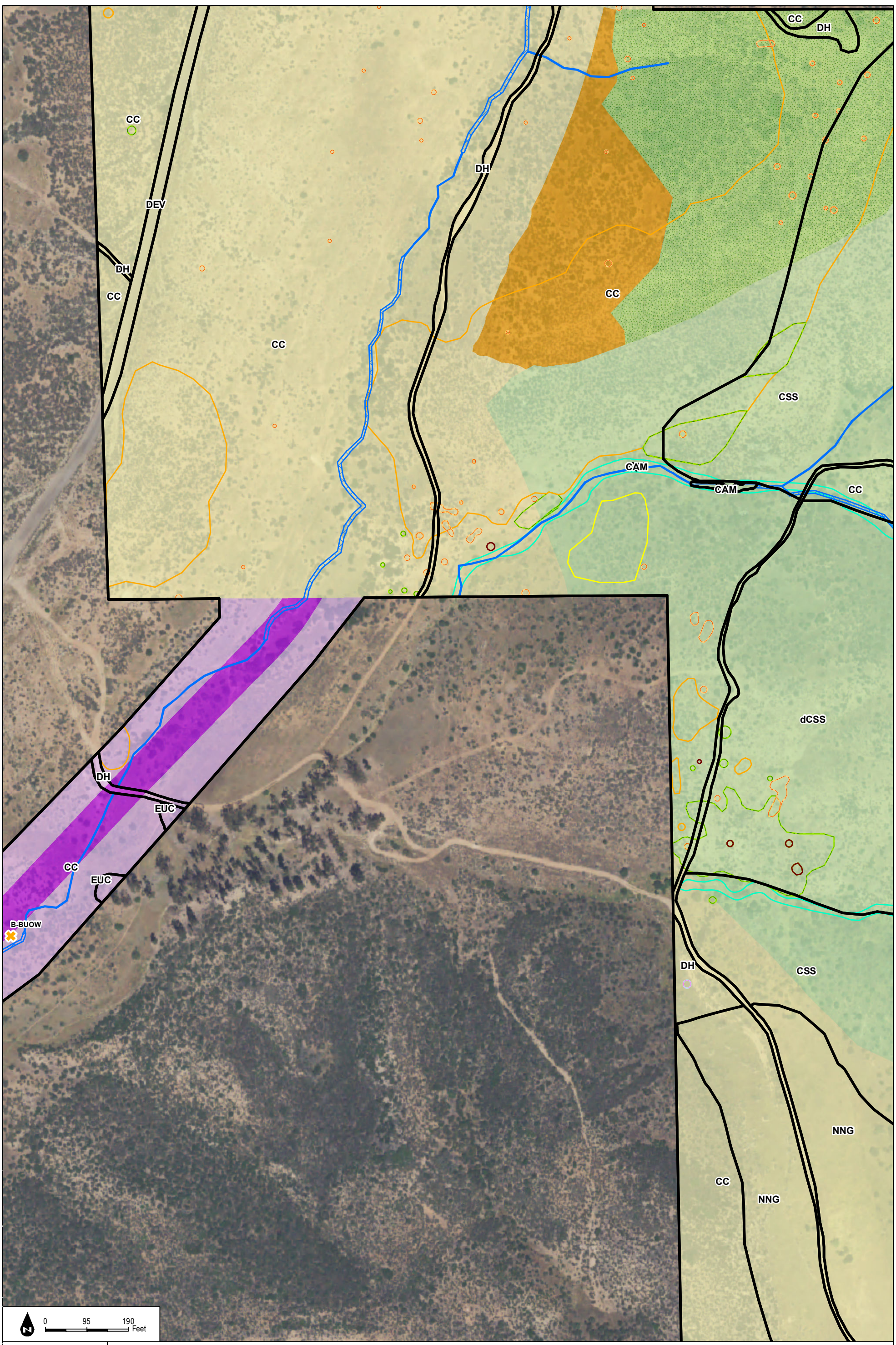

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SOURCE: NAIP 2016; Hunsaker 2017

Figure 5-1m
Impacts to Biological Resources

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SOURCE: NAIP 2016; Hunsaker 2017

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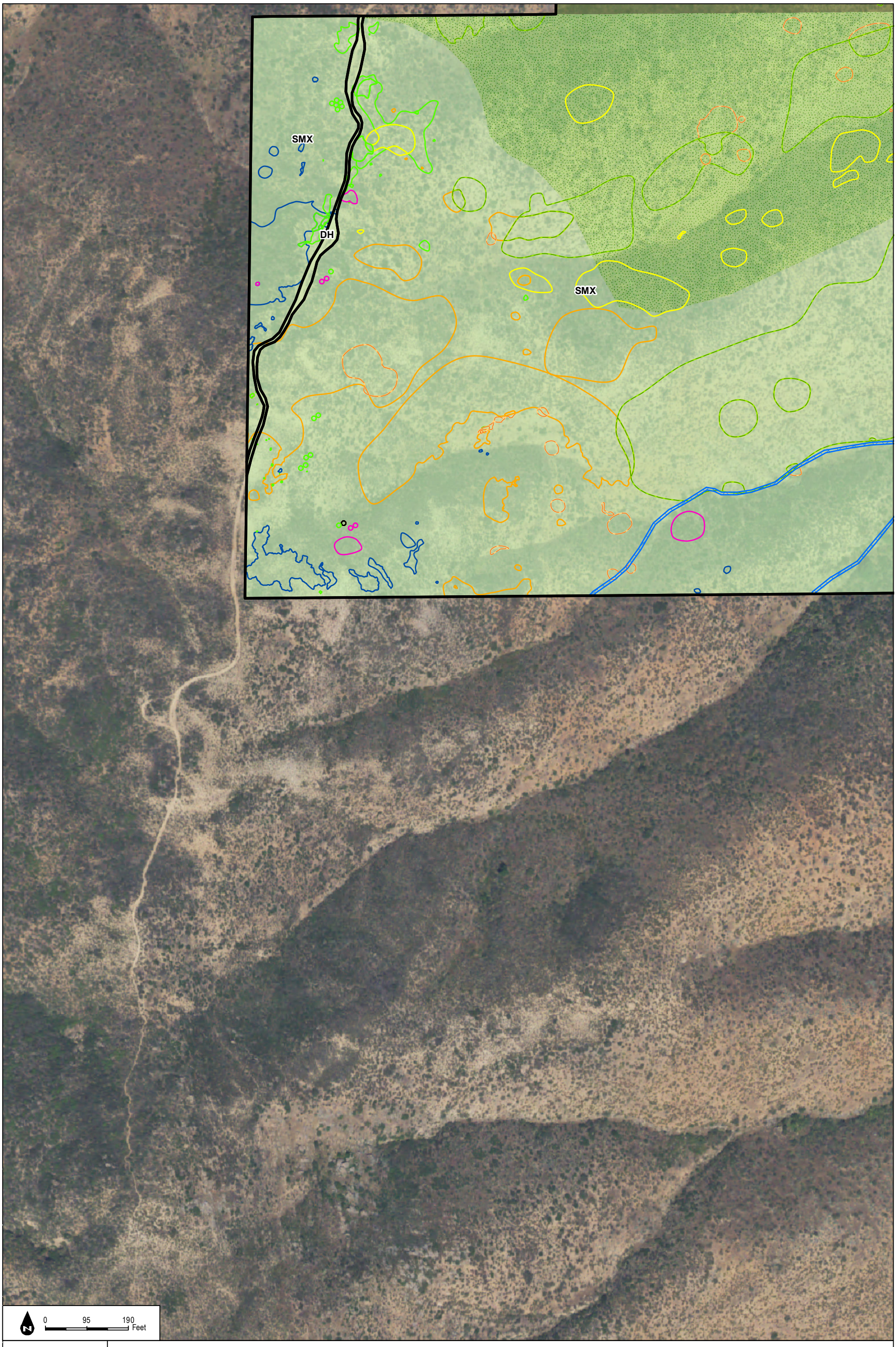

SOURCE: NAIP 2016; Hunsaker 2017

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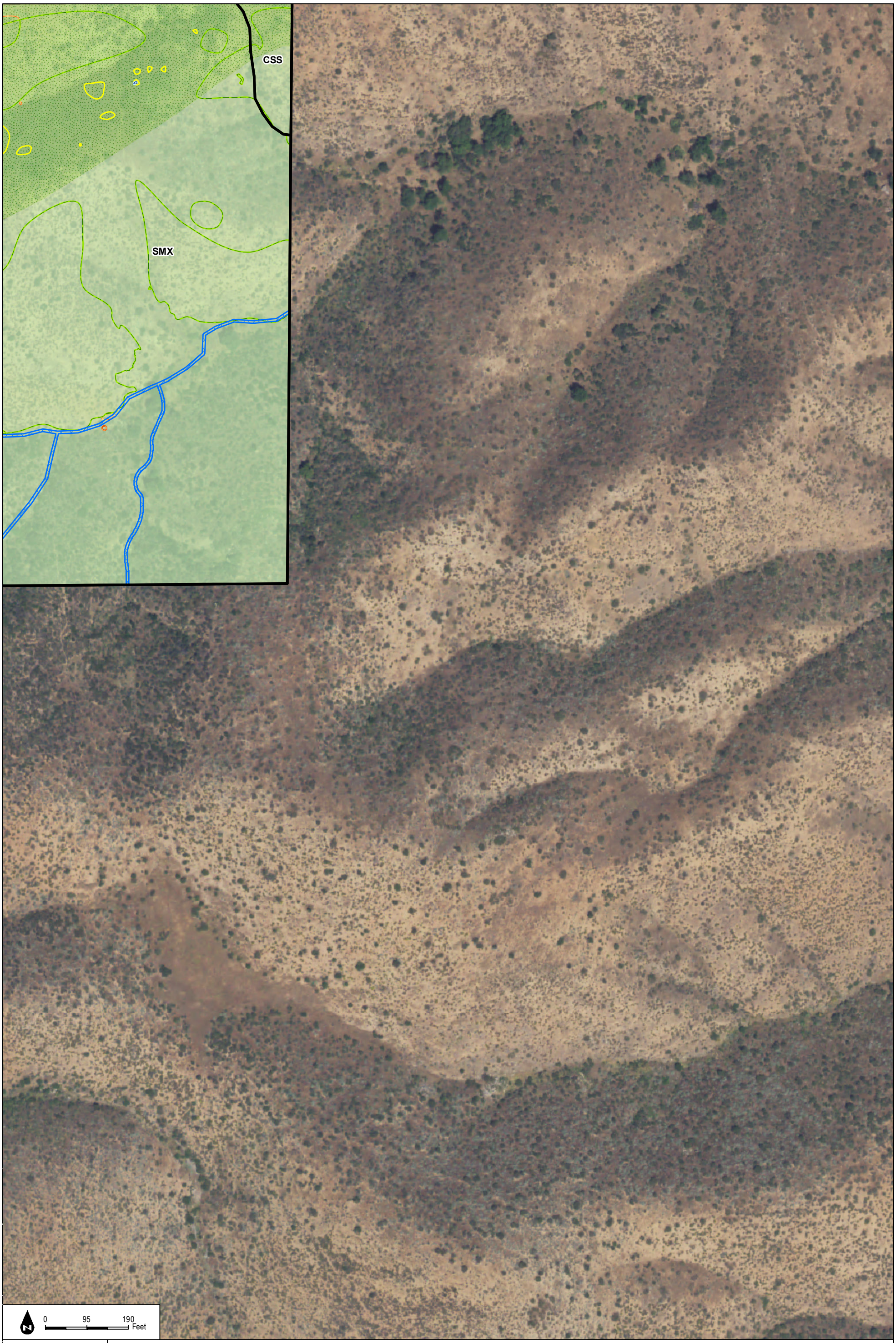

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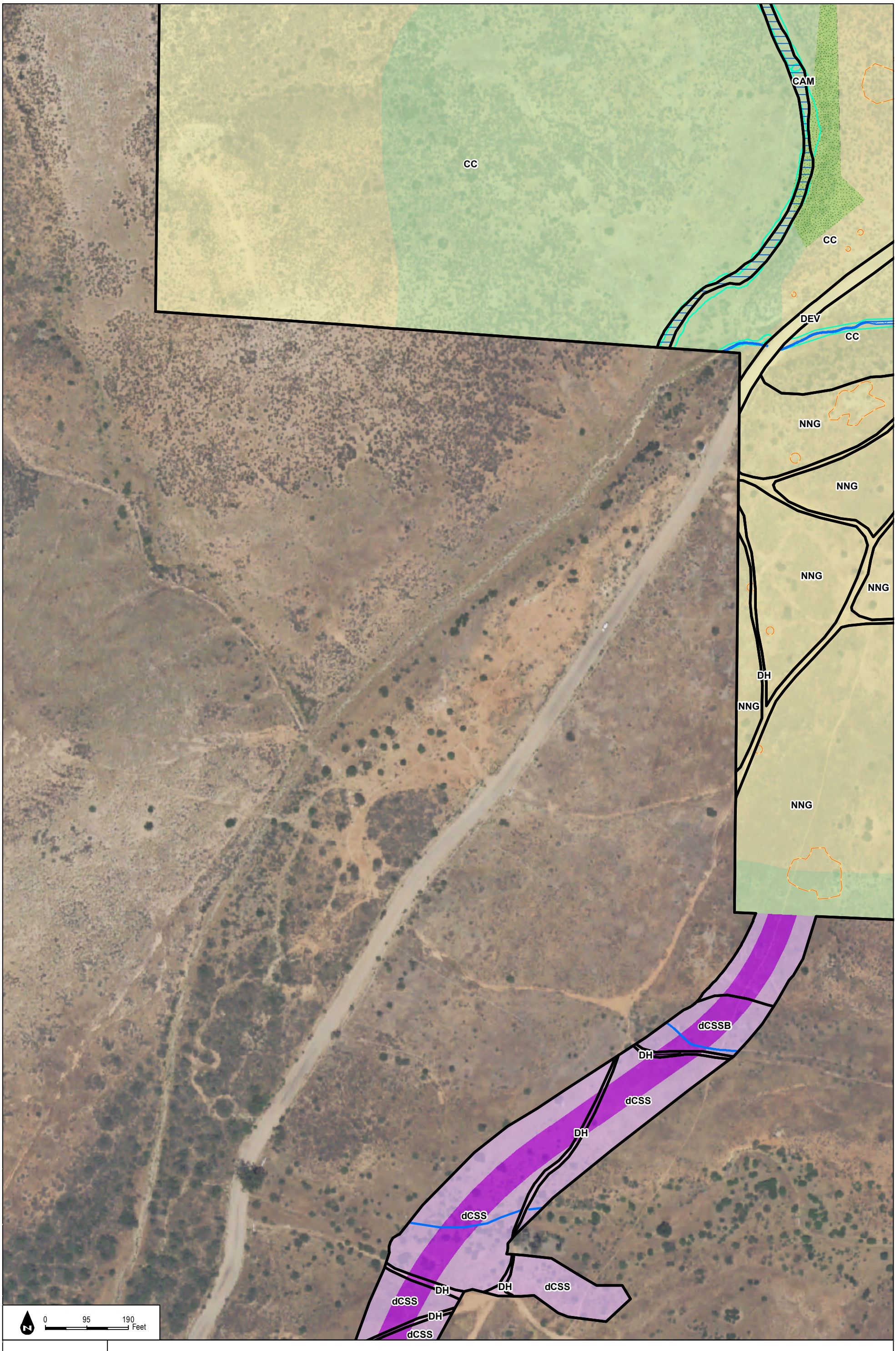

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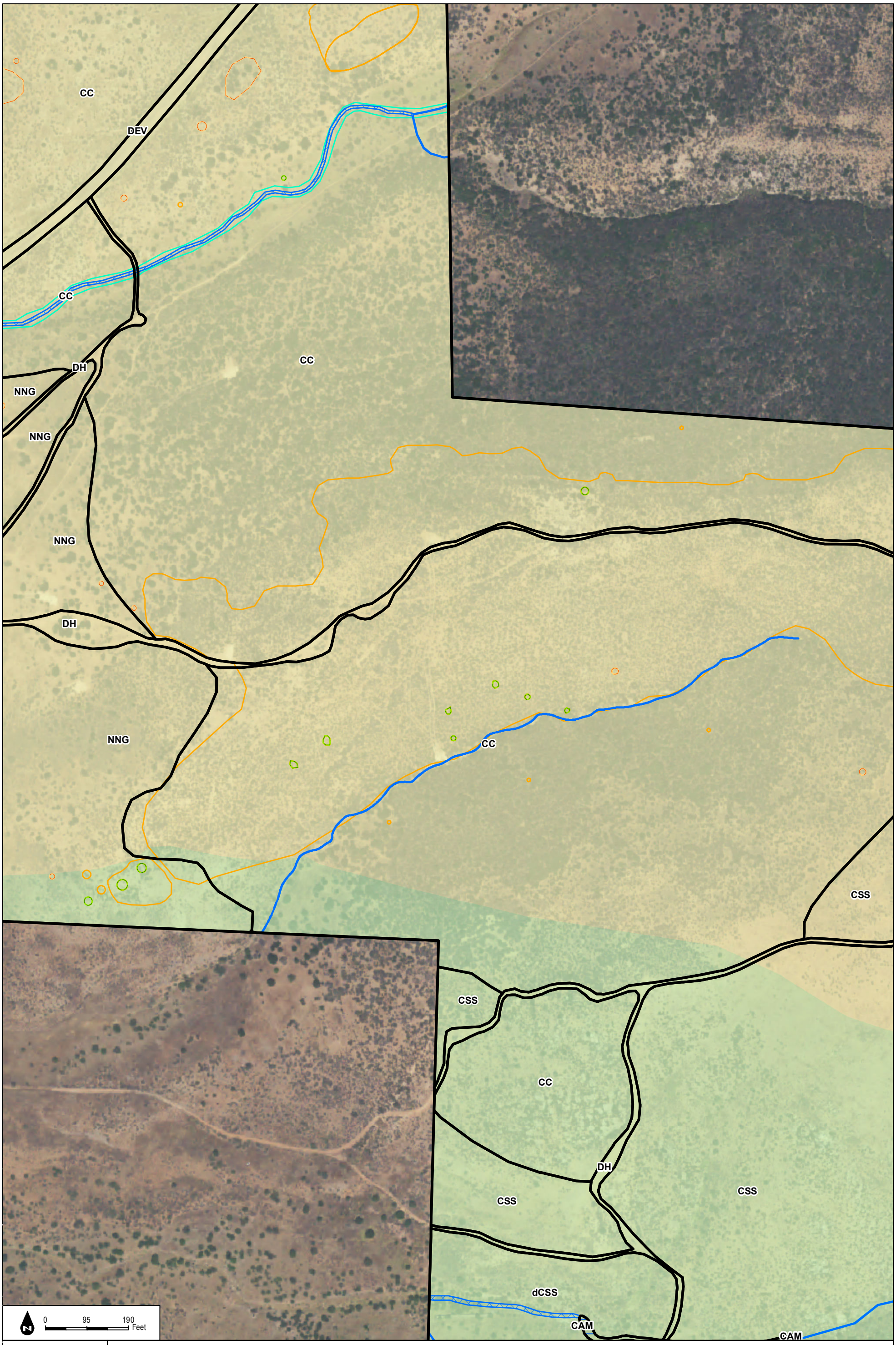

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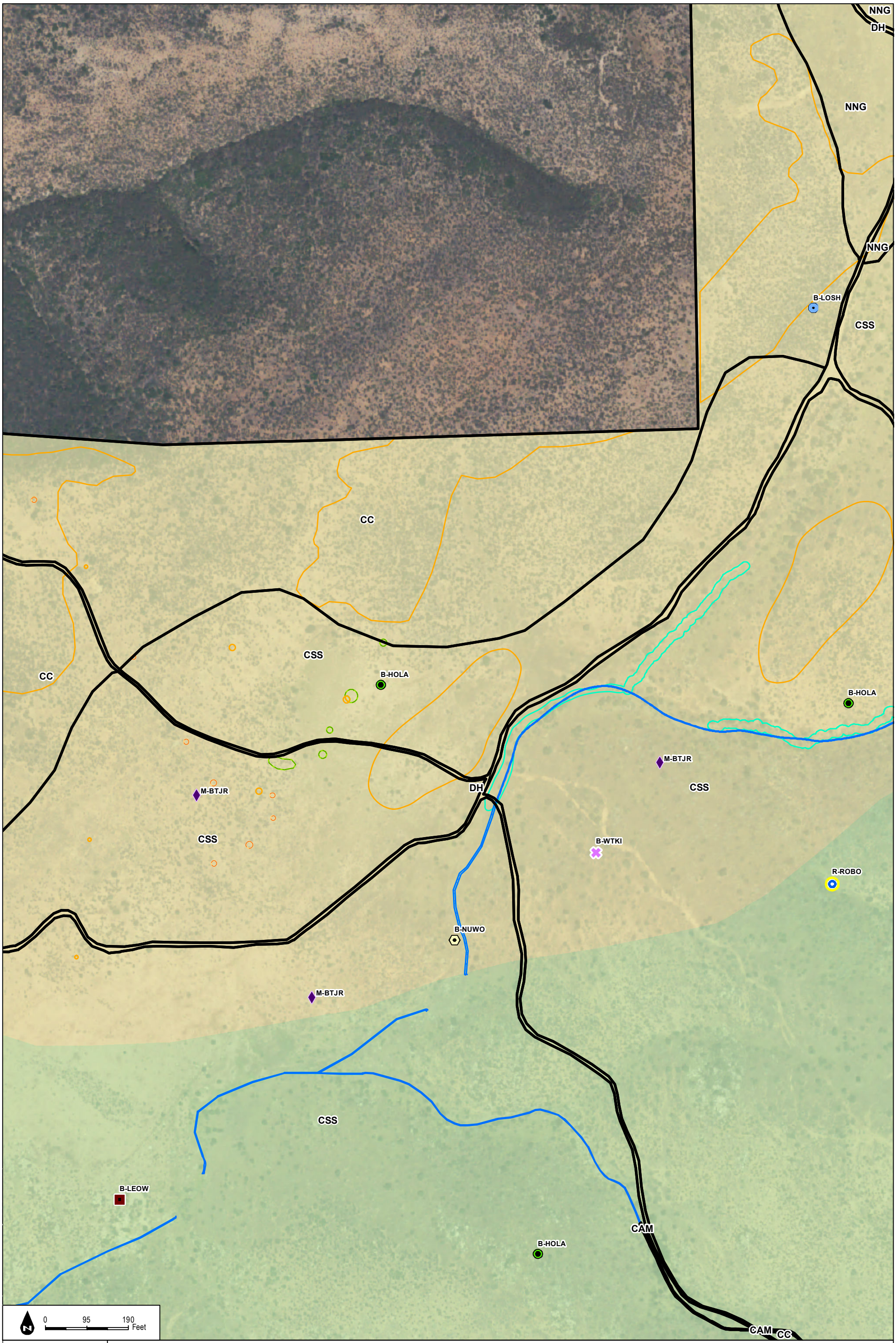

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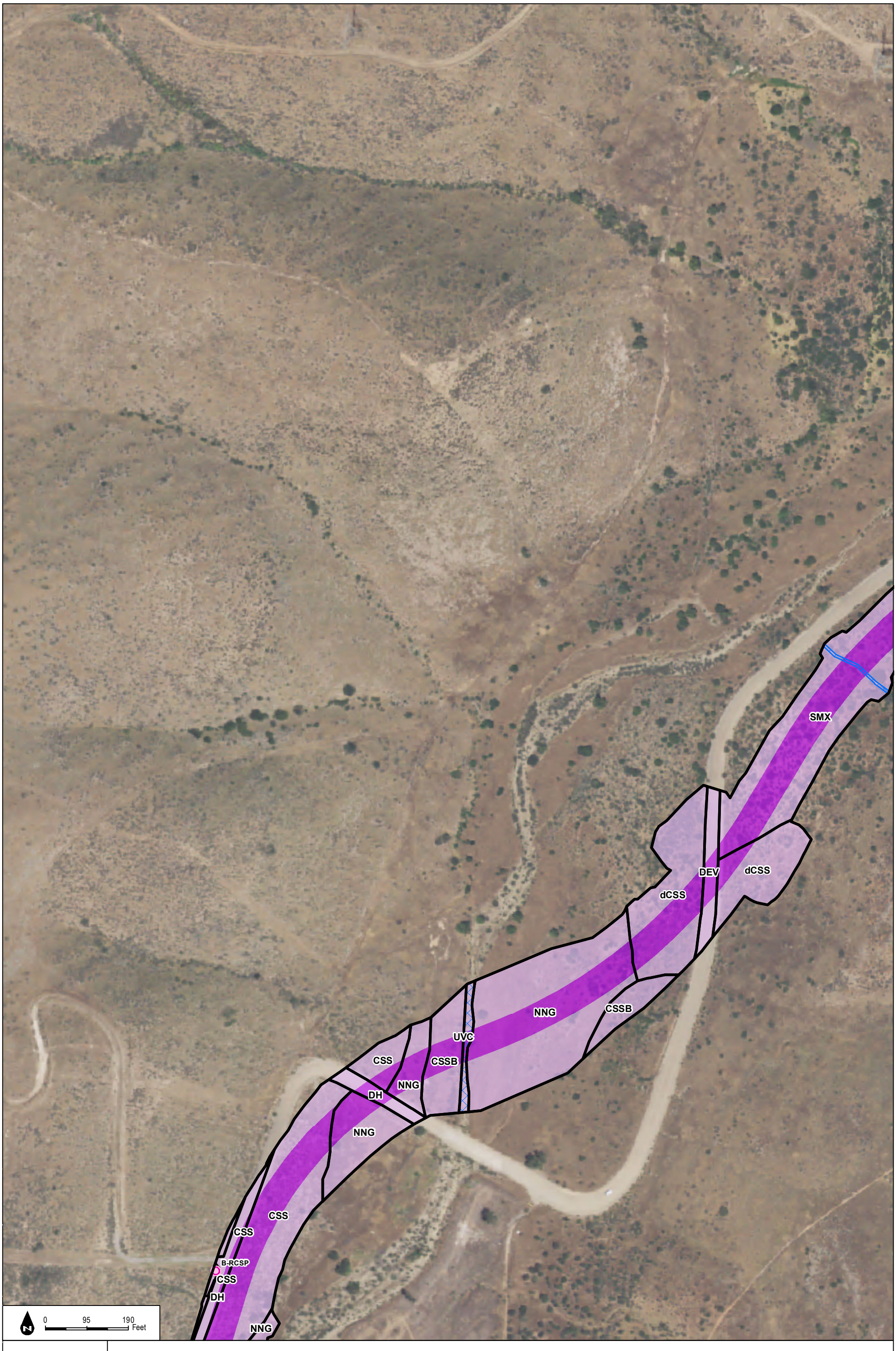

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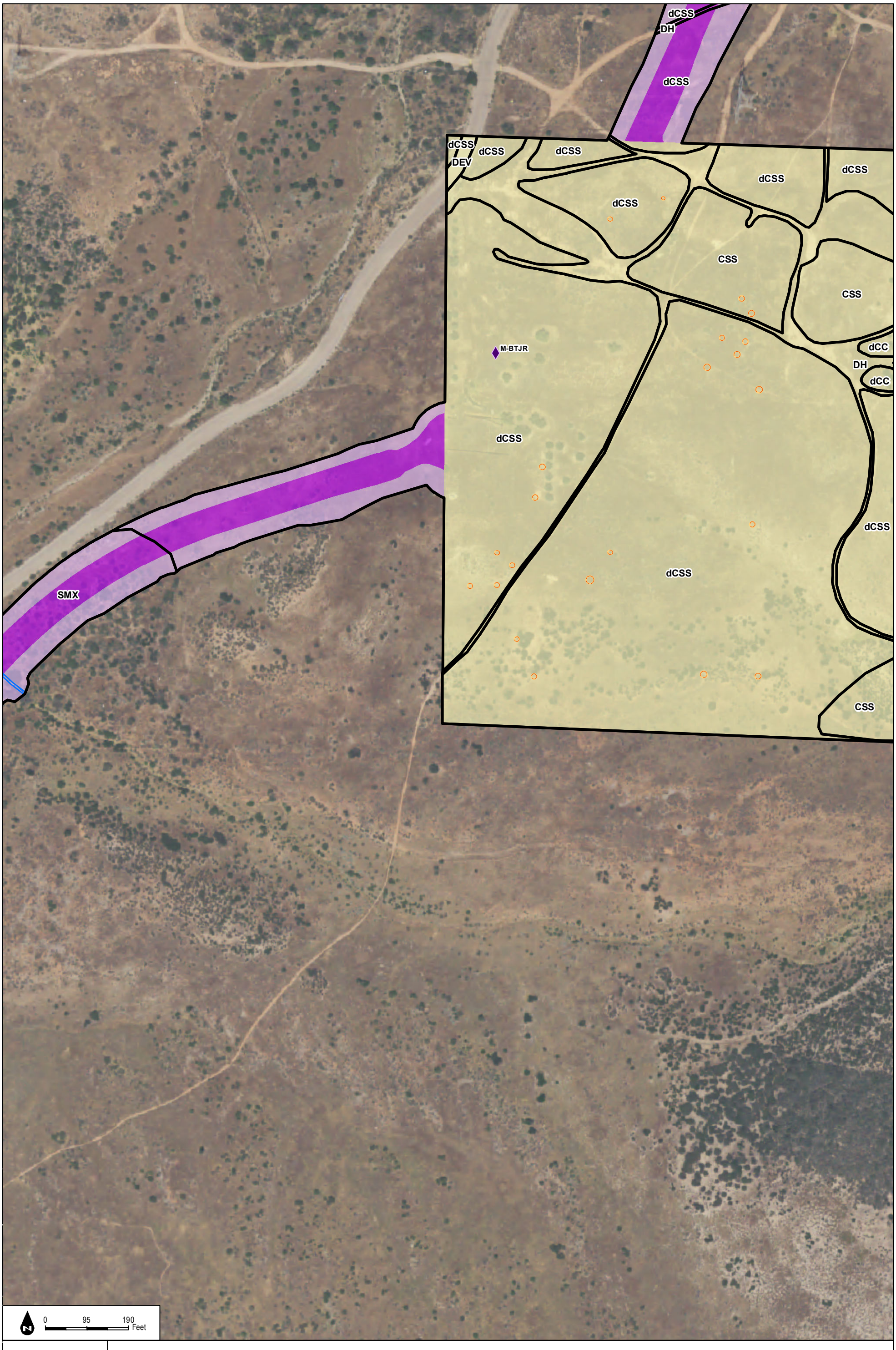

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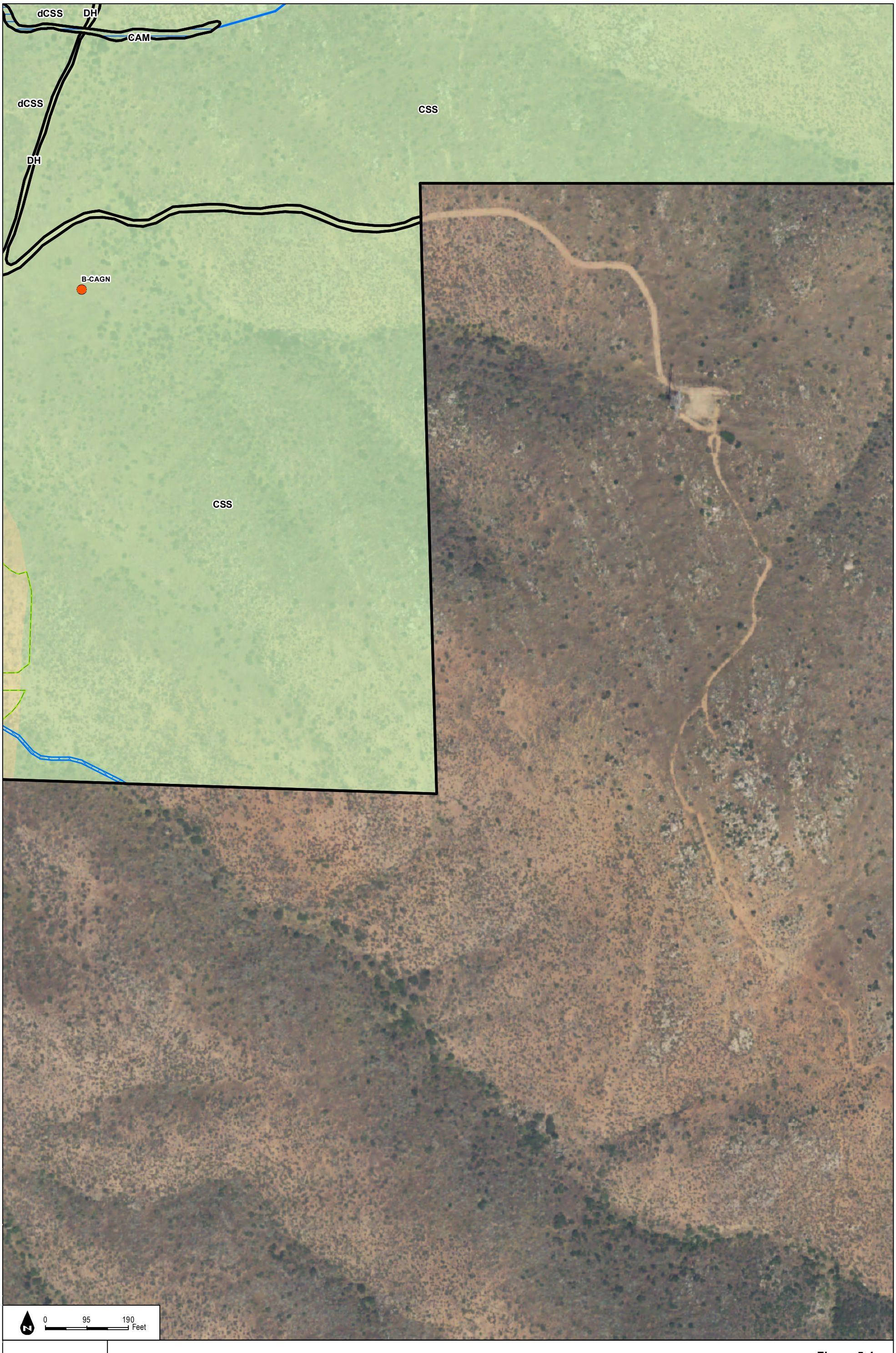

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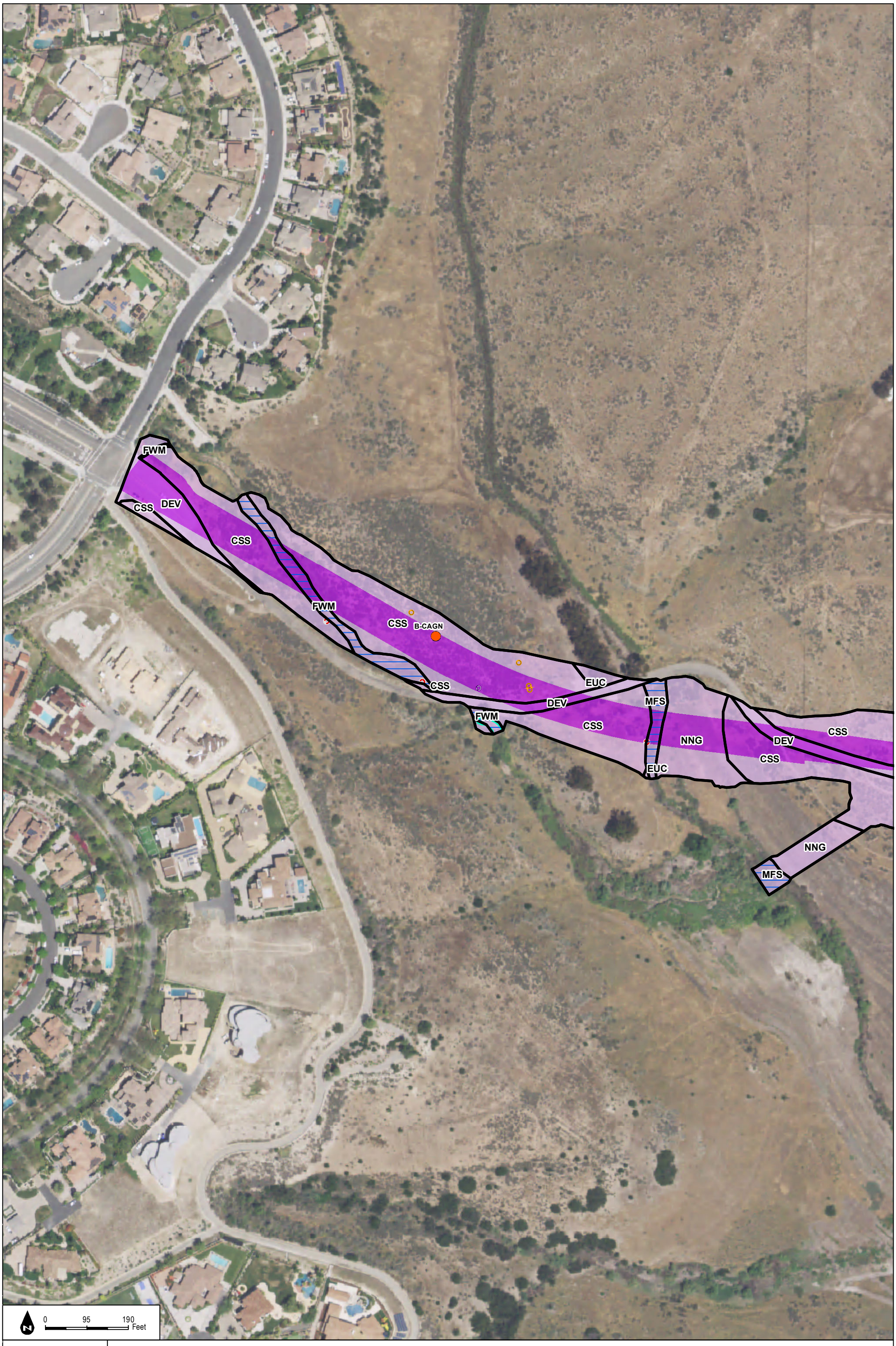

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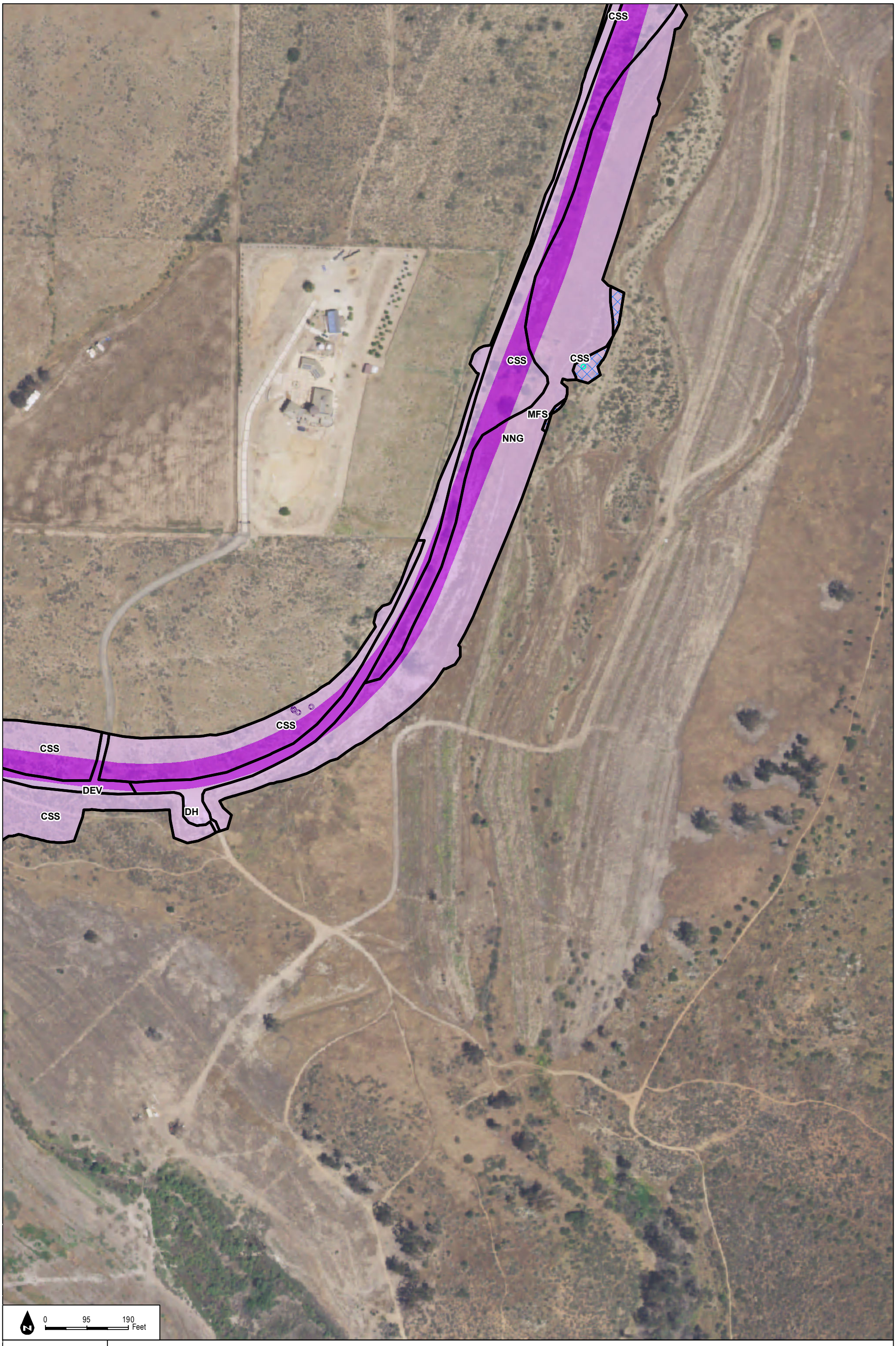

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SOURCE: NAIP 2016; Hunsaker 2017

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Impacts to Biological Resources

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5.1.1.2 Permanent Direct Impacts

Impact V-2: Permanent Direct Impacts to Sensitive Vegetation Communities within Village 14 and Planning Areas 16/19

Village 14

Within Village 14, the Proposed Project would result in direct and permanent impacts to 422.0 acres of vegetation communities, 408.8 acres of which are riparian habitat or sensitive vegetation communities. Approximately 9.3 acres, almost all considered sensitive vegetation communities, of Otay Ranch RMP Preserve within Village 14 would be permanently impacted by the roads within the Preserve. A detailed summary of impacts within Village 14 is provided in Table 5-1; a summary of impacts for the entire Project Area (including off-site improvements) is provided in Table 5-2.

Planning Areas 16/19

The Proposed Project would result in direct and permanent impacts to 286.5 acres within Planning Areas 16/19; the 286.5 acres includes the 272.6 acres of Development Footprint, 2.4 acres of impacts to Otay Ranch RMP Preserve, and 11.6 acres of graded LDA (Table 5-1; Figures 5-1 and 5-1a through 5-1cc). Of the 286.5 acres of total impacts, 280.8 acres of permanent impacts would be to sensitive vegetation (Tables 5-1 and 5-2). The Proposed Project would result in 2.4 acres of permanent, direct impacts to habitat within the Otay Ranch RMP Preserve, 1.9 acres of which is considered riparian habitat or sensitive vegetation communities. In addition, the County is contemplating increasing the right-of-way width for Proctor Valley Road North from 40 feet to 64 feet on site within the portions of the road that go through the Otay Ranch RMP Preserve. This would provide for two dedicated bike lanes, one on each side of the road. Increasing the right-of-way would result in an additional 0.8 acres of impacts, which are anticipated to be permanent. This 0.8 acres of impact would include 0.2 acres of impacts to coastal sage scrub and 0.6 acres of impact to non-native grassland. In addition, there would be minor impacts to cismontane alkali marsh (0.02 acres), mulefat scrub (0.01 acres), and southern willow scrub (0.02 acre). A detailed summary of impacts within Planning Areas 16/19 is provided in Table 5-1; a summary table of impacts for the entire Project Area (including off-site improvements) is provided in Table 5-2.

Summary

In summary, the Proposed Project could result in permanent direct impacts to 689.7 acres of riparian habitat or sensitive vegetation communities as a result of the Development Footprint (not including off-site areas), impacted LDA, and road grading in the Otay Ranch RMP Preserve. All of the direct, permanent impacts described herein are consistent with those assumed in the

Otay Ranch RMP. The significance of these potential impacts was determined through application of the County's Significance Guidelines, described in Section 7.1 of this report.

Table 5-2
Summary of Proposed Project Impacts

Habitat Types/Vegetation Communities	Code[a]	Project Area Total (acres)	Development Footprint[b] (acres)	
			Perm.	*Temp.*
Riparian Habitat/Jurisdictional Aquatic Resources				
Cismontane alkali marsh (including disturbed)	52310	7.8	1.0	<0.1
Coastal and valley freshwater marsh	52410	0.4	0.1	0.3
Mulefat scrub	63310	1.0	0.1	0.3
Southern coast live oak riparian forest	61310	0.7	—	—
Open water	64100	0.4	0.2	—
Southern willow scrub	63320	0.3	0.2	<0.1
Unvegetated channel	64200	0.1	<0.05	0.1
Subtotal of Aquatic Resources		10.8	*1.6*	*0.7*
Sensitive Upland Communities				
Granitic chamise chaparral (including disturbed)	37210	308.6	230.9	18.8
Granitic southern mixed chaparral	37121	99.2	12.4	1.9
Diegan coastal sage scrub	32500	711.1	352.5	18.7
Diegan coastal sage scrub (disturbed)	32500	93.0	51.0	9.6
Diegan coastal sage scrub – *Baccharis* dominated (including disturbed)	32530	1.3	0.4	0.9
Non-native grassland	42200	112.2	70.2	12.5
Subtotal of Sensitive Upland Communities		1,325.5	*717.4*	*62.4*
Non-Sensitive Communities and Land Covers				
Urban/developed	12000	7.3	5.9	1.2
Disturbed habitat	11300	22.5	16.0	2.6
Eucalyptus woodland	79100	2.9	—	0.2
Subtotal of Non-Sensitive Communities and Land Covers		*32.7*	21.9	4.0
Grand Total[c]		**1,369.0**	**740.96**	**67.1**

[a] Oberbauer et al. 2008.

[b] The Development Footprint includes areas within Village 14 and Planning Areas 16/19 designated for development, road grading within the LDA, private HOA open space not considered for Conserved Open Space, impacts within Otay Ranch RMP Preserve, and off-site improvements. An additional 1.3 acre of impacts may be required for widening Proctor Valley Road North.

[c] May not total due to rounding.

Impact V-3 through V-7: Off-Site Permanent Direct Impacts to Sensitive Vegetation Communities

Off-site impacts would include improvements along Proctor Valley Road (which for discussion purposes, is separated into Proctor Valley Road South, Proctor Valley Road Central, and Proctor

Valley North), creation of off-site roads in Planning Areas 16/19, and an off-site sewer pump station in the southern reach of Proctor Valley Road. Improvements in the off-site areas would include wet and dry utilities and a regional Community Pathway. Off-site facilities within Proctor Valley Road would include those typically in the roadways, including wet and dry utilities, sewer pump station, drainage, landscape, culverts, and trails. These impacts would occur within the City of San Diego Cornerstone Lands, lands within the City of Chula Vista and Otay Ranch, CDFW owned lands, and County of San Diego road easements (see Table 5-3). Off-site impacts to sensitive vegetation communities, including granitic chamise chaparral, southern mixed chaparral, coastal sage scrub (including disturbed), coastal sage scrub – *Baccharis* dominated (including disturbed), non-native grassland, mulefat scrub, coastal valley and freshwater marsh, southern willow scrub, and unvegetated stream channel, would total approximately 78.6 acres (49.4 acres of temporary impacts and 29.2 acres of permanent impacts). Table 5-3 summarizes the impacts to these off-site areas based on the vegetation community and the location of the off-site impact. In addition, the County is contemplating increasing the right-of-way width for Proctor Valley Road North from 40 feet to 48 feet within CDFW ownership. This would provide for two dedicated bike lanes, one on each side of the road. Increasing the right-of-way would result in an additional 0.5 acres of impacts, which are anticipated to be permanent. This 0.5 acres of impact would include 0.2 acres of impacts to granitic chamise chaparral, 0.2 acres of impact to coastal sage scrub, and 0.1 acres of impact to non-native grassland. For the purposes of this analysis, these impacts are expected to be permanent. This extra impact is not included within Table 5-3

Table 5-3
Impacts to Vegetation Communities and Land Cover Types within Off-Site Improvement Areas (Acres)

Ownership	Off-Site Improvement Area	Habitat Types/Vegetation Communities	Permanent Impacts	Temporary Impacts	Total Impacts[a]
City of Chula Vista (Rolling Hills Ranch)	Proctor Valley Road South	Urban/developed	0.5	0.4	0.8
		Diegan coastal sage scrub	2.0	2.0	4.0
		Eucalyptus woodland	—	0.1	0.1
		Coastal and valley freshwater marsh	0.1	0.3	0.4
		Mulefat scrub	<0.1	<0.1	<0.1
		City of Chula Vista Total	*2.6*	*2.8*	*5.4*
City of San Diego (in Cornerstone Lands)	Proctor Valley Road South[b]	Urban/developed	0.3	0.3	0.6
		Diegan coastal sage scrub	3.0	4.1	7.0
		Diegan coastal sage scrub (disturbed)	3.3	6.3	9.6
		Diegan coastal sage scrub – *Baccharis*-dominated	0.1	0.6	0.7

Table 5-3
Impacts to Vegetation Communities and Land Cover Types within Off-Site Improvement Areas (Acres)

Ownership	Off-Site Improvement Area	Habitat Types/Vegetation Communities	Permanent Impacts	Temporary Impacts	Total Impacts[a]
		Diegan coastal sage scrub – *Baccharis*-dominated (disturbed)	0.3	0.3	0.6
		Disturbed habitat	0.6	0.9	1.6
		Eucalyptus woodland	—	<0.1	<0.1
		Mulefat scrub	0.1	0.2	0.3
		Non-native grassland	2.6	7.4	10.0
		Granitic southern mixed chaparral	1.4	1.7	3.2
		Unvegetated channel	<0.1	0.1	0.1
		City of San Diego (Cornerstone Lands) Total	*11.6*	*22.0*	*33.7*
Private Property	Proctor Valley Road South	Diegan Coastal sage scrub	0.2	0.3	0.5
		Non-native grassland	0.1	—	0.1
		Disturbed habitat	<0.1	*0.3*	0.3
		Private Property Total	*0.2*	*0.6*	*0.8*
County of San Diego Road Easements	Proctor Valley Road North	Urban/developed	0.1	0.1	0.2
		Diegan coastal sage scrub (disturbed)	<0.1	<0.1	<0.1
		Non-native grassland	<0.1	—	<0.1
		County of San Diego Road Easements Lands Total	*0.2*	*0.1*	*0.3*
CDFW-Owned Land in Otay Ranch	Planning Areas 16/19 Roads	Diegan coastal sage scrub	8.2	6.5	14.7
		Granitic southern mixed chaparral	0.9	0.2	1.1
		Planning Areas 16/19 Roads Subtotal	*9.1*	*6.7*	*15.8*
	Proctor Valley Road Central	Granitic chamise chaparral	4.0	8.4	12.5
		Disturbed habitat	<0.1	0.1	0.1
		Eucalyptus woodland	—	0.1	0.1
		Proctor Valley Road Central Subtotal	*4.1*	*8.6*	*12.7*
	Proctor Valley Road North	Granitic chamise chaparral	1.1	5.2	6.3
		Urban/developed	1.1	0.4	1.5
		Diegan coastal sage scrub	0.8	1.7	2.6
		Disturbed habitat	0.3	1.2	1.5
		Non-native grassland	0.9	3.9	4.8
		Southern willow scrub	<0.1	<0.1	0.1
		Proctor Valley Road North Total	*4.4*	*12.4*	*16.8*
		CDFW-Owned Land Total	*17.5*	*27.7*	*45.2*
		Total[a]	**32.1**	**53.2**	**85.4**

[a] May not total due to rounding. Does not include the 0.5 acres of impacts that may be required for widening Proctor Valley Road North.
[b] Includes impacts related to an off-site sewer pump station adjacent to the road.

Impact V-3: City of San Diego MSCP Cornerstone Lands

Portions of Proctor Valley Road South are located within the City of San Diego MSCP Cornerstone Lands and the City of San Diego's MHPA. As shown in Table 5-3, direct impacts to City of San Diego Cornerstone Lands as a result of the widening of Proctor Valley Road South would total 33.7 acres, 22 acres of which would be temporary and 11.6 acres of which would be permanent. Of this total, 20.6 acres of temporary and 10.6 acres of permanent impacts would be to sensitive upland communities, 0.4 acres would be to jurisdictional aquatic resources (0.3 acres temporary), and 2.4 acres would be to non-sensitive communities (1.5 acres temporary and 0.9 acres permanent) (**Impact V-3**).

Impact V-4: Lands Within City of Chula Vista

As shown in Table 5-3, direct impacts to lands in the City of Chula Vista as a result of the improvements to Proctor Valley Road South (including infrastructure facilities) would total 5.3 acres (2.8 acres temporary and 2.6 acres permanent). Of this total impact area, 4 acres would be to sensitive upland communities consisting of 2 acres of temporary impact and 2 acres of permanent impact, 0.4 acres would be to jurisdictional aquatic resources (0.1 acres would be permanent impacts), and 0.9 acres would be to non-sensitive communities (**Impact V-4**).

Impact V-5: Off-Site Private Lands

As shown in Table 5-3, direct impacts to off-site private lands as a result of road grading associated with Proctor Valley Road South would total 0.2 acres of temporary impacts to Diegan coastal sage scrub, a sensitive upland community (**Impact V-5**).

Impact V-6: Off-Site San Diego County Road Easements

As shown in Table 5-3, direct impacts to County road easement as a result of the improvements to Proctor Valley Road North would total 0.3 acres, (0.1 acres temporary and 0.2 acres permanent) (**Impact V-6**). Of this total impact area, less than 0.1 acres would be to sensitive upland communities consisting of temporary and permanent impacts.

Impact V-7: Off-Site CDFW Owned Lands

As shown in Table 5-3, direct impacts to CDFW-owned lands as a result of road grading would total 45.2 acres (17.5 acres permanent and 27.7 acres temporary) (**Impact V-7**). Impacts to sensitive vegetation communities within CDFW-owned lands in Planning Areas 16/19 as a result of road grading would total 15.8 acres (6.7 acres temporary and 9.1 acres permanent). All impacts would be to sensitive upland communities, including Diegan coastal sage scrub and

southern mixed chaparral. Direct impacts to CDFW-owned off-site lands within the central portion of Proctor Valley Road would total 12.7 acres (8.6 acres temporary and 4.1 acres permanent). Of this total impact area, 8.4 acres of temporary and 4.0 acres of permanent impacts would occur on chamise chaparral, which is a sensitive upland community. Direct impacts to CDFW-owned off-site lands within Proctor Valley Road North would total 16.8 acres (12.4 acres temporary and 4.4 acres permanent). Of this total impact area, 10.8 acres of temporary and 2.9 acres of permanent impacts would be to sensitive upland communities, and less than 0.1 acres of temporary and permanent impacts would be to jurisdictional aquatic resources.

5.1.2 Indirect Impacts to Riparian Habitat or Sensitive Vegetation Communities

5.1.2.1 Temporary Indirect Impacts

Impact V-8: Temporary Indirect Impacts to Sensitive Vegetation Communities within the Project Area (including off-site improvements)

Potential short-term or temporary indirect impacts to sensitive vegetation communities in the Project Area at the development/Preserve interface would primarily result from construction activities and include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants (including herbicides) (**Impact V-8**). These potential impacts are described below.

Generation of Fugitive Dust. Excessive dust can decrease the vigor and productivity of vegetation through effects on light, penetration, photosynthesis, respiration, transpiration, increased penetration of phytotoxic gaseous pollutants, and increased incidence of pests and diseases.

Changes in Hydrology. Construction could result in hydrologic and water-quality-related impacts adjacent to and downstream of the construction area. Hydrologic alterations include changes in flow rates and patterns in streams, which may affect adjacent and downstream vegetation communities. Water-quality impacts include chemical-compound pollution (fuel, oil, lubricants, paints, release agents, and other construction materials), erosion, increased turbidity, and excessive sedimentation. Direct impacts can also remove native vegetation and increase runoff from roads and other paved surfaces, resulting in increased erosion and transport of surface matter into vegetation communities. Altered erosion, increased surface flows, and underground seepage can allow for the establishment of non-native plants. Changed hydrologic conditions can also alter seed bank characteristics and modify habitat for ground-dwelling fauna that may disperse seed.

Chemical Pollutants. Erosion and chemical pollution (releases of fuel, oil, lubricants, paints, release agents, and other construction materials) may affect special-status vegetation communities. The use of chemical pollutants can decrease the number of plant pollinators, increase the existence of non-native plants, and cause damage to and destruction of native plants.

The significance of these potential impacts was determined through application of the County's Significance Guidelines, described in Section 7.1 of this report.

5.1.2.2 Permanent Indirect Impacts

Impact V-9: Permanent Indirect Impacts to Sensitive Vegetation Communities within the Project Area (Including Off-Site Improvement Areas)

Long-term or permanent indirect impacts could result from the proximity of the Development Footprint to sensitive vegetation communities after construction (e.g., maintenance of roads, residential units, commercial space, school, parks, and trails) (**Impact V-9**). Permanent indirect impacts that could affect special-status vegetation communities include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime. These potential impacts are described in detail below.

Generation of Fugitive Dust. The effects of fugitive dust on special-status vegetation communities would be the same as the temporary indirect impacts described in Section 5.1.1.

Chemical Pollutants. The effects of chemical pollutants on special-status vegetation communities would be the same as the temporary indirect impacts described in Section 5.1.1. In addition, landscaping activities may use herbicides to prevent vegetation from reoccurring around roads, residential units, commercial space, school, and parks. Weed control treatments would include all legally permitted chemical, manual, and mechanical methods. The herbicides used during landscaping activities would be contained within the Development Footprint.

Altered Hydrology. For purposes of analyzing potential indirect impacts associated with hydrology, urban run-off associated with landscaping and irrigation are described here. Water would be used for landscaping within residential units and maintained shared spaces (e.g., parks). These water sources may alter the on-site hydrologic regime, and these hydrologic alterations may affect special-status vegetation communities. Altered hydrology can allow for the establishment of non-native plants and/or invasion by Argentine ants (*Linepithema humile*), which can compete with native ant species that could be seed dispersers or plant pollinators. Potential impacts would be reduced by design features, including biofiltration basins that have been integrated into the Proposed Project design, along with additional low-impact-development and source control features such as preservation of existing vegetation wherever possible, smart

irrigation systems, and providing information and awareness about integrated pest management to owners. To eliminate potential flooding impacts during peak storm events, the proposed storm drain system would consist of appropriate on-site inlet placement and storm drain sized to handle peak-flow capacities. Similarly, off-site road improvements would include drainage improvements necessary for peak-flow runoff conveyance.

Non-Native, Invasive Plant and Animal Species. Invasive plant species that thrive in edge habitats are a well-documented problem in Southern California and throughout the United States. Development could also fragment native plant populations, which may increase the likelihood of invasion by exotic plants due to the increased interface between natural habitats and developed areas. Bossard et al. (2000) list adverse effects of non-native species in natural open areas, including that exotic plants compete for light, water, and nutrients, and can create a thatch that blocks sunlight from reaching smaller native plants. Exotic plant species may alter habitats and displace native species over time, leading to extirpation of native plant species, unique vegetation communities, and subsequently suitable habitat for special-status wildlife species. The introduction of non-native, invasive animal species could negatively affect native species that may be pollinators of or seed dispersal agents for plants within special-status vegetation communities.

Increased Human Activity. Increased human activity could result in the potential for trampling of vegetation outside of the Village 14 Development Footprint and designated trails, as well as soil compaction, and could affect the viability of plant communities. Trampling can alter the ecosystem, creating gaps in vegetation and allowing exotic, non-native plant species to become established, leading to soil erosion. Trampling may also affect the rate of rainfall interception and evapotranspiration, soil moisture, water penetration pathways, surface flows, and erosion. An increased human population increases the risk for damage to special-status vegetation communities.

Alteration of the Natural Fire Regime. The Proposed Project could potentially increase the risk of fire, including fire associated with electrical shorts or electrical equipment malfunction within developed neighborhoods, or inadvertent/intentional ignitions within or adjacent to open space. Shorter-than-natural fire return intervals can preclude recovery of the native vegetation between fires; weaken the ecological system; allow for invasion of exotic species; and, in some cases, result in permanent transition of the vegetation to non-native communities, such as to annual grassland and weedy communities (Keeley 1987; Malanson and O'Leary 1982; O'Leary et al. 1992). If the natural fire regime is suppressed, longer-than-natural fire return intervals can result in excessive buildup of fuel loads so that when fires do occur, they are catastrophic. Unnaturally long fire intervals can also result in senescence of plant communities, such as chaparral, that rely on shorter intervals for rejuvenation.

The significance of these potential impacts was determined through application of the County's Significance Guidelines, described in Section 7.1 of this report.

5.2 Special-Status Plant Species

5.2.1 Direct Impacts to Special-Status Plant Species

5.2.1.1 Temporary Direct Impacts

Impact SP-1: Temporary Direct Impacts to Special-Status Plant Species

Short-term, construction-related, or temporary direct impacts to special-status plants at the edge of the Development Footprint and non-impacted areas (i.e., Otay Ranch RMP Preserve, Conserved Open Space, and non-graded LDA) interface would primarily result from construction activities. Temporary impacts to special-status plants resulting from construction are quantified as a permanent impact. Clearing, trampling, or grading of special-status plants outside designated construction zones could occur in the absence of avoidance and mitigation measures. These potential effects could damage individual plants and alter their ecosystem, creating gaps in vegetation that allow exotic, non-native plant species to become established, thus increasing soil compaction and leading to soil erosion. Any special-status plant species at the edge of the Development Footprint/open space interface could be impacted by potential temporary direct impacts, such as those previously listed.

The significance of these potential impacts was determined through application of the County's Significance Guidelines, as described in Section 6.1, Guidelines for the Determination of Significance.

5.2.1.2 Permanent Direct Impacts

Impact SP-2: Permanent Direct Impacts to Special-Status Plant Species and Critical Habitat

The Proposed Project would result in the loss of sensitive plant species (Table 5-4, Summary of Direct Impacts to Special-Status Plant Species). Long-term or permanent direct impacts to special-status plant species were quantified by comparing the Development Footprint with the occurrence data for each special-status plant species. Table 5-4 includes each species' status, estimates of the number of individuals within the Project Area, and an assessment of permanent direct impacts based on the number of individual plants located within the Development Footprint. In addition, there are impacts to critical habitat for Otay tarplant and spreading navarretia. Permanent direct impacts to critical habitat for Otay tarplant would total 17.3 acres within the Project Area; impacts to critical habitat for spreading navarretia would total 16.6 acres within the Project Area (see Figure 5-2, Impacts to Critical Habitat). The significance of these

potential impacts was determined through application of the County's Significance Guidelines, as described in Section 6.1.

5.2.2 Indirect Impacts to Special-Status Plant Species

5.2.2.1 Temporary Indirect Impacts

Impact SP-3: Temporary Indirect Impacts to Special-Status Plant Species

Most of the indirect impacts to vegetation communities described in Section 5.1.2 can also affect sensitive plants. Potential short-term or temporary indirect impacts to special-status plant species in the Project Area would primarily result from construction activities and would include impacts related to or resulting from the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the introduction of chemical pollutants (including herbicides) (Impact SP-3). Special-status plant species at the edge of the Preserve/development interface could be impacted by potential temporary indirect impacts such as those previously listed (see descriptions in Section 5.1.2). The significance of these potential impacts was determined through application of the County's Significance Guidelines, as described in Section 6.1.

5.2.2.2 Permanent Indirect Impacts

Impact SP-4: Permanent Indirect Impacts to Special-Status Plant Species

Permanent indirect impacts could result from the proximity of the Development Footprint to special-status plants during construction. Permanent indirect impacts that could affect special-status plant species include generation of fugitive dust, chemical pollutants, altered hydrology, non-native invasive species, increased human activity, and alteration of the natural fire regime (**Impact SP-4**). Each of these potential indirect impacts is discussed in Section 6.2.2.1, Special-Status Plant Species. Special-status plant species at the edge of the Preserve/Development Footprint interface could be impacted by permanent indirect impacts such as those previously listed. The significance of these potential impacts was determined through application of the County's Significance Guidelines, as described in Section 6.1.

Table 5-4
Summary of Direct Impacts to Special-Status Plant Species

Species	Regulatory Status: Federal/State/County/CRPR	Approximate Number of Individuals within the Project Area	Approximate Number of Individuals Impacted[a]		
			On-Site[b]	*Off-Site*	*Impact Total*
County List A					
Arctostaphylos otayensis Otay manzanita	None/None/Covered/1B.2	627	—	—	—
Bloomeria clevelandii San Diego goldenstar	None/None/Covered/1B.1	4,952	775	—	775
Brodiaea orcuttii Orcutt's brodiaea	None/None/Covered/1B.1	83	83	—	83
Calochortus dunnii Dunn's mariposa-lily	None/SR/Covered, Narrow Endemic/1B.2	453	—	—	—
Clarkia delicata delicate clarkia	None/None/Not Covered/1B.2	5	—	4	4
Clinopodium chandleri San Miguel savory	None/None/Covered/1B.2	1	—	—	—
Deinandra conjugens Otay tarplant	FT/SE/Covered/1B.1	25	—	25	25
Dudleya variegata Variegated dudleya	None/None/Covered, Narrow Endemic/1B.2	35	35	—	35
Lepechinia ganderi Gander's pitcher sage	None/None/Covered, Narrow Endemic/1B.3	168	—	—	—
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None/Not Covered/4.3	174	168	—	168
Navarretia fossalis Spreading navarretia	FT/None/Covered/1.B	Critical habitat	12.5 acres[c]	4.1 acres	16.6 acres
County List B					
Ferocactus viridescens San Diego barrel cactus	None/None/Covered/2B.1	50	36	12	48
Iva hayesiana San Diego marsh-elder	None/None/Not Covered/2B.2	5,556	3,904	33	3,937
Salvia munzii Munz's sage	None/None/Not Covered/2B.2	18,178	11,677	36	11,713
County List D					
Artemisia palmeri San Diego sagewort	None/None/Not Covered/4.2	16	4	—	4
Dichondra occidentalis Western dichondria	None/None/Not Covered/4.2	0.23 acres	0.23 acres	—	0.23 acres
Harpagonella palmeri Palmer's grapplinghook	None/None/Not Covered/4.2	40	40	—	40

Table 5-4
Summary of Direct Impacts to Special-Status Plant Species

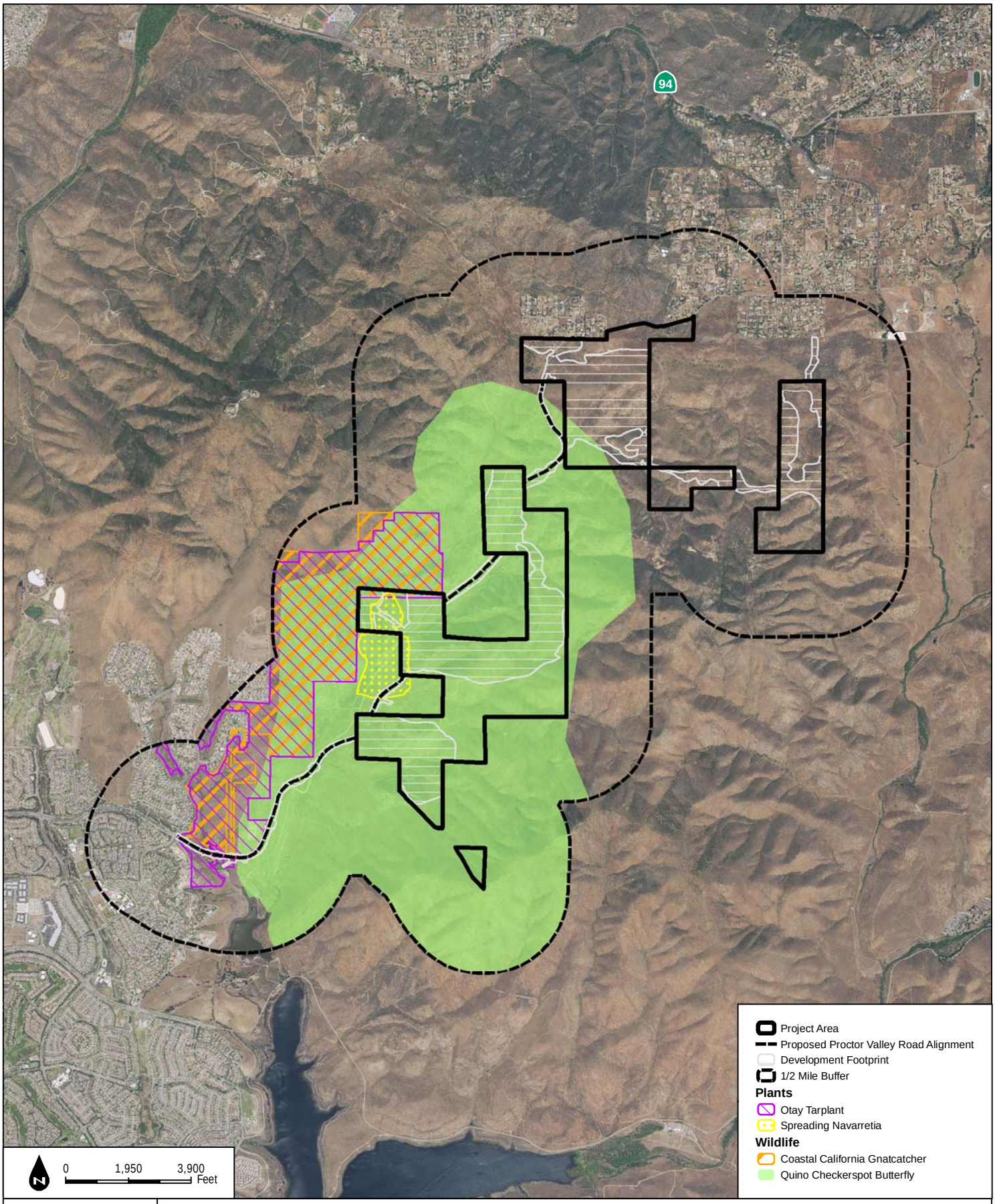
Species	Regulatory Status: Federal/State/County/CRPR	Approximate Number of Individuals within the Project Area	Approximate Number of Individuals Impacted[a]		
			On-Site[b]	*Off-Site*	*Impact Total*
Holocarpha virgata ssp. *elongata* Graceful tarplant	None/None/Not Covered/4.2	20	20	—	20
Juncus acutus ssp. *leopoldii* Southwestern spiny rush	None/None/Not Covered/4.2	577	75	10	85
Pentachaeta aurea ssp. *aurea* Golden-rayed pentachaeta	None/None/Not Covered/4.2	12,608	6,350	—	6,350
Selaginella cinerascens Ashy spike-moss	None/None/Not Covered/4.1	6.63 acres	3.63 acres	0.06 acres	3.69 acres
Stipa [=Achnatherum] diegoensis San Diego County needle grass	None/None/Not Covered/4.2	175	61	7	68
Viguiera laciniata San Diego County viguiera	None/None/Not Covered/4.2	18,599	6,543	188	6,731

Federal
FT = federally threatened
State
SE = state endangered
SR = state rare
County
Covered = Covered species under the MSCP County Subarea Plan
Not Covered = Not a covered species under the MSCP County Subarea Plan
CRPR: California Rare Plant Rank
1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
4: Plants of Limited Distribution – A Watch List
Threat Rank
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
Notes:

[a] Impacts to rare plants include impacts within the permanent and temporary areas.

[b] On-site impacts include impacts within designated development areas and Otay Ranch RMP Preserve, as well as portions of impacts within the LDA. Additional impacts may occur to 13 San Diego marsh elder and 6 southwestern spiny rush as a result of Proctor Valley Road widening.

[c] Impacts in acres occupied are shown rather than number of individuals due to the difficulty in counting distinct individuals for species with such growth habits.



SOURCE: NAIP 2016; Hunsaker 2017; USFWS 2017

FIGURE 5-2

Impacts to Critical Habitat

DUDEK

Otay Ranch Village 14 and Planning Areas 16/19

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5.3 Sensitive Wildlife Species

5.3.1 Direct Impacts to Special-Status Wildlife Species

5.3.1.1 Temporary Direct Impacts

Impact W-1: Temporary Direct Impacts to Habitat for Special-Status Wildlife Species

Short-term, construction-related, or temporary direct impacts to avian foraging and wildlife access to foraging, nesting, or water resources would primarily result from construction activities (**Impact W-1**). These impacts could occur along the interface between development and non-impacted areas. Clearing, trampling, or grading of vegetation communities outside of designated construction zones could occur in the absence of avoidance and mitigation measures. These potential impacts could reduce suitable habitat for wildlife species and alter their ecosystem, thus creating gaps in vegetation that allow exotic, non-native plant species to become established.

All temporarily impacted areas would be restored upon Proposed Project completion. The significance determination for these potential impacts is described in Section 6.1.

5.3.1.2 Permanent Direct Impacts

Impact W-2: Permanent Direct Impacts to Habitat for Special-Status Wildlife Species

Long-term or permanent direct impacts to special-status wildlife species were quantified by comparing the Development Footprint with suitable habitat for wildlife species. Implementation of the Proposed Project would result in the direct loss of habitat, including foraging habitat, for some of the County of San Diego Group 1, Group 2, and SSC species described in Sections 4.6.1 and 4.6.2 (**Impact W-2**). These species include the following: red diamond rattlesnake, western spadefoot, Cooper's hawk, southern California rufous-crowned sparrow, grasshopper sparrow, burrowing owl, red-shouldered hawk, turkey vulture, northern harrier, California horned lark, loggerhead shrike, coastal California gnatcatcher, western bluebird, common barn-owl, monarch, San Diego black-tailed jackrabbit, mule deer, cougar, American badger, San Diegan tiger whiptail, rosy boa, long-eared owl, white-tailed kite, Blainville's horned lizard, Bell's sage sparrow, ferruginous hawk, pallid bat, western mastiff bat, western red bat, Yuma myotis, San Diego desert woodrat, big free-tailed bat, orangethroat whiptail, San Diego banded gecko, and Coronado skink. Locations of sensitive wildlife observed are shown in Figures 4-1 and 41-a through 4-1cc, and described in Sections 4.6.1 and 4.6.2. Additional species that have moderate potential to occur but that were not directly observed are described in Appendix J1. In general, the populations of most sensitive species observed or determined to have a moderate to high likelihood of occurring would be directly affected by this loss of habitat. Table 5-5 outlines

impacts to suitable habitat, including foraging habitat for raptors, for each of these species. The significance determination for these potential impacts is described in Section 6.1. Impacts to golden eagle, Quino checkerspot butterfly, and Hermes copper butterfly are described under separate impact numbers below.

Impact W-3: Permanent Direct Impacts to Golden Eagle

MSCP Defined Golden Eagle Suitable Habitat – Project Area

As discussed above, after the MSCP Plan and MSCP County Subarea Plan were adopted in 1997, the County and the Wildlife Agencies entered into an Implementing Agreement that provides the mechanics for putting the MSCP into action. The Implementing Agreement describes the "hardline" Preserve boundary for Otay Ranch as the 11,375-acre RMP Preserve, which includes Village 14 and Planning Areas 16/19 (USFWS et al. 1998). This hardline boundary identifies the amount and location of land that the applicant must convey to the Otay Ranch RMP Preserve in order to secure the "take" authorization and mitigation benefits of the MSCP Plan itself (which incorporates the Otay Ranch RMP). This same boundary identifies the approved limits of development. Thus, as long as future development of Village 14 and Planning Areas 16/19 conforms to the hardline boundary and conveys the requisite amount of land to the Preserve, that development is entitled to "take" authorization under the Section 10 permit issued by USFWS for the 84 species covered under MSCP, including golden eagle, and the development is deemed to have mitigated to a less-than-significant level all impacts to the 84 species covered under the MSCP Plan, including golden eagle.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Amphibians and Reptiles					
Western spadefoot (*Spea hammondii*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	57 features with the potential to support this species; 16 pools were determined to be occupied	Eight occupied features; within the Development Footprint, one occupied feature, AA3, is within the 100-foot Preserve edge and may not be impacted by the Proposed Project	Impacts to eight occupied features and preservation of eight occupied features.	Western spadefoot is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of spadefoot habitat to the Otay Ranch RMP Preserve through the preservation of eight occupied features that support these species would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Orangethroat whiptail (*Aspidoscelis hyperythra*)	USFWS: None CDFW: SSC MSCP: Covered County: Group 2	1,239.0	715.7	High potential to occur. There are 1,239 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, and southern mixed chaparral.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	1,350.5	789.2	Observed in the east-central portion of the Project Area. There is 1,350.5 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, non-native grassland, and southern mixed chaparral.	San Diegan tiger whiptail is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of San Diegan tiger whiptail habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
San Diego banded gecko (*Coleonyx variegatus abbotti*)	USFWS: None CDFW: None MSCP: Not Covered County: Group 1	1,212.9	696.9	High potential to occur. There is 1,212.9 acres of modeled habitat within the Project Area; however, because this species is associated with rocky areas, this model likely overestimates the habitat. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, mulefat scrub, and southern mixed chaparral.	San Diego banded gecko is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of San Diego banded gecko habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Red diamond rattlesnake (*Crotalus ruber*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	1,328.7	779.6	This species was observed in the southwestern portion of the Project Area. Since this species has a potential to occur throughout the Project Area, specific locations were not mapped. There are 1,328.7 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, non-native grassland, and southern mixed chaparral.	Red diamond rattle snake is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of red diamond rattle snake habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Rosy boa (*Lichanura trivirgata*)	USFWS: None CDFW: None MSCP: Not Covered County: Group 2	1,325.1	779.4	Observed within the Proctor Valley Village 14 Preserve, east of the Development Footprint. There is 1,325.1 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, mulefat scrub, non-native grassland, and southern mixed chaparral.	Rosy boa is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of rosy boa habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Blainville's horned lizard (*Phrynosoma blainvillii*)	USFWS: None CDFW: SSC MSCP: Covered County: Group 2	1,328.7	779.6	Observed within the Village 14 Development Footprint. There is 1,328.7 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, non-native grassland, and southern mixed chaparral.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species and reduce impacts to less than significant.
Coronado skink (*Plestiodon skiltonianus interparietalis*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	410.7	264.8	High potential to occur. There is 410.7 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, disturbed chamise chaparral, eucalyptus woodland, and southern mixed chaparral.	Coronado skink is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of Coronado skink habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Birds					
Cooper's hawk (*Accipiter cooperii*) (nesting)	USFWS: None CDFW: WL MSCP: Covered County: Group 1	3.6 nesting; 1,336.5 foraging	0.2 nesting; 780.7 foraging	Observed within the Project Area. There is 3.6 acres of modeled nesting habitat and 1,336.5 acres of modeled foraging habitat within the Project Area. Nesting modeled habitat for this species includes eucalyptus woodland, and oak riparian forest. Foraging modeled habitat for this species includes chamise chaparral, cismontane alkali marsh, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, eucalyptus woodland, mulefat scrub, oak riparian forest, non-native grassland, and southern mixed chaparral.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species and reduce impacts to less than significant.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	USFWS: None CDFW: WL MSCP: Covered County: Group 1	1,325.1	779.4	Observed within the Project Area. There is 1,325.1 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, mulefat scrub, non-native grassland, and southern mixed chaparral.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species and reduce impacts to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Grasshopper sparrow (*Ammodramus savannarum*) (nesting)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 1	112.2	82.5	Observed within the Project Area. There is 112.2 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes non-native grassland.	Grasshopper sparrow is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of grasshopper sparrow habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Golden eagle (*Aquila chrysaetos*) (nesting and wintering)	USFWS: BCC CDFW: FP,WL MSCP: Covered County: Group 1	1,325.5	780.4 foraging	Observed within the Project Area. There is 1,325.5 acres of modeled foraging habitat within the Project Area. Foraging modeled habitat for this species includes coastal sage scrub (including disturbed and Baccharis dominated), chamise chaparral (including disturbed), southern mixed chaparral, and non-native grassland. These vegetation communities are based on the MSCP definition of foraging habitat and the crosswalk with the project-specific data presented in Appendix C.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan per the Implementing Agreement would provide mitigation for direct impacts to covered sensitive species and reduce impacts to less than significant. The Proposed Project would not result in lethal take of golden eagle individuals or disturbance of any active golden eagle nest. In addition, the Proposed Project would not

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
					place human activity within 4,000 feet of an active golden eagle nest, per the conditions of the MSCP or within 3,000 feet of historical nests per the Otay Ranch Raptor Management Study (Ogden 1992c). Compliance with these plans would mitigate for the Proposed Project's direct and indirect impacts to golden eagle, reducing impacts to less than significant. Therefore, the Proposed Project would not result in any significant impacts that have not already been mitigated by the MSCP and RMP.
Bell's sage sparrow (*Artemisiospiza belli belli)*	USFWS: BCC CDFW: WL MSCP: Not Covered County: Group 1	1,232.7	719.4	High potential to occur. There is 1,232.7 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, mulefat scrub, non-native grassland, and southern mixed chaparral.	Bell's sage sparrow is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of Bell's sage sparrow habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
					reduced to less than significant.
Long-eared owl (*Asio otus*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 1	1,328.7	779.6	Observed within the Project Area. There is 1,328.7 acres of foraging habitat within the Project Area. Foraging modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, eucalyptus woodland, mulefat scrub, oak riparian forest, non-native grassland, and southern mixed chaparral.	Long-eared owl is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of long-eared owl habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Burrowing owl (*Athene cunicularia*) (burrow sites and some wintering sites)	USFWS: BCC CDFW: SSC MSCP: Covered County: Group 1	115.3 potential suitable habitat	84.7	Direct observations of this species did not occur during focused surveys. Incidental sighting of white wash, feathers, and pellets were observed at one location in the central portion of the Project Area during rare plant surveys. There is 115.3 acres of burrowing owl survey areas mapped within the Project Area based on the burrowing owl habitat assessment.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species to reduce impacts to less than significant. In addition, preconstruction surveys would be conducted prior to Proposed Project construction to ensure that direct impacts to this species are avoided.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Red-shouldered hawk (*Buteo lineatus*)	USFWS: None CDFW: None MSCP: Not Covered County: Group 1	3.6 nesting; 1,336.5 foraging	0.2 nesting; 780.7 foraging	Observed within the Project Area. There is 3.6 acres of modeled nesting habitat and 1,336.5 acres of modeled foraging habitat within the Project Area. Nesting modeled habitat for this species includes eucalyptus woodland, and oak riparian forest. Foraging modeled habitat for this species includes chamise chaparral, cismontane alkali marsh, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, oak riparian forest, non-native grassland, and southern mixed chaparral.	Impacts to red-shouldered hawk would be less than significant due to the small amount of suitable nesting habitat proposed to be impacted.
Turkey vulture (*Cathartes aura*)	USFWS: None CDFW: None MSCP: Not Covered County: Group 1	1,259.8	785.1	Observed within the Project Area. There is 1,259.8 acres of modeled foraging habitat within the Project Area. Foraging modeled habitat for this species includes chamise chaparral, cismontane alkali marsh, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, non-native grassland, and southern mixed chaparral.	The Project Area does not support suitable cliffs and large trees for nesting, but there is suitable foraging habitat within the Project Area. The Project Area is not used for breeding by this species; therefore, impacts to habitat would not be significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Northern harrier (*Circus cyaneus*) (nesting)	USFWS: None CDFW: None MSCP: Not Covered County: Group 1	7.8 nesting; 925.8 foraging	1.1 nesting; 515.9 foraging	Observed foraging; moderate potential to nest within the Project Area. There is 7.8 acres of modeled nesting habitat and 925.8 acres of modeled foraging habitat within the Project Area. Nesting modeled habitat for this species includes cismontane alkali marsh. Foraging modeled habitat for this species includes cismontane alkali marsh, coastal sage scrub, disturbed coastal sage scrub, mulefat scrub, oak riparian forest, and non-native grassland.	Northern harrier is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of northern harrier habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
White-tailed kite (*Elanus leucurus*)	USFWS: None CDFW: FP MSCP: Not Covered County: Group 1	124.6	84.2	Observed within the Project Area. There is 124.6 acres of modeled foraging habitat within the Project Area. Foraging modeled habitat for this species includes cismontane alkali marsh, eucalyptus woodland, mulefat scrub, oak riparian forest, and non-native grassland.	The Project Area does not support habitat for nesting, but there is a minimal amount of suitable foraging habitat within the Project Area. A portion of the foraging area would be preserved. In addition, there is likely more suitable foraging habitat outside of the Project Area and closer to suitable nesting habitat. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
California horned lark (*Eremophila alpestris actia*)	USFWS: None CDFW: WL MSCP: Not Covered County: Group 2	947.6	534.5	Observed within the Project Area. There is 947.6 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes cismontane alkali marsh, coastal sage scrub, disturbed coastal sage scrub, disturbed habitat, mulefat scrub, and non-native grassland.	California horned lark is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of California horned lark habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Loggerhead shrike (*Lanius ludovicianus*) (nesting)	USFWS: BCC CDFW: SSC MSCP: Not Covered County: Group 1	943.5	534.4	Observed within the Project Area. There is 943.5 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, and non-native grassland.	Loggerhead shrike is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of loggerhead shrike habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Coastal California gnatcatcher (*Polioptila californica californica*)	USFWS: FT CDFW: SSC MSCP: Covered County: Group 1	1,113.7	682.6	Observed within the Project Area. There is 1,113.7 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes chamise chaparral, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, mulefat scrub, and southern mixed chaparral.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered sensitive species and reduce impacts to less than significant. The Proposed Project provides for the preservation of habitat surrounding known locations of the species. Focused surveys for coastal California gnatcatcher resulted in the detection of three pairs for a total of six gnatcatchers observed within the southern portion of the Village 14 Otay Ranch RMP Preserve.
Western bluebird (*Sialia mexicana*)	USFWS: None CDFW: None MSCP: Covered County: Group 2	943.4	533.6	Observed within the Project Area. There is 943.4 acres of modeled foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes coastal sage scrub, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, and non-native grassland.	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to special-status species, and reduce impacts to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Common barn owl (*Tyto alba*)	USFWS: None CDFW: None MSCP: Not Covered County: Group 2	947.6	534.5	Observed within the Project Area. There is 947.6 acres of modeled nesting/foraging habitat within the Project Area. Nesting and foraging modeled habitat for this species includes cismontane alkali marsh, coastal sage scrub, disturbed coastal sage scrub, disturbed habitat, mulefat scrub, and non-native grassland.	Common barn owl is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of common barn owl habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Mammals					
Pallid bat (*Antrozous pallidus*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	1,252.0	784.0	High potential to occur. There is 1,252.0 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, cismontane alkali marsh, coastal sage scrub, developed, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, open water, non-native grassland, and southern mixed chaparral.	Pallid bat is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of pallid bat habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.

Table 5-5
Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or Off-Site Improvement Area, or with High Potential to Occur

Species Common Name (Scientific Name)	Regulatory Status: Federal/ State/ MSCP/ County Group	Project Area Habitat Total Acres	Development Footprint[a] Habitat Total Acres	Basis for Impact Evaluation	Significance Determination
Western mastiff bat (*Eumops perotis californicus*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	1,252.0	784.0	High potential to occur. There is 1,252 acres of modeled habitat within the Project Area. Modeled habitat for this species includes chamise chaparral, cismontane alkali marsh, coastal sage scrub, disturbed chamise chaparral, disturbed coastal sage scrub, disturbed habitat, eucalyptus woodland, mulefat scrub, oak riparian forest, open water, non-native grassland, and southern mixed chaparral.	Western mastiff bat is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of western mastiff bat habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.
Western red bat (*Lasiurus blossevillii*)	USFWS: None CDFW: SSC MSCP: Not Covered County: Group 2	3.6	0.2	High potential to occur. There is 3.6 acres of modeled habitat within the Project Area. Modeled habitat for this species includes eucalyptus woodland and oak riparian forest.	Western red bat is not a Covered Species under the MSCP. However, the Proposed Project applicant's contribution of western red bat habitat to the MSCP and Otay Ranch RMP Preserve would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Thus, direct impacts to this species would be reduced to less than significant.