

4.10 Land Use and Planning

The purpose of this Section is to identify existing land use within the Project area, analyze potential impacts to land use associated with the development of the proposed Project, and identify mitigation measures that would avoid or reduce any significant impacts identified. Thresholds of significance for the impact analysis are derived from Appendix G of the 2011 *CEQA Guidelines*.

In addition, this Section also addresses socioeconomics and environmental justice issues. While analysis of these two issue topics is not required under CEQA, it is required as part of the federal environmental review process under NEPA. As a result, these issue topics have been addressed in this EIR in the event of federal agency(s) involvement in the Project during the permit approval process and potential funding process.

For socioeconomics, the purpose of this Section is to describe the existing socioeconomic conditions in the Project area related to employment and income, analyze potential impacts to these factors associated with the development of the proposed Project, and identify mitigation measures that would avoid or reduce any significant impacts identified.

For environmental justice, the purpose of this Section is to describe the existing occurrence, distribution, and status of minority or disadvantaged communities in the Project area; analyze potential impacts to these communities and determine whether, in light of all the facts and circumstances, a disproportionately high and adverse human health or environmental impact on minority populations or low-income populations is likely to result; and identify mitigation measures that would avoid or reduce any significant impacts identified.

The thresholds of significance for the socioeconomics impact analysis are based on guidance from the 2011 *CEQA Guidelines* (Section 15131) and on NEPA provisions (Title 40, Code of Federal Regulations, Sections 1508.8[b], 1508.14). The thresholds of significance for environmental justice are based on *Executive Order 12898*¹ and federal guidance.

4.10.1 Environmental Setting

Regional Land Use Setting

The Project area is located in a remote, unincorporated part of the Mojave Desert in eastern San Bernardino County. San Bernardino County is the largest county in the contiguous 48 United States with a land mass of more than 20,000 square miles. Approximately 90 percent of the County consists of desert and mountains.

The cities and communities closest to the Project include Barstow, Needles, Twentynine Palms, Amboy, and Chambless. Two military installations are also located in the region. The U.S.

¹ Council on Environmental Quality, *Environmental Justice Guidance Under the National Environmental Policy Act*, December 1997, pages 3-17.

Marine Corps Air Ground Combat Center in Twentynine Palms is located approximately 40 miles southwest of the Project site and occupies approximately 930 square miles, including an airfield. Fort Irwin, an Army installation, is located approximately 80 miles northwest of the Project site and occupies approximately 995 square miles.

BLM manages lands in the region for multiple uses that include recreation, mining and grazing, open space, wilderness, natural resources, and cultural resources. There are 11 BLM Wilderness Areas in the southeastern portion of San Bernardino County. **Figure 4.10-1** identifies land ownership in the region.

The National Park Service manages three national parks within the County including the Mojave National Preserve, Death Valley National Park, and Joshua Tree National Park (See Figure 1-1). The nearest of these, the Mojave National Preserve, is located approximately 20 miles north of the Project site on 1.6 million acres. The Mojave National Preserve provides hiking opportunities along with four-wheel drive routes, seasonal hunting, and camping.

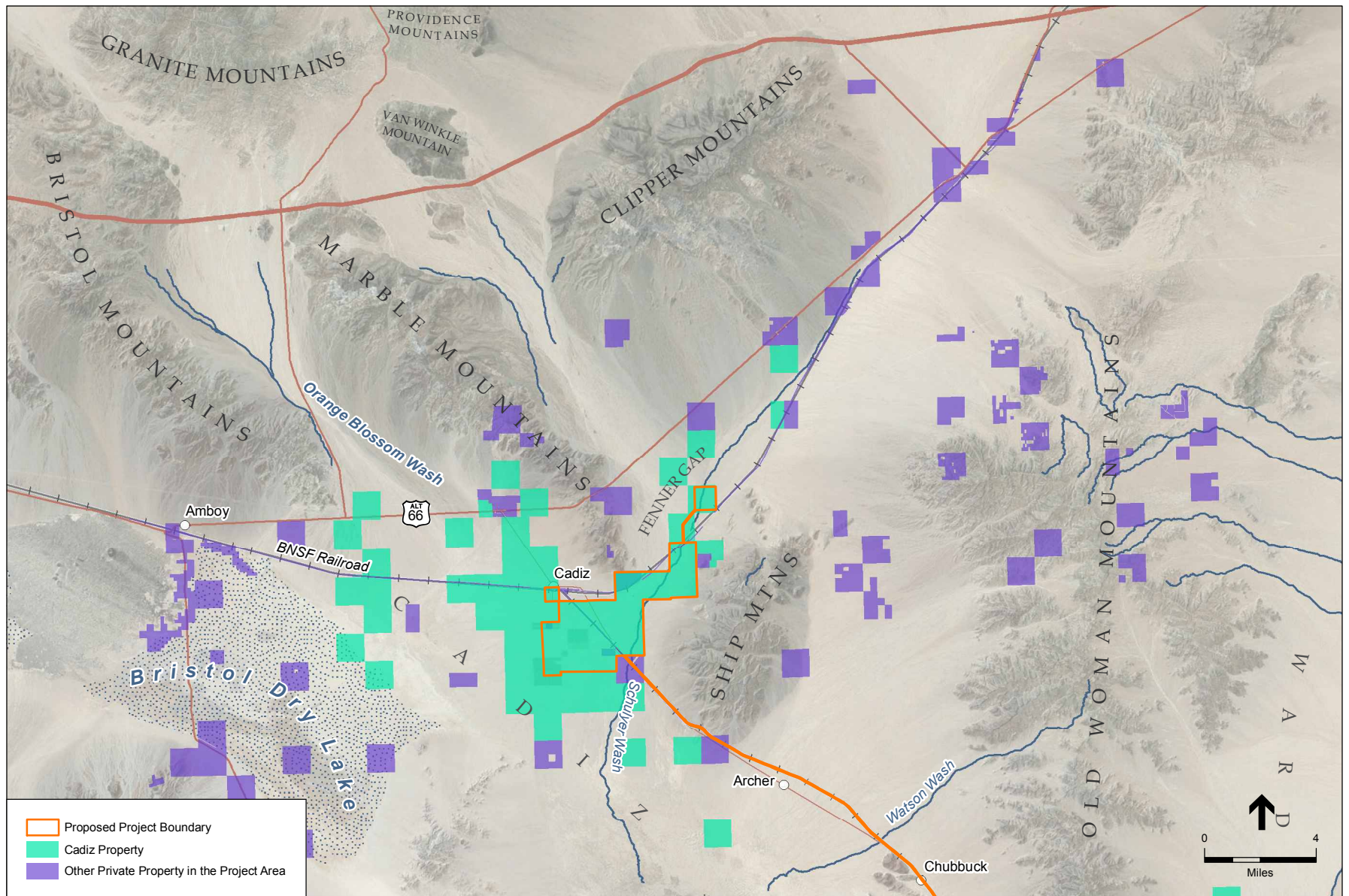
Local Land Use Setting

The Project area is located entirely within the Cadiz and Fenner Valleys of eastern San Bernardino County. The Cadiz Valley extends from Historic SR 66 south to SR 62, near the San Bernardino County-Riverside County boundary. Land uses in the Cadiz Valley include desert conservation, open space, recreation, agriculture, military facilities, mining, salt extraction, and transportation, water, electrical, gas, and oil utility corridors. The land surrounding the Project site is owned and managed by BLM, the State of California, Metropolitan, additional public land owners, and numerous private landowners, as illustrated in Figure 4.10-1.

Cadiz is the largest private landowner in the area with over 34,000 acres of landholdings in the Project's vicinity, including approximately 25,000 contiguous acres at the northern end of the Project area. Of this total, 9,600 acres of land are zoned for agriculture (AG) (see Figure 4.2-1). In 2011, 1,600 acres are in production including 240 acres within the Project wellfield boundary. (For more information on agricultural resources, refer to Section 4.2, Agriculture and Forestry Resources.)

Metropolitan's consolidated lands cover the Iron Mountain Pumping Plant and the land associated with and occupied by the CRA, as well as an electrical power easement. The Project intersects with Metropolitan's CRA corridor at the southern end of the pipeline route.

The Project site is traversed by numerous transportation, water, and utility corridors. The BNSF rail line crosses the northern portion of the Project area, south of the Ship Mountains. The ARZC railroad line branches from the BNSF rail line within the Project site and then travels southeastward



SOURCE: Bing Maps, 2011; ESRI, 2010; Cadiz Inc., 2011; and ESA, 2011

Cadiz Valley Water Conservation, Recovery, and Storage Project

Figure 4.10-1

Private Property in the Project Area

toward Parker, Arizona. Six natural gas pipelines traverse the Project site near the wellfield area, and an overhead high voltage transmission line traverses Danby Dry Lake to Iron Mountain Pump Station on the CRA. Section 4.13, Public Services and Utilities, describes these facilities in more detail.

Land uses north of the Project wellfield include BLM open space, private properties, the BNSF railroad, SR 66, I-40, and the Mojave National Preserve. To the west of the proposed wellfield area, land uses include salt mining operations on the Bristol and Cadiz Dry Lakes, the community of Amboy approximately 15 miles west, and the U.S. Marine Corps Air Ground Combat Center at Twentynine Palms approximately 40 miles west. Sheephole Valley and Cadiz Dunes Wilderness Areas are west of the conveyance pipeline route, south of Bristol Dry Lake. South of the pipeline route, the CRA and SR 62 traverse the desert from east to west. East of the pipeline route, the Old Woman Mountains and Turtle Mountain Wilderness Areas dominate the land uses.

Socioeconomics and Environmental Justice

Data presented in this Section were obtained from the Southern California Association of Governments (SCAG) Local Profiles Report 2011² for unincorporated areas of San Bernardino County that refers to the latest U.S. Census Bureau's 2010 Census Files, and from *The Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*³ which can be found in Appendix I of this Draft EIR.

Demographic Characteristics

The proposed Project (facilities and operations) is locally situated within the Cadiz and Fenner Valleys of eastern San Bernardino County. The Cadiz Valley extends south from Historic State Route (SR) 66 to SR 62, near the San Bernardino County-Riverside County boundary. San Bernardino County is the largest county in both the United States and California with a land mass of over 20,000 square miles, of which 90 percent consists of deserts and mountains. The Project is located regionally within the SCAG service area and locally in the unincorporated part of San Bernardino County, within Census Tract 104.09.

Within SCAG, the Project area is a part of the San Bernardino Associated Governments (SANBAG) subregion, which consists of the cities of Adelanto, Apple Valley, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa, Yucca Valley, and many unincorporated communities. The cities in closest proximity to the Project area are Barstow, Ludlow, and Twentynine Palms to the west; Needles to the east; Desert Center to the south; and the small community of Chambless to the north. The nearest residential communities include Chambless, five miles to the north;

² Southern California Association of Governments, *Local Profiles Report 2011 for Unincorporated Areas of San Bernardino County*, May 2011.

³ Economic & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011.

Amboy, 15 miles to the west; and Twentynine Palms, 40 miles to the southwest of the Project site. There is no existing permanent residential population residing in the proposed Project area.

Population

Table 4.10-1 shows the total population, housing units, and employment for the local, subregional and regional areas for the year 2010. As shown in Table 4.10-1, Census Tract 104.09, where the proposed Project is located, has an estimated total population of 3,018 residents. The Unincorporated San Bernardino County area has a population of 291,776 residents, approximately 94,085 households, and 42,481 workers.⁴ The SANBAG subregional area has a population of 2,035,210 residents, 611,618 households, and 640,497 workers. The SCAG regional area has a total population of 18,051,534 residents, 5,847,909 households, and 7,224,670 workers.

**TABLE 4.10-1
TOTAL 2010 POPULATION, HOUSING, AND EMPLOYMENT**

	Total Population	Total Households ^a	Total Employment
Local Area			
Unincorporated San Bernardino County	291,776	94,085	42,481
Subregional Area			
SANBAG	2,035,210	611,618	640,497
Regional Area			
SCAG	18,051,534	5,847,909	7,224,670

a Households were used instead of housing units to remain consistent with SCAG projected categories. Housing units generally represented a higher number of housing versus occupied households.

SOURCE: Southern California Association of Governments, *Profile of the Unincorporated Area of San Bernardino County, May 2011*, page 2.

According to the 2008 SCAG regional forecast, the population is expected to increase in all geographic areas. As shown in **Table 4.10-2**, the population in Unincorporated San Bernardino County is expected to increase approximately 67.1 percent between the year 2010 and 2035. The SANBAG subregion's forecasted population growth is 54.0 percent over the same period, while the SCAG regional area population is forecasted to increase 33.3 percent. Most recently, San Bernardino County's population grew 0.9 percent from January 2010 to January 2011.⁵

In unincorporated San Bernardino County, the largest category of race/ethnicity is White (49 percent), followed by Black/African American (3.6 percent). Census Tract 104.09 has a greater percentage of people categorized as White (79 percent). **Table 4.10-3** outlines the race/ethnic groups within unincorporated San Bernardino County and Census Tract 104.09 by percent of total population.

⁴ U.S. Census Bureau, *2010 Census Demographic Profiles, Census Tract 104.09*, <http://2010.census.gov/2010census/popmap/>, accessed December 2010.

⁵ San Bernardino County, *San Bernardino County 2011 Community Indicators Report, May 2011*, page 2.

**TABLE 4.10-2
SCAG POPULATION, HOUSING, AND EMPLOYMENT PROJECTIONS**

Geographic Zone	Current	Projected			2010-2035 ^a	
	2010	2020	2030	2035	Growth	Percentage Change (%)
Population						
Local Area	291,776	408,654	462,447	487,697	195,921	+67.1
Subregional Area	2,035,210	2,582,765	2,957,753	3,133,801	1,098,591	+54.0
Regional Area	18,051,534	21,468,934	23,255,378	24,057,292	6,005,758	+33.3
Housing^b						
Local Area	94,085	131,080	153,669	163,941	69,856	+74.2
Subregional Area	611,618	787,142	914,577	972,561	360,943	+59.0
Regional Area	5,847,909	6,840,331	7,449,484	7,710,716	1,862,807	+32.5
Employment						
Local Area	42,481	108,464	120,988	128,679	86,198	+203
Subregional Area	640,497	965,778	1,134,960	1,254,749	614,252	+96.0
Regional Area	7,224,670	9,183,026	9,913,372	10,287,122	3,062,452	+42.4

^a 2010-2035 Growth was calculated by taking the difference between the Projected Year 2035 and Current Year 2010; Percentage Change was derived by dividing the 2010-2035 Growth by the Current Year 2010

^b Housing reflects the number of households and not housing units

SOURCE: Southern California Association of Governments, *Profile of the Unincorporated Area of San Bernardino County, May 2011*, page 2; Southern California Association of Governments, *Integrated Growth Forecast*, <http://www.scag.ca.gov/forecast/index.htm>, accessed October 2010.

**TABLE 4.10-3
2010 RACE/ETHNICITY WITHIN UNINCORPORATED SAN BERNARDINO COUNTY
(Percent of Total Population)**

Local Area	White	Black or African American	Asian	American Indian	Other
Unincorporated San Bernardino County	49%	3.6%	2.2%	0.7%	2.5%
Census Tract 104.09	79%	4.5%	1.7%	1.8%	6.0%

SOURCE: Southern California Association of Governments, *Local Profiles Report 2011 for Unincorporated Areas of San Bernardino County*, May 2011; U.S. Census Bureau, 2010 Census Demographic Profiles, Census Tract 104.09, <http://2010.census.gov/2010census/popmap/>, accessed December 2010.

Income

As shown in **Table 4.10-4**, data compiled from 2005-2009 of unincorporated San Bernardino County revealed that the moderate income of households is \$15,972. Approximately 87,922 residents resided in the unincorporated area during this period and approximately 18 percent of

**TABLE 4.10-4
HOUSEHOLD INCOME AND STATUS**

Local Area	Population	Median Household Income	Low-income (percent of total population)
Unincorporated San Bernardino County (2005-2009)	87,922	\$15,972	18%
Census Tract 104.09 (1999)	2,206	\$27,243	18.2%

SOURCE: Southern California Association of Governments, *Local Profiles Report 2011 for Unincorporated Areas of San Bernardino County*, May 2011; U.S. Census Bureau, *2010 Census Demographic Profiles, Census Tract 104.09*, <http://2010.census.gov/2010census/popmap/>, accessed December 2010.

the population fell under low-income households.⁶ The most recent household income and status data for Census Tract 104.09 was compiled in 1999, and summarized in the 2000 Census Summary Files the following year. The median household income of the population for Census Tract 104.09 was approximately \$26,243 during this period. Approximately 18.2 percent of the total households fell within the low-income category (\$15,000 to \$24,999).

Housing

As shown in Table 4.10-2, the SCAG housing forecasts show a 74.2 percent increase between years 2010 to 2035 for households in the local area of Unincorporated San Bernardino County. Households are projected to also increase 59.0 percent in the SANBAG subregional area and 32.5 percent in the SCAG regional area. The increase of forecasted housing is a result of projected population growth and employment within the areas. However, this forecasted growth does not take into account the recent economic downturn and the affected housing market. In addition, no residents currently live on the proposed Project area and are not projected to permanently live there in the future.

Employment and Economy

As shown in Table 4.10-2, SCAG has forecasted a large growth in employment for Unincorporated San Bernardino County with a percentage growth of approximately 203 percent between the years of 2010 and 2035 based on current and projected employment numbers. Employment in the subregional area of SANBAG and regional area of SCAG has a forecasted percentage growth of 96 percent and 42.4 percent, respectively. The forecasted employment growth for the regions does not take into account the recent economic downturn that has resulted in a high unemployment rate and a decrease in the local and regional economy.

Currently, there is no full-time, long-term employment within the proposed Project area, except for short-term employment opportunities associated with the Cadiz Inc. agricultural operations

⁶ Southern California Association of Governments, *Draft Statistics for Existing Housing Need: The 5th Cycle of Regional Housing Needs Assessment (RHNA) for SCAG Region., Attachment 2 Household Distribution by RHNA Income Category Based on County Median Income (MHI) from American Community Survey 2005-09 5-year average – unincorporated San Bernardino County*, July 2011, page 5.

and Metropolitan’s Iron Mountain Pumping Plant located approximately 15 miles west of Rice, California, where the Project conveyance pipeline would access the CRA .

Labor Force and Unemployment

The labor force in San Bernardino County has consistently grown since the year 2000. In addition to the growing labor force, the unemployment rate has also steadily increased, reaching as high as 14.6 percent in January 2010 and averaging 14.2 percent for the year. Between 2008 and 2010, the unemployment rate has nearly doubled with the 2008 annual average at 7.9 percent. Currently, the labor force in San Bernardino County is at approximately 836,000 workers with an unemployment rate of 13.6 percent.⁷

Job-to-Housing Ratio

Job-to-housing ratio is defined as the balance between the distribution of employment relative to the distribution of workers within a given geographic area. A balanced job-to-housing ratio of 1:1 indicates that there is a job for every household. Areas with a job-to-housing ratio below 1.0 are considered “housing-rich” with a job deficit and housing surplus. Areas with a job-to-housing ratio above 1.0 are considered “job-rich,” and have a job surplus and a housing deficit. SCAG has identified the average job-to-housing ratio at 1.25 and a “healthy” job-to-housing ratio at 1.5.⁸ As shown in **Table 4.10-5**, currently the San Bernardino job-to-housing ratio is 0.37 as a result of too many approved housing permits to meet the once growing demand for housing prior to the economic downturn, and the increase in unemployment and loss of employment.⁹ Therefore, the calculated job-to-housing ratio would actually be even lower in light of the current economic situation.

**TABLE 4.10-5
JOB-TO-HOUSING RATIO PROJECTIONS^{a,b}**

Geographic Zone	Current	Projected		
	2010	2020	2030	2035
Local Area	0.58	1.06	1.02	1.01
Subregional Area	0.37 ^c	1.38	1.40	1.45
Regional Area	1.25	1.36	1.35	1.35

^a Job-to-Housing Ratio was calculated by dividing the employment and housing number.

^b To account for vacant homes, the average vacancy rate of 1.5 percent as identified by the Regional Housing Needs Assessment was used for the Subregional Area. The vacancy rate of 12.58 percent and 29.22 percent was applied for the subregional area and the local area, respectively, according to the CA Department of Finance E-5 Population and Housing Estimates, May 2011.

^c Representing the existing 0.37 job-to-housing ratio as identified by the San Bernardino County Communities Indicator Report, May 2011, page 2.

SOURCE: California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State, 2010-11, with 2010 Census Benchmark*, May 2011; San Bernardino County, *San Bernardino County 2011 Community Indicators Report*, May 2011, page 2.

⁷ California Department of Employment Development Department, *Labor Market Info for San Bernardino County, California*, September 2011.

⁸ San Bernardino County, *San Bernardino County 2011 Community Indicators Report*, May 2011, page 21.

⁹ San Bernardino County, *San Bernardino County 2011 Community Indicators Report*, May 2011, page 21.

4.10.2 Regulatory Framework

Federal

U.S. Bureau of Land Management

BLM manages approximately 6 million acres of public land in San Bernardino County. BLM adopted the CDCA Plan in 1980. The CDCA was amended by the Northern and Eastern Colorado Desert Plan (NECO) in 2002.

California Desert Conservation Area (CDCA) Plan and Northern and Eastern Colorado Desert Plan (NECO)

The CDCA Plan (as amended in 2002 by the NECO Plan) area encompasses more than 5 million acres of the Mojave and Sonoran Deserts. The CDCA and NECO Plans establish a series of land-use designations to accommodate expected beneficial uses while protecting natural resources.¹⁰ These land-use designations, or “Multiple-Use Classes,” are further explained in Section 4.14, Recreation, but briefly, these classes are defined as follows:

- Multiple-Use Class C (Controlled) for the management of potential wilderness areas;
- Multiple-Use Class L (Limited Use) for sensitive, natural, scenic, ecological, and cultural resource values and lower-intensity uses;
- Multiple-Use Class M (Moderate Use) for controlled balance between higher-intensity use and protection of public lands; and
- Multiple-Use Class I (Intensive Use) to provide for concentrated use of lands and resources to meet human needs.

Federal lands in the Project area have been designated as Class M (Moderate Use). Allowable uses within Class M lands are discussed in detail in Section 4.14, Recreation.

An important component of the CDCA Plan is the designation of Areas of Critical Environmental Concern (ACEC). These areas are unique or special and have features that set them apart from other areas in the desert. These features could be an unusual diversity of plant or animal life, unique geologic features, or rare concentrations of remains of historic or prehistoric use and occupation. These areas are also identified by BLM as areas that require special management attention.

In the vicinity of the Project area there are two ACECs: Patton’s Iron Mountain Divisional Camp, which is significant as a historic military camp site, and the Marble Mountain Fossil Bed which is significant for its paleontological values.

Of the CDCA and NECO Plans, the Wilderness, Recreation Management, and Energy Production/Utility Corridor Plan Elements are the sections relevant to the Project. These Elements are summarized below.

¹⁰ County of San Bernardino, *County of San Bernardino 2007 General Plan*, April 2007, page VI-3.

Wilderness Plan Element

Under the Wilderness Plan Element, public lands administered by the BLM are inventoried and evaluated for wilderness potential in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA). In the CDCA, 137 areas covering 5.7 million acres were determined to have wilderness characteristics; these areas were designated Wilderness Study Areas (WSAs) in May 1978.

Under the 1994 California Desert Protection Act (CDPA), the NECO Plan imposes the following allowances within wilderness areas: the grazing of livestock, where established prior to the date of enactment of the CDPA, shall be permitted to continue subject to such reasonable regulations, policies, and practices as deemed necessary, as long as such regulations, policies, and practices fully conform with and implement the intent of Congress in accordance with the Wilderness Act and Public Law 101-628, Section 101(f). Additionally, Congress does not intend for the designation of wilderness areas to lead to the creation of protective perimeters of buffer zones around any wilderness area. The fact that non-wilderness activities or uses can be seen or heard from areas within a wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area.¹¹

In the Project vicinity, four Wilderness Areas are designated: the Trilobite, Cadiz Dunes, Old Woman Mountains and Sheephole Valley Wilderness Areas (see Figure 4.14-1). In the Livestock Grazing Element, the majority of the Project site and the surrounding area are listed as suitable for grazing with a small part of the area listed as unsuitable for grazing. The Project is not located in any BLM Wilderness Areas.

Recreation Management Plan Element

The Recreation Plan Element allows for the management of various recreational activities which are categorized as follows: High Importance (trail hiking, camping, nature study), Moderate Importance (horseback riding, picnicking, driving), and Low Importance (mountain biking, hunting, motorcycle/dirt bike/ATV use). Recreational activities such as hiking, camping, rock climbing, and wind sailing are allowed on BLM land near the proposed Project.

Energy Production and Utility Corridor Plan Element

The goal of the Energy Production and Utility Corridor Plan Element is to provide a network of joint-use planning corridors capable of meeting future utility, communications, and energy needs. The NECO Plan states that “probably the most significant use of the California Desert is for linear transmission facilities for electrical power, oil and gas products, water, and coaxial and fiber-optic cables. These facilities serve a critical need for infrastructure for people living in Southern California and the Southwest in general. On federal lands, rights-of-way for these facilities are granted under various land laws. To some extent all the federal agencies have rights-of-way crossing their lands...The predominant orientation of the designated corridors is east-west, with a number of entry points to the planning area along the Nevada-Arizona border.”¹²

¹¹ 101st Congress, *Tax Relief and Health Care Act of 2006 – Public Law 101-628*, November 1990, Section 101(d).

¹² Bureau of Land Management, *Proposed Northern & Eastern Colorado Desert Coordinated Management Plan and Final Environmental Impact Report*, July 2002, page 3-79.

There are 16 separate designated planning corridors in the CDCA, and one traverses a portion of the Project area near the CRA. (See Section 4.13 Public Services and Utilities.)

Local

The State of California Government Code establishes an exemption for “the location or construction of facilities for the production, generation, storage, treatment, or transmission of water....” from county or city building and zoning ordinances. (Gov. Code §§ 53091(d), (e)) The implementation of the Project by SMWD would be covered under this exemption for the construction and operation of facilities that are used to produce, store and transmit water. The following discussion on local zoning is provided for context to assess the Project’s consistency with the County policies.

Zoning

The lands traversed by the Project facilities are zoned either AG or RC (see **Figure 4.10-2**). Within the Project site, approximately 2,295 acres are zoned AG and 5,954 acres are zoned RC. The San Bernardino County Development Code describes these classifications as the following:

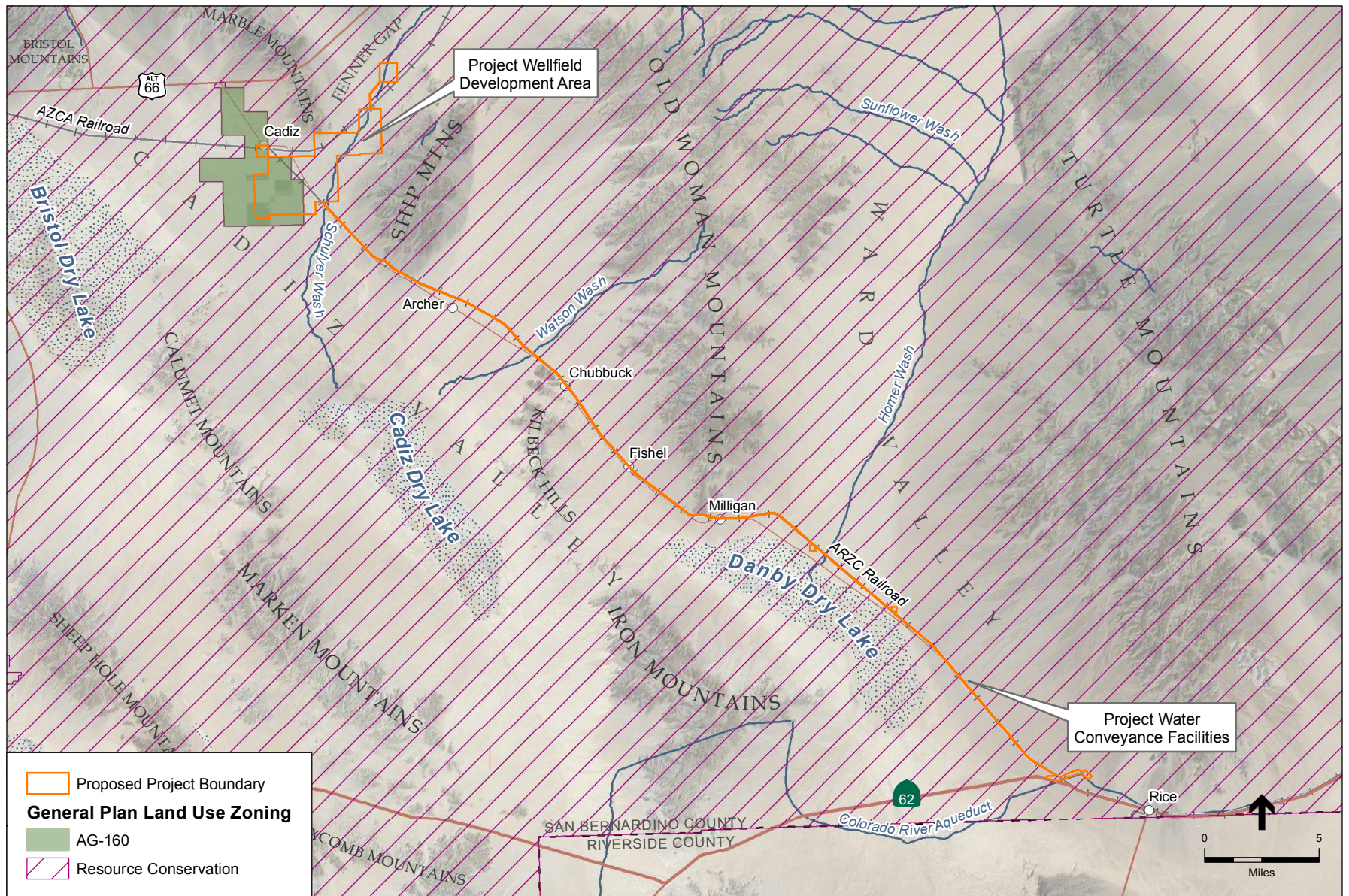
AG (Agriculture). The AG land use zoning district provides sites for commercial agricultural operations, agriculture support services, rural residential uses, and similar and compatible uses. Open space and recreation uses may occur on non-farmed lands within the AG district.

RC (Resource Conservation). The RC land use zoning district provides sites for open space and recreational activities, single family homes on very large parcels, and similar and compatible uses.

According to the Development Code, the following uses are allowed within AG and RC designated areas without a permit: crop production, horticulture, single dwelling residences, second dwelling units, accessory residential uses, guest housing, and social care facilities of six or fewer clients. Normally the County has discretionary approval authority for issuing various types of land-use and development permits to allow for specific types of facilities and land uses within AG and RC designated lands. For example, under a CUP, the following types of land uses can be approved: natural resources development (mining), hazardous waste facilities, composting operations, conference facilities, utility facilities, recreational vehicle parks, or cemeteries.¹³ Under a Specific Use Regulations permit, Special Use Permit (SUP), Minor Use Permit (M/C), or site Plan Permit, allowable uses could include development of recreation, education, residential, and business service facilities.¹⁴

¹³ In this regard, in the early 1990’s, the County approved a 2,100-acre landfill project which would receive up to 21,000 tons of garbage per day, on land located approximately one mile from the Cadiz property, adjacent to Bristol Dry Lake and the rail line between the towns of Amboy and Cadiz. While the County designated the site as “Resource Conservation,” it approved a finding that the landfill was “consistent with the Open Space policies of the General Plan which recognize that landfills are uses which require undeveloped land and open space as a resource or buffer.” (Cadiz Land Co., Inc. v. Rail Cycle, L.P. (2000) 83 Cal.App.4th 74, 81-82, 113-15.)

¹⁴ County of San Bernardino, *County of San Bernardino 2007 Development Code, As Amended*, September 2010, pages 2-18, 2-56.



SOURCE: Bing Maps, 2010; ESRI, 2010; Cadiz Inc., 2010; San Bernardino Co., 2010; and ESA, 2010

Cadiz Groundwater Conservation and Storage Project

Figure 4.10-2
General Plan Land Use / Zoning

San Bernardino County General Plan and Development Code

Adopted in 2007, the San Bernardino County General Plan includes goals and policies that guide land uses and planning in the County. The General Plan includes seven Elements with the goal of guiding future development; facilitating economic development; enhancing neighborhoods and commercial areas; and ensuring adequate infrastructure services and community facilities to support projected growth in the County. The following goals and policies are relevant to the proposed Project:

Land Use Element

- Goal LU 1:** The County will have a compatible and harmonious arrangement of land uses by providing a type and mix of functionally well-integrated land uses that are fiscally viable and meet general social and economic needs of the residents.
- Goal LU 9:** Development will be in a contiguous manner as much as possible to minimize environmental impacts, minimize public infrastructure and service costs, and further countywide economic development goals.
- Goal LU 11.** Promote mutually beneficial uses of land to address regional problems through coordination and cooperation among the County, the incorporated cities, SCAG, SANBAG, the various special districts and other local, state, and federal agencies.

Conservation Element

- Goal CO 1:** The County will maintain to the greatest extent possible natural resources that contribute to the quality of life within the County.

Open Space Element

- Goal D/OS 1:** Preserve open space lands to ensure that the rural desert character of the region is maintained.

Development Code

Section 810.01.230 (e) of the County Development Code defines a “utility facility” as a “fixed base structure or facility serving as a junction point for transferring electric utility services from one transmission voltage to another or to local distribution and service voltages, and similar facilities for water supply and natural gas distribution.” These uses include any of the following facilities:

- Electrical substations and switching stations.
- Natural gas regulating and distribution facilities.
- Public water system wells, treatment plants and storage, water tanks.
- Pumping plants.
- Reservoirs.
- Telephone switching facilities.
- Utility corporation and maintenance yards.

Socioeconomics

Federal

National Environmental Policy Act

According to the provisions of the National Environmental Policy Act (Title 40, Code of Federal Regulations, Section 1508.14):

“...economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.”

State

California Environmental Quality Act

Under *CEQA Guidelines* (Section 15358[b]), the impacts analyzed in an Environmental Impact Report (EIR) must be “related to physical changes” in the environment. The *CEQA Guidelines* (Section 15131) state, “Economic or social effects of a project shall not be treated as significant effects on the environment.” In some cases, however, economic effects can result in physical effects. Therefore guidelines also state:

An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes caused need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Local

County of San Bernardino General Plan – Economic Development Element

The County of San Bernardino General Plan – Economic Development Element sets goals and policies necessary to ensure economic growth within the County. The Economic Development Element is intended to guide the County’s goals in expanding the local economy, providing jobs, attracting and retaining businesses, support diverse and vibrant commercial areas, and bringing in sufficient revenue to support local programs and services. The County of San Bernardino General Plan was adopted in March 2007.

Environmental Justice

Federal

Executive Order 12898

Executive Order 12898 on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, issued in 1994, requires federal agencies (and state agencies receiving federal funds) implementing NEPA to address environmental justice

concerns.¹⁵ The order was designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and to promote nondiscrimination in programs and projects substantially affecting human health and the environment.

Environmental Justice Implementation Plan

In 1997, the U.S. EPA's Office of Environmental Justice released the *Environmental Justice Implementation Plan*, supplementing the U.S. EPA's environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. In 1998, federal agencies received a framework for the assessment of environmental justice in the U.S. EPA's *Guidance for Incorporating Environmental Justice Concerns in the EPA's National Environmental Policy Act Compliance Analysis*. This framework emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

State

While several California state agencies have used the U.S. EPA's *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, the majority of these agencies do not yet have guidance for incorporating environmental justice impact assessment into the *CEQA* process. However, the State of California has a number of legislative and agency actions associated with environmental justice, as described below.

California Government Code

Section 65040.12 of the California Government Code states that:

“[E]nvironmental justice” means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

Under Assembly Bill 1553, signed into law in October 2001, the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. California Code Section 65040.12 also established the OPR as the “coordinating agency in state government for environmental justice programs;” it also directs the agency to coordinate its efforts and to share information regarding environmental justice programs with federal agencies, and to review and evaluate any information obtained as a result of their respective regulatory activities. To this end, the OPR prepared the *Environmental Justice in California State Government*; this policy report gives a brief history of environmental justice, reports on the status of the OPR's efforts, and provides for future environmental justice efforts within State government. OPR also provides general environmental justice guidelines in its most recent 2003 *General Plan Guidelines*. OPR is currently in the process of updating these Guidelines (Litchney, 2008).

¹⁵ Federal Register, *Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, Vol. 59, No. 32, February 1994.

Although the OPR policy report (the California State Lands Commission (CSLC) Environmental Justice Policy, discussed below) and State legislation provide useful background information and guidance on the equitable treatment of environmental justice populations, no specific guidelines have been adopted at the State level to guide environmental justice in CEQA environmental documents. As such, most state agencies have been using federal guidance to assess the environmental justice impacts of the projects under their review.

California State Lands Commission Environmental Justice Policy

The CSLC developed an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures and in October 2002 adopted an amended policy. The policy ensures that “environmental justice is an essential consideration in its processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities”.¹⁶ The CSLC implements the policy, in part, by identifying and communicating with relevant populations that could be adversely and disproportionately affected by CSLC projects or programs and by ensuring that a range of reasonable alternatives is identified to minimize or eliminate environmental impacts affecting such populations. This discussion is provided in this EIR consistent with and in furtherance of the CSLC’s Environmental Justice Policy. Under the agency’s adopted environmental justice policy, CSLC’s staff is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities.¹⁷

Local

County of San Bernardino does not identify specific goals, policies or implementation measures related to environmental justice.

4.10.3 Impact and Mitigation Analysis

Significance Criteria

Based on the *CEQA Guidelines*, Appendix G, a project may be deemed to have a significant effect on the environment with respect to land use and planning if it would:

- Physically divides an established community;
- Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, Specific Plan, Local Coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflicts with any applicable habitat conservation plan or natural community conservation plan.

¹⁶ California State Lands Commission, *Environmental Justice Policy*, http://www.slc.ca.gov/Policy_Statements/Environmental_Justice_Home_Page.html, accessed October 2011.

¹⁷ California State Lands Commission, *Environmental Justice Policy*, http://www.slc.ca.gov/Policy_Statements/Environmental_Justice_Home_Page.html, accessed October 2011.

Socioeconomics

CEQA Guidelines do not currently require a discussion of socioeconomic effects as they are not considered direct effects on the physical environment and no significance criteria has been established. However, *CEQA Guidelines* state that "...economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from anticipated economic or social changes resulting from the project to physical change caused in turn by the economic or social changes."¹⁸ Therefore, if socioeconomic factors, such as employment, income, land cost, or tax base or city/county revenue, create a secondary physical impact to the environment (such as urban decay), socioeconomic analysis may be warranted.

In addition, socioeconomic effects may be used to determine the significance of physical changes caused by the project. (*CEQA Guidelines* Section 15131(b)). For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would be the basis for determining that the effect would be significant. As an additional example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with the religious practices.

For purposes of this Draft EIR, a project is considered to have a significant impact on the environment in relation to socioeconomics if it would:

- Cause an adverse effect on economic or socioeconomic conditions to an extent that would result in substantial physical environmental effects to the project area (e.g. urban decay) or cause physical changes that are determined to be significant due to economic or social effects (e.g. divide a community).

Environmental Justice

For purposes of this Draft EIR, a project is considered to have a significant impact on environmental justice if it would:

- Cause a disproportionately high and adverse human health or environmental impact on minority or low-income populations.

Methodology

Land Use and Planning

The Project was evaluated for consistency with local planning documents including the County General Plan and federal land management plans. The Project was also evaluated for consistency with surrounding land uses. The potential for a conflict with an applicable habitat conservation

¹⁸ CEQA Guidelines, California Code of Regulations Title 14, Chapter 3, §15131.

plan or natural community conservation plan is also discussed in Section 4.4, Biological Resources.

Socioeconomics

The socioeconomic analysis of the proposed Project evaluates potential economic changes resulting from Project construction activities. The analysis focused on the potential construction-related socioeconomic effects since this aspect of the Project involves the greatest opportunity for mobilization and re-allocation of money, such that Project construction is expected to financially affect individuals and businesses within the local economy. As compared to Project construction, operation would have relatively little effect on the local economy and community. Analysis of the economic and employment impacts of the Project is based on data derived from the *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report* (Economic Report) prepared by Economic & Politics, Inc. The Economic Report uses the IMPLAN model to determine the economic impact of the Project on San Bernardino County's economy. The model uses three broad sectors (construction of other non-residential structures; fabricated pipe and pipe fitting manufacturing; and management, scientific, and technical consulting) to represent the construction economic impacts. The model assumes the economy is not operating at full capacity and utilizes the February 2011 unemployment rate of 13 percent.

Economic growth in the County can be created through direct, indirect, and induced effects. Direct effects impact the local economy by bringing in money to the market from the outside world directly from the Project. Indirect effects are made up of activities in local sectors that receive expenditures resulting from the Project. Induced effects are made up of activities in the local economy that occur simply because money is flowing through the community and County.

Environmental Justice

Demographic information was reviewed and summarized for the Project area to identify any minority or low-income communities, and potential Project impacts to such communities are evaluated.

Groundwater Conservation and Recovery Component

Divide an Established Community

Significance Threshold

Would the proposed Project physically divide an established community?

Impact Analysis

Land uses in the Project area consist largely of open space, mining, utility corridors, water conveyance, and military installations. The nearest residential and commercial communities are in Chambless (5 miles to the north), Amboy (15 miles to the west) and Twentynine Palms (40 miles to the southwest).

Construction and operation of the Project would not interrupt the existing roadways, open space areas, residential communities, and large military installations that are located in the Project vicinity. The proposed wellfield would be located on Cadiz Property. The water conveyance pipeline would be installed underground within a portion of the existing ARZC ROW parallel to the railroad tracks between the wellfield on Cadiz Property and the CRA. Cadiz has acquired an easement to construct the water conveyance facilities within a portion of the ARZC ROW that runs between mile post 189.0 at Cadiz, California, and mile post 144.0 at Freda, California. The easement provides for the installation and maintenance of a water conveyance pipeline parallel to the railroad tracks within the ARZC ROW.

The Project area is sparsely populated and the BLM is the dominant land owner. Figure 4.10-1 identifies privately held parcels in the Project area as recorded by the County. The small community of Chambless with approximately 10 residences is located on Route 66 at the Cadiz Ranch Road turn off. The community of Amboy is located approximately 10 miles west of Chambless on Route 66. Sporadic private properties with private dwellings are widely spread out in the desert region. The Project would not construct any facilities that would divide or separate any of the residential areas in the region.

Construction and operation of the necessary facilities within the ARZC ROW would occur without affecting the existing, ongoing operation of the railroad or BLM lands adjacent to the easement or ROW and would not physically divide an established community. Therefore, impacts related to the Groundwater Conservation and Recovery Component are considered less than significant.

Mitigation Measures

None required.

Significance Conclusion

Less than significant.

Consistency with Land Use Plans

Significance Threshold

Would the proposed Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, Specific Plan, Local Coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis

San Bernardino General Plan and Development Code

The Project is located within unincorporated portions of San Bernardino County zoned for resource conservation (RC) and agriculture (AG). The Project would not conflict with goals and

policies of the San Bernardino County General Plan because the pipeline would be constructed entirely within the railroad easement that allows for water conveyance facilities, and the wellfield would be a low intensity development. The RC zone allows for installation of utilities subject to a CUP unless exempted under Government Code §§ 53091(e). Construction and operation of the proposed Project would not conflict with the goals and policies of the County General Plan's Land Use Element, Conservation Element or Open Space Element since the facilities would be utilities conditionally allowed by the Development Code or exempted, and the development would be low intensity and would not conflict with or substantially reduce the open space value in the Cadiz Valley region.

The County has jurisdiction over development that is not exempt, pursuant to its General Plan policies and Development Code. The County would need to approve a CUP for the Project facilities unless the Project is exempted from local jurisdiction pursuant to Gov. Code §§ 53091(e). The State of California Government Code establishes an exemption for “the location or construction of facilities for the production, generation, storage, treatment, or transmission of water...” from county or city building and zoning ordinances. (Gov. Code §§ 53091(d), (e)) The implementation of the Project by SMWD would be covered under this exemption for the construction and operation of facilities that are used to produce, store and transmit water. Because the Project is exempt from the County's zoning ordinances, no CUP for these facilities is required from San Bernardino County.

In contrast, facilities “related” to water (i.e., those that are integral to the operation of water storage and transmission, such as storage yards and buildings containing equipment and materials needed for the water system, and office buildings and parking areas for field crews and support personnel) receive qualified immunity, which is required to be confirmed by SMWD at a public hearing. (Gov. Code § 53096(b)). Project components that are not sufficiently water-related would still be required to comply with building and zoning ordinances.

As discussed previously in Section 4.2, Agriculture and Forest Resources, the Project would convert a small portion of active agricultural lands to non-production uses including access roads, a wellfield and manifold pipeline, and power distribution facilities. These non-production uses are consistent with the County Development Code and the AG land designation since they are water utilities. Moreover, operation of Project facilities would not preclude continued surface agricultural production or prevent agricultural operations from expanding into adjacent AG-zoned lands located west of the Project site. Therefore impacts related to agricultural land uses and zoning are less than significant.

U.S. Bureau of Land Management (CDCA and NECO Plans)

BLM lands in the vicinity of the Project area are predominantly designated as Class M (Moderate Use) in the CDCA and NECO Plans. The Class M designation provides for a wide range of uses such as agriculture, roads, airport landing strips, installation of a variety of new utility facilities, and livestock grazing and support facilities. The Project would be constructed on lands owned by Metropolitan, Cadiz, and ARZC and would not utilize or encroach onto any BLM lands. The Project would not be located on federal property or conflict with surrounding land uses

designated by BLM in the CDCA and NECO Plans. As a result, impacts to federal land and land use plans would be less than significant.

Mitigation Measures

None required.

Significance Conclusion

Less than significant.

Habitat Conservation Plans or Natural Community Conservation Plans

Significance Threshold

Would the proposed Project conflict with any applicable habitat conservation plan or natural community conservation plan?

Impact Analysis

No HCP or NCCP has been established in the Project area. Therefore, the Project would not conflict with an HCP or NCCP.

Mitigation Measures

None required.

Significance Conclusion

No impact.

Socioeconomics

Significance Threshold

Would the proposed Project cause an adverse affect on economic or socioeconomic conditions to an extent that would result in substantial physical environmental effects to the Project area (e.g. urban decay) or cause physical changes that are determined to be significant due to economic or social effects (e.g. divide a community)?

Employment and Economy

The Groundwater Conservation and Recovery Component would construct new water conveyance infrastructure that would require the need for an extensive labor supply from a variety of construction-related trades. The Project would be built in San Bernardino County and would positively impact the local economy with new job creation and increased economic

activity.¹⁹ Approximately 240 workers from the San Bernardino County labor force would be directly employed and working on-site, at any given time during the construction of this component. The construction employment would be short-term, for approximately 18 months.

However, as shown in **Table 4.10-6**, a total of 3,101 full-time equivalent employment opportunities for the San Bernardino County labor force would also be created as a result of the Project according to the Economic Report. These employment opportunities would be created in San Bernardino County through direct effects (i.e. off-site workers, consulting, management, engineering, planning), indirect effects (i.e. suppliers, manufacturing), and induced effects (i.e. new business opportunities in the subregion). Of these generated jobs, the Economic Report states that 1,790 would work directly on the Project, 468 jobs would be indirectly created in firms assisting those operations, and 843 jobs would be created due to monies flowing generally through the economy. A total of approximately \$169 million of income is expected to be earned directly, indirectly, and induced by the Project. A total of approximately \$455 million in economic activity would be added into the County's economy. In addition, a total of \$19.7 million in tax revenues would be created.²⁰

**TABLE 4.10-6
ECONOMIC IMPACTS DURING CONSTRUCTION OF THE
GROUNDWATER CONSERVATION AND RECOVERY COMPONENT**

Type of Impact	Employment	Labor Income	Economic Activity Generated
Direct Effect	1,790	\$ 108,158,760	\$ 277,750,000
Indirect Effect	468	\$ 24,819,009	\$ 69,436,260
Induced Effect	843	\$ 36,266,441	\$ 107,582,177
TOTAL	3,101	\$ 169,204,210	\$ 454,768,437

SOURCE: Economics & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 5, 7.

The Groundwater Conservation and Recovery Component of the Project would create new full-time employment opportunities for the labor force in San Bernardino County. The increase of employment to the County would be beneficial for the job market and would benefit the labor force living in San Bernardino County. In addition, income and economic activity generated by the Project would also benefit the County in terms of tax revenue generation. The increase of employment would be within the SCAG forecasted growth and would also lower the high unemployment rate in San Bernardino County.

Housing

It is estimated that approximately 240 workers from the San Bernardino County labor force would be directly employed and working on-site, at any given time during the construction of the

¹⁹ Economic & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 3, 10.

²⁰ Economic & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 6-8.

Groundwater Conservation and Recovery Component. They would reside within the existing worker housing located on the Cadiz Property during the workweek and commute back home on the weekends. These existing worker housing areas support the seasonal agricultural activities during the peak harvest season and can accommodate over 300 workers. The housing areas are expandable if necessary within the footprint of the existing areas. Thus, no new residential housing units would be required as a result of Project construction.

As described above, a total of 3,101 employment opportunities for San Bernardino County would be created directly, indirectly, and through induced effects as a result of the Project. These employment opportunities do not represent the total number of on-site employees/construction workers (expected to be approximately 240 workers) to be working at any given time, but instead represents employment opportunities in San Bernardino County created through direct, indirect, and induced effects. Since San Bernardino County is currently “housing-rich” with a job-to-housing ratio of 0.58 in the Unincorporated areas of San Bernardino County and 0.37 in the subregion of San Bernardino County, no new additional housing would be required to accommodate employment opportunities generated by the Project.

The proposed Project would be constructed mainly on unoccupied private property and within an existing ROW easement. No residential communities would be impacted by construction or operation of the proposed Project. The nearest residential and commercial developments are located in Chambliss (5 miles to the north), Amboy (15 miles to the west), and Twentynine Palms (40 miles to the southwest). Construction activities and Project implementation have no potential to adversely impact any communities within these areas during construction or in the long term during operation. Therefore, Project effects would not be significant based on social or economic effects.

Mitigation Measures

None required.

Significance Conclusion

Beneficial.

Environmental Justice

Significance Threshold

Would the proposed Project cause a disproportionately high and adverse human health or environmental impact on minority populations or low-income populations?

Impact Analysis

There are no disadvantaged communities within or in the vicinity of the areas proposed for construction. The proposed Project would be constructed mainly on unoccupied private property and within an existing ROW easement. No residential communities would be impacted by

construction of the proposed Project. The nearest residential and commercial communities are located in Chambliss (5 miles to the North), Amboy (15 miles to the west) and Twentynine Palms (40 miles to the southwest). Construction activities and Project implementation have no potential to adversely impact any minority or low income communities within these areas during construction or in the long term during operation. Relatively few people would be affected by the Project, and demographic groups within the Cadiz Valley would equally be subject to the potential impacts of the Project – no one community would specifically be subject to more impacts than would another. Based on the Census data presented, the Groundwater Conservation and Recovery Component would not have any disproportionate effect on minority or low income populations. There would be no impact.

Mitigation Measures

None required.

Significance Conclusion

No impact.

Imported Water Storage Component

This component is analyzed on a programmatic basis.

Divide an Established Community

Significance Threshold

Would the proposed Project physically divide an established community?

Impact Analysis

The construction of additional wells under the Imported Water Storage Component would increase the network of power and water distribution facilities in the wellfield. The new spreading basins, CRA diversion structure, and pump station would also be constructed in undeveloped desert areas on privately owned property. No communities would be divided or access roads impeded by the Imported Water Storage Component of the proposed Project, and established communities in the area would not be divided or affected.

Construction activities at existing natural gas pipeline include converting the pipeline from natural gas to be used for water conveyance and the construction of pump stations and air valves along the pipeline. The pipeline alignment currently exists and does not divide an established community. Therefore, the existing natural gas pipeline element would not physically divide an established community and no impacts would occur.

Mitigation Measures

None required.

Significance Conclusion

No impact.

Consistency with Land Use Plans

Significance Threshold

Would the proposed Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the General Plan, Specific Plan, Local Coastal Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis

The spreading basins would be constructed on Cadiz Property that is currently undeveloped, open space zoned as RC. The Project would covert approximately 300 acres from open space to spreading basins which constitutes less than two percent of the 25,000 acres of the Cadiz Property in the wellfield area. The spreading basins would be part of a water supply management and distribution system that would contribute to the beneficial management of the groundwater basin. The spreading basins would be conditionally consistent with the RC zone since they would be part of a water supply utility system. The construction of the spreading basins would be subject to a CUP unless exempted pursuant to Government Code Section 53091(e).

The development of the expanded wellfield, CRA diversion, and pump station associated with the Imported Water Storage Component would be conditionally allowable within the RC designation and would therefore be consistent with local land use plans. The Project would be constructed entirely within Cadiz Property, Metropolitan property, or within the ARZC ROW and would therefore not impact federal land uses or land use designations of adjacent BLM lands. The Imported Water Storage Component of the Project would have a less than significant impact on designated land uses and would be consistent with applicable land use plans.

The existing natural gas pipeline traverses through different land uses including utility lands, rangelands, and BLM lands. Construction and upgrading activities on the pipeline would not conflict with existing planning goals and policies as the activities would be primarily be conducted within the pipeline right-of-way. The addition of appurtenant structures including air relief valves and pump stations would be exempt from local zoning ordinances under the State of California Government Code (Gov. Code §§ 53091(d), (e)). Since the appurtenances would be consistent with utility infrastructure within the existing easement, impacts to land uses would be less than significant.

Mitigation Measures

None required.

Significance Conclusion

Less than significant.

Habitat Conservation Plans or Natural Community Conservation Plans

Significance Threshold

Would the proposed Project conflict with any applicable habitat conservation plan or natural community conservation plan?

Impact Analysis

No HCP or NCCP has been established in the Project area. The Project would not be located within the wilderness areas established in the NECO Plan. The proposed Project would not conflict with an HCP or NCCP.

Mitigation Measures

None required.

Significance Conclusion

No impact.

Socioeconomics

Significance Threshold

Would the proposed Project cause an adverse affect on economic or socioeconomic conditions to an extent that would result in substantial physical environmental effects to the Project area (e.g. urban decay) or cause physical changes that are determined to be significant due to economic or social effects (e.g. divide a community)?

Impact Analysis

Employment and Economy

Construction of the Imported Water Storage Component would create employment and generate income and economic activity. Approximately 240 workers from the San Bernardino County labor force would be directly employed and working on-site, at any given time during the construction of this Component. The construction employment would be short-term, for approximately 18 months. As shown in **Table 4.10-7**, a total of 2,885 full-time equivalent jobs would be created in San Bernardino County as a result of the Imported Water Storage Component of the Project according to the Economic Report. Of the jobs described within the Economic Report, 1,666 would work directly on the Project in construction, construction material production or planning, and engineering. A total of 435 jobs would be indirectly created in firms

assisting those operations, and 785 jobs would be created due to monies flowing generally through the economy. A total of approximately \$157 million of income is expected to be earned directly, indirectly, and induced by the Project. A total of approximately \$423 million in economic activity would be added into the County's economy. In addition, a total of \$18.3 million in tax revenues would be created.²¹

**TABLE 4.10-7
ECONOMIC IMPACTS DURING THE IMPORTED WATER STORAGE COMPONENT**

Type of Impact	Employment	Labor Income	Economic Activity Generated
Direct Effect	1,666	\$ 100,662,607	\$ 258,500,000
Indirect Effect	435	\$ 23,098,880	\$ 64,623,846
Induced Effect	785	\$ 33,715,696	\$ 100,125,984
Total	2,885	\$ 157,477,183	\$ 423,249,830

SOURCE: Economic & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 11, 13.

The Imported Water Storage Component of the Project would create new full-time employment opportunities for the labor force in San Bernardino County for the approximately 18-month duration of the construction phase. The increase of employment to the County would be beneficial for the job market and would benefit the labor force living in San Bernardino County. In addition, income and economic activity generated by the Project would also benefit the County.

Housing

Approximately 240 workers per Project component would work on-site, at any given time during construction of the Imported Water Storage Component and would live in the existing worker housing located on the Cadiz Property. The housing can accommodate over 300 workers and can be expanded within the Property footprint if necessary. According to the Economic Report, a total of 2,885 employment opportunities for the San Bernardino County would also be created directly, indirectly, and through induced effects as a result of this component of the Project. Since San Bernardino County is currently "housing-rich" with a job-to-housing ratio of 0.58 in the Unincorporated areas of San Bernardino County and 0.37 in the subregion of San Bernardino County, no new additional housing would need to be built as there is a housing surplus that would support a Project-related construction phase employment.

The Project would not generate long-term employment on-site that would result in direct residential growth and housing needs.

The proposed Project would be constructed mainly on unoccupied private property and within an existing ROW easement. No residential communities would be impacted by construction or

²¹ Economic & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 11-13.

operation of the proposed Project. The nearest residential and commercial developments are located in Chambless (5 miles to the north), Amboy (15 miles to the west) and Twentynine Palms (40 miles to the southwest). Construction activities and Project implementation have no potential to adversely impact any communities within these areas during construction or in the long term during operation. Therefore, Project effects would not be significant based on social or economic effects.

Construction at the existing natural gas pipeline would not create long-term employment that would result in direct residential growth and housing needs. In addition, construction activities would be located within existing ROW easements along the pipeline and would not impact residential communities. Thus, impacts to housing would not be significant.

Overall Socioeconomic Impact for Groundwater Conservation and Recovery Component and Imported Water Storage Component

The County would benefit from the direct, indirect, and induced employment opportunities as a result of the construction of the Project. The County would also benefit from an increase in the local and regional economic activity as shown in **Table 4.10-8**. The Project would not result in adverse socioeconomic effects that would, in turn, result in adverse physical environmental effects. The Project would have a beneficial economic impact on the local and regional area and would not disrupt an establish community.

**TABLE 4.10-8
SUMMARY OF TOTAL ECONOMIC IMPACTS**

Type of Impact	Conservation and Recovery Component	Imported Water Storage Component	Project Total
Employment	3,101	2,855	5,986
Labor Income	\$ 169,204,210	\$ 157,477,183	\$ 326,681,393
Economic Activity Generated	\$ 454,7686,437	\$ 423,249,830	\$ 878,018,267
State and Local Taxes Generated	\$19,651,006	\$ 18,289,057	\$ 37,940,063

SOURCE: Economics & Politics, Inc., *Economic Impact of the Proposed Cadiz Valley Groundwater Conservation, Recovery, and Imported Water Storage Project Final Report*, April 2011, pages 3, 10.

Mitigation Measures

None required.

Significance Conclusion

Beneficial.

Environmental Justice

Significance Threshold

Would the proposed Project cause a disproportionately high and adverse human health or environmental impact on minority populations or low-income populations?

Impact Analysis

The construction of additional wells under the Imported Water Storage Component, new spreading basins, CRA diversion structure, and pump station would also be constructed in undeveloped desert areas on privately-owned property. No disadvantaged communities exist in the Project area where proposed construction activities would occur; therefore, there is no potential to adversely impact any minority or low-income communities during construction or in the long term. No impacts would occur with implementation of the Imported Water Storage Component.

No communities or residential areas, in particular, disadvantaged communities would be affected by the exiting natural gas pipeline alignment and associated facilities. Therefore, no impacts would occur.

Mitigation Measures

None required.

Significance Conclusion

No impact.

Mitigation Measure Summary Table

Table 4.10-9 on the following page presents the impacts and mitigation summary for Land Use and Planning.

**TABLE 4.10-9
IMPACTS AND MITIGATION SUMMARY**

Proposed Project Impact	Mitigation Measure	Significance Conclusion
Groundwater Conservation and Recovery Component		
Divide an Established Community	None required	Less than significant
Consistency with Land Use Plans	None required	Less than significant
Habitat Conservation Plans or Natural Community Conservation Plans	None required	No impact
Socioeconomics	None required	Beneficial
Environmental Justice	None required	No impact
Imported Water Storage Component		
Divide an Established Community	None required	No impact
Consistency with Land Use Plans	None required	Less than significant
Habitat Conservation Plans or Natural Community Conservation Plans	None required	No impact
Socioeconomics	None required	Beneficial
Environmental Justice	None required	No impact