

Chapter III

NATURAL RESOURCES

- AIR QUALITY
- ENERGY AND MINERAL RESOURCES
- BIOLOGICAL RESOURCES
- CULTURAL RESOURCES
- WATER RESOURCES
- OPEN SPACE AND CONSERVATION





La Quinta

— GEM of the DESERT —



AIR QUALITY

PURPOSE

The Air Quality Element describes the physical causes of air pollution in the region and provides policies and programs that will enable the City to improve its air quality. Goals, policies, and programs set forth in this element are intended to avoid, reduce, or limit impacts to air quality resulting from build out of the General Plan.

Poor air quality poses a human health threat, reduces visibility in the Valley, affects the views of the surrounding desert and mountains, and interferes with the livability of La Quinta for residents and visitors.

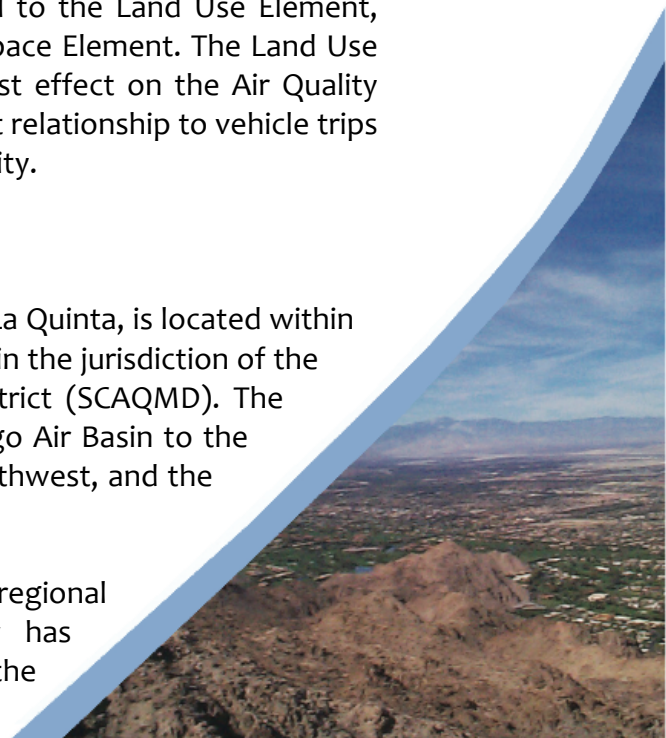
The Air Quality Element is not a stand-alone element, but part of an interrelated group of elements within the General Plan that all strive to preserve and enhance the quality of life in La Quinta. To that end, the City has prepared a Greenhouse Gas Reduction Plan which will help new and existing development reduce greenhouse gas emissions.

The Air Quality Element is directly related to the Land Use Element, Traffic & Circulation Element, and Open Space Element. The Land Use and Circulation Elements have the greatest effect on the Air Quality Element because they have the most direct relationship to vehicle trips – the largest source of air pollution in the City.

BACKGROUND

The Coachella Valley, including the City of La Quinta, is located within the Salton Sea Air Basin (SSAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SSAB shares boundaries with the San Diego Air Basin to the west, the South Coast Air Basin to the northwest, and the Mojave Desert Air Basin to the north.

Air quality in the City is a result of local, regional and area-wide conditions. Air quality has deteriorated in the Coachella Valley over the last few decades due to local growth,



development, industry and construction activities, as well as sources outside of the Valley, particularly from the South Coast Air Basin located west of the region.

Regulatory Environment

Ambient air quality standards have been established by both federal and state (California) governments to monitor and regulate air pollutants and protect people and the environment from the effects of poor air quality. At the regional level, management districts measure and monitor air pollution and develop strategies for reducing air pollution. Local governments, through ordinances, programs, and policies, can help reduce impacts to air quality. A comparative summary of the regulatory environment is shown in **Table III-1**.

Table III-1
Authorizing Legislation & Implementing Agencies for Air Quality

Government	Legislation	Implementing Agencies
Federal	Clean Air Act	US Environmental Protection Agency (USEPA)
State	California Clean Air Act	California Air Resources Board (CARB)
Regional	Air Toxics “Hot Spots” Information Assessment Act	South Coast Air Quality Management District (SCAQMD)
Local	Local Ordinances and Air Quality Elements in General Plans	Local Governments

Source: Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, SCAQMD, May 6, 2005

Federal Regulation¹

At the federal level, the U.S. Environmental Protection Agency (EPA) is charged with reducing emissions from federally controlled sources such as commercial aircraft, trains, and marine vessels, and has also created automobile emission standards for forty-nine states. The EPA has been able to enforce emission standards through the passage of

¹ “2007 Air Quality Management Plan,” South Coast Air Quality Management District, June 1, 2007.

the 1963 Clean Air Act (CAA). More recently, the EPA has become responsible for regulating greenhouse gas emissions.

The EPA is responsible for setting the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The NAAQS has established primary and secondary standards for six criteria air pollutants used to protect the health and welfare of citizens and the economy. Primary standards are designed to protect sensitive sectors of the population such as children and the elderly. Secondary standards were established to protect economic entities, such as crops, buildings, and visibility.

State Regulation

The State of California has created air quality regulation through the California Clean Air Act (CCAA), which became effective on January 1, 1989. The CCAA establishes ambient air quality standards similar to NAAQS, and sets forth deadlines for air management districts which are not attaining the standards to reach attainment status. The CCAA also established the California Air Resources Board (CARB) to oversee regional air pollution and develop State ambient air quality standards, which are generally more stringent than federal standards. CARB advises and evaluates the efforts of local and regional air pollution control agencies and districts. Districts that are in noncompliance with federal and state standards are encouraged to prepare State Implementation Plans (SIP) to help meet the federal and state ambient air quality standards.

The passage of the California Global Warming Solutions Act (AB 32) in 2006 made CARB the responsible state agency for monitoring and reducing greenhouse gas (GHG) emissions at the state level, by establishing an annual reporting program of emissions for significant sources. It also set limits to cut the state's GHG emissions to 1990 levels by 2020.

Finally, the Governor's Executive Order S-3-05, enacted on June 1, 2005, takes California's commitment to GHG reductions one step further. It resolves to achieve statewide emission reductions that are 80% below 1990 levels by 2050.

Regional Regulation

The City and its Sphere of Influence are regulated on a regional level by the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over approximately 10,743 square miles throughout Southern California and regulates air quality standards for three different air basins, including the South Coast Air Basin, Mojave Desert

Air Basin, and Salton Sea Air Basin. The City of La Quinta and surrounding Coachella Valley region are located within the Salton Sea Air Basin (SSAB). The Salton Sea Air Basin is generally bounded on the west by the San Jacinto Mountains and on the east by the eastern edge of the Coachella Valley.

South Coast Air Quality Management District Jurisdiction



The SCAQMD is responsible for the overall development and implementation of the Air Quality Management Plan (AQMP). The AQMP is a comprehensive plan that complies with state and federal requirements for ensuring air quality improvement. The latest plan, approved in 2007, builds upon previous plans and provides comprehensive strategies to control pollution from mobile sources, stationary sources and area sources. It also proposes policies and measures to achieve federal standards for healthful air quality throughout the District.

The Salton Sea Air Basin has been in non-compliance with federal standards for ozone, and has been classified as a “serious” ozone non-attainment area. The region has also historically been designated as a serious non-attainment area for particulate matter of 10 microns or less, known as PM₁₀. Blown sand is the primary source of PM₁₀ in the City and the Valley. In 2002, the Coachella Valley State Implementation Plan (CVSIP) was prepared and implemented by all Valley cities to reduce the amount of blown sand and dust in the Valley. Since the approval of the 2003 CVSIP by the EPA, the Coachella Valley has successfully reduced the amount of PM₁₀ in the air and meets current

federal standards. However, the Environmental Protection Agency has not yet re-designated the PM₁₀ classification for the Coachella Valley.

Regionally, the Coachella Valley Association of Governments (CVAG) coordinates the management of PM₁₀ for all Coachella Valley cities. It developed a model management plan which has been implemented throughout the area. As a member of CVAG, the City of La Quinta is involved in the regional management of air quality.

Local Regulation

This Element provides the City of La Quinta with goals, policies, and programs to implement improvements to its air quality. The City is also meeting the requirements of AB32 by preparing a Greenhouse Gas Reduction Plan, which establishes its current emissions and sets targets for long-term reductions. Community-wide activities in the City generated an estimated 1,228,050 metric tons of carbon dioxide equivalence in 2005. Reduction targets in the Plan strive to achieve 10% below 2005 levels by 2020. To reach those targets, the Plan includes a wide range of implementation tools which can be implemented by City officials, residents and business owners.

Regulated Pollutants

Regulated pollutants fall under three categories, including criteria air pollutants, toxic air contaminants (TAC), and greenhouse and ozone depleting gases. Each type of pollutant is measured and regulated differently. Criteria air pollutants are measured by sampling concentrations in the ambient air, whereas toxic air contaminants are measured at the source and in the atmosphere. Greenhouse and ozone depleting gases do not have established thresholds, but are subject to federal and regional policies for reduction.² AB32, for example, establishes standards for targeted greenhouse gas reduction goals.

Criteria Pollutants

Criteria pollutants are air pollutants for which federal and state air quality standards exist. Federal and state ambient air quality standards exist for lead, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and suspended particulate matter. The California Air Resource Board also has standards for hydrogen sulfide, sulfates, vinyl chloride, and visibility-reducing particles. **Table III-2**, below, provides a summary of primary sources and effects of the NAAQS Criteria Pollutants.

² Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, SCAQMD, May 6, 2005.

**Table III-2
Primary Sources and Effects of Criteria Pollutants**

Pollutant	Source	Primary Health and Welfare Effects
Lead (Pb)	Contaminated Soil, production of batteries, ink, ammunition	Behavioral and hearing disabilities in children; anemia; kidney disease; neuromuscular disorders.
Sulfur Dioxide (SO ₂)	Combustion of sulfur containing fossil fuels such as coal, petroleum; chemical manufacturing plants	Aggravation of respiratory diseases (asthma, emphysema; reduced lung function)
Carbon Monoxide (CO)	Incomplete combustion of motor exhaust; decomposition of organic matter	Heart disease; anemia; impaired mental function; impaired fetal development
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust; high temperature stationary combustion; atmospheric reactions	Respiratory illness; aggravation of heart disease
Ozone	Atmospheric reaction of organic gases with nitrogen oxides and VOC's in sunlight	Aggravation of respiratory and cardiovascular diseases; reduced lung function; asthma; emphysema; increased sensitivity to infections
Particulate Matter (PM ₁₀ & PM _{2.5})	Stationary combustion of fossil fuels; construction activities;	Reduced lung function; aggravation of cardio-respiratory diseases

Source: Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, SCAQMD, May 6, 2005.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are considered “non-criteria” air contaminants because no ambient air quality standards exist for them. There are numerous TACs emitted into the air, and exposure to them is linked to cancer, birth defects, genetic damage and other adverse health conditions. Short-term exposure is known to cause acute health effects such as nausea, skin irritation, and respiratory illness.

Greenhouse Gases

Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, halons, chlorofluorocarbons, and hydro-chlorofluorocarbons, are released into the atmosphere by both natural processes and human activities. These gases are termed “greenhouse gases” because they trap heat and are responsible for the global increase in surface temperature observed over the last decade. There is much debate over what the effects of climate change will be, but there is a general

consensus that emissions levels need to be reduced in order to minimize air pollution and limit the amount of carbon dioxide and other pollutants that are emitted.

Greenhouse Gas Reduction Plan

La Quinta is committed to reducing greenhouse gas emissions, and has prepared a Greenhouse Gas Reduction Plan as a first step towards achieving this goal. The Greenhouse Gas Reduction Plan includes a comprehensive inventory of greenhouse gas emissions generated City-wide, including those generated by local government activities. Future emissions of greenhouse gases are projected, reduction targets set, and policies and programs are proposed as part of the Greenhouse Gas Reduction Plan. The Plan is a toolbox the City will use to meet mandated reductions.

To be consistent with AB 32 and executive order S-3-05, the reduction target is to achieve 1990 level emissions by 2020, and 80% below 1990 levels by 2050.

While more stringent requirements for building standards and vehicle fuel efficiency are being enacted on a statewide level, such as through updates to the California Building Code (Title 24), and SB 375, the City will comply with statewide efforts and act locally to monitor, evaluate, and amend local policies and programs in order to achieve mandated emission reductions.

Ambient Air Quality Standards

Federal and state air quality standards established for criteria pollutants are designed to protect that segment of the population that is most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those who are weak from disease or illness. State standards are generally more restrictive than federal standards, particularly with regard to carbon monoxide and particulate matter. The General Plan EIR describes the federal and state standards in place at the time this General Plan is adopted.

The SCAQMD operates and maintains two regional air quality monitoring stations in the Coachella Valley, including one at a Palm Springs Fire Station and one in the City of Indio, off Jackson Street. These monitoring stations determine whether existing ambient air quality complies with current standards. The nearest monitoring station to La Quinta, in Indio, monitors contaminant levels and meteorological conditions on a daily basis. Ozone and particulate matter are the primary pollutants of concern in La Quinta and

represent the greatest threats to air quality and human health in the Coachella Valley. The region is experiencing a decreasing trend in the number of days that exceed ozone and PM₁₀ levels.

Sensitive Receptors

Sensitive receptors are people or land uses that may be especially subject to respiratory stress and/or significant adverse impacts as a result of exposure to air contaminants. The CARB designates people with cardiovascular and chronic respiratory diseases, children under 14, seniors over 65, and athletes as sensitive receptors. The City's appeal as a retirement destination and resort community implies that a major portion of its residents and visitors are potentially susceptible to respiratory distress from elevated concentrations of air quality pollutants. Accordingly, hospitals, nursing and retirement homes, schools, daycares, playgrounds, parks, athletic facilities, residential structures, and hotels are all considered sensitive land uses.

Climatic Conditions in the Coachella Valley

The City of La Quinta, the City's Sphere of Influence, and the surrounding region are located in a hot, arid desert climate. The surrounding mountains block coastal influences, creating an area of low rainfall. The Valley floor typically receives an average of four inches of rain per year. Temperatures frequently exceed 100° F during the summer and can occasionally fall below freezing during the winter. The prevailing wind patterns during spring and summer blow west to east and are caused by a desert thermal low-pressure area drawing cooler, denser coastal air through the San Geronio Pass. During fall and winter months, climatic conditions change as strong dry northeasterly Santa Ana winds blow air toward the coast. These strong wind events suspend and transport large quantities of particulate matter, including sand and dust, which can reduce visibility, damage property and pose a significant health threat. The prevailing wind patterns also draw in air pollution generated in the South Coast Air Basin west of the Coachella Valley.

Regional Pollutants of Concern

Compared to air basins west of the Coachella Valley, the City of La Quinta has good air quality. High levels of ozone and particulate matter, which are described below, are the primary pollutants of concern in La Quinta and represent the greatest threat to air quality and human health in the Coachella Valley.

Ozone (O₃)

Ozone is a pungent, colorless, toxic gas formed when byproducts of internal combustion engines react in the presence of ultraviolet sunlight. Ozone is emitted daily from the operation of automobiles.

The Coachella Valley has a history of occasionally exceeding state and federal ozone standards; however, trends do show a slight decrease in the concentration over the past decade. The Coachella Valley is classified as a “serious” ozone non-attainment area under the Federal Clean Air Act. Under current regulatory plans, the area must demonstrate attainment of the federal ozone air quality standard by June 15, 2013.³ Local monitoring for ozone indicates that federal ozone exceedances in the Coachella Valley are largely the result of pollutant transport from the South Coast Air Basin, through the Banning Pass. Improving ozone levels in the Coachella Valley will be partly dependent upon reduced ozone emissions in the South Coast Air Basin. Simulations of ozone episodes, prepared by SCAQMD, show that the federal 8-hour standard will be attained in the Coachella Valley by 2018.⁴ This 8-hour standard is currently the only federal standard for ozone.

PM₁₀ Emissions

Particulate matter less than 10 microns in diameter (PM₁₀) includes suspended particles of dust, sand, metallic and mineral substances, road-surfacing materials, pollen, smoke, fumes and aerosols. Natural erosion and sand migration caused by strong winds in the Coachella Valley generate most PM₁₀ in the La Quinta area. Grading and other activities associated with construction are also significant contributors to dust generation. Windborne particles may be further pulverized by motor vehicles on roadways, where they are re-suspended in the air. PM₁₀ particles can pass through the filtering system of the lungs and directly irritate lung tissues, potentially resulting in serious health problems.

Although the Coachella Valley has a history of elevated PM₁₀ levels, local government agencies, private and public stakeholders, and SCAQMD have developed State Implementation Plans, rules, and local dust control ordinances to bring the Coachella Valley into attainment. The Coachella Valley State Implementation Plan was adopted and approved by the EPA on April 18, 2003 and includes control measures

³ As described in the 2007 Air Quality Management Plan, prepared by SCAQMD on June 1, 2007, p.8-1, this will be accomplished using a photochemical grid model.

⁴ 2007 Air Quality Management Plan, SCAQMD, June 1, 2007, p.8-10

to reduce PM₁₀.⁵ These measures have been effective in reducing the concentration of PM₁₀ throughout the Coachella Valley. Although the valley currently meets attainment standards, the EPA has not yet re-designated the PM₁₀ classification for the Coachella Valley.

Pollutant Control Measures Implemented by La Quinta

In 2003, to reduce the impacts of local fugitive dust and PM₁₀ emissions, the City of La Quinta adopted Fugitive Dust (PM₁₀) Control Ordinance No. 391 (Chapter 6.16 of the La Quinta City Municipal Code). The ordinance establishes minimum dust control requirements for construction and demolition activities and other land uses. Dust control measures set forth in the ordinance include the preparation and approval of a Fugitive Dust Control Plan; reductions in vehicular speeds on unpaved roads and at construction sites; the application of chemical and/or vegetative dust suppressants and stabilizers; and paving of parking lots and roadways. The City will not issue a grading or demolition permit without an approved Fugitive Dust Control Plan. The City has the authority to monitor and inspect grading and demolition activities to ensure that the measures identified in each fugitive dust mitigation plan are properly implemented.⁶

The City also participates in regional air pollution reduction measures established and maintained through the Coachella Valley Association of Governments.

PLANNING FOR THE FUTURE

The City of La Quinta will continue to act locally to meet existing and future state and federal air quality regulations. La Quinta is exploring alternative energy options, such as wind turbines, geothermal systems, and solar energy, electric and alternative fuel vehicles, and green building technology, as viable options for enhancing air quality by reducing greenhouse gas emissions and other air pollutants. A major effort of this undertaking is the implementation of the La Quinta Greenhouse Gas Reduction Plan.

⁵ 2003 Coachella Valley PM₁₀ State Implementation Plan, SCAQMD, August 1, 2003

⁶ Ordinance 391, City of La Quinta, December 2, 2003

GOALS, POLICIES AND PROGRAMS

GOAL AQ-1

A reduction in all air emissions generated within the City.

❖ [Policy AQ-1.1](#)

Coordinate with the South Coast Air Quality Management District to assure compliance with air quality standards.

- [Program AQ-1.1.a](#): Participate in monitoring, managing, and enforcing SCAQMD rules for criteria pollutants, TACs, GHGs and all other regional air pollutants of concern.

❖ [Policy AQ-1.2](#)

Work to reduce emissions from residential and commercial energy use by encouraging decreased consumption and increased efficiency.

- [Program AQ-1.2.a](#): Work directly with the major utility providers, including The Gas Company, Imperial Irrigation District and the Coachella Valley Water District to develop incentives and rebates to encourage energy savings, subject to funding availability.
- [Program AQ-1.2.b](#): Encourage Imperial Irrigation District to diversify and expand the use of alternative energy sources.

❖ [Policy AQ-1.3](#)

Work to reduce emissions from mobile sources by encouraging a decrease in the number of vehicle trips and vehicle miles traveled.

- [Program AQ-1.3.a](#): Work with Sunline Transit Agency to expand public transportation routes.
- [Program AQ-1.3.b](#): Encourage public and private schools to establish alternative transportation programs for students.
- [Program AQ-1.3.c](#): Adopt and implement a Transportation Demand Management Ordinance for businesses with 50 or more employees.
- [Program AQ-1.3.d](#): Expand routes for golf carts and other neighborhood electric vehicles and plan for access and

recharging facilities at retail, recreational, and community centers.

- [Program AQ-1.3.e](#): Expand pedestrian and bicycle routes and provide safe and convenient access to retail, recreational, and community centers.
- [Program AQ-1.3.f](#): Facilitate mixed use development concepts in specific identified areas of the community to allow the combination of residential and non-residential uses, such as live-work-shop designs, as described in the Land Use Element.
- [Program AQ-1.3.g](#): Where permitted by the Land Use plan, and where appropriate, encourage high density residential development within walking distance to commercial, educational and recreational opportunities.

❖ [Policy AQ-1.4](#)

Protect people and sites that are especially sensitive to airborne pollutants (sensitive receptors) from polluting point sources.

- [Program AQ-1.4.a](#): Uses such as manufacturing, auto body shops, and other point source polluters should be reasonably separated from sensitive receptors.

❖ [Policy AQ-1.5](#)

Ensure all construction activities minimize emissions of all air quality pollutants.

- [Program AQ-1.5.a](#): All grading and ground disturbance activities shall adhere to established fugitive dust criteria.
- [Program AQ-1.5.b](#): Fugitive Dust Control Plans shall be reviewed and approved for development projects.

❖ [Policy AQ-1.6](#)

Proposed development air quality emissions of criteria pollutants shall be analyzed under CEQA.

❖ [Policy AQ-1.7](#)

Greenhouse gas emissions associated with a development project shall demonstrate adherence to the City's GHG Reduction Plan.

❖ [Policy AQ-1.8](#)

The City shall adopt a comprehensive greenhouse gas reduction plan that sets forth reduction targets, timelines, and measures to achieve targets.

- [Program AQ-1.8.a](#): Implement the GHG reduction measures detailed in the GHG Reduction Plan.
- [Program AQ-1.8.b](#): Establish a comprehensive database to maintain an inventory of city government resource use and conservation with interdepartmental access.
- [Program AQ-1.8.c](#): Coordinate with Burrtec to establish and implement programs that divert wastes from landfills, such as the composting of food waste and plant debris and the expanded re-use and recycling of materials, to reduce methane emissions.

RELATED GOALS

As described above, this Element relates to others in this General Plan. The following Goals, and their associated policies and programs, are closely related to those of this Element.

GOAL SC-1: A community that provides the best possible quality of life for all its residents.



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ENERGY AND MINERAL RESOURCES

PURPOSE

Energy and mineral resources are components of the City's natural resources. Energy resources include electric power, natural gas service, and propane gas service, which is limited to the La Quinta Cove and some areas in the Sphere of Influence (SOI). Recent changes in California law and residents' concerns regarding energy efficiency and conservation have placed a particular focus on energy use now and in the future. Mineral resources in the region consist primarily of sand and gravel for construction, which have not been mined in the City or its SOI in many years. Government Code Section 65560 requires that cities consider in their General Plans lands for the managed production of natural resources.

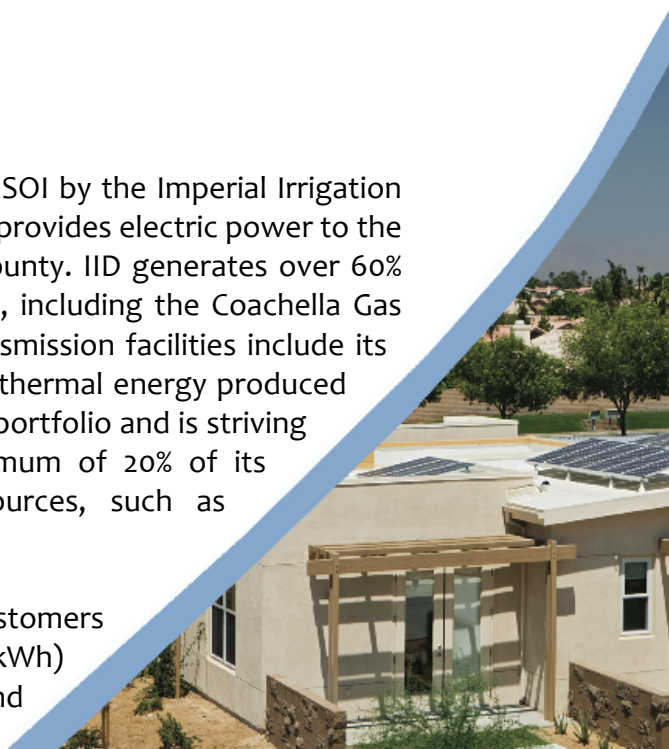
The Energy and Mineral Resources Element addresses these resources, and their relationship to the City's long-term growth.

BACKGROUND

Energy Resources

Electricity is provided to the City and its SOI by the Imperial Irrigation District (IID), a local taxing district which provides electric power to the eastern Coachella Valley and Imperial County. IID generates over 60% of its power from a number of facilities, including the Coachella Gas Turbine facility in Coachella, and its transmission facilities include its Green Path system, which transmits geothermal energy produced in Imperial County. IID has diversified its portfolio and is striving to achieve its goal of deriving a minimum of 20% of its electricity from alternative energy sources, such as geothermal, solar and wind energy.

In 2005 in La Quinta, a total of 9,750 customers consumed 222,576,000 kilowatt hours (kWh) of electricity. Single family homes and condominiums consumed on average



17,917 kWh each, and were the single largest user of electricity in the City. The City has committed to reducing its consumption of electricity through a number of programs, discussed below and in the Livable Community Element.

Natural gas is provided to the City by The Gas Company, which transports natural gas to the Coachella Valley through regional high pressure lines. Limiting stations transfer the gas to supply lines with reduced pressure, which feed local accounts. Natural gas is the primary energy source for water heaters, cooking and heating. In 2005, the City consumed 692,150,000 cubic feet of natural gas. In 2009, the City consumed an estimated 950 million cubic feet of natural gas.

In areas where natural gas service is not available, including portions of the La Quinta Cove and older homes in the SOI, propane gas is used instead. Propane is supplied by private companies which contract with individuals and businesses to fill on-site tanks for private use.

Alternative Energy

The western end of the Coachella Valley has produced wind energy for years. The City and its SOI do not have sustained winds sufficient to accommodate commercial wind energy development, but they have, and will continue, to benefit from this resource. State and federal programs have expanded the potential for wind energy development, which is currently being considered for expansion on federal lands in the region.

As described above, geothermal energy is in production in Imperial County and is currently part of the IID energy portfolio. Its expansion is also likely during the life of this General Plan, as additional sources are tapped and harnessed. More studies are required to determine whether geothermal energy production is feasible locally. However, the City can expect to continue to use geothermal energy produced elsewhere well into the future.

The City's abundant sunshine makes solar energy use the most promising alternative energy production method for the future. In the past, consumer-level solar energy systems were costly and unreliable. The latest technology, however, has reduced costs and improved efficiency. During the life of this General Plan, it can be expected that solar energy use for residences and businesses will increase substantially.

Energy and Greenhouse Gases

In recent years, concerns regarding the existence and increase in greenhouse gases have grown. Greenhouse gases include carbon dioxide, methane, nitrous oxides and fluorinated gases which have been shown to damage our atmosphere and increase global warming. Although the primary source of greenhouse gases is the automobile, the creation and consumption of energy also produces greenhouse gases. In 2006, the State legislature passed, and the Governor signed, the California Global Warming Solution Act, which requires that all greenhouse gas emissions be reduced to 1990 levels by 2020, and that reductions of 80% below 1990 levels be achieved by 2050. By reducing its consumption of energy, the City will help to meet these targets during the life of this General Plan.

Mineral Resources

Mineral resources in the City and the region consist primarily of sand and gravel which has been transported by wind and rain into the Valley from surrounding mountains over millennia. California requires that mineral resources be identified and that the mining of identified resources be protected. The California Department of Conservation, Division of Mines and Geology has mapped the region's resources and identified three Mineral Resource Zones in the City:

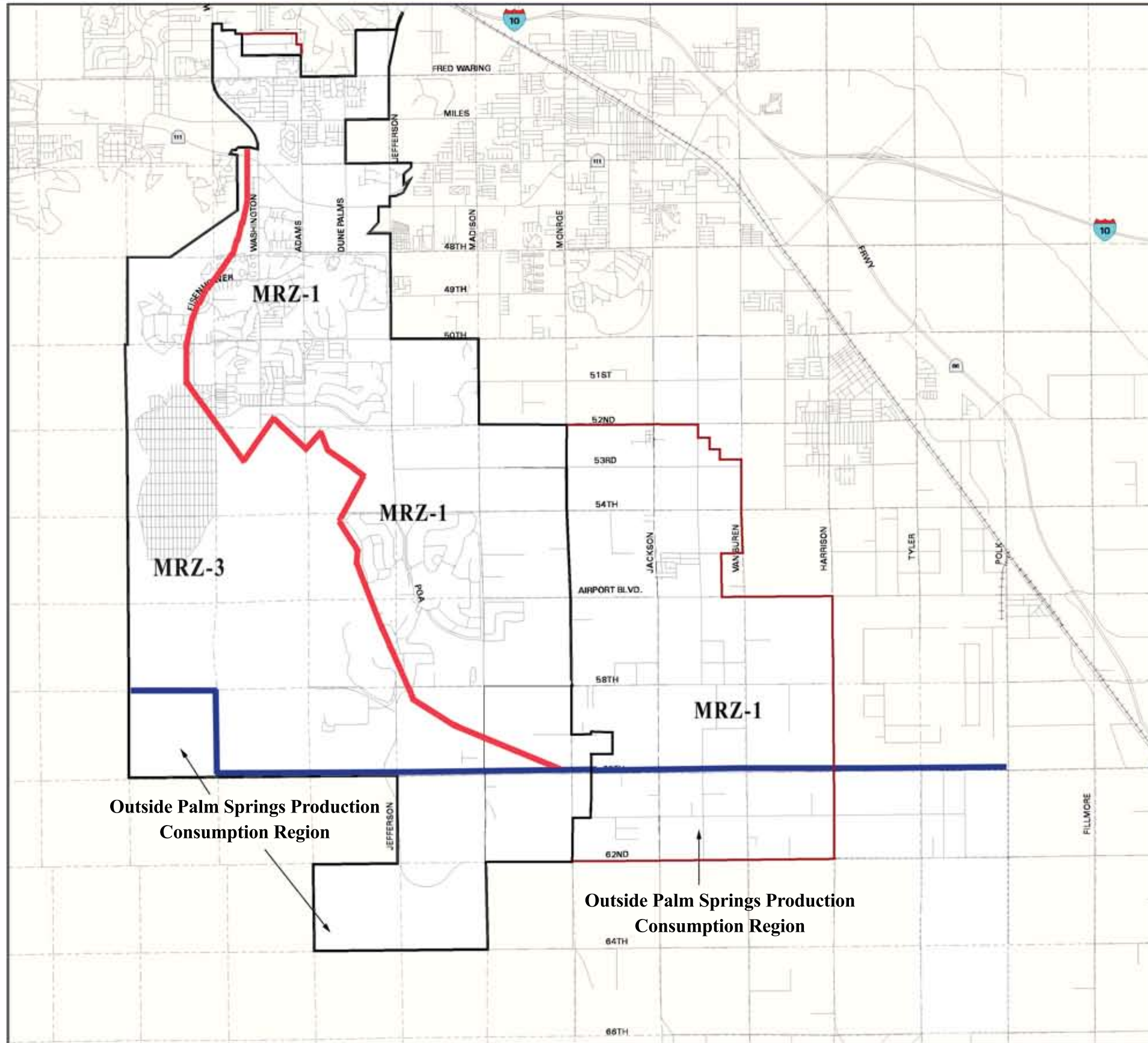
MRZ-1 lands are areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood for their presence exists.

MRZ-2 lands include areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

MRZ-3 lands are areas containing mineral deposits, the significance of which cannot be evaluated from available data.

As shown in Exhibit III-1, most of the City and its Sphere lie within MRZ-1, while lands south of Avenue 60 have not been studied.

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LEGEND

- Roads
- Township/Range Sections
- Railroads
- City Limits
- City Sphere of Influence

Mineral Resource Zone Map

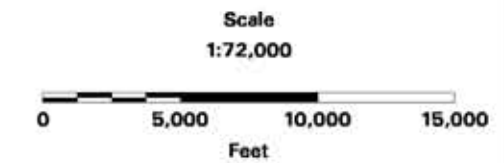
- Mineral Resource Zone Boundary
- Palm Springs Production - Consumption Boundary Region

MRZ - 1: Areas Where available geologic information indicates that little likelihood exists for the presences of significant mineral resources

MRZ - 3: Areas containing known or inferred mineral occurrences of undetermined mineral resources significances

Outside Palm Springs Production Consumption Region

Outside Palm Springs Production Consumption Region



Riverside County Vicinity Map



Map Prepared on: December 14, 2001
 Map Prepared by: Aerial Information Systems
 Map Revised by: Terra Nova Planning & Research, Inc.
 Map Revised on: January 6, 2011 Map Version No.: 6



Only one area of the City is identified as having the potential for mineral resources (please see Exhibit III-1). The MRZ-2 zone was previously a quarry site, but has been developed as a country club community for several years. The future development of the City's hillsides will be unlikely, as they are designated for Open Space and are not expected to develop. No other lands are identified in the City or its Sphere as having the potential to harbor mineral resources. Lands south of Avenue 60 have not been studied yet. If they prove to contain mineral resources, the City will diligently and responsibly manage these mineral resources.

PLANNING FOR THE FUTURE

The continued growth of the City and its Sphere will require additional energy resources. Although IID and The Gas Company are expected to continue to supply the City and its Sphere with electricity and natural gas, respectively, the City is also committed to the conservation of these resources and to reducing energy usage to the greatest extent possible. Additionally, the City has developed a Greenhouse Gas Reduction Plan which establishes reduction targets and implementation programs to help the City meet the requirements of the California Global Warming Solutions Act. While the policies and programs in this element are specifically focused on energy resources, the Livable Community Element includes detailed policies and programs to achieve global warming goals.

GOALS, POLICIES AND PROGRAMS

GOAL EM-1

The sustainable use and management of energy and mineral resources.

❖ [Policy EM-1.1](#)

Strongly encourage conservation of energy resources.

- [Program EM-1.2.a](#): Review and amend, as appropriate, Zoning Ordinance procedures and standards to include site orientation, solar control and use of passive heating and cooling techniques.

❖ [Policy EM-1.2](#)

Support the use of alternative energy and the conversion of traditional energy sources to alternative energy.

- [Program EM-1.2.a](#): Encourage installation of alternative energy devices on new and existing development. Programs may include City-funded incentive programs; matching fund programs with IID, The Gas Company and alternative energy providers, as well as other programs as they become available.
- [Program EM-1.2.b](#): As funding and applicability allows, incorporate Compressed Natural Gas (CNG), hybrid or electric vehicles into the City fleet as vehicles are replaced, with a target to complete the conversion by 2035.
- [Program EM-1.2.c](#): Continue participation in the Sunline Transit Agency, and promote the use of alternative fuel technologies for its buses.
- [Program EM-1.2.d](#): As appropriate, incorporate LED or other energy-efficient lighting in signals and lights throughout the City.
- [Program EM-1.2.e](#): Explore opportunities to provide a CNG and other alternate fuel fueling station in the City.
- [Program EM-1.2.f](#): Implement, as appropriate, energy-efficient improvements in City buildings and facilities using Energy Efficiency Conservation Block Grant or similar funds.

GOAL EM-2

The conservation and thoughtful management of local mineral deposits to assure the long-term viability of limited resources.

❖ [Policy EM-2.1](#)

Preserve mineral resources identified by the Department of Mines and Geology to the greatest extent possible.

- [Program EM-2.1.a](#): As appropriate, designate undeveloped lands known to contain mineral resources as determined by the Department of Mines and Geology as Open Space on the General Plan Land Use Map.
- [Program EM-2.1.b](#): Review and amend the Zoning Ordinance as appropriate to require that mineral extraction occurring in the City be subject to the requirements of the California Surface Mining and Reclamation Act (SMARA), and the City's Zoning procedures.



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— GEM of the DESERT —



BIOLOGICAL RESOURCES

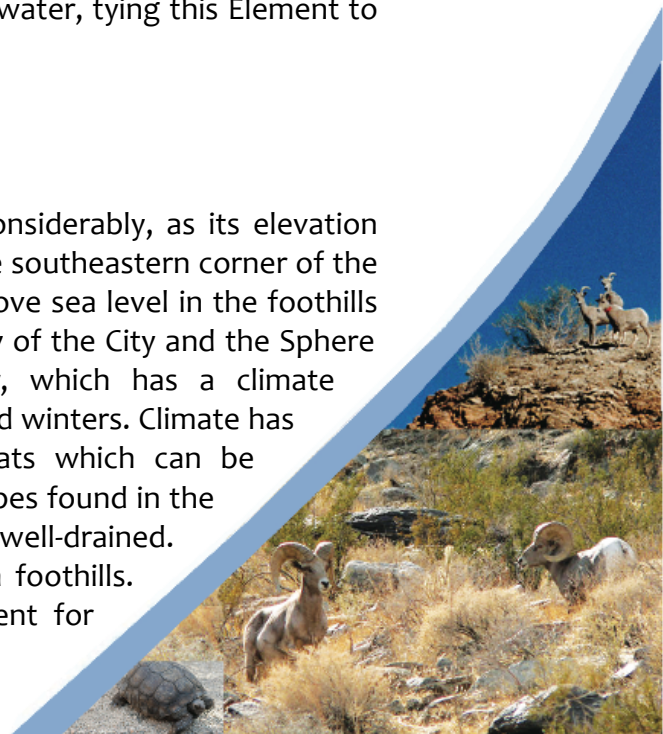
PURPOSE

The Biological Resources Element provides background information on the City's diverse natural habitats and the species which live in these habitats. It provides information on the Coachella Valley Multiple Species Habitat Conservation Plan (CV MSHCP) and those species covered by the Plan which may occur in the City. The Element also includes goals, policies and programs to direct the preservation of valuable habitat and the species which occur in the City, and to comply with federal, state, and regional efforts associated with biological resource preservation.

California Government Code Section 65302(d) requires that the General Plan include a natural resources component, which addresses, among other issues, biological resources. The Biological Resources Element directly relates to the Land Use and Open Space elements and has the potential to impact both. In addition, native species can be significantly affected by the availability of water, tying this Element to the Water Resources Element.

BACKGROUND

La Quinta's natural environment varies considerably, as its elevation ranges from 130 feet below sea level in the southeastern corner of the Sphere of Influence, to over 1,700 feet above sea level in the foothills of the Santa Rosa Mountains. The majority of the City and the Sphere of Influence occur on the Valley floor, which has a climate characterized by hot, dry summers and mild winters. Climate has affected soils, and therefore, the habitats which can be sustained in the City. Most of the 11 soil types found in the City and its Sphere are sandy in nature and well-drained. Rock and rubble occur in the Santa Rosa foothills. (Please see the Soils and Geology Element for greater detail on soil types in the City.)



Naturally occurring habitat within the City and on the Valley floor has largely disappeared due to the impacts of agriculture and urban development. The majority of the City's vegetation consists of non-native ornamental plants which have been introduced via urban development. Native habitat still occurs on the slopes of the Santa Rosas, and lands which are designated as Open Space on the City's Land Use Map, and these areas have little potential for development.

Common Native Plant Species

The base of the foothills, drainages and streams in the City consist primarily of Sonoran Creosote Bush Scrub, Sonoran Mixed Woody and Succulent Scrub, and Desert Dry Wash Woodland. Sonoran Creosote Bush Scrub is the most common plant community in the City and the Coachella Valley, and is dominated by Creosote Bush, Burrobush, Brittlebush and similar common species. This plant community also has the highest concentration of annual desert wildflowers, which can result in bright explosions of color in the spring. Sonoran Mixed Woody and Succulent Scrub, which occurs primarily at the base of the Santa Rosa Mountains, is similar to Creosote Bush Scrub, but has a higher plant density and greater variety of species, including cacti and succulents.

This habitat can include Golden Cholla, Buckhorn Cholla, Beavertail, California Barrel Cactus and Ocotillo. Desert Dry Wash Woodland is dominated by Blue Palo Verde, Ironwood and Smoketree, which are all well adapted to



intermittent water flows in the washes and drainage courses which occur in the City's southern end.

The northern area of the City was originally wind blown sandy habitat, including desert dunes and sand field habitats. The development of lands to the northwest over time has reduced the amount of sand transported to these areas and resulted in stabilized sand habitats that are more likely to support non-native and invasive species, which have degraded the natural communities. Little of this habitat still occurs, and those parcels which are still vacant are generally isolated. None of

the sand field habitats within the City have been identified for preservation in the CV MSHCP.

In the Sphere of Influence, Desert Saltbush Scrub occurs on soils which are poorly drained and have high salinity or alkalinity, most often occurring on long-fallow agricultural lands. In addition to the native Big Saltbush, Allscale and Honey Mesquite, this habitat often supports non-native alkali tolerant species.



Common Native Wildlife

Native species in the City and its Sphere of Influence can be divided into two types: those which have adapted to the disturbed sand field, saltbush scrub, agricultural and urban development; and those which occur in the less disturbed habitats that currently exist on the southern and western edges of the City and Sphere. Insects common in the City and Sphere include Harvester Ants, Creosote Bush Grasshopper and Black Widow Spider. Amphibians include California Toad and Pacific Tree Frog; while the Zebra-tailed Lizard, Desert Horned Lizard, California Kingsnake, and Colorado Desert Sidewinder are common reptiles. The City and its Sphere also support a number of native birds, including the House Finch and House Sparrow, Abert's Towhee, Mourning Dove and Red-tailed Hawk. Common mammals include the Black-tailed Jackrabbit, Pocket Mouse and California Ground Squirrel. A complete listing of common species found in the City and Sphere is available in the General Plan EIR.

Special Status Species

Species which are considered threatened or endangered under either the California or federal Endangered Species Acts are called special status species. The US Fish and Wildlife Service (FWS), CDFG, and the California Native Plant Society (CNPS) all maintain lists of these species. The **Table III-3** provides a list of special status species known to occur in the City or its Sphere of Influence. In addition to these species, habitat has been modeled for Coachella Valley Milk Vetch, Desert Tortoise and Palm Springs Pocket Mouse, although these species have not been observed in the City or its Sphere of Influence.

**Table III-3
Special Status Species**

Common Name	Scientific Name	Habitat	State and Local Status	Federal Status
Chaparral Sand-Verbena	<i>Abronia villosa</i> var. <i>aurita</i>	Sandy areas; Chaparral/ Desertdunes	CNPS List 1B.1 State: S2.1	
Glandular Ditaxis	<i>Ditaxis claryana</i>	Sandy habitats Sonoran Desert scrub 0-465 meters	CNPS List 2.2 State: S1S2	
California Ditaxis	<i>Ditaxis serrata</i> var. <i>californica</i>	Sonoran Desert Scrub	CNPS List 3.2 State: S2.2	
Flat-tailed Horned Lizard	<i>Phrynosoma mcallii</i>	Sandy habitats with adjacent hardpan, often sparsely vegetated, also saltbush habitats	State: S2 CDFG: CSC CVMSHCP	
Coachella Valley Fringe-toed Lizard	<i>Uma inornata</i>	Sand dunes, sand fields	CDFG: Endangered/S1 CVMSHCP	Threatened
Burrowing Owl	<i>Athene cunicularia</i>	Burrows/abandoned Foundation structures, Creosote Bush & Ruderal Scrub (edges of canals/agriculture)	State: S2 CDFG: CSC CVMSHCP	
Prairie Falcon	<i>Falco mexicanus</i>	Cliff faces (nesting), Open habitats for foraging	State: S3 CDFG: Watchlist	
Black-tailed Gnatcatcher	<i>Polioptila melanura</i>	Desert scrub and desert wash woodland habitats	State: S4	
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Fairly common in a variety of open habitats	State: S4 CDFG: CSC	
Western Yellow Bat	<i>Lasiurus xanthinus/ega</i>	Primarily roosts in the dead fronds of palms, including landscape specimens	State: S3 CDFG: CSC CVMSHCP	
Pocketed Free-tailed Bat	<i>Nyctinomops femorosaccus</i>	Variety of arid habitats Desert Scrub, Palm Oasis, Desert Wash, roosts in rocky cliffs	State: S2S3 CDFG: CSC	
Palm Springs Round-tailed Ground Squirrel	<i>Xerospermophilus tereticaudus chlorus</i>	Desert Scrub, Desert Wash, Alkali Scrub, & levees, golf course edges w/ adjacent native habitat	State: S1S2 CDFG: CSC CVMSHCP	Candidate
Peninsular Bighorn Sheep	<i>Ovis canadensis nelsoni</i> DPS	Lower elevations of the eastern Peninsular Ranges, including canyon bottoms, alluvial fans, and mountain slopes	Threatened CVMSHCP	Endangered

Table Legend

Habitat: terrestrial natural community descriptions per Holland (1986)

State of California and Local Status: Endangered, Threatened, Protected, Special Concern status per the California Fish and Game Code of 2007, as well as all species protected by the Coachella Valley Multiple Species Habitat Conservation Plan (species covered by plan listed as CVMSHCP).

Federal Status: Endangered, Threatened and Candidate for listing status per the Endangered Species Act of 1973 (as amended). It is mandatory that federally listed plant species be fully considered during preparation of environmental documents pertaining to the California Environmental Quality Act or National Environmental Policy Act, or any federal authorization.

California Native Plant Society (CNPS) listing rankings (CNPS 2010) are described as follows:

- List 1A:** Plants (29) presumed extinct in California because they have not been seen or collected in the wild in California for many years.
- List 1B:** Plants considered rare and endangered in California and throughout their range. All of the plants constituting List 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code and are eligible for state listing. It is mandatory that these plant species be fully considered during preparation of environmental documents pertaining to the California Environmental Quality Act.
- List 2:** Plants considered rare, threatened or endangered in California but which are more common elsewhere.
- List 3:** Plants about which more information is needed to assign them to one of the other lists.
- List 4:** Plants of limited distribution (a “watch list”) or infrequent throughout a broader area in California, their vulnerability to threat appears low at this time.

Threat Rank

- **0.1** Seriously threatened in California (high degree/immediacy of threat)
- **0.2** Fairly threatened in California (moderate degree/immediacy of threat)
- **0.3** Not very threatened in California (low degree/immediacy of threat)

State Ranks

- S1:** 5 or fewer viable occurrences or fewer than 1,000 individuals statewide and/or less than 2,000 acres
- S2:** 6 – 20 viable occurrences or fewer than 3,000 individuals statewide and/or 2,000 – 10,000 acres
- S3:** 21 – 100 viable occurrences or fewer than 10,000 individuals statewide and/or 10,000 – 50,000 acres
- S4:** Greater than 100 viable occurrences statewide and/or greater than 50,000 acres, apparently secure statewide
- S5:** Community demonstrably secure statewide

Where two ranks are given (eg. S1S2) the species' rank falls between the two ranks

Threat Ranks

- 0.1:** Very threatened
 - 0.2:** Threatened
 - 0.3:** No current threats known
-

Seven of the species in **Table III-3** are not covered by the CV MSHCP. Each is briefly described below, along with the likelihood of its occurrence in the City and Sphere.



Glandular Ditaxis has been identified at two locations in the planning area, both of which have been developed. There is a low potential for the occurrence of the species in the southern and western edges of the City and Sphere. Spring or fall surveys are required for the species following sufficient rainfall.

California Ditaxis occurs in dry washes, flood plains and rocky alluvial fans. It was previously identified west of Avenida Montezuma and Calle Nogales, in the Cove. There is a moderate to high potential that the species occurs in the southern and western areas of the City. Spring surveys are required for the species following sufficient rainfall.



The *Burrowing Owl* uses burrows dug out by other wildlife, such as the Kit Fox, Desert Tortoise, or Ground Squirrel; it also uses man-made structures such as piles of rubble or tree branches, pipes or buildings. The species is a protected raptor as well as a species of special concern, and therefore requires CDFG notification and approved mitigation prior to any activity which might impact the species. The species has the potential to occur throughout the City and Sphere, where undeveloped or fallow land occurs. Site-specific surveys are needed to identify the species.



The *Prairie Falcon* is a medium to large sized migratory raptor which winters in the region. Its preferred habitat is cliffs or steep rock ledges in the western and southern parts of the City and its Sphere. Prairie Falcons have been identified at the southwestern end of the City. The species is a protected raptor as well as a species of special concern, and therefore requires CDFG notification and approved mitigation prior to



any activity which might impact the species. Site-specific surveys are needed to identify the species.

The *Black-tailed Gnatcatcher* is a small resident songbird which has been identified at two locations in the City, and which is likely to occur in the western and southern portions of the City and its Sphere. Site-specific surveys are needed to identify the species.



The *Loggerhead Shrike* is reasonably common in California, but has been significantly depleted in other parts of the US. It occurs in undeveloped areas, the hillsides in the south and west, and on the edges of

agricultural fields. No specific study or preservation prescriptions are attached to the species.



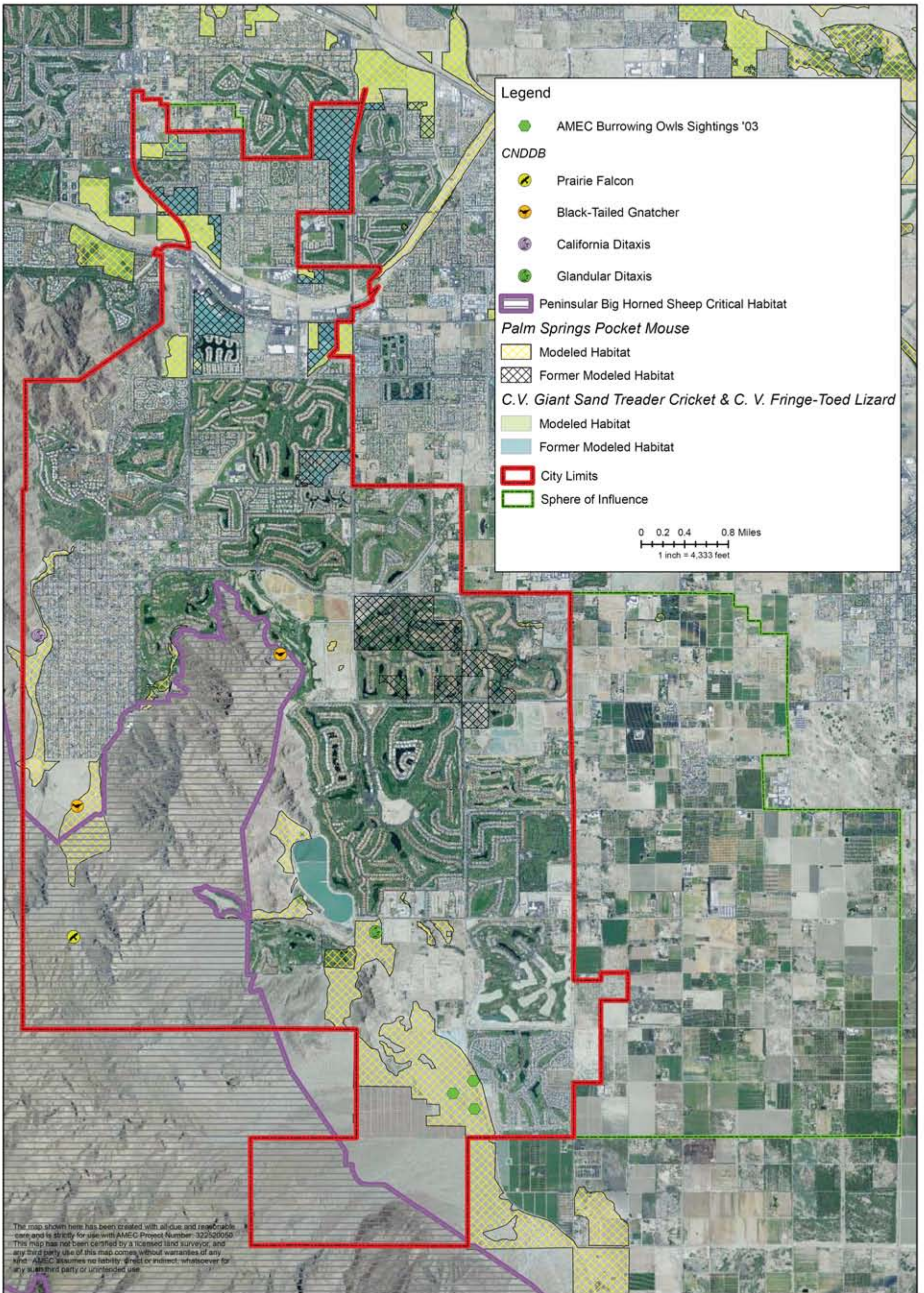
The *Pocketed Free-tailed Bat* has large ears and long wings, and roosts in caves crevices and cliffs. It is likely to use golf



courses for foraging and drinking. Since the species uses rocky terrain in the Santa Rosa Mountains for its roosts, the Open Space designation applied to these lands should protect it from harm within the City and its Sphere.

Locations where the species above have been sighted, and the areas requiring species-specific studies are shown in **Exhibit III-2**.

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Source: AMEC, 06.02.10



Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP)

The Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) has been implemented since 2008. The MSHCP addresses the conservation of 27 species and 24 vegetation communities in the Coachella Valley, covering more than 1.2 million acres. The MSHCP has two primary goals – to balance the protection of the natural environment with the economic development needs of the Valley; and to streamline compliance with California and federal endangered species regulations and permitting for the species covered by the Plan.

The MSHCP includes identified conservation areas throughout the Valley. In La Quinta, conservation areas are limited to lands in the Santa Rosa Mountains and its foothills. The MSHCP quantifies the conservation goals for La Quinta, as follows:

- 2,545 acres of Essential Habitat for the Peninsular bighorn sheep
- 387 acres of Conserved Habitat for the Le Conte’s thrasher
- 1,409 acres of Conserved Habitat for the Desert Tortoise
- 76 acres of desert dry wash woodland
- Conserve occupied burrowing owl burrows as provided for in the MSHCP avoidance, minimization and mitigation measures.

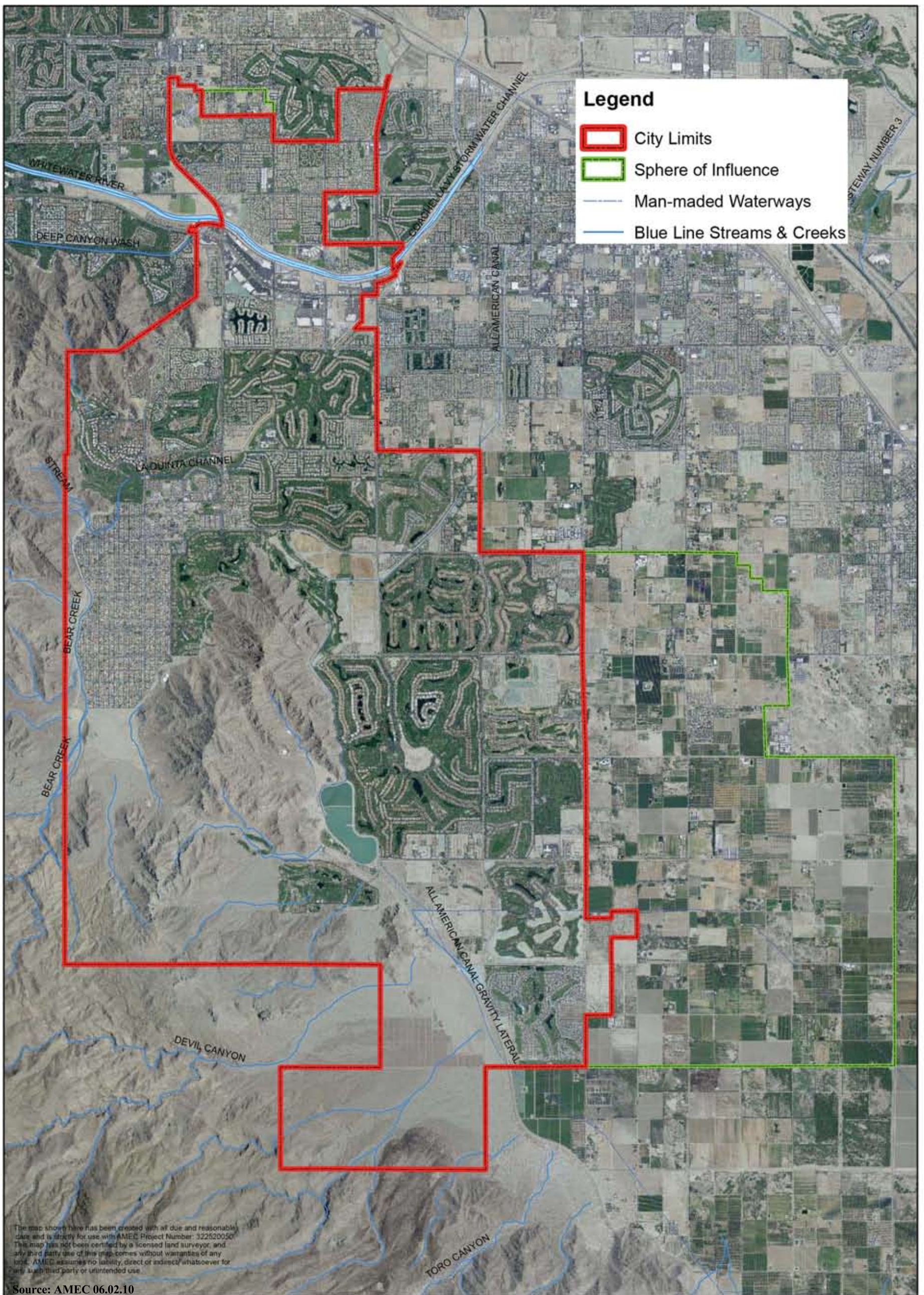
Development proposed on lands which are not designated for conservation is required to pay a mitigation fee, which assures that funds will be available in the future for the purchase of conservation lands, and which offsets the potential impacts of that development on the natural environment.

Streambeds and Blueline Streams

The primary ephemeral stream through the City is the Coachella Valley Stormwater Channel, known as the Whitewater River west of Washington Street. The Channel qualifies as both a Water of the State of California, and a Water of the United States, and therefore falls under the jurisdiction of both the California Department of Fish and Game (CDFG) and the US Army Corps of Engineers (USACE). Any construction activity within the Channel requires consultation with both CDFG and the USACE and the securing of permits from both agencies.

A number of smaller, mostly unnamed streams drain from the Santa Rosa Mountains, including Bear Creek, which enters the City at the south end of the Cove. These drainage courses fall under the jurisdiction of the CDFG, but are not considered “waters of the United

States,” as defined by USACE. Construction activity in these streams, including the La Quinta Evacuation Channel, requires consultation with CDFG, and may require a permit prior to the initiation of work.



Migratory Bird Treaty Act

Common and special status birds in the City and its Sphere are almost all protected under the Migratory Bird Treaty Act (MBTA). This federal law prohibits the disturbance of nests, eggs or incubating birds while nests are active. In the City, the nesting period generally ranges from March through August. Projects undertaken during that time must first determine if active nests occur in trees and bushes prior to removing them.

PLANNING FOR THE FUTURE

The City's native biological environment on the Valley floor will continue to shrink as development occurs. The City's participation in the MSHCP will help to offset this loss by acquiring lands regionally for preservation. However, the City can support the preservation of native species, some of which have proven to be adaptable to developed conditions, through the planting of native plants and the continued use of drought tolerant landscaping techniques, which do not significantly increase the water levels in the soil.

The City must also assure that impacts to species not covered by the MSHCP do not significantly affect these populations by requiring site-specific surveys for those species as development is proposed in their habitats. Fortunately, the majority of these species occur at the base of the Santa Rosa Mountains, in areas which are to be conserved under the MSHCP, and these uncovered species will, therefore, receive de facto protection.

GOALS, POLICIES AND PROGRAMS

GOAL BIO-1

The protection and preservation of native and environmentally significant biological resources and their habitats.

❖ [Policy BIO-1.1](#)

Continue to implement the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP).

- [Program BIO-1.1.a](#): Building permits shall not be issued for projects required to pay the MSHCP local development mitigation fee until such time as the fee has been paid to the City.

- [Program BIO-1.1.b](#): For lands identified by the MSHCP as slated for conservation within the City, the Planning Department will refer land owners and developers to the Coachella Valley Association of Governments and/or Coachella Valley Conservation Commission for guidance and permitting assistance.
- [Program BIO-1.1.c](#): The Planning Department will maintain maps of conservation and mitigation fee boundaries for the MSHCP, and update them as necessary.

❖ [Policy BIO-1.2](#)

Where appropriate, site-specific, species-specific surveys shall be required for the seven species not covered by the MSHCP.

- [Program BIO-1.2.a](#): The Planning Department will, in conjunction with the entitlement process, require the preparation of biological resource surveys by a qualified biologist on properties identified on **Exhibit III-2** as having potential habitat for the following species: Glandular Ditaxis, California Ditaxis, Prairie Falcon, Black-tailed Gnatcatcher, Loggerhead Shrike and Pocketed Free-tailed Bat, if the development proposal occurs in an area identified as having potential for the species, as described in this Element.
- [Program BIO-1.2.b](#): Prior to the issuance of any ground disturbing permit for qualifying projects⁷ in a Conservation Area, the City will require a protocol compliant survey for burrowing owl, in compliance with the MSHCP Section 4.4.
- [Program BIO-1.2.c](#): Prior to the issuance of any ground disturbing permit for fallow lands outside Conservation areas, the City will require protocol compliant surveys for burrowing owl.

❖ [Policy BIO-1.3](#)

Publicly owned conservation lands, including those for the MSHCP, shall be designated as Open Space on the Land Use Map.

⁷ Qualifying projects do not include single family residences, non-commercial accessory uses and structures (including but not limited to second units on an existing legal lot), or the operation and maintenance of Covered Activities other than levees, berms, dikes, and similar features known to contain burrowing owl burrows.

❖ [Policy BIO-1.4](#)

Comply with the requirements of the Migratory Bird Treaty Act (MBTA).

- *Program BIO-1.4.a:* Throughout the City, prior to the removal of vegetation on a development site between March and August, a qualified biologist shall determine whether any bird nests or young occur on the site, and if they occur, provide mitigation measures compliant with the MBTA.

❖ [Policy BIO-1.5](#)

Comply with the regulatory requirements of the California Department of Fish and Game, the US Army Corps of Engineers, and the Regional Water Quality Control Board as they relate to “waters of the State of California” and/or “waters of the United States.”

- *Program BIO-1.5.a:* Prior to the initiation of any project within any defined blueline stream as identified on **Exhibit III-3**, the City will require that consultation and/or permitting by CDFG be demonstrated in writing.

❖ [Policy BIO-1.6](#)

Native desert plant materials should be incorporated into new development projects to the greatest extent possible. Invasive, non-native species shall be discouraged.

❖ [Policy BIO-1.7](#)

Sensitive habitat areas, including conservation areas for the MSHCP, should be buffered from urban development to the greatest extent possible.

- *Program BIO-1.7.a:* Use zoning standards and the design review process to assure that adequate buffers are provided in environmentally sensitive areas.



La Quinta

— GEM *of the* DESERT —



CULTURAL RESOURCES

PURPOSE

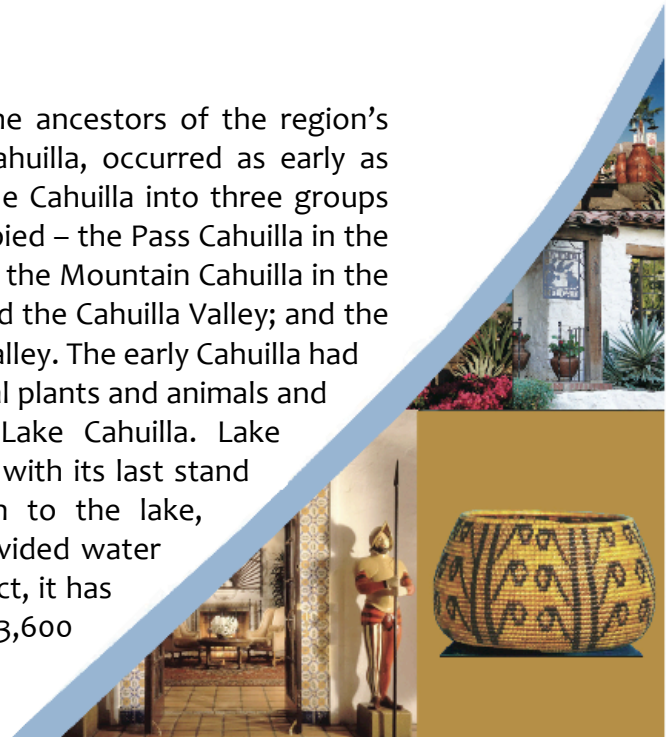
The Cultural Resources Element describes prehistoric, historic and paleontological resources in the City and its Sphere of Influence. The City has a rich history which includes Ancient Lake Cahuilla and its fossilized resources, Native American settlements and activity, and European settlement in more recent times. The resources which remain from each of these time periods are non-renewable, and the continued development of the City and its Sphere of Influence has the potential to negatively impact artifacts and fossils which may occur in the area.

This Element describes the area's history and provides goals, policies and programs intended to assure that the cultural resources which have been identified, and those resources which may be identified in the future, are preserved.

BACKGROUND

Prehistoric Context

It is believed that early settlement by the ancestors of the region's current Native American peoples, the Cahuilla, occurred as early as 1000 BC. Anthropologists have divided the Cahuilla into three groups based on the geographic areas they occupied – the Pass Cahuilla in the San Geronio Pass and Palm Springs area; the Mountain Cahuilla in the San Jacinto and Santa Rosa Mountains and the Cahuilla Valley; and the Desert Cahuilla of the eastern Coachella Valley. The early Cahuilla had many villages in the area and lived off local plants and animals and the aquatic food available in ancient Lake Cahuilla. Lake Cahuilla filled and receded several times, with its last stand believed to be about 1650. In addition to the lake, seasonal springs and hand dug wells provided water to these villages. Prior to European contact, it has been estimated that there were between 3,600 and 10,000 native people in the region.



The first Europeans, Romero, Estudillo and Pacheco, traveled through the Coachella Valley searching for a route to what is now Yuma in 1823 through 1825. These explorations did not yield settlement, however, as the conditions were harsh. The explorers used the trails that had been established by the native peoples.

The first US Government Land Office surveys in the area occurred in the 1850s. At that time, surveyors identified four native villages in and near present day La Quinta. With the arrival of European explorers and settlers, the native peoples were decimated by diseases introduced to the area, particularly smallpox, for which they had no immunity. By the early 20th century, government surveyors could not locate most of the Cahuilla villages identified in the 1850s.

The descendants of the Pass and Desert Cahuilla are now associated with several local reservations, including the Torres Martinez, Cabazon and Augustine to the east and south of the City, and the Agua Caliente and Morongo to the west.

Historic Context

In 1862, William David Bradshaw “discovered” the Cocomaricopa Trail, a route that had been established by native peoples, and ran from the Agua Caliente Village (at present day Palm Springs) to the Pima villages in the area of La Paz, Arizona. Renamed the Bradshaw Trail, it roughly followed the course of present day Highway 111 and became the primary route between Los Angeles and the Colorado River and the nearby gold fields in Arizona.

In the 1870s, the completion of the Southern Pacific Railroad line, including stations in the Coachella Valley, began an influx of settlers, and by the 1880s, public land was opened for private land claims by a series of federal laws. As a result, a substantial farming community developed in the Coachella Valley. The early farms were dependent on artesian wells and similar naturally occurring water sources. A reliable and steady water source was not available in the Valley until 1948, with the completion of the Coachella Branch of the All-American Canal. The first land claims in the La Quinta area occurred at the turn of the 20th century. By the 1910s, a number of ranches were operating in the area of present day La Quinta, including the Point Happy Ranch.

In the 1920s, the tourism industry began to establish itself in the region. The La Quinta Hotel, built by Walter Morgan, began construction in 1926. The resulting first class hotel and its grounds made the hotel a favorite of Hollywood stars in the 1930s. Unlike busy,

bustling Palm Springs, the La Quinta Hotel was considered a tranquil getaway for the discriminating visitor, and it attracted both celebrities and industrialists.

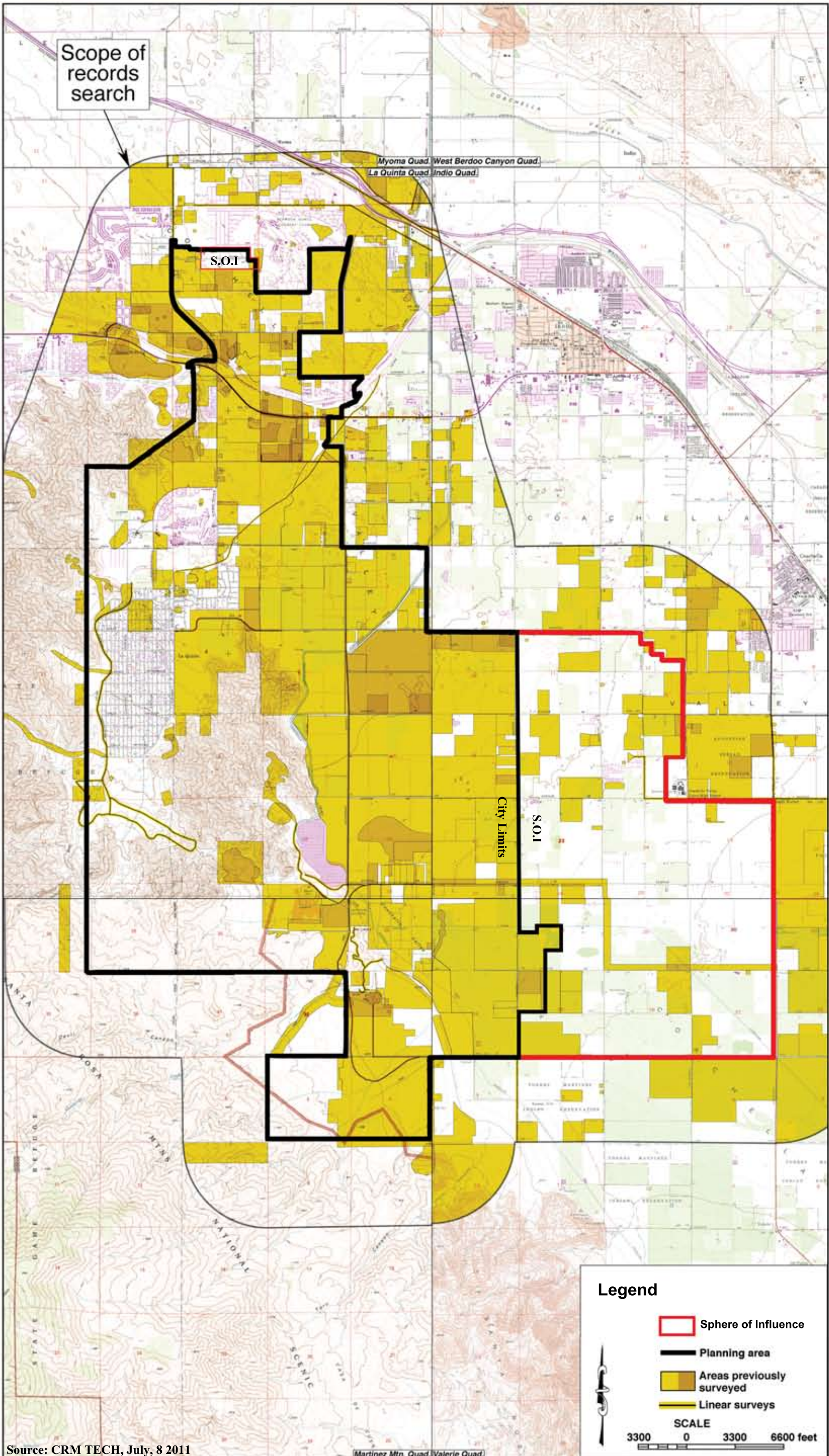
In the 1930s, Harry Kiener subdivided the Cove neighborhood and marketed adobe cottages as “weekend homes,” marking the birth of the first residential community in the area to later become known as La Quinta. Following World War II, La Quinta and the Valley continued to grow, and by 1982, when the City incorporated, it had a population of 3,328 people.

Known Prehistoric & Historic Resources in the City and its Sphere of Influence

The City’s location in and around ancient Lake Cahuilla has resulted in a concentration of prehistoric resources. As shown in Exhibit III-4, about 60% of the City and its Sphere of Influence have been surveyed for archaeological resources, yielding over 500 recorded archaeological sites. At the shoreline of ancient Lake Cahuilla, which is believed to have occurred at 42 feet above sea level, a concentration of pottery, grinding stones, burned animal bones and other remains point to a relatively dense population of native peoples. Sites within the City have been identified as being from 1600 to 2300 years ago. Older sites have been identified immediately west of the City and its Sphere, and date to about 2700 years ago.

In addition to a survey of historic sites by the County of Riverside in the 1980s, the City first undertook its own survey in 1996-1997. The resulting inventory listed 90 properties of historic importance, primarily consisting of buildings and including a segment of the original Coachella Canal. The La Quinta Hotel, its casitas and La Casa were identified as eligible for listing on the National Register of Historic Places, along with other locations eligible for listing on the State Historic Register. The City’s survey also identified the Cove (bounded by Calle Tampico on the north, Avenida Bermudas on the east, Calle Tecate on the south and Avenida Montezuma and Bear Creek on the west) as a potential historic district eligible for local designation. An update to the City’s survey was conducted in 2006, resulting in the addition of 183 buildings to the California Historical Resources Inventory, bringing the total to 280. The majority of these are single family homes dating mostly to the 1930s and 1940s.

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Cultural Resource Areas of Sensitivity

The large number of resources identified to date in the City and its Sphere confirm the area's significance for Native American resources and historic buildings significant to the area's early development.

Areas currently in agriculture in the Sphere of Influence cannot be discounted. The relatively shallow depth at which agricultural activities occur makes it possible for buried resources to survive.

City Programs Relating to Cultural Resources

The City adopted a Historic Preservation Ordinance in 1991, codified in Title 7 of the Municipal Code. The ordinance establishes a Historic Preservation Commission to advise the City Council on matters relating to archaeological and historic resources, and a historic resources inventory and designation procedures. In 1995, the City became a Certified Local Government under the State's enabling legislation. Under this program, the City has established guidelines and standards regarding the qualifications of archaeological consultants, and implemented programs allowing for the transfer of development rights and the use of the State Historic Building Code.

The City also opened its museum, located on Avenida Montezuma at the base of the Cove. It provides a repository for a number of historic and Native American resources found in the City, as well as exhibits which chronicle the development of La Quinta over the years.

Paleontological Context

Paleontological resources are the fossilized remains of ancient plants and animals. They occur in older soils which have been deposited in the Valley over millions of years. About 4 million years ago, the Salton Trough, in which the Coachella Valley is located, was part of the Gulf of California, and extended as far as the Painted Hills, northeast of the current City of Palm Springs. Eventually, the Salton Trough was cut off from the Gulf of California by the delta of the Colorado River.

Ancient Lake Cahuilla, which occurred over a much larger area than the current Salton Sea, resulted from flooding of the Colorado River and receded a number of times. This process left behind sediments which have the potential to have buried plant and animal remains, some of which became fossilized over time. Freshwater shells from the last stand of the Lake in the 17th century are found on the surface of land in the City and its Sphere of Influence today.

In general, fossils occur in soils which are at least 10,000 years old, referred to as the late Pleistocene Epoch. Five soil units have been identified in the City and its Sphere, as shown in Exhibit III-5.

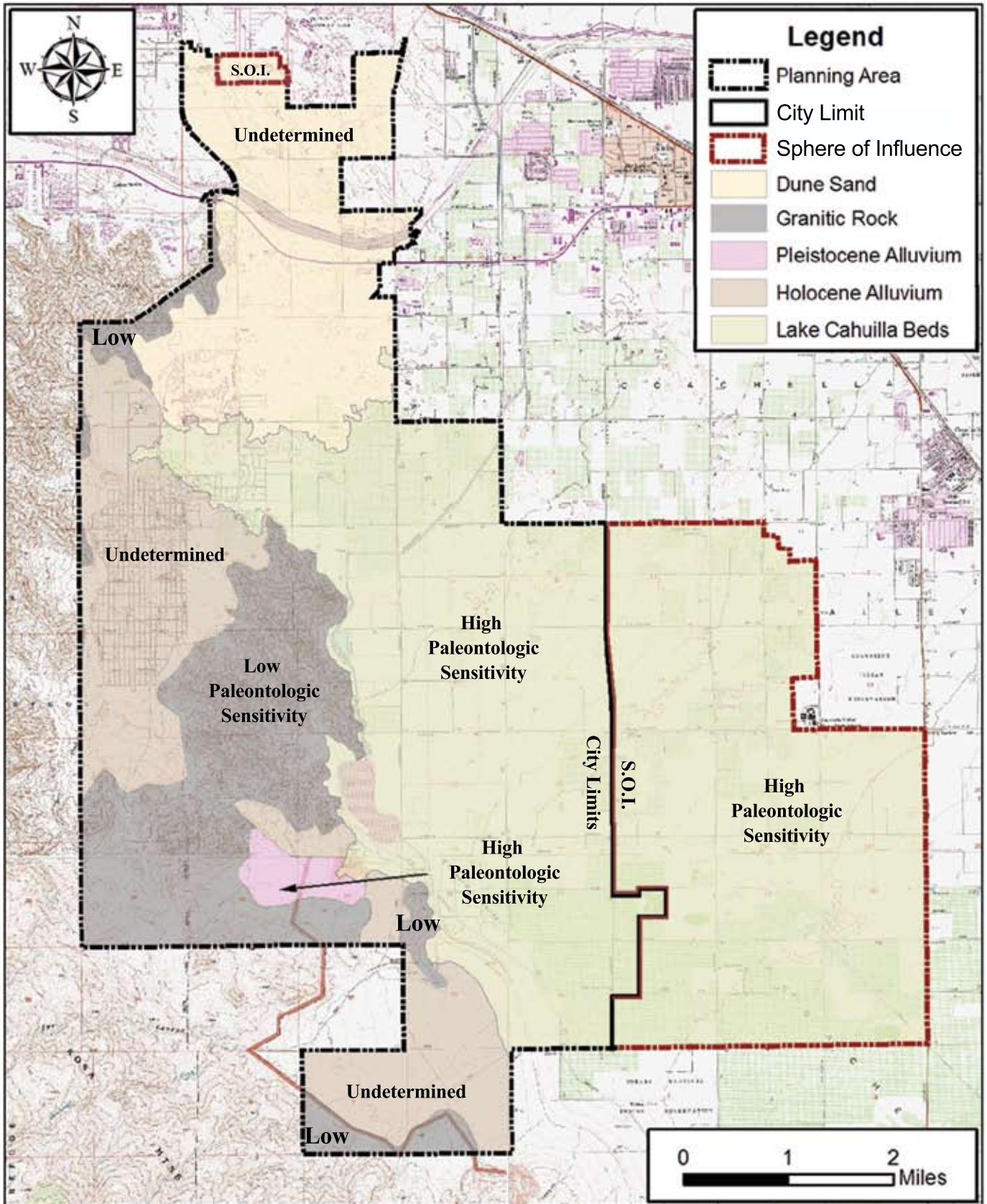
Mesozoic Granitic Rock occurs in the foothills on the south and west edges of the City. Granitic Rock has a low potential to contain paleontological resources.

Pleistocene and Older Alluvium occurs in the southwestern corner of the City, at the base of the Santa Rosa foothills. Fossils have been found in these soils, but not in the City or its Sphere. The closest locality is in the Indio Hills, to the northeast of the City. Pleistocene soils have a high potential to yield fossil remains.

Lake Cahuilla Beds occur in areas where ancient Lake Cahuilla covered the Valley floor. Because of the multiple stands of the ancient lake, these soils can occur in layers, intermixed with other soils which were blown into the area when the ancient lake was dry. Lakebed sediments have yielded freshwater diatoms, plants, sponges, mollusks, and fish, as well as small animals. Although the lakebed soils are much less than 10,000 years old, they hold potentially significant information on the area's early ecological history and have a high potential for paleontological resources.

Holocene Alluvium occurs in the City's Cove area and at the southernmost edges of the City. These soils have been brought into the area by flooding in the mountains and are too recent to hold fossil remains. They have a low potential for paleontological resources.

Recent Dune Sand occurs north of Avenue 50 in the City. This soil has been blown into the area by regional winds and recently deposited. Dune Sand varies in depth and could overlay older alluvium at depth. Because of its recent transport into the area, Dune Sand has a low potential for paleontological resources.



Source: CRM TECH, August, 2010

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PLANNING FOR THE FUTURE

The City and its Sphere of Influence have a rich and varied history. Many cultural resources, including prehistoric, historic and paleontological resources, have been catalogued in the area. The City has demonstrated its commitment to its history through the establishment of its Certified Local Government program and the opening of its museum. As development in the City and its Sphere continues to occur, it has the potential to impact cultural resources which have not yet been identified.

Further, as the City grows, it must continue to reflect on the importance of its history and its preservation to assure that these resources, which ultimately cannot be renewed, are not lost to future generations.

GOALS, POLICIES AND PROGRAMS

GOAL CUL-1

The protection of significant archaeological, historic and paleontological resources which occur in the City.

❖ [Policy CUL-1.1](#)

All reasonable efforts should be made to identify archaeological and historic resources in the City.

- [Program CUL-1.1.a](#): Any development application for a vacant site, or a site previously or currently used for agricultural purposes, shall be accompanied by a Phase I archaeological and/or historic analysis conducted by a qualified archaeologist. Such analysis shall be paid for by the project proponent.
- [Program CUL-1.1.b](#): City staff will maintain open channels of consultation with local Native American tribes, the Eastern Information Center at the University of California, Riverside, the Historical Society, and the Coachella Valley History Museum.
- [Program CUL-1.1.c](#): City staff shall maintain a database of known prehistoric and historic resources in the City.

-
- *Program CUL-1.1.d:* The City shall update its historic inventory at a minimum of every 10 years, subject to available funding.

❖ Policy CUL-1.2

Assure that significant identified archaeological and historic resources are protected.

- *Program CUL-1.2.a:* The City will be proactive in the protection of archaeological and historic resources in City-sponsored or assisted projects and programs.
- *Program CUL-1.2.b:* Consider the use of all potential sources of funding for archaeological and historic resource preservation funding, including regional, state and federal funds.
- *Program CUL-1.2.c:* Encourage owners of qualified historic buildings to take advantage of tax credits and other programs for the preservation and restoration of historic structures.
- *Program CUL-1.2.d:* Continue to implement the Historic Preservation Ordinance.

❖ Policy CUL-1.3

Educate the public about the City's history and paleontology.

- *Program CUL-1.3.a:* Encourage property owners and others to nominate qualified properties to the City's historic inventory.
- *Program CUL-1.3.b:* Continue to support efforts at curation and exhibition of the City's history.
- *Program CUL-1.3.c:* Consider expanding collections to include paleontological resources.
- *Program CUL-1.3.d:* Encourage the Desert Sands and Coachella Unified School Districts to include local history and paleontology in their curricula.
- *Program CUL-1.3.e:* Support efforts by local tribes to expand the knowledge of tribal history in the community.

❖ [Policy CUL-1.4](#)

Make all reasonable efforts to identify paleontological resources in the City.

- *Program CUL-1.4.a:* Any development application for a vacant site located on soils identified as Lake Cahuilla Beds or Pleistocene shall be accompanied by a Phase I paleontological analysis conducted by a qualified geologist or paleontologist.
- *Program CUL-1.4.b:* As part of the geotechnical analysis conducted for grading and building permits, soil borings shall be examined by a qualified geologist or paleontologist to assure that no Pleistocene or older soils occur at depth in areas to be excavated. Monitoring shall be required if Pleistocene or older soils will be impacted by excavations.

❖ [Policy CUL-1.5](#)

All reasonable efforts should be made to preserve paleontological resources in the City.

- *Program CUL-1.5.a:* Significant paleontological resources identified on a site shall be professionally collected, catalogued and deposited with a recognized repository.

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WATER RESOURCES

PURPOSE

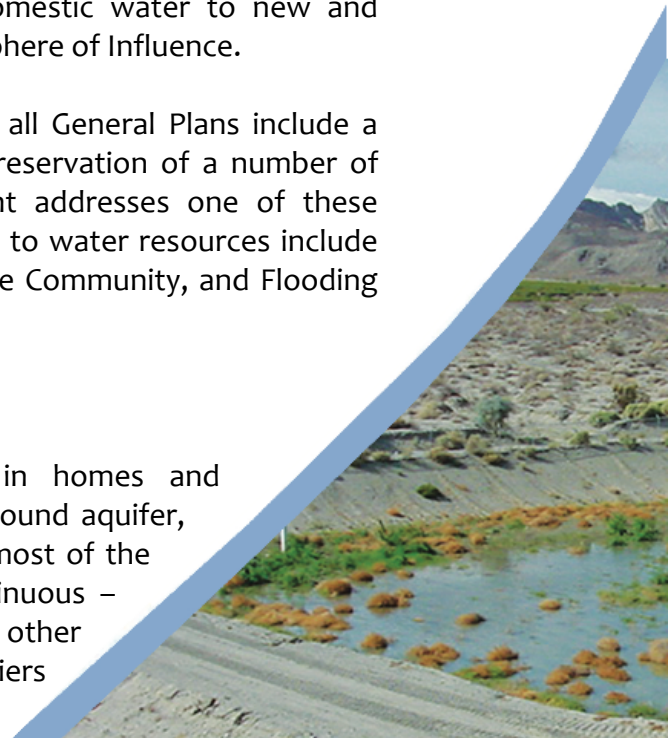
The Water Resources Element describes water supply management in the region and the City. It is important to note that the aquifer that supplies the City and its Sphere of Influence is shared with the other communities of the Coachella Valley. In order to assure that everyone in the region has sufficient water, it is important that La Quinta, as one of the stewards of the local water supply, manages and conserves this important resource.

When describing water resources, this Element addresses both the amount of water available for use in the City's homes and businesses and the quality of that water. Water supplies in the City are managed by the Coachella Valley Water District, with which the City has had a long and successful relationship. The City's goals, policies and programs relating to water resource management are important to the District's continued ability to provide domestic water to new and existing development in the City and the Sphere of Influence.

Government Code 65302(d) requires that all General Plans include a conservation component to assure the preservation of a number of resources. This Water Resources Element addresses one of these components. Other elements which relate to water resources include the Biological Resources, Land Use, Livable Community, and Flooding and Hydrology Elements.

BACKGROUND

Most domestic water – water used in homes and businesses – is pumped from an under-ground aquifer, or series of aquifers, which occur below most of the Coachella Valley. The aquifer is not continuous – earthquake faults, rock barriers, and other naturally occurring breaks create barriers between the sub-basins.



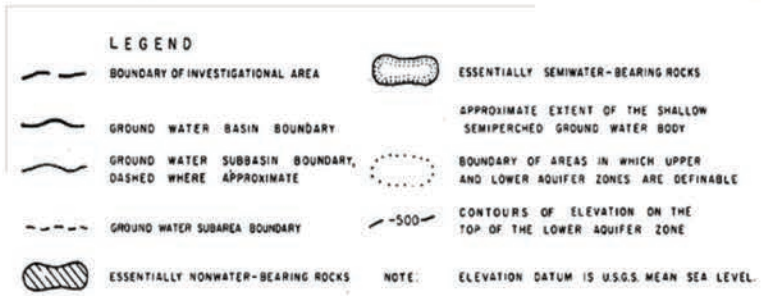
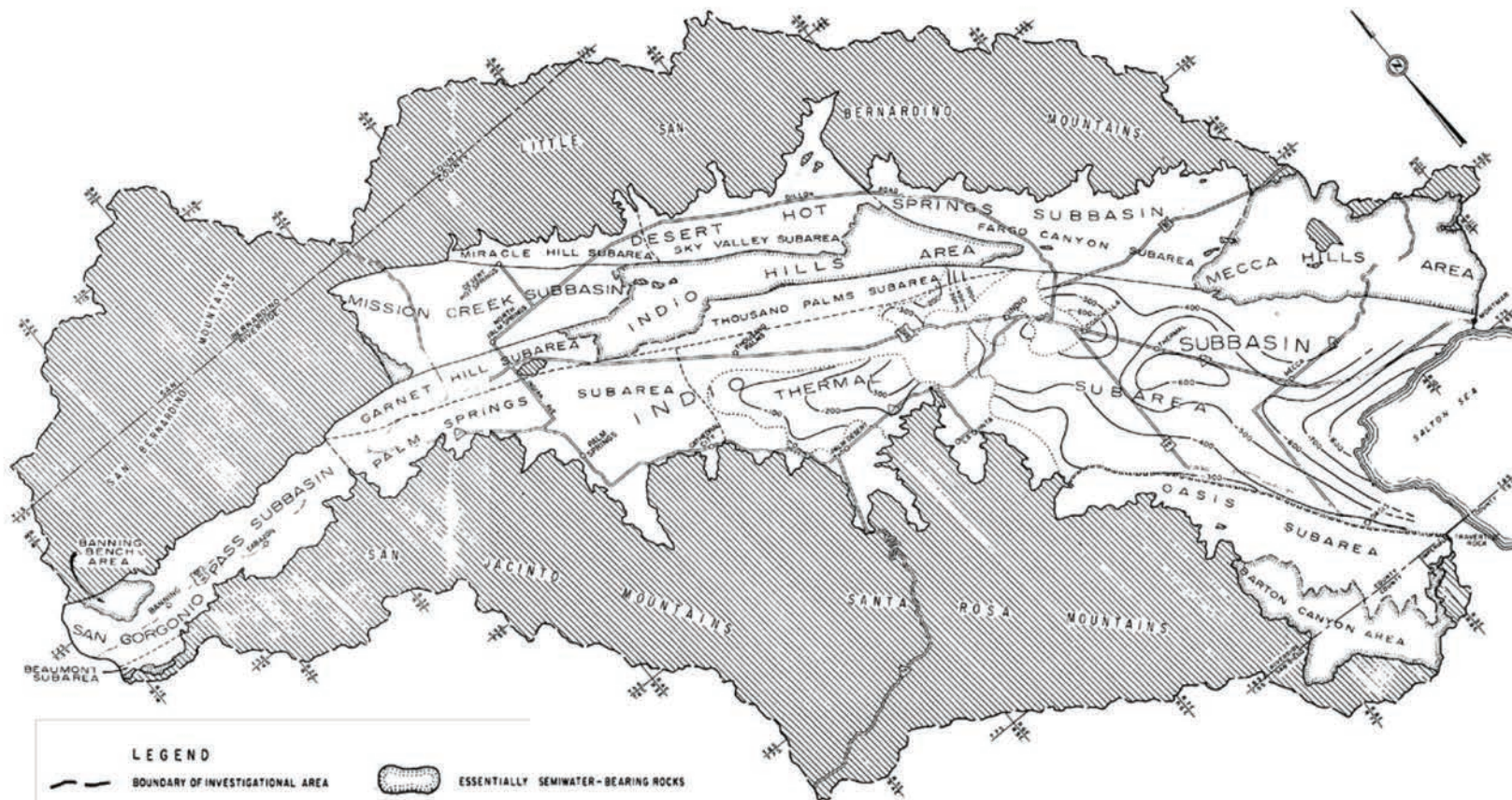
The Whitewater River sub-basin is the Coachella Valley's aquifer. It extends from Palm Springs to the Salton Sea, and is subdivided into a number of subareas. Water in the aquifer flows from the northwest to the southeast. The Lower Thermal subarea occurs under the City and its Sphere of Influence, and provides it with its primary source of domestic water. The subarea's water supply occurs at depths of 300 to 600 feet below the surface, and may extend to a depth of 1,000 feet. The Upper and Lower Thermal subareas together are estimated to contain 19.4 million acre-feet of water (1 acre-foot is equal to 324,829 gallons). The sub-basin is illustrated in Exhibit III-6.

The Coachella Valley Water District (CVWD) is responsible for providing domestic and irrigation water to the City and its Sphere of Influence. All domestic water is extracted from the aquifer through a system of wells, which CVWD operates throughout its District. In addition, CVWD imports water from the Colorado River, which is used to recharge the aquifer. There are three recharge facilities in the Valley: one located northwest of Palm Springs, one located southeast of La Quinta, in Martinez Canyon; and one located in La Quinta, south of Avenue 58, and west of Madison Street.

A detailed description of the geology and capacity of the regional aquifer is included in the General Plan Environmental Impact Report.

Water Demand

Continued growth in the City and the region has resulted in an increased demand for domestic water. As a result, CVWD extracts more water from the Lower Thermal subarea than is naturally recharged into it every year – a condition known as overdraft. The subarea has been in overdraft since the 1980s, prompting CVWD to expand its recharge facilities and conservation efforts. In 2009, approximately 160,000 acre feet of water were pumped from the Lower Thermal subarea, which represents a decrease in water production over 1999 figures, which stood at 168,300 acre feet. CVWD also estimates that natural recharge, groundwater recharge programs and similar programs returned all but 23,912 acre feet to the aquifer – resulting in an overdraft condition. Although CVWD has steadily increased its recharge of the groundwater basin (from 1,813 acre-feet in 2000 to 21,735 acre-feet in 2009), drought conditions and increased demand have made it impossible for the District to maintain a positive recharge. CVWD plans to increase recharge efforts as the City and its Sphere of Influence continue to develop. However, increased development will contribute to greater demand for water resources and the potential for continued overdraft.



STATE OF CALIFORNIA
 THE RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF WATER RESOURCES
 SOUTHERN DISTRICT
 COACHELLA VALLEY INVESTIGATION
 COACHELLA VALLEY
 GROUND WATER BASIN
 SCALE OF MILES

Bulletin No. 108, July 1964

01:31:12

Water Conservation

A more effective manner to reduce overdraft in the aquifer is through water conservation. The City and CVWD have implemented a number of conservation programs in recent years which have reduced consumption of domestic water. It is critical that these programs continue and expand, as possible, through build out of the General Plan.

Domestic water used in homes and businesses is sent to wastewater treatment plants operated by CVWD. A portion of the domestic water used for irrigation is returned to the aquifer when it penetrates the soil and percolates back to its source. However, irrigation of landscaping is the largest consumer of water in most homes, and has the most inefficient return to the water table. The reuse of water used in homes for irrigation can, therefore, be an efficient conservation method.

CVWD has two wastewater treatment plants serving the City, but only the plant which serves the area north of Miles Avenue currently has the ability to generate tertiary treated water (reclaimed water which can be used for irrigation, but is not potable). That plant has a capacity of 2.5 million gallons per day and an expansion potential to 7.5 million gallons per day. In the long term, the expansion of tertiary treated water facilities to serve irrigation needs throughout the City and its Sphere will be critical to water conservation efforts.

The City has also implemented water conservation measures in landscaping maintenance. Chapter 8.13 of the Municipal Code, Water Efficient Landscaping, provides detailed requirements for water conservation in landscaping of new and existing projects. In addition, Building Code requirements provide for the use of water-efficient fixtures in new homes or businesses, or those which are undergoing major remodeling. These requirements extend to water features, fountains and lakes within projects, which can be a significant source of water loss, particularly due to the evaporation which occurs in the City's desert environment.

The City has also partnered with CVWD in conservation programs and plans to continue such programs. They have included "smart controllers" for landscaping irrigation in the past, and may include other conservation efforts as new technology develops.

CVWD holds seminars and workshops relating to water conservation for homeowners and landscape professionals, and offers rebates and discounts for the installation of drought tolerant landscaping, water

efficient sprinklers, and smart controller systems. The District also publishes a number of brochures on water conservation, which are available to the public.

Sustainability of Water Resources

CVWD's Urban Water Management Plan sets forth a number of demand management measures intended to achieve water conservation goals and assure that water supplies are managed for long-term use. As part of the overall management strategy employed by CVWD, conjunctive use management will assure that water supplies are sustainable. While the District is responsible for large-scale groundwater recharge efforts, the City of La Quinta recognizes that land use development patterns, lot coverage, and stormwater runoff within the planning area contribute to regional water conditions. The City has developed goals, policies, and programs that aim to achieve water use efficiency for all applications (indoor use and irrigation), support expansion of recycled water infrastructure and use, and prevent contamination of water supplies through the use of best management practices and control measures, such as those specific to the NPDES and SWPPP (see below). These City efforts, as well as ongoing coordination with CVWD, will facilitate the responsible and sustainable use of water resources.

Surface Water

The City is subject to short duration rainfall events which can generate significant amounts of surface water. This water source can be used to recharge the aquifer through the installation of stormwater retention basins on development projects. The City requires that all projects contain and control the rain water which flows through a developed site, most commonly through the installation of retention basins. These basins are usually landscaped and allow stormwater to percolate into the ground. Although stormwater retention will never represent a significant increase in aquifer recharge because of the limited amount of rain which falls in the City, it will continue to provide some increase in annual recharge efforts.

Storm water which travels over built surfaces, such as parking lots and building rooftops, has the potential to be contaminated by oils, solvents, and chemicals. The City implements the requirements of the National Pollution Discharge Elimination System (NPDES) to assure that stormwaters are protected from pollutants. The City's NPDES permits include: 1) Storm Water Pollution Prevention Plans (SWPPP), and 2) Water Quality Management Plans (WQMP), which are engineering plans that must be submitted and approved by the Public

Works Department prior to construction. These plans identify the specific measures, or Best Management Practices, that will be taken by the developer to prevent storm water pollution before, during, and after construction.

A complete discussion of stormwater and stormwater pollution prevention is included in the Flooding and Hydrology Element.

PLANNING FOR THE FUTURE

The build out of the City and its Sphere of Influence could add more than 53,000 housing units and almost 13 million square feet of commercial and industrial space to the area. All new development will require domestic water for interior use and landscaping irrigation and will increase the demand on limited water resources. The City has already implemented water conservation efforts and will need to continue and expand these efforts to protect its water resources.

GOALS, POLICIES AND PROGRAMS

GOAL WR-1

The efficient use and conservation of the City's water resources.

❖ [Policy WR-1.1](#)

Support the Coachella Valley Water District in its efforts to supply adequate domestic water to residents and businesses.

- [Program WR-1.1.a](#): The City shall continue to implement its Water Efficient Landscaping Ordinance and Building Codes, and update them as needed to meet or exceed State standards for water efficiency and conservation.
- [Program WR-1.1.b](#): Continue to work with CVWD to implement independent and joint programs, rebates, and discounts that promote water conservation, subject to available funding.

❖ [Policy WR-1.2](#)

Support the Coachella Valley Water District in its efforts to recharge the aquifer.

- [Program WR-1.2.a](#): Support CVWD's efforts to increase recharge at its La Quinta facility and elsewhere in its district.

-
- [Program WR-1.2.b](#): Work with CVWD to implement new or improved recharging techniques in golf course and lake design, turf and agricultural irrigation methods, and the use of tertiary treated water for irrigation and other uses.

❖ [Policy WR-1.3](#)

Support the Coachella Valley Water District in its efforts to expand tertiary treated (i.e. reclaimed) water distribution.

- [Program WR-1.3.a](#): Work with CVWD to provide tertiary treated water for future recreational facilities and landscaping irrigation to the greatest extent possible.

❖ [Policy WR-1.4](#)

Protect stormwater from pollution and encourage its use to recharge the aquifer.

- [Program WR-1.4.a](#): Implement federal, regional and local standards pertaining to the discharge and treatment of pollutants in surface water for all development projects.
- [Program WR-1.4.b](#): Coordinate with CVWD in its review of projects which impact drainage channels.
- [Program WR-1.4.c](#): Require on-site retention for new development projects to the greatest extent possible, to provide added recharge of the aquifer.

❖ [Policy WR-1.5](#)

Development within drainage areas and stormwater facilities shall be limited to recreational uses such as golf courses, lakes, sports or play fields and similar uses.

❖ [Policy WR-1.6](#)

Encourage the use of permeable pavements in residential and commercial development projects.

RELATED GOALS

As described above, this Element relates to others in this General Plan. The following goals and their associated policies and programs are closely related to those of this Element.

GOAL UTL-1: Domestic water facilities and services which adequately serve the existing and long-term needs of the City.

GOAL FH-1: Protection of the health, safety and welfare of the community from flooding and hydrological hazards.

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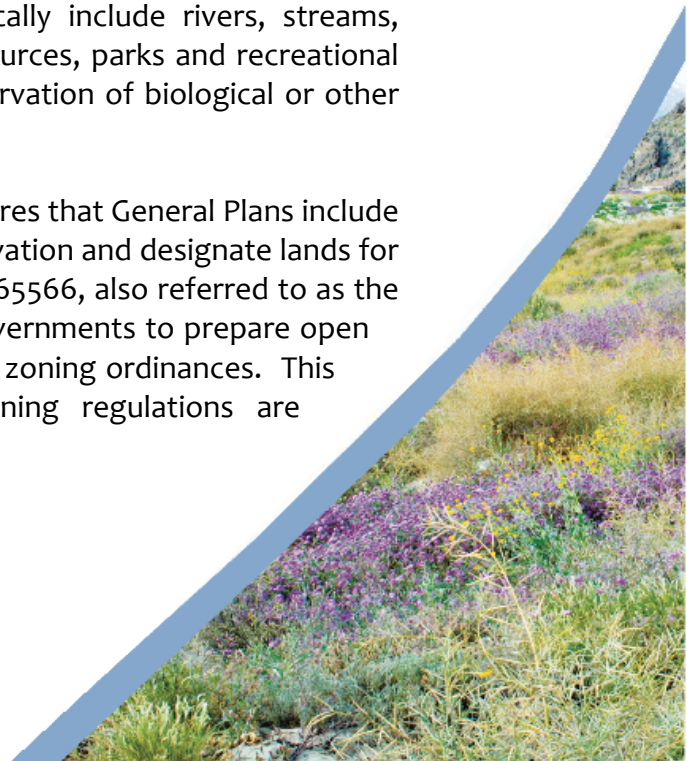
OPEN SPACE AND CONSERVATION

PURPOSE

Some of La Quinta’s greatest assets are its scenic mountain vistas and wilderness areas. The Open Space Element helps to protect these and other assets by designating policies and programs for their management and conservation. These policies and programs are designed to discourage the premature or inappropriate conversion of open space land to more intense land uses. They are intended to assure the long-term viability of open space lands for resource conservation, public health and safety, recreation, and scenic enjoyment.

Government Code Section 65560(b) defines open space as “*any parcel or area of land or water which is essentially unimproved and devoted to an open-space use.*” These lands typically include rivers, streams, managed agricultural lands, mineral resources, parks and recreational lands, and lands dedicated for the preservation of biological or other natural resources.

Government Code Section 65302(d) requires that General Plans include elements which address resource conservation and designate lands for preservation. Government Code Section 65566, also referred to as the Open Space Lands Act, requires local governments to prepare open space plans before adopting open space zoning ordinances. This helps to assure that open space zoning regulations are consistent with open space plans.

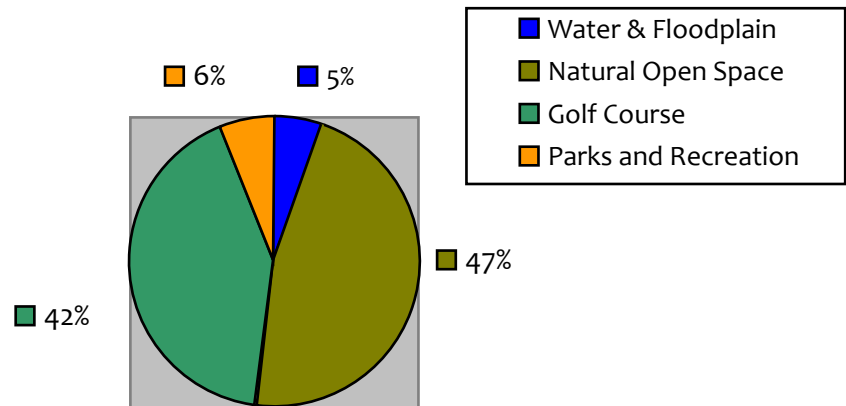


BACKGROUND

Because the Open Space Element addresses a broad range of issues, its policies and programs are interwoven with many other General Plan elements, including Sustainability, Land Use, Parks and Recreation, Circulation, Biological Resources, and Environmental Hazards. In addition, the Open Space Element complements the Coachella Valley Multi-Species Habitat Conservation Plan (MSHCP) by providing protection for lands which may be identified as containing important wildlife habitat.

Open Space Resources

Undeveloped open space areas located along the Santa Rosa and San Jacinto Mountains and their foothills constitute about half of the valuable biological, recreational, and scenic resources enjoyed by residents and visitors in the City of La Quinta, with the remainder generally consisting of the City's storm water management system, public and private golf courses, public parks, and related areas. Approximately 19.1 square miles of open space land are identified within the General Plan Land Use Map.



Open Space Land Uses in La Quinta, in Acres

Open Space for the Preservation of Natural Resources

About half of the lands dedicated for open space in La Quinta have been set aside for the preservation of natural resources. Most of this area is located within the Santa Rosa and San Jacinto Conservation Area, is protected through a deed restriction, or has development limitations under the MSHCP. About 84% of the City's General Plan area located within the MSHCP conservation boundary is currently

designated as open space, with the remainder identified as low density residential.⁸

In the southwestern portion of La Quinta, the Coachella Valley Multi-Species Habitat Conservation Plan (MSHCP) has identified most of the Low Density Residential parcels located within Section 5, Township 7S, Range 7E for preservation and habitat acquisition. This undeveloped section of the City, which contains the only residentially-designated lands located within the MSHCP conservation boundary, generally consists of Sonoran Creosote Bush Scrub and provides valuable habitat for special status species, such as Burrowing Owl and Peninsular Bighorn Sheep, as identified in the Biological Resources Element. The MSHCP permits these lands, if not acquired by a conservation agency, to develop up to 10%, while the balance of the parcel must be preserved in its natural condition.⁹ Approximately 105 acres of land within Section 5 has been acquired for the preservation of natural resources by local and state conservation agencies.

Open Space for the Managed Production of Resources

La Quinta's open space element also designates lands for the managed production of resources. The Sphere of Influence primarily contains agricultural lands and has the potential for additional properties to be set aside in the future for the managed production of resources. Approximately 582 acres of land, all located within the City's Sphere of Influence, have been set aside for farmland conservation under the Williamson Act provisions. Officially titled the California Land Conservation Act of 1965, the Williamson Act provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that the land will not be developed or otherwise converted to another use. There are no active or permitted quarries identified within the General Plan area.

⁸ CVMSHCP, Table 4-110.

⁹ CVMSHCP Vol.1 Sec. 4, p.4-154.

Open Space for Recreation

The remaining areas in the City generally consist of land set aside for Recreational Open Space, such as City and regional parks and golf courses. The City of La Quinta operates 11 parks and shares two sports facilities with Desert Sands Unified School District. The City also contains two regional parks. The 6.5 acre La Quinta Community Park, located in the Village, is managed by the Desert Recreational District, while the 710 acre Lake Cahuilla Regional Park, located in the southern

**Table III-4
La Quinta City and Regional Parks**

Park	Acreage
Adams Park	3.5
Civic Center Campus	17.5
Desert Pride Park	1
Eisenhower Park	0.5
Fritz Burns Park	12
La Quinta Park	18
Monticello Park	4
Saguaro Park	.75
Season's Park	5
Velasco Park	.25
Pioneer Park	2
Lake Cahuilla County Park	710
La Quinta Community Park	6.5
Total Park Acreage	781

portion of the City, is managed by the Riverside County Parks Department. In addition to these larger parks, small “pocket parks” are located throughout the City, within individual subdivisions.

In addition to City Parks, the City of La Quinta holds 146.7 acres of open space land dedicated for the joint purpose of conservation and recreation. These areas include the 27.9 acre Fred Wolff Bear Creek Nature Preserve, the 114 acre Cove Oasis Trailhead, and the 4.75 acre Bear Creek Trail. These areas provide an urban buffer and a trail connection between the City and the Santa Rosa and San Jacinto National Monument.

As La Quinta is a well-known golfing destination, there are 23 public and private golf courses located within the City, most of which are located within residential areas. La Quinta has one municipal golf course, SilverRock Resort, and another seven private golf courses available for public play. All golf courses are identified as open space in the General Plan’s land use map.

Open Space for Public Health and Safety

Due to La Quinta’s geographical setting at the foot of the Santa Rosa and San Jacinto Mountains, some properties are undevelopable due to engineering and safety limitations, or have been designated for the purposes of flood control and storm water conveyance. These lands have been set aside as open space dedicated to protect public health and safety.

All lands having a twenty percent slope or greater have been designated as open space in order to protect the public from hazards associated with hillside development, including seismic activity, landslides, flooding, inaccessibility for fire and emergency services, lack of water for fire control, wildfires, collapse of roads and similar risks.

About 6% of the open space lands designated within La Quinta have specifically been dedicated for purposes of flood control and water. These areas are connected to a regional conveyance system managed by the Coachella Valley Water District, and include the Coachella Valley Stormwater Channel, the La Quinta Evacuation Channel, the All-American Canal, the Upper Bear Creek Drainage System, the Lake Cahuilla Reservoir, and the East La Quinta Channel.

PLANNING FOR THE FUTURE

The General Plan land use map is anticipated to result in a potential build-out population of about 134,352 in the City and its sphere of influence. The General Plan accommodates this growth by identifying 12,193 acres (19.1 square miles) of total open space lands. Open Space lands are divided into two categories on the General Plan land use map, Recreational Open Space and Natural Open Space. Recreational Open Space consists of public parks and golf courses, while Natural Open Space consists of wilderness and natural resources and water and flood control facilities.

Thoughtful implementation of the General Plan, Zoning Ordinance and other regulatory mechanisms will be required to assure the long-term preservation of open spaces. The City and other conservation organizations can play an important role in acquiring federal and state grants and other funding mechanisms for the purchase of conservation easements and/or fee simple land ownership interests. The City also has the opportunity to encourage residents and other agencies to become involved in open space preservation. On-going efforts between the City, Coachella Valley Association of Governments (CVAG), Bureau of Land Management, National Forest Service, adjoining communities, and private entities are necessary for the continued conservation of local and regional open space resources.

GOALS, POLICIES AND PROGRAMS

GOAL OS-1

Preservation, conservation and management of the City's open space lands and scenic resources for enhanced recreational, environmental and economic purposes.

❖ [Policy OS-1.1](#)

Identify and map lands suitable for preservation as passive and active open space.

- *Program OS-1.1.a:* Identify lands suitable for preservation as natural open space on the General Plan Land Use map.
- *Program OS-1.1.b:* Confer with adjoining communities and other responsible agencies to periodically review and update information on regional open space, and to coordinate preservation efforts.

❖ [Policy OS-1.2](#)

Continue to develop a comprehensive multi-purpose trails network to link open space areas.

- *Program OS-1.2.a:* Coordinate with, and obtain approval from, local utility providers, including the Coachella Valley Water District, to use flood control and utility easements as a trails network which links open space and recreation areas.
- *Program OS-1.2.b:* Continue to coordinate with neighboring communities and other appropriate agencies in developing local and regional trail connections across open space lands.
- *Program OS-1.2.c:* Explore opportunities for additional trails connectivity adjacent to and along watercourses, irrigation canals, and flood control improvements

❖ [Policy OS-1.3](#)

The City shall encourage community involvement and volunteerism in open space maintenance and improvement as a means to leverage local funds, improve open space, and increase public awareness of the City's Open Space areas.

GOAL OS-2

Good stewardship of natural open space and preservation of open space areas.

❖ [Policy OS-2.1](#)

Unique and valuable biological resources should be preserved as open space, to the greatest extent practical.

- [Program OS-2.1.a](#): Continue to implement the Coachella Valley Multi-Species Habitat Conservation Plan.
- [Program OS-2.1.b](#): In conjunction with the entitlement process, the City shall require the preparation of a biological resource survey by a qualified biologist for all development proposed within designated open space land.

❖ [Policy OS-2.2](#)

Where appropriate, geological hazard zones, including but not limited to earthquake fault lines, areas susceptible to liquefaction, floodways, and unstable slopes should be preserved as open space.

❖ [Policy OS-2.3](#)

Encourage the preservation of open space in privately owned development projects.

- [Program OS-2.3.a](#): Utilize flexible development standards, density incentives, and/or other means to encourage the provision of open space in new planned developments.

GOAL OS-3

Preservation of scenic resources as vital contributions to the City's economic health and overall quality of life.

❖ [Policy OS-3.1](#)

To the greatest extent possible, prohibit development on lands designated as open space which are elevated and visually prominent from adjacent developed areas or are located within or in close proximity to areas identified as critical wildlife habitat.

- [Program OS-3.1.a](#): Continue to implement the Hillside Preservation Ordinance.

-
- *Program OS-3.1.b:* Minimize the loss of open space resources.

❖ [Policy OS-3.2](#)

Any development that is permitted within areas designated as Open Space should minimize grading for structures and access and should be visually subordinate to and compatible with surrounding landscape features.

❖ [Policy OS-3.3](#)

Explore and utilize a variety of measures to preserve privately owned properties within hillside and alluvial fan areas, including private covenants, deed restrictions, and land transfers.

- *Program OS-3.3.a:* Identify agencies and property owners which hold fee simple title to properties located in hillside and alluvial fan areas, and encourage agreements which assure that such lands remain undeveloped in perpetuity.

RELATED GOALS

As described above, this Element relates to others in this General Plan. The following goals and their associated policies and programs are closely related to those of this Element.

GOAL PR-1: A comprehensive system of parks, and recreation facilities and services that meet the active and passive needs of all residents and visitors.

GOAL SC-1: A community that provides the best possible quality of life for all its residents.

GOAL FH-1: Protection of the health, safety and welfare of the community from flooding and hydrological hazards.