



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

Appendix E4, Recreation Technical Memorandum

March 2019



Federal Aid No. 999-M(161)S

ADOT Project No. 999 SW 0 M5180 01P

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Acronyms

1		
2		
3	ACEC	Area of Critical Environmental Concern
4	AGFD	Arizona Game and Fish Department
5	BLM	Bureau of Land Management
6	CAP	Central Arizona Project
7	ERMA	Extensive Recreation Management Area
8	GMU	Game Management Unit
9	I	Interstate
10	NHT	National Historic Trail
11	OHV	off-highway vehicle
12	ROW	right-of-way
13	SRMA	Special Recreation Management Area
14	Study Area	I-11 Corridor Study Area
15	USFS	US Forest Service
16	VMRMZ	Vulture Mountains Recreation Management Zone



1 **E4.1 Recreation**

2 **E4.1.1 Affected Environment**

3 **E4.1.1.1 Recreation Management Areas**

4 The Bureau of Land Management (BLM) and United States (US) Forest Service (USFS)
5 designate recreation management areas where recreation and visitor services objectives are
6 recognized as a primary resource management consideration and specific management is
7 required to protect the recreation opportunities.

8 BLM defines recreation management areas as either a Special Recreation Management Area
9 (SRMA) or an Extensive Recreation Management Area (ERMA). SRMAs recognize unique and
10 distinctive recreation values and are managed to enhance a targeted set of activities,
11 experiences, benefits, and recreation setting characteristics, which become the priority
12 management focus. Management of SRMAs focuses on providing special recreation
13 opportunities that would not otherwise be available to the public, reducing conflicts among
14 users, minimizing damage to resources, and reducing visitor health and safety problems.
15 Recreation opportunities within or along these areas may be developed or dispersed.

16 ERMAs recognize existing recreation use and demand, and are managed to sustain principal
17 recreation activities and associated qualities and conditions of the ERMA, commensurate with
18 management of other resources (BLM 2011). Generally, recreation opportunities in ERMAs are
19 dispersed, unstructured activities that do not require intensive management or substantial
20 investment in trails or facilities. Recreation opportunities also are present on undesignated BLM
21 lands, which consist of those areas that do not have a BLM recreation-related designation
22 (i.e., lands not designated as a SRMA, ERMA, or national monument).

23 SRMAs or ERMAs within the Interstate 11 (I-11) Corridor Study Area (Study Area) are identified
24 for each project section in the Existing Recreation Sites/Areas subsection below.

25 The Nogales Recreation Area in the Coronado National Forest is the only USFS-designated
26 recreation area in the Study Area.

27 **E4.1.1.2 Designated National Trails and Other Recreational Trails**

28 The National Trails System is a network of scenic, historic, and recreation trails created by the
29 National Trails System Act of 1968 and amended in 1978 (National Park Service 2009). There
30 are three types of trail designations:

- 31 • National recreation trails provide a variety of outdoor recreation uses.
- 32 • National scenic trails apply to trails that provide maximum outdoor recreation potential and
33 conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural
34 qualities of the areas through which the trails may pass.
- 35 • National historic trails (NHTs) apply to trails following as closely as possible and practicable
36 to original trails or routes of travel of national historic significance.

37 There is one National Recreation Trail just outside of the Study Area, the Central Arizona
38 Project (CAP) Trail, which follows the CAP canal through southern Arizona. This trail is

1 completed along some portions of the canal and is typically constructed and managed by a city
2 or county in conjunction with the Bureau of Reclamation and the Central Arizona Water
3 Conservation District. There are no completed segments of the CAP Trail within the Study Area.
4 There are no national scenic trails within the Study Area.

5 One NHT is present within the Study Area, the Juan Bautista de Anza Trail, in the South and
6 Central Sections. The Anza Trail is a 1,210-mile multi-state, commemorative route of Juan
7 Bautista de Anza from Nogales, Arizona, to San Francisco, California. In addition, the Butterfield
8 Overland Trail, which is currently being considered for NHT designation, also crosses the Study
9 Area in the Central Section. The Butterfield Overland Mail Route provided mail service between
10 St. Louis, Missouri, and San Francisco, California, until 1861. The route of the Arizona
11 component of the 2,795-mile trail crosses three counties within the Study Area: Pima, Pinal, and
12 Maricopa. Because these trails also are both historic resources, impacts to the historical
13 components of these trails are analyzed in Section 3.7, Cultural Resources. The developed (for
14 recreation) portion of the Butterfield Overland Trail is not within the Study Area.

15 **E4.1.1.3 State Wildlife Areas and State Parks**

16 There is one state park and four wildlife areas in the Study Area.

- 17 • Picacho Peak State Park
- 18 • Robbins Butte Wildlife Area
- 19 • Arlington Wildlife Area
- 20 • Powers Butte Wildlife Area
- 21 • Santa Rita Wildlife Area

22 Wildlife areas are typically established to preserve fish and wildlife habitat and to provide
23 recreational opportunities including fishing, hunting, and wildlife viewing. They may or may not
24 be a component of a larger recreation property.

25 The Study Area also contains 11 Game Management Units (GMUs). These are hunting areas
26 consisting of state, federal, military, and private land. Hunters must have written or verbal permission
27 from private property owners for use of their private lands for hunting or crossing these lands to reach
28 State Trust lands. All of the state managed recreation areas are described below.

29 **E4.1.1.4 Other Special Management Areas**

30 In addition to the previously mentioned designated recreation sites/areas, there are federally
31 designated special management areas within or adjacent to the Study Area where recreation
32 occurs, including wilderness areas, wilderness study areas, lands with wilderness
33 characteristics, roadless areas, and Areas of Critical Environmental Concern (ACECs). These
34 areas generally provide opportunities for solitude and dispersed recreation activities in a
35 primitive setting, but are not managed primarily for recreation. These specially designated areas
36 are described in more detail in Section 3.3, Land Use. Impacts to recreation within three
37 wilderness areas (North Maricopa, South Maricopa, and Table Top), are described under the
38 Sonoran Desert National Monument, where all three wilderness areas are located.

1 **South Section**

2 **Table E4-1** (Managed Recreation Sites/Areas within the South Section of the Project) identifies
 3 all recreation sites/areas within the South Section. **Figure E4-1** (BLM-Designated Recreation
 4 Sites/Areas) and **Figure E4-2** (GMUs throughout the Study Area) show the BLM lands and
 5 GMUs within the Project Area.

Table E4-1 Managed Recreation Sites/Areas within the South Section of the Project

Managing Entity	Recreation Site/Area	Description
BLM Tucson Field Office	General Field Office area	6,597,900 acres of BLM-managed public lands.
	Ironwood Forest National Monument	This 129,000-acre national monument is managed by the BLM, but also includes some State Trust lands. The monument includes a large number of ironwood trees, archaeological sites, and a wide variety of plants and animals within several desert mountain ranges.
National Park Service	Saguaro National Park (SNP)	The SNP consists of 24,505 acres within two districts (Tucson Mountain and Rincon Mountain); however, only one district, the Tucson Mountain District, is within the Study Area. Facilities in the park include trails, campgrounds, a picnic area, and visitor center.
	Tumacacori National Historical Park	Located east of I-19 along the frontage road in the community of Tumacacori, this 360-acre park contains a visitor center, museum, garden, mission buildings, and a trailhead for the Anza Trail segment between this park and the Tubac Presidio State Park.
	Juan Bautista de Anza NHT	The Anza Trail is a 1,210-mile multi-state, commemorative route of Juan Bautista de Anza from Nogales, Arizona, to San Francisco, California. Within the Study Area, approximately 40 miles of the historical route passes through Santa Cruz, Pima, Pinal, and Maricopa counties. Existing trail segments that are developed for recreation are located within the Study Area, including non-motorized trails and the auto tour route; however, auto tour signage has not been posted in Arizona yet.
USFS	Nogales Recreation Area	The 1.7-million-acre Coronado National Forest includes the Santa Rita, Pajaritos, and Tumacacori mountains and grassy areas in-between.
Arizona Game and Fish Department (AGFD)	Santa Rita Wildlife Area	The Santa Rita Wildlife Area is 52,616 acres located in GMU 34A. A portion of the wildlife area is leased by the University of Arizona as the Santa Rita Experimental Range for year-round studies in wildlife management. The Santa Rita Mountains provide hunting opportunities for javelin, mule deer, white-tailed deer, black bear, dove, and quail.
	GMU 26M	The Study Area includes the southern end of this 1,344,822-acre GMU. The average number of hunting permits in the past 5 years in this GMU includes over 5,300 permits per year for a variety of species. The Study Area includes the southern end of the GMU.

Table E4-1 Managed Recreation Sites/Areas within the South Section of the Project (Continued)

Managing Entity	Recreation Site/Area	Description
AGFD (Con't)	GMU 34A	The average number of hunting permits for this 441,311-acre GMU in the past 5 years includes over 5,300 permits per year for a variety of species.
	GMU 36A	The average number of hunting permits for this 394,831-acre GMU in the past 5 years includes over 2,100 permits per year for a variety of species.
	GMU 36B	The average number of hunting permits in the past 5 years in this 359,008-acre GMU includes over 3,600 permits per year for a variety of species.
	GMU 37A	The average number of hunting permits in the past 5 years in this 1,070,487-acre GMU includes over 950 permits per year for a variety of species.
	GMU 38M	Hunting permits are issued for a variety of species within this 490,151-acre GMU.
Arizona State Parks	Picacho Peak State Park	Consisting of approximately 3,747 acres, the park has developed and undeveloped areas. Developed facilities for public recreation include a visitor center, trails, picnic areas, campground, playground, amphitheater, showers, restrooms, and recreational vehicle dump station. Recreation opportunities at the park include hiking, picnicking, camping, and wildlife viewing.
Arizona State Land Department	State Trust Lands	The Arizona State Land Department manages 9.3 million acres of land held in trust for the benefit of public schools and 13 other public institutions. Roughly 8 million acres of State Trust land is available for some form of recreation with a recreation permit,
City of Tucson	Oury Park	This 7.1-acre park includes a pool, ballfields, and recreation center.
	La Mar Park	This 3.2-acre park features a playground.
	El Parque De San Cosme	This 0.8-acre park features greenspace and a gazebo.
	El Paso and Southwestern Greenway	The Greenway will be a 6-mile trail for bicyclists and pedestrians. The Greenway is documented in several plans, including the City of Tucson Parks and Recreation Strategic Plan, the City of Tucson General Plan, the Downtown Infrastructure Plan, the Regional Transportation Authority's Transportation Plan, the Eastern Pima County Trails Master Plan and the Parks, Open Space and Trails Plan, and the Regional Bicycle Plan. The Greenway trail will be built in phases as funding allows. The block at Fire Central, from Cushing Street to Simpson Street, is already completed. The next segment from Simpson Street to 22nd Street is partially funded by a Transportation Enhancement Grant and is expected to begin construction in winter 2017.



Table E4-1 Managed Recreation Sites/Areas within the South Section of the Project (Continued)

Managing Entity	Recreation Site/Area	Description
City of Tucson (Con't)	Bonita Park	This 1.4-acre park features a trail and greenspace along the river.
	Garden of Gethsemane	This 1.3-acre recreation area features a sculpture garden.
	Estevan Park	This 8.2-acre park features ballfields, ball courts, picnic area, and a playground.
	Francesco Elias Esquer Park	This 6.3-acre park features a playground and ramada.
	Julian Wash Greenway	A 14-mile non-motorized trail that runs from the Santa Cruz River Park west bank at Silverlake Road (just west of the I-19 crossing) to Rita Road. The trail contains multiple entry and exit points.
	Julian Wash Archaeological Park	This 16.2-acre park features a sculpture garden.
	Pima Community College, Desert Vista Campus	A 4.5-acre area of the college campus that includes a fitness center and ballfields.
	David G. Herrera and Raymond Quiroz Park	A 6.6-acre park featuring the Oury Recreation Center, ball fields, basketball courts, walking path, picnic area, and play equipment.
Pima County	Tucson Mountain Park	At 19,775 acres, this park provides a large area for a diverse set of recreation opportunities. The park includes a campground, picnic areas, a shooting range, archery range, scenic overlooks, restrooms, and the Desert Discovery Center. There also are 62 miles of non-motorized trails throughout the park.
	Historic Hacienda de la Canoa (at Raul M. Grijalva Canoa Ranch Conservation Park)	This 4,798-acre park includes a historic ranch along the Santa Cruz River. Tours of the ranch are offered two days per week. Environmental education programs also are offered, such as star gazing and bird watching. Special events also occur at the park periodically.
	Santa Cruz River Park	A 469-acre linear park along the Santa Cruz River that features 26.25 miles of multi-use trails and play equipment.
	Rillito River Park	A 12-mile linear park along both banks of the Rillito River that encompasses trails along the river as well as parking areas, restrooms, drinking fountains, and shade structures located at various parking areas and other parks along the river.
	The Loop	The Loop consists of more than 120 miles of non-motorized trails for hiking/walking, cycling, and horseback riding in Marana, Oro Valley, and South Tucson. Work is ongoing to complete 11 more miles of trail and connect to Rillito River Park, Santa Cruz River Park, and Pantano River Park.



Table E4-1 Managed Recreation Sites/Areas within the South Section of the Project (Continued)

Managing Entity	Recreation Site/Area	Description
Pima County (Con't)	Sweetwater Wetlands Park	This 58.3-acre park is a water treatment facility, an outdoor classroom and wildlife habitat. The park provides opportunities for wildlife viewing, environmental education, and walking.
	Ted Walker Park	Located in Marana, this 60.5-acre park features the Mike Jacobs Sports park, consisting of ballfields and restrooms.
	Canada Del Oro River Park	This park provides more than 9 miles of trail for equestrians, bicyclists, and pedestrians along the Canada Del Oro Wash. Parking and restrooms also are provided. Wildlife viewing opportunities also are available along the riverside trail.
	Rillito Vista Park	This 1.6-acre park features ball courts, a picnic area, and a playground.
Town of Marana	San Lucas Community Park	This 13.5-acre park features ballfields, ball courts, picnic areas, playgrounds, and dog park.
Town of Sahuarita	Anamax Recreation Center	A 42-acre park featuring a recreation center, ball fields, and dog park.

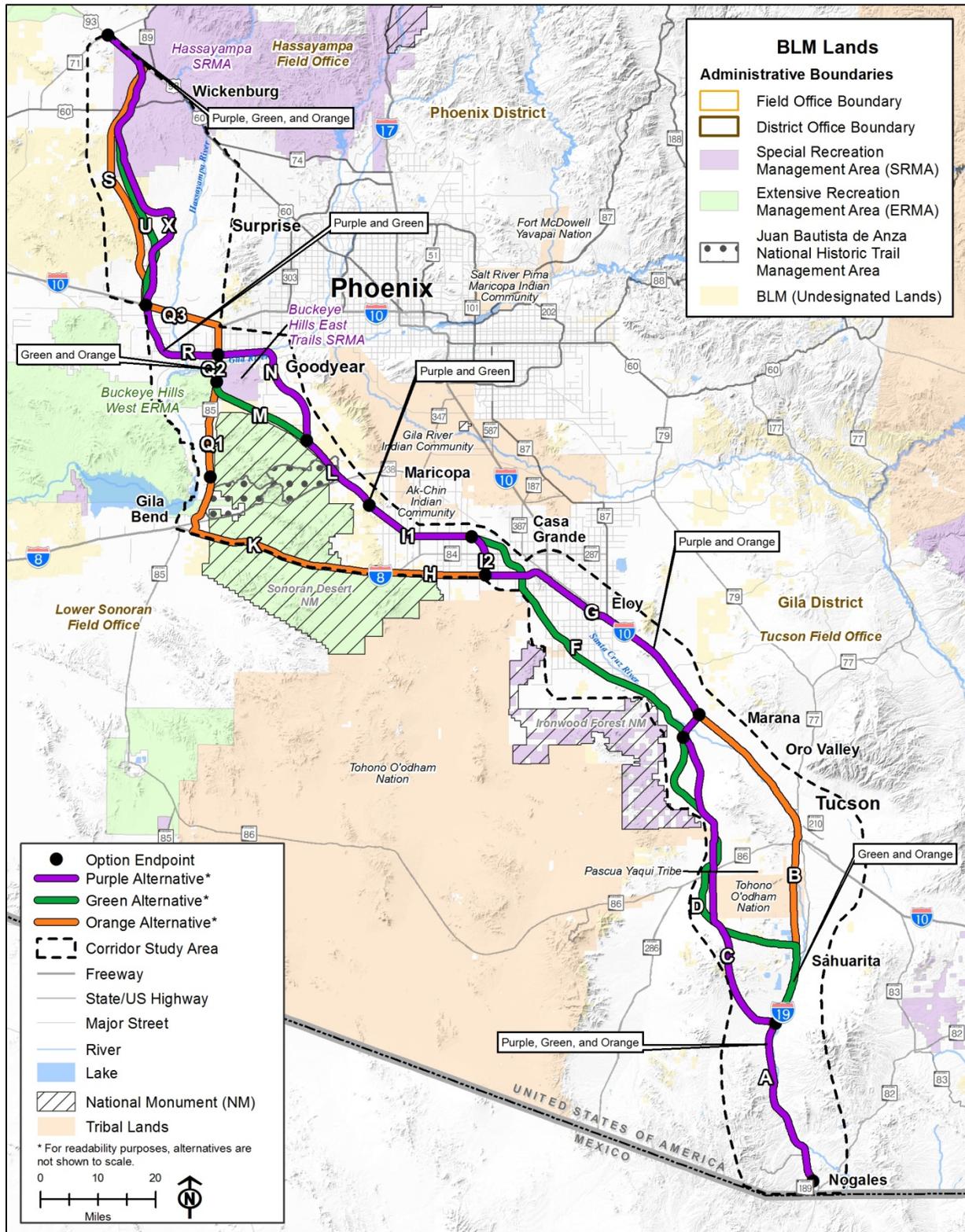


Figure E4-1 BLM-Designated Recreation Sites/Areas

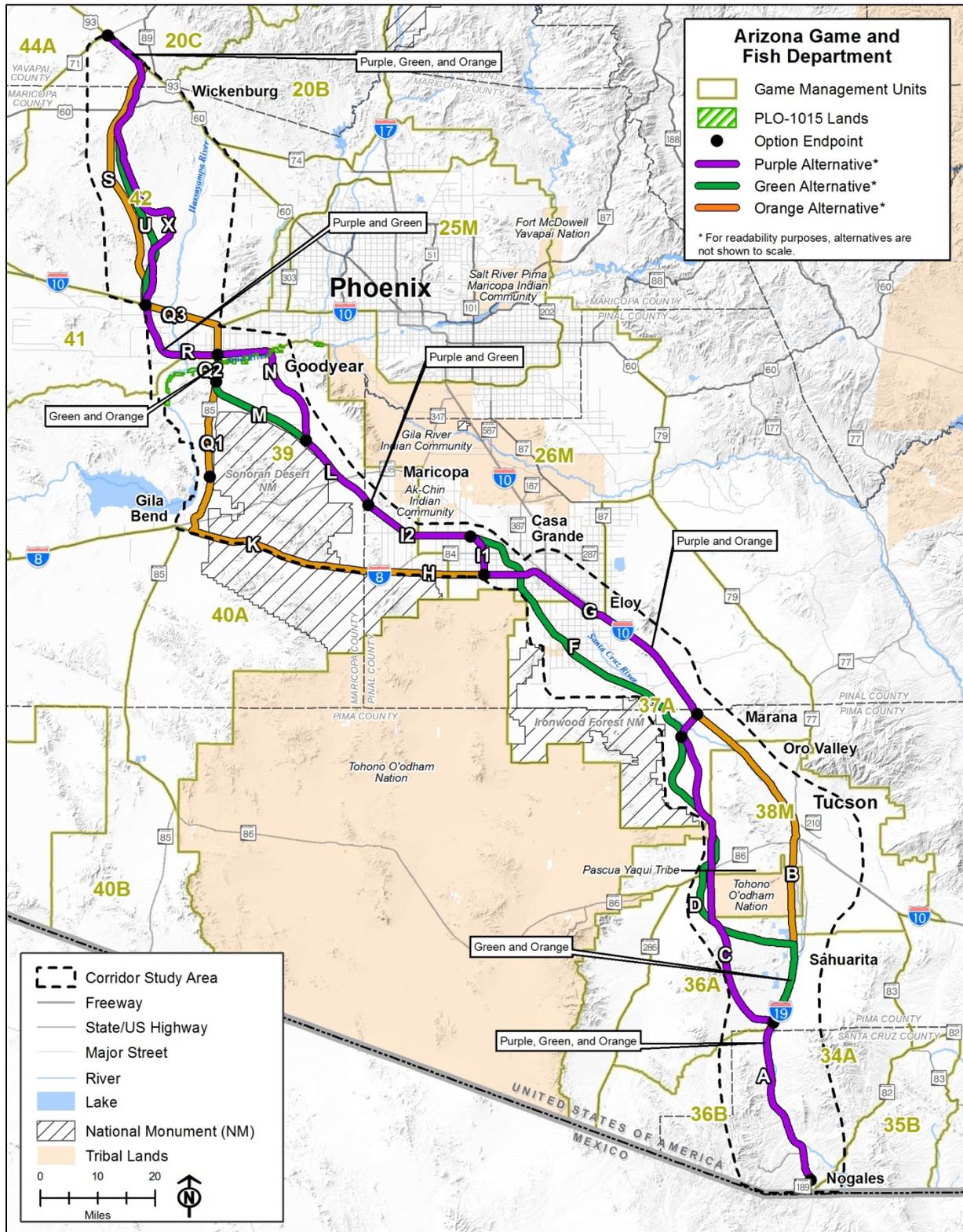


Figure E4-2 GMUs throughout the Study Area



1 **Central Section**

- 2 **Table E4-2** (Managed Recreation Sites/Areas within the Central Section of the Project)
- 3 identifies all recreation sites/areas within the Central Section of the project.

Table E4-2 Managed Recreation Sites/Areas within the Central Section of the Project

Managing Entity	Recreation Site/Area	Description
BLM Lower Sonoran Field Office	General Field Office area	8,872,714 acres of BLM-managed public lands. Visitation averages over 18,000 visitors per year.
	Buckeye Hills East Trails SRMA	This 25,800-acre SRMA is managed by BLM to provide local residents with motorized and non-motorized recreation trail opportunities in natural open spaces for various skill levels.
	Buckeye Hills West ERMA	This 22,100-acre ERMA is managed by BLM to provide dispersed recreation opportunities adjacent to Buckeye Hills Regional Park and Robbins Butte Wildlife Area.
	Juan Bautista de Anza NHT Management Area	This management area contains 510,694 acres and is managed by BLM to enhance the experience of visitors and maintain the integrity of the Anza Trail, associated sites, and visual setting. Management of this area is in concert with the Lower Gila terraces and historic trails ACEC. Management of this ACEC also applies to the Fred J. Weiler Green Belt Resource Conservation Area.
	Sonoran Desert National Monument	This 76,786-acre national monument includes extensive saguaro cactus forest, three sets of mountain ranges, and the valleys in between them. Also within the monument are three wilderness areas, many archaeological and historic sites, and several historic trails, including the Juan Bautista de Anza NHT, Butterfield Overland Stage Route, Mormon Battalion Trail, and the Gila Trail.
AGFD	Robbins Butte Wildlife Area / Public Land Order (PLO) 1015 Lands	This 1,681-acre wildlife area is managed to optimize the wildlife habitat potential and wildlife-oriented recreation, including hunting, fishing, hiking, and birdwatching. Located 7 miles southwest of Buckeye, this wildlife area includes over 115 bird species in winter and likely even more species during the summer. Robbins Butte Wildlife Area encompasses AGFD Commission owned (deeded) lands and PLO 1015 lands managed by AGFD through a Memorandum of Understanding between the AGFD Commission and the US Fish and Wildlife Service (USFWS). PLO 1015 lands were reserved under the jurisdiction of the Department of the Interior, USFWS for wildlife refuge purposes.



Table E4-2 Managed Recreation Sites/Areas within the Central Section of the Project (Continued)

Managing Entity	Recreation Site/Area	Description
	Arlington Wildlife Area	This 1,500 acre wildlife area is located 3.5 miles south of Arlington on the west bank of the Gila River. The area consists of lands owned by the Arizona Game and Fish Commission and lands owned by other governmental agencies, but are managed for wildlife by the AGFD under a long-term agreement. Waterfowl is the focus of the wildlife area, which provides recreation opportunities for hunting, wildlife viewing, and other wildlife-oriented recreation activities.
	Powers Butte Wildlife Area	Located near the Gila River, this 1,120-acre wildlife area provides riparian, wetland and streamside forest habitat for many types of birds, including rare and sensitive species. The wildlife area provides opportunities for birdwatching, hunting, hiking, and fishing. AGFD acquired Powers Butte in 1982 as mitigation for wildlife habitat losses along the lower Colorado River and is currently managed to provide quality wildlife habitat and recreational opportunities along the Gila River.
	GMU 26M	Hunting permits are issued for a variety of species within this 1,344,822-acre GMU.
	GMU 39	The average number of hunting permits in the past 5 years in this 1,240,559-acre GMU includes over 150 permits per year for a variety of species.
	GMU 40A	The average number of hunting permits in the past 5 years in this 694,434-acre GMU includes over 300 permits per year for a variety of species.
	GMU 41	The average number of hunting permits in the past 5 years in this 1,815,899-acre GMU includes over 500 permits per year for a variety of species.
	GMU 42	The average number of hunting permits in the past 5 years in this 952,511-acre GMU includes over 1,400 permits per year for a variety of species.
Arizona State Land Department	State Trust Lands	The Arizona State Land Department manages 9.3 million acres of land held in trust for the benefit of public schools and 13 other public institutions. Roughly 8 million acres of State Trust land is available for some form of recreation with a recreation permit.
Maricopa County	Buckeye Hills Regional Park	Consisting of approximately 4,747 acres, this park above the Gila River includes picnic areas, restrooms, and a shooting range.
Pinal County	Palo Verde Regional Park	Palo Verde Regional Park is a proposed 21,900-acre park on land currently owned by BLM within the Lower Sonoran Decision Area. Pinal County prepared the Recreation Area Master Plan for the Palo Verde Regional Park Cooperative Recreation Management Area in partnership with BLM in December 2016.
	Pinal County West/Kortsen Park	This 160-acre park in Stanfield provides over 20 picnic sites and 3 miles of trails.

1 **North Section**

- 2 **Table E4-3** (Managed Recreation Sites/Areas within the North Section of the Project) identifies
3 all recreation sites/areas within the North Section of the project.

Table E4-3 Managed Recreation Sites/Areas within the North Section of the Project

Managing Entity	Recreation Site/Area	Description
BLM Hassayampa Field Office	General Field Office Area	24,295,200 acres of BLM-managed public lands.
	Hassayampa SRMA	The BLM Hassayampa Field Office lands within the Project Area are primarily within the 363,567-acre Hassayampa SRMA, specifically the Wickenburg Community and Vulture Mine Recreation Management Zones. The Vulture Mountains ACEC also is located within the SRMA.
	Vulture Mountains Recreation Management Zone (VMRMZ)	BLM manages 70,452 acres for recreation, such as hiking and off-highway vehicle trails, picnic and camping areas; master-planned amenities include: multi-use trails, motorized uses, equestrian uses, picnicking, camping, day use, archery, interpretive/educational uses, wildlife and nature viewing, historical interpretation, hunting, geocaching, and other miscellaneous uses; County-planned recreation areas in a proposed lease area; contains a designated multi-use corridor that allows for non-conservation uses
AGFD	GMU 20C	The average number of hunting permits in the past 5 years in this 485,845-acre GMU includes over 1,500 permits per year for a variety of species.
	GMU 41	The average number of hunting permits in the past 5 years in this 1,815,899-acre GMU includes over 500 permits per year for a variety of species.
	GMU 42	The average number of hunting permits in the past 5 years in this 952,511-acre GMU includes over 1,500 permits per year for a variety of species.
Arizona State Land Department	State Trust Lands	The Arizona State Land Department manages 9.3 million acres of land held in trust for the benefit of public schools and 13 other public institutions. Roughly 8 million acres of State Trust land is available for some form of recreation with a recreation permit.

4 **E4.1.2 Environmental Consequences**

5 **E4.1.2.1 Impacts by Alternative**

- 6 **Table E4-4** (Purple Alternative Recreation Sites/Areas within Options: Project Area Acres),
7 **Table E4-5** (Green Alternative Recreation Sites/Areas within Options: Project Area Acres), and
8 **Table E4-6** (Orange Alternative Recreation Sites/Areas within Options: Project Area Acres)
9 provide the acreage of each recreation site/area within the 2,000-foot-wide corridor for each
10 alternative and Corridor Option within the South, Central, and North Sections of the Study Area.
11 A description of the impacts by alternative and Corridor Option are discussed following these
12 tables.

Table E4-4 Purple Alternative Recreation Sites/Areas within Options: Project Area Acres (% of Total Area)

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option C	Option G	Option I1	Option I2	Option L	Option N	Option R	Option X
Federal	BLM Undesignated Lands in the Tucson Field Office	--	459 (<0.5)	--	--	--	--	--	--	--
Federal	BLM Undesignated Lands in the Lower Sonoran Field Office	--	--	--	--	--	1,164 (<0.5)	157 (<0.5)	81 (<0.5)	
Federal	BLM Undesignated Lands in the Hassayampa Field Office	--	--	--	--	--	--	--	--	1,823 (<0.5)
Federal	Hassayampa SRMA	--	--	--	--	--	--	--	--	5,931 (1.6)
Federal	VMRMZ	--	--	--	--	--	--	--	--	1,915 (2.7)
Federal	Tumacacori National Historical Park	4 (1.1)	--	--	--	--	--	--	--	--
Federal	Juan Bautista de Anza NHT Management Area	--	--	--	--	--	471 (<0.5)	--	--	--
State	GMU 20C	--	--	--	--	--	--	--	--	780 (<0.5)
State	GMU 26M	--	--	4,691 (<0.5)	1,768 (<0.5)	2,123 (<0.5)	--	2,091 (<0.5)	--	--
State	GMU 34A	3,651 (0.8)	4 (<0.5)	--	--	--	--	--	--	--
State	GMU 36A	182 (<0.5)	7,140 (1.8)	--	--	--	--	--	--	--
State	GMU 36B	3,122 (0.9)	--	--	--	--	--	--	--	--
State	GMU 37A	--	5,454 (0.5)	6,238 (0.6)	--	--	--	--	--	--



**Table E4-4 Purple Alternative Recreation Sites/Areas within Options: Project Area Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option C	Option G	Option I1	Option I2	Option L	Option N	Option R	Option X
State	GMU 38M	--	1,430 (<0.5)	--	--	--	--	--	--	--
State	GMU 39	--	--	--	--	2,392 (<0.5)	4,478 (<0.5)	4,109 (<0.5)	--	--
State	GMU 41	--	--	--	--	--	--	5 (<0.5)	4,227 (<0.5)	1 (<0.5)
State	GMU 42	--	--	--	--	--	--	--	9 (<0.5)	12,446 (1.3)
State	Picacho Peak State Park	--	--	173 (4.6)	--	--	--	--	--	--
State	State Trust Lands	224 (<0.5)	4,597 (<0.5)	2,273 (<0.5)	<1 (0.0)	237 (<0.5)	192 (<0.5)	1,216 (<0.5)	904 (<0.5)	1,410 (<0.5)
State	PLO 1015							43 (<0.5)		
Local	Palo Verde Regional Park	--	--	--	--	63 (0.3)	242 (1.1)	--	--	--

Table E4-5 Green Alternative Recreation Sites/Areas within Options: Project Area Acres (% of Total Area)

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option D	Option F	Option I2	Option L	Option M	Option Q2	Option R	Option U
Federal	BLM Undesignated Lands in the Tucson Field Office	--	564 (<0.5)	--	--	--	--	--	--	--
Federal	BLM Undesignated Lands in the Lower Sonoran Field Office	--	--	--	--	1,164 (<0.5)	3,103 (<0.5)	61 (<0.5)	3,103 (<0.5)	
Federal	BLM Undesignated Lands in the Hassayampa Field Office	--	--	--	--	--	--	--	--	1,996 (<0.5)
Federal	Hassayampa SRMA	--	--	--	--	--	--	--	--	5,878 (1.6)
Federal	VMRMZ	--	--	--	--	--	--	--	--	1,858 (2.6)
Federal	Tumacacori National Historical Park	4 (1.1)	--	--	--	--	--	--	--	
Federal	Juan Bautista de Anza NHT Management Area	--	--	--	--	471 (<0.5)	--	--	--	--
Federal	Buckeye Hills East Trails SRMA	--	--	--	--	--	1,017 (3.9)	208 (0.8)	--	--
Federal	Buckeye Hills West ERMA	--	--	--	--	--	--	241 (1.1)	--	--
State	GMU 20C	--	--	--	--	--	--	--	--	916 (<0.5)
State	GMU 26M	--	--	4,008 (<0.5)	2,123 (<0.5)	--	--	153 (<0.5)	--	--
State	GMU 34A	3,651 (0.8)	4 (<0.5)	--	--	--	--	--	--	--
State	GMU 36A	182 (<0.5)	5,595 (1.4)	--	--	--	--	--	--	--
State	GMU 36B	3,122 (0.9)		--	--	--	--	--	--	--

**Table E4-5 Green Alternative Recreation Sites/Areas within Options: Project Area Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option D	Option F	Option I2	Option L	Option M	Option Q2	Option R	Option U
State	GMU 37A	--	4,877 (0.5)	8,323 (0.8)	--	--	--	--	--	--
State	GMU 38M	--	1,795 (<0.5)	--	--	--	--	--	--	--
State	GMU 39	--	--	--	2,392 (<0.5)	4,478 (<0.5)	4,478 (<0.5)	884 (<0.5)	--	--
State	GMU 41	--	--	--	--	--	--	64 (<0.5)	4,227 (<0.5)	4 (<0.5)
State	GMU 42	--	--	--	--	--	--	--	9 (<0.5)	11,306 (1.2)
State	State Trust Lands	224 (<0.5)	5,019 (<0.5)	2,077 (<0.5)	237 (<0.5)	192 (<0.5)	92 (<0.5)	--	--	1,507 (<0.5)
State	Robbins Butte Wildlife Area	--	--	--	--	--	--	329 (19.6)	--	--
State	PLO 1015							32 (<0.5)		
Local	Palo Verde Regional Park	--	--	--	63 (0.3)	242 (1.1)	--	--	--	--
Local	Historic Hacienda de la Canoa (Raul M. Grijalva Canoa Ranch Conservation Park)	--	416 (8.7)	--	--	--	--	--	--	--
Local	Anamax Recreation Center	--	25 (59.5)	--	--	--	--	--	--	--
Local	Buckeye Hills Regional Park	--	--	--	--	--	70 (1.6)	114 (2.5)	--	--



Table E4-6 Orange Alternative Recreation Sites/Areas within Options: Corridor Acres (% of Total Area)

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option B	Option G	Option H	Option K	Option Q1	Option Q2	Option Q3	Option S
Federal	BLM Undesignated Lands in the Lower Sonoran Field Office	--	--	--	161 (<0.5)	270 (<0.5)	510 (<0.5)	61 (<0.5)	2 (<0.5)	--
Federal	Sonoran Desert National Monument	--	--	--	477 (0.6)	6,133 (8.0)	--	--	--	--
Federal	BLM Undesignated Lands in the Hassayampa Field Office	--	--	--	--	--	--	--	--	3,769 (<0.5)
Federal	Hassayampa SRMA	--	--	--	--	--	--	--	--	4,043 (1.1)
Federal	VMRMZ	--	--	--	--	--	--	--	--	<1 (0.0)
Federal	Tumacacori National Historical Park	4 (1.1)	--	--	--	--	--	--	--	--
Federal	Buckeye Hills East Trails SRMA	--	--	--	--	--	322 (1.2)	208 (0.8)	--	--
Federal	Buckeye Hills West ERMA	--	--	--	--	--	346 (1.6)	241 (1.1)	--	--
State	GMU 20C	--	--	--	--	--	--	--	--	780 (<0.5)
State	GMU 26M	--	--	4,691 (<0.5)	1,446 (<0.5)	--	--	153 (<0.5)	513 (<0.5)	--
State	GMU 34A	3,651 (0.8)	1,987 (0.5)	--	--	--	--	--	--	--
State	GMU 36A	182 (<0.5)	2,047 (0.5)	--	--	--	--	--	--	--
State	GMU 36B	3,122 (0.9)	--	--	--	--	--	--	--	--

**Table E4-6 Orange Alternative Recreation Sites/Areas within Options: Corridor Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option B	Option G	Option H	Option K	Option Q1	Option Q2	Option Q3	Option S
State	GMU 37A	--	1,968 (<0.5)	6,238 (0.6)	--	--	--	--	--	--
State	GMU 38M	--	6,208 (1.3)	--	--	--	--	--	--	--
State	GMU 39	--	--	--	1,426 (<0.5)	6,035 (0.5)	3,860 (<0.5)	884 (<0.5)	--	--
State	GMU 40A	--	--	--	1,511 (<0.5)	4,001 (0.6)	--	--	--	--
State	GMU 41	--	--	--	--	--	--	64 (<0.5)	2,076 (<0.5)	2 (<0.5)
State	GMU 42	--	--	--	--	--	--	--	1,608 (<.5)	11,288 (1.2)
State	Robbins Butte Wildlife Area	--	--	--	--	--	--	329 (19.6)	--	--
State	PLO 1015	--	--	--	--	--	--	32 (<0.5)	--	--
State	Picacho Peak State Park	--	--	173 (4.6)	--	--	--	--	--	--
State	State Trust Lands	224 (<0.5)	138 (<0.5)	2,273 (<0.5)	207 (<0.5)	1,936 (<0.5)	1,548 (<0.5)	--	647 (<0.5)	2,248 (<0.5)
Local	Oury Park	--	7.1 (100)	--	--	--	--	--	--	--
Local	La Mar Park	--	3.2 (100)	--	--	--	--	--	--	--

**Table E4-6 Orange Alternative Recreation Sites/Areas within Options: Corridor Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option B	Option G	Option H	Option K	Option Q1	Option Q2	Option Q3	Option S
Local	El Parque De San Cosme	--	0.8 (100)	--	--	--	--	--	--	--
Local	El Paso and Southwestern Greenway	--	<0.5 mile of trail (5.0)	--	--	--	--	--	--	--
Local	Bonita Park	--	1 (71.4)	--	--	--	--	--	--	--
Local	Garden of Gethsemane	--	1 (76.9)	--	--	--	--	--	--	--
Local	Estevan Park	--	2 (24.3)	--	--	--	--	--	--	--
Local	Francesco Elias Esquer Park	--	1 (15.9)	--	--	--	--	--	--	--
Local	Julian Wash Greenway	--	1.5 miles of trail (10.7)	--	--	--	--	--	--	--
Local	Julian Wash Archaeological Park	--	16 (98.8)	--	--	--	--	--	--	--
Local	Pima Community College, Desert Vista Campus	--	4.5 (100)	--	--	--	--	--	--	--
Local	David G. Herrera and Raymond Quiroz Park	--	6.6 (100)	--	--	--	--	--	--	--

**Table E4-6 Orange Alternative Recreation Sites/Areas within Options: Corridor Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option B	Option G	Option H	Option K	Option Q1	Option Q2	Option Q3	Option S
Local	Historic Hacienda de la Canoa (Raul M. Grijalva Canoa Ranch Conservation Park)	--	416 (8.7)	--	--	--	--	--	--	--
Local	Santa Cruz River Park	--	131 (27.9), 10.5 miles of trail (40)	--	--	--	--	--	--	--
Local	Rillito River Park	--	1 mile of trail (8.3)	--	--	--	--	--	--	--
Local	The Loop	--	13 miles of trail (10.8)	--	--	--	--	--	--	--
Local	Sweetwater Wetlands Park	--	1 (1.7)	--	--	--	--	--	--	--
Local	Ted Walker Park	--	42 (69.4)	--	--	--	--	--	--	--
Local	Canada Del Oro River Park	--	< 1 mile of trail (3.6)	--	--	--	--	--	--	--
Local	Rillito Vista Park	--	1.6 (100)	--	--	--	--	--	--	--
Local	San Lucas Community Park	--	5 (37.0)	--	--	--	--	--	--	--



**Table E4-6 Orange Alternative Recreation Sites/Areas within Options: Corridor Acres (% of Total Area)
(Continued)**

Jurisdiction	Recreation Site/Area Shown as Corridor Acres (% of total area)	South Section			Central Section					North Section
		Option A	Option B	Option G	Option H	Option K	Option Q1	Option Q2	Option Q3	Option S
Local	Anamax Recreation Center	--	33 (78.6)	--	--	--	--	--	--	--
Local	Palo Verde Regional Park	--	--	--	143 (0.7)	284 (1.3)	--	--	--	--
Local	Pinal County West/Korsten Park	--	--	--	47 (29.4)	--	--	--	--	--
Local	Buckeye Hills Regional Park	--	--	--	--	--	232 (5.2)	114 (2.5)	--	--



1 **E4.1.2.2 Purple Alternative**

2 **South Section**

3 Option A

4 *Federal*

5 *Tumacacori National Historical Park.* Approximately 4 acres of the Tumacacori National
6 Historical Park would be located within Option A. Under Option A would be located within the
7 existing right-of-way (ROW) for I-19, thus there would be no need for additional ROWs within
8 the park itself. The park provides recreation opportunities for hiking, interpretation, birdwatching,
9 photography, wildlife viewing, picnicking, horseback riding, and cultural demonstrations. Access
10 to the park is from Exit 29 on I-19 and the frontage road. Impacts to recreation within the park
11 would likely be minimal because I-11 would be located within the existing I-19 ROW and
12 recreation currently occurs fairly close to I-19 at the park. Therefore, there would likely be
13 minimal long-term impact to recreation opportunities, experiences, and the recreation setting of
14 the park.

15 *Nogales Recreation Area.* Option A would not pass through the western portion of the Nogales
16 Recreation Area. Several roads into the western portion of the recreation area originate from
17 I-19 and become USFS-designated routes within the recreation area (USFS 2015). Under
18 Option A, I-11 would be located within the existing I-19 ROW; therefore, there would be minimal
19 impact on views from the nearby Tumacacori Mountains, located within the western portion of
20 the Nogales Recreation Area. Thus, the recreation setting for recreation opportunities within
21 these mountains would be minimally impacted.

22 Option C

23 *Federal*

24 *BLM Undesignated Lands in the Tucson Field Office.* Approximately 459 acres of BLM lands not
25 within a SRMA, ERMA, or national monument (i.e., undesignated) under the jurisdiction of the
26 Tucson Field Office would be located within Option C. Under this Option, I-11 would require a
27 new 400-foot ROW on BLM lands that are not designated for specific uses, but rather are used
28 for a variety of dispersed recreation uses, such as OHV use, hunting, wildlife viewing, hiking,
29 etc. Because I-11 would require a new ROW on BLM land, there would be a loss of acreage for
30 recreation opportunities and also potential “dead-ending” of BLM designated routes, or abrupt
31 ending of designated routes that once continued on to other areas, which could result in the limit
32 or loss of access to some areas and recreation opportunities, as well as alter recreation
33 experiences for some users. Development of I-11 also would result in permanent impacts to the
34 setting of recreation areas along the new roadway, particularly for areas that were natural or
35 natural appearing and would now be more developed. This would especially affect non-
36 motorized recreation opportunities and experiences dependent upon a quiet natural setting. Due
37 to the permanent change in the recreation setting, some users may choose to recreate in
38 another location. Displaced visitors could likely use other nearby BLM lands for their recreation
39 activities. Recreation use of BLM lands also could increase due to increased road access. A
40 significant increase in use could alter recreation experiences due to changes in setting
41 (increased crowding, noise, loss of solitude, etc.).



1 *Ironwood Forest National Monument.* Although no acreage of the Ironwood Forest National
2 Monument would be located within Option C, development of I-11 along Option C could impact
3 recreation within the national monument. Option C would cross access roads to the monument,
4 particularly Avra Valley, which becomes West Silverbell Road. West Silverbell Road provides
5 access to the Waterman Trailhead and interpretive site within the monument (BLM Undated 1).
6 Additional roadway access to the monument also could result in increased use of the
7 monument, which also could affect the recreation setting and visitor experiences. It is assumed
8 that road connectivity to I-10 would be maintained within the proposed project, thereby
9 maintaining connectivity between the monument and other nearby recreation areas that
10 recreationists also may visit, thereby reducing potential permanent road access impacts to
11 recreation.

12 *Saguaro National Park.* Although Option C would not include any acreage within the SNP, the
13 alignment for the Option would cross the main access road for the west side of the Tucson
14 Mountain District of the park, Sandario Road, and would pass near the far western portion of the
15 park. Sandario Road is a main access road to the Tucson Mountain District of the park,
16 providing access to several trails, a scenic loop road, and the road to the visitor center. Option C
17 would require a new 400-foot ROW and would not be co-located with an existing roadway.
18 Additional roadway access to the park also could result in increased use of the park, which also
19 could affect the recreation setting and visitor experiences.

20 *Local*

21 *Tucson Mountain Park.* Although Option C would not include any acreage within the Tucson
22 Mountain Park, the alignment for the Option would cross Sandario Road and Mile Wide Road,
23 both of which provide access to the park from the west and the most direct access to the
24 Arizona-Sonora Desert Museum within the park. Option C does not pass close to the park and
25 therefore would likely have minimal to no effect on recreation settings and experiences.

26 Option G

27 *State*

28 *Picacho Peak State Park.* Approximately 173 acres of Picacho Peak State Park would be within
29 Option G. The Corridor Option would pass through portions of the park with no recreation
30 facilities other than access roads. Under Option G, I-11 would be located within the existing I-10
31 ROW. I-11 would be located within the existing I-10 ROW and would be a similar lane
32 configuration, there would be minimal impact on views from the nearby trails and Picacho Peak.
33 Therefore, there would likely be minimal long-term impact to recreation opportunities,
34 experiences, and the recreation setting of the park.

35 Central Section

36 Option I2

37 *Local*

38 *Palo Verde Regional Park.* Approximately 63 acres of Palo Verde Regional Park would be within
39 Option I2. This Option would cross lands along Vekol Wash, although these lands are not
40 included within the December 2016 Preferred Alternative map of the park from the Master Plan
41 (Pinal County 2016). The Project Area would, however, cross a Pinal County conceptual trail
42 alignment shown in the Master Plan that would connect the southern and northern portions of



1 the park. Recreation opportunities are proposed in the southern portion of the park and would
2 be available for any displaced recreation users. Permanent impacts to the park in this area
3 could include division of the two portions of the park due to the crossing of the proposed trail
4 alignment, changes to the recreation setting, and potentially increased access and use of the
5 park.

6 Option L

7 *Federal*

8 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 1,164 acres of BLM
9 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
10 jurisdiction of the Lower Sonoran Field Office would be located within Option L. Under this
11 Option, I-11 would require a new 400-foot ROW on BLM lands that are not designated for
12 specific uses, but rather are used for a variety of dispersed recreation uses, such as OHV use,
13 hunting, wildlife viewing, hiking, etc. Because I-11 would require new ROW on BLM land, there
14 would be a permanent loss of acreage for recreation opportunities and also potential
15 “dead-ending” of BLM designated routes, or abrupt ending of designated routes that once
16 continued on to other areas, which could result in the limit or loss of access to some areas and
17 recreation opportunities, as well as alter recreation experiences for some users. Development of
18 I-11 also would result in permanent impacts to the setting of recreation areas along the new
19 roadway, particularly for areas that were natural or natural appearing and would now be more
20 developed. This would especially affect non-motorized recreation opportunities and experiences
21 dependent upon a quiet natural setting. Due to the permanent change in the recreation setting,
22 some users may choose to recreate in another location. Recreation use of BLM lands also could
23 increase due to increased road access. A significant increase in use could alter recreation
24 experiences due to changes in setting (increased crowding, noise, loss of solitude, etc.).

25 *Juan Bautista de Anza NHT Management Area.* 471 acres of the Juan Bautista de Anza NHT
26 Management Area would be located within Option L. This area is managed by BLM to enhance
27 the experience of visitors and maintain the integrity of the Anza Trail, associated sites, and
28 visual setting. Under Option L, I-11 would require a new 400-foot ROW and would not be
29 co-located with another roadway. Therefore, the recreation setting and recreation experiences
30 for Anza Trail-based recreation opportunities would be significantly impacted as well. In
31 addition, because I-11 would require a new ROW, there would be reductions in recreation
32 opportunities within the Juan Bautista de Anza NHT Management Area. Development of I-11
33 could affect access to the NHT management area due to its crossing of Highway 238 and
34 potentially smaller roads that access BLM lands within the management area. Access
35 disruptions or closures could affect visitors’ ability to participate in recreation opportunities and
36 would affect recreation experiences.

37 *Sonoran Desert National Monument.* Although no acreage within the Sonoran Desert National
38 Monument would be within Option L, development of I-11 within this corridor could affect
39 recreation within the monument. Under Option L, I-11 would require a new 400-foot ROW.
40 Option L runs adjacent to the northeastern side of the monument. Option L also would cross
41 Maricopa Road/Highway 238, which is a main thoroughfare through the monument
42 (BLM Undated 2). Because development of I-11 would require a new ROW and would not be
43 co-located with an existing roadway, the I-11 facility would have permanent impacts to the
44 recreation setting and recreation experiences within the monument due to the change from a
45 natural or natural appearing environment to a more developed environment.



1 *Local*

2 *Palo Verde Regional Park.* Approximately 242 acres of Palo Verde Regional Park would be
3 within Option L. Option L would run through the southwest corner of the northern portion of the
4 park, which is proposed for motorized trail use. The Corridor Option would cross an existing
5 BLM two-track route, which leads towards the southern portion of the park, and north to an
6 intersection with other existing routes. The existing BLM route that Option L would cross is not
7 an anticipated entrance to the park. Permanent impacts to the park in this area could include
8 division of the two portions of the park due to the crossing of the existing BLM route that
9 connects both portions of the park, changes to the recreation setting, and potentially increased
10 access and use of the park due to the new I-11 facility.

11 Option N

12 *Federal*

13 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 157 acres of BLM
14 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
15 jurisdiction of the Lower Sonoran Field Office would be located within Option N. Impacts to
16 recreation on these lands would be similar to those described for Option L.

17 Option R

18 *Federal*

19 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 81 acres of BLM
20 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
21 jurisdiction of the Lower Sonoran Field Office would be located within Option R. Impacts to
22 recreation on these lands would be similar to those described for Option L.

23 North Section

24 Option X

25 *Federal*

26 *Undesignated BLM Lands in the Hassayampa Field Office.* Approximately 1,823 acres of BLM
27 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
28 jurisdiction of the Hassayampa Field Office would be included within Option X. Impacts to
29 recreation on these lands would be similar to those described for Purple Alternative – Option I2
30 for undesignated lands under the jurisdiction of the Lower Sonoran Field Office.

31 *Hassayampa SRMA.* This SRMA provides opportunities for geocaching, dispersed camping,
32 rockhounding, shooting, OHV use, competitive motorized event use, hiking, and biking.
33 Approximately 5,931 acres of the SRMA would be located within Option X. Development of I-11
34 through the SRMA under Option X would result in displacement of users to other lands within
35 the SRMA or other nearby recreation areas, as well as loss of lands for recreation. The new
36 roadway would result in changes to the recreation setting from presence of the roadway (and
37 any ancillary facilities), particularly for areas considered semi-primitive (either motorized or non-
38 motorized on the Recreation Opportunity Spectrum), where the area is predominantly natural or
39 natural appearing. This would especially affect recreation experiences for non-motorized
40 recreation opportunities such as hiking and biking. Due to the limited presence of areas open to



1 motorized special events, closure of any trails or routes for competitive motorized events would
2 result in an adverse impact to recreation.

3 *VMRMZ*. Option X would encompass 1,915 acres of the *VMRMZ*. Although there are no
4 facilities planned within the *VMRMZ* where Option X would be located (Maricopa County Parks
5 and Recreation 2012), this Option would be located farthest east and thus would fragment the
6 recreation area the most due to a slightly larger amount of the area cut-off/isolated from the rest
7 of the recreation area by the interstate. This would particularly affect motorized recreation uses
8 (motorcycle use, OHV use, OHV backcountry camping, etc.) or uses that rely on motorized
9 routes for access if designated routes become “dead-ended” or abruptly end at the new
10 interstate roadway instead of continuing throughout the recreation area and/or out to other BLM
11 lands farther west. Other impacts to recreation within the *VMRMZ* would be similar to those
12 described for the *Hassayampa SRMA*. Displaced recreationists from *Vulture Mountains* could
13 potentially relocate to other areas within the *SRMA* or *Vulture Mountains* further east. This
14 Corridor Option would be located farthest east within the recreation area and, therefore, would
15 have the highest likelihood of affecting the recreation setting for future facilities within the area, if
16 the new roadway was visible or audible from the proposed facilities.

17 **E4.1.2.3 Green Alternatives**

18 **South Section**

19 Option A

20 *Federal*

21 *Tumacacori National Historical Park*. Approximately 4 acres of the *Tumacacori National*
22 *Historical Park* would be located within Option A. Impacts to recreation within this park would be
23 the same as those described under Purple Alternative – Option A.

24 *Nogales Recreation Area*. Impacts to the *Nogales Recreation Area* would be the same as those
25 described under Purple Alternative – Option A.

26 Option D

27 *Federal*

28 *BLM Undesignated Lands in the Tucson Field Office*. Approximately 564 acres of BLM lands not
29 within a *SRMA*, *ERMA*, or national monument (i.e., undesignated) under the jurisdiction of the
30 *Tucson Field Office* would be located within Option D. Impacts to recreation on these lands
31 would be similar to those described for Purple Alternative – Option C.

32 *Ironwood Forest National Monument*. Although no acreage within the *Ironwood Forest National*
33 *Monument* would be located within Option D, development of I-11 along this Option could
34 impact recreation within the monument. Impacts to recreation within the monument under
35 Option D would be the same as those described under Purple Alternative – Option C.

36 *Saguaro National Park*. Although no acreage of the *SNP* would be located within Option D,
37 development of I-11 along this Option could impact recreation within the park. Impacts to
38 recreation within the park under Option D would be the same as those described under Purple
39 Alternative – Option C.



1 *Local*

2 *Tucson Mountain Park.* Impacts to recreation within the Tucson Mountain Park under Option D
3 would be the same as those described under Purple Alternative – Option C.

4 *Historic Hacienda de la Canoa (Raul M. Grijalva Canoa Ranch Conservation Park).*

5 Approximately 416 acres of Option D would be located within the Historic Hacienda de la
6 Canoa. I-11 under Option D would be located within the existing ROW for I-19. The park
7 provides recreation opportunities for environmental education, star gazing, bird watching, and
8 cultural demonstrations. Access to the park is from Exit 56 on I-19 and the frontage road.
9 Impacts to the park would likely be minimal because I-11 would be located within the existing
10 I-19 facility and most of the main park area (main ranch complex) is outside the Study Area,
11 therefore reducing visual and audible effects from the expanded interstate. Therefore, there
12 would likely be minimal long-term impact to recreation opportunities, experiences, and the
13 recreation setting of the park.

14 *Anamax Recreation Center.* Approximately 25 acres of the Anamax Recreation Center would be
15 within Option D. Development of I-11 within this park would result in the loss of facilities and
16 acreage for recreation, potentially eliminating some recreation opportunities from the park.
17 Development of I-11 under Option D would have an impact on recreation at Anamax Recreation
18 Center.

19 Option F

20 *Federal*

21 *Ironwood Forest National Monument.* Although no acreage of the Ironwood Forest National
22 Monument would be located within Option F, development of I-11 along Option F could impact
23 recreation within the monument. Option F would cross access roads to the monument,
24 particularly Sasco and Silverbell roads, which are the two main access roads to the Silverbell
25 Group Campsite and two of the three main roads within the monument (BLM Undated 1).
26 Option F would require a new 400-foot ROW and also would pass fairly close to the eastern
27 side of the monument. Recreation opportunities within the monument include primitive camping,
28 hunting, hiking, mountain biking, horseback riding, wildlife viewing, plant viewing, photography,
29 birdwatching, sightseeing, fossil and geological resource viewing, and visiting historic and
30 archeological sites. Because development of I-11 would require a new ROW and would not be
31 co-located with an existing roadway, I-11 would have impacts to the recreation setting and
32 recreation experiences within the east side of the monument due to the change from a natural
33 or natural appearing environment to a more developed environment. Additional roadway access
34 to the monument also could result in increased use of the monument, which also could affect
35 the recreation setting and visitor experiences. It is assumed that road connectivity to I-10 would
36 be maintained, thereby maintaining connectivity between the monument and other nearby
37 recreation areas that recreationists also may visit.



1 **Central Section**

2 **Option I2**

3 *Local*

4 *Palo Verde Regional Park.* Approximately 63 acres of the Palo Verde Regional Park would be
5 located within the Project Area of Option I2. Impact of this Option on recreation within the park
6 would be the same as those described under Purple Alternative – Option I2.

7 **Option L**

8 *Federal*

9 *Undesignated BLM Lands in the Lower Sonoran Field Office.* 1,164 acres of BLM lands not
10 within a SRMA, ERMA, or national monument (i.e., undesignated) under the jurisdiction of the
11 Lower Sonoran Field Office would be included within Option L. Impacts of this Option on
12 recreation within these BLM lands would be the same as those described under Purple
13 Alternative – Option L.

14 *Juan Bautista de Anza NHT Management Area.* 471 acres of the Juan Bautista de Anza NHT
15 Management Area would be located within Option L. Impacts on recreation within this
16 management area would be the same as those described under Purple Alternative – Option L.

17 *Sonoran Desert National Monument.* Impacts to the Sonoran Desert National Monument under
18 Option L would be the same as those described under Purple Alternative – Option L.

19 *Local*

20 *Palo Verde Regional Park.* Approximately 242 acres of Palo Verde Regional Park would be
21 located within the Project Area for Option L. Impacts of this Option on recreation within the park
22 would be the same as those described under Purple Alternative – Option L.

23 **Option M**

24 *Federal*

25 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 3,103 acres of BLM
26 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
27 jurisdiction of the Lower Sonoran Field Office would be located within Option M. Impacts to
28 recreation on these lands would be similar to those described for Purple Alternative – Option I2.

29 *Buckeye Hills East Trails SRMA.* Approximately 1,017 acres of Option M would be within BLM's
30 Buckeye Hills East Trails SRMA. Under Option M, I-11 would require a new 400-foot ROW and
31 would not be co-located with an existing facility. Therefore, there would be ROW required within
32 the SRMA. Because I-11 would require a new ROW on BLM land, there would be a permanent
33 loss of acreage for recreation opportunities and also potential "dead-ending" of BLM designated
34 routes, or abrupt ending of designated routes that once continued on to other areas, which
35 could result in the limit or loss of access to some areas and recreation opportunities, as well as
36 alter recreation experiences for some users. Development of I-11 also would result in
37 permanent impacts to the setting of recreation areas along the new roadway, particularly for
38 areas that were natural or natural appearing and would now be more developed. This would
39 especially affect non-motorized recreation opportunities and experiences dependent upon a



1 quiet natural setting. Due to the permanent change in the recreation setting, some users may
2 choose to recreate in another location. Temporary and permanently displaced visitors could
3 likely use other nearby BLM lands for their recreation activities. Recreation use of BLM lands
4 also could increase due to increased road access. A significant increase in use could alter
5 recreation experiences due to changes in setting (increased crowding, noise, loss of solitude,
6 etc.).

7 *Sonoran Desert National Monument.* Although no acreage within the Sonoran Desert National
8 Monument would be within Option M, development of I-11 could affect recreation within the
9 monument. Under Option M, I-11 would require a new 400-foot ROW. The North Maricopa
10 Mountains wilderness area is located just south of the Option M. Because development of I-11
11 would require a new ROW and would not be co-located with an existing roadway, I-11 would
12 have impacts to the recreation setting and recreation experiences within the monument,
13 including the North Maricopa Mountains wilderness area, due to the change from a natural or
14 natural appearing environment to a more developed environment. Additional roadway access to
15 this portion of the monument also could result in increased use of the monument and/or
16 wilderness area, which also could affect the recreation setting and visitor experiences. In
17 addition, I-11 could result in permanent access changes to the monument and its connectivity to
18 adjacent BLM lands due to route “dead-ending.”

19 *Local*

20 *Buckeye Hills Regional Park.* Approximately 70 acres of Option M would be within the Buckeye
21 Hills Regional Park. Within Option M, I-11 would be a new 400-foot ROW not co-located with an
22 existing roadway and would join Highway 85 at or near the intersection with Buckeye Hills Drive.
23 Recreation opportunities within this portion of the park include shooting at the public shooting
24 complex and picnicking. Access to the park is located off Buckeye Hills Drive, which connects to
25 Highway 85. Additional roadway access could lead to increased use of the park. Depending on
26 the potential increase in use, the recreation setting and/or experience may change for some
27 visitors. Impacts to the recreation setting and recreation experiences within the park from
28 Option M would likely be minimal because I-11 would be located primarily within the existing
29 Highway 85 ROW adjacent to the park.

30 Option Q2

31 *Federal*

32 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 61 acres of BLM
33 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
34 jurisdiction of the Lower Sonoran Field Office would be located within Option Q2. Impacts to
35 recreation on these lands would be similar to those described for Purple Alternative – Option L,
36 except under Option Q2, I-11 would be within the existing ROW for Highway 85; therefore, there
37 would be no ROW needed within BLM lands and there would be no recreation impacts due to
38 the expanded ROW.

39 *Buckeye Hills East Trails SRMA.* Approximately 208 acres of Option Q2 would be within BLM's
40 Buckeye Hills East Trails SRMA. The SRMA is managed by BLM to provide motorized and non-
41 motorized recreation trail opportunities including OHV use, hiking, and horseback riding, as well
42 as opportunities for picnicking, camping, photography, target shooting, and sightseeing. I-11
43 would be located within the existing ROW for Highway 85; therefore, no additional ROW within
44 the SRMA would be needed. Impacts to the recreation setting and recreation experiences within
45 the SRMA would likely be minimal because I-11 would be located within the existing



1 Highway 85 ROW with a similar lane configuration. Because no additional ROW would be
2 required under this Option, permanent impacts to access roads would not be expected.

3 *Buckeye Hills West ERMA.* Approximately 241 acres of Option Q2 would be within BLM's
4 Buckeye Hills West ERMA. The ERMA is managed for motorized and non-motorized
5 recreational activities including OHV touring, hiking, sightseeing, wildlife viewing, photography,
6 and hunting. Within Option Q2, I-11 would be located within the existing Highway 85 ROW.
7 Impacts to recreation within the ERMA would be similar to those described for the Buckeye Hills
8 East Trails SRMA under Option Q2.

9 *State*

10 *Robbins Butte Wildlife Area.* PLO 1015 Option Q2 would include 329 acres of the Robbins Butte
11 Wildlife Area. Option Q2 would be co-located with Highway 85 and I-11 would either replace the
12 existing lanes on Highway 85 (south of the Gila River) or would be built within the median of the
13 existing highway (north of the Gila River). The Robbins Butte Wildlife Area, encompasses AGFD
14 Commission owned (deeded) lands and PLO 1015 lands managed by AGFD through a
15 Memorandum of Understanding between the AGFD Commission and the USFWS. PLO 1015
16 lands were reserved under the jurisdiction of the Department of the Interior, USFWS for wildlife
17 refuge purposes. It provides recreation opportunities for hunting and bird watching. Permanent
18 impacts from development of I-11 within the wildlife area include potential long-term changes in wildlife
19 presence due to the additional traffic (compared to the existing Highway 85) and changes in hunting
20 locations, potential increases in access to the wildlife area for both hunters and birdwatchers, and
21 alteration of the recreation setting to a more developed setting through the wildlife area, primarily
22 north of the Gila River where additional lanes would be added. Impacts to the recreation setting also
23 could affect recreation experience quality for hunters and bird watchers.

24 *Local*

25 *Buckeye Hills Regional Park.* Approximately 114 acres of the Buckeye Hills Regional Park
26 would be within Option Q2. Impacts to the recreation setting and recreation experiences within
27 the park would likely be minimal because I-11 would be located within the existing Highway 85
28 ROW with a similar lane configuration. Impacts to recreation from alterations to access roads
29 are discussed under Option M.

30 Option R

31 *Federal*

32 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 81 acres of BLM
33 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
34 jurisdiction of the Lower Sonoran Field Office would be located within Option R. Impacts to
35 recreation on these lands would be similar to those described for Purple Alternative – Option R.

36 North Section

37 Option U

38 *Federal*

39 *Undesignated BLM Lands in the Hassayampa Field Office.* Approximately 1,996 acres of BLM
40 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the



1 jurisdiction of the Hassayampa Field Office would be included within Option U. Impacts of this
2 Option on recreation within these BLM lands would be the same as those described under
3 Purple Alternative – Option X.

4 *Hassayampa SRMA*. Approximately 5,878 acres of the SRMA would be located within Option U.
5 Impacts to recreation within this SRMA would be the same as those described for Purple
6 Alternative – Option X.

7 *VMRMZ*. Option U would encompass 1,858 acres of the VMRMZ. Impacts to recreation within
8 the VMRMZ under Option U would be the same as those described for Purple Alternative –
9 Option X; however, this Option would be located slightly west of Option X and therefore would
10 result in slightly less fragmentation and would have a lower likelihood of altering the recreation
11 setting for future facilities.

12 **E4.1.2.4 Orange Alternative**

13 **South Section**

14 Option A

15 *Federal*

16 *Tumacacori National Historical Park*. Approximately 4 acres of the Tumacacori National
17 Historical Park would be located within Option A. Impacts to recreation within this park would be
18 the same as those described under Purple Alternative – Option A.

19 *Nogales Recreation Area*. Impacts to the Nogales Recreation Area would be the same as those
20 described under Purple Alternative – Option A.

21 Option B

22 *Local*

23 *Oury Park, La Mar Park, El Parque de San Cosme, Bonita Park, Garden of Gethsemane, Julian*
24 *Wash Archeological Park, Pima Community College (Desert Vista Campus), David G. Herrera*
25 *and Raymond Quiroz Park, Ted Walker Park, Rillito Vista Park, and Anamax Recreation Center*.
26 For these parks, Option B would include 69 to 100 percent of the park (for acreages within each
27 park [see **Table E4-6**]). I-11 under Option B would be located within the existing ROW for I-19
28 and I-10, with additional lanes being added within the center or on the outside of the existing
29 lanes. Because the interstate would be widened within the existing ROW, there would be no
30 need for a ROW within these parks. Some users may be displaced to other nearby parks that
31 provide similar recreation opportunities. Access to these parks would likely not be significantly
32 affected as they are not directly accessed off the existing interstate. Impacts to these parks
33 would include changes to recreation settings and experiences due to additional traffic on the
34 interstate and additional background noise.

35 *Estevan Park, Francesco Elias Esquer Park, Sweetwater Wetlands Park, and San Lucas*
36 *Community Park*. Option B would include 2 acres within Estevan Park, 1 acre within Francesco
37 Elias Esquer Park, 1 acre within Sweetwater Wetlands Park, and 5 acres within San Lucas
38 Community Park. Option B would encompass 2 to 24 percent of these parks as they are located
39 primarily outside of the Project Area. Impacts to recreation within these parks would be similar



1 to those listed above; however, because these parks are located further from the Project Area,
2 there would be less impact from a change in the recreation setting.

3 *El Paso and Southwestern Greenway.* Less than 0.5 mile of the El Paso and Southwestern
4 Greenway trail would be located within Option B. I-11 under Option B would be located within
5 the existing ROW for I-19, with additional lanes being added within the center of the existing
6 roadway. Development of I-11 would likely have minimal permanent impact on the trail setting or
7 experiences, particularly if I-11 was completed prior to the planned segments of the trail,
8 because additional roadway lanes would be located in the center of the roadway away from the
9 trail.

10 *Julian Wash Greenway.* Approximately 1.5 miles at the western end of the Julian Wash
11 Greenway trail where it crosses I-19 and within Julian Wash Archeological Park, would be within
12 Option B. I-11 under Option B would be located within the existing ROW for I-19, with additional
13 lanes being added within the center of the existing roadway; therefore, no additional ROW
14 within the greenway would be needed. Impacts to recreation on the trail would likely be minimal
15 as the trail already crosses the interstate and it is assumed that trail crossing of the interstate
16 would continue to be provided for any new lanes added. Changes to the recreation setting
17 would likely be minimal at this location due to the undercrossing of the trail and movement of
18 users away from the noise of the roadway due to the nature of the facility (Pima County
19 Undated 2).

20 *Rillito River Park.* Approximately 1 mile, at the western end of the river park where it connects
21 with the Santa Cruz River Park at the I-19 crossing, would be located within Option B. Impacts
22 would be similar to those described above for the Julian Wash Greenway (Pima County
23 Undated 3).

24 *Canada Del Oro River Park.* Less than 1 mile of the Canada Del Oro River Park trail, where the
25 trail connects with the Santa Cruz River Park trail at I-19, would be within Option B. Impacts
26 would be similar to those described above for the Julian Wash Greenway (Pima County
27 Undated 1).

28 *Santa Cruz River Park.* Approximately 10.5 miles of trail and 131 acres of the Santa Cruz River
29 Park would be located within Option B. I-11 under Option B would be located within the existing
30 ROW for I-19, with additional lanes being added within the center of the existing roadway;
31 therefore, an additional ROW within the park would not be needed. The Santa Cruz River runs
32 west (parallel) to I-19, with the park's trail running along both sides of the river in many areas
33 (Pima County Undated 4 and 5). Access to the park would likely not be significantly affected as
34 there are numerous access points to the park. Permanent recreation setting and experience
35 impacts for Santa Cruz River Park users would likely be minimal as the park already parallels an
36 interstate roadway and additional lanes would be located within the center of the roadway away
37 from the park.

38 *The Loop.* Approximately 13 miles of The Loop trail would be located in Option B. Segments of
39 The Loop trail within the Project Area would be located at the Canada Del Oro River Park,
40 Julian Wash Greenway, Rillito River Park, Santa Cruz River Park, and Ted Walker Park.
41 Impacts to these areas are described above. The Loop trail is a unique trail facility that provides
42 long distance trail opportunities and closure of the only three east/west connections would
43 greatly limit the long distance opportunities and round-trip trail opportunities (Pima County
44 2017).



1 *Historic Hacienda de la Canoa (Raul M. Grijalva Canoa Ranch Conservation Park).*
2 Approximately 416 acres of the Option B Project Area would be located within the Historic
3 Hacienda de la Canoa. Impacts to recreation at this park would be the same as those described
4 under Green Alternative – Option D.

5 Option G

6 *State*

7 *Picacho Peak State Park.* Approximately 173 acres within Picacho Peak State Park would be
8 located within Option G. Impacts to recreation at the park would be the same as those
9 described for Purple Alternative – Option G.

10 Central Section

11 Option H

12 *Federal*

13 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 161 acres of BLM
14 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
15 jurisdiction of the Lower Sonoran Field Office would be located within Option H. Impacts to
16 recreation on these lands would be similar to those described for Purple Alternative – Option L,
17 except under Option H, I-11 would be within the existing ROW for I-8. Therefore, there would be
18 no ROW needed within BLM lands and there would be no recreation impacts due to the
19 expanded ROW.

20 *Sonoran Desert National Monument.* Approximately 477 acres of the Option H would be within
21 the BLM-managed Sonoran Desert National Monument. Recreation opportunities within the
22 monument include visiting historic and archeological sites, hiking, horseback riding, hunting,
23 wildlife viewing, OHV use, mountain biking, backpacking, sightseeing, photography, and
24 stargazing. I-11 would be within the existing ROW of I-8; therefore, no additional ROW within
25 the National Monument would be needed. Impacts to the recreation setting and recreation
26 experiences within the monument (including the Table Top Wilderness Area) would likely be
27 minimal because I-11 would be located within the existing I-8 ROW with a similar lane
28 configuration. Because no additional ROW would be required under this option, permanent
29 impacts to access would not be expected.

30 *Local*

31 *Palo Verde Regional Park.* Approximately 143 acres of Palo Verde Regional Park would be
32 within Option H. The Project Area would run along the southern edge of the park where there
33 are no anticipated facilities (Pinal County 2016). There is, however, a designated BLM two-track
34 route that crosses I-8 in this area that could be impacted. I-11 would be within the existing ROW
35 for I-8 under this Option, thus there would be no need for an additional ROW within the park
36 itself. Impacts to the park would likely be minimal because the I-11 facility would be located
37 within the existing I-8 facility and recreation currently occurs near/adjacent to I-8 in the park (on
38 the existing BLM route). Therefore, there would likely be minimal long-term impact to recreation
39 opportunities, experiences, and the recreation setting of the park.

40 *Pinal County West/Korsten Park.* Although 47 acres of this local county park would be within
41 Option H, I-11 would be within the existing ROW for I-8 under this option; thus, there would be



1 no need for an additional ROW within the park itself. Access to the park is off Highway 84;
2 therefore, access delays would likely not be an issue at this park. Permanent impacts to the
3 park would likely be minimal because I-11 would be located within the existing I-8 facility and
4 recreation currently occurs fairly close to I-8 at the park. Therefore, there would likely be
5 minimal long-term impact to recreation opportunities, experiences, and the recreation setting of
6 the park.

7 Option K

8 *Federal*

9 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 270 acres of BLM
10 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
11 jurisdiction of the Lower Sonoran Field Office would be located within Option K. Impacts to
12 recreation on these lands would be similar to those described for Option H.

13 *Sonoran Desert National Monument.* Approximately 6,134 acres of Option K would be within the
14 BLM-managed Sonoran Desert National Monument. Under this Option, I-11 would be within the
15 existing ROW of I-8; therefore, no additional ROW within the monument would be needed.
16 Impacts to the recreation setting and recreation experiences within the monument (including the
17 South Maricopa Mountains wilderness area) would be minimal because I-11 would be located
18 within the existing I-8 ROW with a similar lane configuration. Because no additional ROW would
19 be required under this option, permanent impacts to access roads would not be expected.

20 *Local*

21 *Palo Verde Regional Park.* Approximately 284 acres of Palo Verde Regional Park would be
22 within Option K. Impacts to recreation within this park would be similar to those described under
23 Option H, except no designated BLM routes would be within the Project Area.

24 Option Q1

25 *Federal*

26 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 510 acres of BLM
27 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
28 jurisdiction of the Lower Sonoran Field Office would be located within Option Q1. Impacts to
29 recreation on these lands would be similar to those described for Option H.

30 *Buckeye Hills East Trails SRMA.* Approximately 322 acres of Option Q1 would be within BLM's
31 Buckeye Hills East Trails SRMA. Impacts to recreation within the SRMA would be similar to
32 those describe under Green Alternative – Option Q2.

33 *Buckeye Hills West ERMA.* Approximately 346 acres of Option Q1 would be within BLM's
34 Buckeye Hills West ERMA. The ERMA is managed for motorized and non-motorized
35 recreational activities including OHV touring, hiking, sightseeing, wildlife viewing, photography
36 and hunting. Within Option Q1, I-11 would replace the existing lanes of Highway 85; thus, there
37 would be no need for an additional ROW within the ERMA. Impacts to recreation within the
38 ERMA would be similar to those described for the Buckeye Hills East Trails SRMA under Green
39 Alternative – Option Q2.



1 *Sonoran Desert National Monument.* Although no acreage within the Sonoran Desert National
2 Monument would be within Option Q1, development of I-11 within this corridor could affect
3 recreation within the monument. Under Option Q1, I-11 would replace the existing lanes of
4 Highway 85. The North Maricopa Mountains wilderness area is located east of Highway 85
5 within this Option (BLM Undated 2). Impacts to the recreation setting and recreation
6 experiences within the monument (including the North Maricopa Mountains wilderness area)
7 would likely be minimal because I-11 would be located within the existing Highway 85 ROW with
8 a similar lane configuration. Because no additional ROW would be required under this option,
9 permanent impacts to access roads would not be expected.

10 *Local*

11 *Buckeye Hills Regional Park.* Approximately 232 acres of Option Q1 would be within the
12 Buckeye Hills Regional Park. Within Option Q1, I-11 would replace the existing lanes of
13 Highway 85, thus there would be no need for additional temporary or permanent ROWs within
14 the park itself. Recreation opportunities within this portion of the park include shooting and
15 picnicking. Impacts to the recreation setting and recreation experiences within the park would
16 likely be minimal because I-11 would be located within the existing Highway 85 ROW with a
17 similar lane configuration. Access to the park is located off Buckeye Hills Drive, which connects
18 to Highway 85. It is assumed that permanent access to the park would be part of I-11
19 development. Additional roadway access could lead to increased use of the park. Depending on
20 the potential increase in use, the recreation setting and/or experience may change for some
21 visitors.

22 Option Q2

23 *Federal*

24 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 61 acres of BLM
25 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
26 jurisdiction of the Lower Sonoran Field Office would be included within the Project Area for
27 Option Q2. Impacts of this option on recreation within these BLM lands would be the same as
28 those described under Green Alternative – Option Q2.

29 *Buckeye Hills East Trails SRMA.* Approximately 208 acres of the Buckeye Hills East Trails
30 SRMA would be located within Option Q2. Impacts of this option on recreation within the SRMA
31 would be the same as those described under Green Alternative – Option Q2.

32 *Buckeye Hills West ERMA.* Approximately 241 acres of Option Q2 would be located within the
33 Buckeye Hills West ERMA. Impacts of Option Q2 on recreation within the ERMA would be the
34 same as those described under Green Alternative – Option Q2.

35 *State*

36 *Robbins Butte Wildlife Area.* Approximately 329 acres of the Robbins Butte Wildlife Area would
37 be located within the Option Q2 Project Area. Impacts of this option on recreation within the
38 wildlife area would be the same as those described under Green Alternative – Option Q2.



1 *Local*

2 *Buckeye Hills Regional Park.* Approximately 114 acres of Option Q2 would be located within the
3 Buckeye Hills Regional Park. Impacts of this Option on recreation within the park would be the
4 same as those described under Green Alternative – Option Q2.

5 Option Q3

6 *Federal*

7 *Undesignated BLM Lands in the Lower Sonoran Field Office.* Approximately 2 acres of BLM
8 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
9 jurisdiction of the Lower Sonoran Field Office would be included within Option Q3. Impacts of
10 this option on recreation within these BLM lands would be the same as those described under
11 Option H.

12 **North Section**

13 Option S

14 *Federal*

15 *Undesignated BLM Lands in the Hassayampa Field Office.* Approximately 3,769 acres of BLM
16 lands not within a SRMA, ERMA, or national monument (i.e., undesignated) under the
17 jurisdiction of the Hassayampa Field Office would be included within the Project Area for
18 Option S. Impacts of this option on recreation within these BLM lands would be the same as
19 those described under Purple Alternative – Option X.

20 *Hassayampa SRMA.* Approximately 4,043 acres of the SRMA would be located within the
21 Option S Project Area. Impacts would be the same as those described for Purple Alternative –
22 Option X.

23 *VMRMZ.* Option S would encompass less than 1 acre of the VMRMZ. Although the VMRMZ
24 would be within the 2,000-foot-wide corridor for Option S, the anticipated alignment of I-11 is
25 expected to skirt the edge of this recreation area and thus would have substantially reduced
26 impacts to recreation compared to the other two Options that pass through this recreation area.
27 Impacts to recreation within the VMRMZ under Option S would be similar to those described for
28 the recreation area and Hassayampa SRMA under Purple Alternative – Option X.



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