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Draft Tier 1 Environmental Impact Statement and Preliminary Section 4(f) Evaluation

Section 3.3, Land Use and Section 6(f)

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3.3 Land Use and Section 6(f)

3.3.1 Land Use and Special Designated Lands

This section describes the existing and future (planned) land use, land use plans and policies, and any special designated lands within the Interstate 11 (I-11) Corridor Study Area (Study Area). The Study Area encompasses portions of the cities of Buckeye, Casa Grande, Eloy, Goodyear, Maricopa, Nogales, Surprise, South Tucson, and Tucson; portions of the towns of Gila Bend, Marana, Oro Valley, Sahuarita, and Wickenburg; and areas of unincorporated Maricopa, Pima, Pinal, Santa Cruz, and Yavapai counties.

3.3.1.1 Regulatory Setting

Arizona state law requires that communities update their general or comprehensive plan every 10 years (Arizona Revised Statutes §9-461.05 for incorporated municipalities; Arizona Revised Statutes §11-804 for counties). These plans establish a long-range blueprint, and goals and policies to guide future growth and development, mapping a future envisioned 20 or more years ahead. The Arizona Growing Smarter/Growing Smarter Plus state legislation outlines the statutory requirements of general and comprehensive plan documents. These requirements are based on population size and whether the jurisdiction is an incorporated municipality or county, dictating a minimum series of elements. An element is a specific section of the plan that discusses a particular planning topic, such as land use, transportation, housing, economic development, energy, and public services. All plans must present existing and planned land uses and transportation strategies as well as related regulations.

Each city and town regulates land planning within its municipal planning area, while counties are responsible for planning in the unincorporated areas. While both lay out circulation plans for their jurisdictions, metropolitan planning organizations lead multimodal transportation planning throughout urbanized areas, in collaboration with their member agencies, which typically include all cities, towns, counties, and Tribal governments within the planning area.

This land use section documents existing and planned land uses from available data and information provided by local governments. No formal local land use approvals would occur as the result of this Draft Tier 1 Environmental Impact Statement and Preliminary Section 4(f) Evaluation (Draft Tier 1 EIS). The requirements for subsequent Tier 2 evaluations, including compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, are described further in Section 3.3.1.6.

From a land management perspective, each agency has varying laws and regulations governing use, management, land disposal, and protection of character and values. The potential direct impact to these lands will be discussed as well as the potential acres of land conversion under each of the Build Corridor Alternatives. However, until a specific alignment is selected in Tier 2 studies, these conversion impacts should be viewed as high-level estimates and do not reflect detailed calculations. As required, the Arizona Department of Transportation (ADOT) will pursue coordination and mitigation activities with individual agencies, such as development of Memoranda of Understanding, programmatic agreements, and updates to resource management plans, at the selection of a specific alignment in Tier 2 studies. See **Chapter 6** (Recommended Alternative) for further discussion of mitigation strategies.

3.3.1.2 Methodology

The planning process for the Draft Tier 1 EIS documents land use considerations at a programmatic level (qualitative) with respect to the impacts of an I-11 Corridor on existing and future land uses within the three Build Corridor Alternatives as well as the No Build Alternative. The Project Area for land use is the 2,000-foot-wide corridor for each Build Corridor Alternative. The analysis acknowledges that direct land use impacts would be different for Corridor Options that are co-located with existing corridors versus Corridor Options in undeveloped areas, but these differences are not reflected in the overall acreage calculations for the Corridor Options.

The adopted general or comprehensive plans within each jurisdiction were used as sources of information. Local plans and ordinances, along with private development plans, were consulted to establish the affected environment, environmental consequences, and proposed mitigation measures. Land use trends, goals, and objectives of relevant city, county, and regional plans were reviewed to determine if construction of I-11 would be consistent with these jurisdictions' applicable goals and policies; potential impacts to special land management designations also were reviewed. Other sources of information include Maricopa Association of Governments (MAG) and Pima Association of Governments (PAG) (their land use projections, various websites, and conversations with agency staff). Geographic information system (GIS) software was used to pinpoint land uses and land ownership in the Study Area and to measure the acreage of various land uses. Field verification was undertaken as needed to understand existing land uses.

It is important to acknowledge that land use planning is an ongoing activity. Therefore, information related to all of these land use topics will be updated during Tier 2 studies to maintain the most up-to-date information.

From a land management perspective, underlying land ownership patterns were analyzed for their potential impacts to federally and state-managed lands, in addition to related legislation or planning documents that might guide future development opportunities.

3.3.1.3 Affected Environment

The following sections provide summary-level findings. For the full land use inventory, see **Appendix E3**, Land Use and Section 6(f) Technical Memorandum.

Land Use Plans and Policy

Land use elements vary among the Study Area jurisdictions' general and comprehensive plans. Within the South Section, the Study Area encompasses portions of the planning areas of Nogales, Sahuarita, South Tucson, Tucson, Marana, Eloy, Pima County, and Pinal County. In the Central Section, the Study Area encompasses portions of the planning areas of Casa Grande, Gila Bend, Goodyear, Buckeye, Pinal County, and Maricopa County. The North Section includes portions of the planning areas of Buckeye, Wickenburg, Maricopa County, and Yavapai County.

Typically, land use goals relate to economic growth that takes advantage of transportation infrastructure while maintaining buffers between urban and rural land use and to development that occurs in a manner that is sensitive to the natural environment. In general, the transportation elements include goals related to improving circulation and reducing congestion, enhancing public transit, and creating alternatives to automobile transportation for localized travel. As a driver of growth, economic development initiatives respond to transportation

patterns, with other land uses planned in a compatible manner. For example, it is common for Study Area jurisdictions to plan major employment centers along high-capacity roadways, as industrial growth is anticipated near freeways, rail lines, and airports. Mixed-use development often surrounds these areas, with lower densities of residential growth more distant from these areas to avoid conflicts with noise and high volumes of traffic.

Many municipalities, including Pinal County, Casa Grande, Eloy, Goodyear, Buckeye, and Wickenburg, already incorporate some version of I-11 in their general or comprehensive plans,. These versions of I-11 often have multiple names, including the West Pinal Freeway (Options I1 and I2), Hassayampa Freeway (Options I1, I2, L, M, X), State Route (SR) 303L South Extension (north-south portion of Option N), and SR 30 (east-west portion of Option N and Option R).

Other municipal plans are focused on expansion of existing highways such as I-19, I-10, I-8, and SR 85 through their communities, (e.g., Nogales, Tucson, and Gila Bend). Several Study Area jurisdictions incorporate and acknowledge ongoing study processes for other intersecting high-capacity transportation corridors, such as the Sonoran Corridor and North-South Freeway. ADOT is considering both in current Draft Tier 1 EIS efforts. In all these scenarios, transportation-compatible land uses are planned in the vicinity of expected transportation corridors, and such land uses will provide a built environment that is well suited for a new or improved high-capacity transportation corridor. For more information on individual land use plans and policies and their relationship with the Build Corridor Alternatives, see **Appendix E3**, Land Use and Section 6(f) Technical Memorandum.

Existing Land Use

Most of the Study Area today consists of vacant or residential land, with large swaths of recreation, open space, or agricultural land and clusters of commercial and industrial development, generally along existing transportation corridors and at major transportation junctions. The following narrative summarizes existing land use patterns, as shown on **Figure 3.3-1** (Existing Land Use). Noted land use features are labeled for context. See **Appendix E3**, Land Use, for tabular descriptions of land use compositions and acreage breakdowns.

Please note that illustrated land uses reflect categorizations in municipal and county general and comprehensive plans. They are not always reflective of underlying land management patterns, which will be discussed further in the next section. Therefore, some areas that are managed as open space or recreation areas may not be reflected as such on **Figure 3.3-1** (Existing Land Use).

For the South and Central Sections, spatial data is unavailable for Pinal County (Options F, G, H, and I); for the North Section, data is unavailable for Yavapai County (northern portions of Options S, U, and X). Neither county maintains a database of existing land uses. For this analysis, a field survey and review of aerial photography assisted in the narrative.

Land uses within the South Section are primarily categorized as existing residential or vacant, with pockets of commercial development at traffic interchange locations and near major arterial intersections. A large cluster of mining activities, including the Mission and Sierrita Mines, exists south of the San Xavier District of the Tohono O'odham Nation. Two major Tucson water recovery properties are located north of SR 86 (CAVSARP/SAVSARP).Other industrial clusters are located near Pinal Airpark and between I-10 and the Union Pacific Railroad (UPRR) corridor in Eloy. The Tucson metropolitan area, especially along the I-10 and I-19 routes, is heavily built out, while the fringes of the urban environment are more sparsely populated, with clusters of

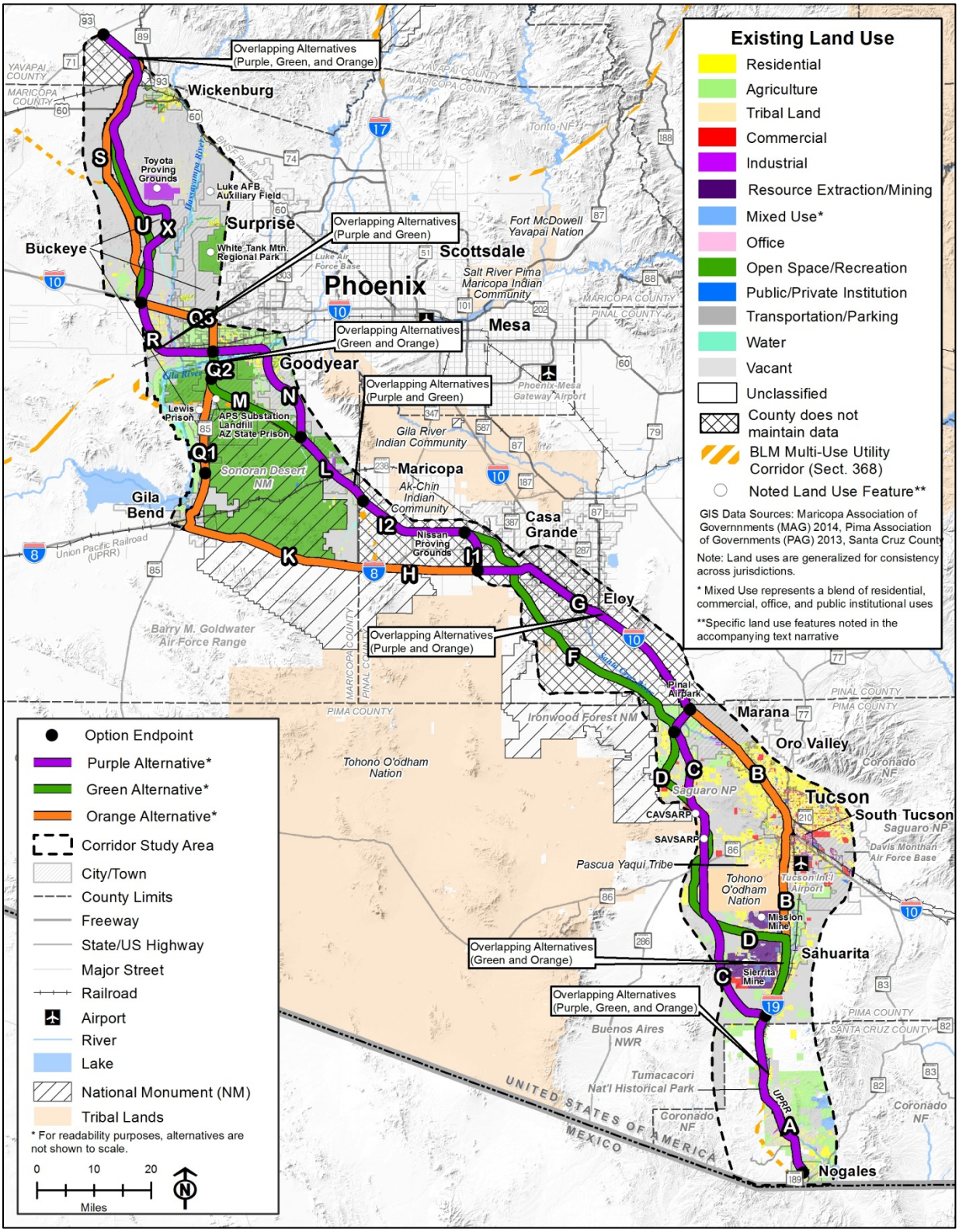

Figure 3.3-1 Existing Land Use

low-density residential housing, open space features, and vacant lands. Large clusters of open space and recreation uses, which are not illustrated in this categorization, are present in the South Section, namely Saguaro National Park (SNP), Tucson Mountain County Park, Tumacacori National Historical Park, Tubac Presidio State Historic Park, Ironwood Forest National Monument, and Picacho Peak State Park.

Land uses within the Central Section are primarily residential, recreation and open space, or vacant, with pockets of commercial and industrial development along existing corridors. This section's high degree of open space land uses is mostly due to the location of the Sonoran Desert National Monument (SDNM), which comprises more than half of the geographic area, several additional parks and recreation areas. Although not mapped, most of the Study Area in Pinal County is vacant and residential in nature, with large swaths of agricultural land and small clusters of commercial and industrial growth, including the Nissan Proving Grounds. Residential development in the Maricopa County portion is primarily clustered near Gila Bend (I-8/SR 85), Buckeye (SR 85/MC-85), and Goodyear (planned SR 303L South Extension).

Non-open-space areas of Maricopa County have a high amount of agricultural lands, mostly located near the Gila River corridor. A cluster of existing industrial and public institutional uses is located on SR 85 south of the Gila River (e.g., Arizona Public Service substation, prison complexes, and a large landfill facility).

Several portions of the Corridor Options run within Bureau of Land Management (BLM) multi-use utility corridors, which are defined corridor rights-of-way for transportation and energy transmission facilities. These multi-use utility corridors represent BLM's preferred routing of such facilities through their lands.

Lands within the North Section are primarily vacant, with some scattered low-density development. Within Maricopa County, major land use features include the Toyota Proving Grounds, White Tank Mountain Regional Park, agricultural and residential lands north of I-10, along with a mix of uses that comprise the Town of Wickenburg. Luke Air Force Base holds a small auxiliary field on the east side of the Hassayampa River. Yavapai County does not maintain an existing land use file, but currently this land is mostly vacant State Trust land. Large clusters of open space and recreation areas are located north of the Toyota Proving Grounds in the center of the Study Area (Vulture Mountains Recreation Area [VMRA], Hassayampa River Preserve), but they are not mapped.

Planned Land Use

Planned land uses in the Study Area reflect the 20-year future land use scenario envisioned in municipal and county general and comprehensive plans. Future land uses are speculative and development patterns can quickly change to respond to new opportunities and constraints, such as a new transportation corridor, changing demographics, or the attraction of a major employer. Additionally, planned land uses are the best vision of a comprehensive coordinated development pattern. However, that does not guarantee that uses will be developed precisely as planned or within the time period envisioned. Furthermore, new residential development in any of the state's five Active Management Areas (including portions of Maricopa, Pinal, Pima, Santa Cruz and Yavapai counties) must demonstrate a 100-year water supply under the Arizona Department of Water Resources' Assured Water Supply Program. This approval requires that new residential development meet five criteria (physical water availability, continuous water availability, legal water availability, water quality, and financial capability to construct water delivery/storage) and comes after the master-planning process (which is what is typically embedded in general and comprehensive plans as "planned land uses"), but before the

recording of plats or selling of parcels. Therefore, the amount and density of proposed residential development throughout the Study Area may not be reflective of the reality of water availability.

The following narrative summarizes the land uses planned in current general and comprehensive plans. However, several plans will be due for revision soon, and the current land use scenario could vary in the future. Planned land uses are illustrated on **Figure 3.3-2** (Planned Land Use). Noted land use features are labeled for context. See **Appendix E3**, Land Use and Section 6(f) Technical Memorandum, for tabular descriptions of land use compositions and acreage breakdowns. Section 3.3.1.4, Environmental Consequences, discusses the implications for specific Build Corridor Alternatives in more detail.

Approximately half of the land within the South Section is planned for residential growth of varying densities. The growth is generally concentrated within the jurisdictional boundaries of Tucson, Marana, Nogales, Sahuarita, and other smaller communities. Industrial land use is the second-largest category of land use, with most uses located around Tucson International Airport, northwest of Tucson and adjacent to SNP, and south of the Tohono O'odham Nation. Recreation and open space form the third-largest category of land use. The Tohono O'odham Nation occupies approximately 10 percent of the Study Area in this section. In addition, public and private institutional land uses are scattered throughout this area. Generally, land immediately adjacent to existing interstate corridors is planned to be used for industrial, commercial, and mixed-use development.

Planned land uses in the Central Section are largely dominated by recreation and open space land uses, owing largely to the SDNM and the proposed Palo Verde Regional Park, the Buckeye Hills Regional Park, and other active and passive open spaces scattered throughout the section. Residential land uses form the second largest land use category in this section and will continue to be generally concentrated within the communities of Buckeye, Casa Grande, Goodyear, and Gila Bend. A variety of industrial, office, commercial, and mixed uses are scattered throughout the Central Section.

Planned land uses in the North Section are primarily split between equal portions of recreational lands and open spaces (VMRA, White Tank Mountain Regional Park) and residential land uses. The Hassayampa River flows through the North Section, and together with various streams and washes, it constitutes approximately 2 percent of the land. Smaller commercial and industrial land uses are scattered throughout the section. Major large-scale master-planned communities in Buckeye and Maricopa County are designated as mixed use and are planned to include both residential and employment-generating land uses.

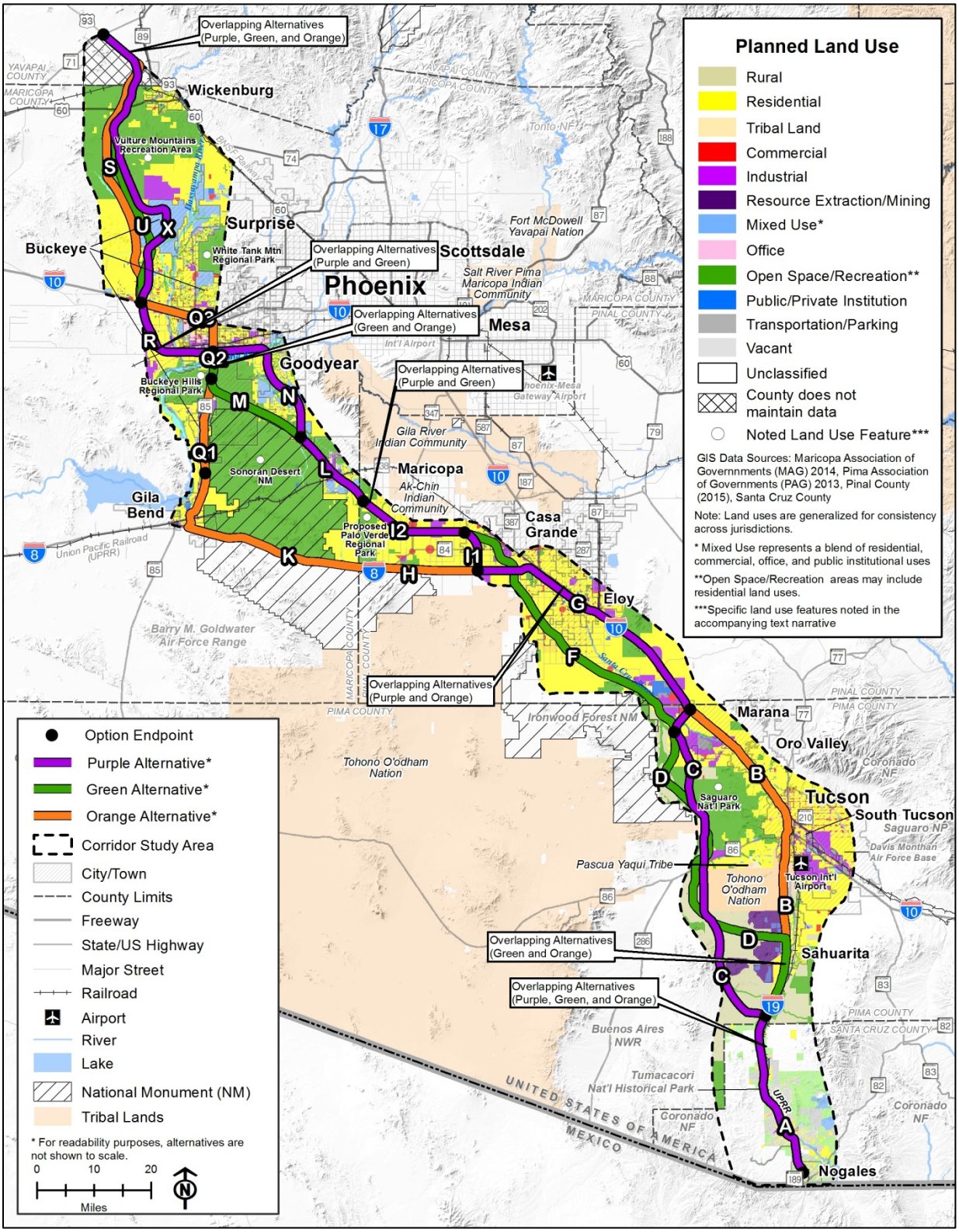

Figure 3.3-2 Planned Land Use

Master Planned Communities

The Study Area, specifically the Pinal County and Maricopa County portions, has been on the fringe of expanding Phoenix metropolitan development for more than a decade. There were more than 200 master-planned communities in various stages of planning, permitting, and construction when the Great Recession hit and most development paused. Several large communities are still planned and/or under development today, as shown on **Figure 3.3-4** (Major Study Area Master-Planned Communities).

Six large-scale communities form the primary clusters of new anticipated growth (Rancho Sahuarita in the South Section; Dreamport Villages, Amaranth, and Estrella in the Central Section; and Belmont and Douglas Ranch in the North Section). Generally permitted as a Planned Area Development, these master-planned communities tend to show up on general or comprehensive plan maps as either all residential or all mixed-use. And while they are typically predominantly residential with a mix of uses throughout, there is generally a thoughtful pattern to their layout, based more on performance standards than zoning. Communities of these sizes may take 25 to 30 or more years to build out, spanning multiple economic cycles and responding in like, which the Planned Area Development allows for. A generalized map of these community locations is illustrated on **Figure 3.3-4** (Major Study Area Master-Planned Communities). Please note that locations are approximate and do not illustrate parcel boundaries. See **Appendix E3**, Land Use and Section 6(f) Technical Memorandum, for more-detailed descriptions of future development opportunities.

Land Management and Special Designated Lands

This section discusses major land management in the Study Area and special designated lands, such as wildernesses, national monuments, areas of critical environmental concern (ACECs), designated roadless areas, and other deeded properties. Only about half the Study Area is private land, and differing land regulations apply to the use of the other lands for transportation purposes. Some land managers, like the Arizona State Land Department (ASLD), may see a new transportation corridor as a benefit and asset to their properties, providing access to developable, non-sensitive lands. Others may feel a high-capacity roadway would have negative impacts, such as increased traffic, noise, pollution, or wildlife connectivity and habitat fragmentation.

For example, several designated wildernesses exist within the Study Area, managed by various agencies but all subject to the Wilderness Act of 1964, which defines these areas as those with a minimal human footprint, opportunities for unconfined recreation; and educational, scientific, or historical value; and without enterprises or motorized travel within them. Ongoing coordination is required with all agencies to understand the consequences of locating a potential I-11 through or proximate to the properties under their jurisdiction.

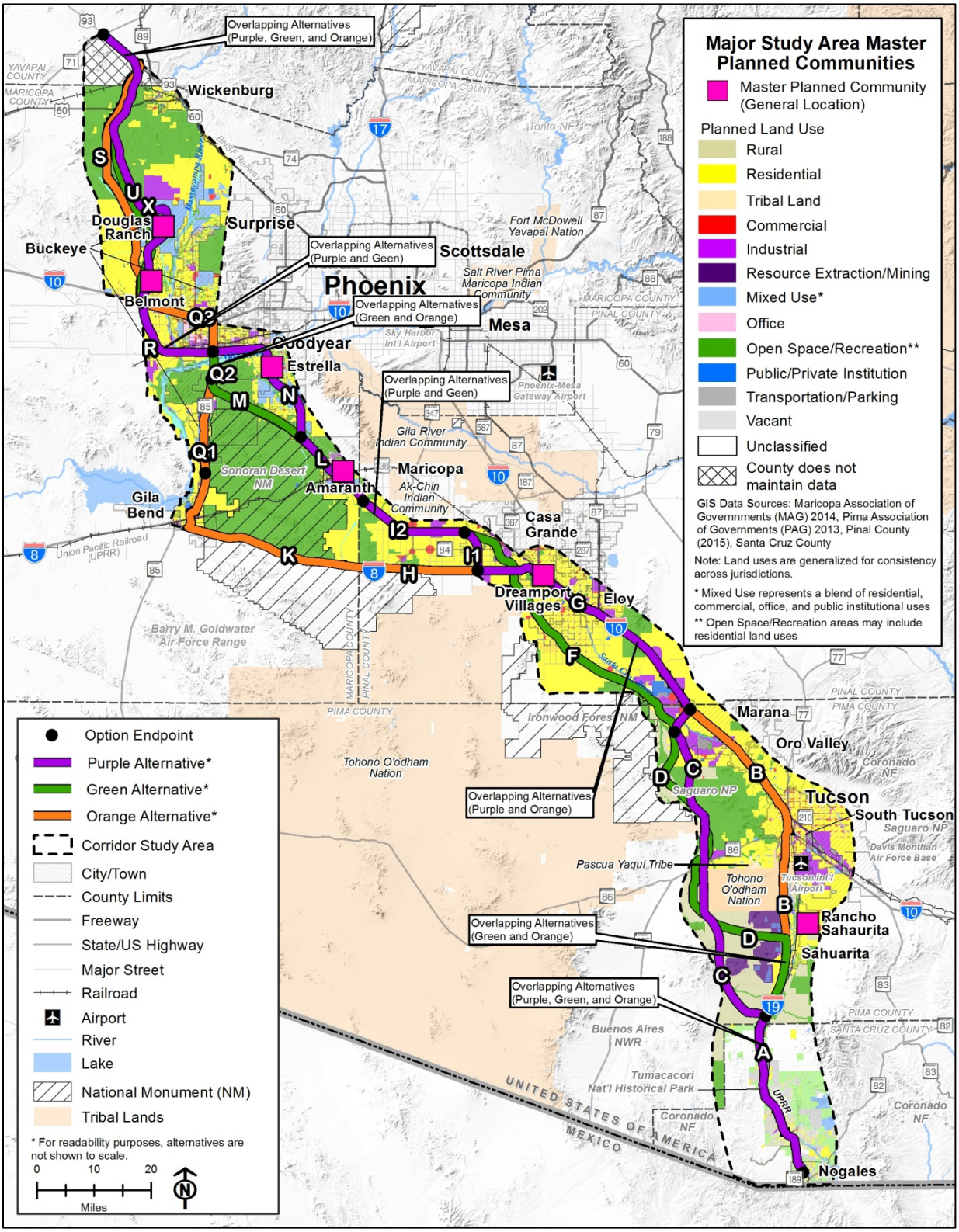

Figure 3.3-3 Major Study Area Master-Planned Communities

The following narrative summarizes major land management patterns, as shown on **Figure 3.3-5** (Land Management and Special Designated Lands). See **Appendix E3**, Land Use and Section 6(f) Technical Memorandum, for tabular descriptions of land management compositions and acreage breakdowns.

Slightly more than 50 percent of the South Section is private land and 25 percent is State Trust lands. Smaller parcels of land are managed by BLM, the Bureau of Reclamation (Reclamation), United States Forest Service (USFS), and National Park Service (NPS), and other parcels belong to the military or are state parks and Tribal lands. Roadless areas and wilderness are located within the USFS Coronado National Forest. These areas are generally on the edges of the Study Area and do not encroach upon existing highways. The largest cluster of protected lands is located west of metropolitan Tucson where SNP (NPS)/Saguaro Wilderness, Tucson Mountain Park (Pima County Parks), and the Tucson Mitigation Corridor (TMC) (Reclamation) sit adjacent to each other and near the Tohono O'odham Nation and Ironwood Forest National Monument (BLM), which mostly sits outside the Study Area except for a small portion near Marana.

Within the South Section, the Pima County Buffer Overlay Zone is a zoning overlay district within 1-mile of the surrounding public preserves. The purpose of this overlay is to preserve and protect the open space characteristics of lands that are in close proximity to public preserves, while also permitting reasonable economic use of the land. This is intended as a transition zone between the preserves and the more urban areas of the county. It does not discourage changes in the underlying zoning, but seeks to minimize impacts to wildlife movement and the visual aesthetics surrounding public preserves. Within the Study Area, this overlay zone applies to national, state, and county parks; wildernesses; national forests; national monuments; wildlife refuges; and other open space preservation areas (**Figure 3.3-5** [Land Management and Special Designated Lands]).

Generally, land directly adjacent to existing interstate corridors is either privately or state-owned, with the exception of the San Xavier District of the Tohono O'odham Nation, which spans about an 8-mile section of I-19 between Tucson and Sahuarita, and Picacho Peak State Park, which partially spans I-10 in its most northeastern corner.

Private land and BLM land are present in the Central Section. Most privately held land is located near the incorporated municipal areas (Casa Grande, Gila Bend, Goodyear, and Buckeye), while large pieces of contiguous BLM lands are present throughout most of the Maricopa County portion, including the SDNM and various wildernesses. Parcels of State Trust land are intermingled with the private land, along with small parcels of park and recreation areas west of SR 85 (e.g., Buckeye Hills Regional Park). The Gila River Terraces and Lower Gila Historic Trails ACEC is prevalent in linear blocks in the Study Area, spanning the Gila River on BLM lands from edge-to-edge of the Study Area, following the west edge of the Study Area along the river corridor down to Gila Bend. Several blocks of Arizona Game and Fish Department (AGFD) deeded lands are managed as state wildlife areas throughout the ACEC.

In the North Section, land within the City of Buckeye and the Town of Wickenburg planning areas is predominantly private land, State Trust land, and BLM land; some parcels of Reclamation land are located along the Central Arizona Project (CAP) canal. VMRA is located south of US 60 between Buckeye and Wickenburg, a 110-square-mile area owned by BLM and managed in cooperation with Maricopa County. The Vulture Mountains ACEC is within the VMRA. The Flood Control District of Maricopa County operates several flood-retardant

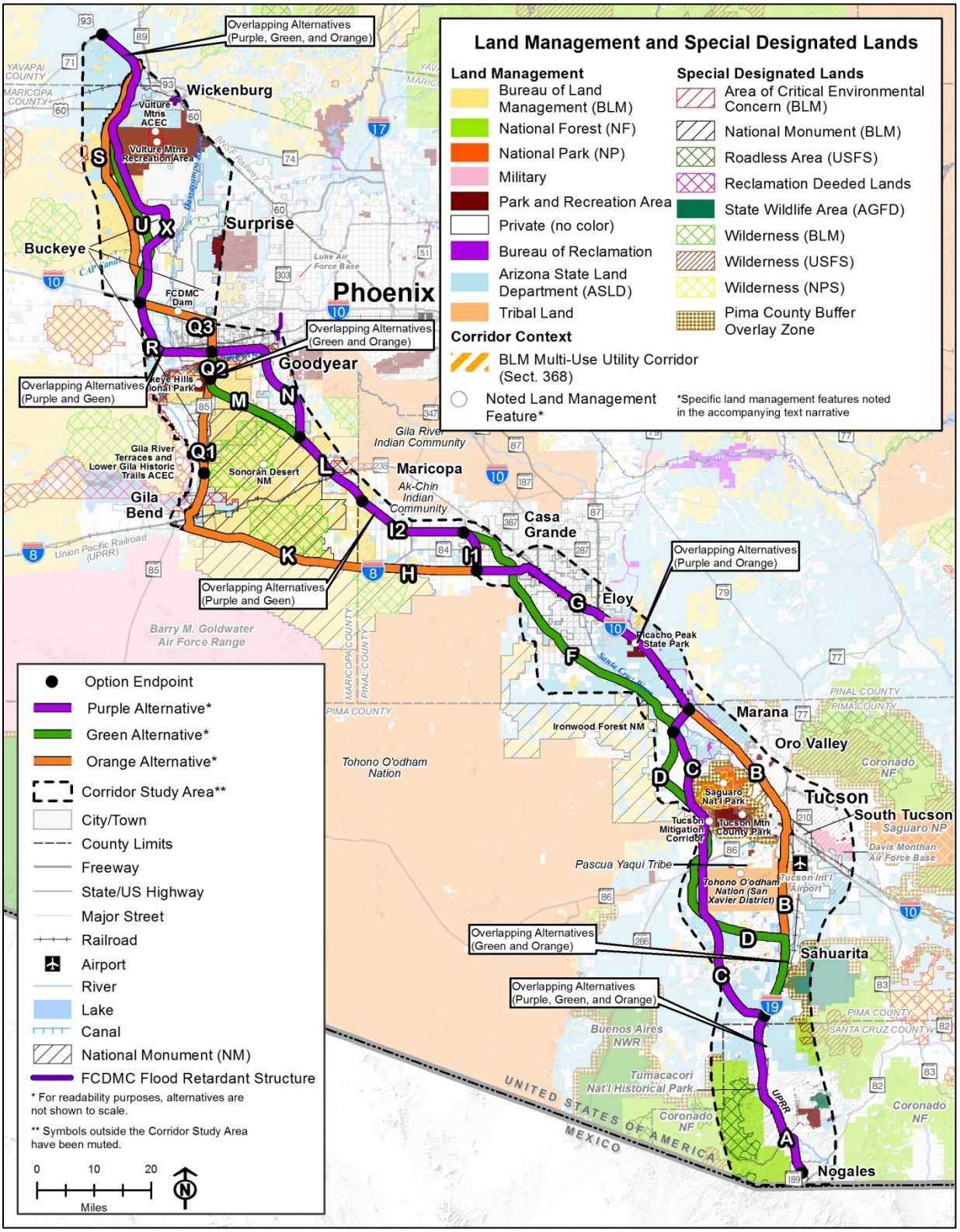

Figure 3.3-4 Land Management and Special Designated Lands

structures on the east side of the Study Area as well as an 8-mile dam to interrupt and redirect overland stormwater flows on the north side of I-10.

3.3.1.4 Environmental Consequences

At the Tier 1 EIS level, environmental consequences are evaluated within a 2,000-foot-wide Project Area for each Build Corridor Alternative. To accommodate a new transportation corridor, portions of the alternative may need to be rezoned through the local development process, which could alter adjacent planned land uses from what is envisioned today. A higher probability exists for changes to planned land uses or displacement of existing uses where new corridor development would occur, and new rights-of-way would need to be acquired. This would be the case under any of the Build Corridor Alternatives, and would be better understood during Tier 2 studies, which would include detailed analysis of right-of-way (ROW) impacts.

The I-11 transportation corridor ultimately could be located anywhere within the 2,000-foot-wide Project Area, and is expected to generally occupy approximately a 400-foot (or less, in the case of existing transportation facilities or other design commitments) ROW footprint. The Build Corridor Alternatives could make improvements within the existing and proposed rights-of-way, which could result in changes to existing land uses in newly acquired lands. Within the 2,000-foot-wide Project Area, specific land uses or properties that could be affected, and the extent to which they could be affected, cannot be adequately determined until Tier 2, when detailed alignments are identified.

Indirect land use impacts of the Build Corridor Alternatives have the potential to extend beyond the proposed ROW and might affect accessibility, community cohesion, economics, air quality, biology, noise, cultural, and visual resources, among others. Other sections of this Draft Tier 1 EIS discuss these impacts related to land use; see Section 3.17 (Indirect and Cumulative Effects).

Overall, the Build Corridor Alternatives are anticipated to benefit commercial, industrial, and related land uses by improving the capacity of the transportation system and retaining or granting new local access, especially to large regional facilities (e.g., shopping centers, business parks, and industrial parks) located near access points. Proposed improvements would reduce travel time and delay in urban areas, and shorten periods of congestion to make travel times more predictable. These transportation benefits would increase the prosperity and economic competitiveness of large employers and businesses while stimulating new economic development – both on existing and new corridors. Additionally, the development of new transportation junctions (i.e., intersection of I-11 with other high-capacity transportation facilities), could spur focused, economically productive uses, such as major employment centers, and meet the I-11 Purpose and Need.

This section will identify the key locations along each Build Corridor Alternative where major land use impacts are likely to occur due to creation of new transportation junctions or new development activity. This section also will identify planned land uses along the Build Corridor Alternatives that could be avoided when determining the recommended I-11 route.

Purple Alternative

The Purple Alternative is composed of Options A, C, G, I, L, N, R, and X. This alternative is a mix of existing and new corridor development.

Planned Land Use

Future land use designations were reviewed to quantify types of planned land uses within the Project Area that could be impacted (**Table 3.3-1** [Potential Planned Land Use Conversion Impacts – Purple Alternative]). Depending on the alignment location within the 2,000-foot-wide Project Area, which would be determined during Tier 2 environmental studies, consequences to planned land uses could vary. This analysis provides a qualitative assessment of which portions of the alternative are more likely to be impacted based on whether an Option provides the opportunity for co-location with an existing transportation facility; an assessment of areas within the Project Area that should be avoided, if possible; and a discussion of areas along the alternative that are more likely to benefit from I-11.

Table 3.3-1 Potential Planned Land Use Conversion Impacts (acres) – Purple Alternative

Planned Land Use	Corridor Option								Total	% Total
	A	C	G	I1/I2	L	N	R	X		
Residential	1,032	10,153 (1)	4,127	5,483	1,203	3,279	3,033	2,309	30,620	49
Agriculture	1,215	0	0	0	0	0	0	0	1,215	2
Tribal Lands	0	0	0	0	0	0	0	0	0	0
Commercial	483	212	1,938	262	39	166	269	363	3,732	6
Industrial	221	325	3,386	478	84	177	288	0	4,961	8
Mixed Use	298	22	0	0	912	1,546	520	2,668	5,966	9
Office	0	0	0	0	199	74	4	59	337	1
Recreation/Open Space	64	3,316 (1)	837	63	1,186	437	0	4,985	10,889	17
Public/Private Institutions	0	0	453	0	7	77	8	18	563	1
Transportation/Parking	0	11	207	0	15	144	123	86	586	1
Vacant (2)	1,479	0	0	0	0	0	0	0	1,479	2
Unclassified (2)	2,174	0	0	0	0	0	0	0	2,174	3
Waterbodies	0	0	0	0	3	305	34	55	397	1

(1) 9,722 acres residential and 3,479 acres recreation/open space if the CAP Design Option is selected.

(2) Per direction from Santa Cruz County, the same land uses are illustrated for existing and planned scenarios.

NOTE: Planned land uses are likely to evolve and change, depending on market demand and community needs. Acreages listed for the Project Area are based on current general or comprehensive plans and may not reflect actual land uses in the future.

Figure 3.3-6 (Planned Land Uses – Purple Alternative, South Section) displays planned land uses in the South Section; noted land use features are labeled for context.

New development is likely to occur at the new transportation junctions where Options A and C meet, just north of the Santa Cruz-Pima County line, as well as where I-11 would meet I-10 north of Marana, where Options C and G intersect. Both locations may attract development from convenience commercial to freight/industrial uses in the vicinity of the system interchanges, which would be deviations from planned residential growth. Along Option C, the CAP Design Option would traverse a similar mix of planned residential and open space/recreation lands. The major difference is that the CAP Design Option would avoid impacting properties associated with the City of Tucson's CAVSARP/SAVSARP facilities.

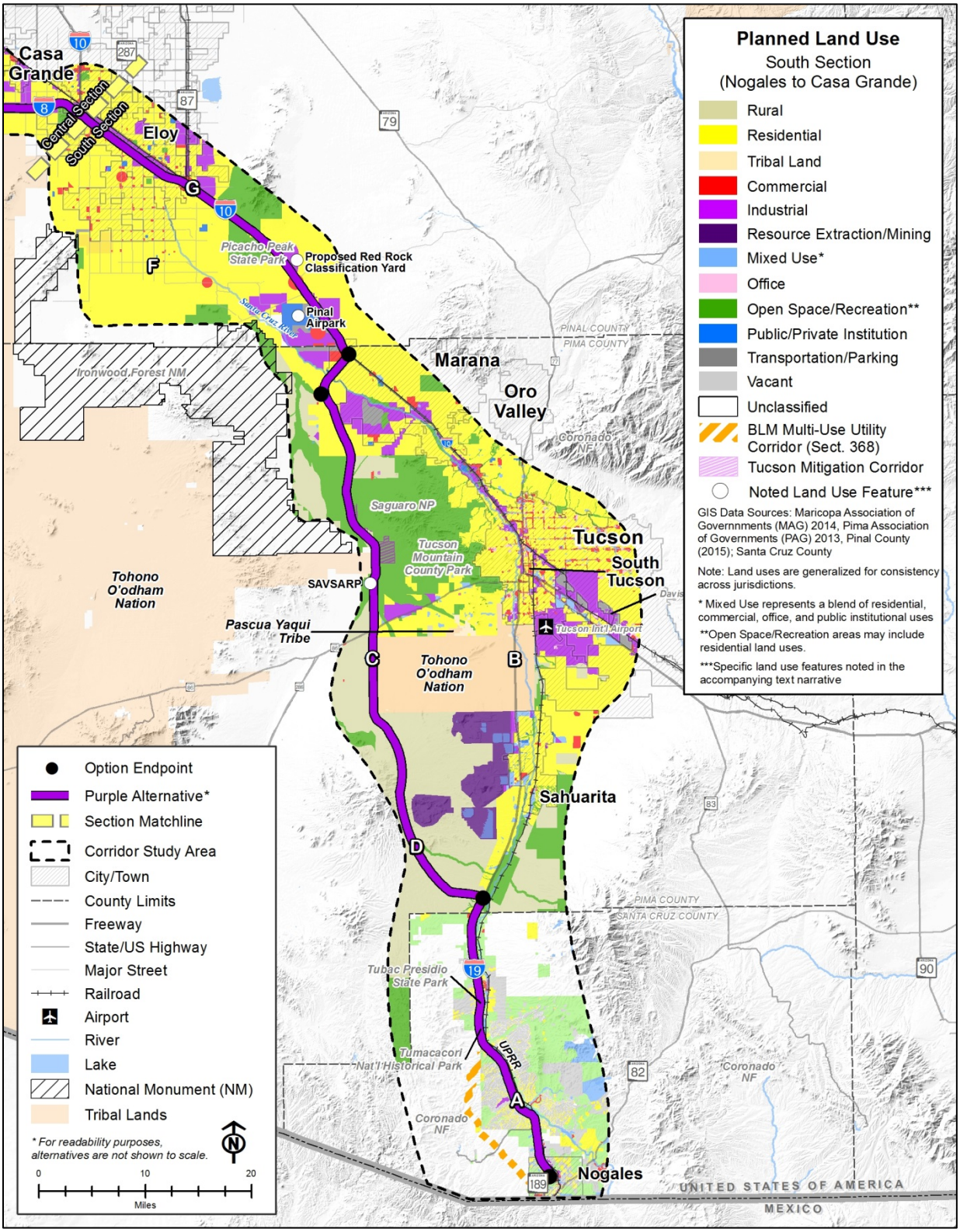

Figure 3.3-5 Planned Land Uses – Purple Alternative, South Section

The section of I-10 where Option G follows the existing I-10 from just north of the Pinal County/Pima County line to the I-8 interchange is already six lanes wide, and no major land use impacts are anticipated. Co-location of I-11 with I-10 could, however, increase the development potential of properties in and near the Pinal Airpark and UPRR's proposed Red Rock Classification Yard – both potentially major freight hubs that could take advantage of the interstate's transcontinental route and parallel Class 1 rail facility. These two developments would attract truck and other intermodal traffic.

Option G in the Central Section continues from I-10 to I-8, to approximately Montgomery Road. Increased development is expected surrounding the I-8/I-10 system interchange. As improvements to the interchange are already planned, minimal direct impacts to surrounding land uses are expected with the addition of I-11. However, new growth can be expected in Dreamport Villages, an entertainment and mixed-use village located west of I-10 where it spans I-8. New growth of the existing Phoenix Mart along Casa Grande La Palma Highway (SR 287), a distribution, warehousing, and business park attracting freight uses, also would be expected. **Figure 3.3-6** (Planned Land Uses – Purple Alternative, Central Section) displays planned land uses in the Central Section; noted land use features are labeled for context.

Today, Option I is almost entirely comprised of vacant and agricultural lands; however, it is mostly planned as future residential development. This Option also is the route of the proposed West Pinal Freeway (as documented in the *Pinal Regional Transportation Plan* and referenced in Section 3.3.1.3, Land Use Plans and Policies). Depending on the status of future land development and/or ROW set asides, residential impacts may or may not occur. Additionally, Option I skirts the southern edge of the Nissan Proving Grounds. In western Pinal County, Option I is expected to sit between two clusters of the proposed Palo Verde Regional Park.

Option L partially parallels the northeast edge of the SDNM and passes through large portions of planned residential and recreational/open space uses, which would likely be bifurcated by I-11. Planned uses near Mobile, which include smaller parcels of commercial, office, industrial, and mixed uses, could be impacted. Previous master-planning endeavors incorporated ROW for a new interstate-level facility through this community (Amaranth), so enhancement opportunities could be coordinated with ongoing development plans.

A large part of Option N traverses planned residential land within Goodyear (Estrella Master Planned Community, as shown on **Figure 3.3-7** (Planned Land Uses – Purple Alternative, Central Section) and discussed in Section 3.3.1.3, Master Planned Communities. Mixed uses also line the corridor, with clusters of commercial, industrial, and recreational/open space uses. Option N was identified as a freeway corridor within the Goodyear General Plan as well as the master plan for Estrella, and is unlikely to adversely impact planned land uses if it generally follows the same alignment as identified in the Goodyear General Plan. In this area, Option N would follow a potential Corridor Option under consideration for the proposed SR 303L South Extension (Rainbow Valley Alignment). Option N turns west immediately north of the Gila River. At this location, I-11 would connect with the future SR 30, which would create a major transportation junction that is likely to attract commercial and industrial activities in the vicinity, leading to potential changes to planned land uses, which are primarily residential.

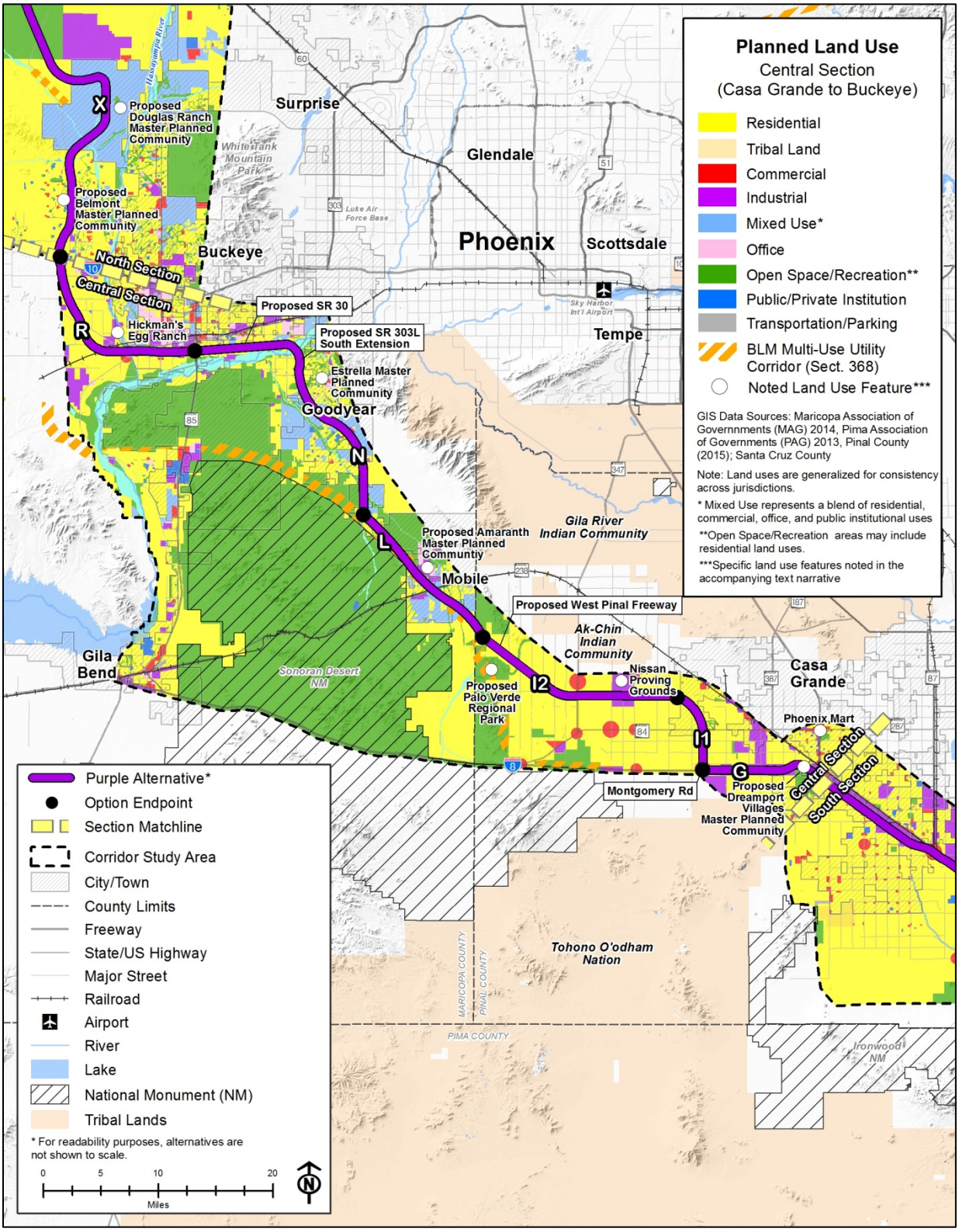

Figure 3.3-6 Planned Land Uses – Purple Alternative, Central Section

Option R consists of planned residential areas on the west side of Buckeye, along with a mix of industrial, mixed-use, and office uses, mostly closer to its junction with SR 85 or I-10. These uses generally include existing agricultural operations, including Hickman's Egg Ranch, which is located just north of the bend in Option R.

Figure 3.3-8 (Planned Land Uses – Purple Alternative, North Section) displays planned land uses in the North Section; noted land use features are labeled for context. This alternative follows Option X, which loops through the Belmont and Douglas Ranch master-planned communities and is consistent with the proposed Hassayampa Freeway corridor, which originated in the MAG *I-10/Hassayampa Valley Regional Transportation Framework Study.* This freeway corridor has been adopted in local circulation planning by the City of Buckeye and Maricopa County. As drawn, this corridor is ultimately planned to link with a proposed east-west freeway corridor north of and parallel to Bell Road (White Tanks Freeway). In this southern portion of the North Section, most of the Project Area is designated as planned mixed use. If it generally follows the same route as planned, minimal impacts are envisioned. Any deviations from this route would be less compatible with transportation and land use planning in Buckeye and Maricopa County. Closer to I-10, scattered areas of residential development exist today and are planned to be expanded, which could result in potential property takes. To the north, this alternative crosses the VMRA within a designated BLM multi-use utility corridor, paralleling an existing electric transmission line. North of this area, planned land uses are generally open space and recreation uses, with small pockets of residential development.

End-to-End Considerations

The Purple Alternative is not likely to cause major adverse effects to land uses along the corridor, and in many respects, responds to them. In many sections, this alternative mirrors a previously planned freeway facility, and therefore local planning efforts are already oriented around such a future transportation facility. Through some developed areas (e.g., Casa Grande, Mobile, Goodyear, and Buckeye), impacts may occur to the extent that I-11 would promote different, non-residential uses in areas planned for rural residential. The determination of likely impacts depends on the timing of I-11 construction versus the pace of future development in local communities.

New transportation junctions created with existing highways (e.g., I-19 south of Sahuarita, I-10 north of Marana, I-8 west of I-10, SR 85 south of I-10, and I-10 west of SR 85) may create opportunities for new development and growth along I-11.

Land Management and Special Designated Lands

Land management designations were reviewed to quantify land with special designations that are located within the Project Area and therefore could be impacted and converted to a transportation use (**Table 3.3-2** [Potential Land Management Conversion Impacts – Purple Alternative]. **Figure 3.3-9** [Land Management and Special Designated Lands – Purple Alternative]) displays Study Area land management patterns; noted features are labeled for context.

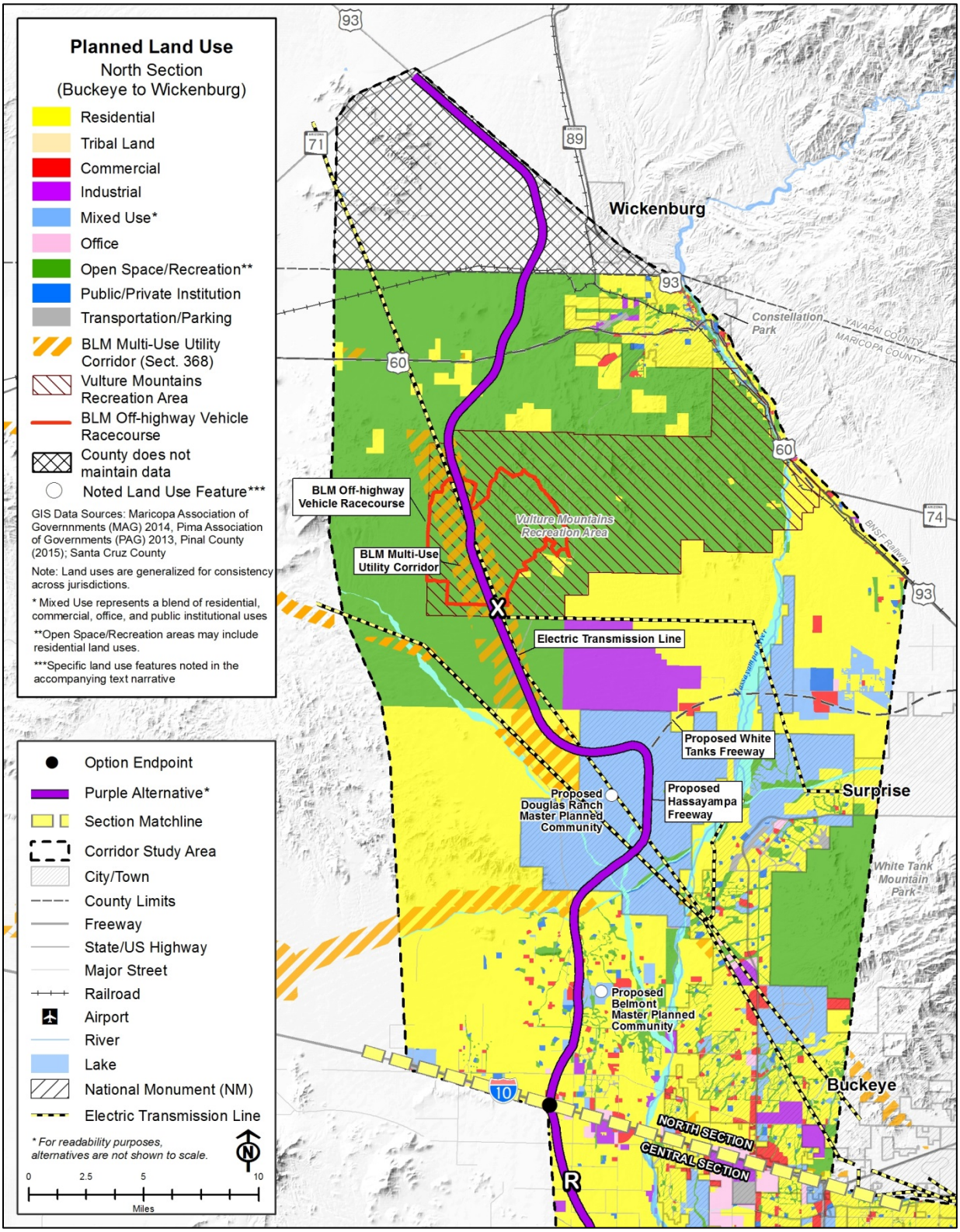

Figure 3.3-7 Planned Land Uses – Purple Alternative, North Section

Table 3.3-2 Potential Land Management Conversion Impacts (acres) – Purple Alternative

Land Management	Build Corridor Option								Total	% Total
	A	C	G	I1/I2	L	N	R	X		
BLM	0	528 (1)	0	0	1,387	198	67	3,741	5,921	9
National Forest	0	0	0	0	0	0	0	0	0	0
NPS	0	0	0	0	0	0	0	0	0	0
Military	0	0	0	0	0	0	0	0	0	0
Park and Recreation Area	0	0	202	0	0	0	0	1,913	2,115	3
Private Land	6,623	8,914 (1)	7,702	6,060	2,056	4,860	3,270	4,108	43,593	65
Reclamation	0	0	0	0	0	0	0	0	0	0
State Trust Land	331	4,659 (1)	3,026	224	203	1,147	899	5,377	15,866	23
Tribal Land	0	0	0	0	0	0	0	0	0	0
Area of Critical Environmental Concern (BLM)	0	0	0	0	610	243	0	0	853	
National Monument (BLM)	0	0	0	0	0	0	0	0	0	
Roadless Area (US Forest Service [USFS])	0	0	0	0	0	0	0	0	0	
Reclamation – Deeded Lands	0	453 (1)	0	0	0	0	0	0	453	
State Wildlife Area (AGFD)	0.5	0	0	0	0	42	0	0	43	
Wilderness (BLM)	0	0	0	0	0	0	0	0	0	
Wilderness (NPS)	0	0	0	0	0	0	0	0	0	
Wilderness (USFS)	0	0	0	0	0	0	0	0	0	

(1) 8,773 acres private land and 4,530 State Trust land if the CAP Design Option is selected; no changes in total acreage impacts to BLM and Reclamation deeded lands (TMC) if the CAP Design Option is selected.

(2) Percent totals are not included for Special Designated Lands, as these are overlays to the underlying ownership patterns and do not cover the entire Study Area.

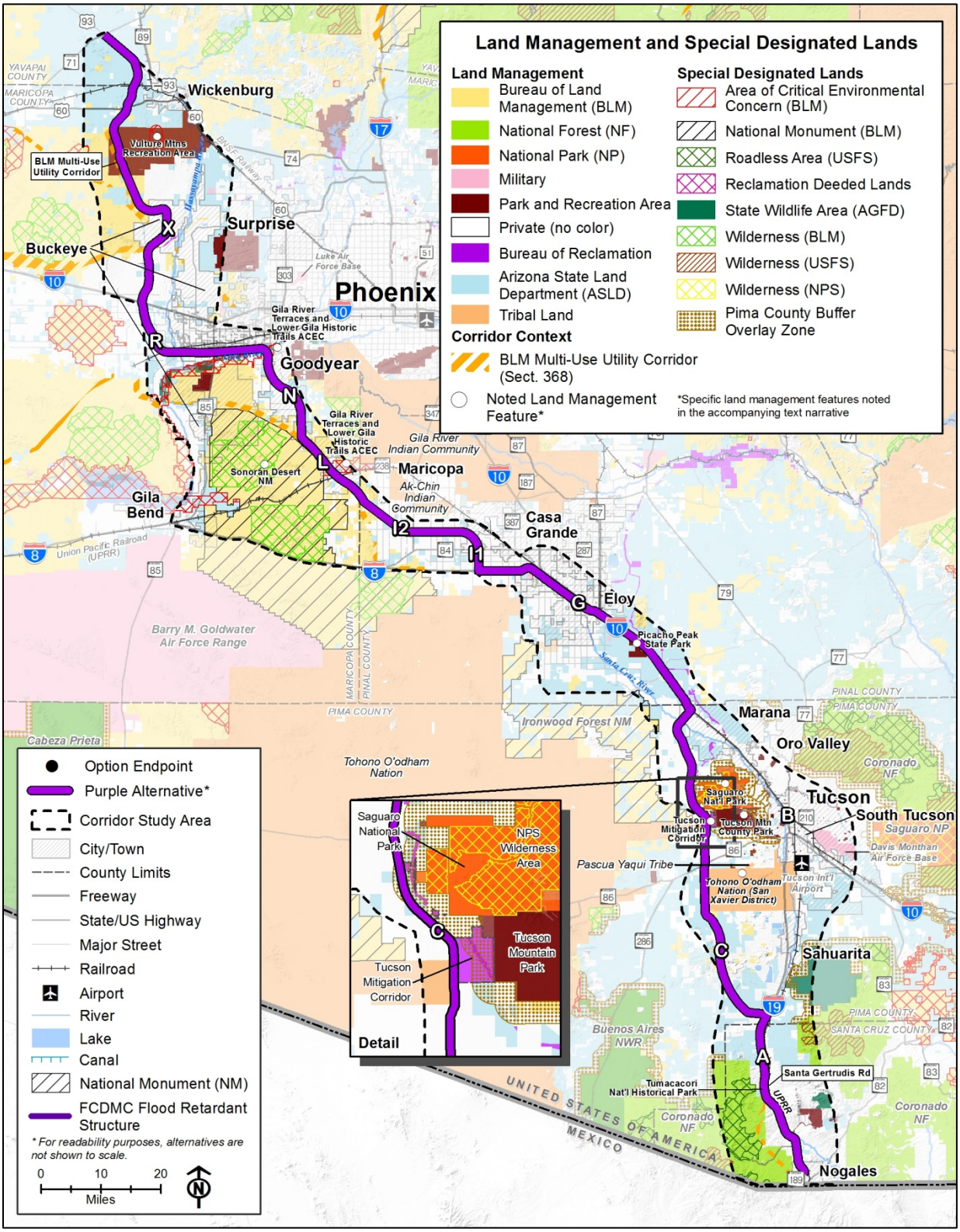

Figure 3.3-8 Land Management and Special Designated Lands – Purple Alternative

The Purple Alternative in the South Section is composed of Options A, C, and G. The majority of the land along Option A consists of private land, with the exception of 331 acres of State Trust land spanning the existing interstate in the vicinity of Santa Gertrudis Lane and Tumacacori National Historical Park. A portion of Tumacacori National Historical Park is within the eastern edge of the 2,000-foot-wide corridor.

Option C turns to the west of I-19 and I-10 in Pima County, and is a mix of private and State Trust lands, with a few parcels of BLM land and a cluster of special designated uses. Option C parallels the western edge of the Tohono O'odham Nation (San Xavier District), but no portion of the corridor is on Tribal land.

Due to the various special designated uses located in close vicinity along Option C, limited flexibility exists in terms of where I-11 could be located to avoid impacts to these lands (e.g., the TMC, SNP, and Tucson Mountain Park). Option C would traverse the TMC, along its western edge. The CAP Design Option also would traverse the TMC, paralleling the CAP canal. Additionally, Option C is located within close proximity to the Ironwood Forest National Monument, which is a Special Recreation Management Area. Selection of the Purple Alternative could potentially adversely impact recreational users. Also, Option C could intersect approximately 956 acres of the Pima County Buffer Overlay Zone.

Option G is a mix of State Trust land (more to the south) and private land (more to the north), with Picacho Peak State Park crossing I-10 in the Study Area at its northeastern edge for approximately 1.2 miles. Minimal impact to adjacent lands is expected, as both I-8 and I-10 are existing interstate highways, with no widening expected outside the existing ROW.

Option I in the Central Section is almost entirely comprised of private land, with the exception of a few parcels of State Trust lands. Private lands are likely to be most impacted by a new transportation corridor, depending on the pace of future urban development.

Option L parallels the northeast edge of the SDNM and is a mix of private, BLM, and State Trust lands. Short portions of Options L and N cross a portion of the Gila River Terraces and Lower Gila Historic Trails ACEC. Option L consists of private land, while Option N traverses private land and BLM lands in the area of the ACEC designation.

Option R is a mix of private land and State Trust lands, with small parcels of BLM land. Special designations are not present in this area.

Option X in the North Section traverses BLM, State Trust, and private lands. It cuts through the VMRA within a BLM multi-use utility corridor. This would create a direct impact on recreation lands, but may be mitigated in coordination with BLM. North of the recreation area and closer to Wickenburg, Option X is almost entirely on State Trust lands, where the development of I-11 may be considered a beneficial opportunity to generate value for trust beneficiaries.

End-to-End Considerations

The two primary areas with potential land conversion impacts on special designations along the Purple Alternative are in the vicinity of the TMC (South Section) and VMRA (North Section). Crossing these areas would be unavoidable under the Purple Alternative. These areas are discussed further in **Chapter 4** (Preliminary Draft Section 4(f) Evaluation. Section 3.17 (Indirect and Cumulative Effects) discusses direct and indirect impacts to the character of wilderness and recreation areas.

The Gila River in the Central Section and related ACEC lands would be crossed by the corridor, but related impacts may be avoided or minimized by locating the alignment away from sensitive resources within the 2,000-foot-wide Project Area. The ACEC designation only applies to BLM-managed lands. Impacts are most likely to occur on private and State Trust lands.

Green Alternative

The Green Alternative is composed of Options A, D, F, I, L, M, Q, R, and U. This alternative consists primarily of new Corridor Options (i.e., it is not co-located with existing transportation facilities).

Planned Land Use

Future land use designations were reviewed to quantify types of planned land uses within the Project Area that could be impacted (**Table 3.3-3** [Potential Planned Land Use Conversion Impacts – Green Alternative]). Depending on the alignment location within the 2,000-foot-wide Project Area, which would be determined during Tier 2 environmental studies, consequences to planned land uses could vary. This analysis provides a qualitative assessment of which portions of the alternative are more likely to be impacted based on whether an Option provides the opportunity to co-locate with an existing transportation facility; an assessment of areas within the Project Area that should be avoided, if possible; and a discussion of areas along the alternative that are more likely to benefit from I-11 construction.

Table 3.3-3 Potential Planned Land Use Conversion Impacts (acres) – Green Alternative

Planned Land Use	Corridor Option									Total	% Total
	A	D	F	I2	L	M	Q	R	U		
Residential	1,032	8,406 (1)	11,013	5,483	1,203	274	2,536	3,033	3,043	36,024	51
Agriculture	1,215	0	0	0	0	0	0	0	0	1,215	2
Tribal Lands	0	0	0	0	0	0	0	0	0	0	0
Commercial	483	0	102	262	39	0	1,739	269	167	3,061	4
Industrial	221	119	976	478	84	1	991	288	0	3,159	5
Mixed Use	298	0	0	0	912	13	471	520	958	3,171	5
Office	0	0	0	0	199	0	741	4	93	1,036	1
Recreation/Open Space	64	3,380 (1)	25	63	1,186	4,143	1,463	0	4,933	15,257	22
Public/Private Institutions	0	6	19	0	7	0	192	8	28	261	0
Transportation/Parking	0	0	2	0	15	35	2,614	123	79	2,869	4
Vacant (2)	1,479	0	0	0	0	0	0	0	0	1,479	2
Unclassified (2)	2,174	0	0	0	0	0	0	0	0	2,174	3
Waterbodies	0	0	0	0	3	14	266	34	86	402	1

(1) 8,136 acres residential and 3,303 acres recreation/open space if the CAP Design Option is selected.

(2) Per direction from Santa Cruz County, the same land uses are illustrated for existing and planned scenarios.

NOTE: Planned land uses are likely to evolve and change, depending on market demand and community needs. Acreages listed for the Project Area are based on current general or comprehensive plans and may not reflect actual land uses in the future.

Figure 3.3-10 (Planned Land Uses – Green Alternative, South Section) displays planned land uses in the South Section; noted land use features are labeled for context.

Options D and F generally are new corridors in Pima and Pinal counties. Option D turns west from I-19 near Sahuarita, traveling west and north. Most of this area is currently vacant, with scattered low-density residential development and several recreational areas and parklands. Impacts to planned uses along Option D could include changes to planned residential and open space clusters. Along Option D, the CAP Design Option would traverse a similar mix of planned residential and open space/recreation lands. The major difference is that the CAP Design Option would avoid impacting properties associated with the City of Tucson's SAVSARP facility. Additionally, Option D is located within close proximity to the Ironwood Forest National Monument, which is a Special Recreation Management Area. Selection of this alternative could potentially adversely impact recreational users.

Option F, continuing north from Option D in Pinal County, crossing I-8 at approximately Chuichu Road and connecting to Option I2 at Barnes Road, also mostly traverses land that is vacant today but that is planned for residential development in the future. Option F would travel directly west of the Pinal Airpark activity center, providing access to this industrial development cluster.

Figure 3.3-11 (Planned Land Uses – Green Alternative, Central Section) displays planned land uses in the Central Section; noted land use features are labeled for context. Like the Purple Alternative, the Green Alternative uses Options I2 and L through Pinal County and southeastern Maricopa County. Today, Option I consists almost entirely of vacant and agricultural lands; however, it is mostly planned as future residential development. Option I also is the route of the proposed West Pinal Freeway corridor (as documented in the *Pinal Regional Transportation Plan*, and referenced in Section 3.3.1.3, Land Use Plans and Policies). Depending on the status of future land development and/or ROW set asides, residential impacts may or may not occur. Additionally, Option I skirts the southern edge of the Nissan Proving Grounds. In western Pinal County, Option I is expected to sit between two clusters of the proposed Palo Verde Regional Park.

Option L partially parallels the northeast edge of the SDNM and passes through large portions of planned residential and recreational/open space uses, which would likely be bifurcated by the I-11. Planned uses near Mobile, which include smaller parcels of commercial, office, industrial, and mixed uses, could be impacted. Previous master-planning endeavors have incorporated ROW for a new interstate-level facility through this community (Amaranth), so enhancement opportunities, if coordinated with ongoing development plans, remain.

Option M is a continuation of Option L, paralleling the SDNM on the north side. Options I2, L, and M are consistent with the proposed Hassayampa Freeway corridor, which originated in the MAG *I-10/Hassayampa Valley Transportation Framework Study*. Much of Option M runs through planned recreational areas and open space, with minimal anticipated impact on residential, mixed-use, and transportation-related land uses. Where Option M meets Option Q at SR 85, it turns north to avoid impacts to an existing landfill, prison complex, power substation, and planned solar facility.

The southern half of Option Q2 is a short section of SR 85 that connects Options M and R and crosses the Gila River. New transportation junctions created with SR 85 may attract increased commercial or industrial development, especially at the junction of Options Q2 and R near MC-85, the UPRR Wellton Branch corridor, and a planned economic activity center in Buckeye, surrounding the municipal airport.

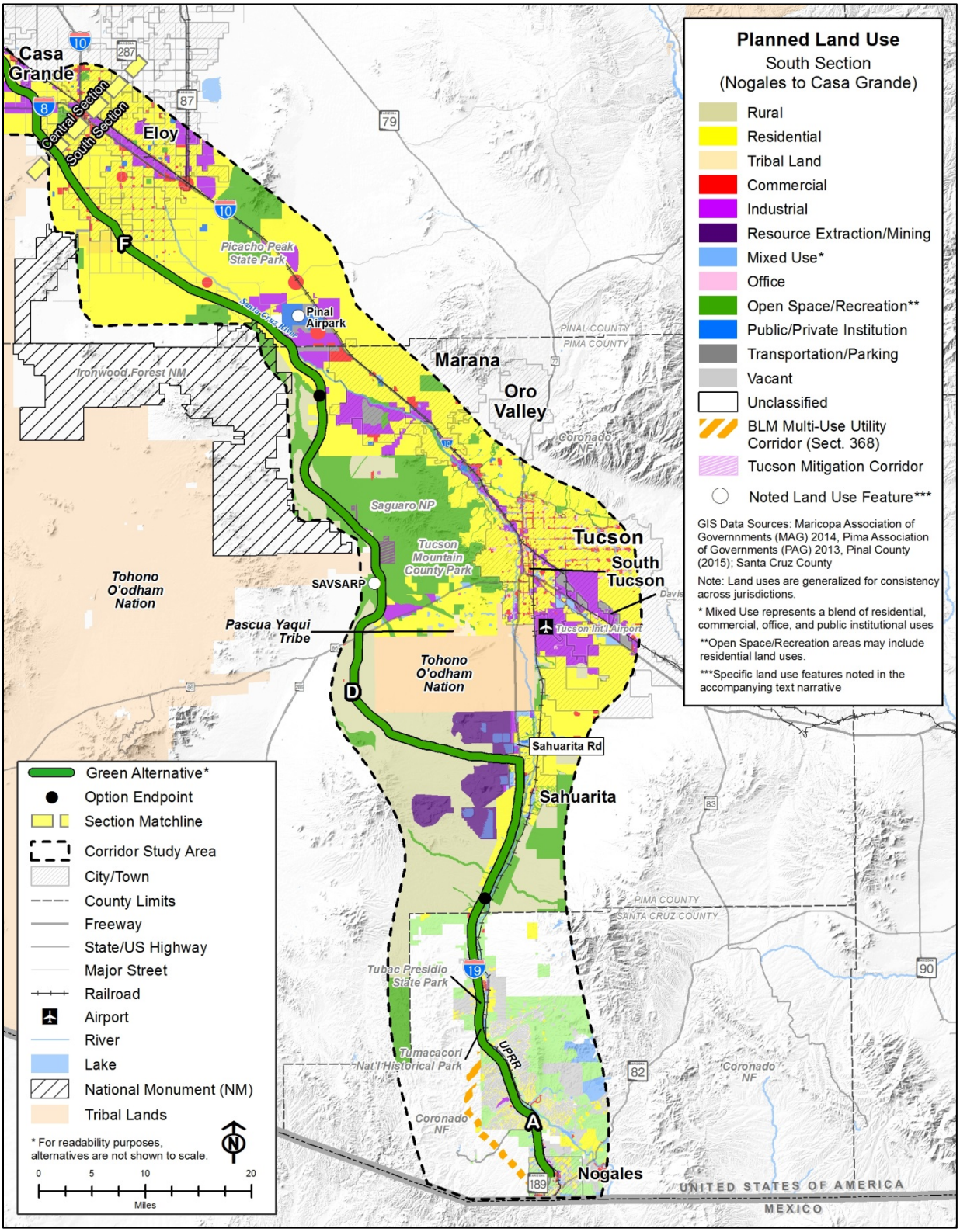

Figure 3.3-9 Planned Land Uses – Green Alternative, South Section

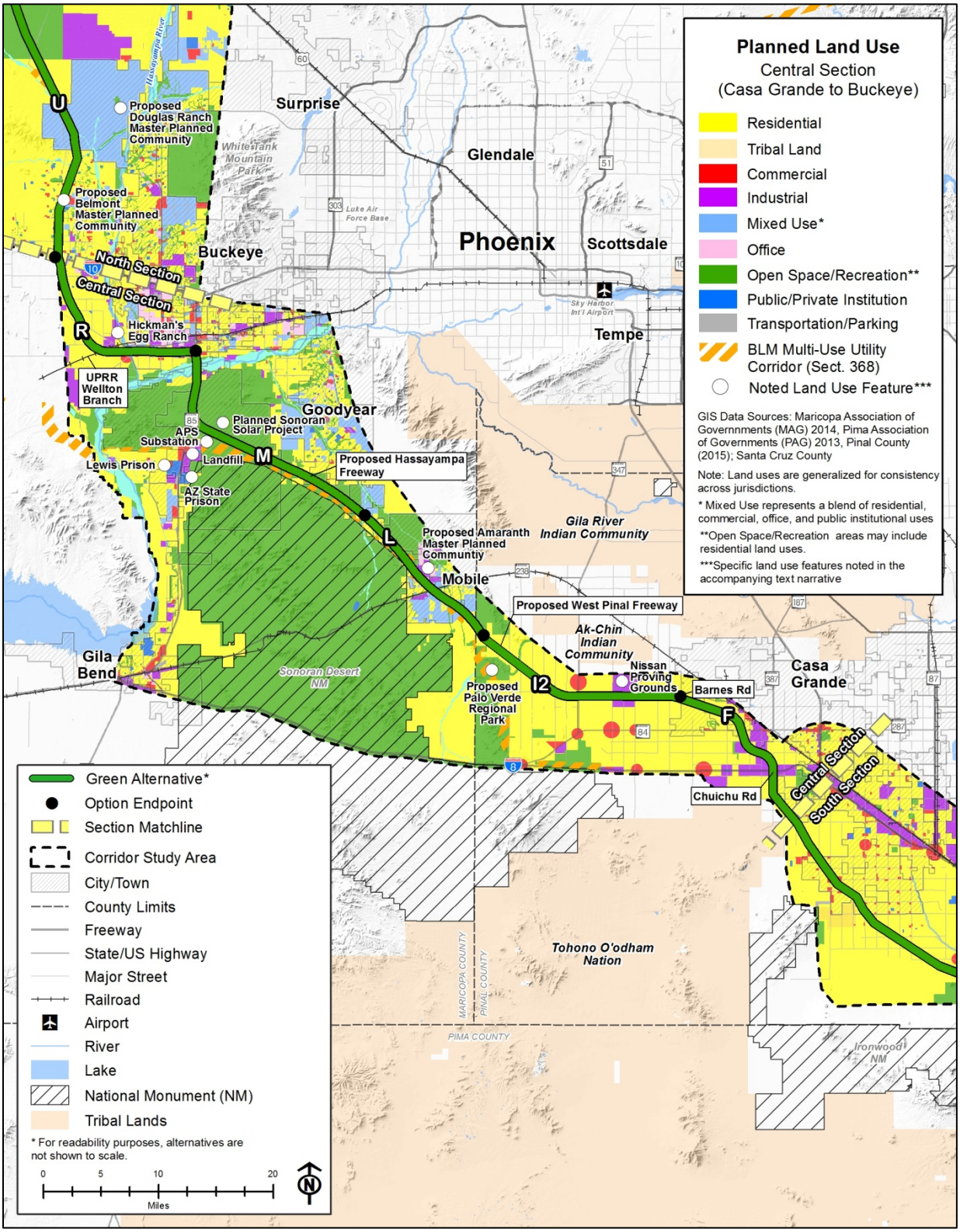

Figure 3.3-10 Planned Land Uses – Green Alternative, Central Section

Option R consists of planned residential areas on the west side of Buckeye, along with a mix of industrial, mixed-use, and office uses, mostly closer to its junction with SR 85 or I-10. These uses generally include existing agricultural operations, located just north of the bend in Option R.

Option U in the North Section is a continuation of Option R north of I-10. This Corridor Option crosses the VMRA on the western side of the BLM multi-use corridor. South of the recreation area, most of the land is vacant today, with scattered clusters of low-density development. Future plans are primarily for expanded residential development and clusters of mixed-use, commercial, and industrial development in the planned communities of Belmont and Douglas Ranch. This route does not follow any approved transportation corridor plans in either master-planned community. **Figure 3.3-12** (Planned Land Uses – Green Alternative, North Section) shows the planned land uses in the North Section; noted land use features are labeled for context.

North of the recreation area, Option U mostly traverses planned open space and recreation land. However, deviations in planned land uses may occur at its junctions with US 60, US 93, and the Arizona and California Railroad short line corridor, which could promote employment-generating land uses. Yavapai County does not maintain a plan for future land use in this area, but development patterns are expected to generally mirror Maricopa County's, with planned open space and residential development and clusters of commercial development along US 93.

End-to-End Considerations

The Green Alternative consists almost entirely of new corridor development. Today, much of the land along the proposed Project Area is vacant or sparsely developed, with clusters of low-density residential and commercial development. New transportation junctions may create opportunities for new urban development and growth along the alternative. However, the most likely anticipated impacts would be on planned residential land uses.

Land Management and Special Designated Lands

Land management designations were reviewed to quantify land with special designations that are located within the Project Area and therefore could be impacted and converted to a transportation use (**Table 3.3-4** [Potential Land Management Conversion Impacts – Green Alternative]). **Figure 3.3-13** (Land Management and Special Designated Lands – Green Alternative) displays land management patterns corridor-wide; noted features are labeled for context.

The Green Alternative in the South Section consists of Options A, D, and F. The majority of land along Option A is private land, with the exception of 331 acres of State Trust land spanning the existing interstate in the vicinity of Santa Gertrudis Lane and Tumacacori National Historical Park. A portion of Tumacacori National Historical Park is within the eastern edge of the 2,000-foot-wide Project Area.

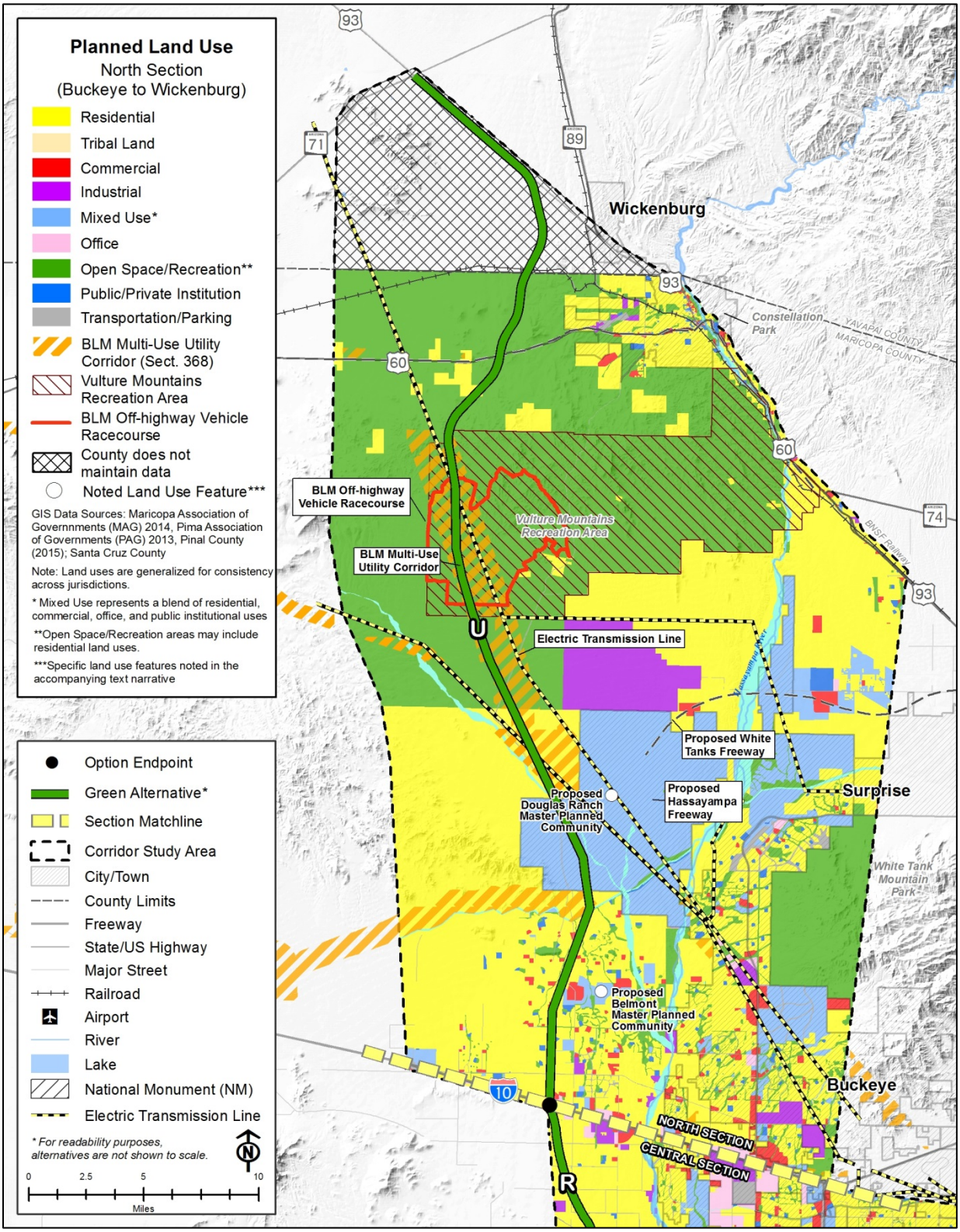

Figure 3.3-11 Planned Land Uses – Green Alternative, North Section

Table 3.3-4 Potential Land Management Conversion Impacts (acres) – Green Alternative

Land Management	Corridor Option									Total	% Total
	A	D	F	I2	L	M	Q	R	U		
BLM	0	600 (1)	0	0	1,387	4,109	1,366	67	3,830	11,359	15
National Forest	0	0	0	0	0	0	0	0	0	0	0
NPS	0	0	0	0	0	0	0	0	0	0	0
Military	0	0	0	0	0	0	0	0	0	0	0
Park and Recreation Area	0	0	0	0	0	83	375	0	1,856	2,314	3
Private Land	6,623	9,920 (1)	9,785	6,060	2,056	195	5,188	3,270	2,814	45,911	60
Reclamation	0	0	0	0	0	0	0	0	0	0	0
State Trust Land	331	5,007 (1)	2,546	224	203	92	2,106	899	5,427	16,835	22
Tribal Land	0	0	0	0	0	0	0	0	0	0	0
ACEC (BLM)	0	0	0	0	610	0	474	0	0	1,084	
National Monument (BLM)	0	0	0	0	0	0	0	0	0	0	
Roadless Area (USFS)	0	0	0	0	0	0	0	0	0	0	
Reclamation – Deeded Lands	0	452 (1)	0	0	0	0	0	0	0	452	
State Wildlife Area (AGFD)	0.5	0	0	0	0	0	278	0	0	279	
Wilderness (BLM)	0	0	0	0	0	0	0	0	0	0	
Wilderness (NPS)	0	0	0	0	0	0	0	0	0	0	
Wilderness (USFS)	0	0	0	0	0	0	0	0	0	0	

(1) 9,641 acres private land, 4,938 acres State Trust land, and 453 acres Reclamation deeded lands if the CAP Design Option is selected; no changes in total acreage impacts to BLM land if the CAP Design Option is selected.

(2) Percent totals are not included for Special Designated Lands, as these are overlays to the underlying ownership patterns and do not cover the entire Study Area.

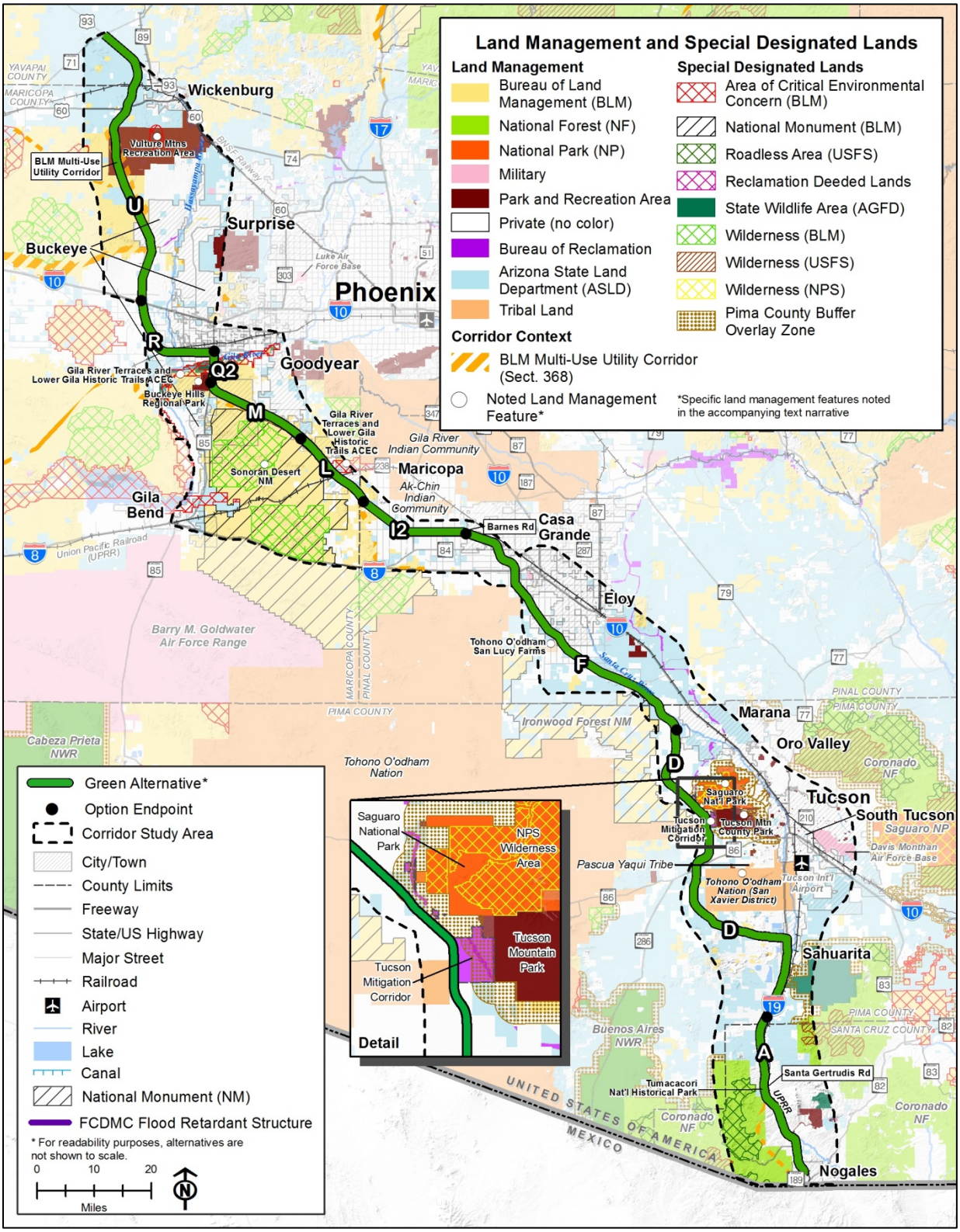

Figure 3.3-12 Land Management and Special Designated Lands – Green Alternative

Option D follows I-19 from near the Santa Cruz/Pima County line and diverts west from I-19 near El Toro Road in Sahuarita. Option D is a mix of private and State Trust lands, with a few parcels of BLM land and a cluster of special designated uses. Due to the various special designated uses located close to Option D, there is very limited flexibility in determining exactly where I-11 could be located to avoid any adverse impacts to these lands (e.g., TMC, SNP, and Tucson Mountain Park). The Project Area is proposed to traverse the TMC, coincident with its western edge. The CAP Design Option also would traverse the TMC, paralleling the CAP canal. North of this area, Option D is located close to the Ironwood Forest NM, but does not border or cross it. Additionally, Option D could intersect approximately 723 acres of the Pima County Buffer Overlay Zone.

Option F continues north from Option D in Pinal County, forming a new Corridor Option that generally parallels I-10 to the south and west by about 8 miles. It mostly traverses private land, but does traverse some larger blocks of State Trust land. Option F is located within close proximity to the Ironwood Forest National Monument, which is a Special Recreation Management Area. Selection of this Build Corridor Alternative could potentially adversely impact recreational users.

Near Eloy, the Corridor Option is located close to, but does not cross, the Tohono O'odham Nation San Lucy Farms, an agricultural operation. Option F crosses I-8 in the vicinity of Chuichu Road, forming a new corridor through Casa Grande and connecting with Option I2 at Barnes Road. Impacts to private lands and State Trust lands are expected.

Generally, the Project Area within the Central Section is a mix of BLM, State Trust, and private lands. Private lands are likely to be most impacted by a new transportation corridor, depending on the pace of future urban development.

The Option I2 Project Area consists almost entirely of private lands within Casa Grande. Options L and M generally parallel the northeast edge of the SDNM, within the BLM multi-use corridor, and pass through areas of BLM, State Trust, and private lands.

Similarly, most of the land along Option Q is private, State Trust, or BLM land. Near the junction with Option M, the Buckeye Hills Regional Park is located directly adjacent to the west side of SR 85 for 3 miles. To the north sits the Gila River Terraces and Lower Gila Historical Trails ACEC as well as the Robbins Butte Wildlife Area, which is located within the I-11 Project Area for 3 miles. These lands would be impacted if improvements are required outside the existing SR 85 ROW.

Option R is a mix of private and State Trust lands, with small parcels of BLM land. Special designations are not present in this area.

Option U in the North Section traverses BLM, State Trust, and private lands. It cuts through the VMRA within a BLM multi-use utility corridor. This would create a direct impact on recreation lands, but the impact may be mitigated in coordination with BLM. North of the recreation area and closer to Wickenburg, Option U is almost entirely on State Trust lands, and thus corridor development may be considered a beneficial opportunity to generate value for trust beneficiaries.

End-to-End Considerations

The two primary areas with potential land conversion impacts on special designations along the Green Alternative are in the vicinity of the TMC (South Section) and VMRA (North Section).

Crossing these areas would be unavoidable under the Green Alternative. These areas are discussed further in **Chapter 4** (Preliminary Draft Section 4(f) Evaluation). Direct and indirect impacts to the character of wilderness and recreation areas are discussed in Section 3.17 (Indirect and Cumulative Effects).

The Gila River in the Central Section and related ACEC lands would be crossed by I-11, but related impacts may be minimized through mitigation for improvements that occur within or near the existing SR 85 ROW. The ACEC designation only applies to BLM-managed lands. Impacts are most likely to occur on private and State Trust lands.

Orange Alternative

The Orange Alternative is composed of Options A, B, G, H, K, Q, and S. This alternative consists mostly of existing interstate and highway corridors.

Planned Land Use

Future land use designations were reviewed to quantify types of planned land uses within the Project Area that could be impacted (**Table 3.3-5** (Potential Planned Land Use Conversion Impacts – Orange Alternative). Depending on the alignment location or definition of improvements to existing facilities within the 2,000-foot-wide Project Area, which would be determined during Tier 2 environmental studies, consequences to planned land uses could vary. This analysis provides a qualitative assessment of which portions of the alternative are more likely to be impacted based on whether an Option could be co-located with an existing transportation facility; an assessment of areas within the Project Area that should be avoided, if possible; and a discussion of areas along the alternative that are more likely to benefit from I-11 construction.

Table 3.3-5 Potential Planned Land Use Conversion Impacts (acres) – Orange Alternative

Planned Land Use	Corridor Option							Total	% Total
	A	B	G	H	K	Q	S		
Residential	1,032	5,767	4,127	2,729	1,977	2,536	3,496	21,665	32
Agriculture	1,215	0	0	0	0	0	0	1,215	2
Tribal Lands	0	1,977	0	0	0	0	0	1,977	3
Commercial	483	809	1,938	947	730	1,739	198	6,845	10
Industrial	221	2,635	3,386	431	192	991	0	7,857	12
Mixed Use	298	647	0	0	0	471	552	1,969	3
Office	0	57	0	0	81	741	90	968	1
Recreation/Open Space	64	858	837	1,511	5,707	1,463	4,836	15,277	22
Public/Private Institutions	0	110	453	0	0	192	67	822	1
Transportation/Parking	0	1,333	207	0	1,304	2,614	26	5,484	8
Vacant (1)	1,479	0	0	0	0	0	0	1,479	2
Unclassified (1)	2,174	0	0	0	0	0	0	2,174	3
Waterbodies	0	0	0	0	45	266	109	420	1

(1) Per direction from Santa Cruz County, the same land uses are illustrated for existing and planned scenarios.

NOTE: Planned land uses are likely to evolve and change, depending on market demand and community needs. Acreages listed for the Project Area are based on current general or comprehensive plans and may not reflect actual land uses in the future.

Figure 3.3-14 (Planned Land Uses – Orange Alternative, South Section) displays planned land uses in the South Section; noted land use features are labeled for context. Options A, B, and G in the South Section are all existing interstate highways (I-19 and I-10). Option A in the South Section is a shared component of all three Build Corridor Alternatives.

Option B is composed of I-19 and I-10 in Pima County. I-19 passes through the San Xavier District of the Tohono O'odham Nation. As documented in **Appendix I**, ADOT has a perpetual transportation easement across the San Xavier District of the Tohono O'odham Nation for an approximately 8-mile stretch of I-19 south of the I-19/I-10- system interchange.

Through central Tucson, Option B consists of a mix of planned land uses, including residential, industrial, commercial, mixed-use, recreation/open space, public/private institutions, and transportation/parking. A variety of scenarios for capacity improvements could occur on I-10 to accommodate I-11 and forecasted traffic volumes (e.g., widening, elevated express lanes, or a collector-distributor system). In most of these scenarios, the configuration of travel lanes, auxiliary lanes, and frontage roads would be realigned, resulting in additional ROW needs of varying widths. This area is densely developed today, and plans for future growth would intensify existing land uses, increasing the land use impacts.

Where Option G follows the existing I-10 corridor from just north of the Pinal/Pima county line to the I-8 interchange, this portion of I-10 is already six lanes wide. Co-location of I-11 with I-10 could increase the development potential of properties in and near the Pinal Airpark and UPRR's proposed Red Rock Classification Yard, which are both potential major freight hubs that could take advantage of the interstate's transcontinental route and parallel Class 1 rail facility. These two developments would attract truck traffic and other intermodal traffic.

Figure 3.3-15 (Planned Land Uses – Orange Alternative, Central Section) displays planned land uses in the Central Section; noted land use features are labeled for context. Option H follows I-8 to approximately the Pinal/Maricopa county line. Much of the adjacent land today is vacant, but is planned for future residential development. Due to the available capacity, improvements to I-8 are expected to occur within the existing ROW, avoiding or minimizing impacts on adjacent uses within the Project Area.

The majority of Option K traverses the SDNM. Like Option H, improvements to I-8 are expected to occur within the existing ROW, avoiding or minimizing impacts on adjacent uses within the Project Area. A small portion of Option K would be constructed in Gila Bend to connect I-8 and SR 85. This new portion may affect future residential and commercial uses; however, Gila Bend's General Plan reflects construction of this route.

Option Q (1, 2, 3) – SR 85 from Gila Bend to I-10, including a 12-mile portion of I-10 to 363rd Avenue, contains a mix of planned residential, commercial, recreational/open space, and transportation-related land uses within the Project Area. Since the concept of this Option is to co-locate with I-10, improvements would be expected near the existing facility, and land uses have already developed that are consistent with a high-capacity roadway.

Figure 3.3-16 (Planned Land Uses – Orange Alternative, North Section) displays planned land uses in the North Section; noted land use features are labeled for context. Option S parallels the western boundary of the VMRA. South of the recreation area, most of the land is vacant today, with scattered clusters of low-density development.

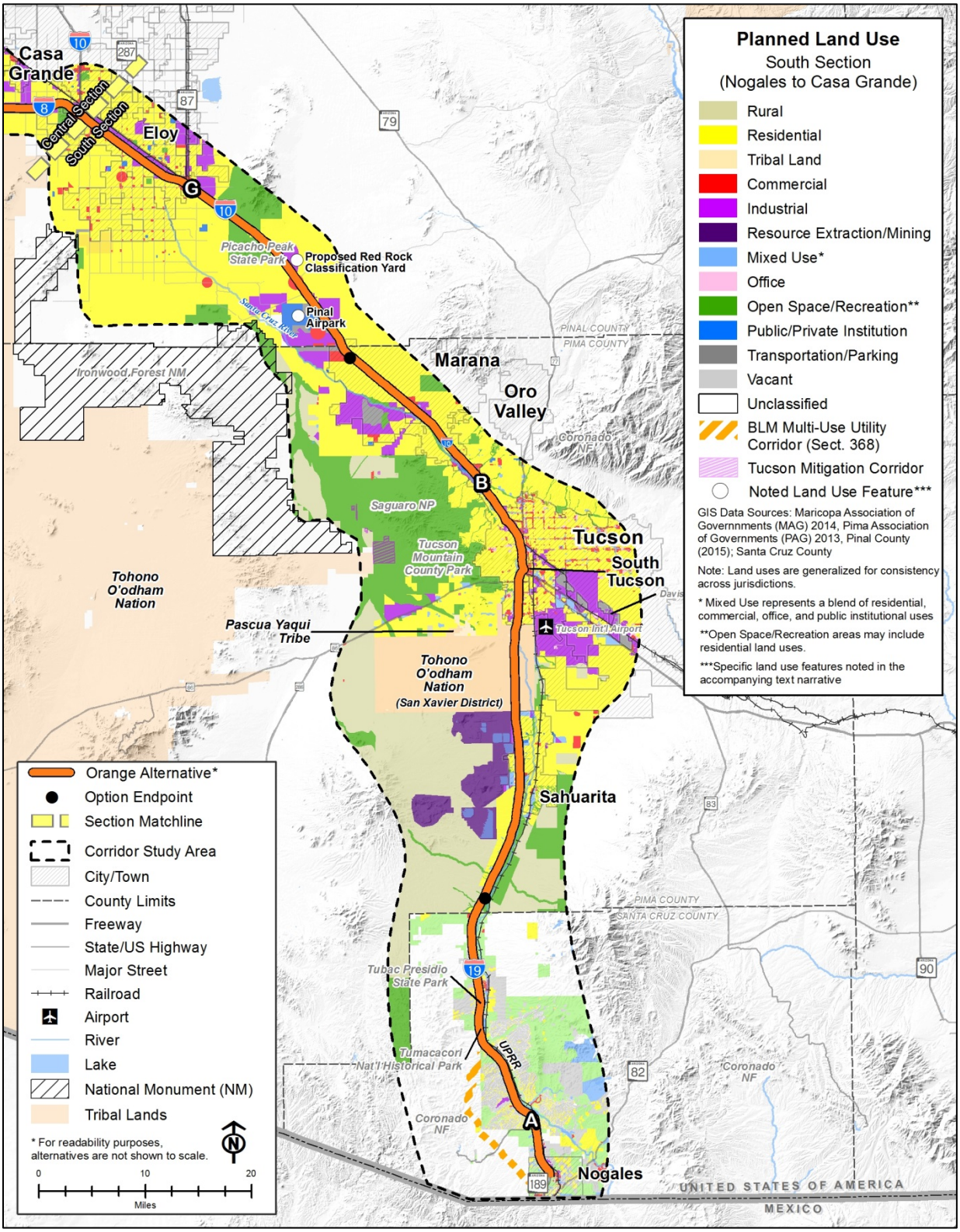

Figure 3.3-13 Planned Land Uses – Orange Alternative, South Section

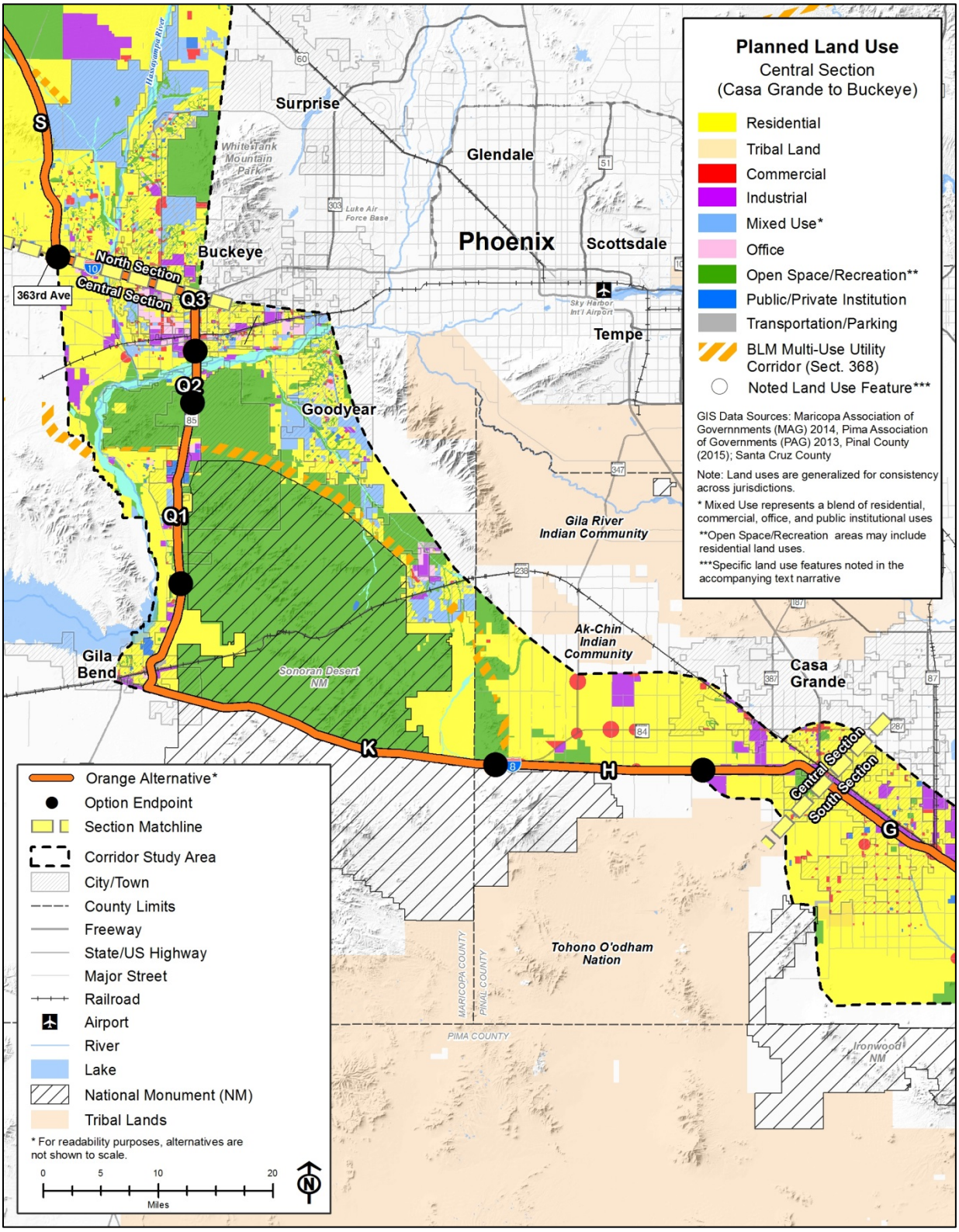

Figure 3.3-14 Planned Land Uses – Orange Alternative, Central Section

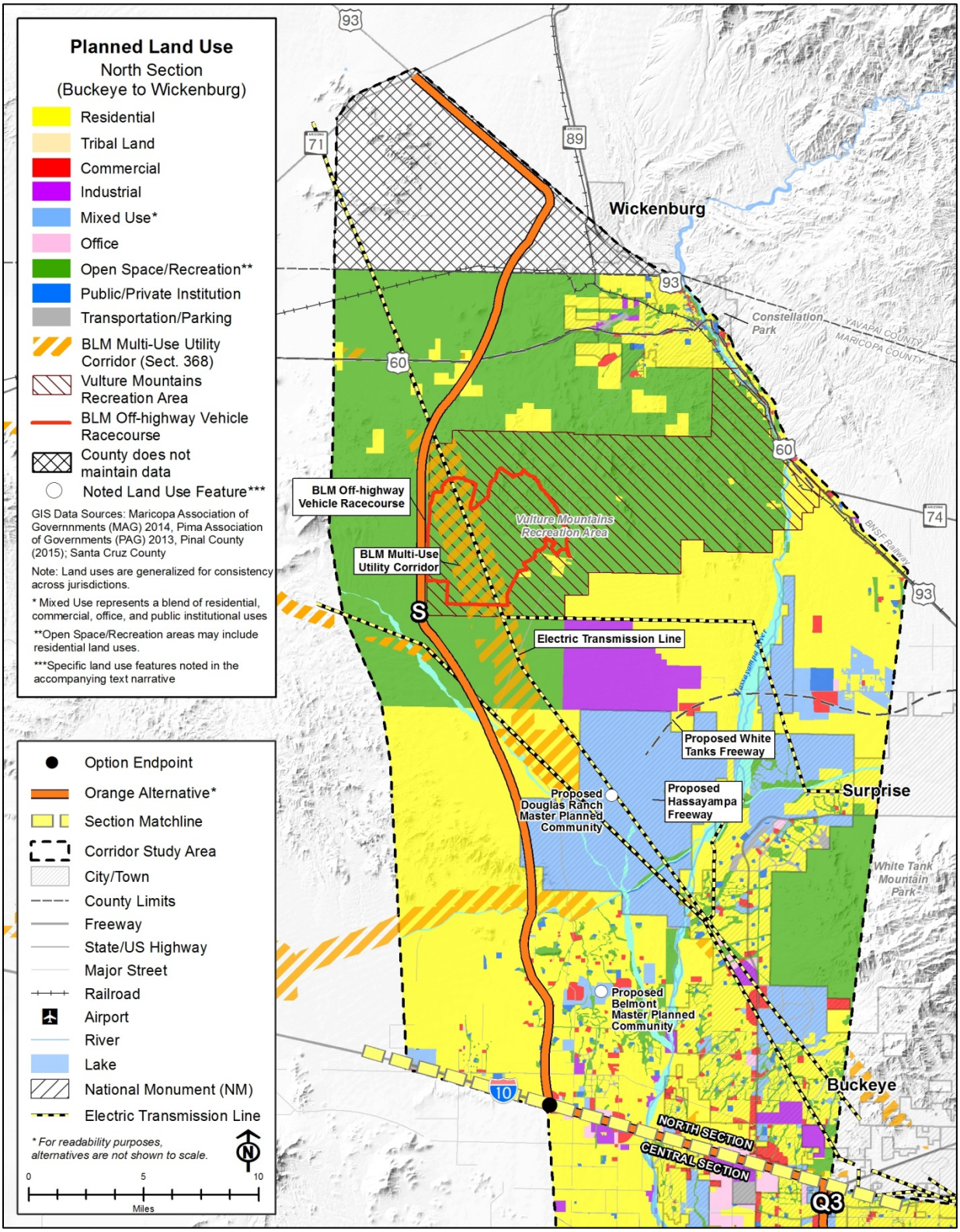

Figure 3.3-15 Planned Land Uses – Orange Alternative, North Section

Future plans in the vicinity of Option S are primarily for expanded residential development. North of the recreation area, this Corridor Option mostly traverses planned open space/recreation land, and slightly encroaches on the Vista Royale community. However, impacts could be avoided or minimized by maintaining a more western alignment within the Project Area during the Tier 2 detailed design.

Deviations in planned land uses may occur at the Option's junctions with US 60, US 93, and the Arizona and California Railroad short line corridor, which could encourage employment-generating land uses. Yavapai County does not maintain a plan for future land use in this area, but development patterns are expected to generally mirror Maricopa County's, with planned open space and residential development, and clusters of commercial development expected along US 93.

End-to-End Considerations

The Orange Alternative follows existing interstate or state highway corridors in the South and Central Sections. Where the Orange Alternative is to co-locate with existing roadway corridors, improvements would be expected near the existing facility and where land uses have already been developed consistent with a high-capacity roadway. Option B through central Tucson has the potential to cause land use impacts if additional ROW is required in this densely built area. In the North Section, Option S follows a new route between I-10 and US 93 and could impact the pattern of planned land uses, both in master-planned communities as previously discussed and in rural residential subdivisions.

Land Management and Special Designated Lands

Land management designations were reviewed to quantify lands with special designations that are located within the Project Area and therefore could be impacted and converted to a transportation use (**Table 3.3-6** [Potential Land Management Conversion Impacts – Orange Alternative]). **Figure 3.3-17** (Land Management and Special Designated Lands – Orange Alternative) illustrates land management patterns corridor-wide; noted features are labeled for context.

The Orange Alternative includes Options A, B, and G in the South Section. The majority of land along Option A consists of private land, with the exception of 331 acres of State Trust land spanning the existing interstate in the proximity of Santa Gertrudis Lane and Tumacacori National Historical Park.

Option B consists mostly of private land and State Trust land, with the exception of an approximate 8-mile easement on the San Xavier District of the Tohono O'odham Nation along I-19.

Option G is a mix of State Trust land (more to the south) and private land (more to the north), and Picacho Peak State Park is within the Project Area at its northeastern edge for approximately 1.2 miles. Given the available capacity on both I-8 and I-10, it is expected that additional impacts could be avoided or minimized.

Table 3.3-6 Potential Land Management Conversion Impacts (acres) – Orange Alternative

Land Management	Build Corridor Option							Total	% Total
	A	B	G	H	K	Q	S		
BLM	0	0	0	1,805	6,042	1,366	3,837	13,050	19
National Forest	0	0	0	0	0	0	0	0	0
NPS	0	0	0	0	0	0	0	0	0
Military	0	0	0	0	0	0	0	0	0
Park and Recreation Area	0	0	202	0	0	375	0	577	1
Private Land	6,623	11,892	7,702	2,220	1,786	5,188	2,382	37,793	56
Reclamation	0	0	0	0	0	0	0	0	0
State Trust Land	331	336	3,026	358	2,207	2,106	6,007	14,371	21
Tribal Land	0	1,977	0	0	0	0	0	1,977	3
ACEC (BLM)	0	0	0	0	507	474	0	981	
National Monument (BLM)	0	0	0	0	6,133 (2)	0	0	6,133	
Roadless Area (USFS)	0	0	0	0	0	0	0	0	
Reclamation – Deeded Lands	0	0	0	0	0	0	0	0	
State Wildlife Area (AGFD)	0.5	0	0	0	0	278	0	279	
Wilderness (BLM)	0	0	0	0	456	0	0	456	
Wilderness (NPS)	0	0	0	0	0	0	0	0	
Wilderness (USFS)	0	0	0	0	0	0	0	0	

(1) Percent totals are not included for Special Designated Lands, as these are overlays to the underlying ownership patterns and do not cover the entire Study Area.

(2) This acreage reflects what is present within the 2,000-foot-wide Project Area. However, assumptions on travel demand and typical sections were made as part of the analysis, and I-8 is not anticipated to be widened; therefore direct impacts on the SDNM are expected to be avoided or minimized. This is an inventory of the entire 2,000-foot-wide Project Area and does not reflect the actual amount of land that would be taken if Option K were to be selected.

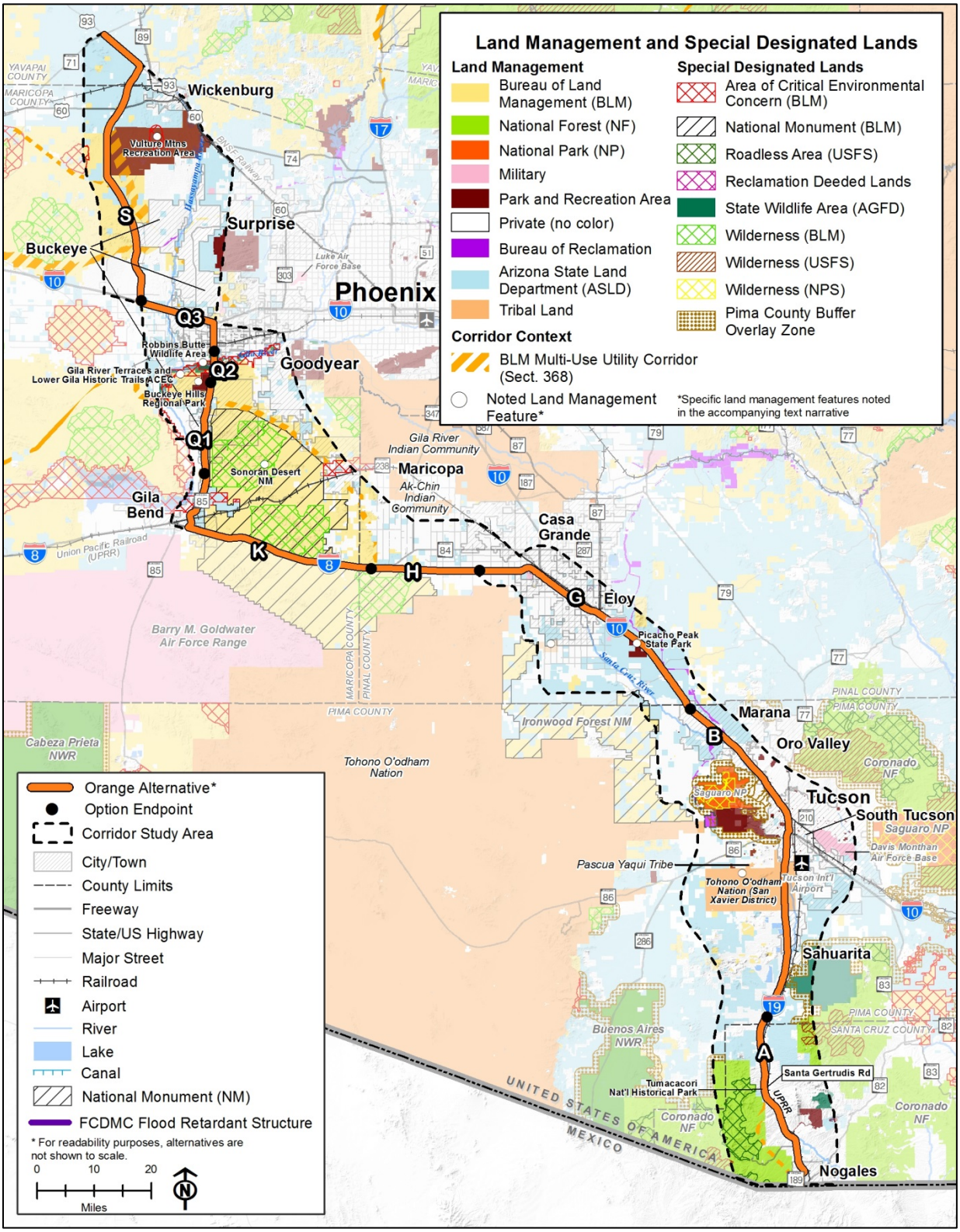

Figure 3.3-16 Land Management and Special Designated Lands – Orange Alternative

Options H, K, and Q in the Central Section involve existing routes, where planned improvements could occur largely within the existing rights-of-way. A new connection between I-8 and SR 85, planned east of Gila Bend, would require a new ROW. This connection traverses parcels of private land and State Trust land.

Option Q (1, 2, 3), SR 85, mostly consists of private, State Trust, or BLM land. The Buckeye Hills Regional Park is located directly adjacent to the west side of SR 85 for 3 miles. To the north sits the Gila River Terraces and Lower Gila Historical Trails ACEC as well as the Robbins Butte Wildlife Area, which is located within the Project Area for 3 miles. Since this Option is to co-locate with SR 85, improvements would be expected in proximity to the existing facility, and additional impacts could be avoided or minimized.

Option S in the North Section traverses BLM, State Trust, and private lands. Since it skirts the western boundary of the VMRA, direct impacts to the park property are not expected. North of the recreation area and closer to Wickenburg, the corridor is almost entirely on State Trust lands, where I-11 development may be considered a beneficial opportunity to generate value for trust beneficiaries.

End-to-End Considerations

The Orange Alternative generally follows existing interstate or state highway corridors in the South and Central Sections. The co-located portions of the Build Corridor Alternative would decrease the potential for additional impacts, to the extent ROW needs can be minimized.

The Gila River in the Central Section and related ACEC lands would be crossed by the alternative, but related impacts may be minimized through mitigation for improvements that occur within or near the existing SR 85 ROW. The ACEC designation only applies to BLM-managed lands. Impacts are most likely to occur on private and State Trust lands. See Section 3.17 (Indirect and Cumulative Effects) for a discussion of the direct and indirect impacts to the character of wilderness and recreation areas.

No Build Alternative

The No Build Alternative would include the programmed improvements to the regional transportation system that are in ADOT's federally approved 2018-2022 State Transportation Improvement Program. The No Build Alternative would be unresponsive to forecasted population and employment growth in the long term, which could lead to increased congestion on the highway system, increased travel times, and reduced efficiency in the movement of people and goods.

Additionally, the No Build Alternative would not reflect the long-term land use plans in long-range planning documents (general and comprehensive plans) that are oriented around proposed new highway corridors, such as the West Pinal Freeway, Hassayampa Freeway, SR 303L extension, and SR 30 extension (as discussed in Section 3.3.1.3, Land Use Plans and Policies). The No Build Alternative is not consistent with Study Area land use plans.

Planned Land Use

The No Build Alternative could inhibit planned future development areas by not providing access to the regional transportation system. Several Study Area master-planned communities include proposed freeway corridors in their long-term land use plans, for which land uses are organized around, but many of these are not reflected in the No Build Alternative (e.g., Hassayampa

Freeway, West Pinal Freeway, SR 303L Extension, SR 30). Planned land uses, especially in emerging economic activity centers, could be adversely affected by traffic congestion and travel delays.

Land Management and Special Designated Lands

The No Build Alternative would generally not directly impact land managers in the Study Area, as improvements are proposed to existing transportation facilities within or near current ROW boundaries.

3.3.2 Section 6(f)

3.3.2.1 Regulatory Setting

Section 6(f) of the Land and Water Conservation Fund Act (LWCFA) of 1965 (16 United States Code §§ 4601-4 to 4601-11, et seq.), administered by the Interagency Committee for Outdoor Recreation and the Department of the Interior's NPS, provides funding for acquiring property and developing public recreational facilities, and protects against the loss of that property to other uses. The LWCFA states, "No property acquired or developed with assistance under this section shall, without the approval of the Secretary (of the Department of the Interior), be converted to other than public outdoor recreation uses" (16 United States Code § 4601-8(f) (3)). Section 6(f) applies when a project proposes to convert property where Land and Water Conservation Grant Funds have been used to redevelop all or a portion of the property (36 Code of Federal Regulations § 59 et seq.). When property is converted, mitigation is required in the form of replacement property of at least equal recreation value.

3.3.2.2 Methodology

The evaluation of potential effects on properties protected by Section 6(f) began with identifying whether and where such properties are found within the Study Area. Tools used in making this determination included the LWCFA list of sites, found at: waso-lwcf.ncrc.nps.gov/public/index.cfm and projects.invw.org/data/lwcf/grants-az.html. The list of sites includes entries with park names as well as more generalized entries for property acquisitions. At this Tier 1 level, entries with park names were reviewed. During Tier 2 project level analysis, ADOT will coordinate with recipients of LWCFA monies regarding the more generalized entries to determine where the monies were applied and if I-11 has the potential to impact those protected properties.

The identified Section 6(f) properties were mapped using GIS software. The potential for each Build Corridor Alternative to impact Section 6(f) properties was preliminarily assessed by overlaying each Build Corridor Alternative on the Section 6(f) property layer, identifying where overlaps potentially could occur and calculating the overlaps to quantify the potential impact areas. Detailed analysis of co-located Corridor Options as well as Corridor Options that are not co-located is deferred to Tier 2.

3.3.2.3 Affected Environment

Twenty-two properties identified in the listing of Section 6(f)-encumbered properties are within the Study Area; they are listed in **Table 3.3-8** (Section 6(f) Properties) and shown in **Figure 3.3-17** (Section 6(f) Properties).

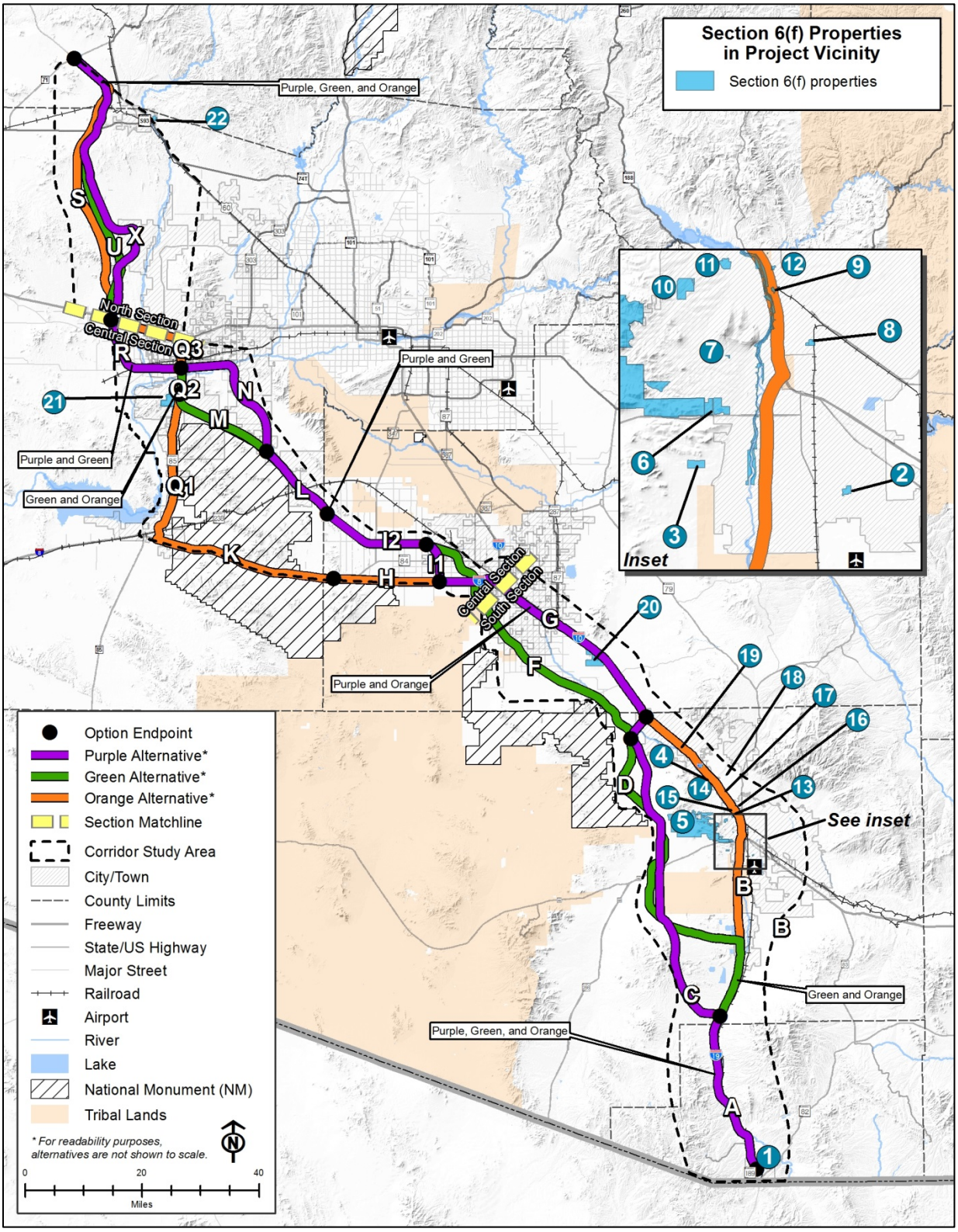

Figure 3.3-17 Section 6(f) Properties

Table 3.3-7 Section 6(f) Properties

1	Nogales Recreation Center	The City of Nogales Parks and Recreation Department owns and manages the Recreation Center at 1500 North Hohokam Drive, east of I-19 near the intersection of I-19 and East Calle Sonora/Mariposa Road. The Recreation Center, which was developed for active recreational activities, includes a community pool, tennis and basketball courts, lighted soccer fields, and on-site parking. It is adjacent to the ball fields of nearby Fleischer Park. The City obtained LWCFA monies in the 1960s, 1970s, and 1980s, and applied them to developing and maintaining the recreational facilities in the city, including the Recreation Center.
2	CSM Martin “Gunny” Barreras Memorial	The City of Tucson and Sunnyside Unified School District own and maintain this park, which features publicly accessible ball fields adjacent to the Sunnyside School. The City obtained LWCFA monies in 1976 for development of the park.
3	Winston Reynolds Manzanita District Park	Owned and maintained by Pima County, this is a 67-acre park with a publicly accessible community center and pool. Pima County obtained LWCFA monies in 1970 and 1978 for development of the park.
4	Santa Cruz River Park	The City of Tucson developed this park to provide trails and a disc golf course on the west bank of the Santa Cruz River north of El Rio Street. The City obtained LWCFA monies between 1975 and 1979 specifically to acquire the land and develop the park.
5	Tucson Mountain Park	Managed by Pima County, this park provides preserved land as well as passive and active recreational opportunities. Facilities include camping and picnicking areas, more than 62 miles of trails, shooting ranges, and an overlook. Pima County obtained LWCFA monies in 1979 to acquire land to expand the park.
6	John F. Kennedy Park	The City of Tucson developed this park to provide active recreation facilities, including a pool, ball fields, and play equipment. The park includes Kennedy Lake, an AGFD Community Fishing Program Water. The City obtained LWCFA monies in 1970 to develop the park.
7	Vista Del Pueblo Park	The City of Tucson developed Vista Del Pueblo Park as a neighborhood park with play equipment and passive recreation areas. The City obtained LWCFA monies in 1970 to develop the park.
8	Santa Rita Park	The City of Tucson owns and maintains this park, which features publicly accessible ball fields and a skate park. The City obtained LWCFA monies in 1984 for development of the park.
9	Oury Park	The City of Tucson developed Oury Park to provide active recreation facilities, including a pool, ballfields, and a recreation center. The City obtained LWCFA monies in 1971 to acquire land for the park.
10	Greasewood Park	The City of Tucson owns and maintains Greasewood Park, a 152-acre park that preserves the natural features of the property and is publicly accessible for orienteering. The City obtained LWCFA monies in 1984 for development of the park.
11	Joachim Murrieta Park	The City of Tucson owns and maintains this park, which features publicly-accessible ballfields. The City obtained LWCFA monies in 1971 for land acquisition, and again in 1972 and 1983 for development of the park.

Table 3.3-7 Section 6(f) Properties (Continued)

12	Francesco Elias Esquer Park	Owned and maintained by the City of Tucson, this park features a publicly-accessible playground and ramada. The City obtained LWCFA monies in 1972 for development of the park.
13	Manuel Valenzuela Alvarez Park	The City of Tucson owns and maintains this park, which features a publicly accessible playground. The City obtained LWCFA monies in 1971 for development of the park.
14	Juhan Park	The City of Tucson developed Juhan Park to provide ballfields. The City obtained LWCFA monies in 2008 to make improvements to the park.
15	Silverbell Golf Course	The City of Tucson developed Silverbell Golf Course to provide a publicly accessible golf facility. The City obtained LWCFA monies in 1976 to develop the property.
16	Jacobs Park	The City of Tucson owns and maintains Jacobs Park, which features publicly accessible ball fields, a pool, a picnic area, and a playground. The City obtained LWCFA monies in 1966 and 1970 for development of the park.
17	Flowing Wells Park	Pima County owns and maintains this 18-acre park, which features publicly accessible ball fields, a dog park, picnic areas, and playgrounds. Pima County obtained LWCFA monies in 1976 for development of the park.
18	Ann Day Community Park	Pima County owns and maintains Ann Day Community Park (formerly Northwest Park) in the City of Tucson, which features publicly accessible ball fields, a playground, a dog park, trails, and open space. Pima County obtained LWCFA monies in 1970 for development of the park.
19	Rillito Town Park	Pima County developed Rillito Town Park to provide ball courts and play equipment. The County obtained LWCFA monies in 1977 to develop the park.
20	Picacho Peak State Park	The 3,747 acres comprising Picacho State Park are located north of Tucson and adjacent to southbound I-10 at Exit 219 in Picacho. Opened in 1968 and managed by Arizona State Parks, the park includes the 1,500-foot Picacho Peak, which has been a landmark for travelers passing through the Pinal County area, including the DeAnza Expedition, the forty-niners, the Butterfield Overland Stage, and Union and Confederate troops during the Civil War. The land was acquired by the State of Arizona for a park because of its history, geology, and natural resources. Public use facilities in the park include camping areas, hiking trails, a visitor center, a playground, historical markers, and picnic areas. Arizona State Parks obtained LWCFA monies specifically for the park in 1967 and 1971. The department applied the 1967 funds to the development of the initial park facilities, and the 1971 funds to additional facility development and maintenance; no monies were applied to land purchase.
21	Buckeye Hills Regional Park	Maricopa County owns and manages Buckeye Hills Regional Park in the City of Buckeye. Consisting of approximately 4,747 acres, the public park is undeveloped and intended for the protection and enjoyment of the natural environment. The County obtained LWCFA monies in 1971.
22	Constellation Park	The Town of Wickenburg owns and manages this park, a publicly accessible recreational facility consisting of campgrounds, a rodeo ground, and a shooting range. Wickenburg acquired LWCFA monies in 1979 for development of these recreational uses of the park.

3.3.2.4 Environmental Consequences

Purple Alternative

Picacho Peak State Park – Option L would be aligned along I-10, resulting in approximately 173 acres of I-11 within and along the edge of Picacho Peak State Park in the South Section (also see the Section 4(f) Evaluation of Picacho Peak State Park). The Tier 2 analysis would need to evaluate the impacts to Section 6(f) resources associated with Picacho Peak State Park because the exact location of I-11 is unknown at this time.

Green Alternative

No portion of a Section 6(f) property falls within the Green Alternative in the South Section. Therefore, no portions of a Section 6(f) property would be converted to uses other than for public outdoor recreation under this Build Corridor Alternative.

Buckeye Hills Regional Park – Option M would be aligned along SR 85, resulting in approximately 184 acres of I-11 within and along the edge of Buckeye Hills Regional Park in the Central Section (also see the Section 4(f) Evaluation of Buckeye Hills Regional Park). The Tier 2 analysis would need to evaluate the impacts to Section 6(f) resources associated with Buckeye Hills Regional Park because the exact location of the I-11 facilities is unknown at this time

No portion of a Section 6(f) property falls within the Green Alternative in the North Section. Therefore, no portions of a Section 6(f) property would be converted to uses other than for public outdoor recreation under this Build Corridor Alternative.

Orange Alternative

Santa Cruz River Park – Approximately 131 acres of Santa Cruz River Park fall within Option B in the South Section of the Orange Alternative. Santa Cruz River Park parallels I-10, with a crossing in the Sahuarita area (also see Section 4(f) Evaluation). Impacts to Section 6(f) resources associated with Santa Cruz River Park cannot be determined because the exact location of the I-11 facilities is unknown at this time. The Tier 2 National Environmental Policy Act (NEPA) process would evaluate specific effects.

Oury Park – Approximately 7 acres of the Oury Park fall within Option B in the South Section of the Orange Alternative. Oury Park is entirely within the 2,000-foot-wide Project Area (also see Section 4(f) Evaluation). Impacts to Section 6(f) resources associated with Oury Park cannot be determined because the exact location of I-11 is unknown at this time. The Tier 2 NEPA process will evaluate specific project effects.

Francesco Elias Esquer Park – Approximately 0.9 acre of the Francesco Elias Esquer Park falls within Option B in the South Section of the Orange Alternative. The remaining 5.1 acres of Francesco Elias Esquer Park are outside the 2,000-foot-wide Project Area (also see Section 4(f) Evaluation). Impacts to Section 6(f) resources associated with Francesco Elias Esquer Park cannot be determined because the exact location of I-11 is unknown at this time. The Tier 2 NEPA process will evaluate specific project effects.

Rillito Town Park – Approximately 2 acres of Rillito Town Park (Rillito Vista Park) fall within Option B in the South Section of the Orange Alternative. The entirety of Rillito Town Park is

within the 2,000-foot-wide Project Area along I-10 (also see Section 4(f) Evaluation). Impacts to Section 6(f) resources associated with Rillito Town Park cannot be determined because the exact location of I-11 is unknown at this time. The Tier 2 NEPA process will evaluate specific project effects.

Picacho Peak State Park – Option L would be aligned along I-10 in the South Section, resulting in approximately 173 acres of the corridor within and along the edge of Picacho Peak State Park (also see the Section 4(f) Evaluation of Picacho Peak State Park). Impacts to Section 6(f) resources associated with Picacho Peak State Park cannot be determined because the exact location of the I-11 facilities is unknown at this time. The Tier 2 NEPA process would need to evaluate any impacts.

Buckeye Hills Regional Park – Approximately 114 acres of Buckeye Hills Regional Park fall within Option Q2 in the Central Section under the Orange Alternative. Impacts to Section 6(f) resources associated with Buckeye Hills Regional Park cannot be determined because the exact location of I-11 is unknown at this time. The Tier 2 NEPA process will evaluate specific project effects.

No portion of a Section 6(f) property falls within the Orange Alternative in the North Section. Therefore, no portions of a Section 6(f) property would be converted to uses other than public outdoor recreation under this Build Corridor Alternative.

No Build Alternative

The No Build Alternative would result in no change to an outdoor recreational use of a Section 6(f) property.

3.3.3 Summary

All of the Build Corridor Alternatives would have land use impacts, including the potential to encourage commercial and industrial development in locations near interchanges and to increase development density in those areas. The actual effects and their magnitude cannot be adequately determined at this time; they will largely depend on the timing of future construction and other factors, such as the overall rate of urban development within the Study Area. Many communities within the Study Area are planning for a high-capacity transportation facility that follows one of the Build Corridor Alternatives. In these situations, anticipated land use effects may be planned and compatible. In other situations, new development may be unplanned and incompatible.

The Green and Orange Alternatives would have similar impacts on Section 6(f) resources (Buckeye Hills Regional Park). The Purple Alternative would not affect Section 6(f) properties.

Table 3.3-8 (Summary of Potential Impacts to Land Use and Section 6(f) Properties) summarizes the key impact issues.

3.3.4 Potential Mitigation Strategies

Future construction of I-11 would result in physical impacts that could require mitigation. At this stage in the development of I-11, potential mitigation measures can only be identified in general terms, such as minimizing impacts to residential and sensitive environmental areas, until the definition of a specific alignment is defined during Tier 2 studies. During Tier 2, if property

acquisition is necessary, the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the Civil Rights Act of 1964 would be followed. Additionally, the specific alignment and locations of traffic interchanges would be planned in coordination with local government entities and with public input to minimize the potential for land use conflicts and to develop appropriate mitigation specific to each location.

If a Selected Alternative encroaches upon specially designated BLM lands, during Tier 2 studies, ADOT may need to pursue an amendment to the applicable Resource Management Plans to grant ROW or otherwise permit construction of an interstate highway.

Understanding the potential for indirect and cumulative land use effects from I-11, ADOT would be an active partner in a broader effort with Metropolitan Planning Organizations, local jurisdictions, resource agencies, and private stakeholders to cooperatively plan development in the I-11 Project Area. The effort would coordinate wildlife connectivity, local land use planning, and context-sensitive design for I-11. The White Tanks Conservancy may be a model for this type of effort, which also could include coordination with Pima County on the implementation of the Sonoran Desert Conservation Plan.

If I-11 advances into Tier 2 design and NEPA analysis, ADOT would examine ways to avoid or minimize impacts to Section 6(f) properties. Potential strategies ADOT could consider include, but are not limited to, defining alignments that do not use park properties and incorporating refinement details, such as using retaining walls to minimize the I-11 footprint.

As part of that effort, ADOT would continue coordinating with the agencies having jurisdiction over the potentially affected properties. If land from one or more properties cannot be avoided, Section 6(f) requires replacement of park land that is converted to a transportation use. The land must be equal to or greater in value than the impacted land in terms of its ability to serve as park land. To achieve this requirement, if park land cannot be avoided, ADOT's coordination activities would assist in ADOT's identification of replacement land.

3.3.5 Future Tier 2 Analysis

Future Tier 2 projects would address specific effects to property, zoning regulations, neighborhoods, or community facilities. The approach to determining acquisitions, easements, and displacements, including ownership (public or private), would be determined as part of the project-specific Tier 2 environmental study. Tier 2 projects also would address compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970; this compliance ensures that property owners (residential and business) receive fair market value for their property and relocation benefits, and that displaced persons receive fair and equitable treatment and do not suffer disproportionate injuries because of programs designed for overall public benefit.

The Federal Highway Administration (FHWA) would complete a Final Section 6(f) Evaluation during the future Tier 2 analysis. At that time, the FHWA would make the final determinations of I-11 impacts on protected properties, assessing the ability of the Selected Alternative to avoid or minimize impacts to protected properties and identifying specific mitigation measures to offset the remaining impacts. During the Tier 2 analysis, coordination with agencies with jurisdiction would focus on making final determinations of impact and identifying replacement land and other specific mitigation measures, as warranted.

Table 3.3-8 Summary of Potential Impacts to Land Use and Section 6(f) Properties

Topics	No Build Alternative	Purple Alternative	Green Alternative	Orange Alternative
Major Resource Features		Land use effects are assessed qualitatively in the Draft Tier 1 EIS. Overall, the Build Corridor Alternatives would benefit commercial, industrial, and related land uses by improving the capacity of the interstate highway system, and retaining or granting new local access, especially to large regional facilities located near freeway interchanges.		
Most Common Planned Land Uses within Project Area Potentially Affected	No I-11 impacts identified; existing conditions and baseline trends would continue.	• Residential (51%) • Recreation/Open Space (13%) • Mixed Use (10%) • Industrial (8%)	• Residential (51%) • Recreation/Open Space (22%) • Mixed Use (5%) • Industrial (5%)	• Residential (31%) • Recreation/Open Space (22%) • Industrial (12%) • Commercial (10%)
Overall Land Use Considerations	Because it only accommodates near-term planned improvements, the No Build Alternative would be unresponsive to forecasted population and employment growth in the long term, which could lead to increased congestion on the highway system, increased travel times, and reduced efficiency in the movement of people and goods.	Not likely to cause major adverse effects to land uses along the corridor because I-11 is generally consistent with adopted plans. Some impacts in developed areas may occur due to right-of-way acquisition. New transportation junctions may create opportunities for new development and growth along I-11, depending on the timing of construction and pace of development.	Similar to the Purple Alternative.	Impacts to planned land uses are expected to be less than the other Build Corridor Alternatives, since I-11 would likely be co-located with an existing facility under the Orange Alternative, where land uses have developed consistent with a roadway. Added traffic may increase the attractiveness of the route and desire for new goods and services.

Table 3.3-8 Summary of Potential Impacts to Land Use and Section 6(f) Properties (Continued)

Indirect Effects	Programmed transportation improvements plus projected population and employment growth could: • Reduce the availability of land that could be used for future parks, recreational facilities, and open space. • Increased use of parks, recreational facilities, and open space due to an increased population.	Land development induced by I-11 could: • Reduce the availability of land that could be used for future parks, recreational facilities and open space. Could increase the rate and geographic extent of this impact compared to the No Build Alternative. • Increased use of park, recreational facilities, and open space due to increased population. Could cause more pressure for open space protection if the Build Alternative results in induced growth in additional areas.	Similar to the Purple Alternative, except: • The resources present within the Project Area have greater potential to be indirectly affected by induced changes to land use and traffic.	Similar to the Green Alternative, except: More resources are present within the Project Area and so could be indirectly affected by induced changes to land use and traffic. However, these resources are already located adjacent to a transportation facility in the South and Central Sections.
Cumulative Effects	Past, present, and reasonably foreseeable projects and planning could: • Decrease the potential land available for recreation uses. • Increase the demand to provide parks, recreational facilities, and open spaces in growing urban/suburban areas. • Increase the demand to	Past, present, and reasonably foreseeable projects could: • Reduce the amount of land available for future parks, recreational facilities, or open space compared to the No Build Alternative.	Similar to the Purple Alternative.	Similar to the Purple Alternative, except: • Effects to specific parks, recreational facilities, or open space, but these are more likely to already be in the vicinity of an existing transportation use.

Table 3.3-8 Summary of Potential Impacts to Land Use and Section 6(f) Properties (Continued)

	provide protected land with recreational components in rural/undeveloped areas.			
Section 6(f) potential impacts	No I-11 impacts identified; No changes to outdoor recreational use of Section 6(f) properties.	No portion of a Section 6(f) property falls within the Purple Alternative.	Option M could result in a permanent loss of a portion of Buckeye Hills Regional Park. Because the exact location of the I-11 is unknown at this time, impacts to Section 6(f) resources associated with the Buckeye Hills Regional Park would need to be evaluated during Tier 2.	Option Q2 could result in a permanent loss of a portion of Buckeye Hills Regional Park. Because the exact location of the I-11 facility is unknown at this time, impacts to Section 6(f) resources associated with Buckeye Hills Regional Park would need to be evaluated during Tier 2.

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