





## *chapter eight*

---

# **CONSERVATION**

The purpose of the Conservation Element is to address the conservation, development, and sustainable use of Indio's natural resources, including, but not limited to, water, soils, natural gas, fossil fuels, renewable energy sources, and mineral deposits. Strategies to improve air quality and reduce greenhouse gas emissions that contribute to global climate change are also discussed. In addition, this element provides guidance to enhance and protect cultural, paleontological, and historic resources as well as sensitive biological resources, such as the native desert plants and wildlife species that occupy the northern portion of the planning area.

## Key Considerations and Strategies

Human population growth and urbanization is a worldwide concern. Human activities such as the burning of fossil fuels and deforestation are creating concentrations of greenhouse gases in the atmosphere. High levels of greenhouse gases contribute to higher global temperatures, resulting in changes to snow and rainfall patterns, glacial ice coverage, and sea levels. Such changes can have significant impacts on the availability of water and energy resources at the local level. In addition, climate change can have a negative impact on human health due to increased air pollution and heat-related illnesses.

To combat these problems, Indio is taking a leadership role in addressing sustainability, climate change, and resource conservation at the local level. In 2017, the City of Indio was awarded the gold level Beacon Award from the Institute for Local Government. This award recognized the accomplishments of Indio, including:

- + Purchasing City electric vehicles and installing solar electric vehicle charging stations;
- + Expediting the review and permit process for solar projects;
- + Reducing greenhouse gas emissions by using local vendors and locally-produced goods;
- + Replacing grass with drought-tolerant landscaping throughout the City;
- + Enacting a recycling ordinance requiring 65% or more diversion of project waste; and
- + Participating in regional and local planning efforts to offset carbon emission.



*Drought-tolerant landscaping*

This General Plan builds on those existing efforts by including a broad policy framework to reduce greenhouse gas emissions and adapt to climate change. For example, the Land Use and Community Design Element focuses new growth and redevelopment into compact mixed-use areas, such as Midtown and Downtown, that provide opportunities for people who live in adjacent connected neighborhoods to use public transit, walk, and bike. Along with multi-modal transportation improvements, this helps to reduce vehicle miles traveled and lower greenhouse gas emissions associated with driving. However, vehicles are not the only sources of greenhouse gas emissions. Residential buildings, commercial and industrial buildings, municipal buildings, solid waste, and water and wastewater systems also emit greenhouse gas and contribute to climate change.

Reducing the impact of these human activities on the natural environment is a priority for Indio. This Conservation Element addresses topics, such as green building code regulations, renewable energy sources, energy and water conservation measures, low impact development, solid waste reduction, and public awareness programs that contribute to the long-term health and viability of Indio's natural resources.

Consistent with General Plan goals and policies, the City of Indio has developed a Climate Action Plan that sets forth a series of strategies to achieve greenhouse gas reduction targets. These efforts are in line with the number of laws and regulations that California has passed to address climate change, such as Senate Bill 32, which requires greenhouse gas emissions to reach 40% below 1990 levels by 2030.

Land use development pressure can also impact areas that support natural resources and help define Indio's identity, contribute to community health, and are relied upon for economic prosperity. This General Plan supports objectives to limit development in these areas. For example, the northern portion of the planning area (refer to Figure 8-4) encompasses a diverse landscape of desert and hillsides that form the scenic backdrop to the City and support many sensitive plant and animal species. These species contribute to biological diversity and are crucial to maintaining a healthy ecosystem. Many of these species are protected under the federal Endangered Species Act (ESA). To safeguard these areas, the City of Indio complies with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which balances environmental protection and economic development objectives.

The northern portion of the planning area also contains important mineral resources, such as sand and gravel, which provide necessary materials for the local economy (refer to Figure 8-2). This Element promotes the long-term viability of mineral resource sites.

Indio has, and will continue to, celebrate and embrace its past. The preservation of significant cultural and historic resources serves to strengthen community identity and provides educational opportunities. This Conservation Element promotes the preservation and maintenance of these resources.

## Context

### Water Conservation

Both the Indio Water Authority (IWA) and the Coachella Valley Water District (CVWD) have implemented water conservation programs to reduce water demand. Water conservation efforts include such measures as a Landscaping and Water Conservation Ordinance, a hotline to report water misuse, rebate programs, a Water Conservation Master Plan, education and outreach programs, landscape audits, water-wise landscape workshops and seminars, and an agricultural conservation program.



*Water waste*

## Energy Conservation

The City of Indio has made significant progress towards conserving energy by working closely with its local electrical provider, the Imperial Irrigation District (IID). As part of the Desert Cities Energy Partnership (CDEP) between the Coachella Valley Association of Governments (CVAG), Southern California Edison (SCE) and Southern California Gas Company (SCG), the City also has received direction and support in identifying and addressing energy efficiency and demand response opportunities for both municipal facilities and the broader community. The City has sponsored and supported a wide variety of environmental and sustainability programs including:

- + Energy Star promotions and rebates;
- + Standard appliance efficiency improvements;
- + Solar installations by the Imperial Irrigation District (IID), the Indio Water Authority (IWA), and City Hall;
- + Solar installation at the City Corporate Yard;
- + Solid waste recycling and diversion programs;
- + Water saving initiatives;
- + Fleet fuel shifting from gasoline to compressed natural gas (CNG) by SunLine, Burrtec, and Desert Sands Unified School District;
- + Use of alternative-fuel vehicles in the municipal fleet service;
- + Adoption of a plastic bag ban;
- + School outreach programs

Additionally, the Southern California Gas Company (SCG) is responsible for providing natural gas services to Indio. SCG provides rebate and incentive programs that reward residents for using energy efficient natural gas equipment. Residential customers are eligible for rebates if they install high-efficiency water heaters, clothes washers, and furnaces, utilize low-flow showerheads, or insulate their attics and walls. In addition, customers can receive incentives for making other energy efficient-upgrades to their homes.

## Urban Forest

Indio recognizes the importance of preserving and maintaining the urban forest. Indio is the only Tree City USA community in the Coachella Valley. The Arbor Day Foundation assigns this designation if a city meets its core standards of sound urban forestry management. Indio celebrates Arbor Day annually in December and plants trees at a local park with the help of the community. Urban forests provide many environmental benefits and quality of life benefits, such as improving water quality by capturing stormwater runoff, reducing the urban heat island effect by providing shade, producing oxygen, and creating sound buffers.

Indio's urban forest is comprised of trees along public rights-of-ways, in parks, in parking lots, and along private and publicly-owned property. The urban forest is most prominent in older neighborhoods where trees have fully matured. The Public Works Department is committed to protecting existing trees, properly planting and maintaining new trees, and educating the public about the benefits of maintaining a healthy urban forest.

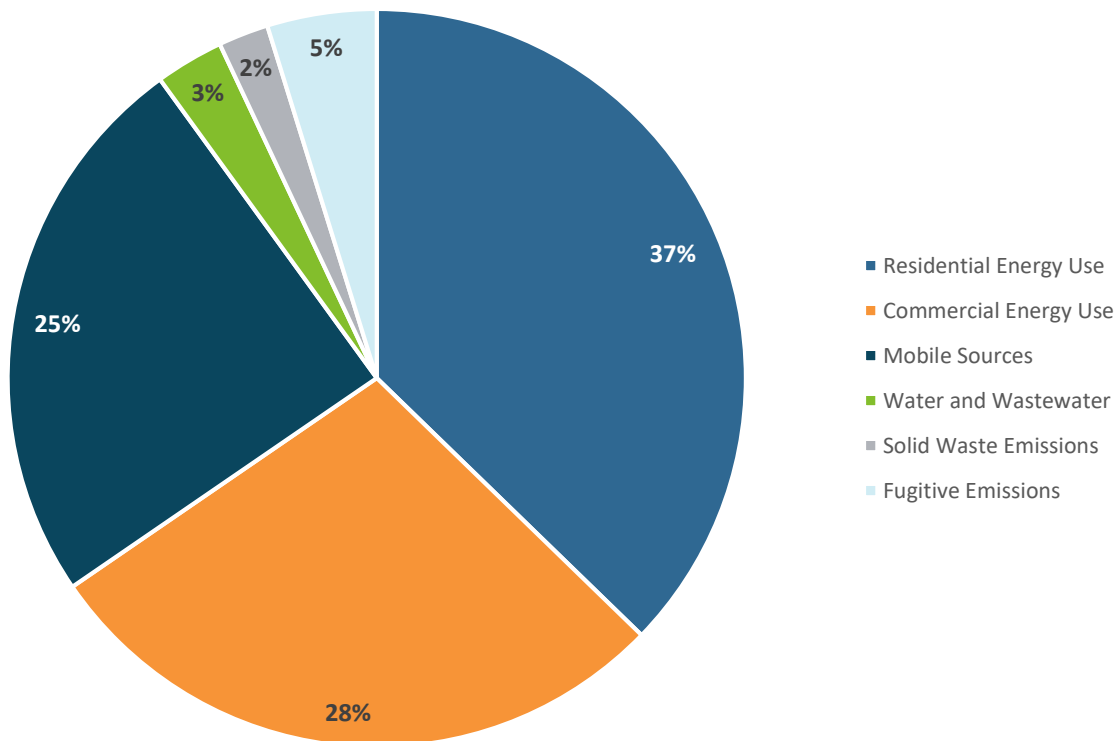
## Greenhouse Gas Emissions

The Indio greenhouse gas emissions inventory provides a snapshot of emissions for 2010 to quantify the main sources of emissions from municipal operations and the community as a whole. The purpose of the inventory is to:

- + Identify and understand the sources and quantities of emissions within a local government’s jurisdictional boundary;
- + Create an emissions baseline that can be used by the City to measure progress towards emissions reductions targets;
- + Use the baseline to prioritize and evaluate potential government actions; and
- + Make informed policy decisions related to greenhouse gas emissions reduction.

In 2010, total greenhouse gas emissions in Indio were approximately 610,000 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e). On a per person basis, this is approximately 8 MTCO<sub>2</sub>e per Indio resident, less than the State average of 11.9 MTCO<sub>2</sub>e. These emissions account for direct emissions from the on-site combustion of fuels and the combustion of fuel in vehicles, indirect emissions associated with electricity consumption, and emissions from solid waste generated and water consumed by Indio. Figure 8-1 shows communitywide greenhouse gas emissions by sector.

**Figure 8-1: 2010 Communitywide Greenhouse Gas Emissions**



## Mineral Resources

Indio's important mineral resources include sand, gravel, and termed aggregate. These minerals are an important component of asphalt, concrete, road base, stucco, and plaster, and provide materials for the local economy.

The State Mining and Geology Board has defined Mineral Resource Zones for Indio, which describes mineral resources deposit areas (Table 8-1). The Indio Quarry/Indio Hills Fan, located within Indio's Sphere of Influence, is an existing permitted sand and gravel operation. The subject resource area consists of a moderate-sized deposit that is located within 750 acres of an alluvial fan adjacent to and immediately south of Indio Hills as shown in Figure 8-2.

**Table 8-1: Description of Mineral Resource Zones**

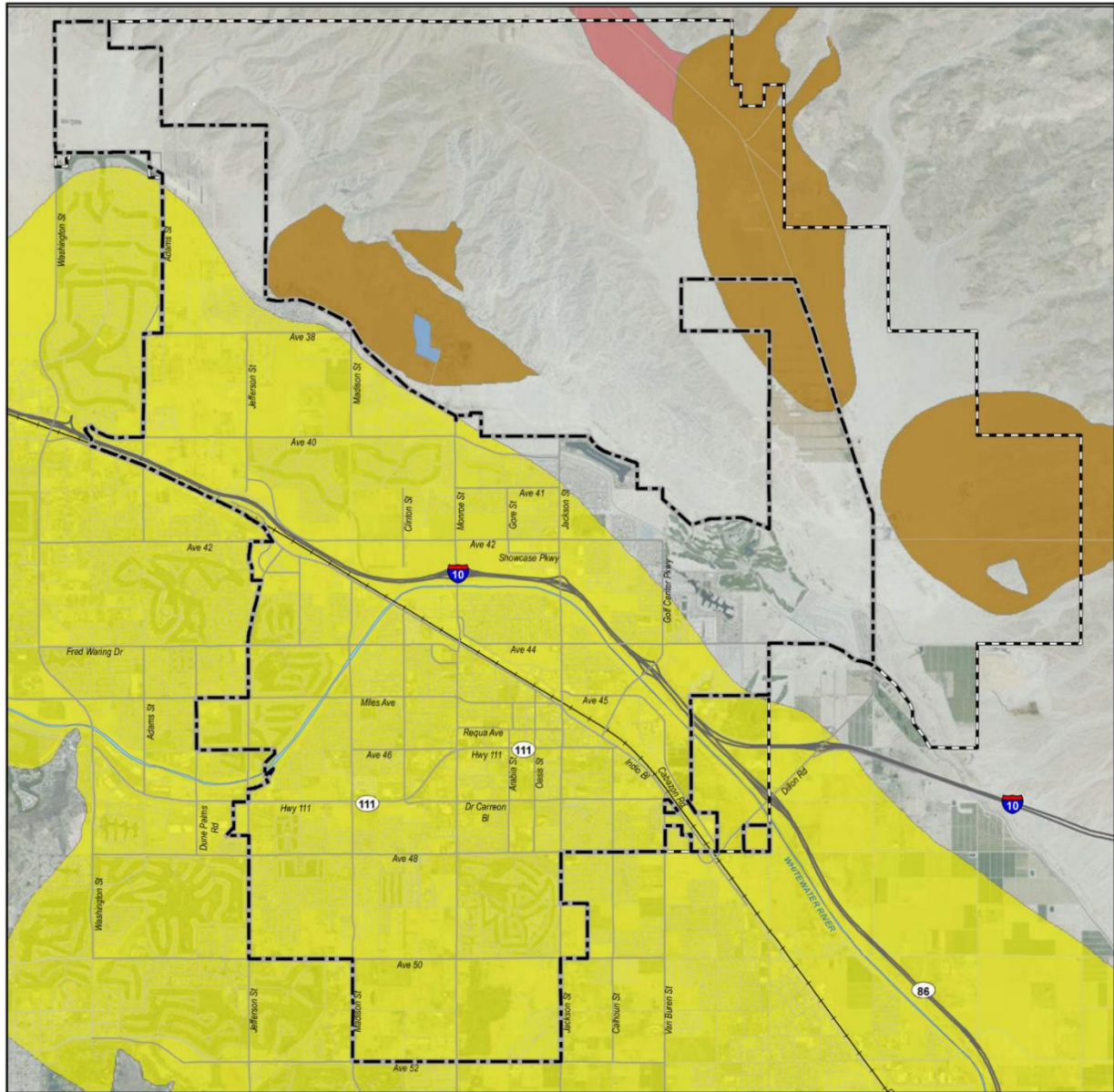
Zone	Description
MRZ-1	Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
MRZ-2a	Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. Contains known economic mineral deposits.
MRZ-2b	Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
MRZ-3	Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ.

*Source: 2007 California Geological Survey. Special Report 198.*

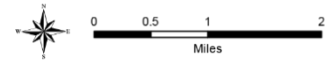
## Soils

There is a wide variety of agricultural soils in Indio. Soils vary appreciably in origin, degree of weathering, and depth and texture. There are still many locations in Indio which have productive soil and other requisites to be especially well suited for agricultural purposes. Soils in the region with higher Storie Indices and capability classifications include the Coachella, Gilman, and Indio soil series, which compose approximately 57% of Indio's total area. Figure 8-3 identifies the soil types within the planning area.

Figure 8-2: Mineral Resource Zones in Indio



### Mineral Resource Zones



- City Boundary
- Sphere of Influence
- Roads
- Railroads
- Highways

**Mineral Resource Zones (2008)**

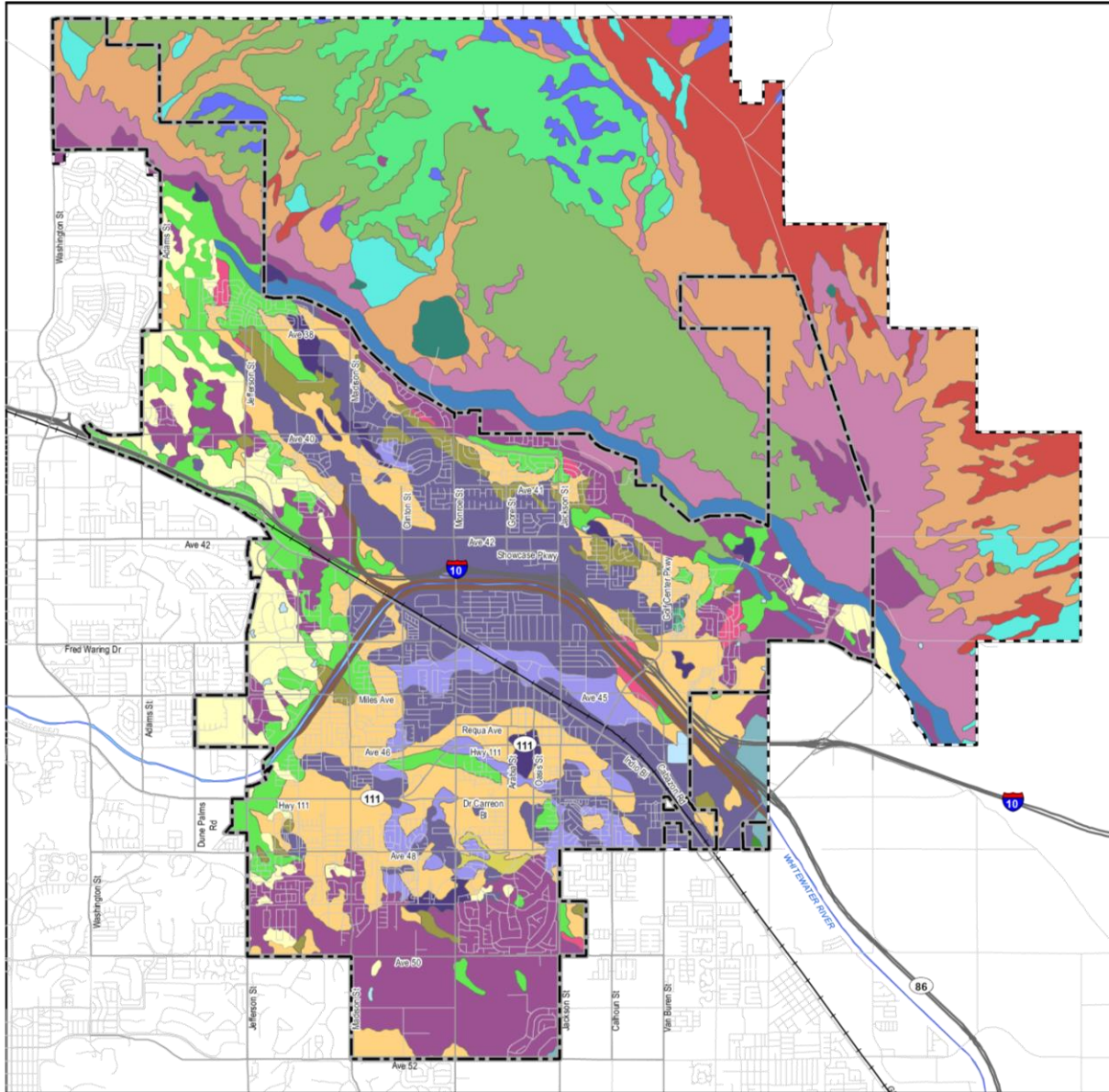
- MRZ-1
- MRZ-2a
- MRZ-2b
- MRZ-3

Source: Riverside County/LAFCO ( City Boundary,2012; SOI,2012)  
 Riverside County/TLMA (Roads,Railroads,Highways) Riverside County  
 (River)

The information on this map was derived from various digital databases, sourced above. Care was taken in the creation of this map but it is provided "as is". PDC cannot accept any responsibility for any errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. Users are cautioned to field verify information on this product before making any decisions.



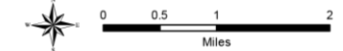
Figure 8-3: Soil Types in Indio



**Soils**

- City Boundary
- Sphere of Influence
- Roads
- Railroads
- Highways
- 1255, Goldenhills-Bulletproof-Fanhill-Whiterobe complex, 30 to 75% slopes
- BA, Badland
- BP, Borrow pits
- CcC, Carrizo stony sand, 2 to 9% slopes
- CdC, Carsitas gravelly sand, 0 to 9% slopes
- ChC, Carsitas cobbly sand, 2 to 9% slopes
- CoB, Chuckawalla very gravelly sandy clay loam, 2 to 5% slopes

- CoD, Chuckawalla very gravelly sandy clay loam, 5 to 15% slopes
- CpA, Coachella fine sand, 0 to 2% slopes
- CsA, Coachella fine sandy loam, 0 to 2% slopes
- Fe, Fluvents
- GP, Gravel pits and dumps
- GaB, Gilman loamy fine sand, 0 to 5% slopes
- GbA, Gilman fine sandy loam, 0 to 2% slopes
- GbB, Gilman fine sandy loam, 2 to 5% slopes
- GcA, Gilman fine sandy loam, wet, 0 to 2% slopes
- GeA, Gilman silt loam, 0 to 2% slopes
- GfA, Gilman silt loam, wet, 0 to 2% slopes
- IeA, Imperial silty clay, 0 to 2% slopes
- Ip, Indio fine sandy loam



- Ir, Indio fine sandy loam, wet
- Is, Indio very fine sandy loam
- LR, Lithic Torripsamments-Rock outcrop complex
- MaB, Myoma fine sand, 0 to 5% slopes
- MaD, Myoma fine sand, 5 to 15% slopes
- RU, Rubble land
- W, Water

Source: Riverside County/LAFCO (City Boundary,2012; SO(2012) Riverside County TLMA (Roads; Railroads; Highways) Riverside County (River)

The information on this map was derived from various digital databases, sourced above. Care was taken in the creation of this map but it is provided "as is". PDC cannot accept any responsibility for any errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. Users are cautioned to field verify information on the product before making any decisions.

## Biological Resources

The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) provides a regional vision for balanced growth to meet the requirements of federal and State endangered species laws, while promoting enhanced opportunities for recreation, tourism, and job growth. The CVMSHCP aims to conserve over 240,000 acres of open space and protect 27 plant and animal species across the region. By providing comprehensive compliance with federal and State endangered species laws, the CVMSHCP not only safeguards the desert's natural heritage for future generations, it also allows for more timely construction of roads and other infrastructure that is essential to improving quality of life in the Coachella Valley. The Indio City Council adopted the plan in 2008, and it guides development within key conservation areas.

The CVMSHCP designates five conservation areas where development is limited to protect environmentally sensitive lands:

- + East Indio Hills Conservation Area located along the northern City limit;
- + Thousand Palms Conservation Area located near the northwest corner of the City limits;
- + Santa Rosa and San Jacinto Mountains Conservation Area located to the southwest and outside of the City limits;
- + Indio Hills Palms Conservation Area located along the northern edge of and outside of the City limit but within the sphere of influence area adjacent to the Thousand Palms Conservation Area; and
- + Desert Tortoise and Linkage Conservation Area located just outside the northeast part of the sphere of influence area with a small portion located within the sphere of influence.

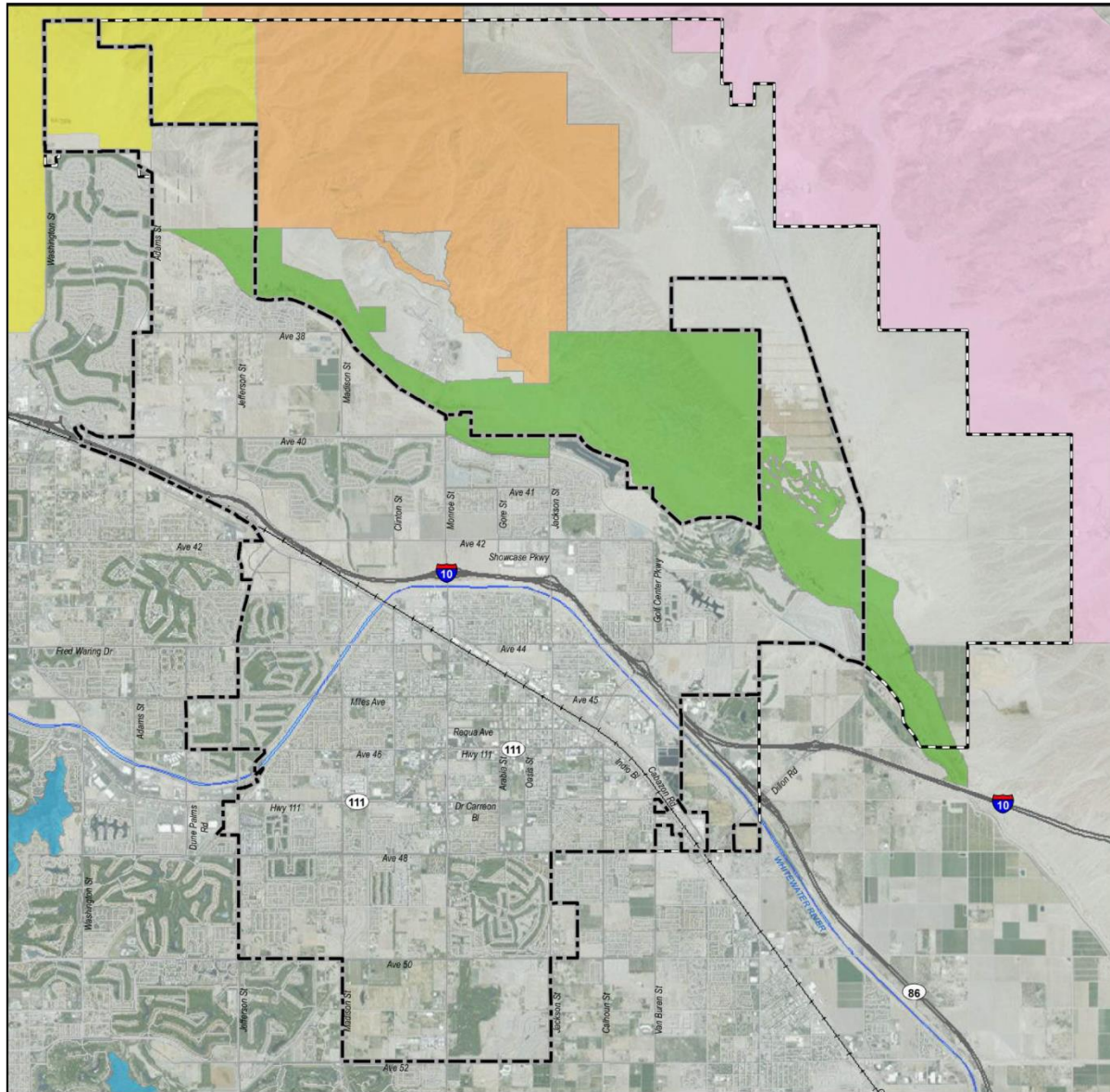
The CVMSHCP is shown on Figure 8-4 and on the Land Use and Community Design Element Place Type map (Figure 3-5) as an overlay zone.

Although most of Indio has been largely developed, biological resource areas are present within the City urbanized area. These resources are confined to areas of native vegetation that occur in the northwest and northeast portions of the planning area, generally north of I-10 and lie partially within designated conservation areas that are part of the CVMSHCP area. These conservation areas provide core habitat for a number of sensitive plants, insects, mammals, birds, and reptiles.

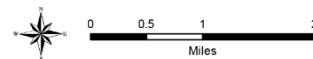
At the southern end of the Coachella Valley is the Salton Sea. The Salton Sea is California's largest lake, and it provides important habitat for fish, migratory birds, and other species. The State, along with federal, regional, and local partners, has established the Salton Sea Management Program in order to balance water supply security, habitat protection, and dust suppression.

The Coachella Valley and Indio is also part of the Whitewater River watershed which drains into the Salton Sea and is part of the larger Colorado River Watershed. The watershed is also home to a diverse desert landscape that provides habitat for dozens of plant and animal species.

Figure 8-4: CVMShCP Areas in Indio



### CVMShCP Conservation Areas



-  City Boundary
-  Sphere of Influence
-  Roads
-  Railroads
-  Highways
-  Desert Tortoise and Linkage Conservation Area
-  East Indio Hills Conservation Area
-  Indio Hills Palms Conservation Area
-  Santa Rosa and San Jacinto Mountains Conservation Area
-  Thousand Palms Conservation Area

Source: Riverside County/LAFCO (City Boundary,2012; SOI,2012)  
 Riverside County/LMA (Roads,Railroads,Highways) Riverside County (River)

The information on this map was derived from various digital databases, sourced above. Care was taken in the creation of this map but it is provided "as is". PDC cannot accept any responsibility for any errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. Users are cautioned to field verify information on the product before making any decisions.

## Cultural and Tribal Cultural Resources

### Cultural Resources

Cultural resources include prehistoric and historic archaeological sites, buildings, structures, features (including significant trees or other landscaping), places, or other objects of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance. Several prehistoric archaeological resource sites occur in Indio, including habitation sites, temporary camps, lithic and ceramic scatters, quarries, and trails. Archaeological sites in arid regions, such as Indio and the Coachella Valley, are more frequent in areas of permanent or seasonal water sources. Historic archaeological sites consist predominately of trash dumps/scatters but may also include structure remains.

Within Indio, archaeological resources will most likely be encountered in undeveloped parcels of land. However, subsurface archaeological resources may be encountered in areas that have been developed but have not been subject to extensive subsurface disturbance.

### Historic Resources

Included under the broader umbrella of cultural resources is the subcategory of “historic resources,” also referred to as built environment resources. Historic resources can include buildings, structures, sites, objects, districts, and cultural landscapes that have architectural, cultural, social, or historic significance. In order to qualify as a historic resource, a property must meet applicable eligibility criteria and retain historic integrity.

A number of potential historic and prehistoric sites and structures have been recorded in the City. A number of these resources fall within the historic resource subcategory. In the case of Indio, these resources include a range of property types, such as residences, institutional, commercial, recreational, and agricultural properties. These resources reflect and embody the City’s rich cultural heritage, from its founding years as a small railroad town and date capital of the United States, through the war years and an extensive postwar building boom and City expansion.

In order to manage and preserve its cultural heritage, the City maintains a Historic Resource List. Established in 2008, the City of Indio Historic Resource List currently includes a total of 39 buildings that are eligible or potentially eligible as historic resources. An additional 19 properties are included on the City’s list as warranting evaluation. The list also includes all Unreinforced Masonry (URM) buildings in Indio.



*Indio’s water tower at the Date Museum*

### Tribal Land

Three tribes are located within the vicinity of Indio. The Cabazon Tribal lands are located immediately east and southeast of the City. Augustine Tribal Lands and Torres-Martinez Tribal Lands are located to the south. Agua Caliente Tribal Lands are located to the northwest. The City engages with these tribes when planning development that may affect Native American cultural resources or sacred sites.

### Paleontological Resources

Paleontological resources include the fossilized remains or traces of animals and plants from a previous geologic period. Indio is located in the Coachella Valley, a large northwest to southeast trending basin that is the result of the well-known San Andreas Fault system in California. Sedimentary deposition has been slowly filling this basin since the Miocene Epoch (23.0 to 5.3 million years ago). Being an area of sedimentary deposition, the potential for paleontological resources exists.

Five sedimentary units in Indio have the potential to contain significant paleontological resources:

- + The Mecca Formation, dated from the late Miocene/early Pliocene, for which little information is available, has been given a High Potential sensitivity ranking.
- + The Palm Springs Formation dates from the Pleistocene and contains vertebrate fossils such as horse and cotton rat. It is considered to have a High Potential sensitivity ranking.
- + The Canebrake Conglomerate, which dates from the Pliocene to the Pleistocene, has produced mammalian, reptilian, and avian fossils. It is also considered to have a High Potential sensitivity ranking.
- + The Older Quaternary Lake Sediments, found above the high shoreline of Lake Cahuilla, date from the Late Pleistocene and contain abundant fossil fresh water fauna. This unit is considered to have a High Potential sensitivity ranking.
- + The Ocotillo Conglomerate, an alluvial fan deposit, dates from the mid to late Pleistocene. It has been given a sensitivity rating of Undetermined Potential.

# Goals and Policies

## Greenhouse Gas Emissions

Indio seeks to meet greenhouse gas reduction targets set by the State. To achieve this, the City will continually evaluate total emissions produced by Indio and update strategies for reducing greenhouse gas emissions.

**Goal CE-1: Greenhouse Gas Emissions. Indio maintains a leadership role in the Coachella Valley by reducing greenhouse gas emission to support a resilient community.**

### CE-1 Policies

**CE-1.1 Reduction targets.** Establish greenhouse gas emission reduction targets in line with those of the State that call for reducing greenhouse gas emissions as follows:

- 1990 levels by 2020
- 40 percent below 1990 levels by 2030
- 60 percent below 1990 levels by 2040

**CE-1.2 Reduction measures.** Implement greenhouse gas reduction measures consistent with the Climate Action Plan to achieve greenhouse gas reduction targets.

**CE-1.3 Monitor emissions.** Monitor and report greenhouse gas emissions so that reductions can be tracked in a transparent, consistent, and accurate manner.

**CE-1.4 Reduction programs.** Use the emissions inventory and monitoring tools to identify, prioritize, and update programs that effectively contribute to greenhouse gas reductions.

**CE-1.5 Municipal emissions.** Prioritize municipal policies and programs that reduce the City's carbon footprint, such as purchasing alternative fuel vehicles, pursuing solar installation, implementing green purchasing, and retrofitting existing buildings.

**CE-1.6 Green jobs.** Promote greenhouse gas reduction measures that support local job training and placement in green industries focused on environmental sustainability, renewable energy, renewable-related technologies, and bioremediation.

**CE-1.7 Sustainable communities strategy.** Collaborate with regional and State partners to implement the Sustainable Communities Strategy to reduce greenhouse gas emissions, balance jobs and housing, and develop transportation systems that support all modes of circulation.

## Water Conservation

In order to ensure that there is a sufficient supply of water to meet current and future needs, it is important to continue to conserve water and explore other ways to reduce the demand for potable water.

**Goal CE-2: Water Conservation. Sustainable domestic water facilities and water conservation measures to effectively meet current and future demand.**

### CE-2 Policies

- CE-2.1 Rate schedule.** Work with the Indio Water Authority to continue to maintain a water conservation rate schedule intended to reduce water use.
- CE-2.2 Regional coordination.** Continue to work with CVWD and IWA to implement water conservation projects, including conducting water audits, disseminating information about water conservation measures and rebate programs, and participating in regional water planning efforts.
- CE-2.3 New development requirements.** Require new development projects to implement water conservation measures that are equivalent to or exceed CalGreen Tier One or other applicable standards in effect at the time of development.
- CE-2.4 Drought-tolerant landscaping.** Exceed State landscaping water efficiency standards by requiring the use of drought tolerant landscaping, minimizing the use of turf, and encouraging the retrofitting of existing irrigation systems
- CE-2.5 Water-efficient landscaping and appliances.** Encourage the retrofitting of existing water-intensive appliances and irrigation systems. Continue to disseminate information about the CVWD and IWA rebate programs.
- CE-2.6 Greywater systems.** Encourage new residential development to be constructed to allow for easy implementation of greywater systems that redirect water from washbasins, showers, and tubs for use in toilet flushing, irrigation, and other non-potable uses.
- CE-2.7 Reclaimed and recycled water use.** Work with the Coachella Valley Water District (CVWD), Valley Sanitation District (VSD), and the Indio Water Authority (IWA) to use reclaimed and recycled water.

## Energy Conservation and Renewables

Most energy is generated by the use of non-renewable resources such as fossil fuels. Fossil fuels contribute to air pollution and release greenhouse gases into the atmosphere. It is necessary to reduce reliance on fossil fuels and develop renewable alternative energy solutions, such as solar and wind power. These are clean forms of energy that improve the overall health and sustainability of the community.

### Goal CE-3: Energy Efficiency, Conservation, and Renewables. Energy-efficient buildings and vehicles that use energy from renewable sources.

#### CE-3 Policies

- CE-3.1 Regional energy leadership.** Continue involvement with CVAG, Imperial Irrigation District, and the Desert Energy Cities Partnership and be a regional leader in energy conservation, efficiency, and renewables implementation. Seek opportunities to join a Community Choice Energy program.
- CE-3.2 Residential energy efficiency education.** Maintain a designated City staff member to oversee an Energy Awareness Program that provides lectures, seminars, and training on green building.
- CE-3.3 Low-income weatherization assistance program.** Partner with Imperial Irrigation District and SoCal Gas to promote existing programs that provide financial assistance to low-income households for weatherization improvements and heating, ventilation, and air conditioning (HVAC) tune-ups.
- CE-3.4 Energy audits.** Require energy audits to be performed on residences prior to sale or transfer of title and provide prospective owners with recommendations for retrofit measures.
- CE-3.5 Commercial benchmarking.** Promote commercial benchmarking using the Environmental Protection Agency's ENERGY STAR Portfolio Manager or equivalent benchmarking tool.
- CE-3.6 Zero net energy use.** Implement building design requirements to achieve zero net energy use for new residential development by 2020 and zero net energy use for new commercial development by 2030 consistent with the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan.
- CE-3.7 Solar financing.** Promote installation of solar panels by continuing to support Indio's Ygrene and HERO Programs and by distributing information on actual savings achieved by PV systems.
- CE-3.8 Building energy use.** Encourage the use of building placement, design, and construction techniques to limit energy consumption, reduce the heat island effect, increase renewable energy use, and maintain solar access.
- CE-3.9 Municipal buildings.** Continue to take a leadership role in ensuring that municipal buildings are designed to be as sustainable and energy efficient as feasible by:
- Requiring new City buildings to achieve LEED Gold certification or an equivalent standard;
  - Retrofitting existing buildings with renewable energy infrastructure or updating energy efficient appliances and fixtures;
  - Implementing stringent water conservation measures;
  - Capturing and reusing rainwater to the extent feasible; and



- Planting new native or low water use trees in conjunction with City-initiated projects to expand Indio’s urban forest, decrease demand for air conditioning, and reduce the heat island effect.

**CE-3.10 Municipal vehicle fleet upgrades.** When replacing or adding new municipal vehicles, require the analysis of alternative-fuel vehicles along with gasoline-fueled vehicles. When appropriate and economically-feasible, preference the purchase of alternative-fuel vehicles over gasoline-fueled vehicles.

**CE-3.11 Grant funding.** Seek grant funding to implement a “green building” demonstration project to promote awareness of available “green” technologies that work within Indio’s desert setting.

**CE-3.12 Alternative energy.** Explore future renewable energy sources utilizing diverse energy resources with Imperial Irrigations District (IID) and other agencies. Facilitate the development of small-scale alternative energy infrastructure.

**CE-3.13 Innovative systems.** Identify opportunities to implement innovative infrastructure systems that utilize natural ecological processes.

**CE-3.14 Sustainability commission.** Work with the Sustainability Commission to identify and develop energy efficiency and sustainability programs.

## Urban Forest

Urban forests improve water quality by removing pollutants from water as it is absorbed into the ground, reduce energy use by providing shade, and mitigate climate change by taking carbon dioxide out of the atmosphere. Urban forests also result in better air quality by releasing oxygen as a byproduct of photosynthesis.

**Goal CE-4: Urban Forest. A healthy and thriving urban forest that results in improved air and water quality, lower greenhouse gas emissions, and reduced energy use.**

### CE-4 Policies

**CE-4.1 Public trees.** Require the planting of new trees in conjunction with City-initiated projects, where feasible, and manage and care for all publicly-owned trees.

**CE-4.2 Heritage trees.** Support the conservation of heritage trees, or trees that are recognized as unique due to their age, rarity, and large size as well as their aesthetic, botanical, ecological, and historic value.

**CE-4.3 Shade trees.** Promote the planting of shade trees with substantial canopies, and require, where feasible, site design that uses trees to shade buildings, parking facilities, sidewalks, and other facilities to minimize heat island effects and decrease demand for air conditioning.

**CE-4.4 Fruit tree program.** Explore the feasibility of implementing a fruit tree program that permits fruit trees to be planted within parks or on another City property. Work with non-profit organizations or community volunteers to identify funding sources (such as grants), plant and maintain the trees, and harvest the fruit for to give to the homeless or low-income families, sell at farm stands or farmers’ markets, and/or offer a subscription service to residents that allows the fruit to be delivered to their home or office for a set price.

- CE-4.5 New development requirements.** Ensure that new development incorporates and maintains street trees and parking lot plantings as required, and work with residents and businesses to retain healthy trees as part of Indio’s streetscape.

## Mineral Resources

**Goal CE-5: Mineral Resources. Viable long-term production of mineral resource sites that do not adversely impact public health or the environment.**

### CE-5 Policies

- CE-5.1 Mining operations buffers.** Maintain buffers between active mining operations and incompatible land uses, such as housing and commercial development.
- CE-5.2 Reclaimed mining sites.** In coordination with the State, periodically declassify and remove mining sites from the State list once a site has been reclaimed.
- CE-5.3 Best practices.** Coordinate with Riverside County to assure that mining operations continue to implement best available management practices to minimize or avoid nuisances, hazards, or adverse environmental impacts including, but not limited to dust, noise, and erosion.
- CE-5.4 Raw mineral resources.** Support efforts to conserve and recycle raw mineral resources.
- CE-5.5 Annexing active mining operations.** Consider the feasibility, benefits, and costs of annexing active mining operations and mineral resource areas with potential for active mining. Conduct a related fiscal analysis that demonstrates that annexation will be revenue neutral or revenue enhancing. Annexation shall not create a revenue drain on the City.

## Soils

Protecting and enhancing soil quality through conservation efforts and utilizing best management practices is critically important for sustaining our environment.

**Goal CE-6: Soils. The protection of soils from erosion by wind and water, and from the build-up of salts on agricultural lands.**

### CE-6 Policies

- CE-6.1 Grading.** Minimize grading of land to project specific efforts so as to limit the impact of soil erosion from wind, water, and landslides in areas of unstable slopes, and reduce negative aesthetic impacts in areas of significant landforms.
- CE-6.2 Agricultural soil erosion.** Continue to work with agricultural property owners and operators to minimize the impacts of tilling and grading on soil erosion.
- CE-6.3 Agricultural best practices.** Promote best agricultural practices regarding to address surface and groundwater contamination, particulate emissions from agricultural operations, minimal soil erosion, and the buildup of salts in soils.

## Biological Resources

Maintaining biological diversity is an important component of ensuring the proper function of ecosystems. The conservation of biological resources is integral to ensuring biodiversity and promoting the long-term health of the community and the environment.

**Goal CE-7: Biological Resources. The protection and conservation of sensitive biological resources.**

### CE-7 Policies

- CE-7.1 CVMSHCP and other regulations.** Implement the CVMSPHCP. Ensure development is consistent with federal, State, and regional regulations for habitat and species protection.
- CE-7.2 Desert fan palm.** Work with Riverside County, public and private landowners to maintain and enhance the desert fan palm oases located in the southern slopes of the Indio Hills.
- CE-7.3 Riparian resources.** Preserve and enhance wetland functions and values to the extent feasible and maintain ecological integrity in order to support riparian resources.
- CE-7.4 Volunteerism.** Encourage community volunteerism and stewardship to help protect and rehabilitate natural resources.
- CE-7.5 Public and private partnerships.** Encourage public and private partnerships to acquire and protect habitat areas containing sensitive resources for preservation as permanent open space.
- CE-7.6 Native plants.** Incorporate native desert plant materials into new development projects to the extent possible and feasible.
- CE-7.7 Sensitive biological area development.** Apply appropriate land use and development regulations to limit development of sensitive biological areas, including wetlands, wildlife movement corridors, and sensitive habitats.
- CE-7.8 Preserve night sky.** Ensure that outdoor lighting is shielded and directed away from natural open space areas.
- CE-7.9 Hazards and open space.** Maintain open space areas that are designed to protect people and property from risks associated with hazards, such as fault lines, flood zones, high voltage power line areas, and electrical substations.
- CE-7.10 Agency coordination.** Communicate with neighboring jurisdictions (including the cities of La Quinta, Indian Wells, Palm Desert, Coachella, and the County of Riverside), regional agencies (including the Southern California Association of Governments (SCAG), Coachella Valley Association of Governments (CVAG), and the Local Agency Formation Commission (LAFCO), and Riverside County Transportation Commission (RCTC)), Caltrans, and the SunLine Transit Agency to seek opportunities to improve and expand upon the regional open space/biological preserve system.
- CE-7.11 Aquifer recharge areas.** Continue to identify and protect aquifer recharge areas and natural drainages throughout Indio.

## Cultural and Tribal Cultural Resources

Identifying and preserving significant cultural and historic resources strengthens community heritage and identity. These resources provide a constant reminder of the culture and history of Indio and the Coachella Valley, and serve as a valuable educational resource for residents and visitors.

**Goal CE-8: Historic, Archaeological, and Paleontological Resources. Historic, archaeological, and paleontological resources preserved for their scientific, educational, aesthetic, and cultural values.**

### CE-8 Policies

**CE-8.1 Site plan review.** Ensure adequate site plan review and mitigation measures are implemented for the development of sites with the potential to contain historic, archaeological, and paleontological resources.

**CE-8.2 Avoidance of impacts to historic resources.** For projects that could affect historic resources, ensure adequate study to identify eligible resources and project-level review to avoid or lessen negative impacts through conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

**CE-8.3 Incentivize retention of historic landmarks.** Explore opportunities to provide economic and regulatory incentives for the retention and sensitive upgrades and changes to historic landmarks and contributors to designated historic districts.

**CE-8.4 Monitoring.** Require monitoring on sites where grading has the potential to impact subsurface cultural and paleontological resources during excavation and construction activities.

**CE-8.5 Public Education.** Support opportunities to promote public awareness of the history and pre-history of the area as the oldest Valley City and the cultural center of the Coachella Valley.

**CE-8.6 Coordination with local tribes.** Periodically meet with representatives from local tribes to:

- Obtain input prior to making decisions, taking actions, or implementing programs/projects that may impact cultural resources;
- Discuss methods to preserve and protect highly sensitive cultural resources; and
- Ensure that there is agreement regarding the protocol to be followed when cultural resources are discovered.

## Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s conservation policies. Programs are consistent with this chapter’s goals and policies.

**Table 8-4: Conservation Programs**

	DESCRIPTION	PRIORITY	TIME FRAME	RESPONSIBILITY
1	<p><b>Staff allocation.</b> Designate a City staff member(s) responsible for overseeing implementation of its energy and water conservation programs. Example activities may include:</p> <ul style="list-style-type: none"> <li>• Manage the residential energy disclosure program.</li> <li>• Promote installation of solar panels and implementation of energy upgrades through Indio’s Ygrene and HERO Programs.</li> <li>• Benchmark municipal facilities using the Environmental Protection Agency’s ENERGY STAR Portfolio Manager or equivalent benchmarking tool and identify energy efficiency upgrades in City buildings.</li> <li>• Establish an employee carpooling program.</li> <li>• Provide lectures, seminars, and training on green building based on guide and training material emphasizing desert conditions and opportunities.</li> </ul>	High	Short	Sustainability Coordinator
2	<p><b>Residential transfer of title energy disclosures.</b> Establish an energy disclosure program to be performed prior to sale or other transfer of title. Disclosures should provide prospective owners with recommendations for retrofit measures to be given to the buyer prior to transfer of title.</p>	High	Short	Planning, Sustainability Coordinator
3	<p><b>Low-income weatherization assistance program.</b> Partner with Imperial Irrigation District and SoCal Gas to aggressively promote existing programs that provide financial assistance to low-income households for weatherization improvements and heating, ventilation, and air conditioning (HVAC) tune-ups.</p>	High	Ongoing	Sustainability Coordinator
4	<p><b>Solar financing.</b> Formalize and implement a protocol to promote installation of solar panels by continuing to support Indio’s Ygrene and HERO Program and by distributing information on actual savings achieved by PV systems.</p>	High	Short	Sustainability Coordinator

5	<b>Landscape and water conservation ordinance.</b> Adopt the Coachella Valley Model Water Efficient Landscape Ordinance.	High	Short	Planning, Public Works
6	<b>Greywater ordinance</b> Study and adopt an ordinance allowing greywater systems that redirect water from washbasins, showers, and tubs.	Medium	Medium	Planning, Public Works
7	<b>Zoning and implementation ordinances.</b> Regularly review and update zoning and building codes to enable innovative sustainability measures, including implementation of the following: <ul style="list-style-type: none"> <li>• Permit approval streaming for renewable energy or energy upgrades</li> <li>• Greywater capture and reuse systems</li> <li>• Wind generation on residential and commercial buildings</li> <li>• Electric vehicle infrastructure requirements</li> <li>• Green building performance standards, such as those to achieve Net Zero goals</li> <li>• Dark Sky Ordinance</li> </ul>	High	Ongoing	Planning, Public Works, Sustainability Coordinator
8	<b>Heritage trees.</b> Identify heritage trees that should be preserved. Trees on this list shall only be removed when a public interest served by removal outweighs the interest in preservation and heritage status.	Medium	Ongoing	Community Services/Planning
9	<b>Agricultural study.</b> Develop a study of sound agricultural practices that addresses surface and groundwater contamination, particulate emissions from agricultural operations, minimal soil erosion, and the buildup of salts in soils. Based on the study, create brochures available to the agricultural community.	Low	Short	Community Services
10	<b>Historic resources program.</b> Establish a program and identify potential funding sources to facilitate the preservation and maintenance of identified historic resources. Ensure that any proposed changes to such landmarks are appropriate to the historic character of the original structure.	Medium	Short	Planning
11	<b>Historic resources design guidelines.</b> Prepare and adopt design guidelines that contribute to the creation of a distinctive character for each subarea based on important historic/cultural resources within each subarea.	Medium	Short	Planning