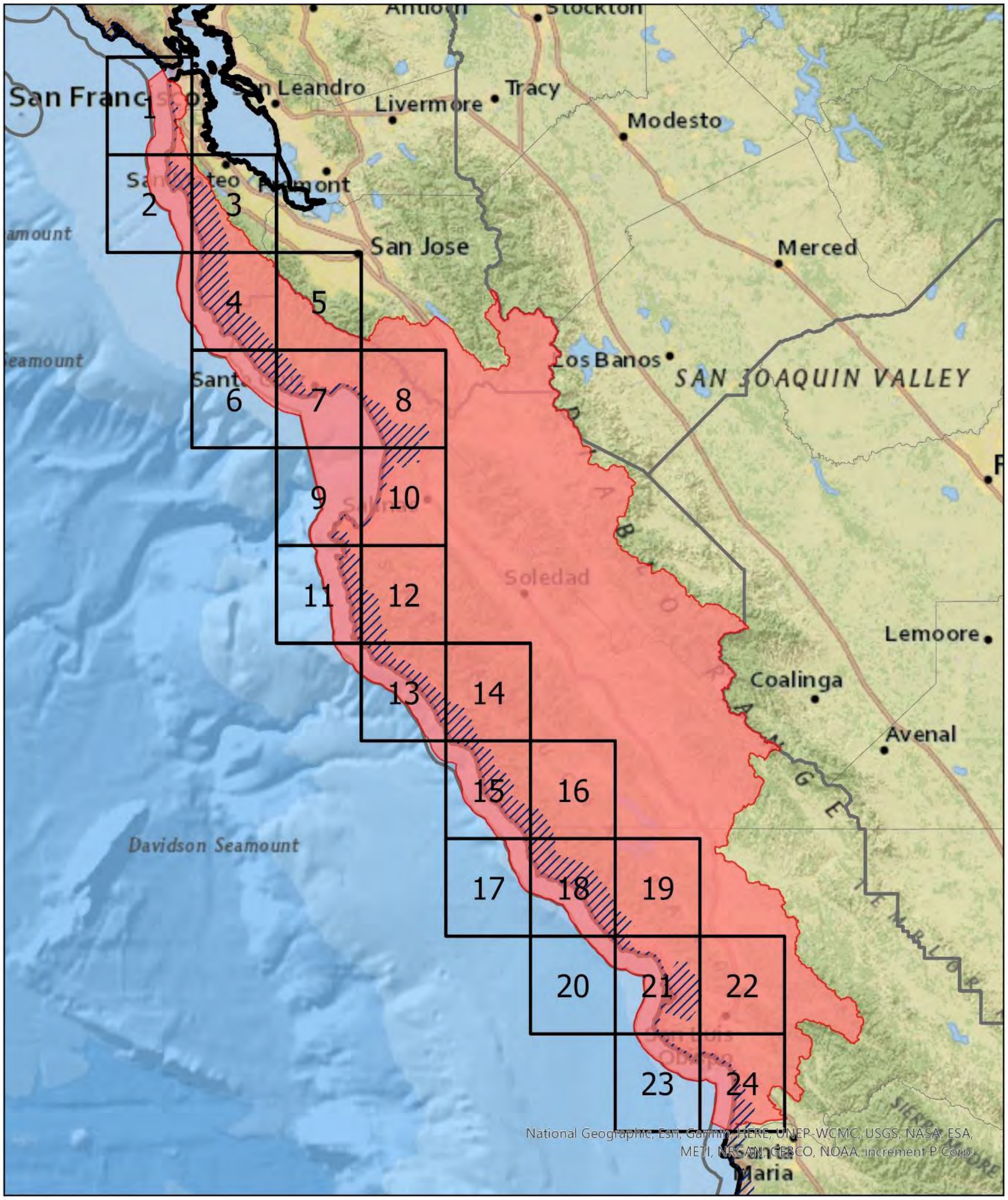
Antioch
Stockton
San Francisco
San Leandro
Livermore
Tracy
Modesto
San Mateo
Fremont
San Jose
Merced
Los Banos
SAN JOAQUIN VALLEY
Santa Cruz
Soledad
Lemoore
Coalinga
Avenal
Davidson Seamount
DIABLO RANGE
TEMBLOR RANGE
San Luis Obispo
Santa Maria
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
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24
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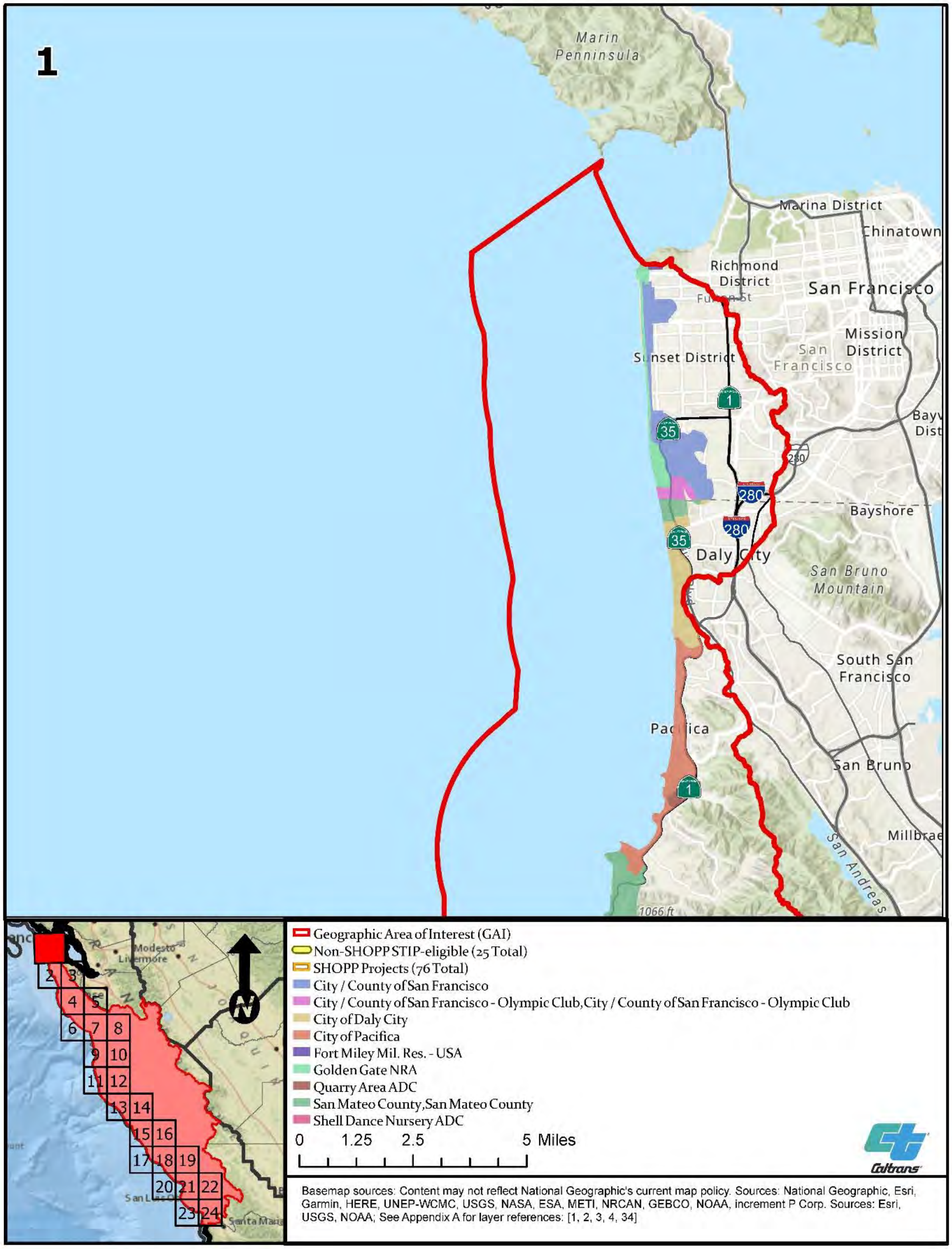
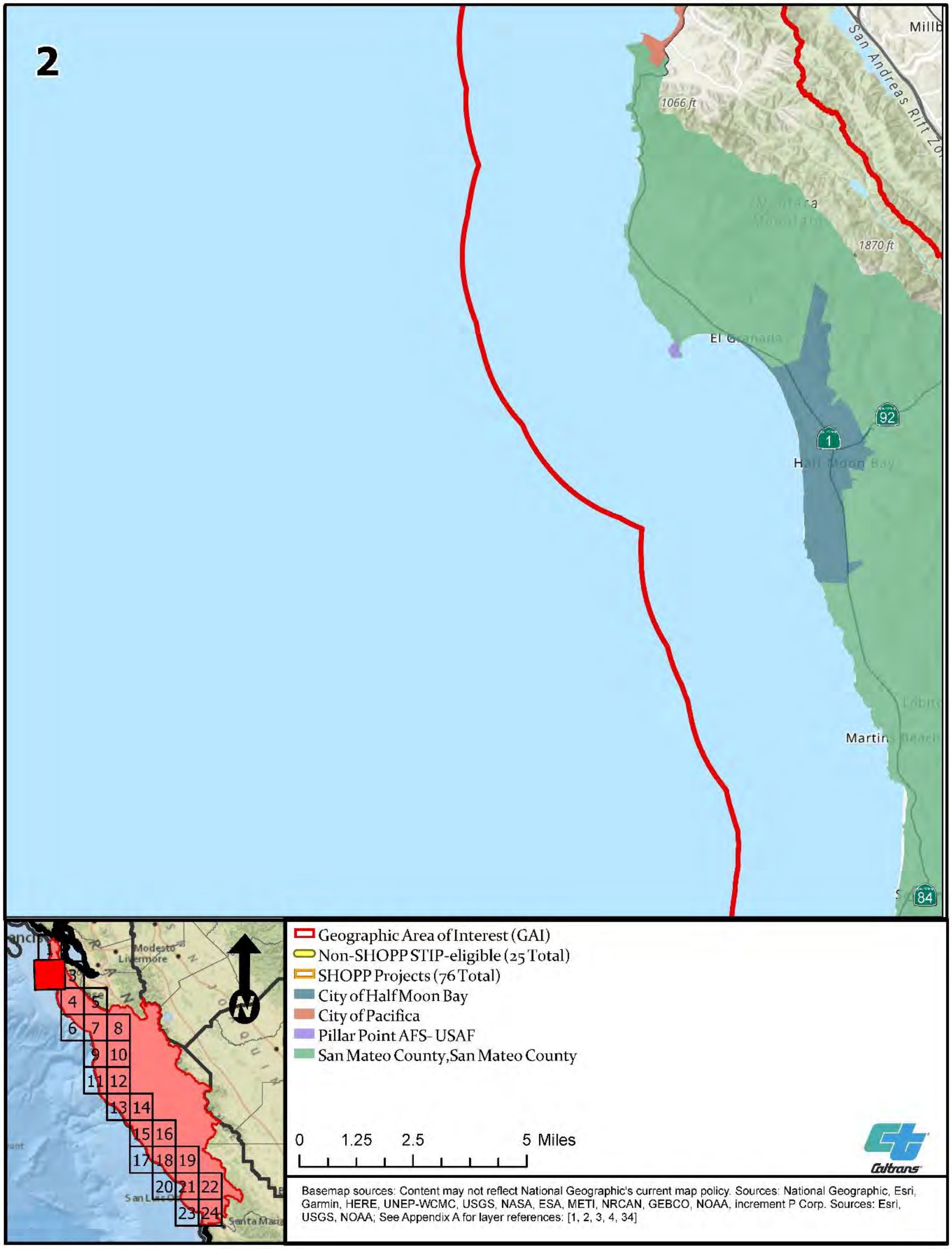
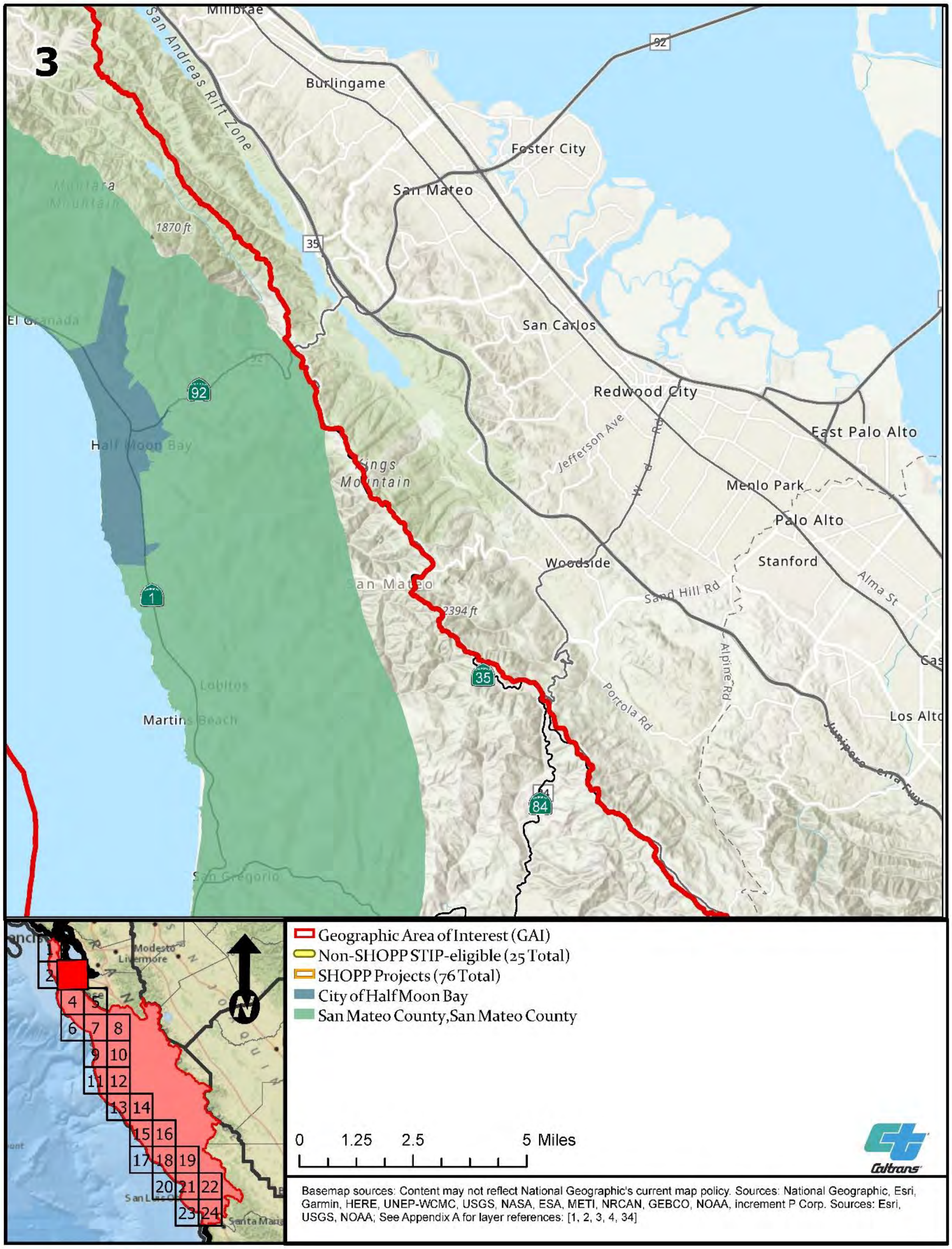
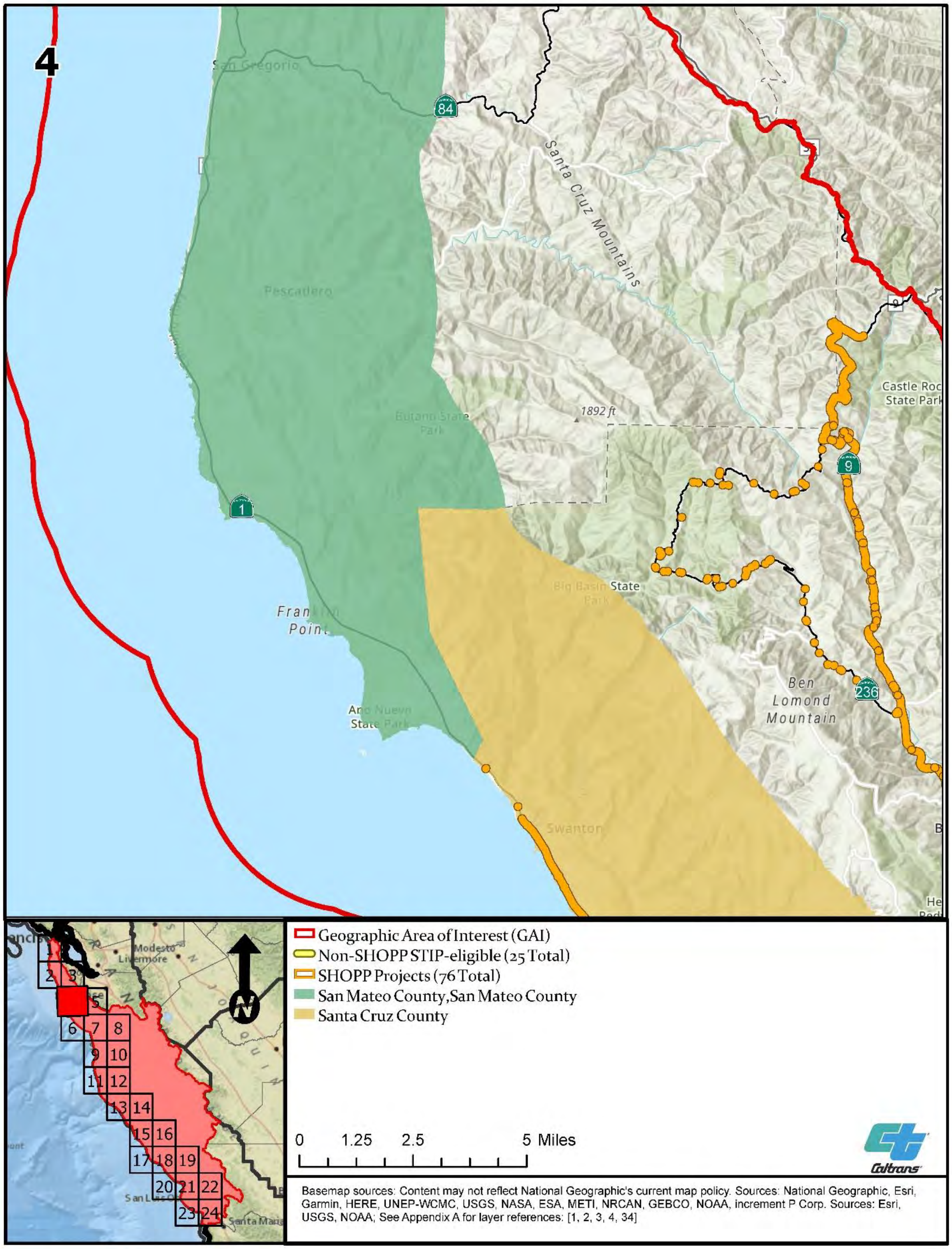
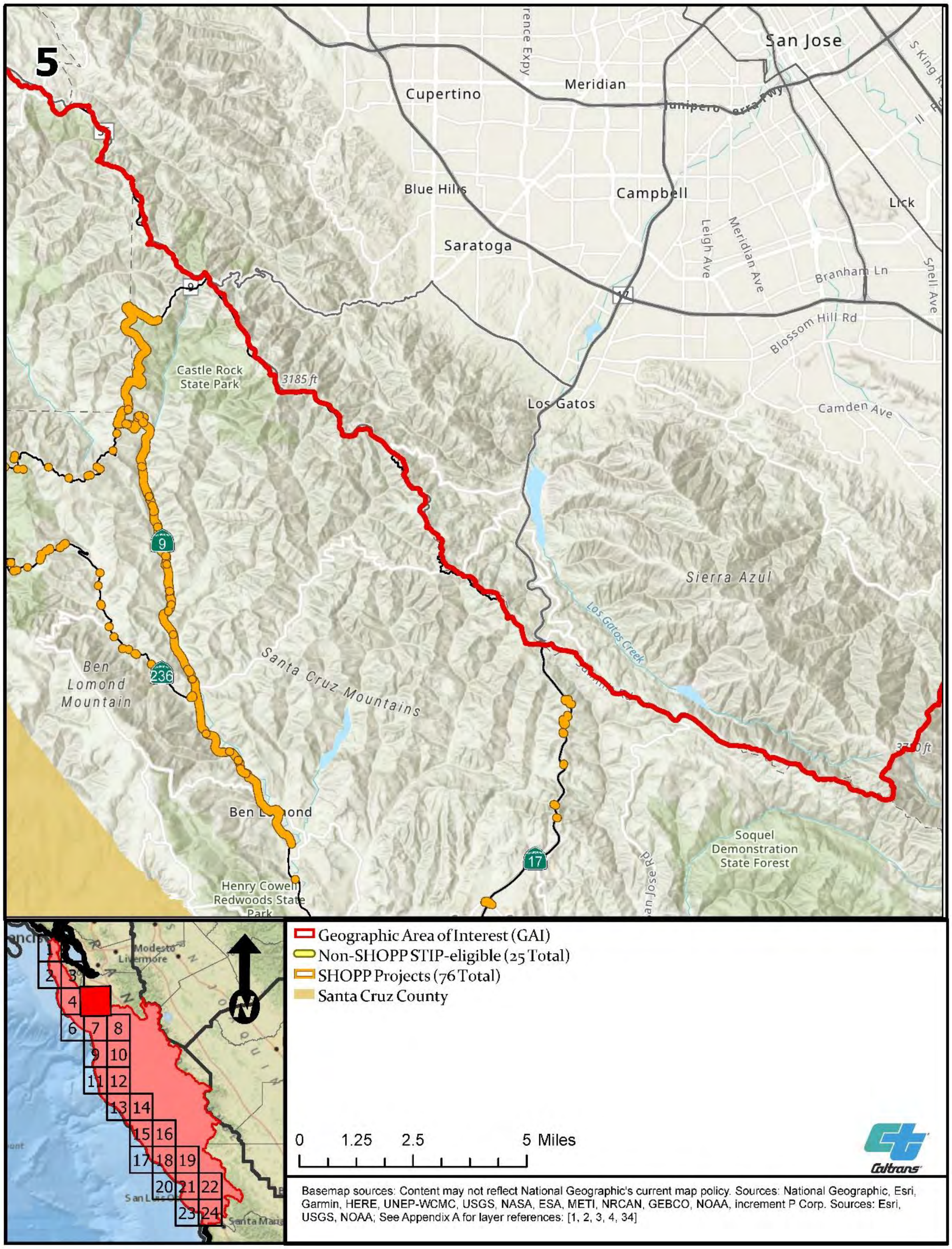
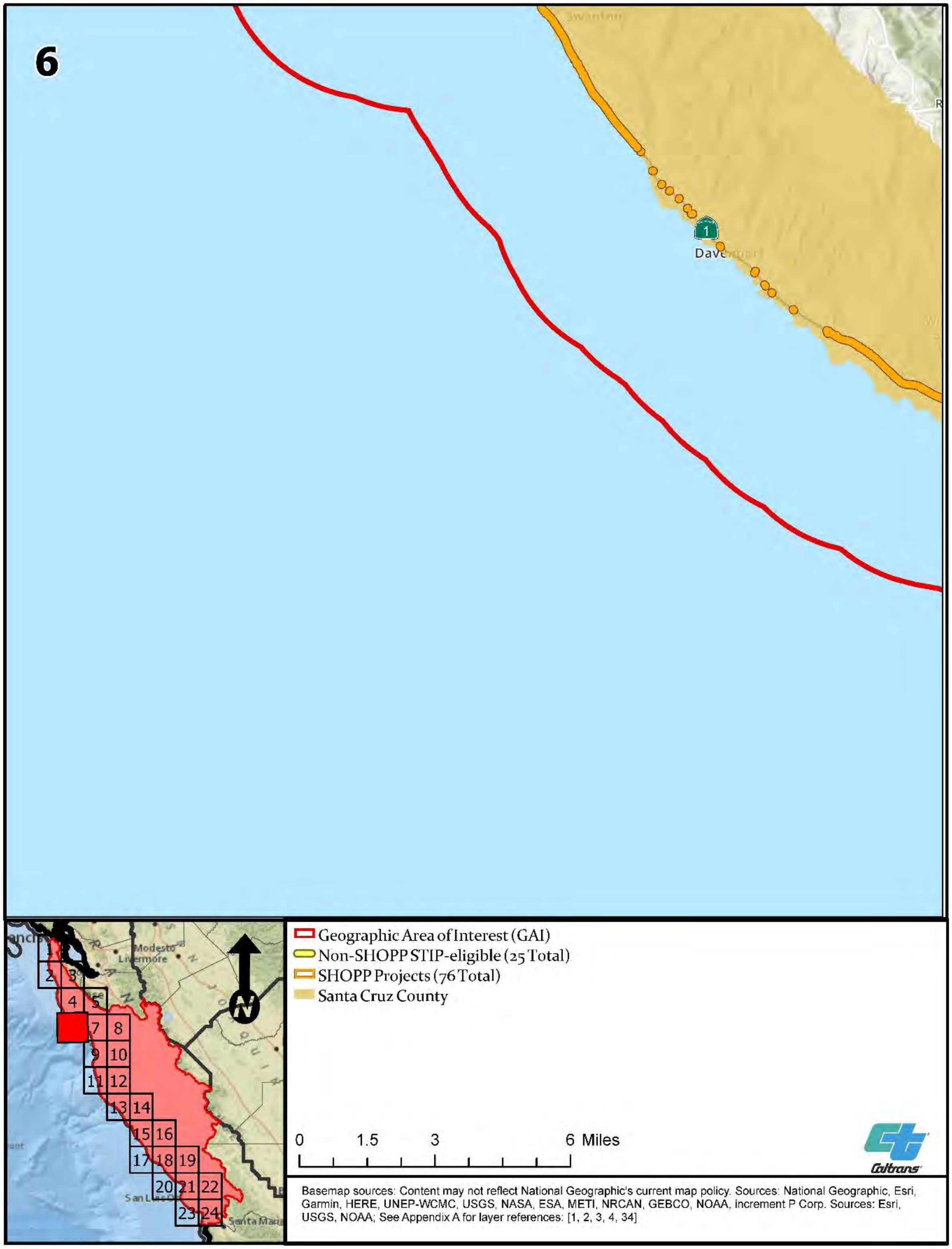

1
Marin Penninsula
Marina District
Chinatown
Richmond District
San Francisco
Mission District
Sunset District
Bayshore
Daly City
San Bruno Mountain
South San Francisco
Pacifica
San Bruno
Millbrae
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City / County of San Francisco
City / County of San Francisco - Olympic Club,City / County of San Francisco - Olympic Club
City of Daly City
City of Pacifica
Fort Miley Mil. Res. - USA
Golden Gate NRA
Quarry Area ADC
San Mateo County,San Mateo County
Shell Dance Nursery ADC
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

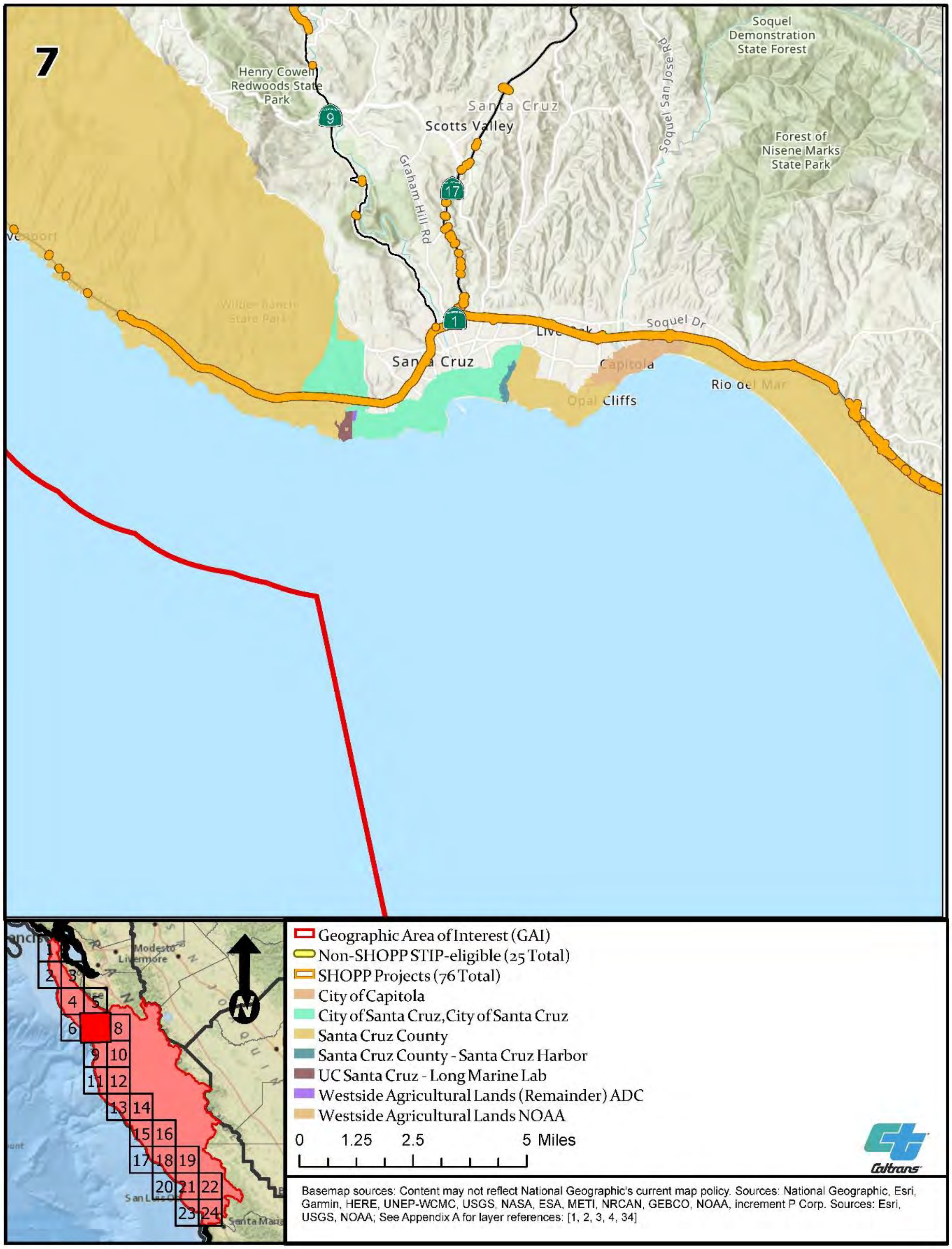

2
Millb
San Andreas Rift Zo
1066 ft
Montara Mountain
1870 ft
El Granada
92
1
Half Moon Bay
Martins Beach
84
Modesto
Livermore
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Half Moon Bay
City of Pacifica
Pillar Point AFS- USAF
San Mateo County,San Mateo County
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

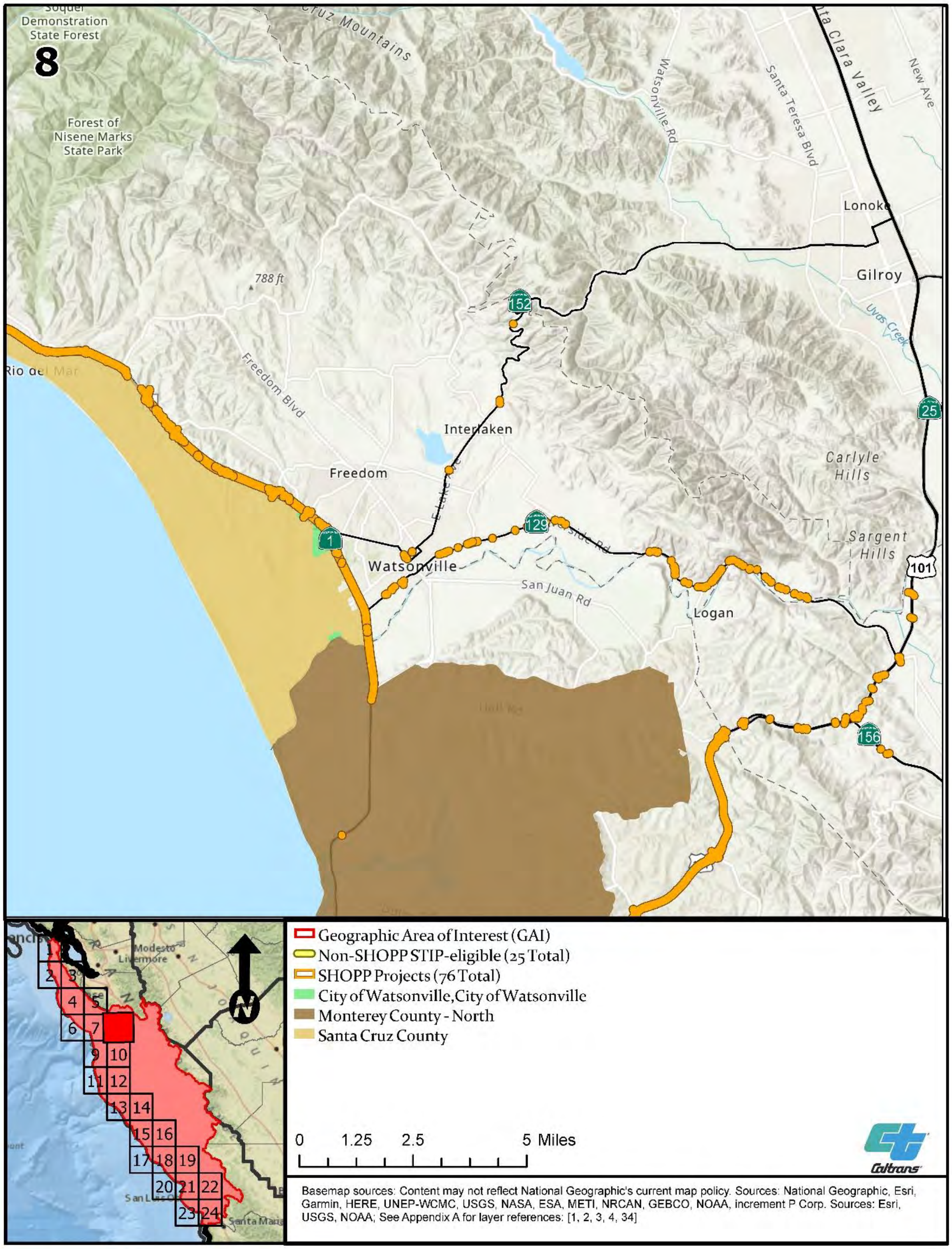

3
Millbrae
San Andreas Rift Zone
Burlingame
Foster City
San Mateo
Montara Mountain
1870 ft
35
92
El Granada
San Carlos
Redwood City
East Palo Alto
Jefferson Ave
Half Moon Bay
Kings Mountain
Menlo Park
Palo Alto
Woodside
Stanford
Sand Hill Rd
Alma St
San Mateo
2394 ft
1
Alpine Rd
Portola Rd
Lobitos
Martins Beach
Los Alto
Junipero Serra Fwy
84
San Gregorio
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
San Luis
Santa Maria
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Half Moon Bay
San Mateo County,San Mateo County
0
1.25
2.5
5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

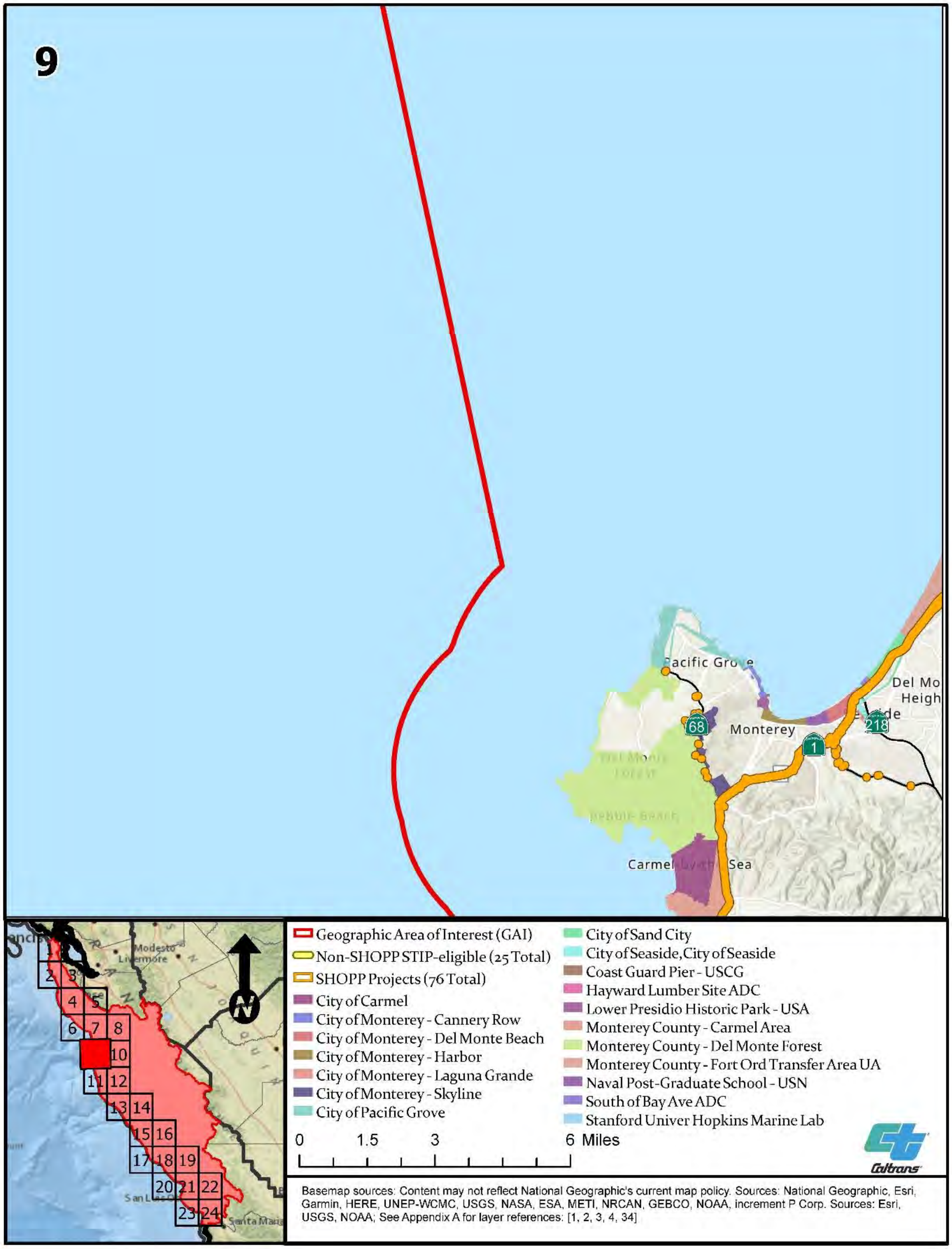

4
San Gregorio
84
Santa Cruz Mountains
Pescadero
Butano State Park
1892 ft
Castle Rock State Park
9
1
Big Basin State Park
Franklin Point
Año Nuevo State Park
Ben Lomond Mountain
236
Swanton
Modesto
Livermore
1
2
3
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
San Luis
Santa Maria
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
San Mateo County,San Mateo County
Santa Cruz County
0
1.25
2.5
5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

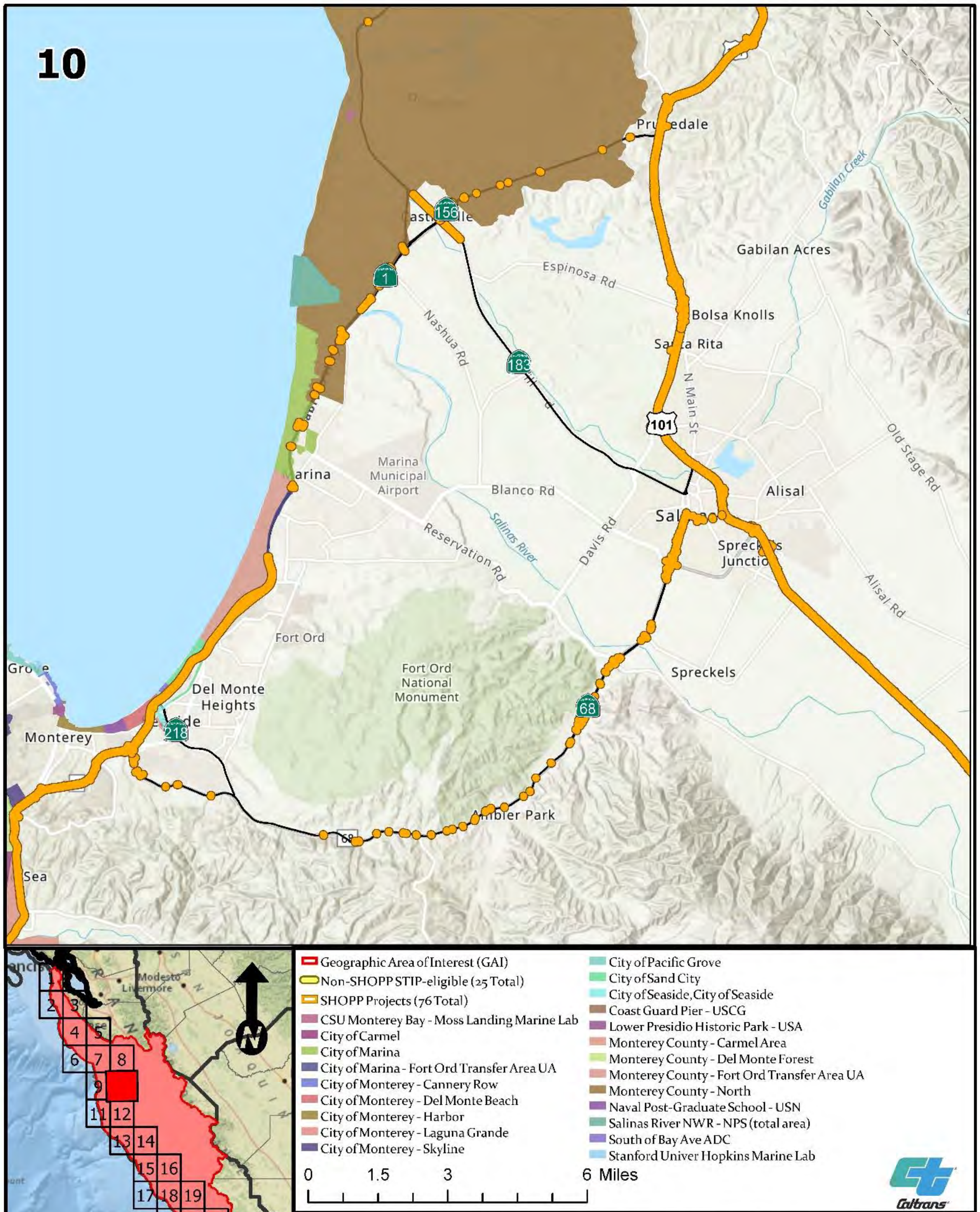

5
San Jose
Cupertino
Meridian
Blue Hills
Campbell
Saratoga
Leigh Ave
Meridian Ave
Branham Ln
Blossom Hill Rd
Snell Ave
Castle Rock
State Park
3185 ft
Los Gatos
Camden Ave
Sierra Azul
Los Gatos Creek
Santa Cruz Mountains
Ben
Lomond
Mountain
9
236
17
Soquel
Demonstration
State Forest
Henry Cowell
Redwoods State
Park
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Santa Cruz County
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


6
Davenport
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Santa Cruz County
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


7
Soquel Demonstration State Forest
Henry Cowell Redwoods State Park
Santa Cruz
Scotts Valley
Graham Hill Rd
Soquel San Jose Rd
Forest of Nisene Marks State Park
Wilder Ranch State Park
Soquel Dr
Santa Cruz
Capitola
Rio del Mar
Opal Cliffs
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Capitola
City of Santa Cruz, City of Santa Cruz
Santa Cruz County
Santa Cruz County - Santa Cruz Harbor
UC Santa Cruz - Long Marine Lab
Westside Agricultural Lands (Remainder) ADC
Westside Agricultural Lands NOAA
0 1.25 2.5 5 Miles
Caltrans
Modesto
Livermore
N
1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


8
Soquel Demonstration State Forest
Forest of Nisene Marks State Park
Santa Cruz Mountains
Watsonville Rd
Santa Teresa Blvd
Santa Clara Valley
New Ave
Lonoke
Gilroy
Uvas Creek
788 ft
152
Rio del Mar
Freedom Blvd
Interlaken
Freedom
25
Carlyle Hills
Sargent Hills
129
1
Watsonville
San Juan Rd
101
Logan
156
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Watsonville, City of Watsonville
Monterey County - North
Santa Cruz County
0 1.25 2.5 5 Miles
Caltrans
Modesto
Livermore
San Luis O
Santa Marg
1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
N
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


9
Pacific Grove
Monterey
Del Mo
Heigh
68
1
218
Carmel
Sea
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Carmel
City of Monterey - Cannery Row
City of Monterey - Del Monte Beach
City of Monterey - Harbor
City of Monterey - Laguna Grande
City of Monterey - Skyline
City of Pacific Grove
City of Sand City
City of Seaside, City of Seaside
Coast Guard Pier - USCG
Hayward Lumber Site ADC
Lower Presidio Historic Park - USA
Monterey County - Carmel Area
Monterey County - Del Monte Forest
Monterey County - Fort Ord Transfer Area UA
Naval Post-Graduate School - USN
South of Bay Ave ADC
Stanford Univer Hopkins Marine Lab
0 1.5 3 6 Miles
N
Modesto
Livermore
1
2
3
4
5
6
7
8
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]



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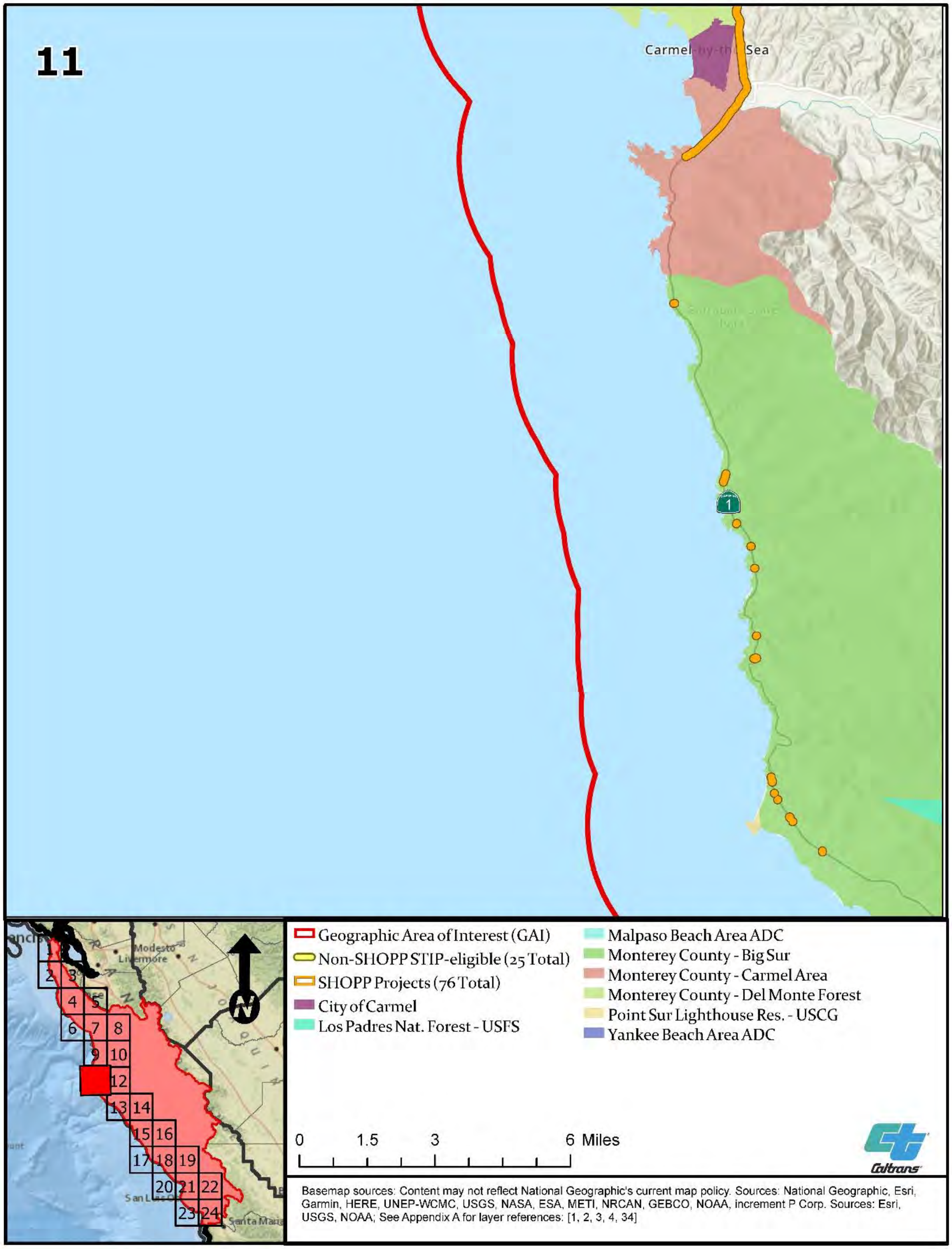
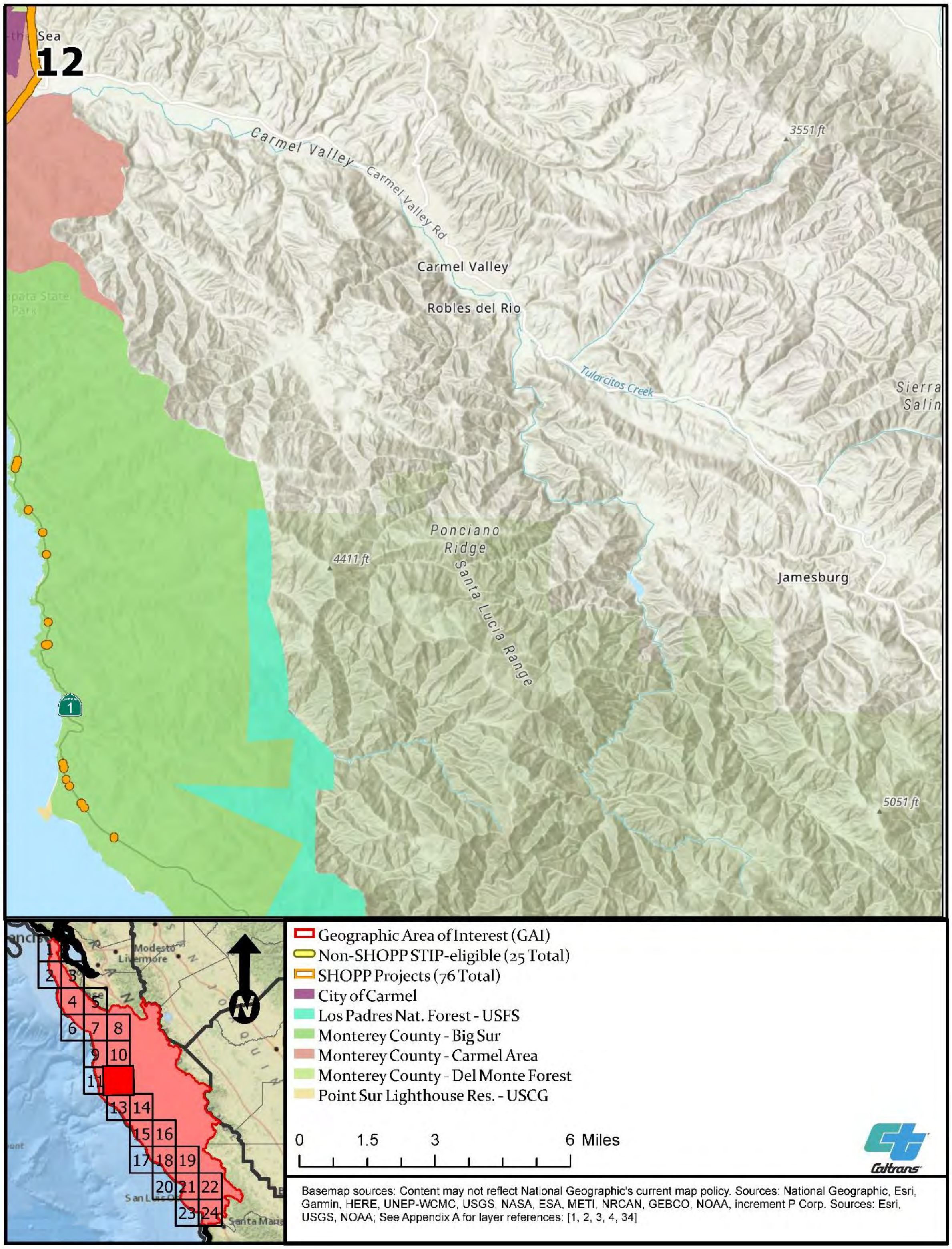
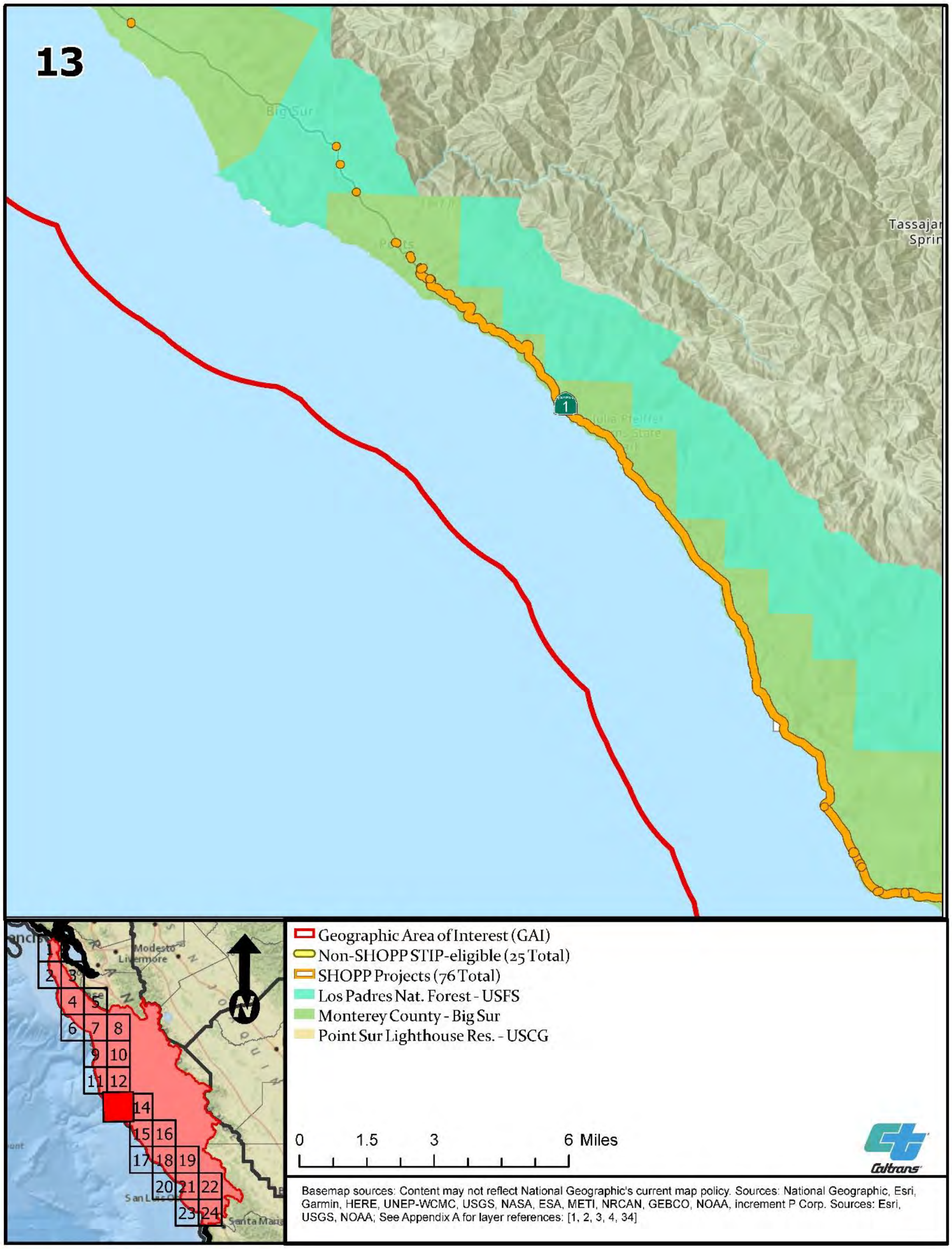
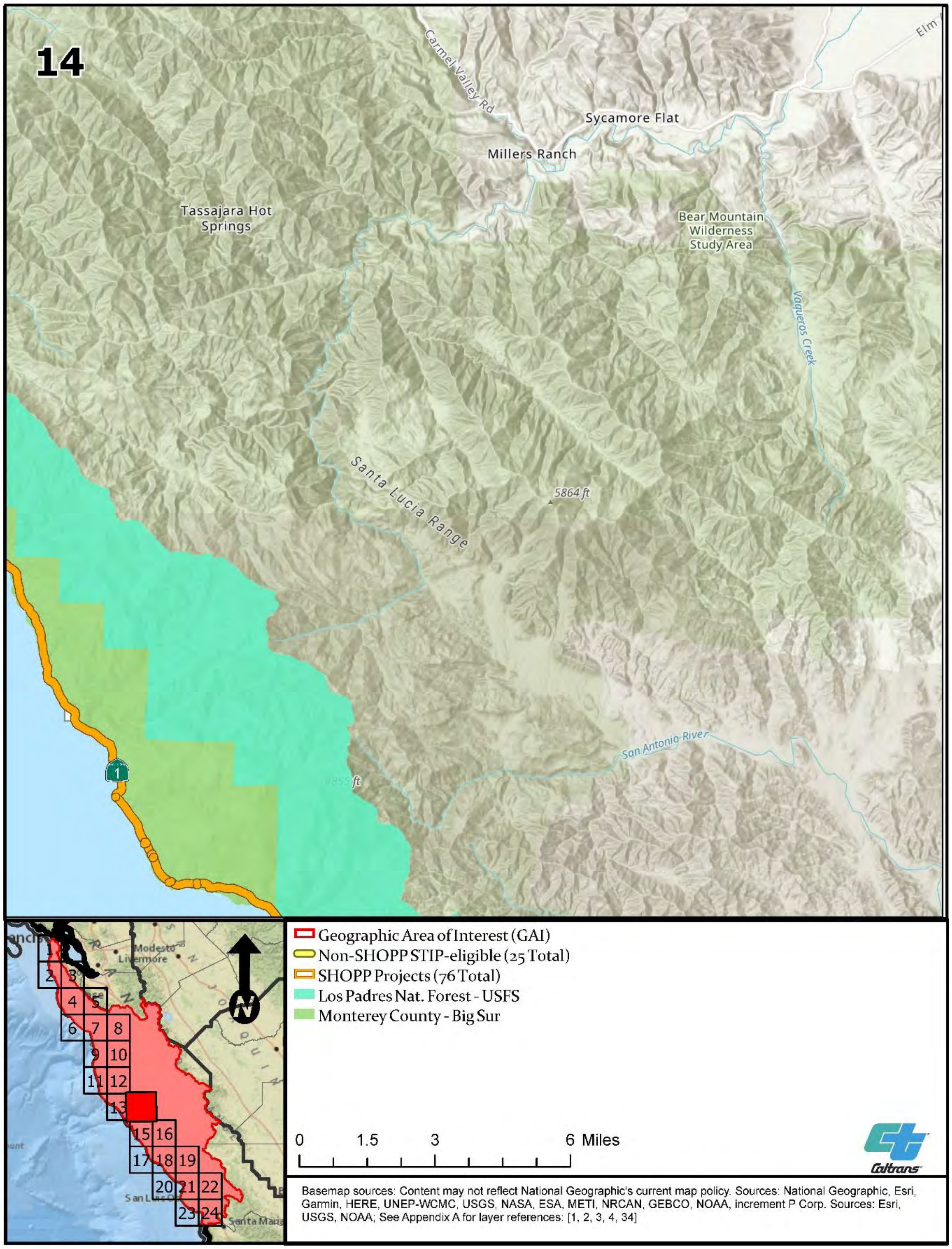
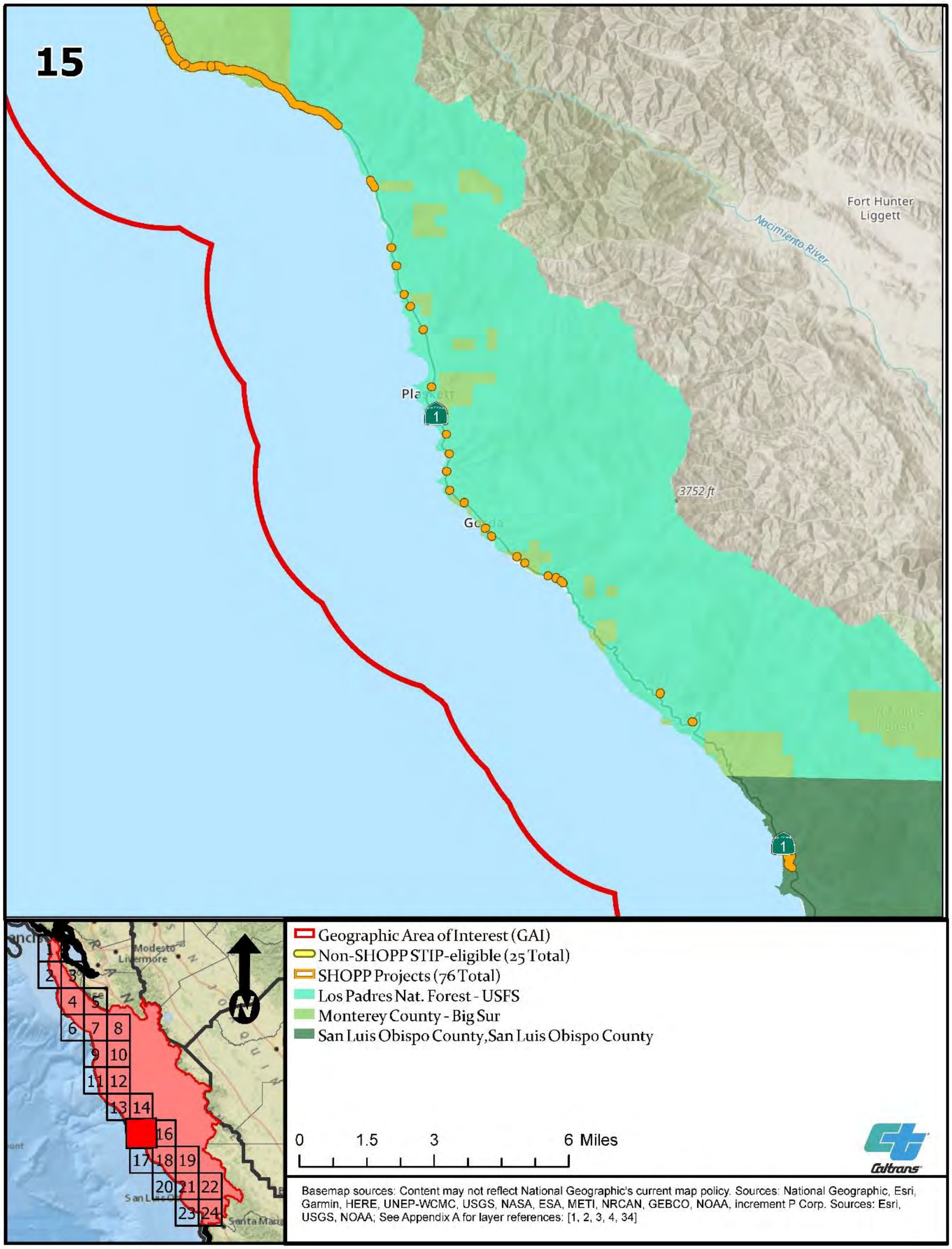
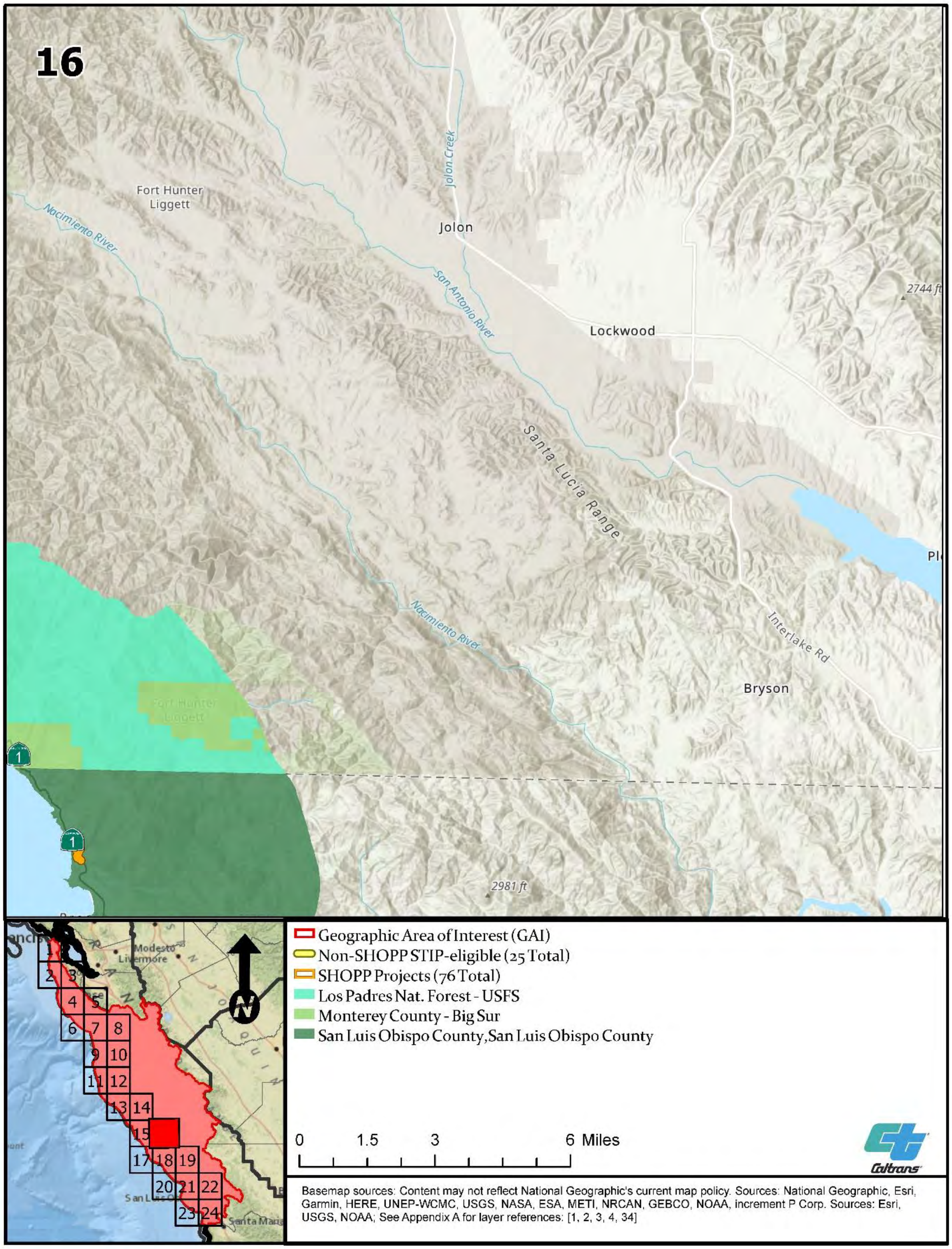

11
Carmel-by-the-Sea
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Carmel
Los Padres Nat. Forest - USFS
Malpaso Beach Area ADC
Monterey County - Big Sur
Monterey County - Carmel Area
Monterey County - Del Monte Forest
Point Sur Lighthouse Res. - USCG
Yankee Beach Area ADC
0 1.5 3 6 Miles
N
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

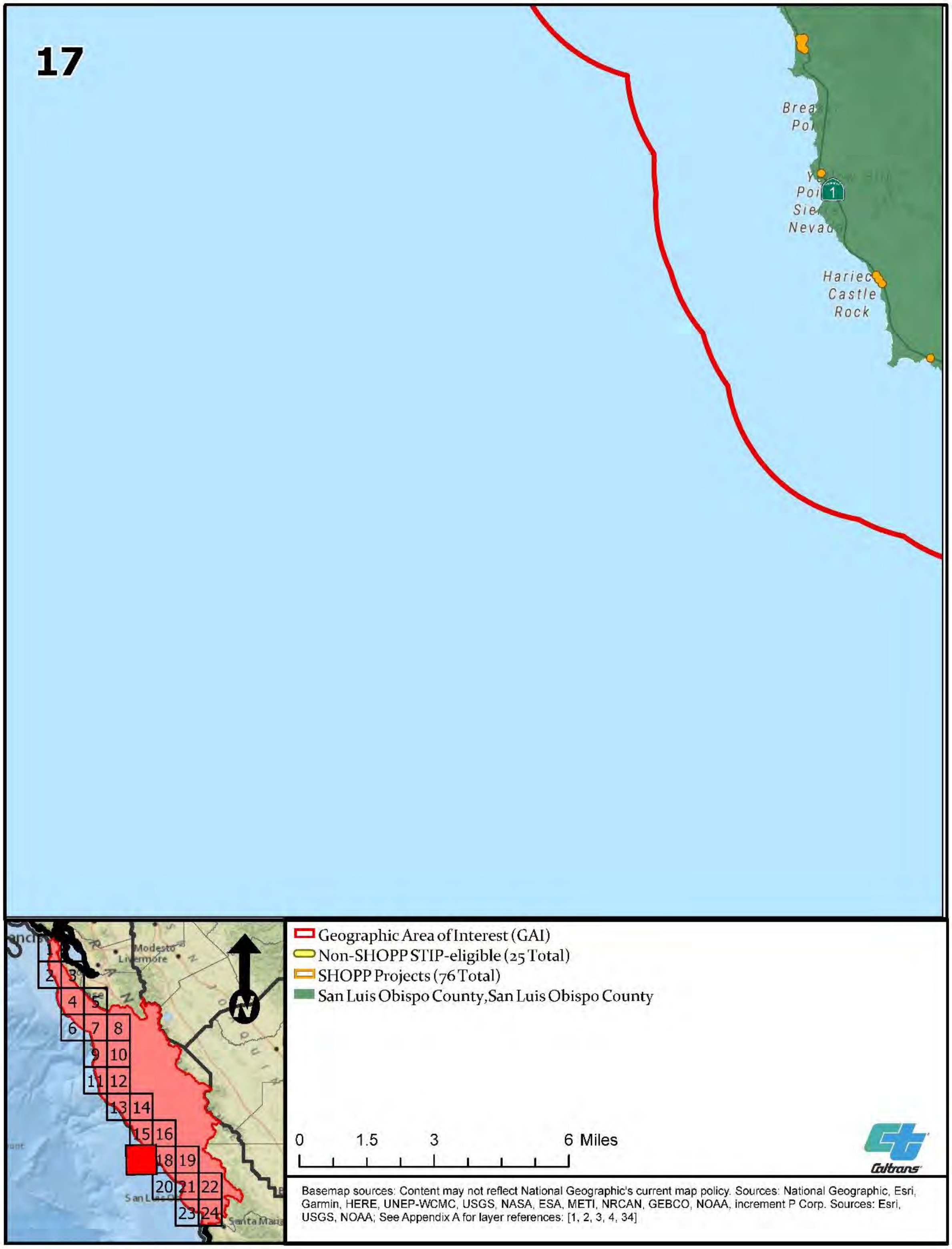

Sea
12
Carmel Valley
Carmel Valley Rd
3551 ft
Carmel Valley
Robles del Rio
Tularcitos Creek
Sierra
Salin
Ponciano
Ridge
Santa Lucia Range
4411 ft
Jamesburg
5051 ft
1
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
13
14
15
16
17
18
19
20
21
22
23
24
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Carmel
Los Padres Nat. Forest - USFS
Monterey County - Big Sur
Monterey County - Carmel Area
Monterey County - Del Monte Forest
Point Sur Lighthouse Res. - USCG
0
1.5
3
6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

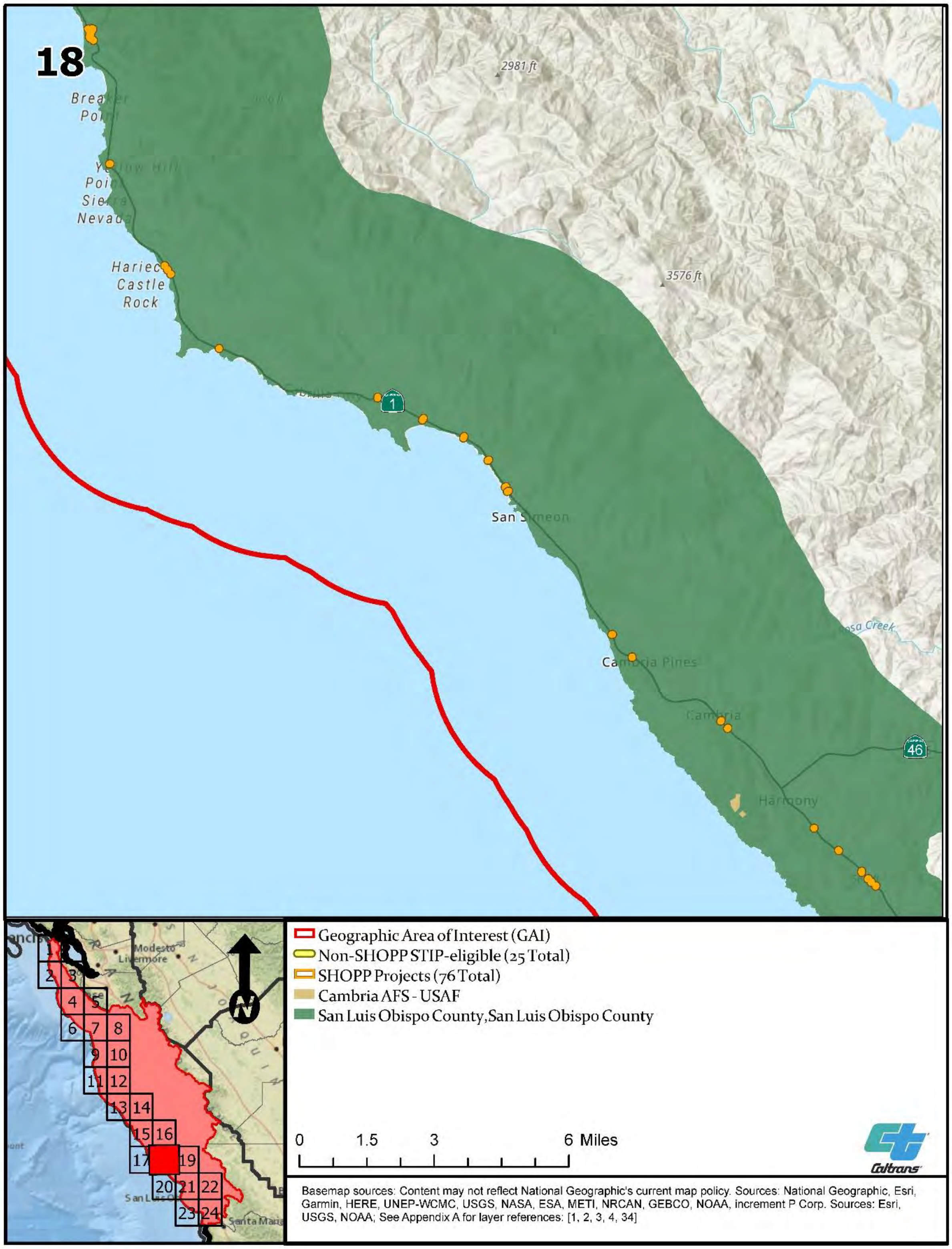

13
Big Sur
Tassajar
Sprin
1
Julia Pfeiffer
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Los Padres Nat. Forest - USFS
Monterey County - Big Sur
Point Sur Lighthouse Res. - USCG
0
1.5
3
6 Miles
N
1
2
3
4
5
6
7
8
9
10
11
12
14
15
16
17
18
19
20
21
22
23
24
Modesto
Livermore
San Luis O
Santa Marg
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

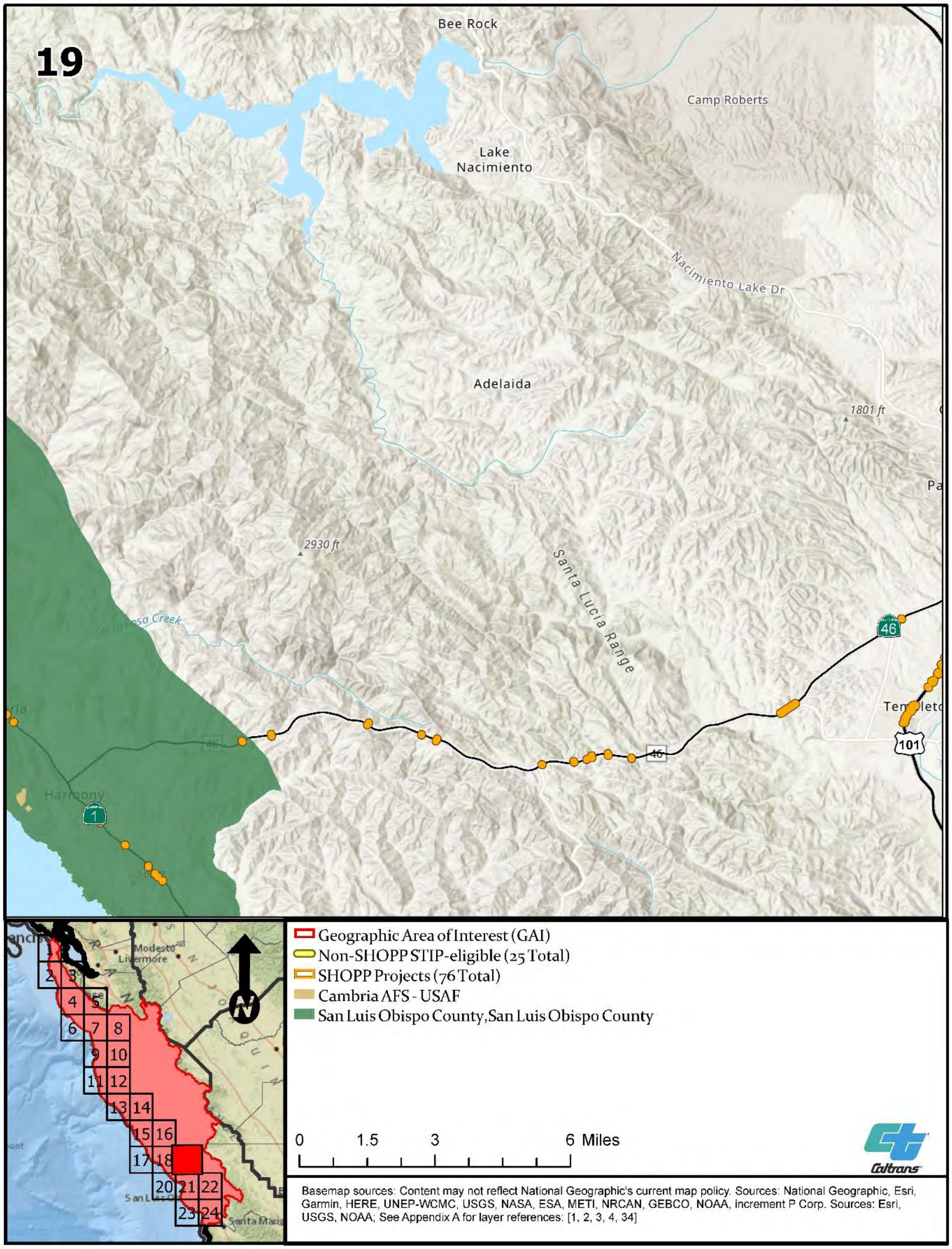

14
Carmel Valley Rd
Sycamore Flat
Millers Ranch
Tassajara Hot Springs
Bear Mountain Wilderness Study Area
Vaqueros Creek
Santa Lucia Range
5864 ft
San Antonio River
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Los Padres Nat. Forest - USFS
Monterey County - Big Sur
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

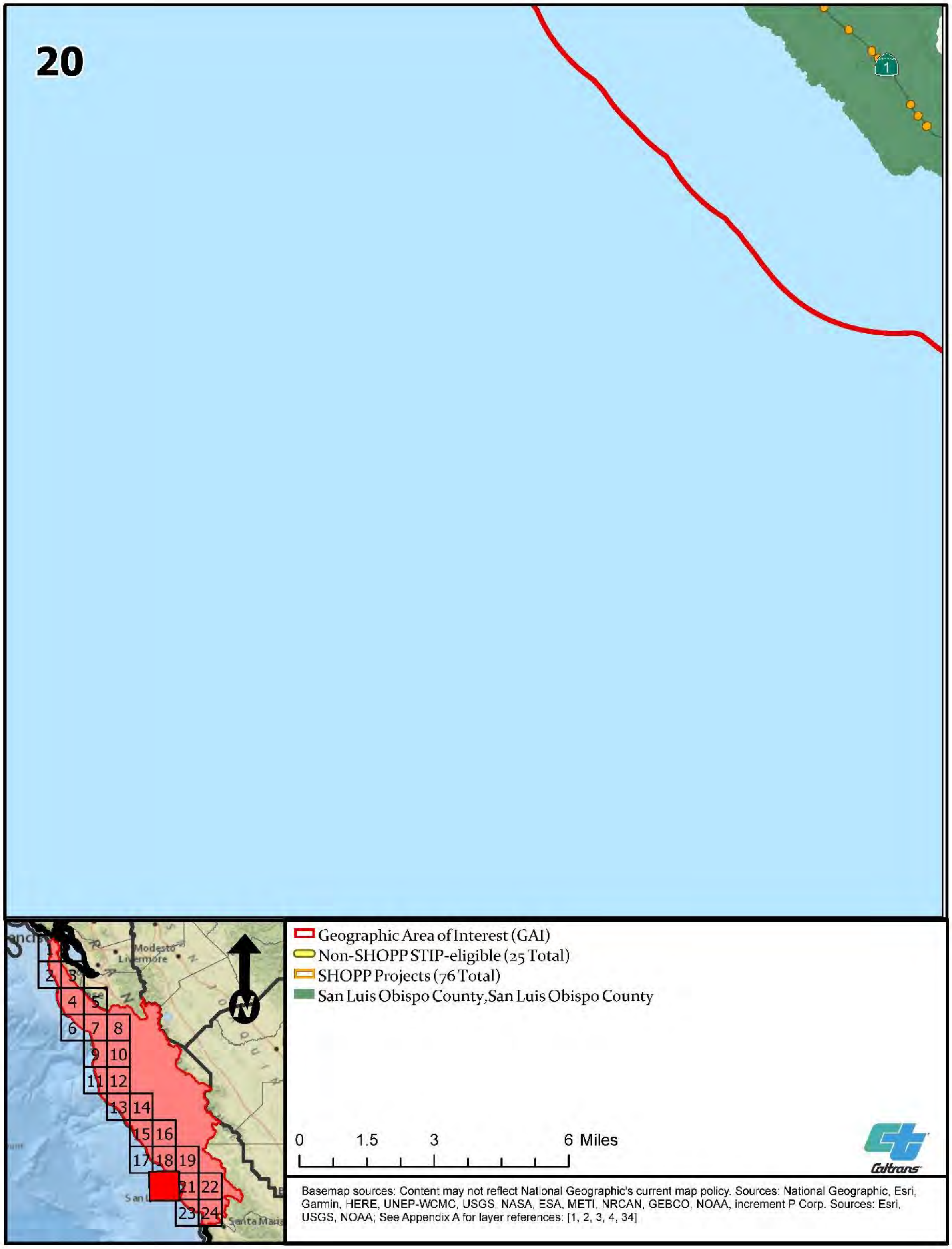

15
Fort Hunter Liggett
Nacimiento River
3752 ft
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Los Padres Nat. Forest - USFS
Monterey County - Big Sur
San Luis Obispo County,San Luis Obispo County
0 1.5 3 6 Miles
N
Modesto
Livermore
1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 18 19 20 21 22 23 24
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

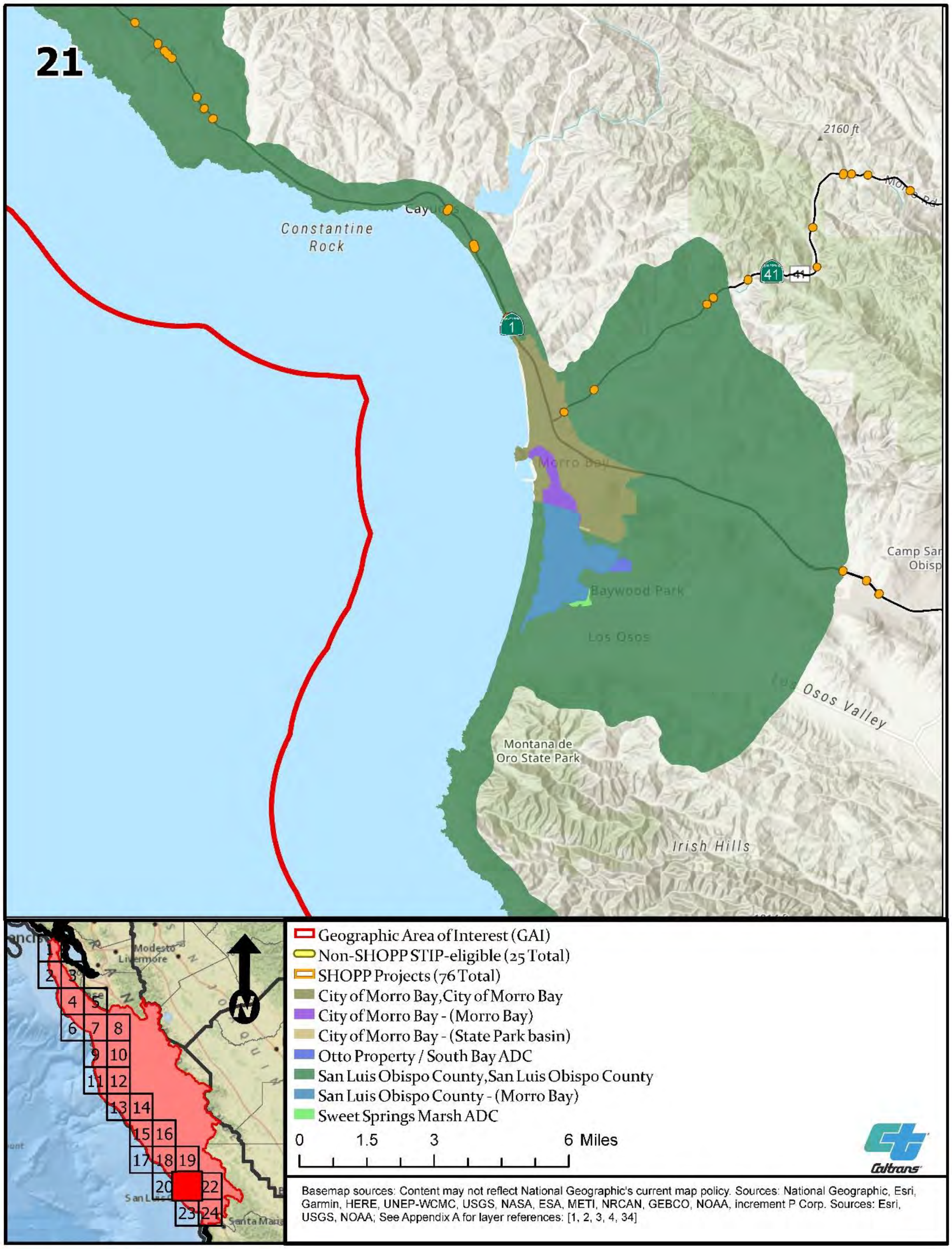

16
Fort Hunter Liggett
Nacimiento River
Jolon Creek
Jolon
San Antonio River
Lockwood
2744 ft
Santa Lucia Range
Interlake Rd
Bryson
Fort Hunter Liggett
2981 ft
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
17
18
19
20
21
22
23
24
San Luis Obispo
Santa Maria
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Los Padres Nat. Forest - USFS
Monterey County - Big Sur
San Luis Obispo County,San Luis Obispo County
0
1.5
3
6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

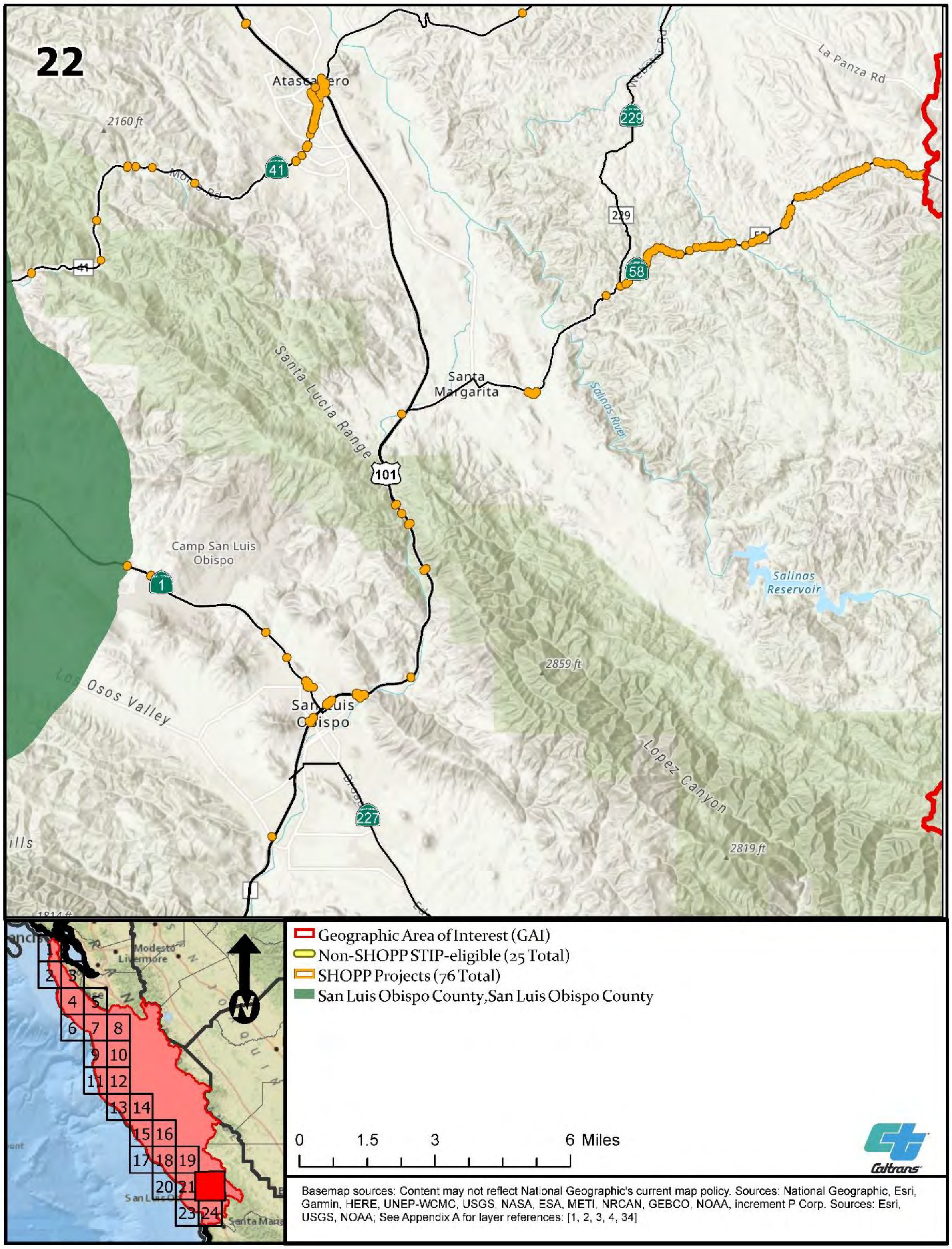

17
Brea Poi
Yellow Hill
Point Sierra Nevada
1
Harlech Castle Rock
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
San Luis Obispo County,San Luis Obispo County
0
1.5
3
6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
18
19
20
21
22
23
24
N


18
Hariec Castle Rock
2981 ft
3576 ft
1
San Simeon
Cambria Pines
Cambria
46
Harmony
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Cambria AFS - USAF
San Luis Obispo County,San Luis Obispo County
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

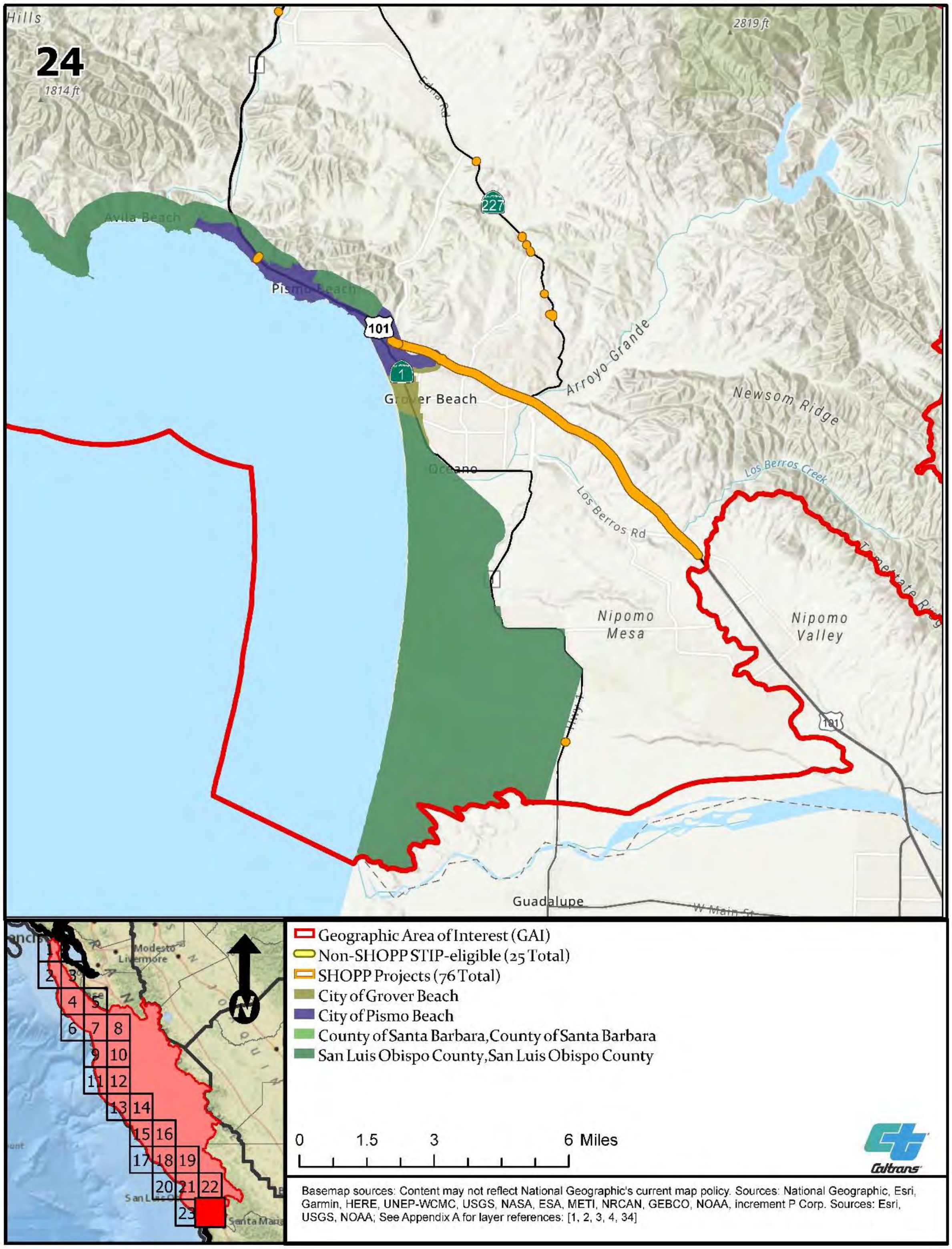

19
Bee Rock
Camp Roberts
Lake Nacimiento
Nacimiento Lake Dr
Adelaida
1801 ft
2930 ft
Santa Lucia Range
46
101
1
Harmony
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
Cambria AFS - USAF
San Luis Obispo County,San Luis Obispo County
0 1.5 3 6 Miles
N
Modesto
Livermore
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


20
1
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
21
22
23
24
Santa Maria
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
San Luis Obispo County,San Luis Obispo County
0
1.5
3
6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


21
Constantine Rock
Morro Bay
Baywood Park
Los Osos
Los Osos Valley
Montana de Oro State Park
Irish Hills
2160 ft
Camp San Obispo
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Morro Bay,City of Morro Bay
City of Morro Bay - (Morro Bay)
City of Morro Bay - (State Park basin)
Otto Property / South Bay ADC
San Luis Obispo County,San Luis Obispo County
San Luis Obispo County - (Morro Bay)
Sweet Springs Marsh ADC
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


22
Atascadero
2160 ft
41
Morro Rd
229
La Panza Rd
58
Santa Lucia Range
Santa Margarita
Salinas River
101
Camp San Luis Obispo
1
Salinas Reservoir
2859 ft
Los Osos Valley
San Luis Obispo
Lopez Canyon
227
2819 ft
Modesto
Livermore
N
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
23
24
Santa Maria
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
San Luis Obispo County,San Luis Obispo County
0
1.5
3
6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


23
Irish Hills
1814 ft
Avila Beach
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Pismo Beach
San Luis Obispo County, San Luis Obispo County
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]


24
1814 ft
2819 ft
Avila Beach
Pismo Beach
101
227
1
Grover Beach
Arroyo Grande
Newsom Ridge
Los Berros Creek
Oceano
Los Berros Rd
Nipomo Mesa
Nipomo Valley
101
Guadalupe
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
City of Grover Beach
City of Pismo Beach
County of Santa Barbara,County of Santa Barbara
San Luis Obispo County,San Luis Obispo County
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 34]

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APPENDIX E: COMPLETE SAMNA SPECIES RESULTS

Complete terrestrial species SAMNA results for the GAI are provided in Table E-1 and Table E-2. Table E-1 consists of SAMNA results for the Central California Coast Section within the GAI (starts on page 3). Table E-2 consists of the SAMNA results for the Central California[1] Coast Ranges Section within the GAI (starts on page 16). The tables list the species for which the SAMNA has enough and the right kind of information to forecast potential impacts from transportation projects conceptualized in long range transportation plans (Caltrans 2019). SAMNA results are only as accurate as their foundational data and have not been ground-truthed.

- Species without CWHR system-supplied home ranges but identified by the California Natural Diversity Data Base as potentially present will be incorporated into the analysis of specific advance mitigation projects and future transportation projects.
- Subspecies may or may not have CWHR-supplied or other document sources of home ranges. When a subspecies did not have home range information suitable for input into the SAMNA model, SAMNA results are provided at the species level which may include both special status and non-special status species and, hence, the number of species that have the potential to be affected may be overestimated.
- If impacts were estimated, additional information sources were consulted to determine whether special-status subspecies are located in the GAI, and the SAMNA results are usable for this analysis. Footnotes have been added to the tables where data input limitations and modeling assumptions resulted in identification of potential impacts to species or subspecies that are not present in the GAI.
- When no impacts are estimated for a specific habitat, for any species, the habitat was excluded from this Appendix.
- When no impacts for a species are estimated for any habitat, the species is included. Based on available information, it is potentially present in the GAI, but not in the habitats forecast to be impacted by transportation projects.

Total habitat impacts for each special-status species are indicated in the far-right column of each table. Total habitat impacts in the bottom row of each table indicate the total anticipated impacts for each habitat type and are not additive across all special-status species because each habitat type may provide suitable habitat for more than one special-status subspecies.

Habitats referenced in Table E-1 and Table E-2 are mapped in Appendix C. While California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylii*), tricolored blackbird (*Agelaius tricolor*), Central California Coast and South-Central California Coast Distinct Population

[1] The SAMNA Reporting Tool incorrectly labeled this section as the Central Valley Coast Ranges Section instead of the Central California Coast Ranges Section.

Segment steelhead (*Oncorhynchus mykiss*), and tidewater goby (*Eucyclogobius newberryi*) are the species of mitigation need identified for this GAI, several other special-status species share habitat with these species of mitigation need and may be affected by Caltrans future transportation projects. Advance mitigation planning will consider the special-status species that co-occur in habitats that may also benefit from advance mitigation project planning and scoping, in order to improve the conservation benefits of compensatory mitigation in the GAI. For example, advance mitigation established for California tiger salamander impacts may also provide mitigation to compensate for impacts on other species. The types of habitats for the species of mitigation need with the potential to be affected in the GAI, and the other special-status species that may share these habitats, were excerpted from Table E-1 and Table E-2 and are provided in Table 5-10 of the main text.

References

Caltrans. 2019. *Statewide Advance Mitigation Needs Assessment Report*. State Highway Operation and Protection Program. Ten-Year Project Book. Second Quarter 2017/2018 Fiscal Year. May. Sacramento, California.

Table E-1. Complete SAMNA Results for the Central California Coast Ecoregion Section in District 5, by Land Cover (results provided in acres)

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Plants	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
San Mateo thorn-mint	*Acanthomintha duttonii*	FE, SE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sonoma alopecurus[a]	*Alopecurus aequalis* var. *sonomensis*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.65	0.00
Franciscan manzanita[a]	*Arctostaphylos franciscana*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearsts' manzanita	*Arctostaphylos hookeri* ssp. *hearstiorum*	SE	56.70	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Bruno Mountain manzanita[a]	*Arctostaphylos imbricata*	SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Presidio manzanita[a]	*Arctostaphylos montana* ssp. *ravenii*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morro manzanita	*Arctostaphylos morroensis*	FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pacific manzanita[a]	*Arctostaphylos pacifica*	SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pallid manzanita[a]	*Arctostaphylos pallida*	FT, SE	0.00	0.00	0.00	0.00	0.00	0.03	0.00	8.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coastal dunes milk-vetch	*Astragalus tener* var. *titi*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sonoma sunshine[a]	*Blennosperma bakeri*	FE, SE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Point Reyes blennosperma[a]	*Blennosperma nanum* var. *robustum*	SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dwarf goldenstar	*Bloomeria humilis*	FS, SR	110.26	0.00	0.00	0.00	0.00	0.00	0.00	122.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tiburon mariposa lily[a]	*Calochortus tiburonensis*	FT, ST	56.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Benito evening-primrose[a]	*Camissonia benitensis*	FT	36.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tiburon paintbrush[a]	*Castilleja affinis* var. *neglecta*	FE, ST	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coyote ceanothus[a]	*Ceanothus ferrisiae*	FE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	8.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearsts' ceanothus	*Ceanothus hearstiorum*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maritime ceanothus	*Ceanothus maritimus*	SR	56.70	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mason's ceanothus[a]	*Ceanothus masonii*	SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Santa Lucia purple amole[a]	*Chlorogalum purpureum* var. *purpureum*	FT	20.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Camatta Canyon amole[a]	*Chlorogalum purpureum* var. *reductum*	FT, SR	20.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Soft bird's-beak[a]	*Chloropyron molle* ssp. *molle*	FE, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Ben Lomond spineflower	*Chorizanthe pungens* var. *hartwegiana*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monterey spineflower	*Chorizanthe pungens* var. *pungens*	FT	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scotts Valley spineflower	*Chorizanthe robusta* var. *hartwegii*	FE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Robust spineflower	*Chorizanthe robusta* var. *robusta*	FE, FS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sonoma spineflower[a]	*Chorizanthe valida*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crystal Springs fountain thistle	*Cirsium fontinale* var. *fontinale*	FE, SE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Luis Obispo fountain thistle	*Cirsium fontinale* var. *obispoense*	FE, SE	20.24	0.00	0.00	0.00	0.00	0.00	0.00	53.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Surf thistle	*Cirsium rhothophilum*	FS, ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
La Graciosa thistle	*Cirsium scariosum* var. *loncholepis*	FE, ST	56.70	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Presidio clarkia[a]	*Clarkia franciscana*	FE, SE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pismo clarkia	*Clarkia speciosa* ssp. *immaculata*	FE, SR	56.70	0.00	0.00	0.00	0.00	18.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mt. Diablo bird's-beak[a]	*Cordylanthus nidularius*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaside bird's-beak	*Cordylanthus rigidus* ssp. *littoralis*	FS, SE	0.00	0.00	0.00	0.00	0.00	18.39	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baker's larkspur[a]	*Delphinium bakeri*	FE, SE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Golden larkspur[a]	*Delphinium luteum*	FE, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vandenberg monkeyflower[a]	*Diplacus vandenbergensis*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beach spectaclepod	*Dithyrea maritima*	FS, ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Santa Clara Valley dudleya	*Dudleya abramsii* ssp. *setchellii*	FE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern mallow	*Eremalche parryi* ssp. *kernensis*	FE	36.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Knob mountainbalm	*Eriodictyon altissimum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lompoc yerba santa[a]	*Eriodictyon capitatum*	FE, SR	0.00	0.00	0.00	0.00	0.00	18.40	0.00	115.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Butterworth's buckwheat	*Eriogonum butterworthianum*	FS, SR	20.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Mateo woolly sunflower	*Eriophyllum latilobum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Menzies' wallflower	*Erysimum menziesii*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz wallflower	*Erysimum teretifolium*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roderick's fritillary	*Fritillaria roderickii*	SE	115.94	0.00	0.00	0.00	0.00	0.00	0.00	128.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monterey gilia	*Gilia tenuiflora* ssp. *arenaria*	FE, ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz cypress	*Hesperocyparis abramsiana* var. *abramsiana*	FT, SE	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Butano Ridge cypress	*Hesperocyparis abramsiana* var. *butanoensis*	FT, SE	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	22.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gowen cypress	*Hesperocyparis goveniana*	FT	0.00	0.00	0.00	0.00	0.00	18.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marin western flax	*Hesperolinon congestum*	FT, ST[1]	67.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz tarplant	*Holocarpha macradenia*	FT, SE	56.70	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contra Costa goldfields	*Lasthenia conjugens*	FE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beach layia	*Layia carnosa*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coast yellow leptosiphon	*Leptosiphon croceus*	SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Francisco lessingia	*Lessingia germanorum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Point Reyes meadow-foam	*Limnanthes douglasii* ssp. *sulphurea*	SE	56.70	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nipomo Mesa lupine	*Lupinus nipomensis*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tidestrom's lupine	*Lupinus tidestromii*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Spreading navarretia[a]	*Navarretia fossalis*	FT	20.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dudley's lousewort	*Pedicularis dudleyi*	FS, SR	85.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.94	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White-rayed pentachaeta	*Pentachaeta bellidiflora*	FE, SE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yadon's rein orchid	*Piperia yadonii*	FE	0.00	0.00	0.00	0.00	0.00	18.39	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Francisco popcornflower	*Plagiobothrys diffusus*	SE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Lucia mint	*Pogogyne clareana*	SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scotts Valley polygonum	*Polygonum hickmanii*	FE, SE	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hickman's cinquefoil	*Potentilla hickmanii*	FE, SE	0.00	0.00	0.00	0.00	0.00	18.39	0.00	100.16	0.00	0.00	0.00	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adobe sanicle	*Sanicula maritima*	FS, SR[1]	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rock sanicle[a]	*Sanicula saxatilis*	FS, SR	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuesta Pass checkerbloom	*Sidalcea hickmanii* ssp. *anomala*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parish's checkerbloom[a]	*Sidalcea hickmanii* ssp. *parishii*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.36	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Metcalf Canyon jewelflower	*Streptanthus albidus* ssp. *albidus*	FE, FS	11.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tiburon jewelflower[a]	*Streptanthus glandulosus* ssp. *niger*	FE, SE	56.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California seablite	*Suaeda californica*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Two-fork clover	*Trifolium amoenum*	FE	67.17	0.00	0.00	0.00	0.00	0.00	0.00	108.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pacific Grove clover	*Trifolium polyodon*	FS, SR	56.70	0.00	0.00	0.00	0.00	18.39	0.00	100.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monterey clover	*Trifolium trichocalyx*	FE, SE	0.00	0.00	0.00	0.00	0.00	18.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Invertebrates	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	6.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ohlone tiger beetle	*Cicindela ohlone*	FE	1.99	0.00	0.00	0.00	0.00	0.00	0.00	9.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Smith's blue butterfly	*Euphilotes enoptes smithi*	FE	0.00	3.04	0.00	0.00	0.00	0.00	0.00	95.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mount Hermon (barbate) June beetle	*Polyphylla barbata*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zayante band-winged grasshopper	*Trimerotropis infantilis*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Amphibians	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
California tiger salamander	*Ambystoma californiense*	FE, ST	104.47	0.00	1.22	0.23	0.00	0.00	29.33	0.00	0.00	0.00	8.68	3.77	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	12.06	0.00
Long-toed salamander	*Ambystoma macrodactylum*	None	0.00	0.00	0.00	0.00	0.00	0.00	14.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	6.07	0.00
Santa Cruz long-toed salamander	*Ambystoma macrodactylum croceum*	FE, SE, SFP	0.00	0.00	0.00	0.00	0.00	0.00	14.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	6.07	0.00
Ensatina[b]	*Ensatina eschscholtzii*	FS	0.00	0.00	2.42	0.23	0.00	18.11	35.15	119.93	0.00	0.00	4.53	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.00	42.42	0.00	0.00	0.00	10.73	0.00
Foothill yellow-legged frog	*Rana boylii*	FS, SE, SSC[c]	17.82	0.00	2.42	0.23	0.70	10.51	18.05	108.81	0.00	0.00	2.51	0.00	0.00	0.00	0.00	0.00	3.94	0.36	24.30	0.00	0.00	42.42	0.00	0.00	0.00	4.11	0.00
California red-legged frog	*Rana draytonii*	FT, SSC	115.94	0.00	2.42	0.23	0.00	18.43	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.04	0.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.00	0.00	12.53	0.00
Western spadefoot	*Spea hammondii*	FS, SSC	101.70	0.00	1.34	0.00	0.00	0.00	14.39	17.65	0.04	0.00	5.93	0.00	4.95	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.06	0.00	0.00	0.00	0.01
California newt	*Taricha torosa*	SSC	13.44	0.00	1.29	0.18	0.00	0.00	14.15	109.76	0.00	0.00	2.69	3.77	0.00	0.00	0.00	0.00	3.94	0.00	24.49	0.00	0.00	0.00	0.00	0.00	0.00	2.09	0.00
Reptiles	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
California legless lizard	*Anniella pulchra*	FS, SSC	0.00	0.00	2.42	0.21	0.09	0.00	29.78	113.17	0.00	0.00	8.60	0.00	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	12.09	0.00
Northern rubber boa	*Charina bottae*	None	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.06	0.00	0.00	38.12	0.00	0.00	0.00	1.32	0.00
Coachwhip	*Masticophis flagellum*	SSC[c]	18.47	0.00	0.00	0.00	0.00	0.00	0.00	4.90	0.00	0.00	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09	0.00	0.00	0.00	0.00	0.00	1.89	0.00
Striped racer[d]	*Masticophis lateralis*	FT, ST[c]	0.00	0.00	2.42	0.23	0.70	0.00	13.27	105.24	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00	3.94	0.36	24.77	0.00	0.00	0.00	0.00	0.00	0.00	2.36	0.00
Ring-necked snake[e]	*Diadophis punctatus*	FS[c]	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.00	0.00	3.94	0.36	25.52	31.20	0.50	0.00	0.00	0.00	821.82	12.53	0.00
California mountain kingsnake[f]	*Lampropeltis zonata*	FS[c]	10.25	0.00	0.00	0.00	0.00	15.18	9.89	0.00	0.00	0.00	2.47	0.00	0.00	0.00	0.00	0.00	3.90	0.36	24.77	0.00	0.00	40.89	0.00	0.00	0.00	2.14	0.00
Blainville's horned lizard	*Phrynosoma blainvillii*	FS, SSC	113.61	0.00	2.42	0.21	0.70	17.74	34.34	115.42	0.00	0.03	8.68	0.00	4.97	0.00	0.00	0.00	3.94	0.00	24.29	0.00	0.50	0.00	0.00	0.00	0.00	12.28	0.01
Gophersnake	*Pituophis catenifer*	None	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	821.82	12.53	0.01
Western skink[g]	*Plestiodon skiltonianus*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	0.00	4.97	0.00	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	0.00	12.53	0.01
Western patch-nosed snake[h]	*Salvadora hexalepis*	SSC	6.58	11.23	0.87	0.00	0.00	0.00	1.80	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common sagebrush lizard[i]	*Sceloporus graciosus*	FS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	3.87	0.36	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two-striped gartersnake	*Thamnophis hammondii*	FS, SSC	109.23	0.00	2.42	0.21	0.09	17.71	29.78	113.17	0.00	0.00	8.60	3.77	0.00	0.00	0.04	0.00	3.91	0.36	2.46	0.00	0.00	0.00	0.06	0.00	0.00	12.09	0.00
Common gartersnake	*Thamnophis sirtalis*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.04	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	0.00	12.53	0.01

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Desert night lizard	*Xantusia vigilis*	FS, SSC	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birds	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Red-winged blackbird[j]	*Agelaius phoeniceus*	SSC	115.94	0.00	0.00	0.00	0.00	0.00	0.00	128.32	0.04	0.00	8.74	3.77	4.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.01	821.82	12.53	0.00
Tricolored blackbird	*Agelaius tricolor*	FS, ST, SSC	115.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	6.84	0.18	4.97	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	818.83	12.11	0.00
Rufous-crowned sparrow[k]	*Aimophila ruficeps*	SSC	115.94	0.00	0.00	0.23	0.70	0.00	0.00	128.32	0.00	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	12.53	0.00
Grasshopper sparrow	*Ammodramus savannarum*	SSC	57.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Golden eagle	*Aquila chrysaetos*	FS, SFP, SFS[c]	115.94	76.59	2.42	0.23	0.70	0.00	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	821.82	12.53	0.00
Great egret	*Ardea alba*	SFS[c]	115.94	0.00	2.42	0.23	0.00	18.43	35.40	0.00	0.00	0.03	8.74	3.77	4.97	0.22	0.04	0.00	0.00	0.00	25.52	0.00	0.50	42.42	0.06	0.01	821.82	12.53	0.01
Great blue heron	*Ardea herodias*	SFS[c]	115.94	0.00	2.42	0.23	0.00	18.43	35.40	128.32	0.00	0.03	8.74	3.77	4.97	0.22	0.04	1.00	0.00	0.36	25.52	0.00	0.50	42.42	0.06	0.01	821.82	12.53	0.00
Bell's sparrow[l]	*Artemisiospiza belli*	FT, SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short-eared owl	*Asio flammeus*	SSC	22.99	0.00	1.51	0.23	0.09	0.00	18.66	113.75	0.00	0.00	2.77	3.77	2.91	0.22	0.00	0.00	3.91	0.00	2.95	0.00	0.24	4.99	0.00	0.01	335.91	3.99	0.00
Long-eared owl	*Asio otus*	SSC	115.94	0.00	2.42	0.23	0.70	0.00	35.40	0.00	0.00	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	31.20	0.50	0.00	0.00	0.00	0.00	12.53	0.00
Burrowing owl	*Athene cunicularia*	FS, SSC	112.15	73.96	2.42	0.23	0.09	0.00	28.56	94.38	0.00	0.00	7.81	0.00	0.00	0.00	0.00	0.00	3.88	0.00	0.00	31.20	0.50	0.00	0.00	0.00	803.10	12.17	0.00
Redhead	*Aythya americana*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marbled murrelet	*Brachyramphus marmoratus*	FT, SE, SFS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barrow's goldeneye	*Bucephala islandica*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
California quail[m]	*Callipepla californica*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	0.00	0.00	0.22	0.00	0.00	3.94	0.36	25.52	0.00	0.50	42.42	0.00	0.00	821.82	12.53	0.01
Vaux's swift	*Chaetura vauxi*	SSC	0.00	0.00	0.00	0.00	0.00	5.03	13.94	0.00	0.00	0.00	2.15	3.59	0.00	0.00	0.00	0.00	3.90	0.36	24.30	0.00	0.00	42.42	0.00	0.00	168.95	2.85	0.00
Snowy plover	*Charadrius alexandrinus rivosus*	FT, SSC	0.00	59.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern harrier	*Circus hudsonius*	SSC	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	0.00	0.22	0.04	1.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.01	821.82	12.53	0.01
Marsh wren[n]	*Cistothorus palustris*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	10.30	0.00
Olive-sided flycatcher	*Contopus cooperi*	SSC	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	4.35	0.00	0.00	0.00	0.00	0.00	3.90	0.36	25.44	0.00	0.00	42.42	0.00	0.00	0.00	0.00	0.00
Black swift	*Cypseloides niger*	SSC	6.75	3.42	0.47	0.07	0.00	5.18	3.77	0.00	0.00	0.00	1.97	0.00	0.00	0.00	0.00	0.92	3.90	0.36	11.84	0.00	0.00	25.79	0.00	0.00	107.91	1.60	0.00
White-tailed kite	*Elanus leucurus*	FS, SFP	115.94	76.59	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.00	0.00	3.94	0.00	0.00	0.00	0.50	42.42	0.00	0.01	821.82	12.53	0.01
Peregrine falcon	*Falco peregrinus*	SFP SFS	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.22	0.04	1.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.01	821.82	12.53	0.00
Tufted puffin	*Fratercula cirrhata*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common loon[o]	*Gavia immer*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Common yellowthroat[p]	*Geothlypis trichas*	SSC	115.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.74	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.01	0.00	12.53	0.00
Bald eagle	*Haliaeetus leucocephalus*	FS, SE, SFP, SFS	115.94	76.59	2.42	0.23	0.70	0.00	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.04	1.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.01	0.00	12.53	0.00
Harlequin duck	*Histrionicus histrionicus*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yellow-breasted chat	*Icteria virens*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58	0.00
Loggerhead shrike	*Lanius ludovicianus*	SSC	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.50	0.00	0.00	0.00	821.82	12.53	0.01
Song sparrow[q]	*Melospiza melodia*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	3.77	0.00	0.22	0.04	1.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.01	821.82	12.53	0.00
Fork-tailed storm-petrel[r]	*Oceanodroma furcata*	FS, SSC	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ashy storm-petrel	*Oceanodroma homochroa*	FS, SSC	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Black storm-petrel[s]	*Oceanodroma melania*	SSC	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Osprey	*Pandion haliaetus*	FS, SFS	115.94	76.59	2.42	0.23	0.00	18.43	35.40	0.00	0.00	0.00	8.74	3.77	0.00	0.22	0.04	1.00	3.94	0.36	25.52	0.00	0.50	42.42	0.06	0.01	0.00	12.53	0.00
Savannah sparrow[t]	*Passerculus sandwichensis*	SSC	115.94	0.00	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.03	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	31.20	0.50	0.00	0.00	0.01	0.00	12.53	0.01
Bryant's savannah sparrow	*Passerculus sandwichensis alaudinus*	SSC	115.28	0.00	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.03	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	31.20	0.50	0.00	0.00	0.01	0.00	12.53	0.01
American white pelican	*Pelecanus erythrorhynchos*	SSC	0.00	74.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Brown pelican	*Pelecanus occidentalis*	FS, SFP	0.95	1.27	0.00	0.00	0.00	0.00	0.00	16.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California towhee[u]	*Melozone crissalis*	FT, SE	0.00	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.00	0.00	0.00	0.00	821.82	12.53	0.00
Spotted towhee[v]	*Pipilo maculatus*	SSC	0.00	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.00	42.42	0.00	0.00	821.82	12.53	0.00
Vesper sparrow[w]	*Pooecetes gramineus*	None	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purple martin	*Progne subis*	SSC	14.19	0.00	1.69	0.18	0.00	15.18	12.24	0.00	0.00	0.00	2.47	3.77	0.00	0.00	0.00	0.00	0.00	0.36	24.77	0.00	0.00	40.89	0.00	0.00	269.24	2.14	0.00
Cassin's auklet	*Ptychoramphus aleuticus*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Clapper rail	*Rallus longirostris*	None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California Ridgway's rail[c]	*Rallus obsoletus obsoletus*[c]	FE, SE, SFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bank swallow	*Riparia riparia*	FS, ST	26.29	10.62	0.00	0.00	0.00	0.00	0.00	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	216.27	2.34	0.00
Yellow warbler	*Setophaga petechia*	SSC	0.00	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.00	42.42	0.00	0.00	821.82	12.53	0.00
Least tern	*Sternula antillarum*	FE, SE, SFP	0.00	28.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Spotted owl	*Strix occidentalis*	None	0.00	0.00	0.00	0.02	0.00	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.02	0.00	0.00	2.77	0.00	0.00	0.00	0.37	0.00
California spotted owl	*Strix occidentalis occidentalis*	FS, SSC	0.00	0.00	0.00	0.02	0.00	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.02	0.00	0.00	2.77	0.00	0.00	0.00	0.37	0.00
Bewick's wren	*Thryomanes bewickii*	SSC	0.00	0.00	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.00	8.74	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	0.00	0.00	42.42	0.00	0.00	821.82	12.53	0.00
Hutton's vireo[x]	*Vireo huttoni*	SSC	0.00	0.00	2.42	0.23	0.70	17.85	32.07	114.56	0.04	0.00	8.61	0.00	0.00	0.00	0.00	0.00	3.94	0.36	24.33	0.00	0.00	42.06	0.00	0.00	806.47	10.09	0.00
Mammals	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Pallid bat	*Antrozous pallidus*	FS, SSC	115.94	76.59	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	821.82	12.53	0.01
Guadalupe fur-seal	*Arctocephalus townsendi*	FT, ST, SFP	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ringtail	*Bassariscus astutus*	SFP	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.00	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	0.00	12.53	0.01
Northern fur-seal	*Callorhinus ursinus*	None	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California pocket mouse	*Chaetodipus californicus*	SSC	113.80	0.00	2.42	0.23	0.70	0.00	35.26	119.28	0.00	0.00	8.68	0.00	0.00	0.00	0.00	0.00	3.94	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Townsend's big-eared bat	*Corynorhinus townsendii*	FS, SSC	115.94	76.59	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.00	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	821.82	12.53	0.01
Heermann's kangaroo rat	*Dipodomys heermanni*	None	108.77	0.00	1.64	0.05	0.00	0.00	29.65	29.24	0.00	0.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.20	0.50	0.00	0.00	0.00	0.00	0.00	0.00
Narrow-faced kangaroo rat	*Dipodomys venustus*	None	21.15	0.00	0.78	0.18	0.61	4.47	24.63	97.18	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	0.89	0.00	42.39	0.00	0.00	0.00	0.00	0.00
Big-eared kangaroo rat	*Dipodomys venustus elephantinus*	SSC	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz kangaroo rat	*Dipodomys venustus venustus*	None	21.15	0.00	0.78	0.18	0.61	4.47	24.63	97.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.94	0.00	0.00	0.89	0.00	42.39	0.00	0.00	0.00	0.00	0.00
Sea otter	*Enhydra lutris*	FT, SFP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northern (steller) sea-lion	*Eumetopias jubatus*	None	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Western mastiff bat	*Eumops perotis*	FS, SSC	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	0.00	0.00	0.00	821.82	12.53	0.01
Western red bat	*Lasiurus blossevillii*	SSC	115.94	0.00	2.42	0.23	0.70	0.00	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.04	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	821.82	12.53	0.00
Black-tailed jackrabbit[y]	*Lepus californicus*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	821.82	12.53	0.01
Northern river otter[z]	*Lontra canadensis*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.60	0.00
California vole[aa]	*Microtus californicus*	FE, SE	115.94	0.00	2.42	0.23	0.00	0.00	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.01	821.82	12.53	0.01
Northern elephant seal	*Mirounga angustirostris*	SFP	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small-footed myotis	*Myotis ciliolabrum*	FS	103.88	75.21	2.42	0.23	0.09	0.00	21.12	108.03	0.04	0.03	8.48	3.77	4.97	0.22	0.04	0.00	3.91	0.36	2.24	30.33	0.50	0.00	0.06	0.00	664.29	9.16	0.01
Long-eared myotis	*Myotis evotis*	FS	0.00	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.04	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	0.00	12.53	0.01
Fringed myotis	*Myotis thysanodes*	FS	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.00	0.03	8.74	0.00	4.97	0.22	0.04	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	821.82	12.53	0.00

Common Name	Scientific Name	Status	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise - Redshank Chaparral	Closed-Cone Pine-Cypress	Coastal Oak Woodland	Coastal Scrub	Deciduous Orchard	Dryland Grain Crops	Eucalyptus	Fresh Emergent Wetland	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Marine	Mixed Chaparral	Montane Hardwood	Montane Hardwood-Conifer	Pasture	Perennial Grassland	Redwood	Riverine	Saline Emergent Wetland	Urban	Valley Foothill Riparian	Vineyard
Yuma myotis	*Myotis yumanensis*	FS	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.04	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.06	0.00	821.82	12.53	0.01
Dusky-footed woodrat	*Neotoma fuscipes*	SSC	0.00	0.00	0.04	0.00	0.61	0.60	14.29	20.69	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.03	0.00	23.28	0.00	0.00	39.65	0.00	0.00	0.00	2.79	0.00
Desert woodrat[bb]	*Neotoma lepida*	SSC	0.00	0.00	0.00	0.23	0.09	0.00	0.00	89.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91	0.36	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Big-eared woodrat	*Neotoma macrotis*	SSC	0.00	0.00	2.42	0.23	0.09	17.83	21.12	108.31	0.00	0.00	8.48	0.00	0.00	0.00	0.00	0.00	3.91	0.36	2.24	0.00	0.50	0.00	0.00	0.00	0.00	9.74	0.00
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Joaquin pocket mouse	*Perognathus inornatus*	FS	48.73	16.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.46	0.26	0.00	0.00	0.00	0.00	0.00	0.00
Deer mouse[cc]	*Peromyscus maniculatus*	SSC	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	3.77	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.01	821.82	12.53	0.01
Harbor seal	*Phoca vitulina*	None	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mountain lion[dd]	*Puma concolor*	SC	45.08	0.00	2.42	0.23	0.70	18.11	35.15	119.93	0.04	0.00	4.53	0.00	0.00	0.00	0.00	0.00	3.94	0.36	25.52	22.55	0.24	42.42	0.00	0.00	0.00	10.73	0.01
Broad-footed mole[ee]	*Scapanus latimanus*	SSC	115.94	0.00	2.42	0.23	0.00	0.00	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	0.00	0.36	25.52	31.20	0.50	42.42	0.00	0.00	0.00	12.53	0.01
Ornate shrew	*Sorex ornatus*	SSC	115.94	0.00	2.42	0.23	0.00	0.00	35.40	128.32	0.00	0.00	8.74	3.77	0.00	0.00	0.00	0.00	3.94	0.00	25.52	0.00	0.50	0.00	0.00	0.01	0.00	12.53	0.00
Vagrant shrew[ff]	*Sorex vagrans*	SSC	13.41	0.00	0.00	0.00	0.00	0.00	16.23	26.36	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.03	0.00	10.74	0.00	0.00	15.60	0.00	0.01	0.00	3.43	0.00
Western spotted skunk[gg]	*Spilogale gracilis*	SSC	115.94	0.00	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	821.82	12.53	0.01
Brush rabbit	*Sylvilagus bachmani*	FE, SE	115.94	0.00	2.42	0.23	0.70	0.00	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	821.82	12.53	0.01
American badger	*Taxidea taxus*	SSC	115.94	76.59	2.42	0.23	0.70	18.43	35.40	128.32	0.04	0.03	8.74	0.00	4.97	0.22	0.00	0.00	3.94	0.36	25.52	31.20	0.50	42.42	0.00	0.00	0.00	12.53	0.01
Kit fox[hh]	*Vulpes macrotis*	None	27.05	11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.89	0.00	0.00	0.00	0.00	0.00	1.76	0.00
San Joaquin kit fox	*Vulpes macrotis mutica*	FE, ST	27.05	11.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.89	0.00	0.00	0.00	0.00	0.00	1.76	0.00
Red fox	*Vulpes vulpes*	None	42.46	6.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	0.00	2.03	0.00	0.00	0.00	0.00	0.00	0.24	3.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California sea-lion	*Zalophus californianus*	None	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Not applicable	Not applicable	**Total**	**115.94**	**76.59**	**2.42**	**0.23**	**0.70**	**18.43**	**35.40**	**128.32**	**0.04**	**0.03**	**8.74**	**3.77**	**4.97**	**0.22**	**0.04**	**1.00**	**3.94**	**0.36**	**25.52**	**31.20**	**0.50**	**42.42**	**0.06**	**0.01**	**821.82**	**12.53**	**0.01**

Notes: FE = federally endangered, FPT = federal proposed threatened, FS = federal sensitive (USFS and/or BLM sensitive), FT = federally threatened, SC = state candidate, SCE = state candidate endangered, SCT = state candidate threatened, SE = state endangered, SFP = state fully protected, SFS = state fire sensitive, SR = state rare, SSC = species of special concern (CDFW), ST= state threatened

[a] This plant species does not occur in the Central California Coast Ecoregion Section.
[b] Ensatina. Only the yellow-blotched and large-blotched subspecies are species status, and they do not occur in the GAI.
[c] Latin name or regulatory status has changed since August 20, 2019, when the SAMNA model was run (Caltrans 2019).
[d] Striped racer. Only the Alameda subspecies is special status, and it does not occur in the GAI (East Bay).
[e] Ring-necked snake. Only the San Bernardino and regal subspecies are special status, and they do not occur in the GAI.
[f] California [Coast] mountain kingsnake. Updated taxonomy and added status (California mountain kingsnake has been split from coast mountain kingsnake, California has no special status, coast is currently listed as BLM and USFS sensitive).
[g] Western skink. Only the Coronado subspecies is special status, and it does not occur in the GAI (San Diego County south).
[h] Western patch-nosed snake. Only the coast patch-nosed subspecies is special status, and it does not occur in the GAI.
[i] Common sagebrush lizard. Only the northern subspecies is special status, and it does not occur in the GAI.
[j] Red-winged blackbird. Only the Kern subspecies is special status, and it does not occur in the GAI (restricted to Lake Isabella and Walker Basin).
[k] Rufous-crowned sparrow. Only the SoCal and Santa Cruz Island subspecies are special status, and they do not occur in the GAI.
[l] Bell's sparrow. Only the San Clemente subspecies is special status, and it does not occur in the GAI.
[m] California quail. Only the Catalina subspecies is special status, and it does not occur in the GAI.
[n] Marsh wren. Only the Clark's subspecies is special status, and it does not occur in the GAI.
[o] Common loon. This species is only considered special status when nesting and it does not nest in the GAI.

[p] Common yellowthroat. Only the San Francisco/Saltmarsh subspecies is special status, and it does not occur in the GAI.
[q] Song sparrow. There are five special-status subspecies of song sparrow, none of which occur in the GAI.
[r] Fork-tailed storm-petrel. Species is special status while nesting and it does not nest in the GAI.
[s] Black storm-petrel. Species is special status while nesting and it does not nest in the GAI.
[t] Savannah sparrow. Two special-status subspecies of savannah sparrow occur in the GAI, Bryant's (addressed in separate row) and large-billed.
[u] California towhee. Only the Inyo subspecies is special status, and it does not occur in the GAI.
[v] Spotted towhee. Only the San Clemente subspecies is special status, and it does not occur in the GAI.
[w] Vesper sparrow and Oregon vesper sparrow estimates may refer to the same population and subspecies.
[x] Hutton's vireo. Only the Catalina subspecies is special status, and it does not occur in the GAI.
[y] Black-tailed jackrabbit. Only the San Diego subspecies is special status, and it does not occur in the GAI.
[z] Northern river otter. Only the southwestern subspecies is special status, and it does not occur in the GAI.
[aa] California vole. There are five special-status subspecies of California vole, none of which occur in the GAI (Bay Area, Los Angeles, Mohave River, and two in the Death Valley region). A sixth subspecies that occurs in Monterey is not special status.
[bb] Desert woodrat. Only the San Diego subspecies is special status, and it does not occur in the GAI.
[cc] Deer mouse. Only the Channel Islands subspecies are special status, and they do not occur in the GAI.
[dd] Mountain lion. On April 21, 2020, the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of mountain lion was listed as a candidate species under the California Endangered Species Act. This ESU would include the GAI.
[ee] Broad-footed mole. There are two special-status subspecies of broad-footed mole, neither of which occur in the GAI (Alameda Island and Angel Island only).
[ff] Vagrant shrew. Only the salt-marsh wandering subspecies is special status, and it does not occur in the GAI.
[gg] Western spotted skunk. Only the Channel Islands subspecies is special status, and it does not occur in the GAI (only along Stanislaus River).
[hh] Kit fox and San Joaquin kit fox estimates may refer to the same population and subspecies.

Table E-2. Complete SAMNA Results for the Central California Coast Ranges Ecoregion Section in District 5, by Land Cover (acres)

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Plants	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
San Mateo thorn-mint[a]	*Acanthomintha duttonii*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sonoma sunshine[a]	*Blennosperma bakeri*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dwarf goldenstar[a]	*Bloomeria humilis*	FS, SR	0.00	70.24	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Benito evening-primrose	*Camissonia benitensis*	FT	0.00	39.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tiburon paintbrush[a]	*Castilleja affinis* var. *neglecta*	FE, ST	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Succulent owl's-clover[a]	*Castilleja campestris* var. *succulenta*	FT, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California jewelflower	*Caulanthus californicus*	FE, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coyote ceanothus	*Ceanothus ferrisiae*	FE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Lucia purple amole	*Chlorogalum purpureum* var. *purpureum*	FT	0.00	32.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Camatta Canyon amole[a]	*Chlorogalum purpureum* var. *reductum*	FT, SR	0.00	32.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Palmate-bracted bird's-beak[a]	*Chloropyron palmatum*	FE, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monterey spineflower	*Chorizanthe pungens* var. *pungens*	FT	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Scotts Valley spineflower[a]	*Chorizanthe robusta* var. *hartwegii*	FE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crystal Springs fountain thistle[a]	*Cirsium fontinale* var. *fontinale*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Luis Obispo fountain thistle	*Cirsium fontinale* var. *obispoense*	FE, SE	0.00	32.91	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Presidio clarkia[a]	*Clarkia franciscana*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baker's larkspur[a]	*Delphinium bakeri*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vandenberg monkeyflower[a]	*Diplacus vandenbergensis*	FE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Santa Clara Valley dudleya	*Dudleya abramsii* ssp. *setchellii*	FE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Kern mallow	*Eremalche parryi* ssp. *kernensis*	FE	0.00	40.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Knob mountainbalm[a]	*Eriodictyon altissimum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Lompoc yerba santa[a]	*Eriodictyon capitatum*	FE, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Butterworth's buckwheat[a]	*Eriogonum butter-worthianum*	FS, SR	0.00	32.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contra Costa wallflower[a]	*Erysimum capitatum* var. *angustatum*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hoover's spurge[a]	*Euphorbia hooveri*	FT	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roderick's fritillary[a]	*Fritillaria roderickii*	SE	0.00	70.27	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boggs Lake hedge-hyssop[a]	*Gratiola heterosepala*	FS, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marin western flax[a]	*Hesperolinon congestum*	FT, ST[b]	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contra Costa goldfields	*Lasthenia conjugens*	FE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Joaquin woollythreads	*Monolopia congdonii*	FE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spreading navarretia	*Navarretia fossalis*	FT	0.00	32.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colusa grass[a]	*Neostapfia colusana*	FT, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield cactus[a]	*Opuntia basilaris* var. *treleasei*	FE, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Joaquin Valley Orcutt grass[a]	*Orcuttia inaequalis*	FT, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hairy Orcutt grass[a]	*Orcuttia pilosa*	FE, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dudley's lousewort[a]	*Pedicularis dudleyi*	FS, SR	0.00	36.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
White-rayed pentachaeta	*Pentachaeta bellidiflora*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Francisco popcornflower	*Plagiobothrys diffusus*	SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Lucia mint	*Pogogyne clareana*	SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Scotts Valley polygonum[a]	*Polygonum hickmanii*	FE, SE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Joaquin adobe sunburst[a]	*Pseudobahia peirsonii*	FT, SE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Adobe sanicle[a]	*Sanicula maritima*	FS, SR	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rock sanicle	*Sanicula saxatilis*	FS, SR	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuesta Pass checkerbloom	*Sidalcea hickmanii* ssp. *anomala*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parish's checkerbloom	*Sidalcea hickmanii* ssp. *parishii*	FS, SR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Metcalf Canyon jewelflower	*Streptanthus albidus* ssp. *albidus*	FE, FS	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two-fork clover[a]	*Trifolium amoenum*	FE	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greene's tuctoria[a]	*Tuctoria greenei*	FE, SR	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Invertebrates	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Longhorn fairy shrimp	*Branchinecta longiantenna*	FE	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	0.00	15.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern primrose sphinx moth	*Euproserpinus euterpe*	FT	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amphibians	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
California tiger salamander	*Ambystoma californiense*	FE, FT, ST	0.00	70.31	0.00	5.36	0.65	0.00	1.17	0.00	0.00	0.26	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	1.70	0.24	0.00
Arroyo toad	*Anaxyrus californicus*	FE, SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
Ensatina[c]	*Ensatina eschscholtzii*	FS	0.00	0.00	0.00	3.32	0.50	0.00	1.11	1.84	0.00	0.26	0.00	0.00	0.00	0.22	0.02	0.00	0.00	0.00	1.07	0.00	0.00
Foothill yellow-legged frog	*Rana boylii*	FS, SE, SSC	0.00	16.88	0.00	2.16	0.24	0.90	0.64	1.32	0.00	0.00	0.00	0.00	0.00	0.12	0.02	0.00	0.00	0.00	1.17	0.03	0.00
California red-legged frog	*Rana draytonii*	FT, SSC	0.00	71.02	0.00	5.45	0.65	0.00	1.17	2.91	0.00	0.26	0.00	0.00	0.36	0.50	0.02	0.00	0.06	0.00	1.70	0.24	0.00
Western spadefoot	*Spea hammondii*	FS, SSC	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.00	0.36	0.50	0.00	0.00	0.06	0.00	0.00	0.24	4.32
California newt	*Taricha torosa*	SSC	0.00	13.75	0.00	0.88	0.21	0.00	0.22	0.41	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	1.09	0.03	0.00
Reptiles	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
California legless lizard	*Anniella pulchra*	FS, SSC	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	1.70	0.24	0.00
Coachwhip	*Masticophis flagellum*	SSC[b]	0.40	56.37	0.00	0.92	0.03	0.05	0.55	1.13	0.00	0.26	0.00	0.00	0.00	0.10	0.00	3.49	0.00	0.00	0.50	0.00	0.00
Striped racer[d]	*Masticophis lateralis*	FT, ST[b]	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	0.00	1.70	0.24	0.00

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Ring-necked snake[e]	*Diadophis punctatus*	FS[b]	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	0.00
Blunt-nosed leopard lizard	*Gambelia sila*	FE, SE, SFP	0.08	2.51	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California mountain kingsnake[f]	*Lampropeltis zonata*	FS[b]	0.00	3.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blainville's horned lizard	*Phrynosoma blainvillii*	FS, SSC	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.00	0.00	0.50	0.00	0.00	0.00	0.00	1.70	0.24	4.32
Gophersnake	*Pituophis catenifer*	None	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
Western skink[g]	*Plestiodon skiltonianus*	SSC	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.18	0.00	0.00	0.50	0.02	3.52	0.00	0.00	1.70	0.24	4.32
Western patch-nosed snake[h]	*Salvadora hexalepis*	SSC	0.00	4.45	0.00	1.22	0.00	0.47	0.38	0.79	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two-striped gartersnake	*Thamnophis hammondii*	FS, SSC	0.00	70.31	0.00	5.36	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.36	0.43	0.02	0.00	0.06	0.00	1.70	0.24	0.00
Common gartersnake	*Thamnophis sirtalis*	FE, SE, SFP	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.36	0.50	0.02	3.52	0.00	0.00	1.70	0.24	4.32
Desert night lizard	*Xantusia vigilis*	FS, SSC	0.00	4.14	0.00	0.66	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birds	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Red-winged blackbird[i]	*Agelaius phoeniceus*	SSC	0.00	71.02	0.00	0.00	0.00	0.00	0.00	2.91	0.00	0.26	0.18	0.00	0.00	0.00	0.00	0.00	0.00	84.70	1.70	0.00	0.00
Tricolored blackbird	*Agelaius tricolor*	FS, ST, SSC	0.00	71.02	0.00	0.00	0.00	0.00	0.00	0.00	5.84	0.26	0.18	0.07	0.00	0.00	0.00	0.00	0.00	84.70	1.70	0.00	0.00
Rufous-crowned sparrow[j]	*Aimophila ruficeps*	SSC	0.00	55.99	0.00	0.00	0.50	1.42	0.00	1.84	0.00	0.26	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	1.07	0.00	0.00
Grasshopper sparrow	*Ammodramus savannarum*	SSC	0.00	8.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Golden eagle	*Aquila chrysaetos*	FS, SFP, SFS	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	0.00
Great egret	*Ardea alba*	SFS	0.00	55.33	0.00	2.61	0.47	0.00	0.56	0.00	3.43	0.26	0.18	0.00	0.36	0.00	0.00	0.00	0.06	77.68	1.07	0.00	0.05
Great blue heron	*Ardea herodias*	SFS	0.00	71.02	0.00	5.45	0.65	0.00	1.17	2.91	5.84	0.26	0.18	0.07	0.36	0.00	0.02	0.00	0.06	84.70	1.70	0.24	0.00
Bell's sparrow[k]	*Artemisiospiza belli*	FT, SSC	1.18	0.00	0.00	0.00	0.00	1.60	0.00	2.85	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Short-eared owl	*Asio flammeus*	SSC	0.47	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Long-eared owl	*Asio otus*	SSC	71.02	0.00	5.45	0.65	1.66	1.17	0.00	0.00	0.26	0.00	0.00	0.00	0.50	0.02	3.52	0.00	0.00	1.70	0.24	0.00	71.02
Burrowing owl	*Athene cunicularia*	FS, SSC	71.02	1.79	5.36	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.43	0.00	3.52	0.00	84.70	1.70	0.24	0.00	71.02
Redhead	*Aythya americana*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California quail[l]	*Callipepla californica*	SSC	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.07	0.00	0.50	0.02	0.00	0.00	84.70	1.70	0.24	4.32	71.02

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Cactus wren[m]	*Campylorhynchus brunneicapillus*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
Mountain plover	*Charadrius montanus*	FS, SSC	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Western snowy plover	*Charadrius alexandrinus rivosus*	FT, SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.00	0.07	0.36	0.50	0.02	0.00	0.06	84.70	1.70	0.24	4.32
Northern harrier	*Elanus hudsonius*	SSC	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marsh wren[n]	*Cistothorus palustris*	SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.00	0.00	0.00	84.70	1.70	0.24	4.32
Olive-sided flycatcher	*Contopus cooperi*	SSC	0.00	71.02	1.79	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.07	0.36	0.50	0.02	0.00	0.06	84.70	1.70	0.24	0.00
White-tailed kite	*Elanus leucurus*	FS, SFP	0.00	71.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00
Peregrine falcon	*Falco peregrinus*	SFP, SFS	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common loon[o]	*Gavia immer*	SSC	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common yellowthroat[p]	*Geothlypis trichas*	SSC	0.00	4.14	0.00	1.32	0.04	0.12	0.38	0.96	0.02	0.00	0.00	0.00	0.36	0.31	0.00	0.00	0.00	0.00	0.00	0.21	0.00
Bald eagle	*Haliaeetus leucocephalus*	FS, SE, SFP, SFS	0.00	71.02	1.79	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.36	0.50	0.02	0.00	0.06	0.00	1.70	0.24	0.00
Yellow-breasted chat	*Icteria virens*	SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00
Loggerhead shrike	*Lanius ludovicianus*	SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	84.70	1.70	0.24	4.32
Song sparrow[q]	*Melospiza melodia*	SSC	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.07	0.36	0.50	0.02	0.00	0.06	84.70	1.70	0.24	0.00
Osprey	*Pandion haliaetus*	FS, SFS	0.00	55.45	1.41	3.30	0.50	0.00	0.56	0.00	0.00	0.26	0.00	0.00	0.36	0.22	0.02	0.00	0.06	0.00	1.07	0.00	0.00
Savannah sparrow[r]	*Passerculus sandwichensis*	SSC	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.00	0.00	0.00	0.50	0.00	3.52	0.00	0.00	1.70	0.24	4.32
Bryant's savannah sparrow	*Passerculus sandwichensis alaudinus*	SSC	0.00	4.21	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
American white pelican	*Pelecanus erythrorhynchos*	SSC	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
California towhee[s]	*Melozone crissalis*	FT, SE	0.00	0.00	0.00	5.34	0.65	1.66	1.17	2.81	0.00	0.26	0.00	0.00	0.00	0.43	0.02	0.00	0.00	84.70	1.70	0.24	0.00
Spotted towhee[t]	*Pipilo maculatus*	SSC	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	84.70	1.70	0.24	0.00
Vesper sparrow[u]	*Pooecetes gramineus*	None	0.00	4.61	0.00	1.13	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC	0.00	4.61	0.00	1.22	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.07	0.00
Purple martin	*Progne subis*	SSC	0.00	7.96	0.00	2.61	0.47	0.00	0.56	0.00	0.00	0.26	0.00	0.00	0.36	0.00	0.02	0.00	0.00	37.01	0.56	0.00	0.00
Black skimmer	*Rynchops niger*	SSC	0.00	27.54	0.71	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.70	0.00	0.00	0.00
Yellow warbler	*Setophaga petechia*	SSC	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	84.70	1.70	0.24	0.00

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Spotted owl	*Strix occidentalis*	None	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
California spotted owl	*Strix occidentalis occidentalis*	FS, SSC	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Bewick's wren	*Thryomanes bewickii*	SSC	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	84.70	1.70	0.24	0.00
Bell's vireo	*Vireo bellii*	None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00
Least Bell's vireo	*Vireo bellii pusillus*	FE, SE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00
Least tern	*Sternula antillarum*	FE, SE, SFP	0.00	0.00	28.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hutton's vireo[v]	*Vireo huttoni*	SSC	0.00	0.00	0.00	3.84	0.60	1.37	1.17	2.34	0.00	0.26	0.00	0.00	0.00	0.17	0.02	0.00	0.00	84.34	1.70	0.03	0.00
Mammals	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below	See below
Nelson's antelope ground squirrel	*Ammospermophilus nelsoni*	FS, ST	0.08	2.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Pallid bat	*Antrozous pallidus*	FS, SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.06	84.70	1.70	0.24	4.32
Ringtail	*Bassariscus astutus*	SFP	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	0.00	1.70	0.24	4.32
California pocket mouse	*Chaetodipus californicus*	SSC	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	0.00	0.00	0.24	0.00
Townsend's big-eared bat	*Corynorhinus townsendii*	FS, SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.06	84.70	1.70	0.24	4.32
Heermann's kangaroo rat	*Dipodomys heermanni*	None	1.18	71.02	0.00	5.45	0.65	0.00	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	3.52	0.00	0.00	0.00	0.24	0.00
Giant kangaroo rat	*Dipodomys ingens*	FE, SE	1.18	18.69	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno kangaroo rat	*Dipodomys nitratoides*	FE, SE	0.08	0.50	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Narrow-faced kangaroo rat	*Dipodomys venustus*	None	0.00	8.04	0.00	2.41	0.50	1.06	0.70	0.02	3.52	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Big-eared kangaroo rat	*Dipodomys venustus elephantinus*	SSC	0.00	1.90	0.00	0.72	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz kangaroo rat	*Dipodomys venustus venustus*	None	0.00	7.69	0.00	1.69	0.47	1.06	0.70	0.02	3.52	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Western mastiff bat	*Eumops perotis*	FS, SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
Western red bat	*Lasiurus blossevillii*	SSC	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.36	0.50	0.02	3.52	0.06	84.70	1.70	0.24	0.00
Black-tailed jackrabbit[w]	*Lepus californicus*	SSC	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
California vole[x]	*Microtus californicus*	None	1.18	71.02	0.00	5.45	0.65	0.00	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
Small-footed myotis	*Myotis ciliolabrum*	FS	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.36	0.50	0.02	3.52	0.06	84.70	1.70	0.24	4.32

Common Name	Scientific Name	Status	Alkali Desert Scrub	Annual Grassland	Barren	Blue Oak Woodland	Blue Oak-Foothill Pine	Chamise-Redshank Chaparral	Coastal Oak Woodland	Coastal Scrub	Dryland Grain Crops	Eucalyptus	Irrigated Row and Field Crops	Irrigated Grain Crops	Lacustrine	Mixed Chaparral	Montane Hardwood	Pasture	Riverine	Urban	Valley Foothill Riparian	Valley Oak Woodland	Vineyard
Long-eared myotis	*Myotis evotis*	FS	1.10	0.00	1.79	5.34	0.65	1.66	1.17	2.81	5.82	0.26	0.18	0.07	0.36	0.43	0.02	3.52	0.06	0.00	1.70	0.24	4.32
Fringed myotis	*Myotis thysanodes*	FS	0.00	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.36	0.50	0.02	3.52	0.06	84.70	1.70	0.24	0.00
Yuma myotis	*Myotis yumanensis*	FS	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.36	0.50	0.02	3.52	0.06	84.70	1.70	0.24	4.32
Dusky-footed woodrat	*Neotoma fuscipes*	SSC	0.00	0.00	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	0.00	0.00	0.00	1.70	0.24	0.00
Desert woodrat[y]	*Neotoma lepida*	SSC	1.18	0.00	0.00	0.00	0.65	1.66	0.00	2.91	0.00	0.00	0.00	0.00	0.00	0.50	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Big-eared woodrat	*Neotoma macrotis*	SSC	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern grasshopper mouse	*Onychomys torridus*	SSC	0.08	5.64	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Joaquin pocket mouse	*Perognathus inornatus*	FS	0.00	66.26	1.79	3.82	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	3.52	0.00	0.00	0.00	0.24	0.00
Deer mouse[z]	*Peromyscus maniculatus*	SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
Mountain lion[aa]	*Puma concolor*	SC	0.00	71.02	0.00	5.45	0.65	1.66	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.02	3.52	0.00	0.00	1.70	0.24	4.32
Broad-footed mole[bb]	*Scapanus latimanus*	SSC	0.00	71.02	0.00	5.45	0.65	0.00	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.00	0.02	3.52	0.00	0.00	1.70	0.24	4.32
Ornate shrew	*Sorex ornatus*	SSC	0.00	71.02	0.00	5.45	0.65	0.00	1.17	2.91	0.00	0.26	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	1.70	0.24	0.00
Western spotted skunk[cc]	*Spilogale gracilis*	SSC	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
Brush rabbit	*Sylvilagus bachmani*	FE, SE	1.18	71.02	0.00	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	84.70	1.70	0.24	4.32
American badger	*Taxidea taxus*	SSC	1.18	71.02	1.79	5.45	0.65	1.66	1.17	2.91	5.84	0.26	0.18	0.07	0.00	0.50	0.02	3.52	0.00	0.00	1.70	0.24	4.32
Kit fox[dd]	*Vulpes macrotis*	None	1.10	69.62	1.79	3.19	0.15	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	0.00	0.00	1.13	0.24	0.00
San Joaquin kit fox	*Vulpes macrotis mutica*	FE, ST	1.10	69.62	1.79	3.19	0.15	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	0.00	0.00	1.13	0.24	0.00
Red fox	*Vulpes vulpes*	None	0.00	21.11	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.18	0.00	0.00	0.00	0.00	1.66	0.00	0.00	0.00	0.00	0.00
Not applicable	Not applicable	**Total**	**245.87**	**3979.14**	**80.33**	**287.85**	**39.83**	**77.08**	**67.22**	**166.39**	**151.55**	**14.56**	**4.75**	**1.97**	**9.07**	**29.47**	**8.08**	**100.33**	**170.54**	**2515.73**	**92.13**	**16.21**	**317.3**

Notes: FE = federally endangered, FPT = federal proposed threatened, FS = federal sensitive (USFS and/or BLM sensitive), FT = federally threatened, SCE = state candidate endangered, SCT = state candidate threatened, SE = state endangered, SFP = state fully protected, SFS = state fire sensitive, SR = state rare, SSC = species of special concern (CDFW), ST= state threatened

[a] This plant species does not occur in the Central California Coast Ranges Ecoregion Section.
[b] Latin name or regulatory status has changed since August 20, 2019, when the SAMNA model was run (Caltrans 2019).
[c] Ensatina. Only the yellow-blotched and large-blotched subspecies are species status, and they do not occur in the GAI.
[d] Striped racer. Only the Alameda subspecies is special status, and it does not occur in the GAI (East Bay).
[e] Ring-necked snake. Only the San Bernardino and regal subspecies are special status, and they do not occur in the GAI.
[f] California [Coast] mountain kingsnake. Updated taxonomy and added status (California mountain kingsnake has been split from coast mountain kingsnake, California has no special status, coast is currently listed as BLM and USFS sensitive).
[g] Western skink. Only the Coronado subspecies is special status, and it does not occur in the GAI (San Diego County south).
[h] Western patch-nosed snake. Only the coast patch-nosed subspecies is special status, and it does not occur in the GAI.
[i] Red-winged blackbird. Only the Kern subspecies is special status, and it does not occur in the GAI (restricted to Lake Isabella and Walker Basin).
[j] Rufous-crowned sparrow. Only the SoCal and Santa Cruz Island subspecies are special status, and they do not occur in the GAI.
[k] Bell's sparrow. Only the San Clemente subspecies is special status, and it does not occur in the GAI.
[l] California quail. Only the Catalina subspecies is special status, and it does not occur in the GAI.
[m] Cactus wren. Only the coastal subspecies is special status, and it does not occur in the GAI.
[n] Marsh wren. Only the Clark's subspecies is special status, and it does not occur in the GAI.
[o] Common loon. This species is only considered special status when nesting and it does not nest in the GAI.
[p] Common yellowthroat. Only the San Francisco/Saltmarsh subspecies is special status, and it does not occur in the GAI.
[q] Song sparrow. There are five special-status subspecies of song sparrow, none of which occur in the GAI.

[r] Savannah sparrow. One special-status subspecies of savannah sparrow occurs in the GAI, Bryant's (addressed in separate row). The other two special-status subspecies do not occur.
[s] California towhee. Only the Inyo subspecies is special status, and it does not occur in the GAI.
[t] Spotted towhee. Only the San Clemente subspecies is special status, and it does not occur in the GAI.
[u] Vesper sparrow and Oregon vesper sparrow estimates may refer to the same population and subspecies.
[v] Hutton's vireo. Only the Catalina subspecies is special status, and it does not occur in the GAI.
[w] Black-tailed jackrabbit. Only the San Diego subspecies is special status, and it does not occur in the GAI.
[x] California vole. There are five special-status subspecies of California vole, none of which occur in the GAI (Bay Area, Los Angeles, Mohave River, and two in the Death Valley region).
[y] Desert woodrat. Only the San Diego subspecies is special status, and it does not occur in the GAI.
[z] Deer mouse. Only the Channel Islands subspecies are special status, and they do not occur in the GAI.
[aa] Mountain lion. On April 21, 2020, the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of mountain lion was listed as a candidate species under the California Endangered Species Act. This ESU would include the GAI.
[bb] Broad-footed mole. There are two special-status subspecies of broad-footed mole, neither of which occur in the GAI (Alameda Island and Angel Island only).
[cc] Western spotted skunk. Only the Channel Islands subspecies is special status, and it does not occur in the GAI (only along Stanislaus River).
[dd] Kit fox and San Joaquin kit fox estimates may refer to the same population and subspecies.

APPENDIX F: HYDROLOGIC UNITS

The SAMNA Reporting Tool expresses the landscape in terms of USGS HUC-8 sub-basins (Caltrans 2017; USGS 2014). However, the State Water Board considers beneficial uses in terms of HUs (California Department of Water Resources 2016). Table F-1 provides a crosswalk between the HUC-8 and HU classification systems for the GAI.

Table F-1. Crosswalk Table of HUC-8 Sub-basins with HUs in the GAI

HUC-8 #	HUC-8 Name	HUC-8 Acreage[a]	HU #	HU Name	HU Acreage[a]
18050006	San Francisco Coastal South	431,363	202	San Mateo	164,493
18050006	San Francisco Coastal South	431,363	203	Bay Bridges	7,141
18050006	San Francisco Coastal South	431,363	204	South Bay	53,278
18050006	San Francisco Coastal South	431,363	206	Santa Clara	40,772
18050006	San Francisco Coastal South	431,363	304	Big Basin	235,190
18060002	Pajaro	832,403	205	Santa Clara	117,971
18060002	Pajaro	832,403	304	Big Basin	235,190
18060002	Pajaro	832,403	305	Pajaro River	466,180
18060002	Pajaro	832,403	306	Pajaro River	32,650
18060002	Pajaro	832,403	306	Pajaro River	32,650
18060002	Pajaro	832,403	310	Salinas	480,579
18060002	Pajaro	832,403	542	Middle West Side	131,545
18060002	Pajaro	832,403	559	Coast Range	163,083
18060005	Salinas	2,130,629	306	Pajaro River	32,650
18060005	Salinas	2,130,629	307	Carmel River	163,657
18060005	Salinas	2,130,629	308	Santa Lucia	193,656
18060005	Salinas	2,130,629	309	Salinas	334,641
18060005	Salinas	2,130,629	310	Salinas	480,579
18060005	Salinas	2,130,629	310	Estero Bay	480,579
18060005	Salinas	2,130,629	312	Santa Maria	164,812
18060005	Salinas	2,130,629	317	Estrella River	142,981

HUC-8 #	HUC-8 Name	HUC-8 Acreage[a]	HU #	HU Name	HU Acreage[a]
18060005	Salinas	2,130,629	559	Coast Range	163,083
18060006	Central Coastal	1,231,592	307	Carmel River	163,657
18060006	Central Coastal	1,231,592	308	Santa Lucia	193,656
18060006	Central Coastal	1,231,592	310	Salinas	480,579
18060006	Central Coastal	1,231,592	312	Santa Maria	164,812
18060015	Monterey Bay	484,627	202	San Mateo	164,493
18060015	Monterey Bay	484,627	206	Santa Clara	40,772
18060015	Monterey Bay	484,627	304	Big Basin	235,190
18060015	Monterey Bay	484,627	305	Pajaro River	466,180
18060015	Monterey Bay	484,627	306	Pajaro River	32,650
18060015	Monterey Bay	484,627	306	Bolsa Nueva	32,650
18060015	Monterey Bay	484,627	307	Carmel River	163,657
18060015	Monterey Bay	484,627	309	Salinas	334,641
18060015	Monterey Bay	484,627	310	Salinas	480,579

Source: Caltrans 2017

[a] Numbers were rounded to the nearest whole number.

References

California Department of Water Resources. 2016. “CalWater Hydrologic Areas.” Accessed October 19, 2019. https://catalog.data.gov/dataset/calwater-2-233fac.

Caltrans 2017. “Waters_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018” (data file). Accessed February 6, 2019.

USGS (U.S. Geological Survey). 2014. “National Hydrology Dataset & National Watershed Boundary Dataset.” Accessed March 18, 2019. https://www.usgs.gov/core-science-systems/ngp/national-hydrography.

APPENDIX G: LIST OF 303(d) IMPAIRED WATERS

Section 303(d) of the CWA requires that every 2 years each state submit to EPA a list of rivers, lakes, and reservoirs in the state for which pollution control or requirements have failed to meet water quality standards. Waterbodies in the GAI that are included on the Section 303(d) list of impaired waters, their impairments, and whether TMDLs have been established are provided in Table G-1 (State Water Board 2018).

Table G-1. Impaired Waters in the GAI

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
San Francisco Coastal South	Butano Creek	Sedimentation/siltation	Required, not established yet	Yes
San Francisco Coastal South	Pacific Ocean at Pacifica State/Linda Mar Beach	Fecal indicator bacteria	Being addressed with EPA-approved TMDL	No
San Francisco Coastal South	Pacific Ocean at Pillar Point Beach	Fecal indicator bacteria, mercury	Required, not established yet	Yes
San Francisco Coastal South	Pacific Ocean at Venice Beach	Indicator bacteria	Required, not established yet	No
San Francisco Coastal South	Pescadero Creek	Sedimentation/ siltation	Required, not established yet	Yes
San Francisco Coastal South	Pomponio Creek	Fecal indicator bacteria	Required, not established yet	No
San Francisco Coastal South	Scott Creek Lagoon	Chloride, sodium	Required, not established yet	Yes
San Francisco Coastal South	Waddell Creek Lagoon	Chloride, pH, sodium	Required, not established yet	Yes
Pajaro	Beach Road Ditch	Nutrients	Required, not established yet	Yes
Pajaro	Bean Creek	Sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Pajaro	Carnadero Creek (Uvas Creek below Bloomfield Road)	E. coli, fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Carnadero Creek (Uvas Creek below Bloomfield Road)	Dissolved oxygen, nitrate, turbidity	Required, not established yet	Yes
Pajaro	Corralitos Creek	pH, turbidity	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Pajaro	Corralitos Creek	E. coli, fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Furlong Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Furlong Creek	E. coli, nitrate, turbidity	Required, not established yet	Yes
Pajaro	Gallighan Slough	Fecal indicator bacteria	Being addressed with EPA-approved TMDL	No
Pajaro	Hanson Slough	Fecal indicator bacteria	Being addressed with EPA-approved TMDL	No
Pajaro	Harkins Slough	Fecal indicator bacteria	Being addressed with EPA-approved TMDL	No
Pajaro	Harkins Slough	Chlorophyll-a, dissolved oxygen	Required, not established yet	Yes
Pajaro	Llagas Creek (below Chesbro Reservoir)	Chlorpyrifos, fecal coliform, nitrate, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Pajaro	Llagas Creek (below Chesbro Reservoir)	Chloride, dissolved oxygen, E. coli, salinity (sodium, specific conductivity, total dissolved solids), turbidity	Required, not established yet	Yes
Pajaro	McGowan Ditch	Nitrate	Required, not established yet	Yes
Pajaro	Millers Canal	Fecal coliform, nitrate	Being addressed with EPA-approved TMDL	Yes
Pajaro	Millers Canal	Chlorophyll-a, dissolved oxygen, E. coli, pH, toxicity, turbidity, water temperature	Required, not established yet	Yes
Pajaro	Pacheco Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Pacheco Creek	Dissolved oxygen, turbidity	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Pajaro	Pajaro River	Chlorpyrifos, diazinon, fecal coliform, nitrates, sedimentation/siltation	Being addressed with EPA-approved TMDL	Yes
Pajaro	Pajaro River	Boron, chloride, chromium, chlordane, DDD (dichlorodiphenyl-dichloroethane – pesticide), dieldrin, DDE (dichlorodiphenyl-dichloroethylene – pesticide), DDT, dissolved oxygen, E. coli, sodium, PCBs, pH, toxicity, turbidity	Required, not established yet	Yes
Pajaro	Rider Creek	Sedimentation/siltation	Being addressed with EPA-approved TMDL	Yes
Pajaro	Salsipuedes Creek (Santa Cruz County)	E. coli, fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Salsipuedes Creek (Santa Cruz County)	Dissolved oxygen, nitrate, pH, toxicity, turbidity	Required, not established yet	Yes
Pajaro	San Benito River	Fecal coliform, sedimentation/siltation	Being addressed with EPA-approved TMDL	Yes
Pajaro	San Benito River	Boron, E. coli, pH, specific conductivity	Required, not established yet	Yes
Pajaro	Struve Slough	Fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Struve Slough	Chlorophyll-a, dissolved oxygen, E. coli, pH, toxicity, turbidity	Required, not established yet	Yes
Pajaro	Tequisquita Slough	Fecal coliform	Being addressed with EPA-approved TMDL	No
Pajaro	Tequisquita Slough	Ammonia, chlorophyll-a, dissolved oxygen, pH, toxicity, turbidity	Required, not established yet	Yes
Pajaro	Tres Pinos Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Pajaro	Tres Pinos Creek	E. coli, pH	Required, not established yet	Yes
Pajaro	Uvas Creek (above Uvas Reservoir)	Dissolved oxygen, pH, turbidity, water temperature	Required, not established yet	Yes
Pajaro	Uvas Creek (below Uvas Reservoir)	Turbidity	Required, not established yet	Yes
Pajaro	Watsonville Slough	E. coli	Being addressed with EPA-approved TMDL	No
Pajaro	Watsonville Slough	DDE, dissolved oxygen, E. coli, malathion, nitrate, toxicity	Required, not established yet	Yes
Salinas	Alisal Creek (Monterey County)	Ammonia, chlorophyll-a, fecal coliform, nitrate	Being addressed with EPA-approved TMDL	Yes
Salinas	Alisal Creek (Monterey County)	Salinity (sodium), toxicity, turbidity	Required, not established yet	Yes
Salinas	Arroyo Seco River	Fecal coliform, water temperature	Required, not established yet	Yes
Salinas	Atascadero Creek (San Luis Obispo County)	Dissolved oxygen, E. coli, fecal coliform	Required, not established yet	Yes
Salinas	Blanco Drain	Chlorpyrifos	Being addressed with EPA-approved TMDL	Yes
Salinas	Blanco Drain	Chlorpyrifos	Being addressed with EPA-approved TMDL	Yes
Salinas	Branciforte Creek	Chlorpyrifos, E. coli, enterococcus, fecal coliform, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Salinas	Chualar Creek	Ammonia, chlorpyrifos, diazinon, dissolved oxygen, E. coli, fecal coliform, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Salinas	Chualar Creek	Dimethoate (pesticide), malathion (pesticide), pH, turbidity	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Salinas	Chualar Creek, South Branch	Ammonia, nitrate	Being addressed with EPA-approved TMDL	Yes
Salinas	Chualar Creek, South Branch	pH, turbidity, water temperature	Required, not established yet	Yes
Salinas	Esperanza Creek	Turbidity	Required, not established yet	Yes
Salinas	Estrella River	Boron	Being addressed with EPA-approved TMDL	Yes
Salinas	Estrella River	Fecal coliform, pH, salinity (sodium, chloride), toxicity, turbidity	Required, not established yet	Yes
Salinas	Las Tablas Creek	Metals	Required, not established yet	Yes
Salinas	Merrit Ditch	Ammonia, diazinon, dissolved oxygen, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Salinas	Merrit Ditch	pH, turbidity	Required, not established yet	Yes
Salinas	Mountain Charlie Gulch	Sedimentation/ siltation	Required, not established yet	Yes
Salinas	Quail Creek	Nitrate	Being addressed with EPA-approved TMDL	Yes
Salinas	Salinas River (lower, estuary to near Gonzales Road crossing)	Chlorpyrifos, diazinon, E. coli, fecal coliform, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Salinas	Salinas River (lower, estuary to near Gonzales Road crossing)	Benthic community effects, chlordane, chloride, DDE, DDT, dieldrin, enterococcus, PCBs, pH, sodium, total dissolved solids, toxaphene, turbidity	Required, not established yet	Yes
Salinas	Salinas River (middle, near Gonzales Road crossing to confluence with Nacimiento River)	Fecal coliform, pH, toxicity, turbidity, water temperature	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Salinas	Salinas River (upper, confluence of Nacimiento River to Santa Margarita Reservoir)	Chloride	Required, not established yet	Yes
Salinas	San Antonio River (below San Antonio Reservoir)	E. coli	Being addressed with EPA-approved TMDL	No
Salinas	San Lorenzo Creek (Monterey County)	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	Arroyo de la Cruz Lagoon	E. coli	Being addressed with EPA-approved TMDL	No
Central Coastal	Arroyo de la Cruz Lagoon	Dissolved oxygen	Required, not established yet	Yes
Central Coastal	Arroyo Grande Creek (below Lopez Lake)	Benthic community effects, E. coli, fecal coliform, nickel, nitrates, toxicity	Required, not established yet	Yes
Central Coastal	Big Creek (Big Sur Coast)	pH	Required, not established yet	Yes
Central Coastal	Chorro Creek	E. coli, fecal coliform, nutrients, sedimentation/ siltation, sodium, total dissolved solids	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Chorro Creek	Benthic community effects, chloride, toxicity	Required, not established yet	Yes
Central Coastal	Chumash Creek	Fecal coliform	Required, not established yet	No
Central Coastal	Dairy Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	Dairy Creek	Dissolved oxygen, E. coli, enterococcus	Required, not established yet	Yes
Central Coastal	Los Berros Creek	Nitrate	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Los Berros Creek	Salinity (sodium, chloride)	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Central Coastal	Los Osos Creek (Los Osos to Los Osos Creek Estuary)	Fecal coliform, nitrate, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Los Osos Creek (Los Osos to Los Osos Creek Estuary and upstream of Los Osos)	Dissolved oxygen	Required, not established yet	Yes
Central Coastal	Los Osos Creek Estuary	Fecal coliform, nitrates	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Los Osos Creek Estuary	Dissolved oxygen, turbidity	Required, not established yet	Yes
Central Coastal	Morro Creek	Fecal coliform	Required, not established yet	No
Central Coastal	Old Creek (above Whale Rock Reservoir)	E. coli, fecal coliform	Required, not established yet	No
Central Coastal	Pacific Ocean at Avila Beach (Avila Pier)	PCBs, total coliform	Required, not established yet	Yes
Central Coastal	Pacific Ocean at Avila Beach (San Luis Obispo Creek mouth)	Enterococcus, total coliform	Required, not established yet	No
Central Coastal	Pacific Ocean at Cayucos (Cayucos Creek Mouth)	Enterococcus	Required, not established yet	No
Central Coastal	Pacific Ocean at New Brighton Beach (Santa Cruz County)	Total coliform	Required, not established yet	No
Central Coastal	Pacific Ocean at Pismo Beach (San Luis Obispo County)	Enterococcus, fecal coliform, total coliform	Required, not established yet	No
Central Coastal	Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave	Total coliform	Required, not established yet	No
Central Coastal	Pacific Ocean at Pismo State Beach (San Luis Obispo County), south of Pismo Pier	Fecal coliform	Required, not established yet	No

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Central Coastal	Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave	Total coliform	Required, not established yet	No
Central Coastal	Pennington Creek	E. coli, fecal coliform	Required, not established yet	No
Central Coastal	Pico Creek	Dissolved oxygen	Required, not established yet	Yes
Central Coastal	Pismo Creek	Sodium	Required, not established yet	Yes
Central Coastal	Prefumo Creek	Nitrate	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Prefumo Creek	Dissolved oxygen, fecal coliform, toxicity, turbidity	Required, not established yet	Yes
Central Coastal	San Bernardo Creek	E. coli, fecal coliform	Required, not established yet	No
Central Coastal	San Gregorio Creek	Fecal indicator bacteria, sedimentation/siltation	Required, not established yet	No
Central Coastal	San Juan Creek (San Benito County)	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	San Juan Creek (San Benito County)	Dissolved oxygen, E. coli, nitrate, toxicity, turbidity	Required, not established yet	Yes
Central Coastal	San Luis Obispo Creek (below Osos Street)	Fecal coliform, nitrate	Being addressed with EPA-approved TMDL	Yes
Central Coastal	San Luis Obispo Creek (below Osos Street)	Chloride, benthic community effects, dissolved oxygen, sodium	Required, not established yet	Yes
Central Coastal	San Luisito Creek	E. coli, fecal coliform	Required, not established yet	No
Central Coastal	San Pedro Creek	E. coli, pH, sodium, water temperature	Required, not established yet	Yes
Central Coastal	San Simeon Creek	Chloride, dissolved oxygen, nitrate, sodium	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Central Coastal	San Vicente Creek	Fecal indicator bacteria	Required, not established yet	No
Central Coastal	Santa Rosa Creek (San Luis Obispo County)	Fecal coliform, total dissolved solids	Required, not established yet	Yes
Central Coastal	Stenner Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	Stenner Creek	E. coli, pH	Required, not established yet	Yes
Central Coastal	Toro Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	Tularcitos Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Central Coastal	Tularcitos Creek	Salinity (sodium, chloride)	Required, not established yet	Yes
Central Coastal	Villa Creek	Fecal coliform	Required, not established yet	No
Central Coastal	Walters Creek	Fecal coliform	Required, not established yet	No
Central Coastal	Warden Creek	Fecal coliform, nitrate	Being addressed with EPA-approved TMDL	Yes
Central Coastal	Warden Creek	Dissolved oxygen, E. coli, fecal coliform	Required, not established yet	Yes
Monterey Bay	Alisal Slough (Monterey County)	Ammonia, diazinon (pesticide), nitrate	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Alisal Slough (Monterey County)	Toxicity,[a] turbidity	Required, not established yet	Yes
Monterey Bay	Aptos Creek	Fecal indicator bacteria	Being addressed with EPA-approved TMDL	No
Monterey Bay	Aptos Creek	Sedimentation/ siltation	Required, not established yet	Yes
Monterey Bay	Arana Gulch	Chlorpyrifos (pesticide)	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Arana Gulch	*Escherichia coli* (E. coli), fecal coliform	Required, not established yet	No

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Monterey Bay	Bear Creek (Santa Cruz County)	Sedimentation/ siltation	Required, not established yet	Yes
Monterey Bay	Bennett Slough	Chlorophyll-a, dissolved oxygen, pH, turbidity	Required, not established yet	Yes
Monterey Bay	Boulder Creek	Sedimentation/siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Camp Evers Creek	pH	Required, not established yet	Yes
Monterey Bay	Carbonera Creek	Fecal indicator bacteria, nutrients, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Carneros Creek (Monterey County)	Ammonia, chlorophyll-a, dissolved oxygen, fecal coliform, pH, nitrate, turbidity	Required, not established yet	Yes
Monterey Bay	Espinosa Slough	Priority organics	Required, not established yet	Yes
Monterey Bay	Fall Creek	Sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Gabilan Creek	Ammonia, fecal coliform, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Gabilan Creek	Turbidity	Required, not established yet	Yes
Monterey Bay	Kings Creek	Sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Lockhart Gulch	Dissolved oxygen, pH	Required, not established yet	Yes
Monterey Bay	Lompico Creek	Fecal coliform, nitrate, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Love Creek	Sedimentation/ siltation	Required, not established yet	Yes
Monterey Bay	Majors Creek (Monterey County)	Copper, E. coli, lead, zinc	Required, not established yet	Yes
Monterey Bay	McEnery Spring	pH	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Monterey Bay	Moore Creek	Dissolved oxygen, E. coli, pH, specific conductivity	Required, not established yet	Yes
Monterey Bay	Natividad Creek	Ammonia, diazinon, dissolved oxygen, E. coli, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Natividad Creek	Turbidity, water temperature	Required, not established yet	Yes
Monterey Bay	Newell Creek (Lower)	pH	Required, not established yet	Yes
Monterey Bay	Newell Creek (Upper)	Sedimentation/ siltation	Required, not established yet	Yes
Monterey Bay	Noble Gulch Creek	E. coli	Being addressed with EPA-approved TMDL	No
Monterey Bay	Old Salinas River	Chlorophyll-a, chlorpyrifos, diazinon, dissolved oxygen, E. coli, fecal coliform, nitrate, toxicity	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Old Salinas River	pH, turbidity	Required, not established yet	Yes
Monterey Bay	Pacific Ocean at Capitola Beach (Santa Cruz County)	Enterococcus, fecal coliform, total coliform	Required, not established yet	No
Monterey Bay	Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth	Total coliform	Required, not established yet	No
Monterey Bay	Porter Gulch Creek	E. coli, enterococcus	Required, not established yet	No
Monterey Bay	Rodeo Creek Gulch	Turbidity	Required, not established yet	Yes
Monterey Bay	Salinas Reclamation Canal	Fecal coliform	Being addressed with EPA-approved TMDL	No
Monterey Bay	San Lorenzo River	Fecal coliform, nitrate, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	San Lorenzo River	Chlordane, chloride, E. coli, enterococcus, PCBs, sodium, water temperature	Required, not established yet	Yes

Sub-basin	Impaired Water	Impairment(s)	Total Maximum Daily Load Status	Relevant to RAMNA?[a]
Monterey Bay	Santa Rita Creek (Monterey County)	Ammonia, E. coli, fecal coliform, dissolved oxygen, nitrate	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Santa Rita Creek (Monterey County)	Sodium, turbidity	Required, not established yet	Yes
Monterey Bay	Shingle Mill Creek	Nitrate, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Soquel Creek	E. coli, fecal coliform	Being addressed with EPA-approved TMDL	No
Monterey Bay	Soquel Creek	Enterococcus	Required, not established yet	No
Monterey Bay	Tembladero Slough	Chlorophyll-a, chlorpyrifos, diazinon, dissolved oxygen, E. coli, fecal coliform, total coliform, nitrates	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Tembladero Slough	Enterococcus, malathion, nickel, pH, toxicity, turbidity	Required, not established yet	Yes
Monterey Bay	Trout Creek Gulch	Fecal coliform	Being addressed with EPA-approved TMDL	No
Monterey Bay	Valencia Creek	Fecal coliform	Being addressed with EPA-approved TMDL	No
Monterey Bay	Valencia Creek	E. coli, sedimentation/ siltation	Required, not established yet	Yes
Monterey Bay	Watsonville Creek	Dissolved oxygen, E. coli, fecal coliform, nitrate, pH	Required, not established yet	Yes
Monterey Bay	Willow Creek (Monterey County)	pH	Required, not established yet	Yes
Monterey Bay	Zayante Creek	Chlorpyrifos, sedimentation/ siltation	Being addressed with EPA-approved TMDL	Yes
Monterey Bay	Zayante Creek	Fecal coliform	Required, not established yet	No

Sources: Central Valley RWQCB 2018a, 2018b; State Water Board 2018
[a] TMDLs relevant to the RAMNA reflect impaired aquatic resource-related beneficial uses.
[b] Refers to toxicity to aquatic organisms

References

Central Coast RWQCB (Regional Water Quality Control Board). 2019. *Water Quality Control Plan for the Central Coastal Basin*. California Environmental Protection Agency. San Luis Obispo, California.

San Francisco Bay RWQCB. 2017. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*. California Environmental Protection Agency. Oakland, California. Accessed May 1, 2019. https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/docs/BP_all_chapters.pdf.

State Water Board (State Water Resources Control Board). 2018. "2014 and 2016 California Integrated Report." Clean Water Act Sections 303(d) and 305(b). Accessed July 20, 2019. https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml.

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APPENDIX H: AQUATIC RESOURCE LOCATIONS

Aquatic resource locations are shown by HUC-8 sub-basin and HU in the following maps, which also include the coastal zone and major landmarks for perspective. These locations were excerpted from the SAMNA Reporting Tool's water and wetland layers (Caltrans 2017a, 2017b). Few sources of information are known to be available that can be used to describe existing and relevant wetland, riparian, and littoral resources. The FWS National Wetlands Inventory (2017) and the San Francisco Estuary Institute California Aquatic Resource Inventory (2018) are the only known datasets that include the distribution, extent, and types of aquatic resources in the GAI, and the SAMNA Reporting Tool relies upon them (Caltrans 2017a, 2017b).

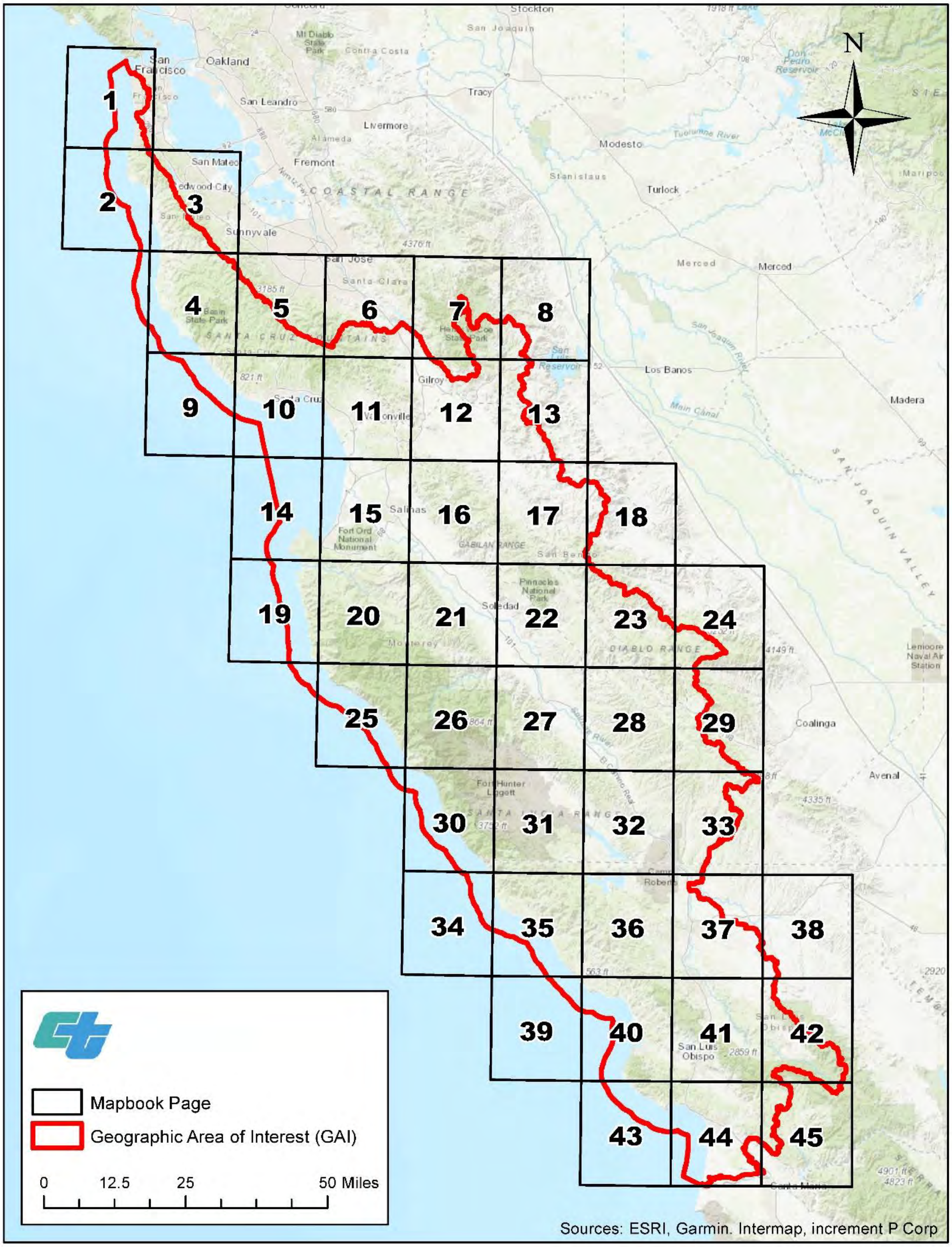
References

Caltrans. 2017a. "Waters_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018" (data file). Accessed February 6, 2019. http://www.dot.ca.gov/env/advancemitigation/.

———. 2017b. "Wetlands_D5 in Caltrans District 5 Geospatial Data for the Advance Mitigation Needs Assessment for the Second Quarter of FY 2017/2018" (data file). Accessed February 6, 2019. http://www.dot.ca.gov/env/advancemitigation/.

FWS (U.S. Fish and Wildlife Service). 2017. "National Wetlands Inventory. Wetlands Mapper." Accessed February 19, 2019. https://www.fws.gov/wetlands/data/mapper.html.

San Francisco Estuary Institute. 2018. "California Aquatic Resource Inventory (CARI)." Accessed February 28, 2019. https://www.sfei.org/cari#sthash.SnPvzyAU.dpbs.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Mapbook Page
Geographic Area of Interest (GAI)
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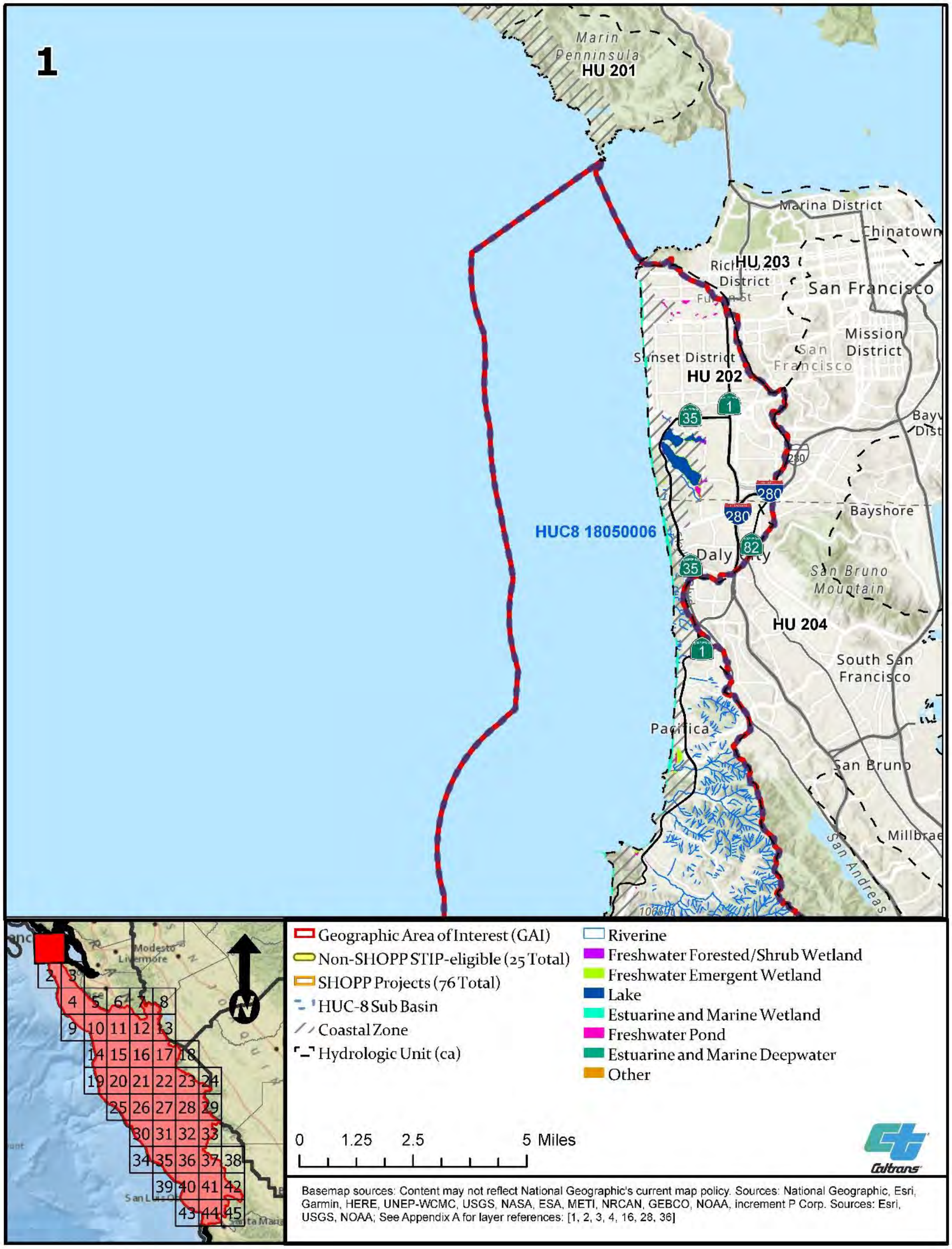
12.5
25
50 Miles
Sources: ESRI, Garmin. Intermap, increment P Corp
Stockton
Oakland
San Francisco
San Leandro
Livermore
Tracy
Modesto
Fremont
San Mateo
Turlock
Sunnyvale
San Jose
Merced
Los Banos
Gilroy
Madera
Salinas
Soledad
Coalinga
Avenal
San Luis Obispo
COASTAL RANGE
DIABLO RANGE
Main Canal
Lemoore Naval Air Station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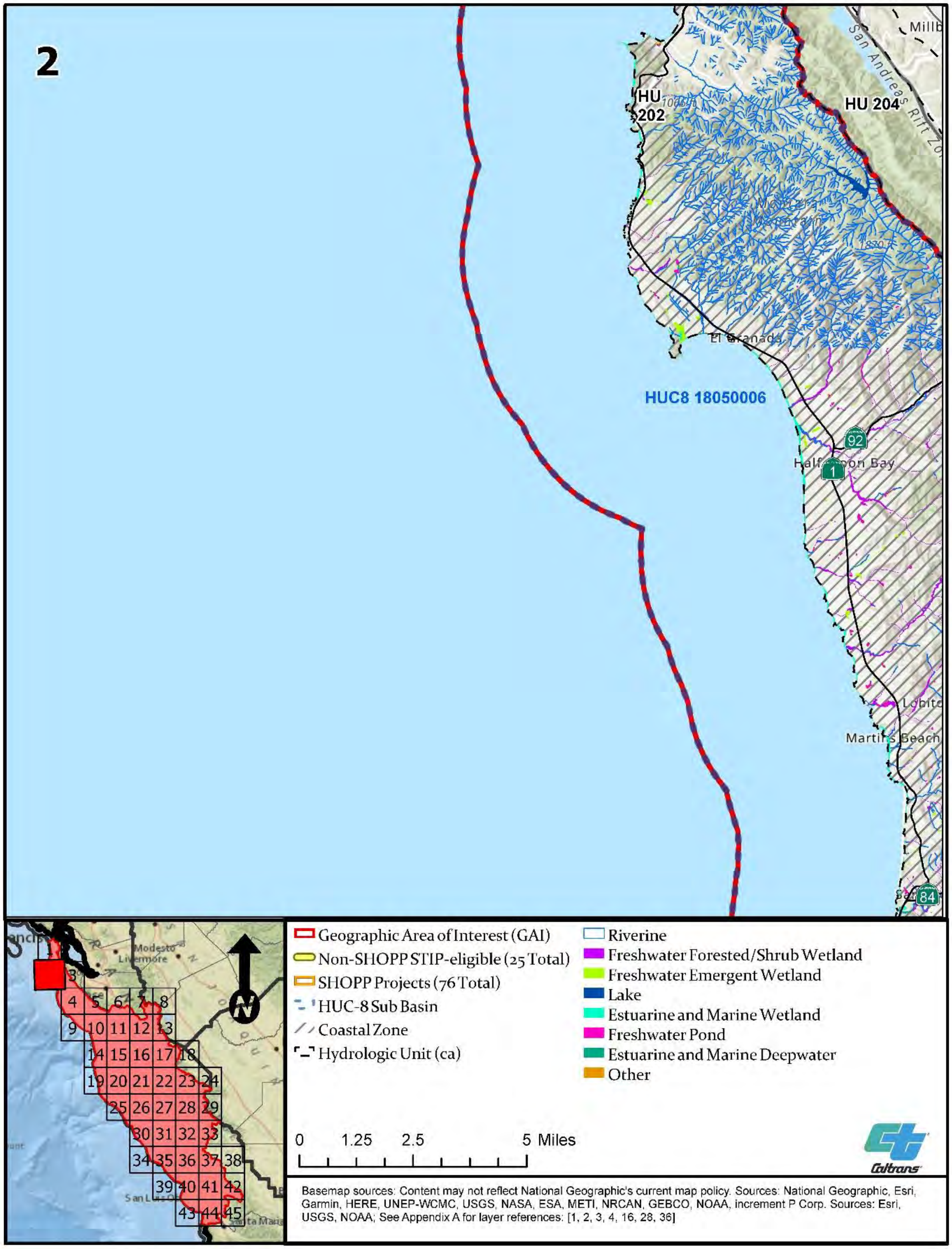
Marin Penninsula
HU 201
Marina District
Chinatown
Richmond District
HU 203
San Francisco
Mission District
Sunset District
HU 202
San Francisco
HUC8 18050006
Bayshore
Daly City
San Bruno Mountain
HU 204
South San Francisco
Pacifica
San Bruno
Millbrae
San Andreas
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]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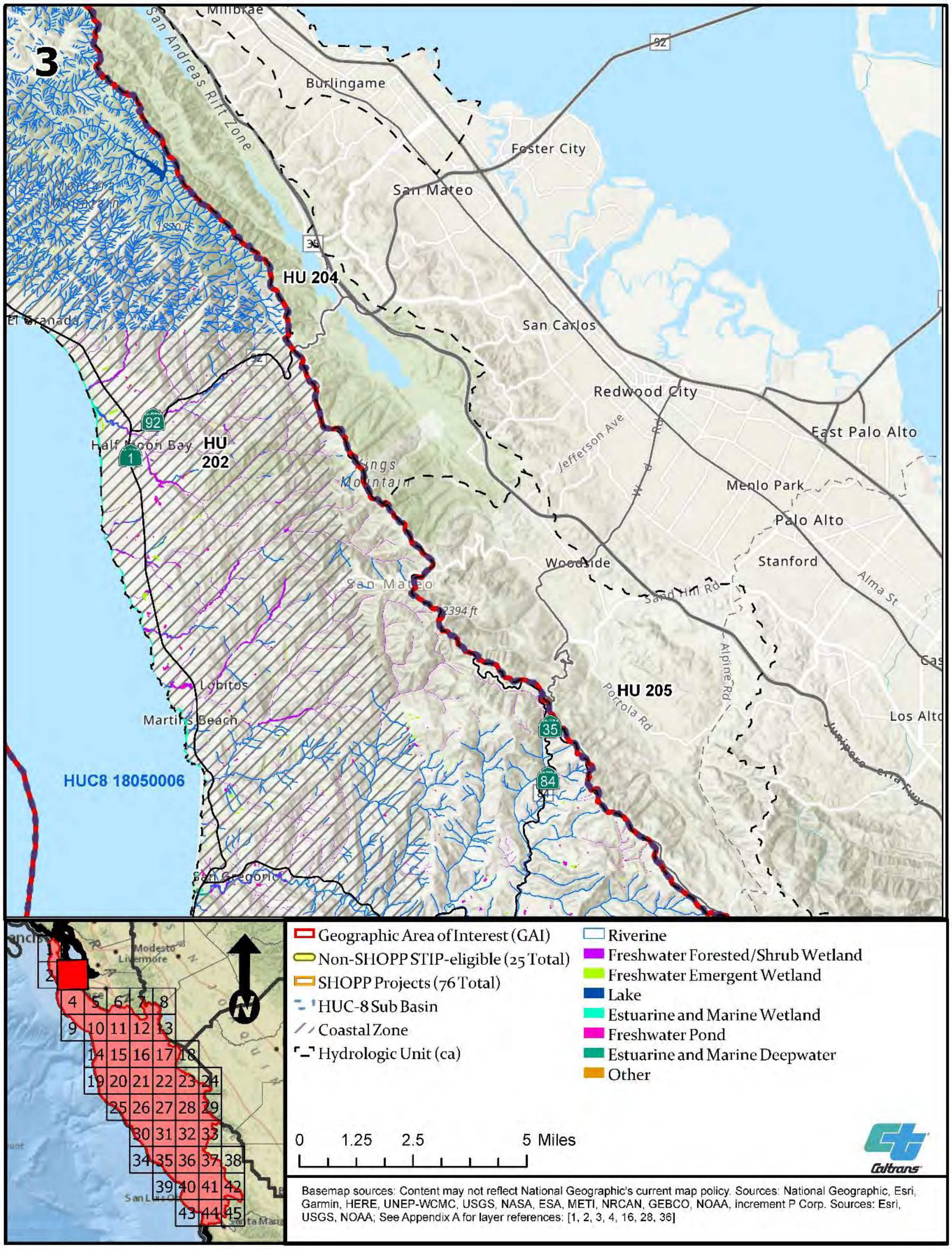
HU 202
HU 204
San Andreas Rift Zone
El Granada
HUC8 18050006
92
Half Moon Bay
1
Martins Beach
84
Modesto
Livermore
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]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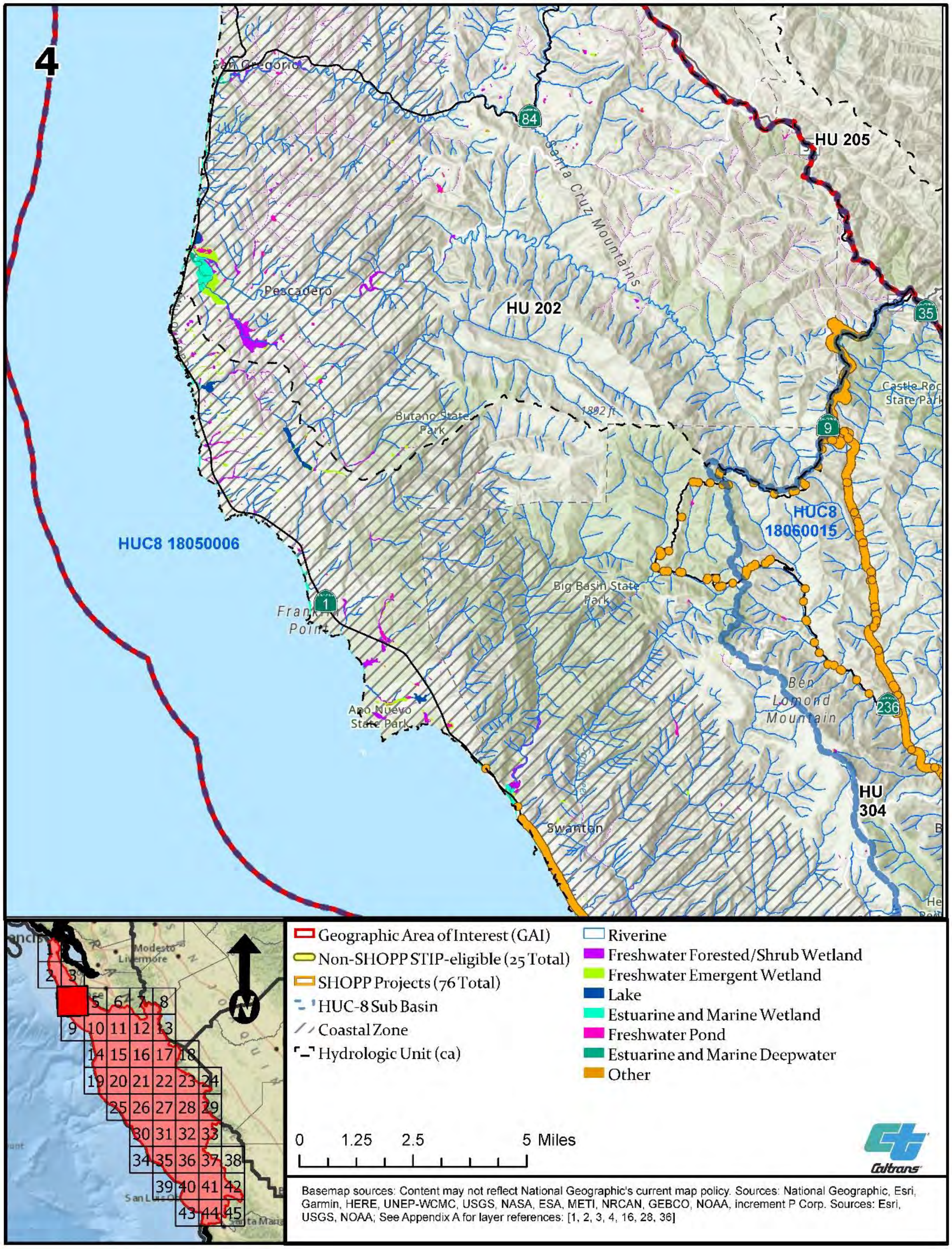
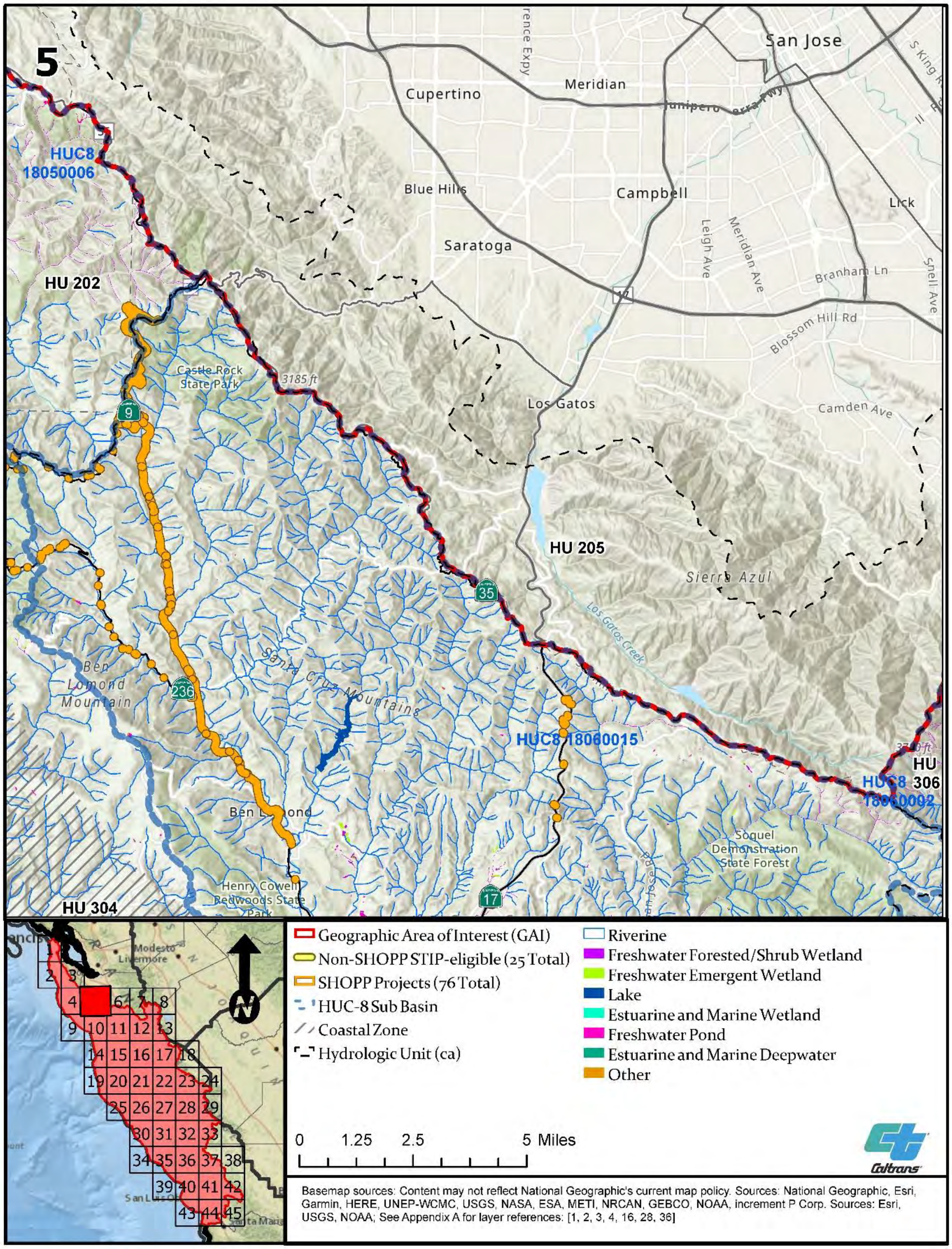
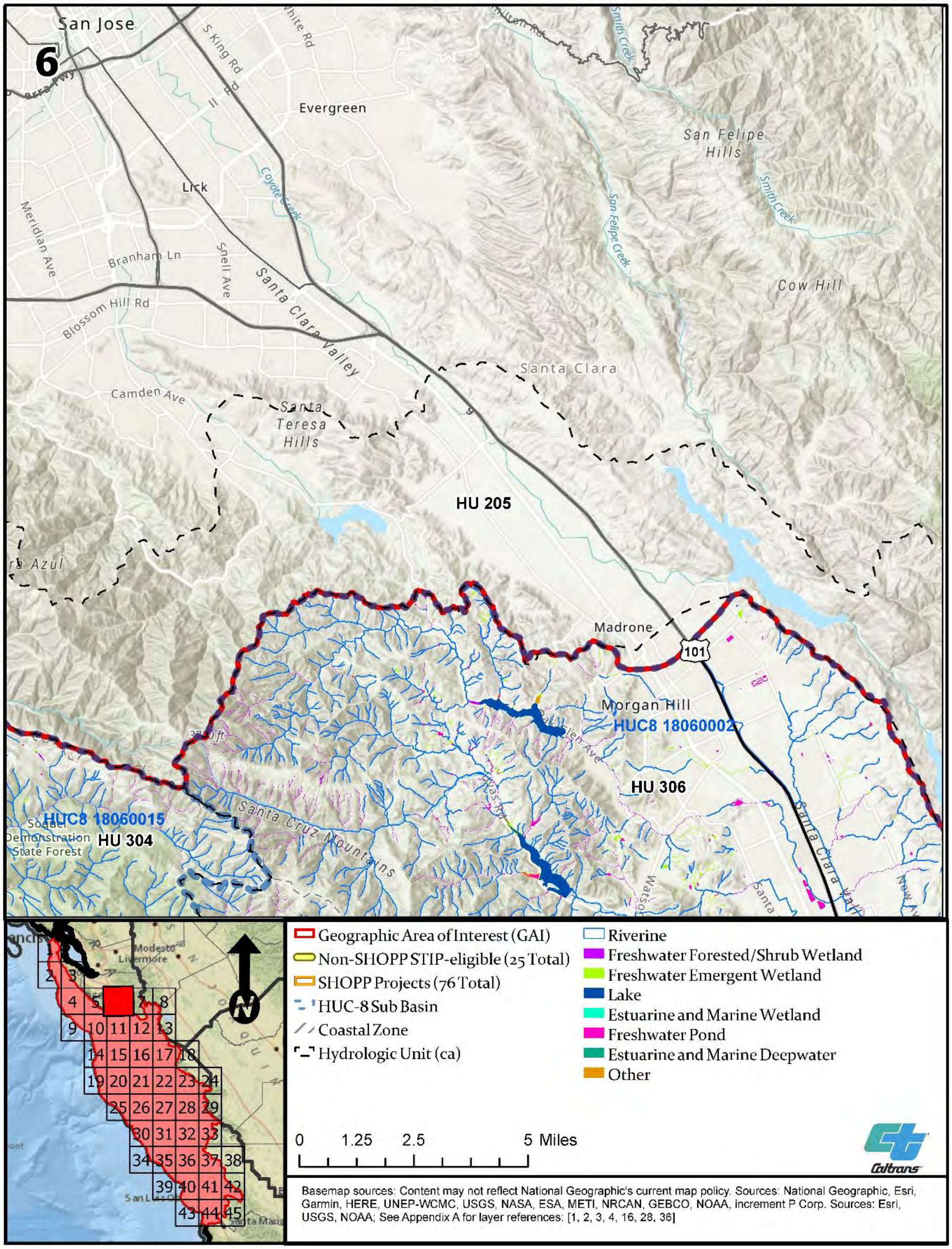
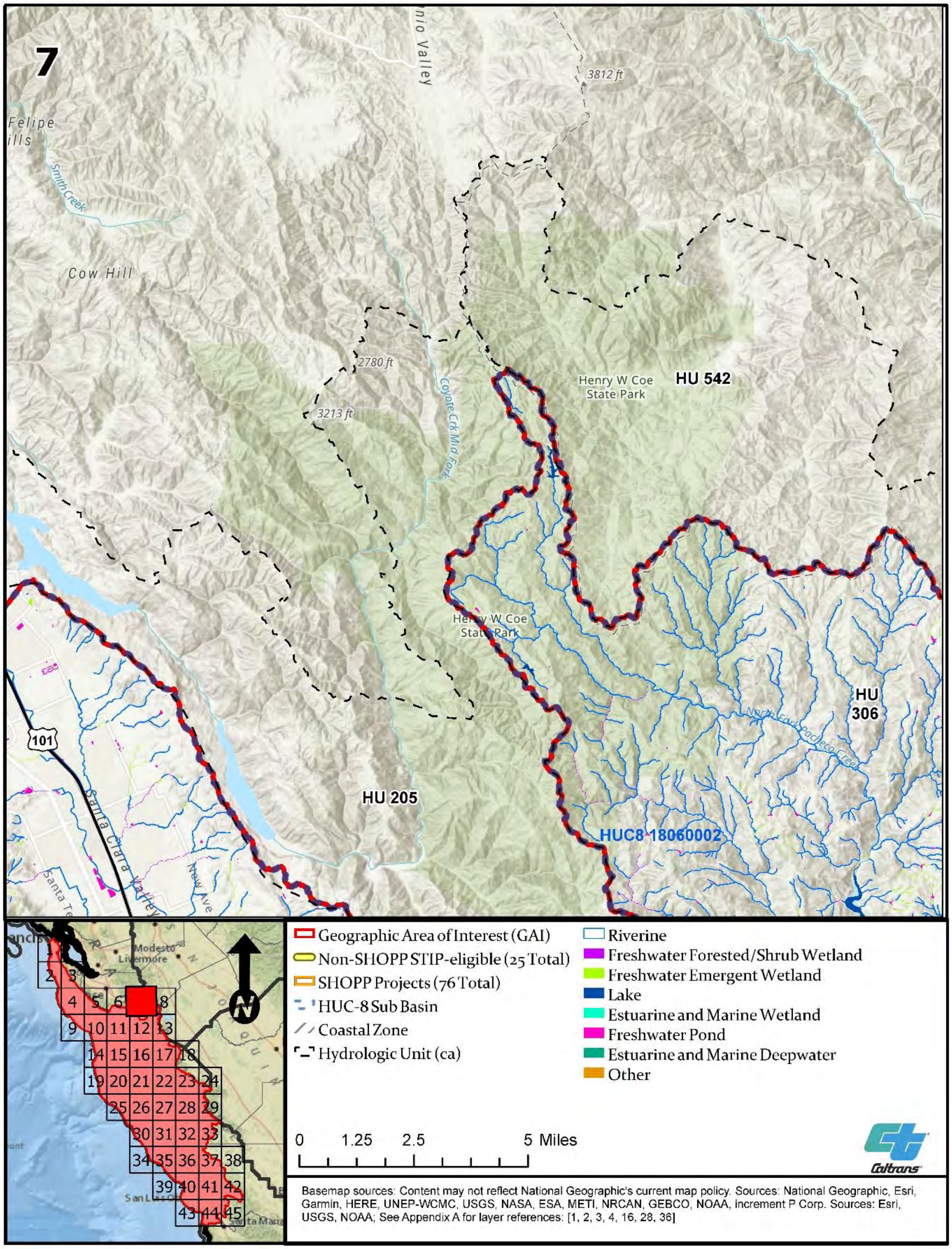
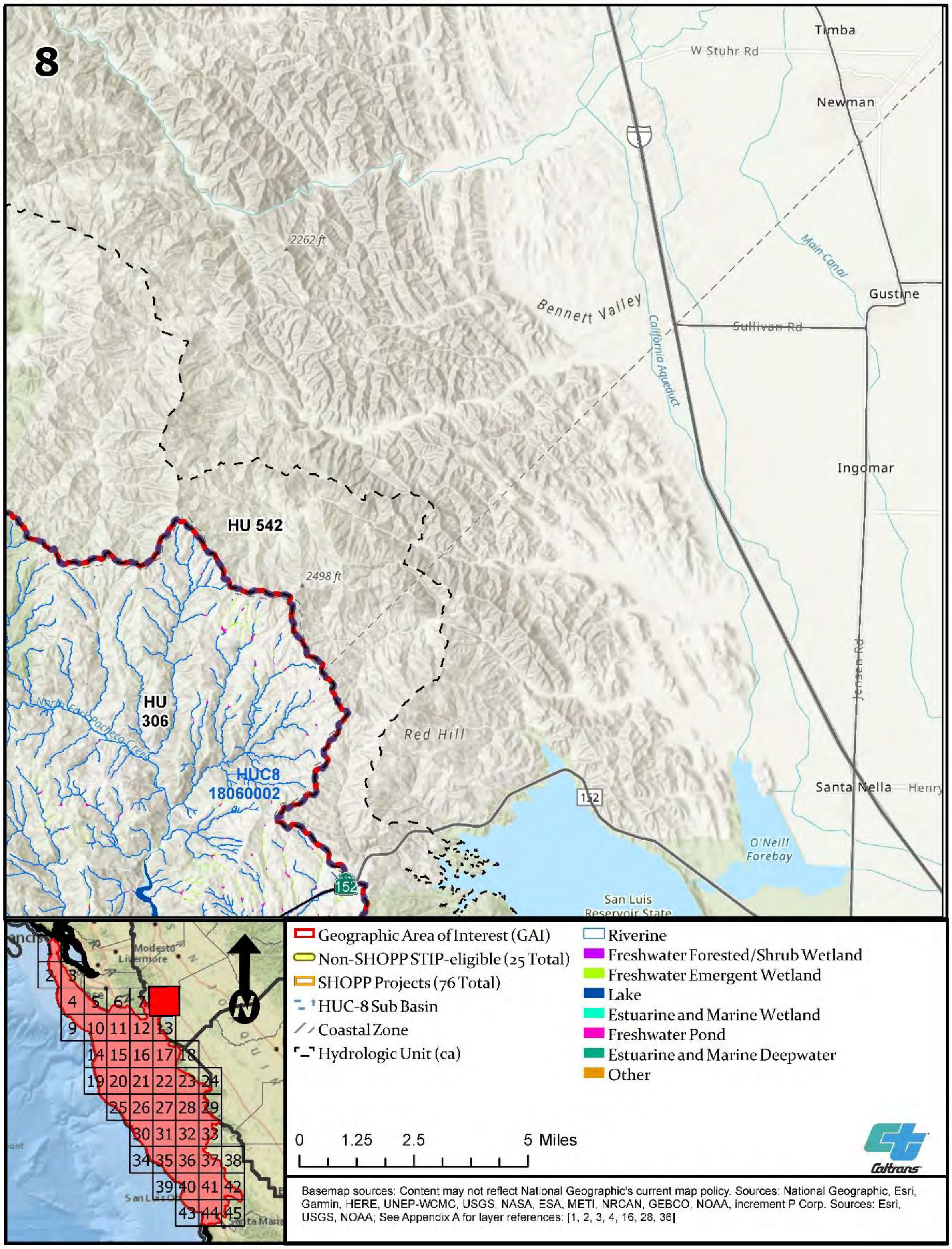
Burlingame
Foster City
San Mateo
HU 204
San Carlos
Redwood City
East Palo Alto
Half Moon Bay
HU 202
Menlo Park
Palo Alto
Stanford
Woodside
Sand Hill Rd
HU 205
Lobitos
Martins Beach
HUC8 18050006
Los Altos
San Gregorio
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

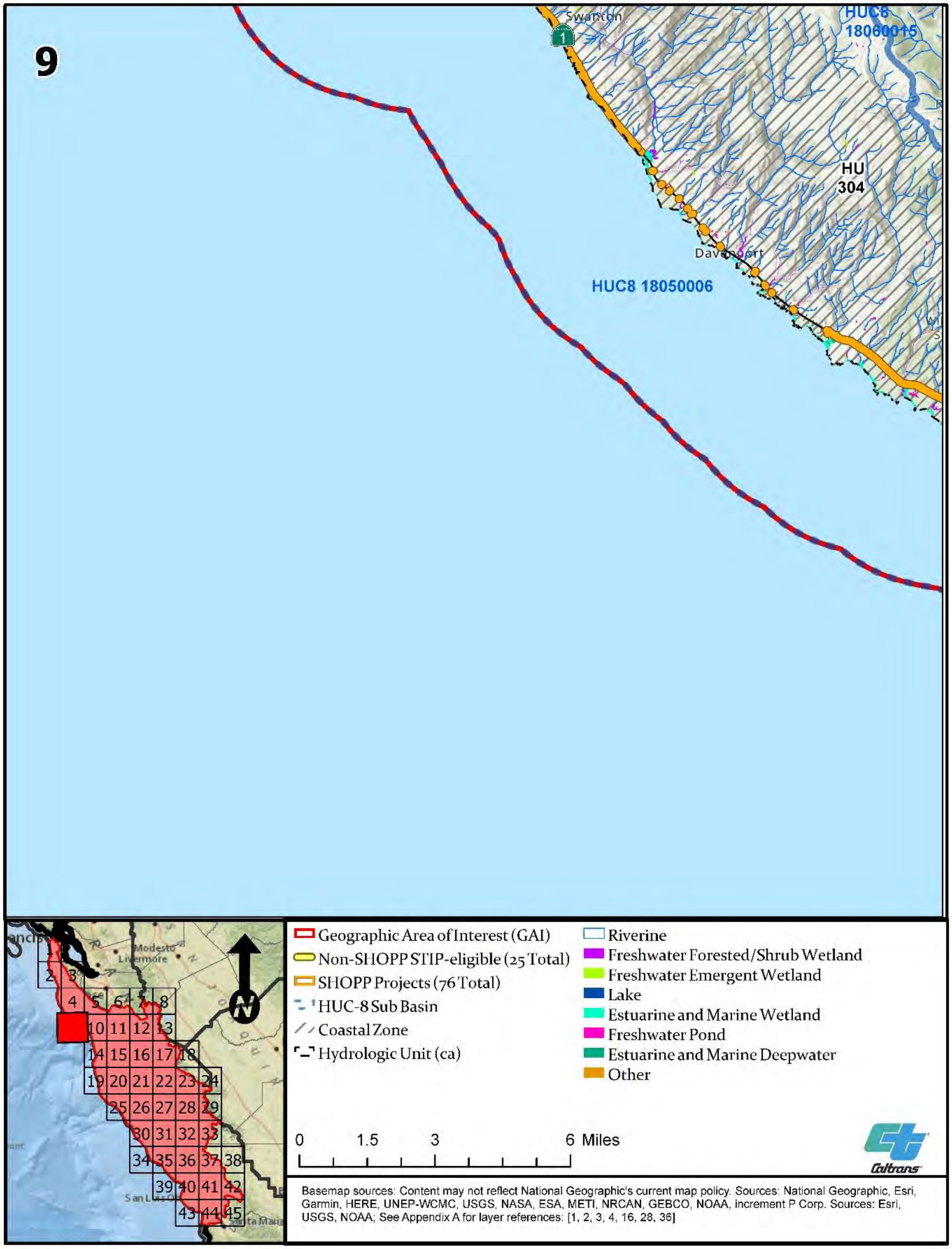

4
San Gregorio
Santa Cruz Mountains
HU 205
HU 202
Pescadero
Castle Rock State Park
Butano State Park
HUC8 18060015
HUC8 18050006
Big Basin State Park
Franklin Point
Ben Lomond Mountain
Año Nuevo State Park
HU 304
Swanton
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

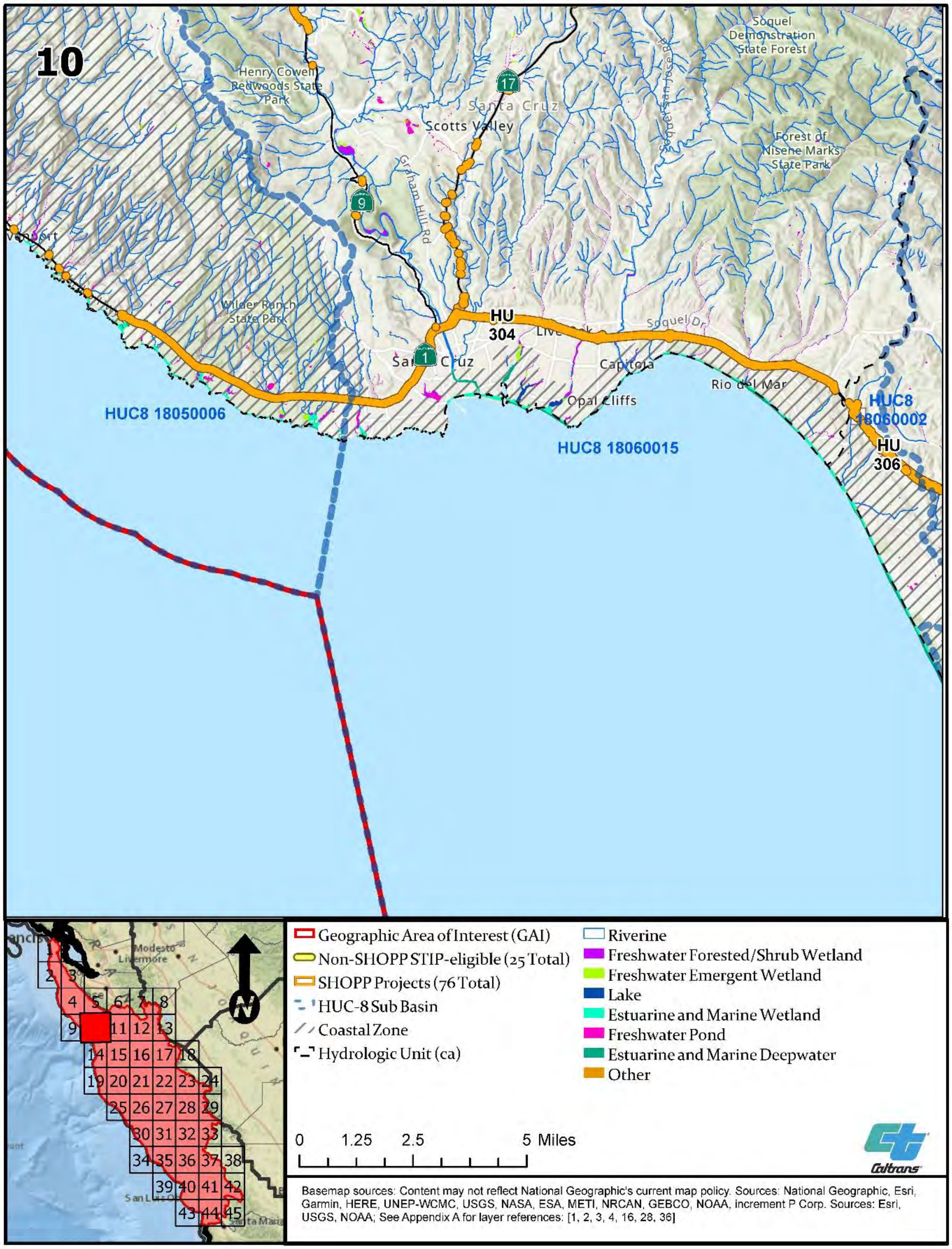

5
San Jose
Cupertino
Meridian
Campbell
Blue Hills
Saratoga
Los Gatos
HUC8 18050006
HU 202
HU 205
HU 304
HU 306
HUC8 18060015
HUC8 18060002
Castle Rock State Park
Ben Lomond Mountain
Santa Cruz Mountains
Ben Lomond
Henry Cowell Redwoods State Park
Soquel Demonstration State Forest
Sierra Azul
Los Gatos Creek
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

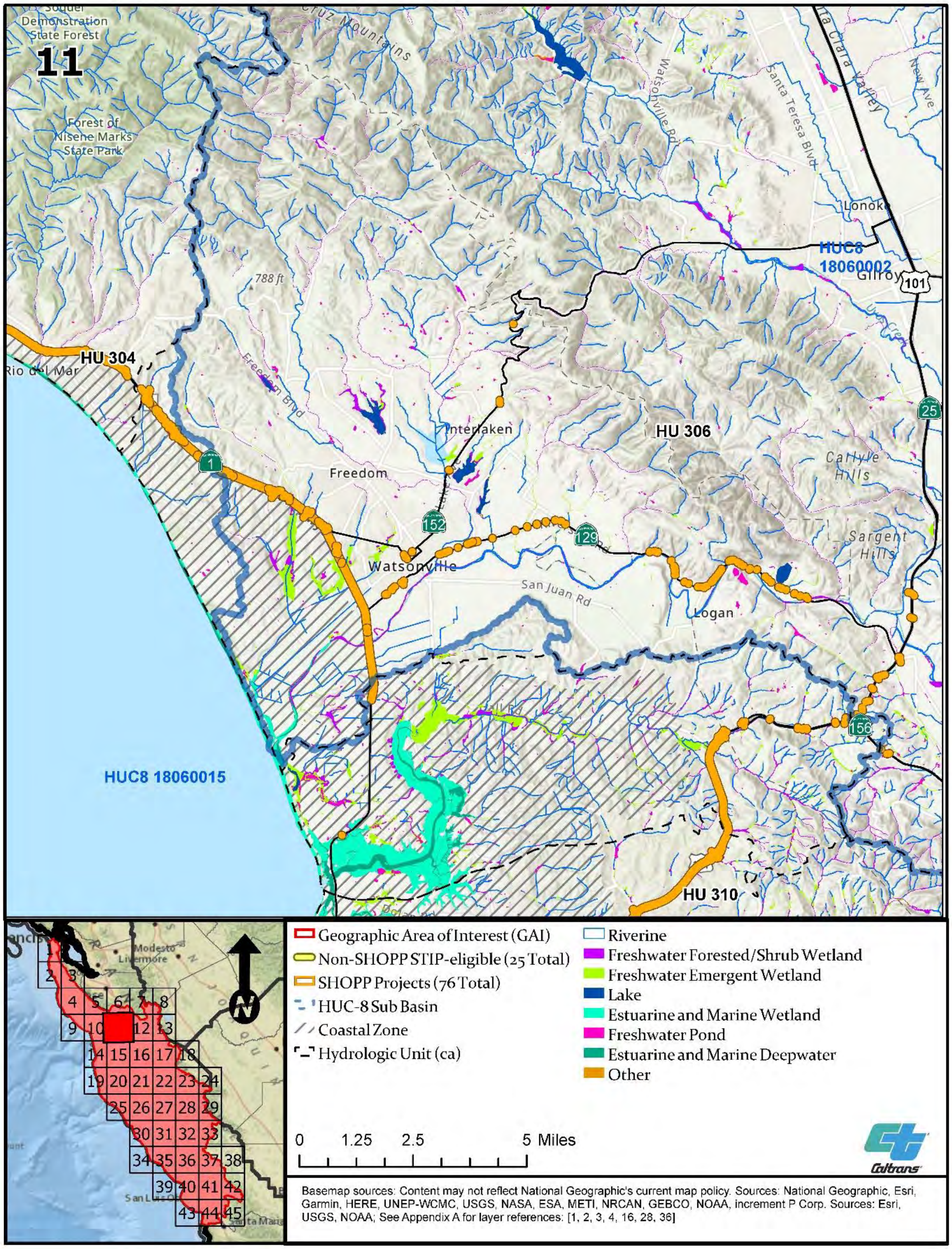

6
San Jose
Evergreen
San Felipe Hills
Lick
Meridian Ave
Branham Ln
Snell Ave
Blossom Hill Rd
Santa Clara Valley
Cow Hill
Camden Ave
Santa Teresa Hills
Santa Clara
HU 205
Madrone
101
Morgan Hill
HUC8 18060002
HU 306
HUC8 18060015
HU 304
Soquel Demonstration State Forest
Santa Cruz Mountains
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


7
3812 ft
Felipe
ills
Smith Creek
Cow Hill
2780 ft
3213 ft
Coyote Crk Mid Fork
Henry W Coe
State Park
HU 542
Henry W Coe
State Park
HU
306
North Fork Pacheco Creek
101
Santa Clara Valley
HU 205
HUC8 18060002
New Ave
Modesto
Livermore
1
2
3
4
5
6
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


8
W Stuhr Rd
Timba
Newman
2262 ft
Main Canal
Gustine
Bennett Valley
Sullivan Rd
California Aqueduct
Ingomar
HU 542
2498 ft
HU
306
Red Hill
HUC8
18060002
Jensen Rd
Santa Nella
Henry
152
O'Neill
Forebay
San Luis
Reservoir State
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


9
Swanton
HUC8 18060015
HU 304
Davenport
HUC8 18050006
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


10
Henry Cowell Redwoods State Park
Scotts Valley
Santa Cruz
Soquel Demonstration State Forest
Forest of Nisene Marks State Park
Graham Hill Rd
Wilder Ranch State Park
HU 304
Soquel Dr
Capitola
Rio del Mar
Opal Cliffs
HUC8 18050006
HUC8 18060015
HUC8 18060002
HU 306
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


11
Soquel Demonstration State Forest
Forest of Nisene Marks State Park
Santa Cruz Mountains
Watsonville Rd
Santa Teresa Blvd
Santa Clara Valley
New Ave
Lonoak
HUC8 18060002
Gilroy
101
788 ft
HU 304
Rio del Mar
Freedom Blvd
Interlaken
HU 306
25
Carlyle Hills
1
Freedom
152
129
Sargent Hills
Watsonville
San Juan Rd
Logan
156
HUC8 18060015
HU 310
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
12
13
14
15
16
17
18
19
20
21
22
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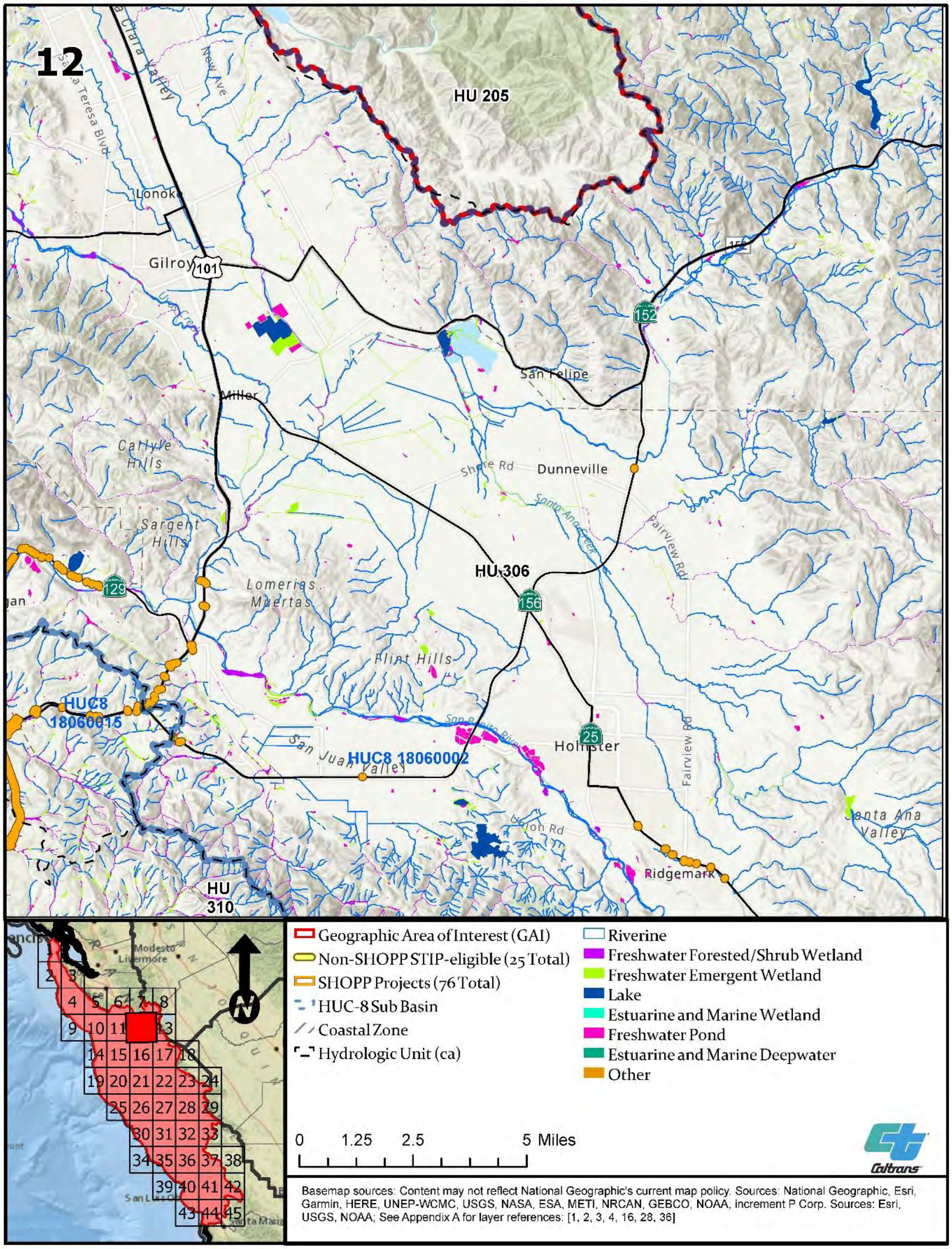
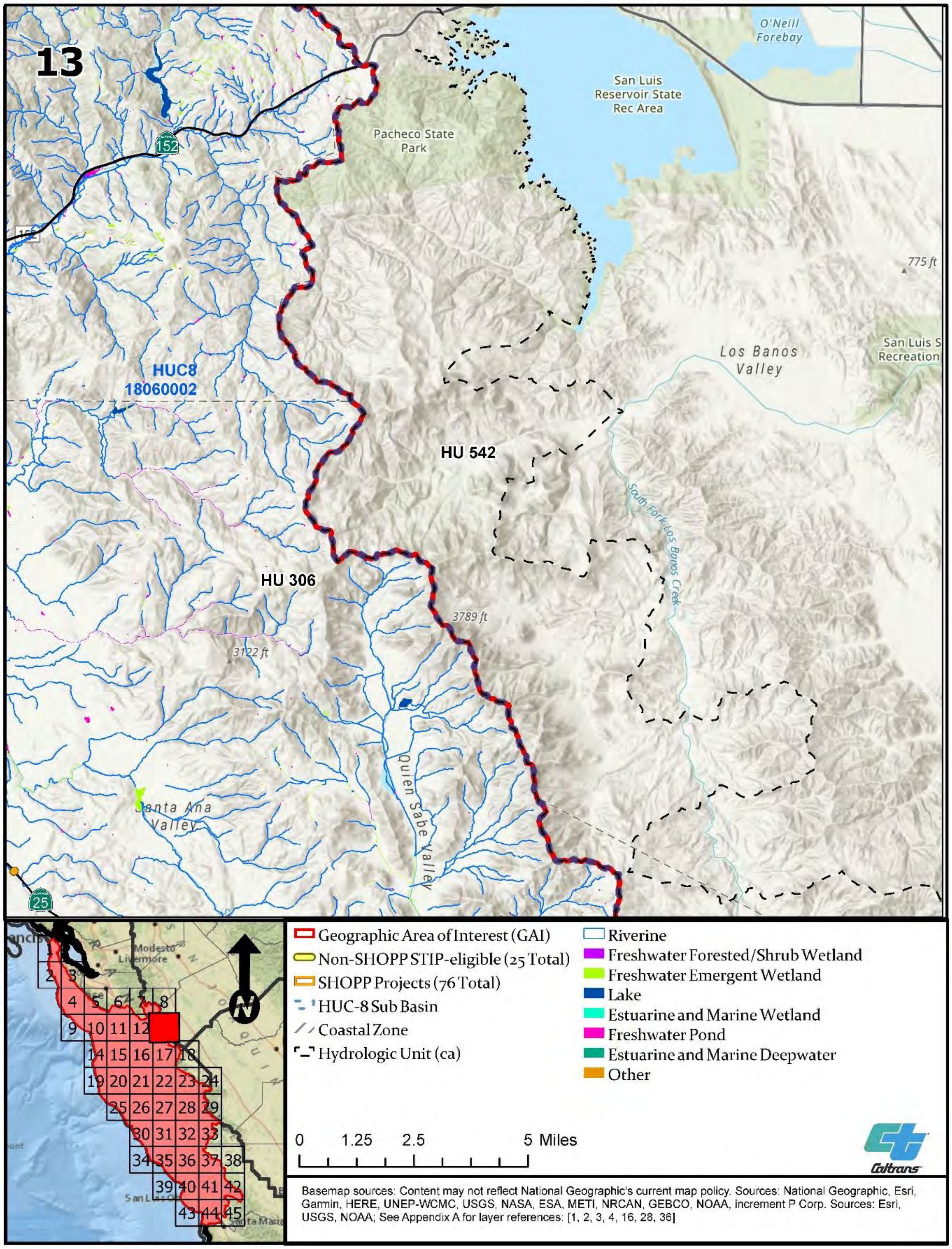
40
41
42
43
44
45
San Luis
Santa Maria
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


12
HU 205
Gilroy
101
Lonoke
Miller
San Felipe
152
Carlyle Hills
Shore Rd
Dunneville
Sargent Hills
Santa Ana Creek
Fairview Rd
HU 306
129
156
Lomerias Muertas
Flint Hills
HUC8 18060015
HUC8 18060002
San Juan Valley
25
Hollister
Santa Ana Valley
Union Rd
Ridgemark
HU 310
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
N
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


13
O'Neill Forebay
San Luis Reservoir State Rec Area
Pacheco State Park
152
HUC8 18060002
HU 542
HU 306
775 ft
Los Banos Valley
San Luis S Recreation
South Fork Los Banos Creek
3789 ft
3122 ft
Quien Sabe Valley
Santa Ana Valley
25
Modesto
Livermore
N
1
2
3
4
5
6
7
8
9
10
11
12
14
15
16
17
18
19
20
21
22
23
24
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32
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34
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36
37
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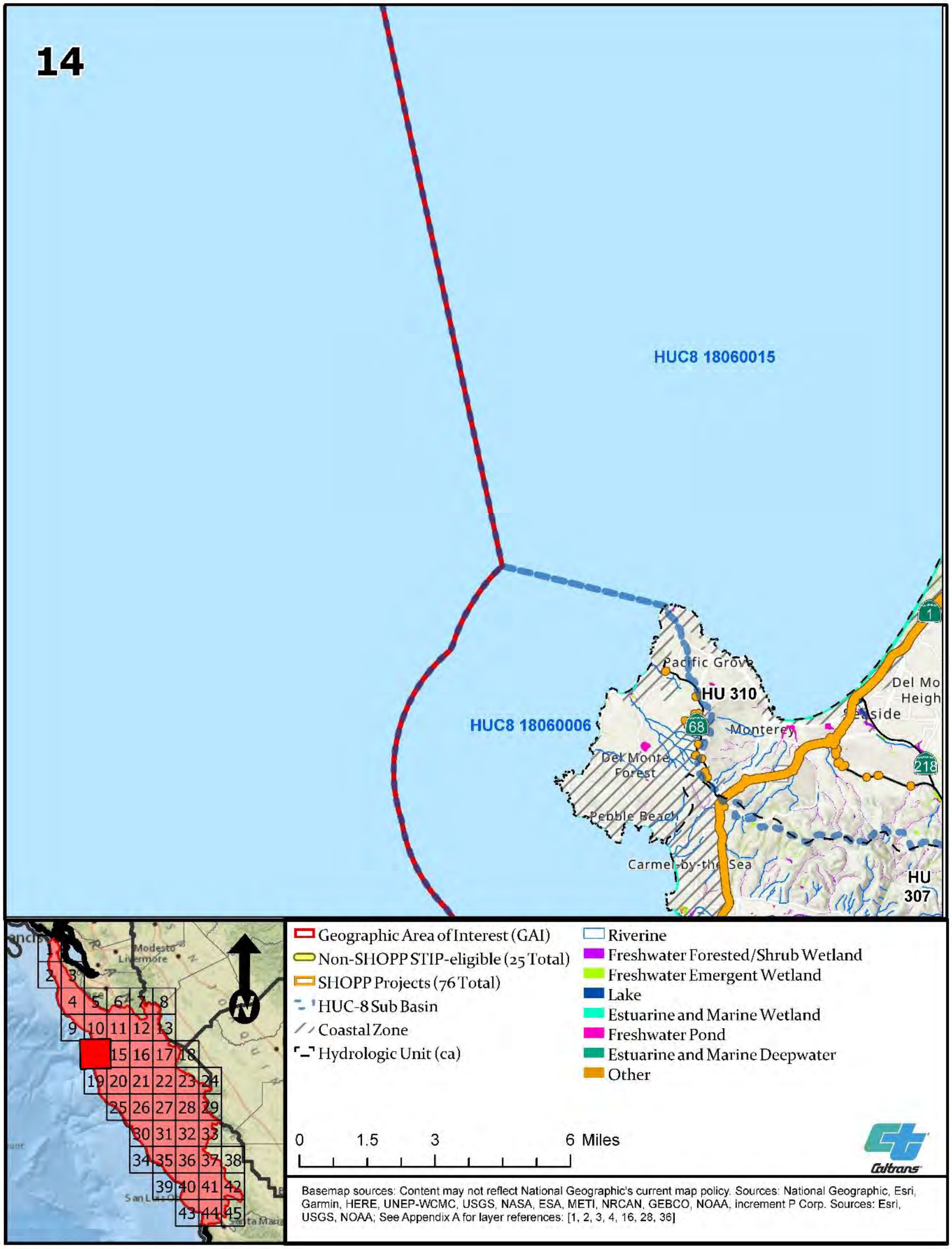
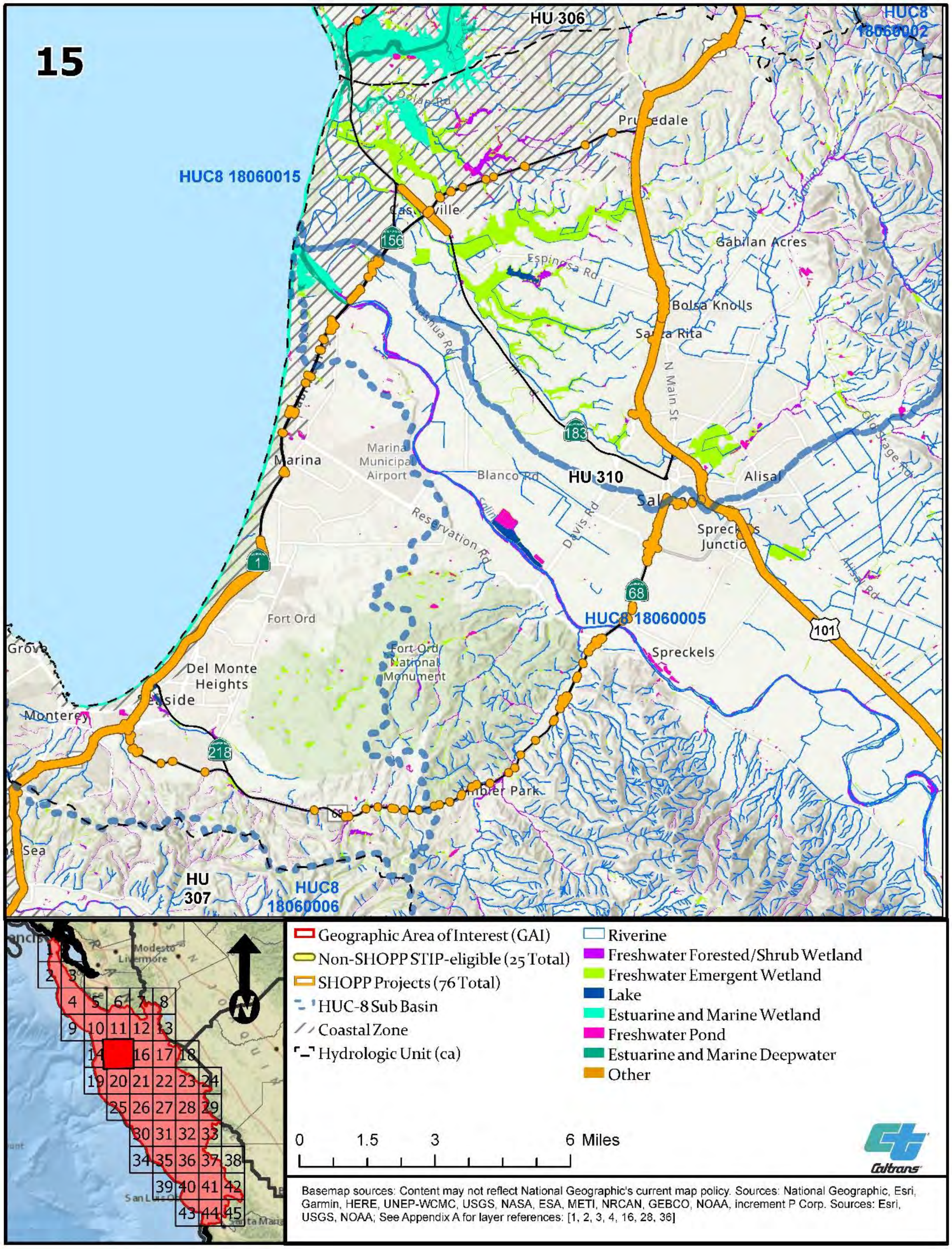
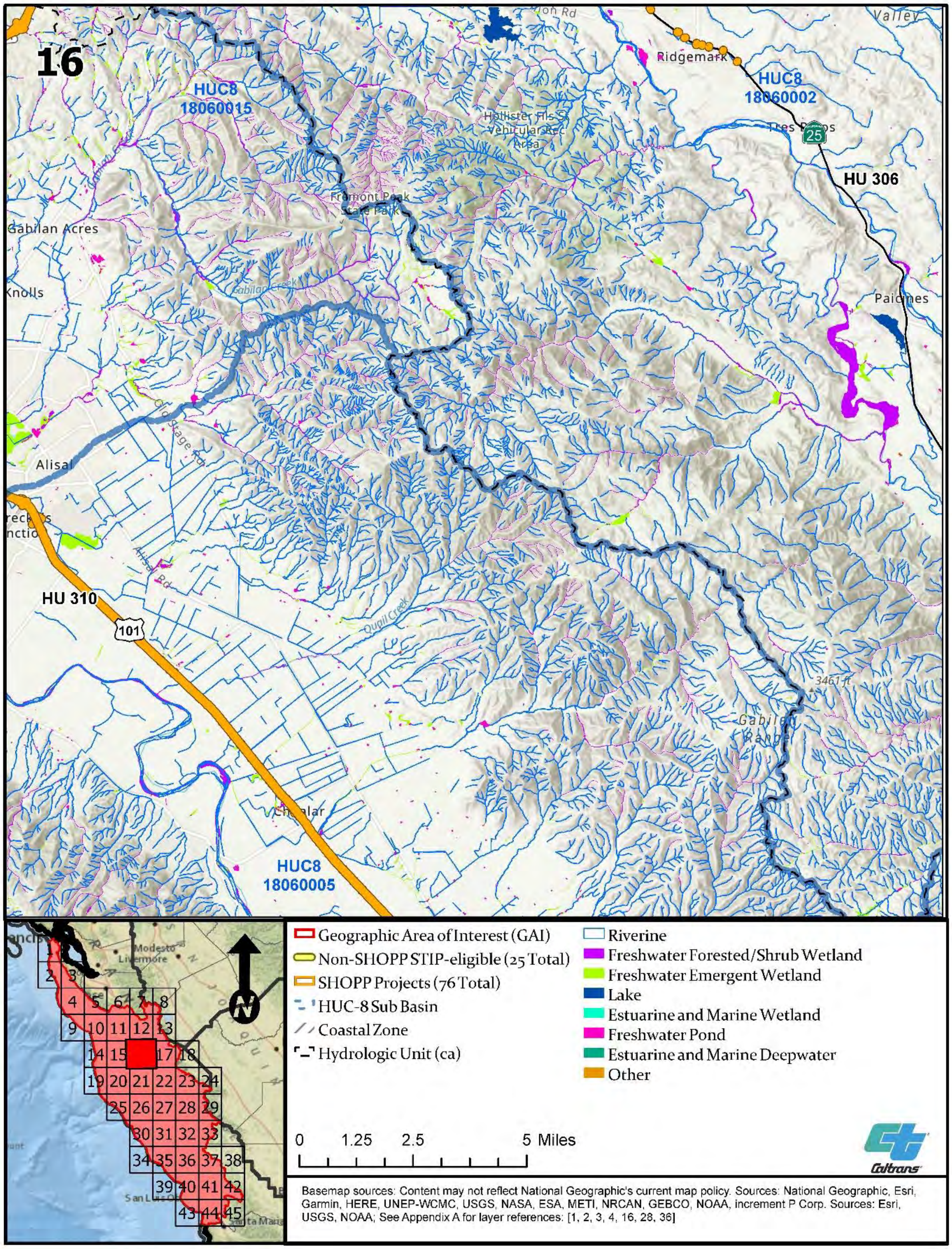
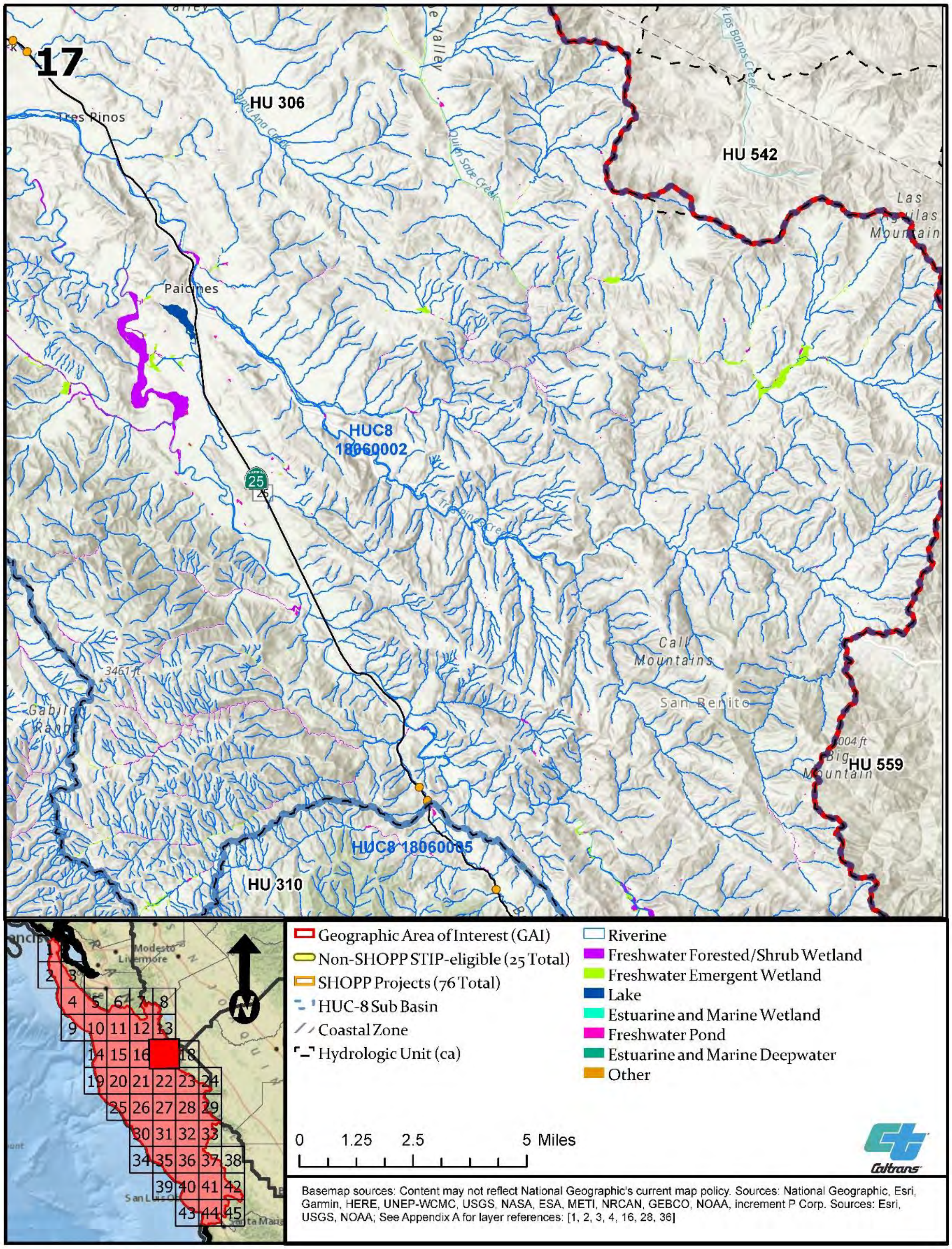
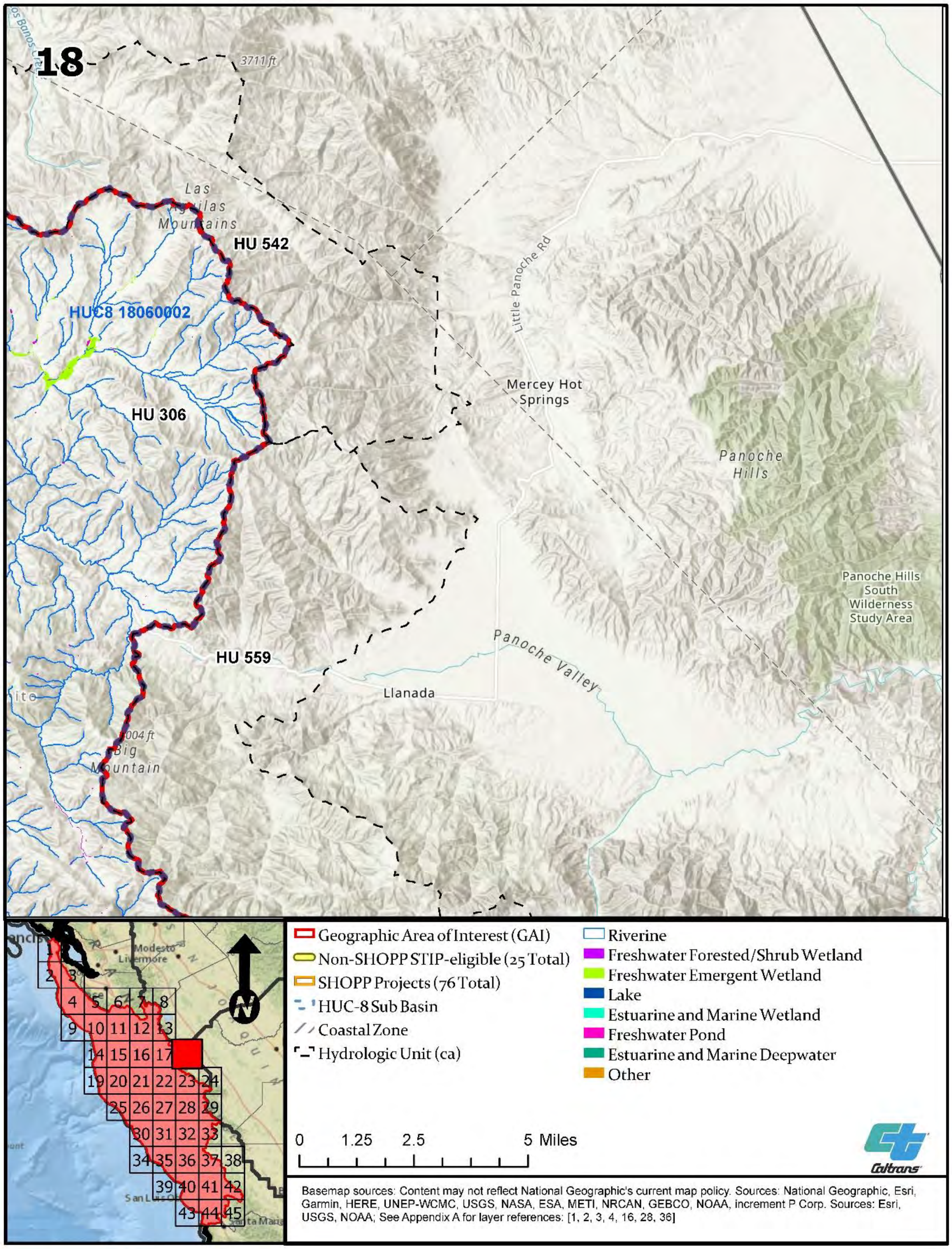
39
40
41
42
43
44
45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

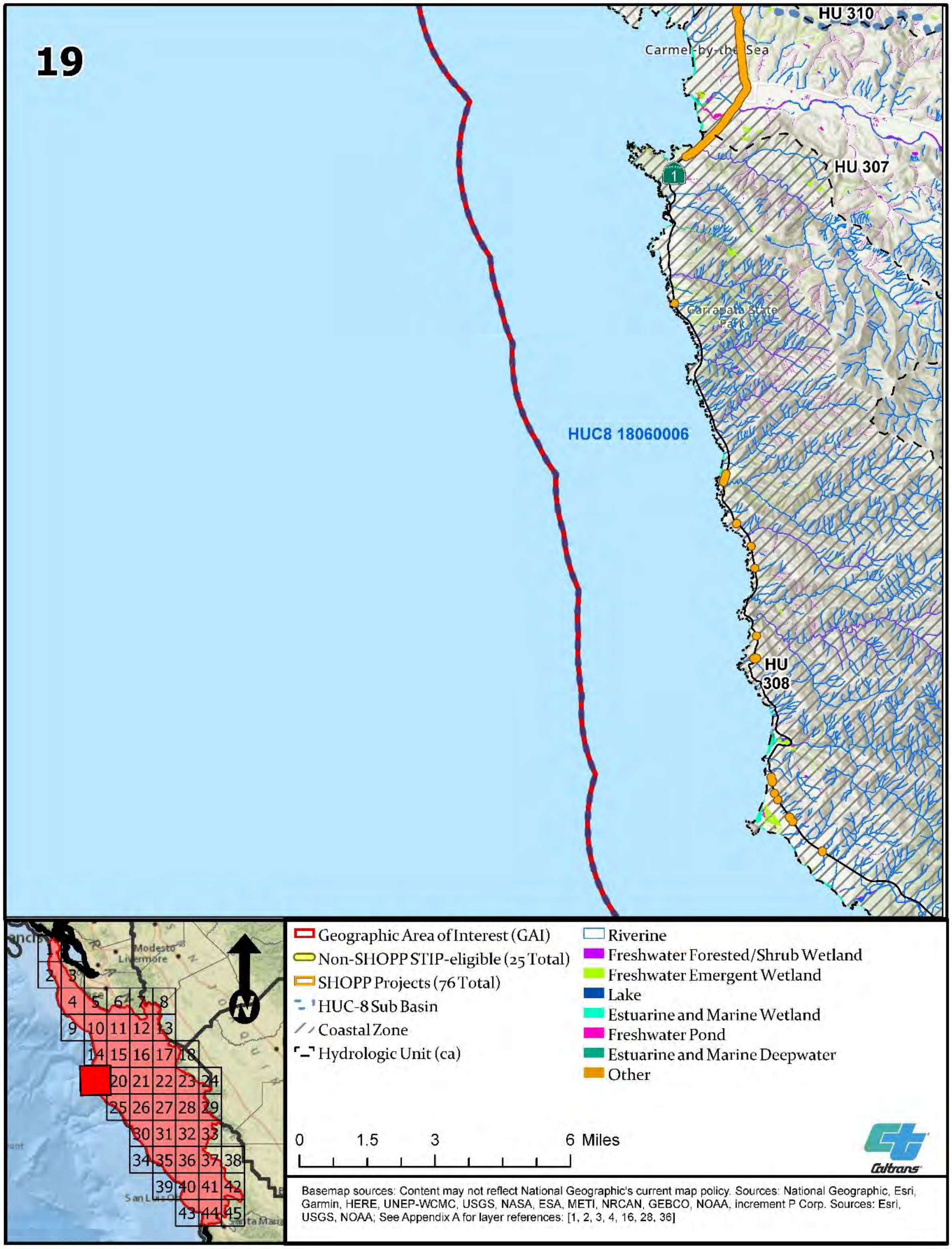

14
HUC8 18060015
HUC8 18060006
HU 310
Pacific Grove
Monterey
Del Monte Forest
Pebble Beach
Carmel-by-the-Sea
HU 307
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

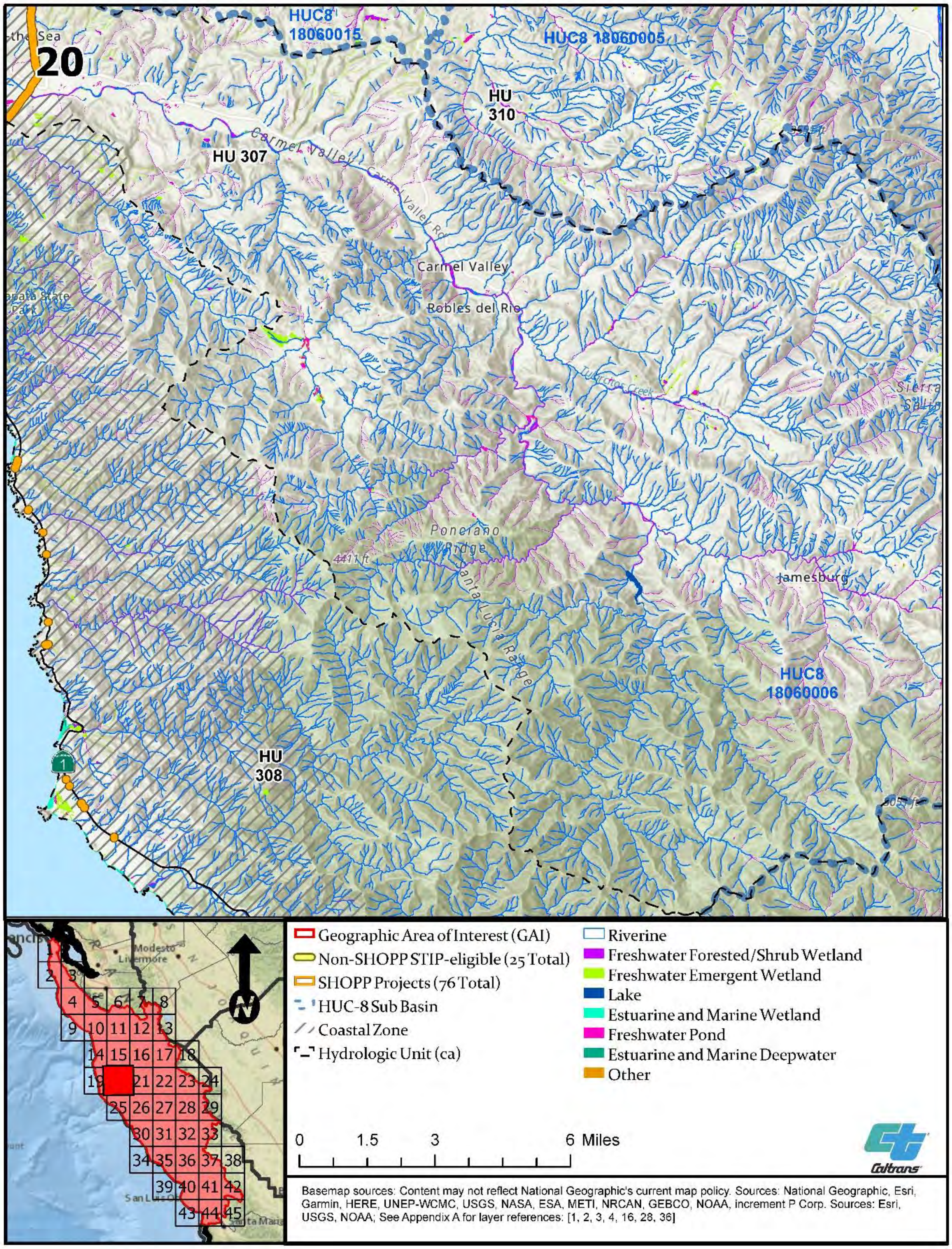

15
HU 306
HUC8 18060002
HUC8 18060015
Prunedale
Castroville
Gabilan Acres
Espinosa Rd
Bolsa Knolls
Santa Rita
N Main St
Marina
Marina Municipal Airport
Blanco Rd
HU 310
Alisal
Salinas
Reservation Rd
Davis Rd
Spreckels Junction
Old Stage Rd
Fort Ord
HUC8 18060005
Spreckels
Del Monte Heights
Fort Ord National Monument
Seaside
Monterey
Timber Park
HU 307
HUC8 18060006
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

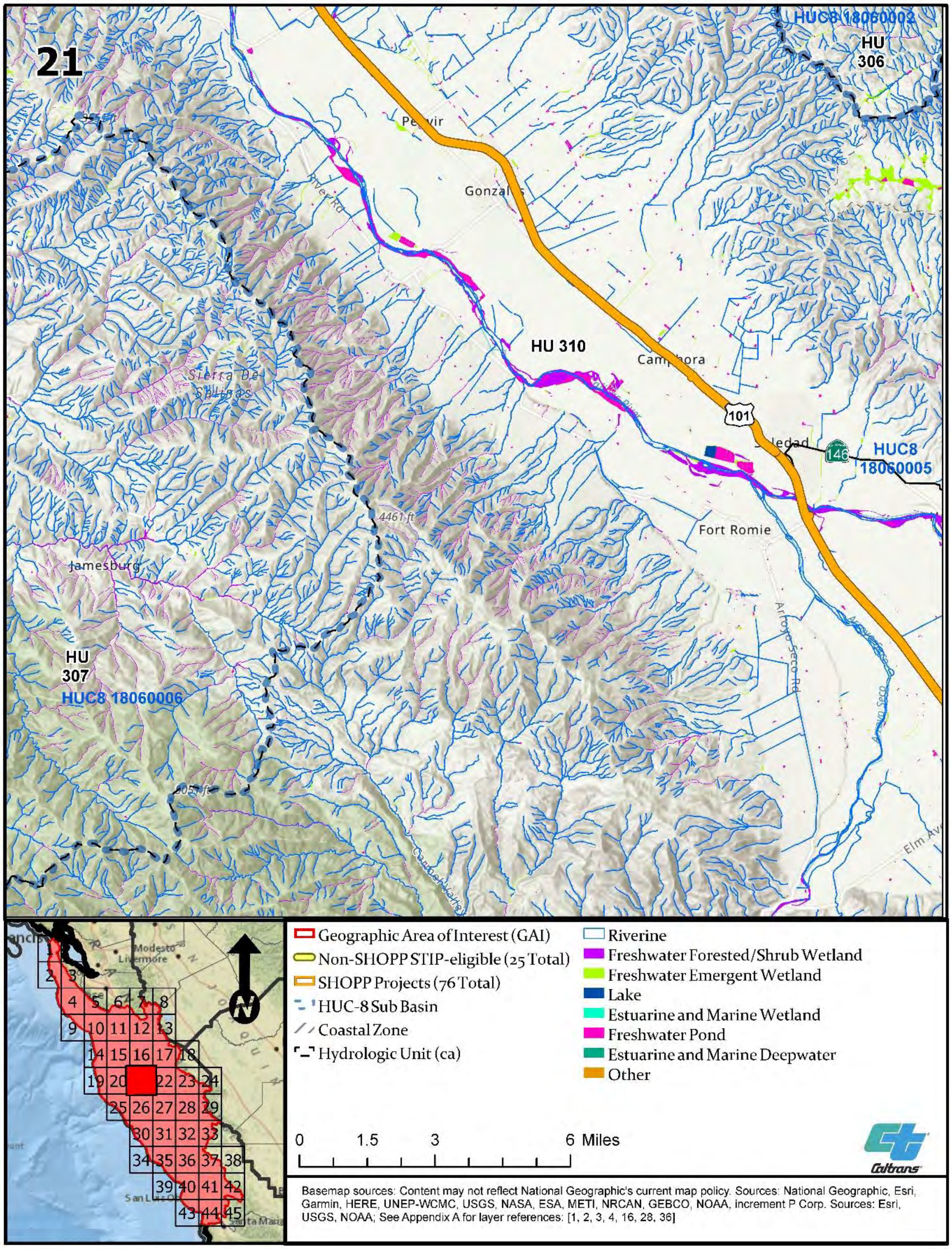

16
HUC8
18060015
HUC8
18060002
HUC8
18060005
HU 306
HU 310
Ridgemark
Hollister Hls S Vehicular Rec Area
Fremont Peak State Park
Gabilan Acres
Knolls
Alisal
Cabilan Creek
Old Stage Rd
Alisal Rd
Quail Creek
3461 ft
Gabilan Range
Paicines
25
101
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
N
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

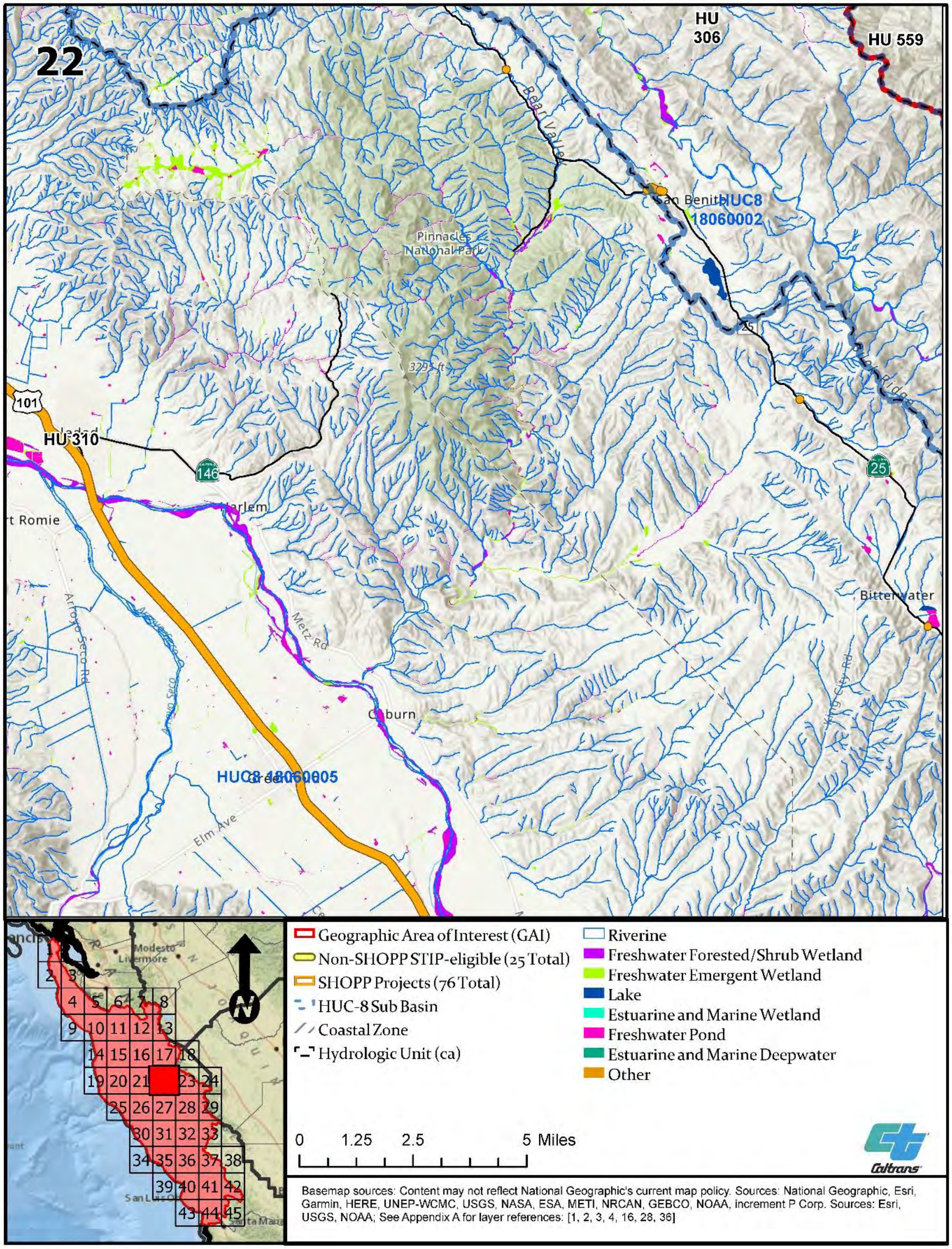

17
HU 306
Tres Pinos
Paicines
HU 542
Las Aguilas Mountain
HUC8 18060002
25
Call Mountains
San Benito
3461 ft
Gabilan Range
Big Mountain
HU 559
HUC8 18060005
HU 310
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

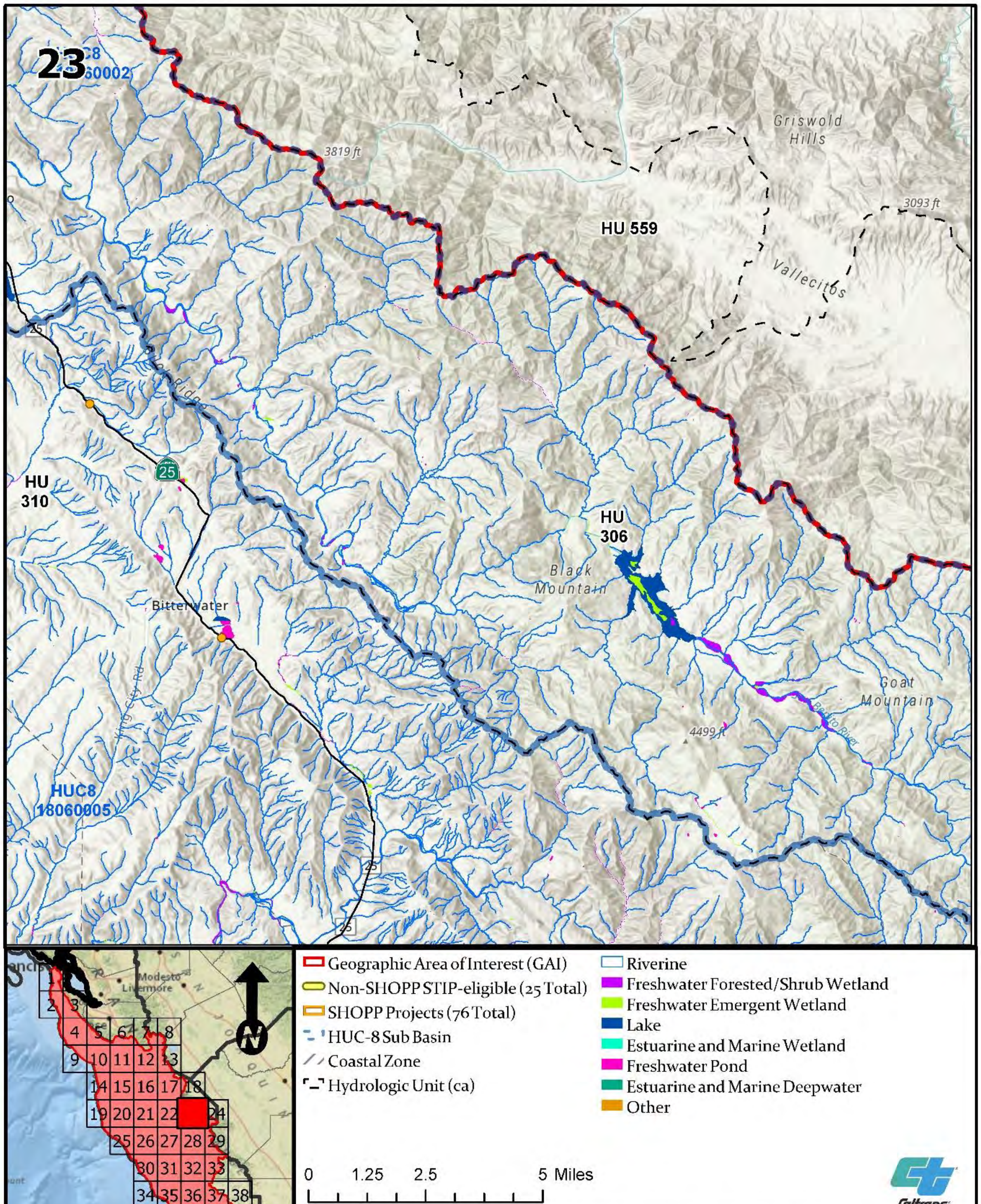

18
3711 ft
Las Aguilas Mountains
HU 542
HUC8 18060002
HU 306
Little Panoche Rd
Mercey Hot Springs
Panoche Hills
Panoche Hills South Wilderness Study Area
Panoche Valley
HU 559
Llanada
004 ft
Big Mountain
Modesto
Livermore
1
2 3
4 5 6 7 8
9 10 11 12 13
14 15 16 17
19 20 21 22 23 24
25 26 27 28 29
30 31 32 33
34 35 36 37 38
39 40 41 42
43 44 45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


19
HU 310
Carmel-by-the-Sea
HU 307
1
Garrapata State Park
HUC8 18060006
HU 308
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

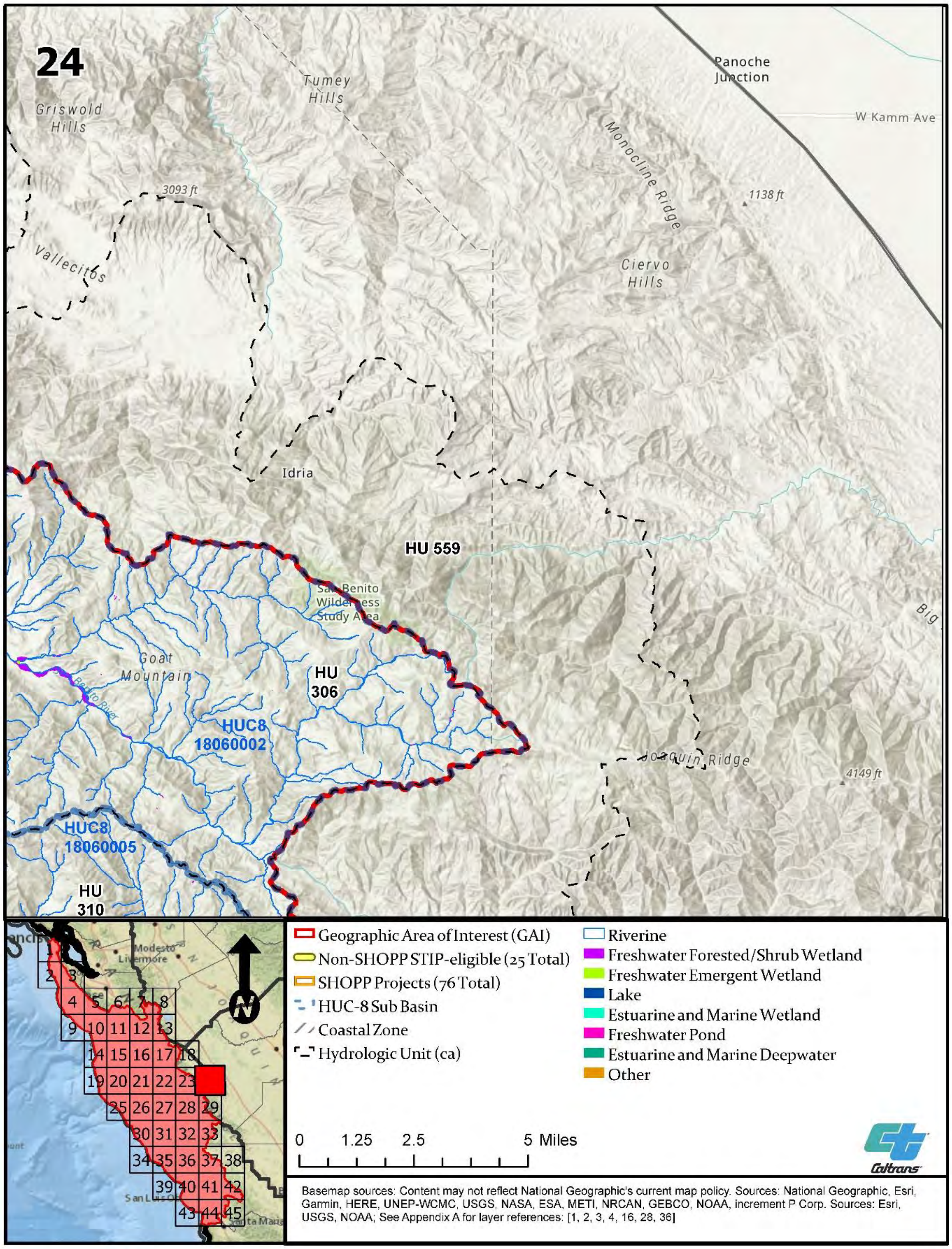

HUC8 18060015
HUC8 18060005
20
HU 310
HU 307
Carmel Valley
Carmel Valley Rd
Robles del Rio
Tularcitos Creek
Poneiano Ridge
Santa Lucia Range
Jamesburg
HUC8 18060006
HU 308
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

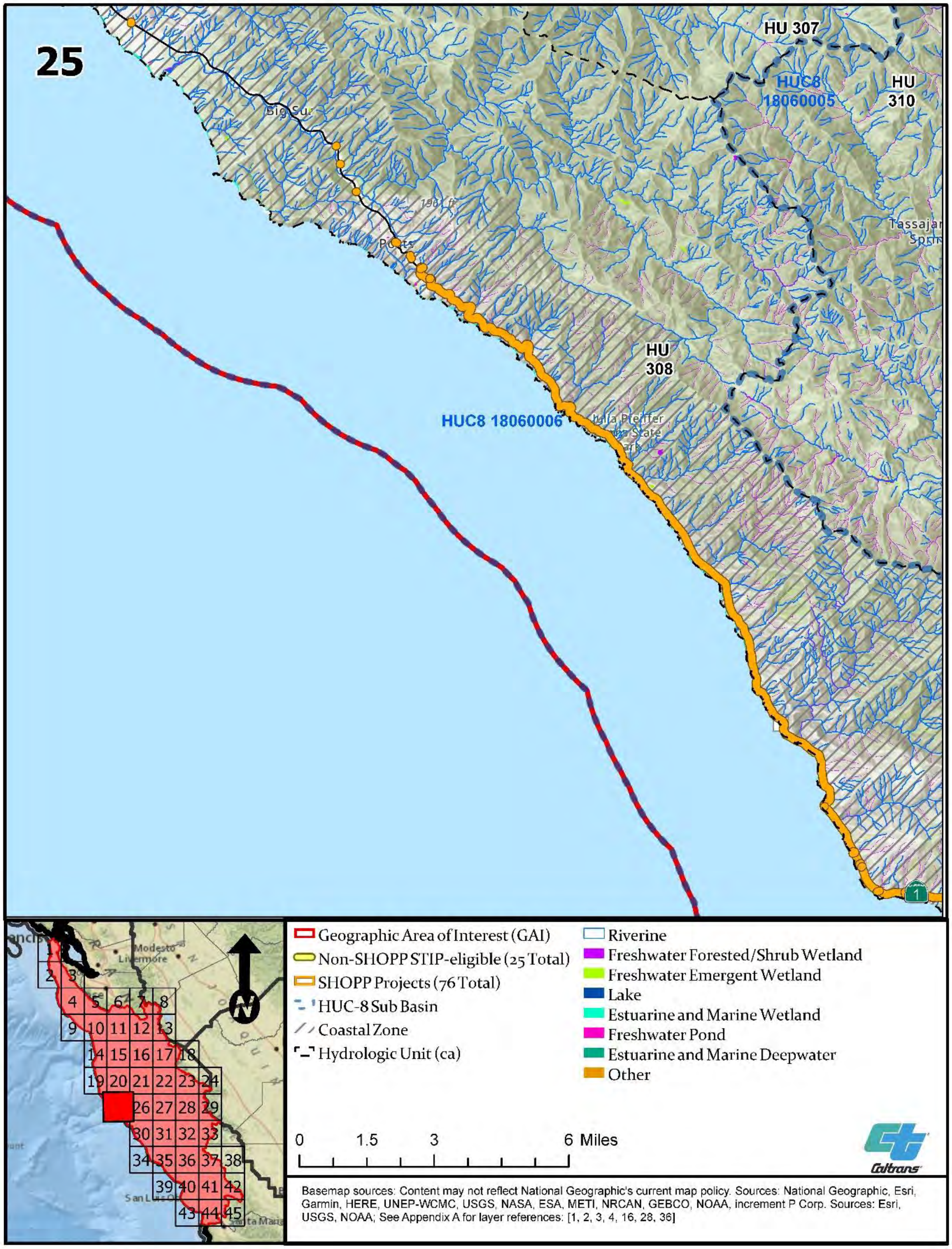

21
HUC8 18060002
HU 306
HU 310
HU 307
HUC8 18060006
HUC8 18060005
Gonzales
Camphora
Soledad
Fort Romie
Jamesburg
Sierra De Salinas
4461 ft
101
146
Arroyo Seco Rd
Elm Ave
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

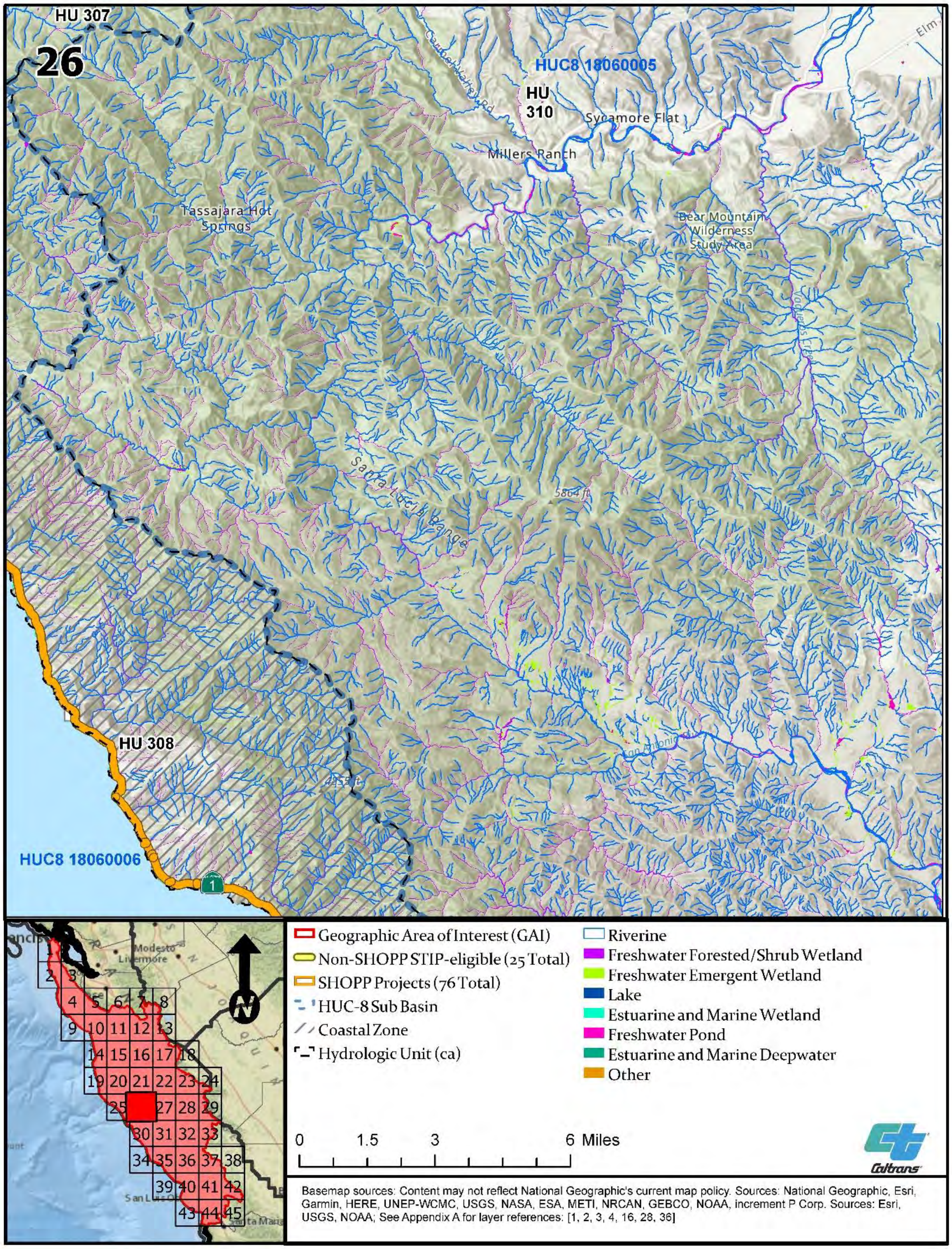

22
HU 306
HU 559
HU 310
Bear Valley
San Benito
HUC8 18060002
Pinnacles National Park
3293 ft
101
146
25
Harlem
Fort Romie
Arroyo Seco Rd
Metz Rd
Soburn
HUC8 18060005
Elm Ave
King City Rd
Bitterwater
Modesto
Livermore
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
N
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0
1.25
2.5
5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

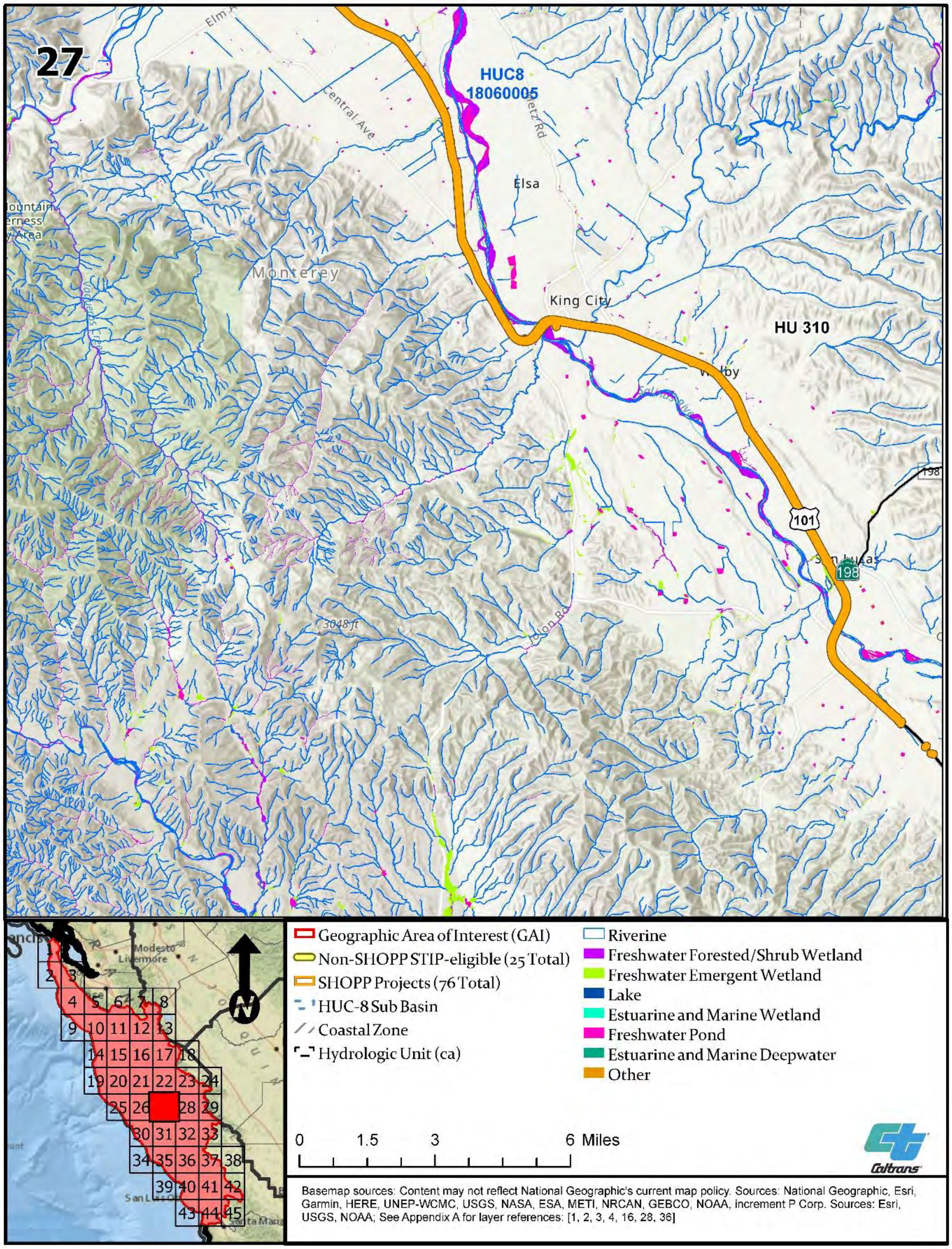


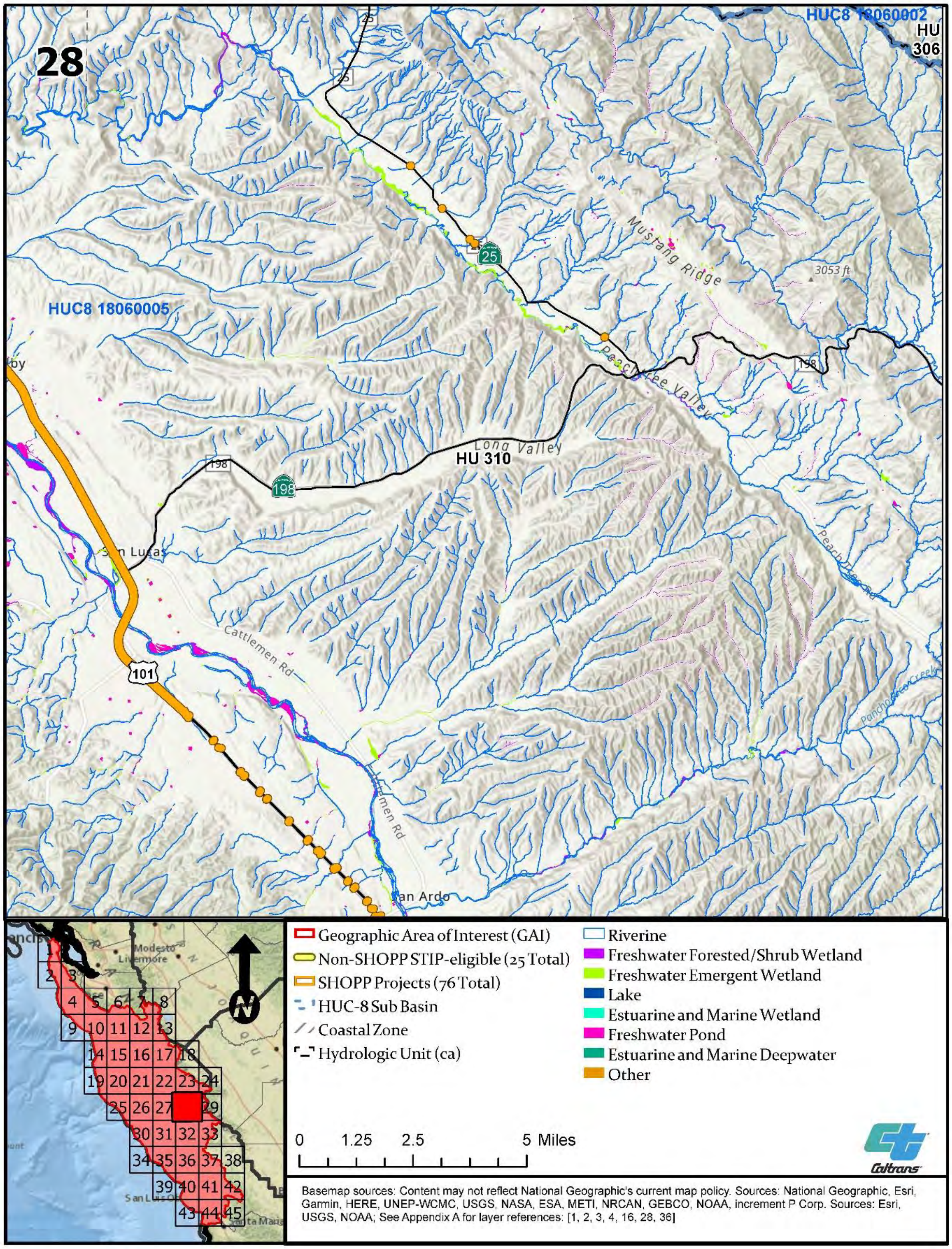
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

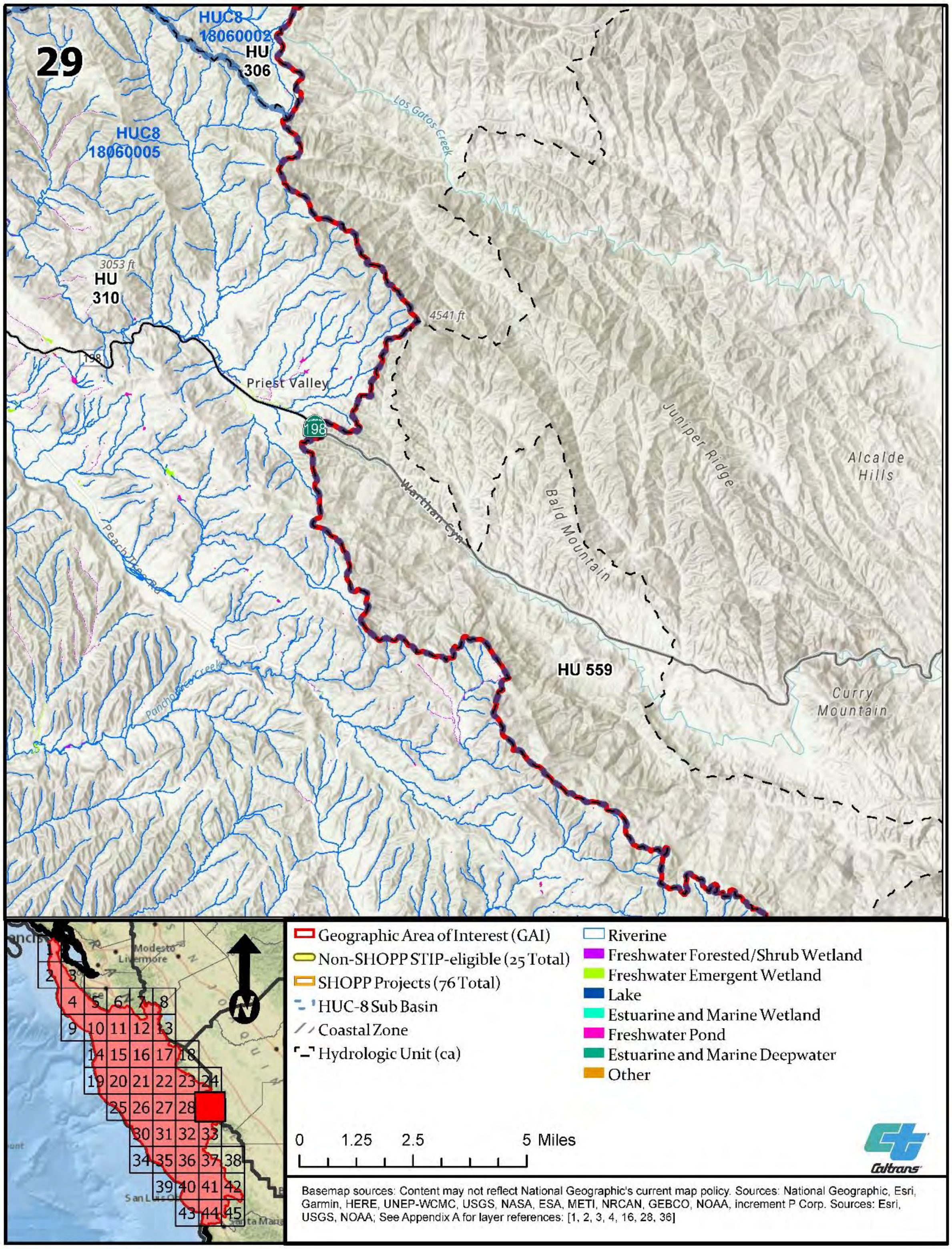

24
Griswold Hills
Tumey Hills
Panoche Junction
W Kamm Ave
Monocline Ridge
3093 ft
1138 ft
Vallecitos
Ciervo Hills
Idria
HU 559
San Benito Wilderness Study Area
Big
Goat Mountain
HU 306
HUC8 18060002
Joaquin Ridge
4149 ft
HUC8 18060005
HU 310
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

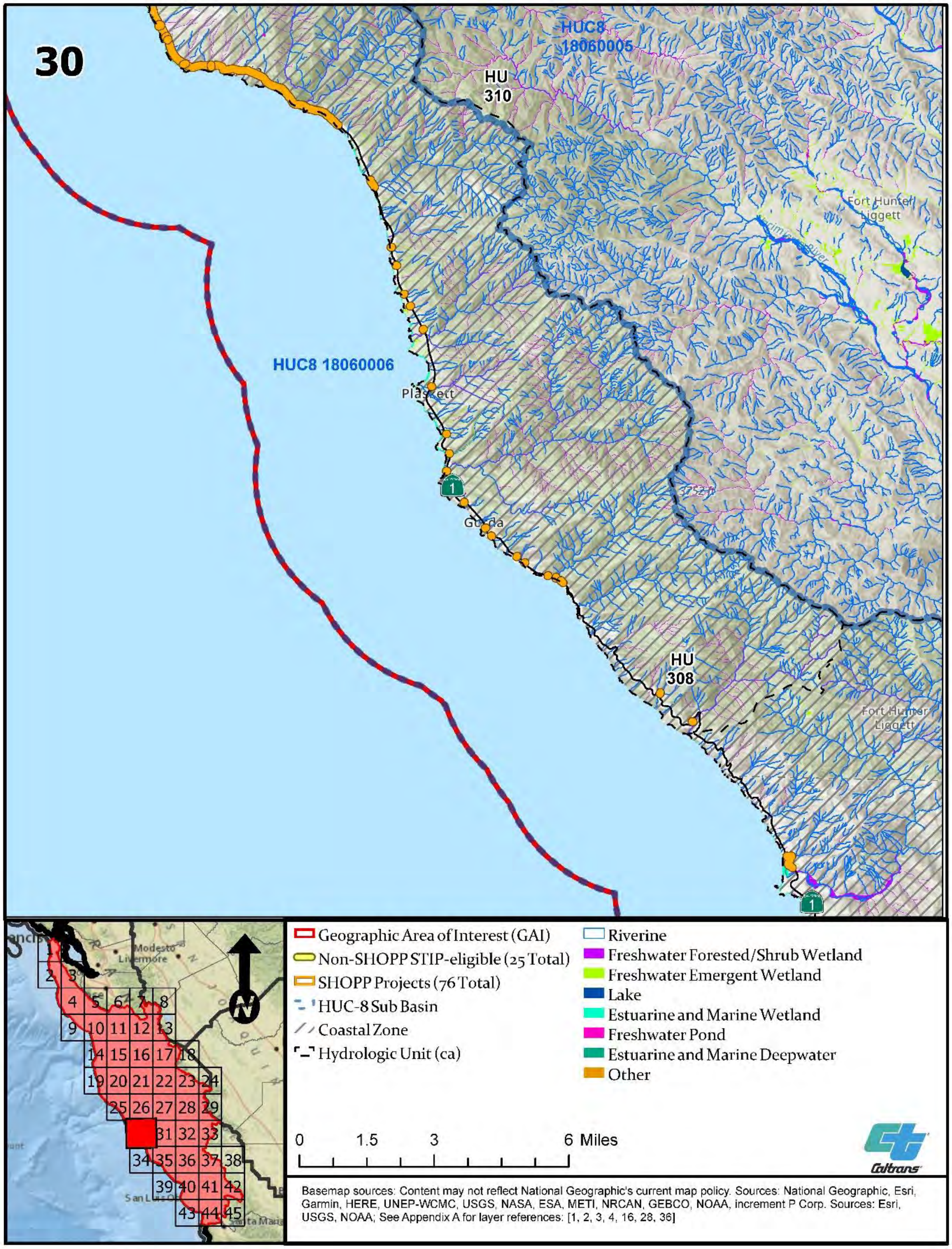

25
HU 307
HUC8 18060005
HU 310
Big Sur
HU 308
HUC8 18060006
Julia Pfeiffer Burns State Park
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

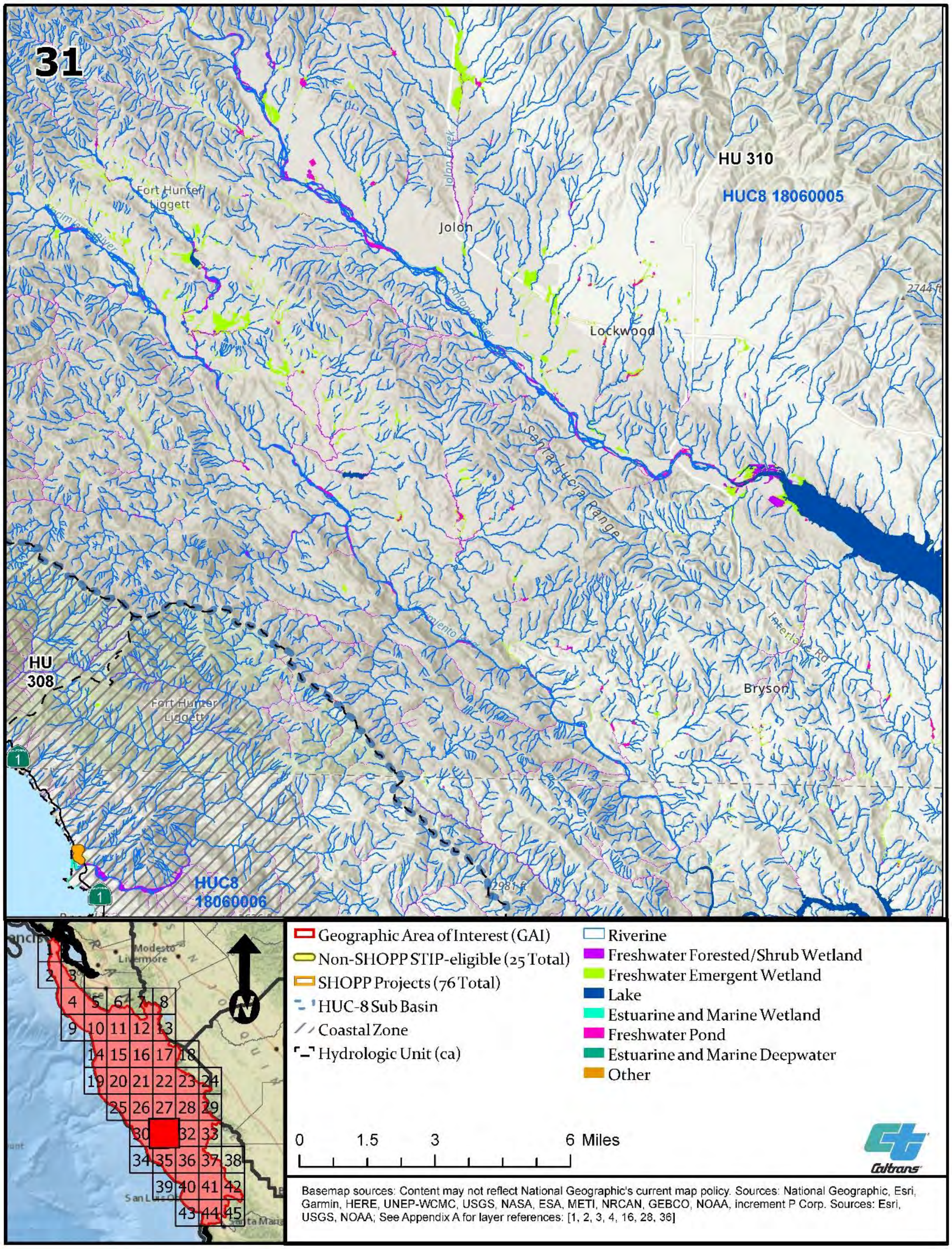

HU 307
26
HUC8 18060005
HU 310
Sycamore Flat
Millers Ranch
Tassajara Hot Springs
Bear Mountain Wilderness Study Area
Santa Lucia Range
5864 ft
HU 308
HUC8 18060006
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
N
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

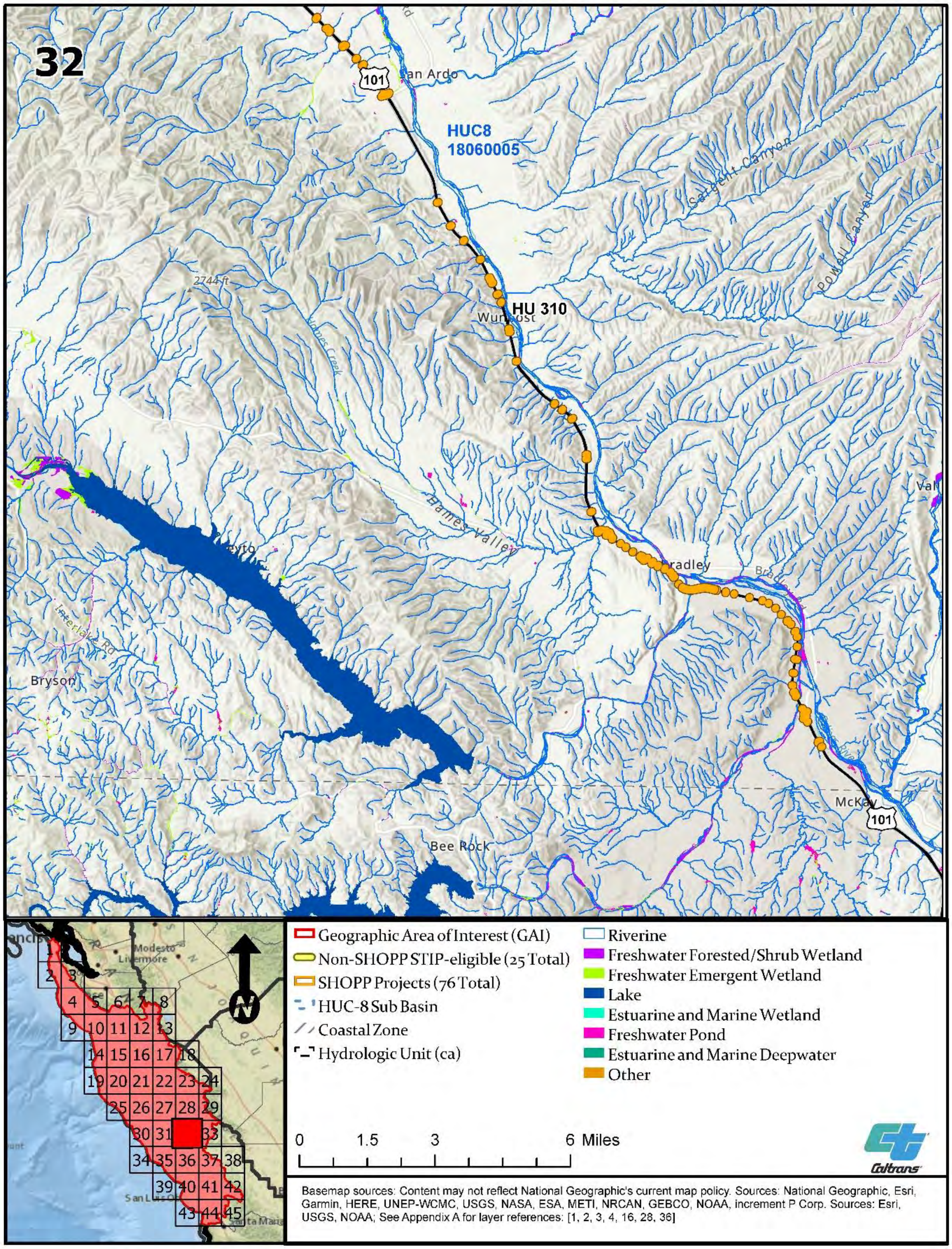

27
HUC8
18060005
Elsa
Monterey
King City
HU 310
101
198
3048 ft
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

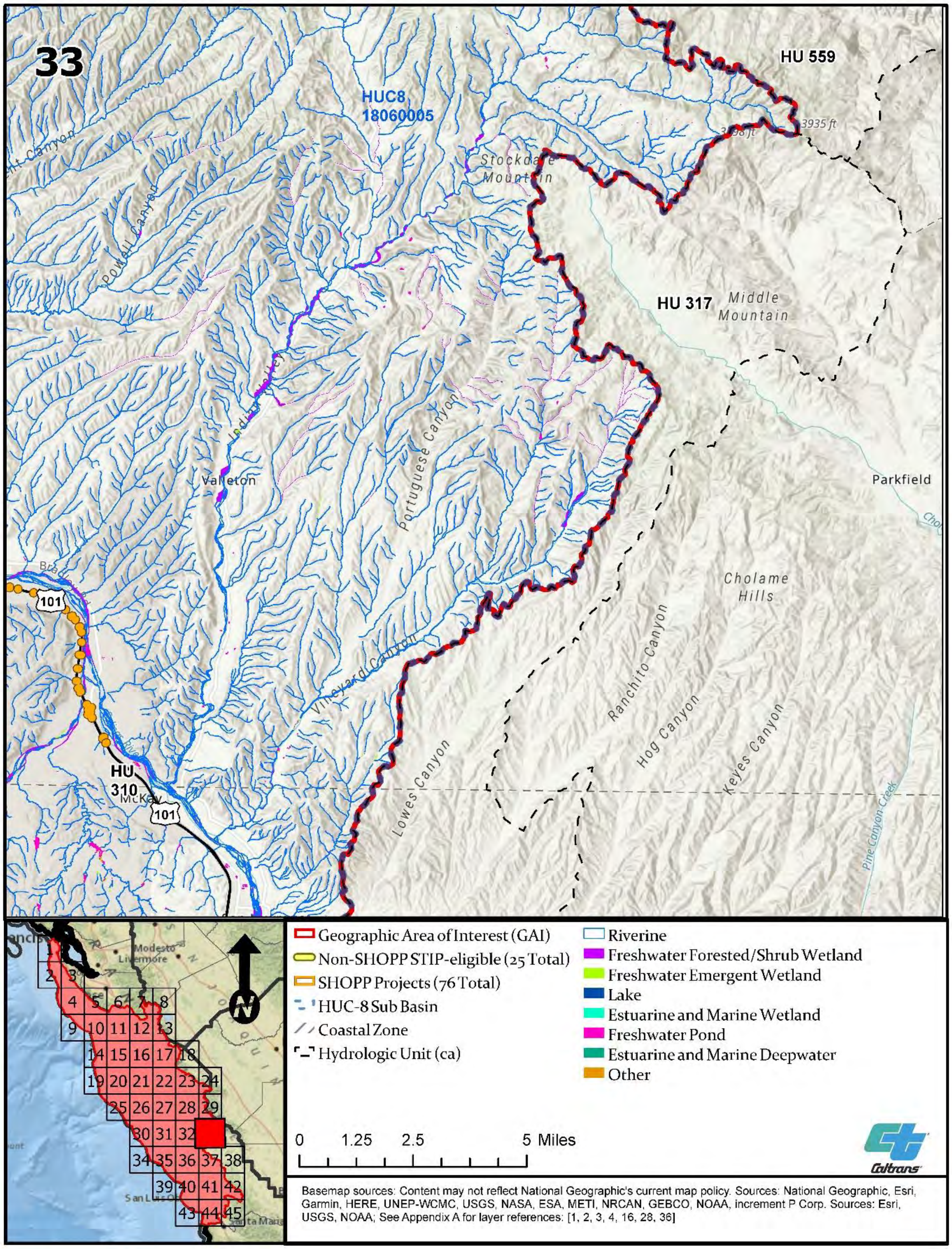

28
HUC8 18060002
HU 306
HUC8 18060005
Mustang Ridge
3053 ft
Peachtree Valley
Long Valley
HU 310
San Lucas
Cattlemen Rd
San Ardo
25
198
101
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

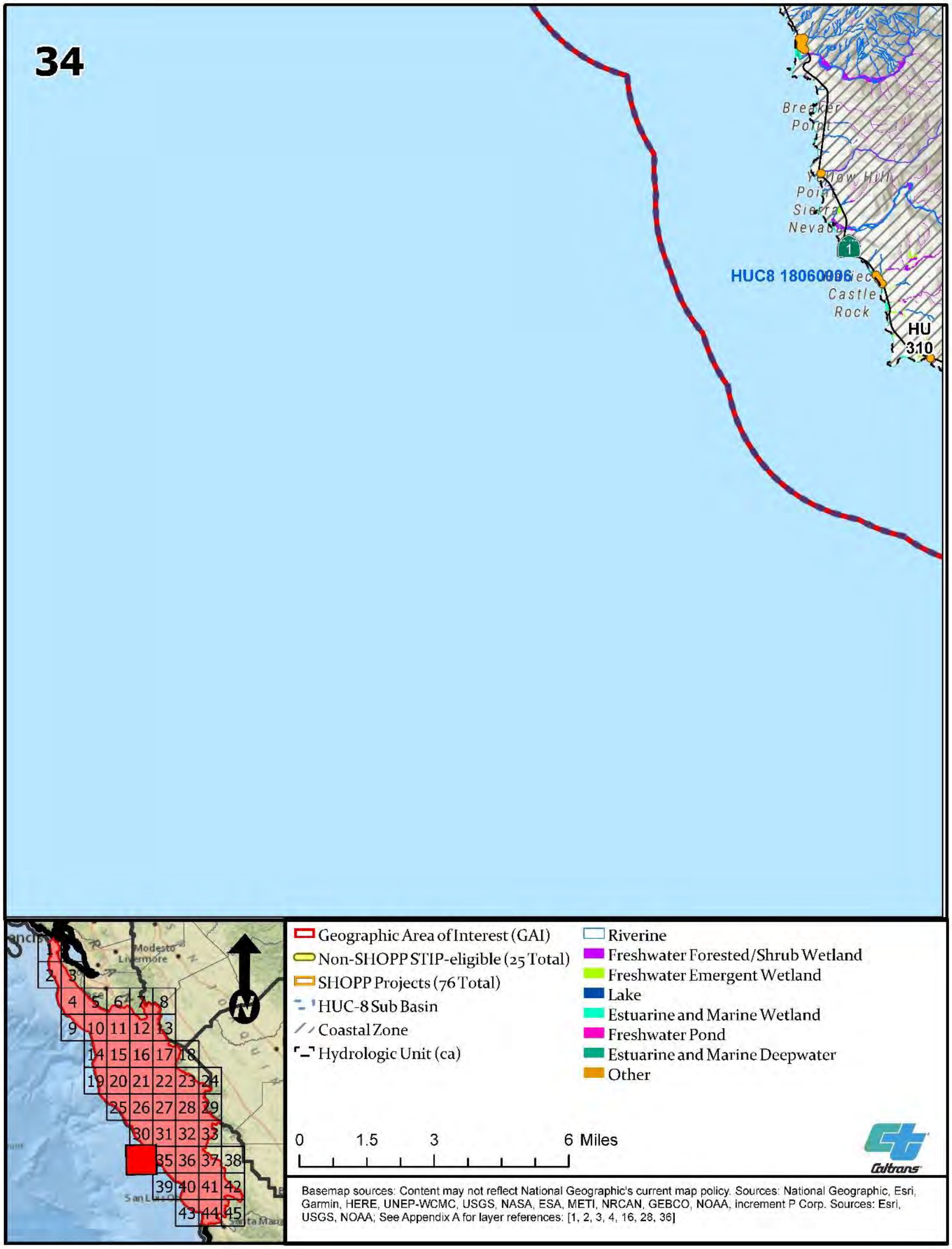

29
HUC8 18060002
HU 306
HUC8 18060005
Los Gatos Creek
3053 ft
HU 310
4541 ft
198
Priest Valley
198
Juniper Ridge
Alcalde Hills
Bald Mountain
Warthan Cyn
Peach Tree Rd
Pancho Rico Creek
HU 559
Curry Mountain
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

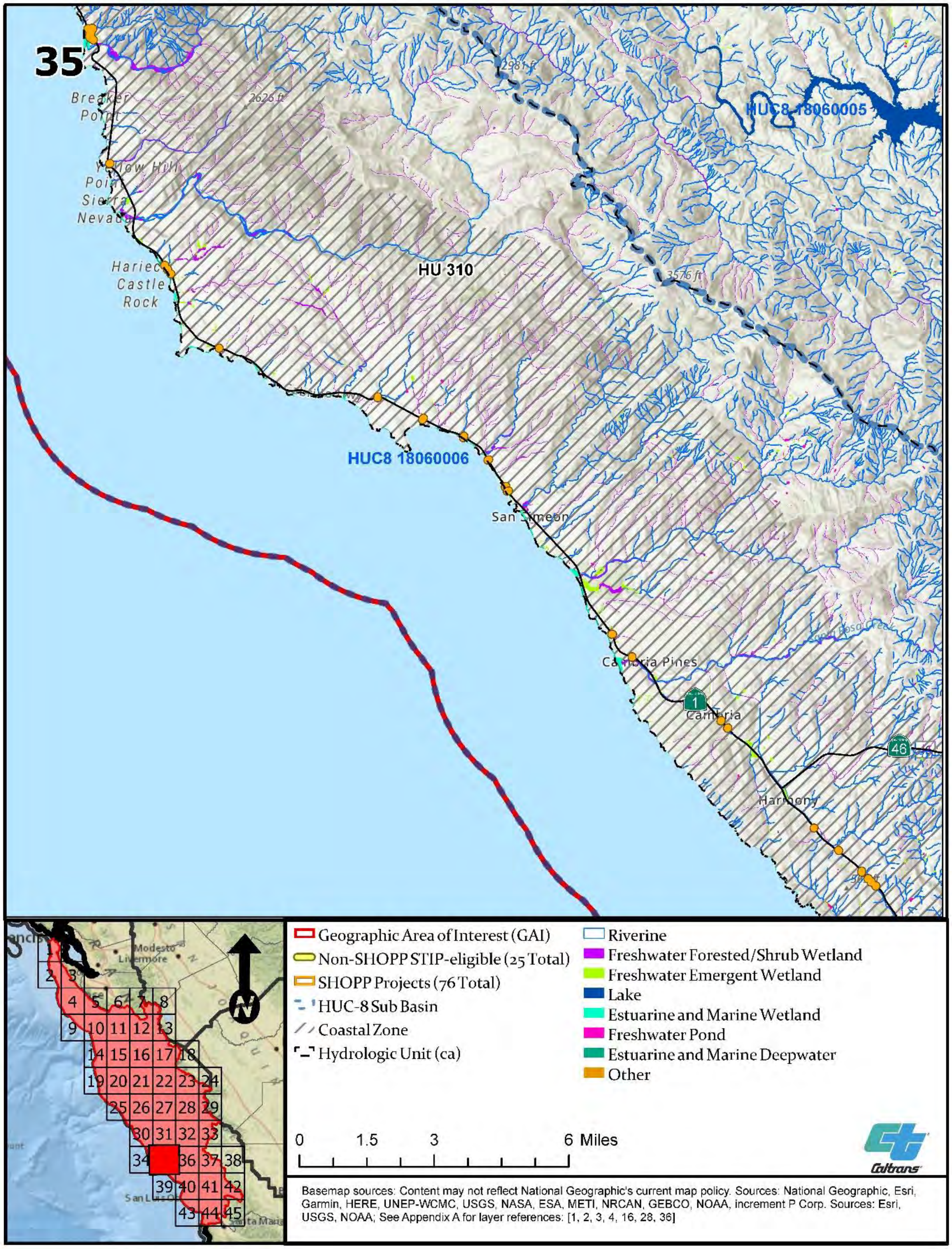

30
HUC8
18060005
HU
310
HUC8 18060006
Plaskett
Gorda
Fort Hunter Liggett
HU
308
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

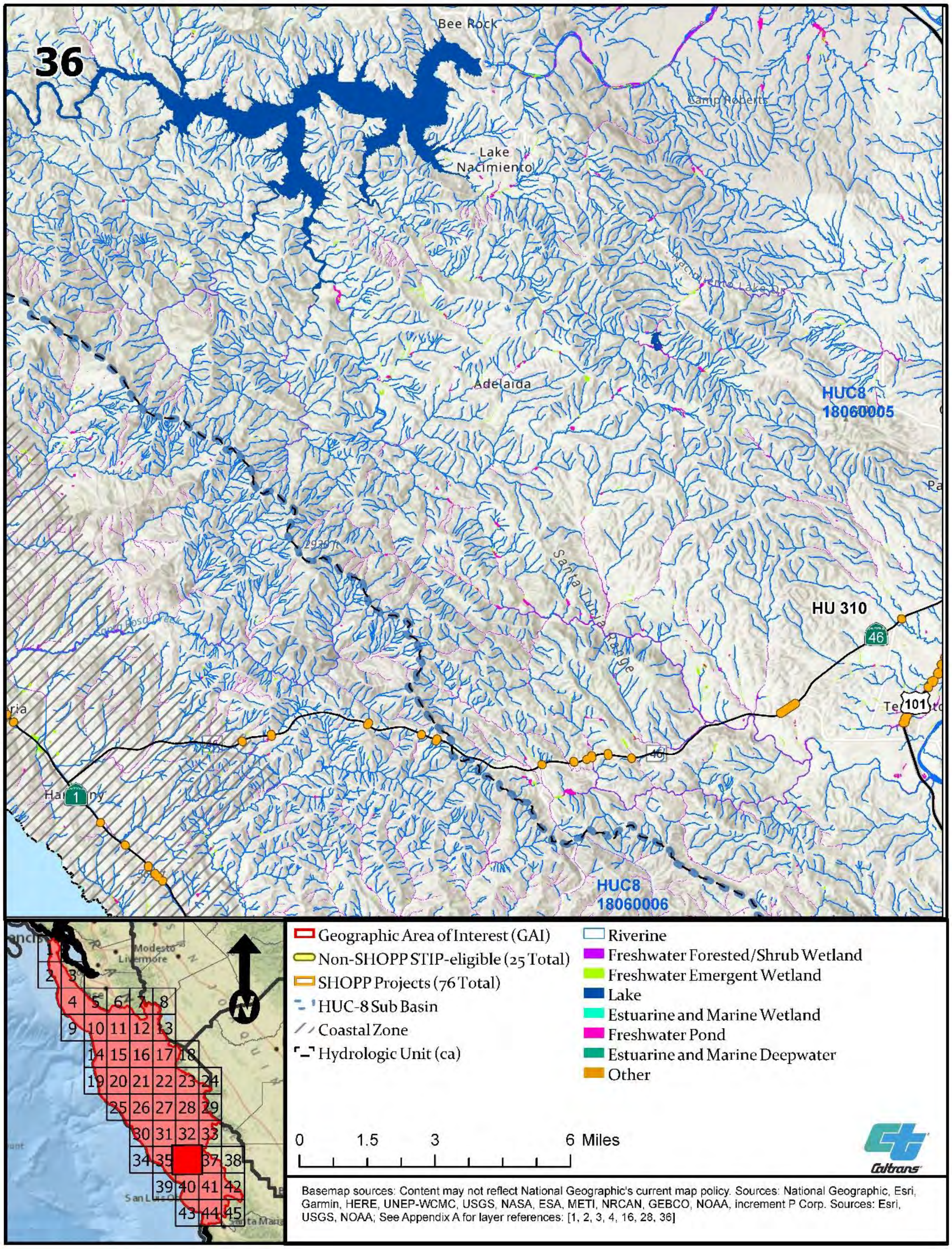

31
HU 310
HUC8 18060005
Fort Hunter Liggett
Jolon
Lockwood
Santa Lucia Range
Interlake Rd
Bryson
HU 308
HUC8 18060006
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

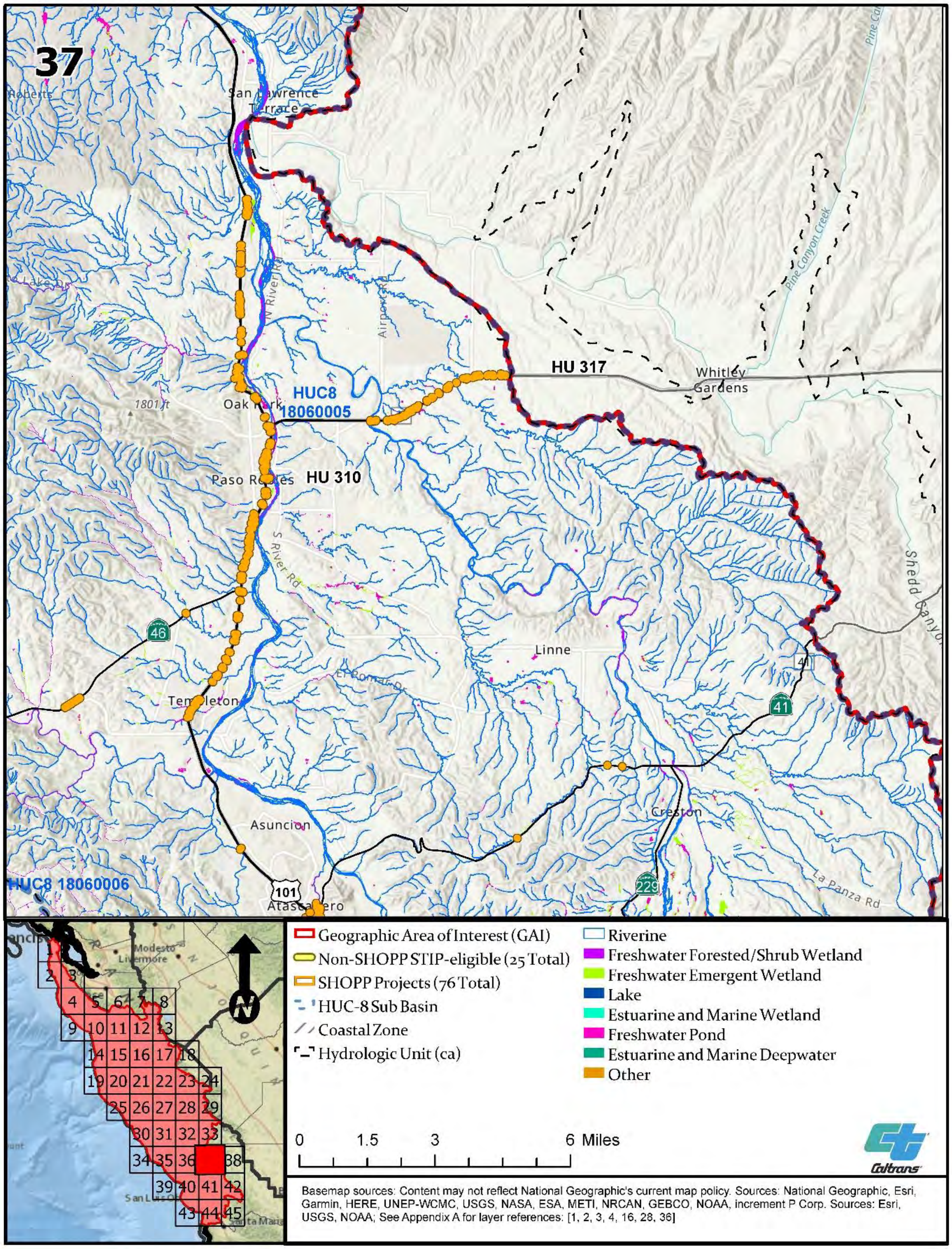

32
101
San Ardo
HUC8
18060005
Sargent Canyon
Powell Canyon
2744 ft
HU 310
Wunpost
Hames Valley
Bradley
Bryson
Interlake Rd
Bee Rock
McKay
Val
Modesto
Livermore
N
1
2
3
4 5 6 7 8
9 10 11 12 13
14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29
30 31 33
34 35 36 37 38
39 40 41 42
43 44 45
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

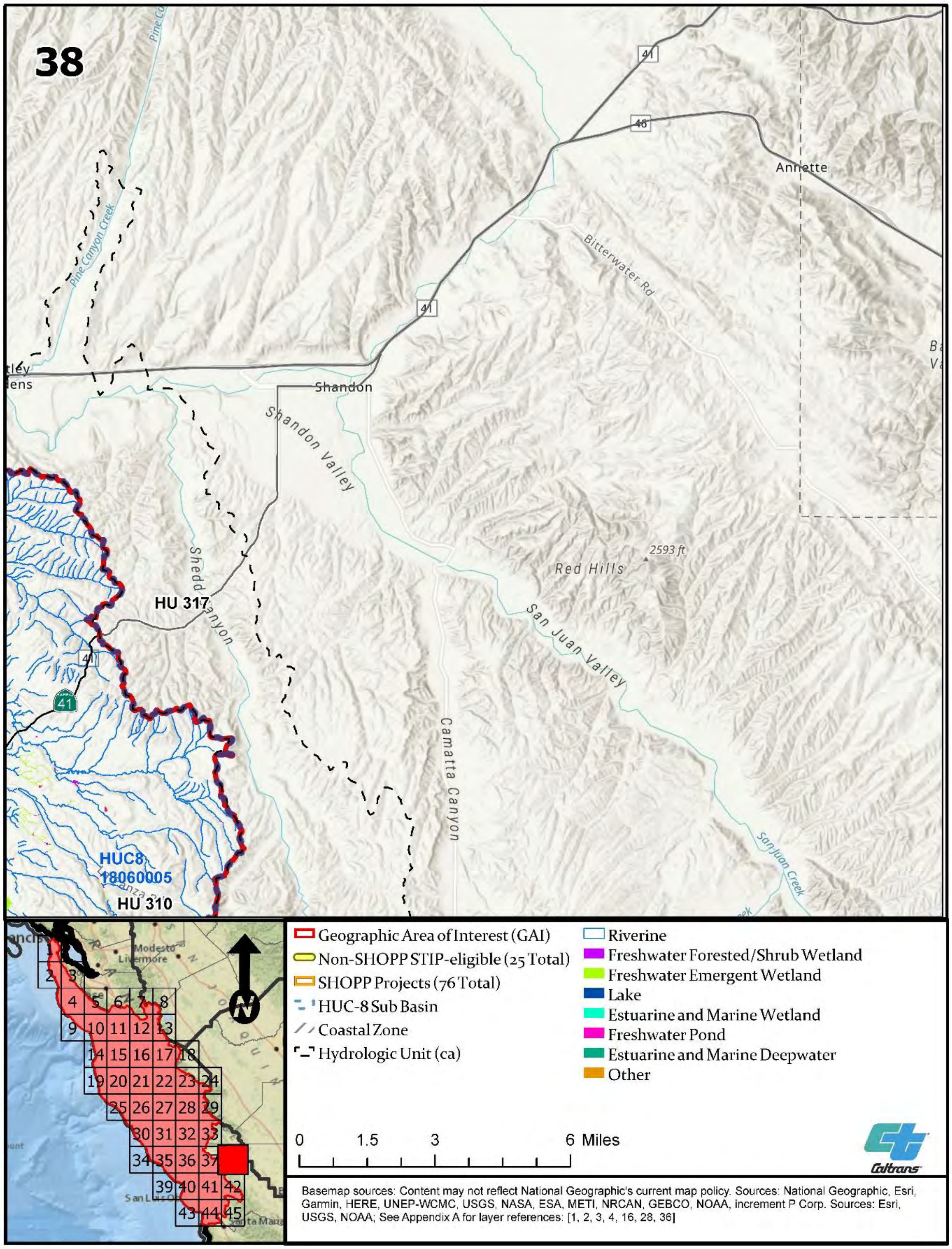

33
HUC8
18060005
HU 559
HU 317
HU 310
Stockdale Mountain
Middle Mountain
Powell Canyon
Indian Valley
Valleton
Portuguese Canyon
Vineyard Canyon
Parkfield
Cholame Hills
Ranchito Canyon
Hog Canyon
Keyes Canyon
Lowes Canyon
Pine Canyon Creek
McKay
101
3935 ft
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.25 2.5 5 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

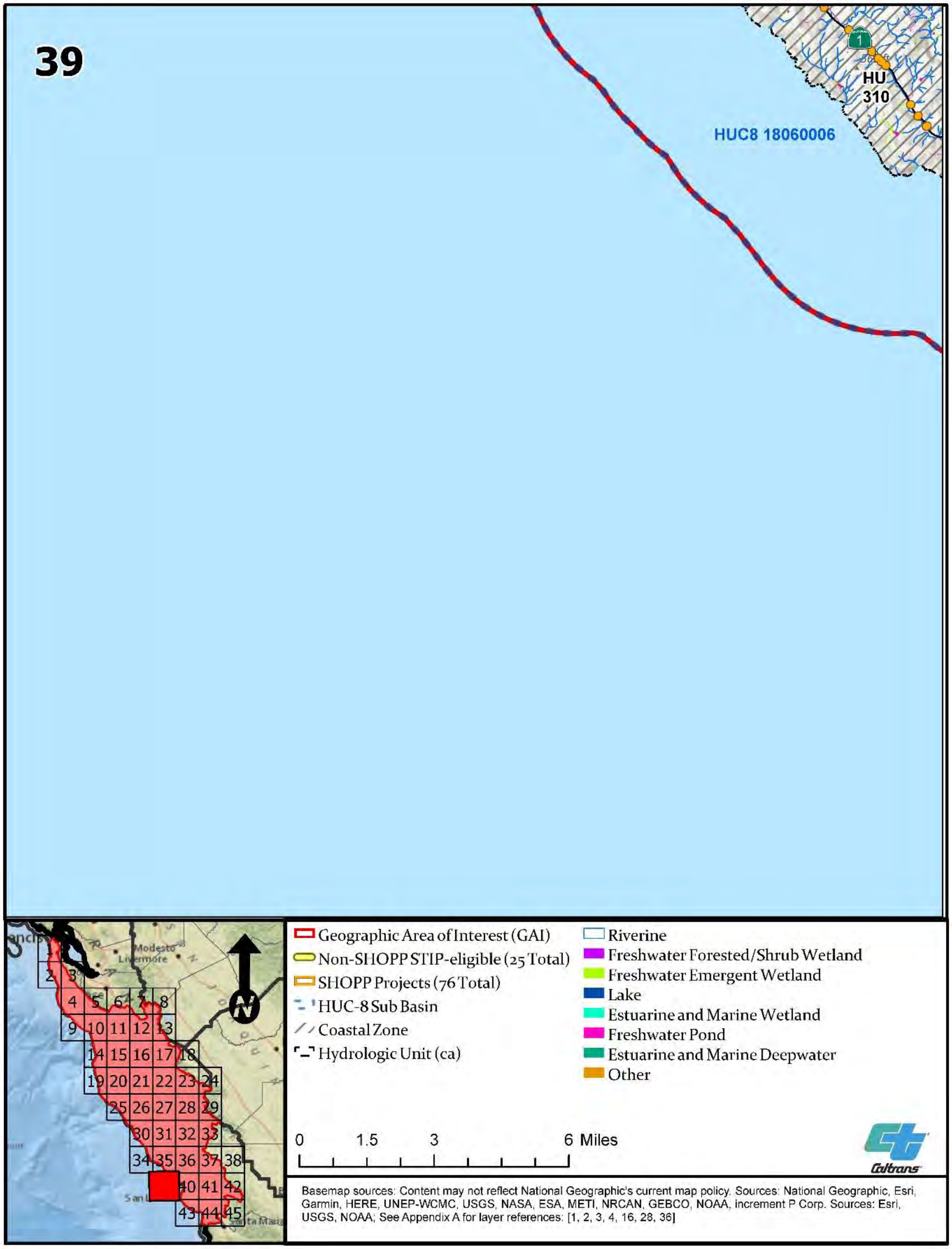

34
Breaker Point
Yellow Hill
Point Sierra Nevada
1
HUC8 18060006
Castle Rock
HU 310
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

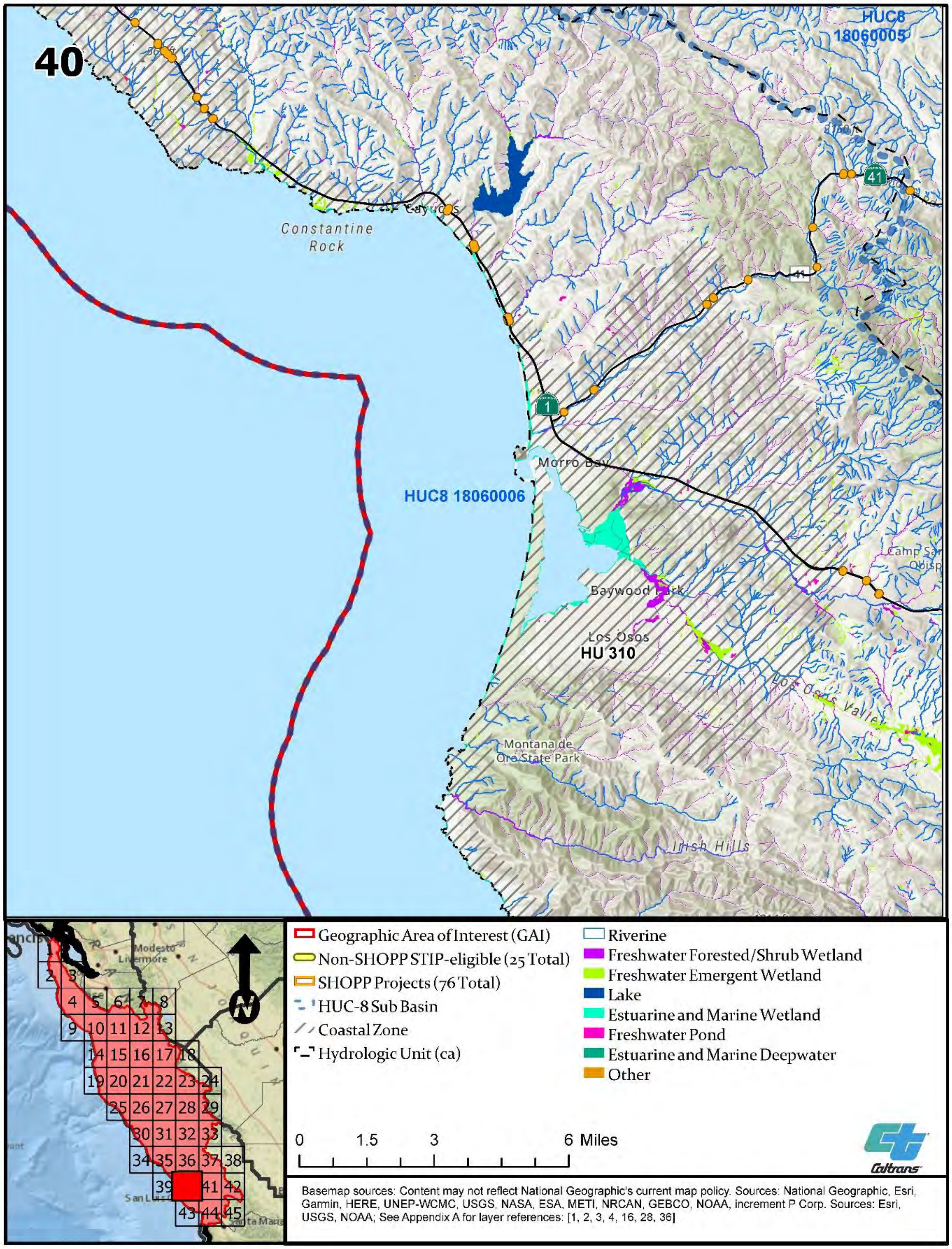

35
Breaker Point
Yellow Hill
Point Sierra Nevada
Harlech Castle Rock
HU 310
HUC8 18060005
HUC8 18060006
San Simeon
Cambria Pines
Cambria
Harmony
1
46
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

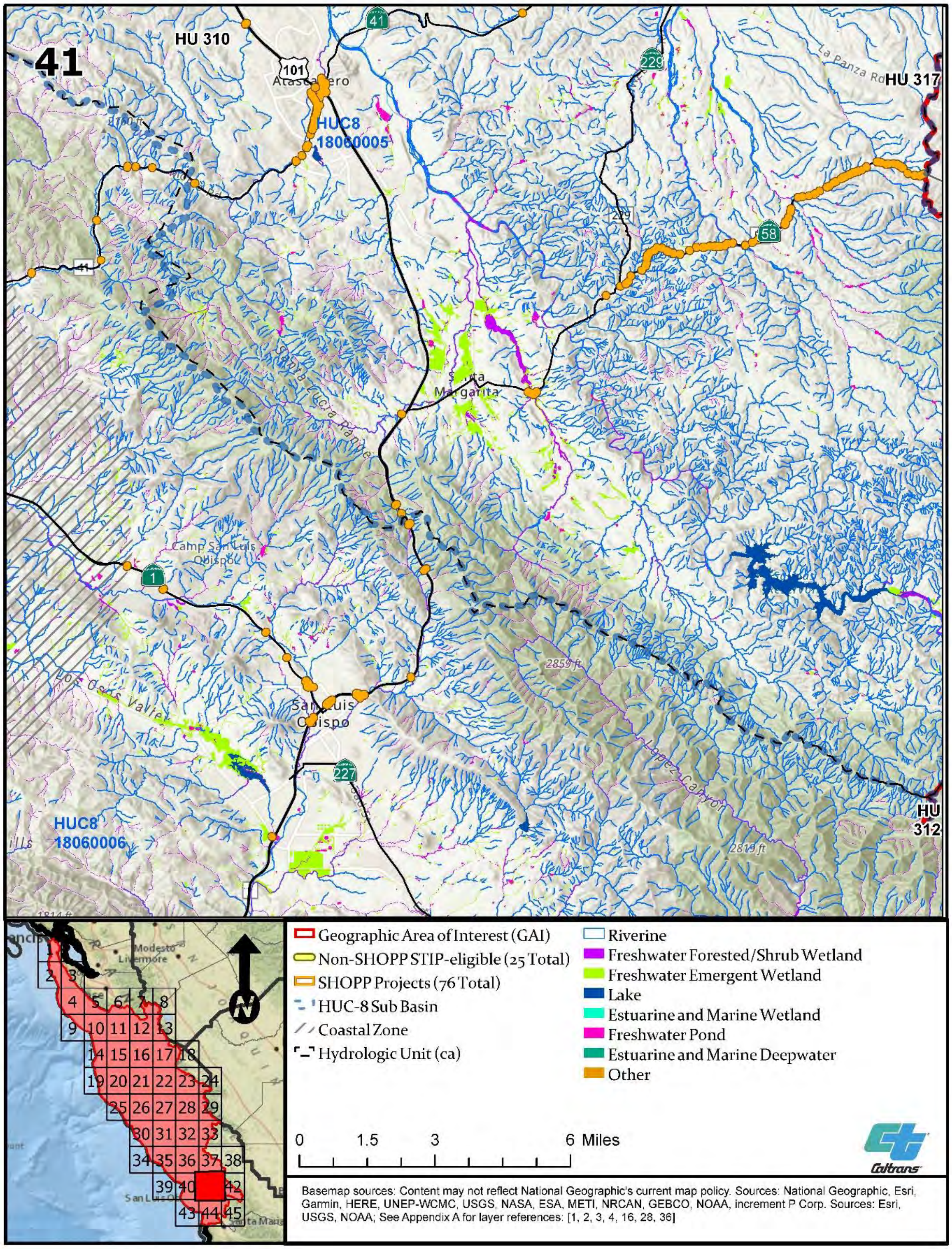

36
Bee Rock
Camp Roberts
Lake Nacimiento
Adelaida
HUC8 18060005
HU 310
Santa Lucia Range
46
101
1
HUC8 18060006
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

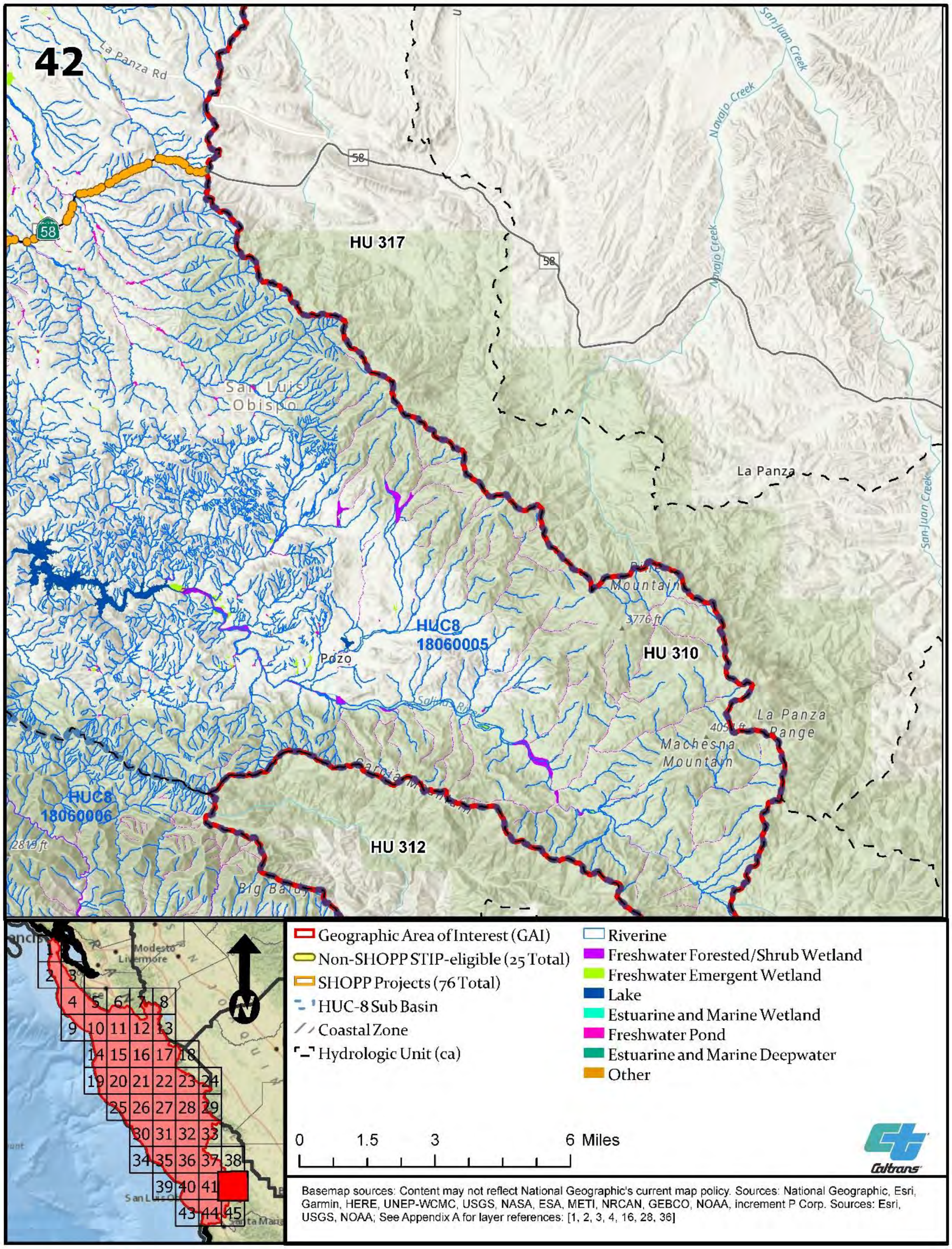

37
San Lawrence Terrace
HUC8 18060005
HU 317
Whitley Gardens
Oak Park
Paso Robles
HU 310
1801 ft
Linne
Templeton
Asuncion
Creston
HUC8 18060006
Atascadero
Pine Canyon Creek
La Panza Rd
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


38
Shandon
Annette
Bitterwater Rd
Shandon Valley
Shedd Canyon
Red Hills
2593 ft
San Juan Valley
Camatta Canyon
San Juan Creek
Pine Canyon Creek
HU 317
HUC8
18060005
HU 310
41
46
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

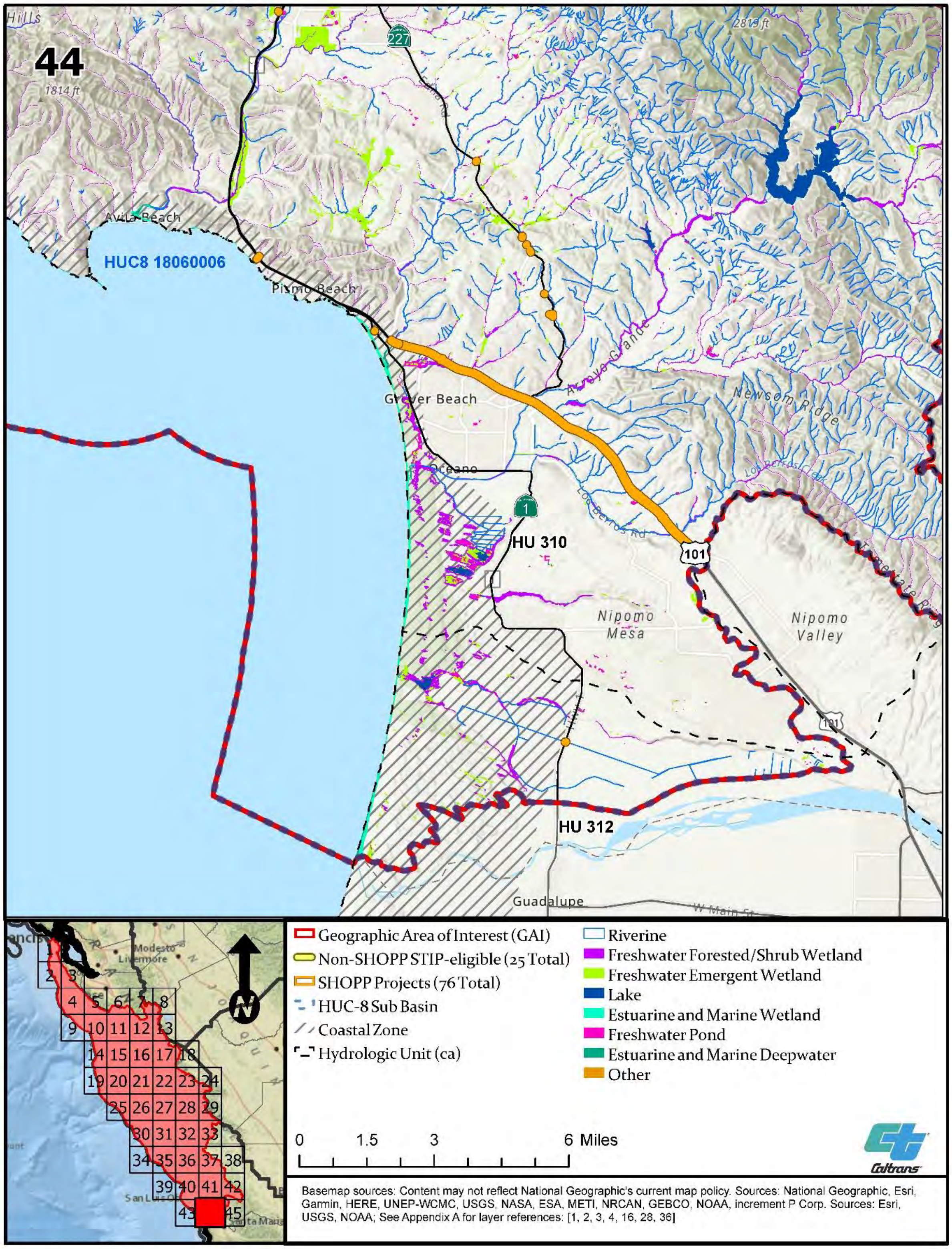

39
HUC8 18060006
HU
310
1
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
N
Modesto
Livermore
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 40 41 42 43 44 45
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

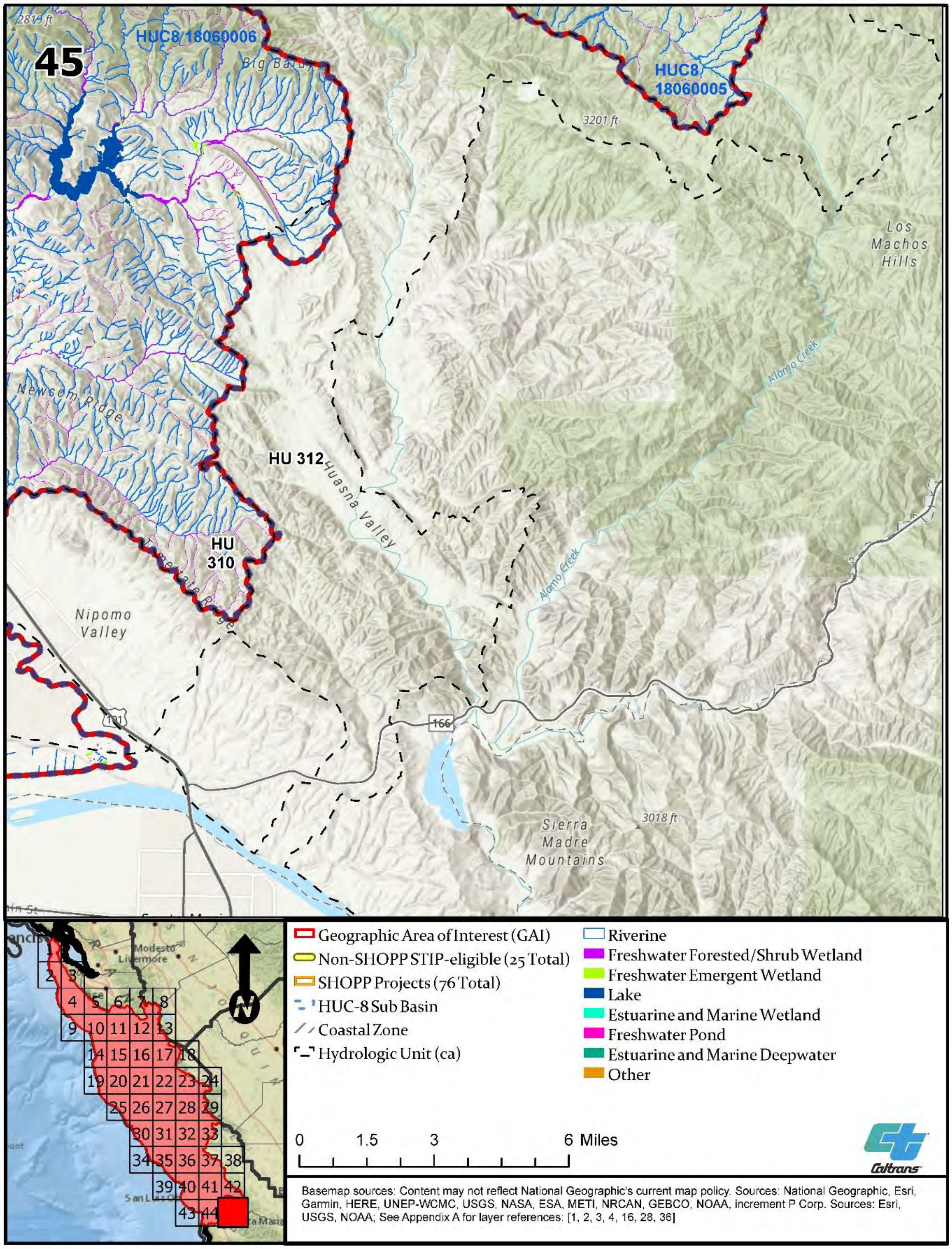

40
HUC8 18060005
HUC8 18060006
Constantine Rock
Cayucos
Morro Bay
Baywood Park
Los Osos
HU 310
Los Osos Valley
Montana de Oro State Park
Irish Hills
Camp San Luis Obispo
1
41
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
N
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 41 42 43 44 45
Modesto
Livermore
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


41
HU 310
HU 317
HU 312
HUC8
18060005
HUC8
18060006
Atascadero
Santa Margarita
Camp San Luis Obispo
San Luis Obispo
Los Osos Valley
Lopez Canyon
La Panza Rd
Cuesta Grade
2859 ft
2819 ft
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


42
La Panza Rd
58
HU 317
San Juan Creek
Navajo Creek
San Luis Obispo
La Panza
HUC8
18060005
Pozo
HU 310
3776 ft
La Panza Range
Machesna Mountain
HUC8
18060006
HU 312
2813 ft
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


43
HU
310
Irish Hills
1814 ft
Avila Beach
HUC8 18060006
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


44
HUC8 18060006
Avila Beach
Pismo Beach
Grover Beach
Oceano
Arroyo Grande
Newsom Ridge
Los Berros Rd
HU 310
Nipomo Mesa
Nipomo Valley
HU 312
Guadalupe
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]


45
HUC8 18060006
HUC8 18060005
3201 ft
Los Machos Hills
Alamo Creek
Newsom Ridge
HU 312
Huasna Valley
HU 310
Nipomo Valley
101
166
Sierra Madre Mountains
3018 ft
Geographic Area of Interest (GAI)
Non-SHOPP STIP-eligible (25 Total)
SHOPP Projects (76 Total)
HUC-8 Sub Basin
Coastal Zone
Hydrologic Unit (ca)
Riverine
Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland
Lake
Estuarine and Marine Wetland
Freshwater Pond
Estuarine and Marine Deepwater
Other
0 1.5 3 6 Miles
Caltrans
Basemap sources: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp. Sources: Esri, USGS, NOAA; See Appendix A for layer references: [1, 2, 3, 4, 16, 28, 36]

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APPENDIX I: RESULTS FOR PROJECTS IN DISTRICT 4 WITHIN THE GAI

Although the vast majority of the GAI assessed in the RAMNA for the Central Coastal, Monterey Bay, Pajaro, Salinas, and San Francisco Coastal South sub-basins overlaps Caltrans District 5, a portion of the GAI extends into Caltrans District 4. To properly capture the potential demand for compensatory mitigation during the 10-year planning horizon, estimated impacts on species of mitigation need, special-status species, and aquatic resources for projects within the District 4 portion of the GAI are provided here. The forecast was performed using the Caltrans SAMNA Reporting Tool, a GIS overlay model developed by Caltrans to support advance mitigation planning (Caltrans 2019). These data are presented separately in this appendix so the impacts and associated mitigation needs can be used to justify District 5's advance mitigation project proposals for the San Francisco Coastal South and Pajaro sub-basins.

Appendix I is organized as follows:

- Table I-1 provides information on each transportation project within the Caltrans District 4 portion of the GAI identified in the SHOPP Ten-Year Book for fiscal years 2018 to 2027 (Caltrans 2018).
- Tables I-2 through I-4 provide the anticipated impacts on wetlands, non-wetland waters, and special-status fish by sub-basin.
- Table I-5 provides the anticipated impacts on special-status terrestrial species by ecoregion section and subsection.
- Tables I-6 through I-9 provide the anticipated impacts on the four wildlife species of mitigation need by ecoregion section and subsection.
- Table I-10 and Figure I-1 provide the estimated impacts on aquatic resources, including special-status fish species, for the Pajaro sub-basin by transportation project delivery year.
- Table I-11 and Figure I-2 provide the estimated impacts on aquatic resources within the San Francisco Coastal South sub-basin by transportation project delivery year.
- Tables I-12 through I-15 and Figures I-3 through I-6 provide the estimated impacts on the wildlife species of mitigation need within the District 4 portion of the GAI by transportation project delivery year.

References

Caltrans (California Department of Transportation). 2018. *State Highway Operation and Protection Program Ten-Year Project Book Fiscal Years 2017/18—2026/27*. State Highway Operation and Protection Program Fiscal Year 2017/18 (Quarter 4). July. Sacramento, California.

———. 2019. *Statewide Advance Mitigation Needs Assessment Report*. State Highway Operation and Protection Program. Ten-Year Project Book. Second Quarter 2017/2018 Fiscal Year. May. Sacramento, California.

Table I-1. SHOPP Transportation Projects Potentially Affecting Special-status Species and Aquatic Resources within District 4 Portion of GAI

Sub-basin (HUC-8)	Advertised Year	SHOPP Project ID	Caltrans District	County	Route	Begin Mile	End Mile	Ecoregion Section	Activity
Pajaro	2019/20	9249	4	Santa Clara	101	N/A[a]	N/A	Central California Coast	Bridge rail
Pajaro	2021/22	18489	4	Santa Clara	152	16.9	22.8	Central California Coast, Central California Coast Ranges	Replace/Install culverts
Pajaro	2024/25	20131	4	Santa Clara	152	0.7	29.6	Central California Coast, Central California Coast Ranges	Replace/Install culverts
Pajaro	2017/18	20730	4	Santa Clara	101	R0.8[b]	R0.9	Central California Coast	Bridge rail
San Francisco Coastal South	2023/24	11357	4	San Mateo	1	17.9	18	Central California Coast	Bridge rail
San Francisco Coastal South	2021/22	16793	4	San Mateo	1	14	N/A	Central California Coast	Bridge rail
San Francisco Coastal South	2023/24	17844	4	San Francisco	280	0	7.5	Central California Coast	Bridge replacement/ New construction
San Francisco Coastal South	2020/21	17980	4	San Francisco	101	2	2.9	Central California Coast	Bridge rail
San Francisco Coastal South	2023/24	18669	4	San Mateo	1	27.5	34.8	Central California Coast	Replace/Install culverts
San Francisco Coastal South	2023/24	19077	4	San Mateo	1	43.46	45.12	Central California Coast	Bridge rail

Sub-basin (HUC-8)	Advertised Year	SHOPP Project ID	Caltrans District	County	Route	Begin Mile	End Mile	Ecoregion Section	Activity
San Francisco Coastal South	2025/26	20134	4	San Mateo	1	2.4	36.5	Central California Coast	Replace/Install culverts
San Francisco Coastal South	2025/26	20135	4	San Mateo	35	0	28.9	Central California Coast	Replace/Install culverts
San Francisco Coastal South	2025/26	20136	4	San Mateo	84	0.6	10.8	Central California Coast	Replace/Install culverts
San Francisco Coastal South	2025/26	20238	4	San Mateo	84	11	29.3	Central California Coast	Replace/Install culverts
San Francisco Coastal South	2026/27	20361	4	San Mateo	84	8.7	10.5	Central California Coast	Replace/Install culverts

[a] Not applicable [b] R = right

Table I-2. Summary of Estimated SHOPP Impacts on Wetlands within District 4 Portion of GAI (results in acres)

Sub-basin (HUC-8)	Sub-basin Number	Number of Transportation Projects	Depressional Unnatural Non-vegetated	Estuarine and Marine Deepwater	Estuarine and Marine Wetland	Estuarine Saline Natural Intertidal Non-vegetated	Freshwater Forested/ Shrub Wetland	Slope Natural	Estimated Wetland Impact
Pajaro	18060002	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
San Francisco Coastal South	18050006	6	<0.1	0.4	0.1	<0.1	<0.1	0.1	0.6
	Total	**6**	**<0.1**	**0.4**	**0.1**	**<0.1**	**<0.1**	**0.1**	**0.6**

Table I-3. Summary of Estimated SHOPP Impacts on Non-wetland Waters within District 4 Portion of GAI (results in acres)

Sub-basin (HUC-8)	Sub-basin Number	Number of Transportation Projects (HUC-8)	Stream/River	Sea Ocean	Estimated Water Impact
Pajaro	18060002	3	0.4	0.0	0.4
San Francisco Coastal South	18050006	6	0.3	0.2	0.5
	Total	**9**	**0.7**	**0.2**	**0.9**

Table I-4. Summary of Estimated SHOPP Impacts on Special-status Fish Species within District 4 Portion of GAI (results in acres)

Sub-basin (HUC-8)	Sub-basin Number	Number of Transportation Projects (HUC-8)	Steelhead (CCC DPS)	Steelhead (SCCC DPS)	Tidewater Goby	Estimated Fish Impact
Pajaro	18060002	2	0.0	0.4	0.0	0.4
San Francisco Coastal South	18050006	4	0.4	0.0	0.4	0.8
	Total	**6**	**0.4**	**0.4**	**0.4**	**1.1**[a]

[a] Totals may differ because of rounding issues

Table I-5. Summary of Estimated SHOPP Impacts on Special-status Terrestrial Species Habitat within District 4 Portion of GAI

Ecoregion Section	Subsection	Number of Caltrans SHOPP Projects	Number of Habitats	Special-status Species[a]	Estimated Total Habitat Impact (acres)
Central California Coast	Bay Flats	2	1	22	2.9
Central California Coast	Leeward Hills	3	2	31	54.9
Central California Coast	Santa Clara Valley	5	3	44	13.5
Central California Coast	Santa Cruz Mountains	11	9	52	11.7
Central California Coast Ranges	Western Diablo Range	2	3	44	0.3
	Total	**15[b,c]**	**11[b]**	**55[b]**	**83.2[b]**

[a] Special-status terrestrial plant and wildlife species evaluated through the SAMNA consisted of federal and state threatened, endangered, or sensitive species; state fully protected or rare species; or state species of special concern.
[b] Totals do not reflect numbers presented in rows above. Some SHOPP transportation projects and some habitats cross more than one subsection.
[c] Transportation projects are listed in Table I-1.

Table I-6. Estimated SHOPP Impacts on California Red-legged Frog within District 4 Portion of GAI

Ecoregion Section	Subsection	Number of Caltrans SHOPP Projects	Estimated Habitat Impact (acres)
Central California Coast	Leeward Hills	1	0.4
Central California Coast	Santa Clara Valley	4	2.3
Central California Coast	Santa Cruz Mountains	9	5.0
Central California Coast Ranges	Western Diablo Range	1	0.1
	Total	**13[a]**	**7.8**

[a] Totals do not reflect numbers presented in rows above. Some SHOPP transportation projects and some habitats cross more than one subsection.

Table I-7. Estimated SHOPP Impacts on California Tiger Salamander within District 4 Portion of GAI

Ecoregion Section	Subsection	Number of Caltrans SHOPP Projects	Estimated Habitat Impact (acres)
Central California Coast	Santa Clara Valley	4	2.3
Central California Coast	Santa Cruz Mountains	3	0.4
Central California Coast Ranges	Western Diablo Range	1	0.1
	Total	**7[a]**	**2.7[a]**

[a] Totals do not reflect numbers presented in rows above. Some SHOPP transportation projects and some habitats cross more than one subsection.

Table I-8. Estimated SHOPP Impacts on Foothill Yellow-legged Frog within District 4 Portion of GAI

Ecoregion Section	Subsection	Number of Caltrans SHOPP Projects	Estimated Habitat Impact (acres)
Central California Coast	Santa Clara Valley	4	2.3
Central California Coast	Santa Cruz Mountains	9	5.6
Central California Coast Ranges	Western Diablo Range	1	0.1
	Total	**12[a]**	**7.9[a]**

[a] Totals do not reflect numbers presented in rows above. Some SHOPP transportation projects and some habitats cross more than one subsection.

Table I-9. Estimated SHOPP Impacts on Tricolored Blackbird within District 4 Portion of GAI

Ecoregion Section	Subsection	Number of Caltrans SHOPP Projects	Estimated Habitat Impact (acres)
Central California Coast	Bay Flats	2	2.9
Central California Coast	Leeward Hills	3	54.5
Central California Coast	Santa Clara Valley	5	13.5
Central California Coast	Santa Cruz Mountains	10	7.0
Central California Coast Ranges	Western Diablo Range	2	0.3
	Total	**14[a]**	**78.1[a]**

[a] Totals do not reflect numbers presented in rows above. Some SHOPP transportation projects and some habitats cross more than one subsection.

Table I-10. Pajaro: Estimated Impacts on Aquatic Resources within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	Fish: Number of Transportation Projects	Fish: Estimated Potential Impacts (acres)	Wetland: Number of Transportation Projects	Wetland: Estimated Potential Impacts (acres)	Non-wetland Waters: Number of Transportation Projects	Non-wetland Waters: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	1	0.1	0	0	1	0.1	27.5
2018/19	0	0.0	0	0	0	0.0	0.0
2019/20	1	0.3	0	0	1	0.3	65.0
2020/21	0	0.0	0	0	0	0.0	0.0
2021/22	0	0.0	0	0	0	0.0	0.0
2022/23	0	0.0	0	0	0	0.0	0.0
2023/24	0	0.0	0	0	0	0.0	0.0
2024/25	0	0.0	0	0	1	<0.1	7.5
2025/26	0	0.0	0	0	0	0.0	0.0
2026/27	0	0.0	0	0	0	0.0	0.0
Total	**2**	**0.4**	**0**	**0**	**3**	**0.4**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100

Table I-11. San Francisco Coastal South: Estimated Impacts on Aquatic Resources within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	Fish: Number of Transportation Projects	Fish: Estimated Potential Impacts (acres)	Wetland: Number of Transportation Projects	Wetland: Estimated Potential Impacts (acres)	Non-wetland Waters: Number of Transportation Projects	Non-wetland Waters: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	0	0.0	0	0.0	0	0.0	0
2018/19	0	0.0	0	0.0	0	0.0	0
2019/20	0	0.0	0	0.0	0	0.0	0
2020/21	0	0.0	0	0.0	0	0.0	0
2021/22	1	0.5	1	0.3	1	0.2	52.6
2022/23	0	0.0	0	0.0	0	0.0	0
2023/24	1	0.2	2	0.2	2	0.2	31.5
2024/25	0	0.0	0	0.0	0	0.0	0
2025/26	1	<0.1	4	0.2	2	0.1	15.8
2026/27	1	<0.1	0	0.0	1	<0.1	<1
Total	**4**	**0.7[b]**	**7**	**0.6[b]**	**6**	**0.5[b]**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100
[b] Totals may differ because of rounding issues.

Figure I-1. Pajaro: Estimated Impacts on Aquatic Resources within District 4 Portion of GAI, by Transportation Project Delivery Year

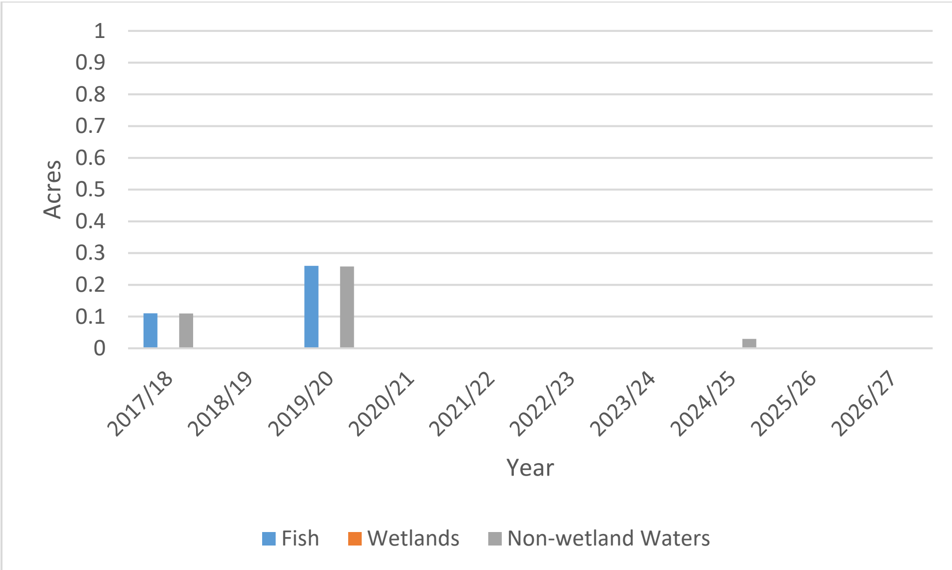

Figure I-2. San Francisco Coastal South: Estimated Impacts on Aquatic Resources within District 4 Portion of GAI, by Transportation Project Delivery Year

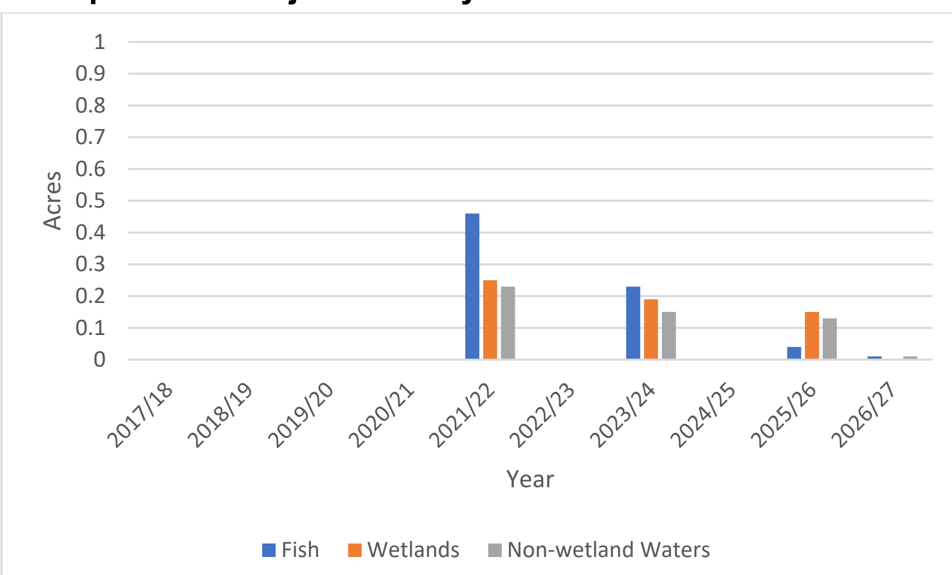

Table I-12. Estimated Impacts on California Red-legged Frog within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	California Red-legged Frog: Number of Transportation Projects	California Red-legged Frog: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	1	0.9	11.8
2018/19	0	0	0
2019/20	1	1.3	16.5
2020/21	0	0	0
2021/22	2	0.5	6.3
2022/23	0	0	0
2023/24	3	0.9	11.9
2024/25	1	0.1	1.4
2025/26	4	4.0	51.8
2026/27	1	<0.1	0.6
Total	**13**	**7.7**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100

Figure I-3. Estimated Impacts on California Red-legged Frog within District 4 Portion of GAI, by Transportation Project Delivery Year

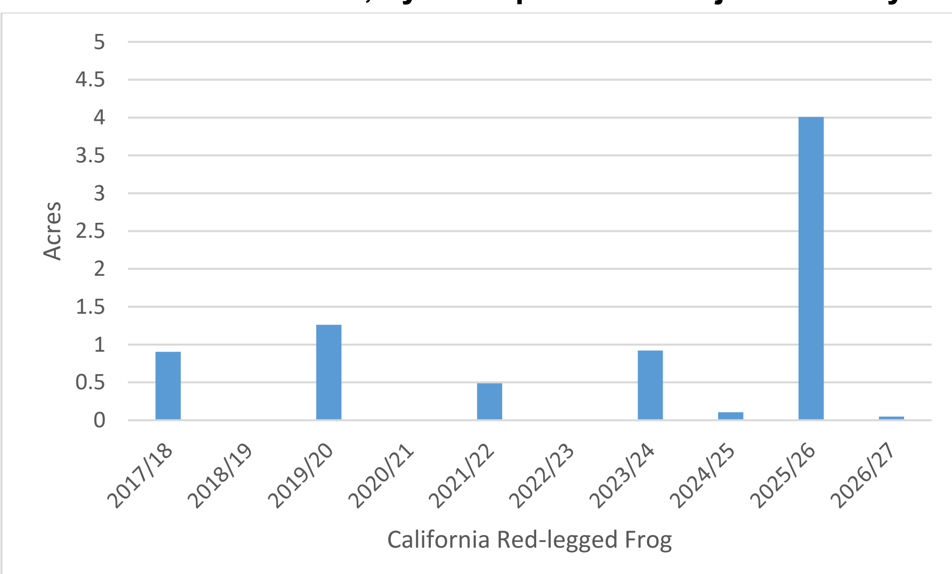

Table I-13. Estimated Impacts on California Tiger Salamander within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	California Tiger Salamander: Number of Transportation Projects	California Tiger Salamander: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	1	0.9	33.3
2018/19	0	0.0	0.0
2019/20	1	1.3	48.1
2020/21	0	0.0	0.0
2021/22	2	<0.1	3.7
2022/23	0	0.0	0.0
2023/24	0	0.0	0.0
2024/25	1	0.1	3.7
2025/26	2	0.3	11.1
2026/27	0	0.0	0.0
Total	**7**	**2.7**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100

Figure I-4. Estimated Impacts on California Tiger Salamander within District 4 Portion of GAI, by Transportation Project Delivery Year

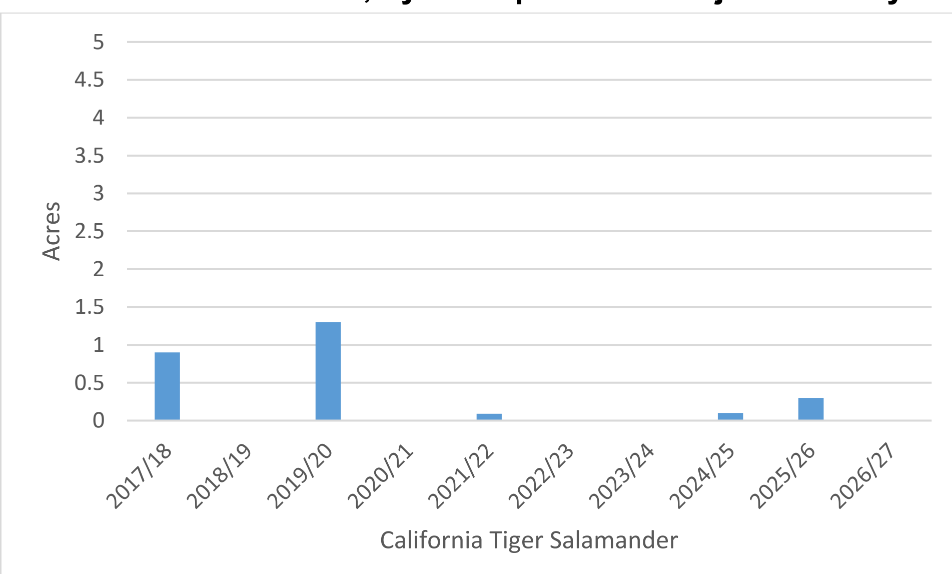

Table I-14. Estimated Impacts on Foothill Yellow-legged Frog within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	Foothill Yellow-legged Frog: Number of Transportation Projects	Foothill Yellow-legged Frog: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	1	0.9	11.5
2018/19	0	0.0	0.0
2019/20	1	1.3	16.0
2020/21	0	0.0	0.0
2021/22	2	0.5	6.2
2022/23	0	0.0	0.0
2023/24	2	1.0	12.8
2024/25	1	0.1	1.4
2025/26	4	4.1	51.5
2026/27	1	0.1	0.6
Total	**12**	**7.9**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100

Figure I-5. Estimated Impacts on Foothill Yellow-legged Frog within District 4 Portion of GAI, by Transportation Project Delivery Year

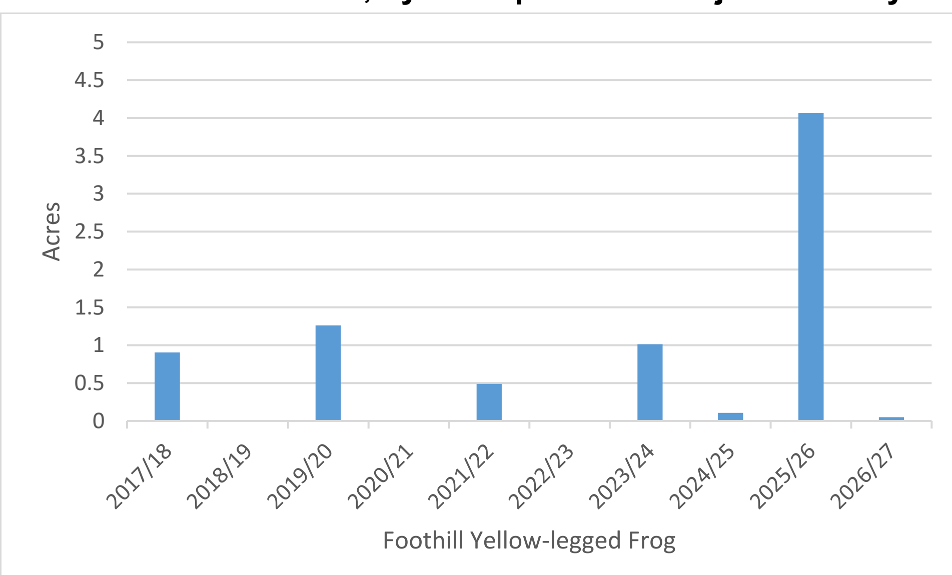

Table I-15. Estimated Impacts on Tricolored Blackbird within District 4 Portion of GAI, by Transportation Project Delivery Year

Expected Advertisement Year	Tricolored Blackbird: Number of Transportation Projects	Tricolored Blackbird: Estimated Potential Impacts (acres)	Percentage of Total Mitigation Need (%)[a]
2017/18	1	2.8	3.6
2018/19	0	0.0	0.0
2019/20	1	9.4	12.0
2020/21	1	4.4	5.6
2021/22	2	0.8	1.0
2022/23	0	0.0	0.0
2023/24	4	54.1	69.3
2024/25	1	1.1	1.4
2025/26	4	5.5	7.0
2026/27	0	0.0	0.0
Total	**14**	**78.1**	**100%**

[a] Indicative of the timing of mitigation need. [∑ impacts (year) ÷ ∑ total impacts]*100

Figure I-6. Estimated Impacts on Tricolored Blackbird within District 4 Portion of GAI, by Transportation Project Delivery Year