

4.0 OVERVIEW OF RESOURCE MANAGEMENT PLAN

Sensitive resources identified within the Plan area include biological, agricultural, and cultural resources. This section of the Plan describes these resources and identifies potential options for their preservation. This section also identifies conservation measures to protect the region's shared resources, including energy and water.

4.1 ON SITE RESOURCES**4.1.1 BIOLOGICAL RESOURCES****Vegetation/Habitats**

Agriculture: Agricultural land may be defined broadly as land used primarily for production of food and fiber. The project site is active agricultural land. Crops grown on the project site include Bermuda grass, alfalfa and hay. The plant species were crops and non-native weeds growing within the designated agriculture fields.

Irrigation Canals and Drains: Large irrigation canals and drains that are part of the Imperial Irrigation District system exist in easements on the project site. The agricultural fields are irrigated by releasing water from a system of canals and flooding the fields. The excess water is collected in a series of drains. The Dogwood Lateral #2, Date Drain #3, and Date Drain #3-A, are the three main irrigation conveyers located on the project site. The closest large conveyer (off-site) of water is the Dogwood Canal is located east of the site on the eastern side of Dogwood Road. **Figure 4-1** depicts the location of these irrigation conveyers. All three of the on-site irrigation conveyers are soft-bottomed and contain small isolated patches of non-native wetland indicator species. Several smaller concrete-lined irrigation canals extend across the property. No vegetation was present in these concrete-lined field canals.

Sensitive Habitats

Wetlands: Wetland habitats are considered to be sensitive by the California Department of Fish and Game (CDFG, 2003b) primarily for their ecological values to surrounding sensitive wildlife species. Wetlands serve many functions including providing habitat for rare and common species, corridors for wildlife movement, and control of water quality and erosion. Although generally dry except for directly after irrigation, the three drainage ditches meet USACE criteria for jurisdictional "waters of the United States". Potential impacts to wetlands and necessary mitigation are discussed in the McCabe Ranch II Specific Plan Environmental Impact Report and Mitigation Monitoring and Reporting Program (MMRP).

Sensitive Plant Species

No sensitive species were observed in the study area, and no endemic species or critical populations of listed species were either observed or known to be present in the study area. Due to the agricultural use of the site and the resulting predominance of non-native plant species, native sensitive plant species are not anticipated to occur.

Sensitive Wildlife Species

Burrowing Owls: The burrowing owl is federally listed as a Species of Management Concern. The burrowing owl is also a second priority Species of Special Concern (SSC) in California. The Specific Plan area may support nesting and/or foraging activities for the western burrowing owl. Ground disturbing activities may adversely impact nesting burrowing owls, should they be present. Furthermore, noise and other human activity may result in nest abandonment if nesting owls are present within 250 feet of a work site. These impacts would be considered potentially significant. Potential impacts to burrowing owls and necessary mitigation are discussed in the McCabe Ranch II Specific Plan Environmental Impact Report and Mitigation Monitoring and Reporting Program.

Special Status Species: Special status species include those designated by the United States Fish & Wildlife Service (USFWS), CDFG, and/or other local agencies, and those species whose status warrants legal protection for the survival of the species. "Threatened and Endangered Species" applies to flora and fauna listed under the federal Endangered Species Act and/or the California Endangered Species Act due to their rapid decline from urban development and other environmental constraints. Imperial County has areas primarily located along the larger canal, drains, and two rivers that are suitable habitat for threatened and endangered species such as the Yuma Capper Rail, the mountain plover, and the desert pupfish. "Species of Special Concern" (SSC) status applies to animals not listed under the federal Endangered Species Act or the California Endangered Species Act, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist (CDFG 2003c). The Specific Plan area may support foraging activities for special-status bird species that may be present, including mountain plover and white-faced ibis. Special-status birds such as the vermilion flycatcher may also nest in trees or other vegetation adjacent to the study area. Furthermore, migratory birds which are protected under the Migratory Bird Treaty Act (MBTA), may be impacted by project implementation should they be present. All native breeding birds (except game birds during hunting season), regardless of their listing status, are protected under the MBTA.

4.1.2 AGRICULTURAL RESOURCES

The Imperial Valley contains some of the most productive agricultural soils in Southern California. As stated previously, crops grown on the project site include Bermuda grass, vegetables, alfalfa and hay. Also, several isolated stands of Mexican fan palm and Palo Verde exist along dirt roads adjacent to the canals and drains within the project site. More than 99 percent of the Plan area is located on land classified as agricultural land by the Department of Conservation. Approximately 4.0-acres is Farmland of Local Importance, approximately 320.8-acres is Farmland of Statewide Importance, approximately 141.5 is considered Prime Farmland and approximately 3.1-acres is Urban and Built-Up Land. No Williamson Act Contracts exist or have existed within the Plan area.

The Imperial County General Plan encourages the preservation of All Important Farmlands. However, the General Plan allows the conversion of agricultural land to other uses where such uses have been identified in the County General Plan. The Land Use Element of the Imperial County General Plan designates the Plan area as a Specific Plan Area. Specific Plan Areas are characterized by a full level of urban services, in particular public water and sewer systems, and contain or propose a broad range of residential, commercial, and industrial uses. Therefore, development of the Plan area would convert agricultural resources to urban development.

The Plan area is to be developed in separate components, each containing phases, which will allow current agricultural activities to continue on those portions of the Plan area that are expected to develop at a later time as market conditions allow. Because smaller private canals may still be able to bring water to those the individual fields, they can still fully operate as agricultural land until development occurs.

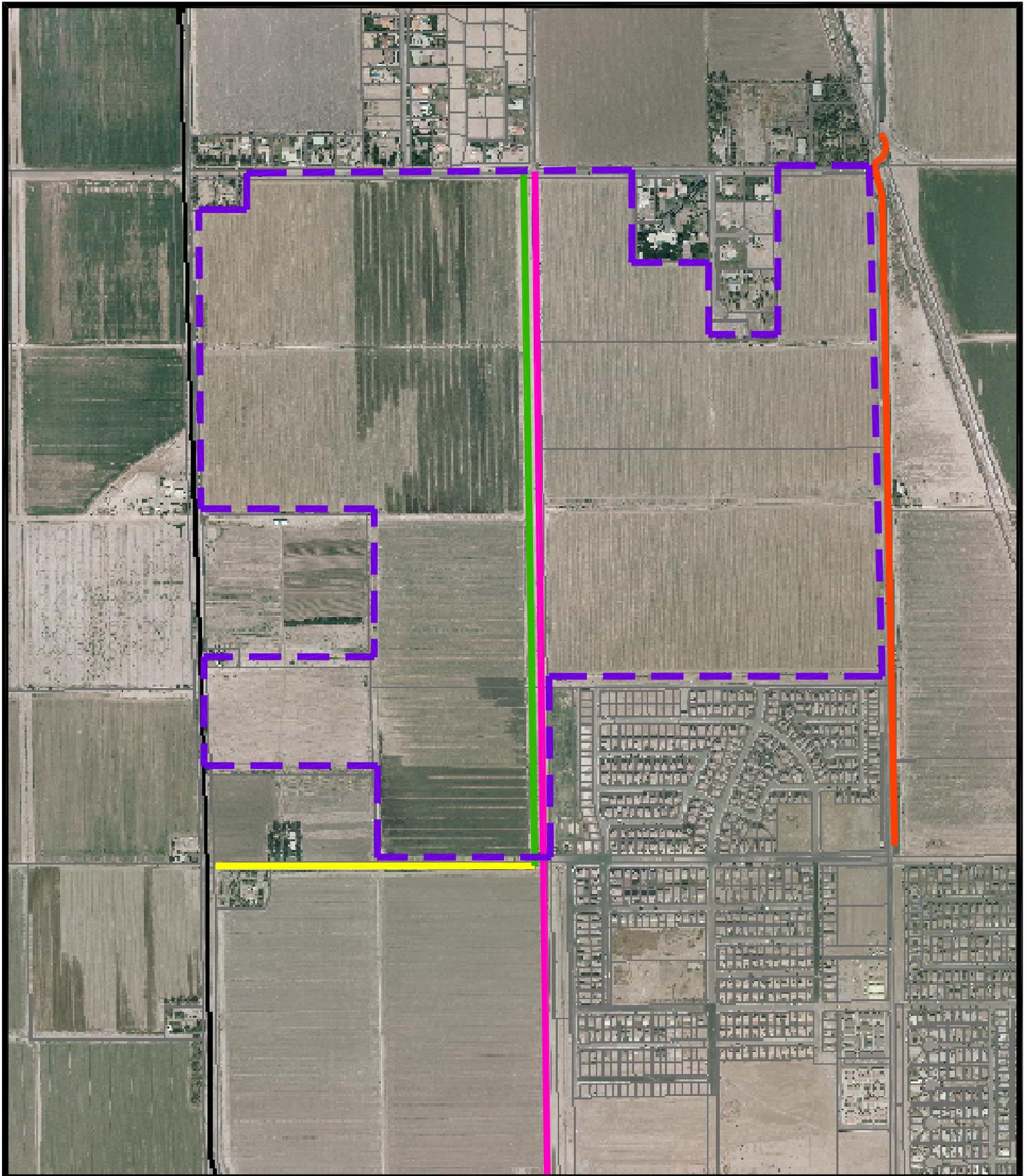


Figure 4-1

McCabe Ranch II Irrigation Conveyors

LEGEND

- Project Boundary
- Date Drain #3
- Date Drain #3-A
- Dogwood Lateral
- Dogwood Canal



Figure 4-1 Page 1

4.1.3 CULTURAL RESOURCES

PMC conducted archaeological and historical investigations for the McCabe Ranch II community development in Imperial County. These investigations included a record search conducted by the Southeast Information Center at the Imperial Valley College Desert Museum, Ocotillo; pedestrian surface survey of the project site; and completion of a report that documented the results of archaeological and historical investigations. PMC did not identify any historical resources, unique archaeological resources, or any other significant cultural resources (e.g., prehistoric sites, historic sites, historic buildings, or isolated artifacts) within project boundaries.

Four cultural resources have been reported within one mile of the project area. All four of these resources are historic constructions including two houses, the Dogwood canal, and the Niland-Calexico Railroad. In addition, an historic farm complex, including a residence, silo, and outbuildings are located along the northwest boundary of the project area (on the corner of McCabe Rd and Hwy 86). All structures are finished with board and batten siding and have gabled roofs consisting of wood shakes. According to the Imperial County Assessor's Office the complex was built in 1953. This site may be eligible for inclusion in the National Register of Historic Places or the California Register of Historic Resources. Regardless of the close proximity of these cultural resources to the proposed project area, project activities will not impact the function, appearance, characteristics, or integrity of any of these historic constructions.

4.1.4 GEOLOGIC RESOURCES

The Specific Plan is located in the central portion of the Colorado Desert geomorphic province, which encompasses an area that extends roughly 100 miles in width, from the Peninsular Ranges on the west to the Colorado River on the east, and is bounded to the north by the Transverse Ranges. The province is dominated by the Salton Trough, a structural depression resulting from large-scale regional faulting. The trough extends from near Palm Springs south to the head of the Gulf of California and is bounded on the northeast by the San Andreas fault and Chocolate Mountains and on the southwest by the Peninsular Range and faults of the San Jacinto fault zone. The oldest rocks in the province are Pre-Cambrian metamorphic rocks in the Chocolate, Cargo Muchacho, Orocopia, and Chuckwalla mountains. The most recent units are lake deposits formed in the ancient Lake Cahuilla, which underlies the current Salton Sea and much of the Salton Trough.

The Specific Plan is underlain by fill and ancient Lake Cahuilla sediments. Undocumented fills were observed at several locations across the site. These included berms, canal banks, spoil piles, and deposits related to farming. These materials are considered potentially compressible. Sediments in the site vicinity consist predominantly of silts and clays.

4.2 SHARED RESOURCES

The County of Imperial encourages energy conservation in order to reduce demand for electricity, gas, and water. The Specific Plan recognizes the importance of conserving the region's shared resources, including energy and water.

4.2.1 ENERGY

The McCabe Ranch II Specific Plan has been designed to encourage the conservation of energy resources. The design of the Circulation Plan encourages pedestrian and other non-vehicular modes of transportation. Additionally, multiple land uses (commercial, educational, and parks) have been located in proximity of one another in order to encourage residents to use alternative transportation to access these uses. Furthermore, even when future residents do

CHAPTER 4 RESOURCE MANAGEMENT

use their automobile, vehicles the trips will be shorter due to the accessibility of the services, which will thereby reduce the consumption of fossil fuels.

Design standards incorporated into the Land Use Plan, such as street sections with less pavement and more green space, along with other pedestrian friendly development techniques will foster conservation of energy resources. Additionally, future residential builders within the Plan area are encouraged to use energy efficient appliances and lighting in their homes, and develop homes with efficient solar orientation. Future builders are also encouraged to make solar power options available to future buyers, if market conditions make this option economically feasible.

Implementation of the following McCabe Ranch II Specific Plan project measures encourage energy conservation practices within the Specific Plan area:

TABLE 4-1
ENERGY CONSERVATION MEASURES

Strategy	Project Measure
Energy efficient building design	Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
Energy efficient building design	Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
Energy efficient building design	Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.
Energy efficient households	Install energy efficient heating and cooling systems, appliances and equipment and control systems, double-paned windows.
Energy efficient households	Install door sweeps and weather stripping if more efficient doors and windows are not available.
Energy efficient lighting	Use low-energy parking lot and streetlights (i.e. sodium).

4.2.2 WATER

The County of Imperial is committed to maintaining water supply by requiring new development projects to incorporate water-conserving fixtures and low-flow toilets. Similarly, the Specific Plan is committed to water conservation, and is designed to minimize water use.

The McCabe Ranch II Specific Plan will work in conjunction with the Heber Public Utility District the possibility of using reclaimed or raw water for landscaping irrigation of the public open spaces. This use of reclaimed or raw water for these uses reduces demand for potable treated water. Irrigation systems in public rights-of-way are also to be modeled on a low precipitation regime, and will be time-controlled. Furthermore, the Plan encourages the use of desert landscaping with low water use plants to complement “oasis landscaping” (areas of higher water use plants such as turf grass and palms) areas to reduce the amount of raw or reclaimed water used to irrigate public spaces. The following Specific Plan policies shall also apply:

Policy Geo-1 Minimize the degradation of water quality through use of erosion control plans and best management practices.

Future residential builders within the Specific Plan area are encouraged to use low-flow household appliances, such as toilets and shower heads. Water conservation devices that are to be used in the Specific Plan area are described in **Table 4-3**. Residential water usage will be

monitored on a per-unit basis, such that multi-family residential buildings, or mixed-use buildings, will have water use meters installed for each individual residence.

**TABLE 4-2
MANDATED WATER CONSERVATION DEVICES**

Device	Requirement
Showerheads	2.5 gpm
Lavatory Faucets	2.2 gpm
Sink Faucets	2.2 gpm
Metering Faucets in Public Restrooms	0.25 – 0.75 gal/cycle
Tub Spout Diverter	0.1 gpm
Residential Water Closets	1.6 gpf
Flushometer Valves	1.6 gpf
Commercial Water Closets	1.6 gpf
Urinals	1.0 gpf

gpm = gallons per minute; gpf = gallons per flush.

Additionally, implementation of the following McCabe Ranch II Specific Plan project measures will encourage water conservation practices within the Specific Plan area:

**TABLE 4-3
WATER CONSERVATION MEASURES**

Strategy	Project Measure
Water-wise operations	Create water-efficient landscapes.
Water-wise operations	Install water-efficient irrigation systems and devices such as soil moisture-based irrigation controls.
Water-wise operations	Design buildings to be water-efficient. Install water-efficient fixtures and appliances.
Water-wise operations	Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
Reduce waste flows	Provide interior and/or exterior storage areas where appropriate for recyclables and green waste and adequate recycling containers located in public areas if such recycling programs are available.

4.2.3 AIR QUALITY

Ambient monitoring is typically performed either in locations representative of where people live and work, or near industrial sources to document the air quality impacts of those facilities. The closest air quality monitoring station is the 9th Street station in the City of El Centro. Information on ambient air quality was gathered from this station for 2006 through 2008. The Imperial Valley is in nonattainment for the state and federal ozone and PM10 standards.