



45-871



DESERT
RECREATION DISTRICT

INDIO COMMUNITY CENTER



chapter nine

INFRASTRUCTURE AND PUBLIC FACILITIES

The purpose of this Element is to inform and guide future investment in infrastructure and public facilities in the City of Indio. This Infrastructure Element addresses the following support systems important to Indio:

- Water Resources
- Domestic Water Facilities
- Storm drain and flood control facilities
- Wastewater collection and Treatment
- Potable Water Service and Supply
- Electricity and Natural Gas Utilities
- Solid Waste

Key Considerations and Strategies

Infrastructure is the backbone of the community and provides support systems important to the community's development. Storm drains protect properties from flooding. The water system, waste water collection lines, electric power, natural gas, and telecommunications facilities help us live in comfort and are critical to the quality of life in Indio. All these support systems must be sufficient to accommodate the present and future needs the community. When infrastructure ages or growth outpaces capacity, maintenance and infrastructure expansion to meet community needs becomes important. In addition to utility infrastructure, the City operates a number of facilities throughout the City and houses numerous schools and education facilities. Emergency services, including police and fire, are addressed in the Safety Element.

Context

Water Resources and Facilities

The Indio Water Authority (IWA) and the Coachella Valley Water District (CVWD) are responsible for providing water service to Indio. Both water agencies are committed to providing a safe, reliable, and high-quality water supply system that supports current and future generations. IWA's service area covers approximately 38 square miles. It encompasses the majority of Indio and some of the unincorporated sphere of influence. The remaining portion of the planning area is served by CVWD, which has a service area that spans approximately 1,000 square miles from the San Gorgonio Pass to the Salton Sea. Figure 9-1 identifies these service area boundaries as they relate to Indio's planning area.

Indio's largest water supply source is groundwater from the Whitewater River Basin. This basin has an estimated storage capacity of approximately 30 million acre feet.¹ IWA and CVWD pump groundwater from multiple wells as needed to meet the demands within their service areas. Since the 1930s, groundwater levels have been declining as a result of overdraft, a condition where more water is extracted from the basin than is naturally recharged to it every year. However, in eastern Coachella Valley, groundwater levels have stabilized in recent years. Natural recharge to the groundwater basin is estimated to be approximately 50,000 acre feet per year (AFY), which is only a fraction of annual pumping.²

In addition to groundwater, IWA and CVWD have access to or are working to obtain other water supply sources to meet projected water needs and help eliminate groundwater overdraft. IWA is collaborating with the Valley Sanitation District (VSD) on a recycled water plant that could potentially serve a variety of irrigation customers, including golf courses, parks, schools, and homeowners associations. IWA is also planning a new surface water plant that would treat Colorado River water from the Coachella Canal for potable use and groundwater recharge.³ CVWD relies on a combination of Colorado River water, State Water Project water, surface water, and recycled water. CVWD is also working on a demonstration desalination facility to treat drain water and groundwater for potable and non-potable uses. Additionally, stormwater capture has been identified as a potential method for increasing local water available for

¹ Coachella Valley Water District (2012). Coachella Valley Water Management Plan 2010 Update.

² Coachella Valley Regional Water Management Group (2010). Coachella Valley Integrated Regional Water Management Plan.

³ Indio Water Authority (2012). Indio Water Authority – 2012 Water Master Plan Update.

either groundwater recharge or direct use. Feasible stormwater capture projects would be developed in conjunction with new flood control facilities as development occurs in eastern Coachella Valley.⁴

Water suppliers are required to prepare an Urban Water Management Plan (UWMP) that ensures adequate water supplies are available to meet existing and future water demands. These plans must be updated every five years to support long-term resource planning. They include water demand projections and identify how those demands will be met. While IWA and CVWD are responsible for managing water supplies, the City of Indio has developed goals, policies, and programs that aim to facilitate the sustainable use of water resources.

To continue to meet the growing needs of the City of Indio, IWA and CVWD have partnered with the Coachella Water Authority, Desert Water Authority, and Mission Springs Water District to develop an Integrated Regional Water Management Plan (IRWMP). The IRWMP addresses the Coachella Valley's current and future water needs by paying specific attention to overdraft issues, water supply management, environmental and economic impacts, compliance with State and federal guidelines, and long-term sustainability.

The existing IWA water distribution system consists of 20 groundwater wells, seven storage reservoirs, one large main pressure zone, and two smaller development-based higher zones, which are pumped at the booster pumps at the Shadow Lakes and Terra Lago reservoir. These zones are served by 326 miles of distribution system pipes, which range in diameter from two to 24 inches.

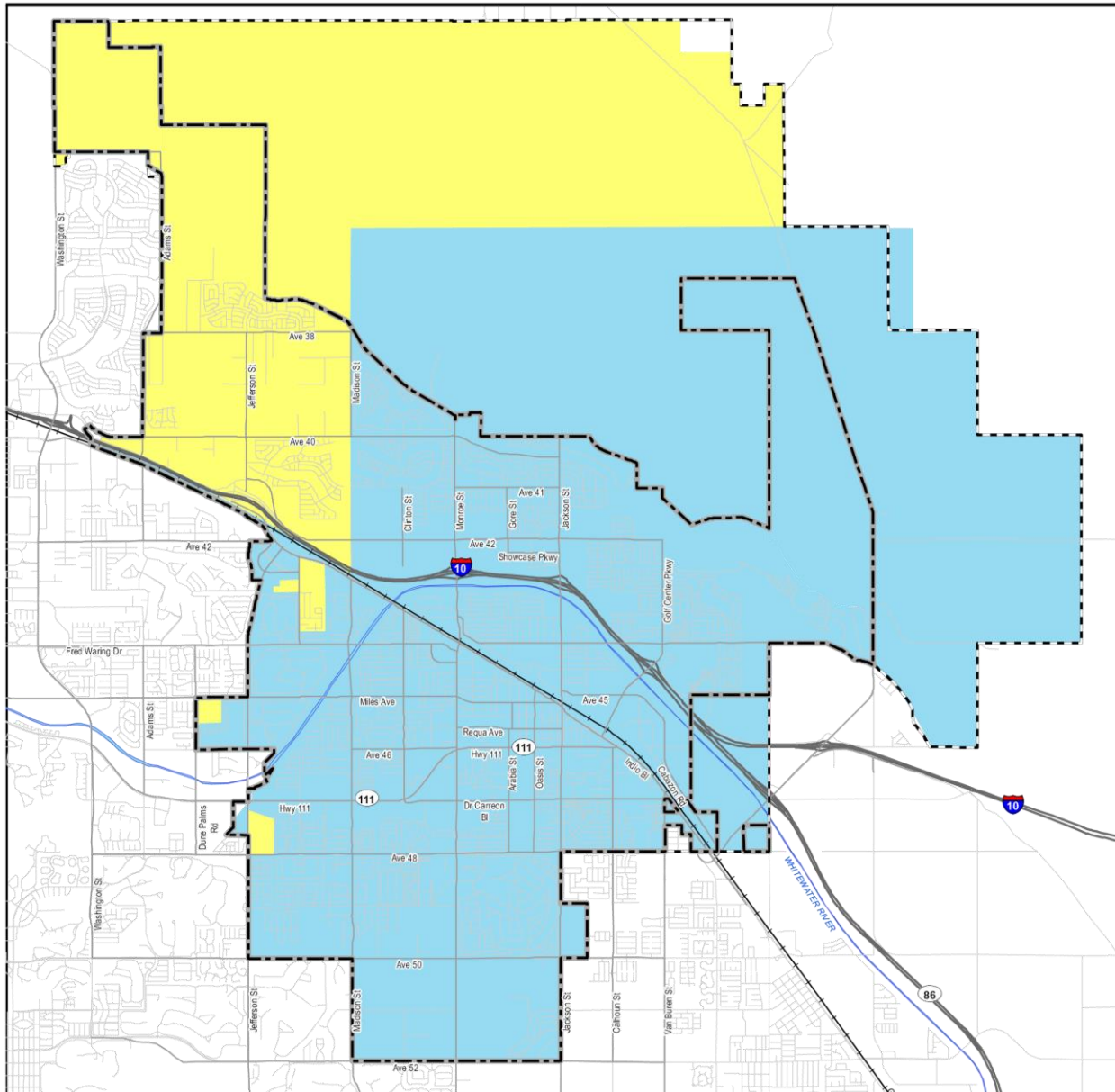
CVWD's domestic water distribution system is nearly 1,990 miles in length, and provides approximately 132,000 AFY to over 280,000 residents. The system consists of approximately 106,000 active meters, 115 deep wells, 59 reservoirs, and 30 pressure zones, which are served by 2,000 miles of distribution system pipes.⁵

IWA and CVWD's existing distribution system is sufficient to meet Indio's current and future demands. Additional pumping, booster systems, and pressure zones will continue to be implemented through Capital Improvement Programs (CIPs) as needed to satisfy the system's performance criteria.


⁴ Coachella Valley Water District (2012). Coachella Valley Water Management Plan 2010 Update.

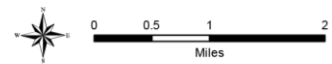
⁵ Coachella Valley Regional Water Management Group (2012). Coachella Valley Integrated Regional Water Management Plan.

Figure 9-1: Water Service Providers



Water Service Providers

-  City Boundary
-  Sphere of Influence
-  Roads
-  Railroads
-  Highways
-  CVWD Service Area
-  IWA Service Area



Source: Riverside County/LAFCO (City Boundary, 2012; SOI, 2012)
 Riverside County/TDMA (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.

Storm Drain and Flood Control Facilities

Regional drainage facilities are constructed, operated, and maintained by the CVWD. Local drainage facilities are maintained by the City and generally convey runoff from local streets to the regional facilities. The Whitewater River Storm Channel, which is part of the Colorado River Basin Region, is the main regional drainage facility for Indio, eventually draining into the Salton Sea. Flood protection efforts by the CVWD have realigned, widened, and deepened the channel to resolve regional flood problems.

The local storm drain system consists of gutters, engineered storm drains, and channels. The majority of these existing facilities are located south of the Whitewater River Storm Channel and I-10. In 2005, the City prepared a Drainage Master Plan to evaluate the condition of these existing facilities. At that time, a number of areas were identified where flooding or standing water resulted after a storm. Storm drain upgrades were determined for the facilities that could not adequately convey the 10-year storm peak discharge and new storm drains were identified to eliminate observed flooding areas. As with other infrastructure improvements, these recommendations are prioritized and budget is allocated through the City's CIP to facilitate implementation.

A significant issue associated with drainage is stormwater pollution, which results from daily activities. The most common pollutants are trash, such as fast food wrappers and cigarette butts, and toxins, such as used motor oil, fertilizer, and pesticides. These pollutants enter the Whitewater River Storm Channel untreated as water from rain, hoses, or sprinklers drain from streets, parking lots, and lawns. This pollution can pose serious public health risks due to the pesticides, bacteria, and chemicals that are washed from City streets into nearby water bodies.

To protect against stormwater pollution, Indio requires new development to comply with the requirements of the National Pollution Discharge Elimination System (NPDES). This requires that specific measures will be taken by developers to prevent stormwater pollution before, during, and after construction.



Whitewater River

Wastewater Collection and Treatment

Wastewater service is provided to the City of Indio by the Valley Sanitation District (VSD), which serves 98% of the City's population, and the Coachella Valley Water District (CVWD), which treats the remaining percentage of Indio's wastewater. There are no wastewater services within Indio's sphere of influence.

The existing VSD wastewater collection system consists of approximately 246 miles of sanitary sewer line, five active pump stations, eight siphons, and a wastewater treatment plant. The collection system pipes range in size from four to 54 inches in diameter. Roughly 75% of the gravity sewer system is made up of eight inch or smaller diameter pipes. The oldest known sewer pipes that are still in operation were connected to the system in 1935. Roughly half of the pipes have been constructed within the last 20 years.

VSD operates a wastewater treatment plant at the northeast quadrant of Van Buren Street and Enterprise Way, just southwest of I-10. This plant treats approximately 6.5 million gallons per day (MGD) of wastewater. CVWD also owns and maintains a wastewater treatment facility located at Avenue 38 and Madison Street. This is a tertiary treatment facility and the effluent produced is recycled for nonpotable uses for CVWD customers.

Energy Services

Electrical power within the City of Indio is provided by the Imperial Irrigation District (IID). IID maintains and operates the remission and distribution infrastructure necessary to provide electricity to users throughout the City. The Southern California Gas Company (SCG) is responsible for providing natural gas services to Indio. Both provide reliable and efficient energy services.

Solid Waste and Recycling

Solid waste services are provided by Burrtec Waste and Recycling Services. Burrtec supports a variety of sustainability and zero waste initiatives intended to achieve the State legislature's goal of recycling, composting, or reducing solid waste by 75% by 2020. Converting green waste and food waste to compost, implementing food waste programs, offering educational community workshops on composting, recycling, and relevant City ordinances, and providing participating food establishments with biodegradable bags are some of Burrtec's current practices.



E-waste event in Indio

Public Facilities

The City of Indio operates a number of facilities throughout the City, including City Hall, City offices, Police Station, Fire Station, Indio Community Center, and Indio Teen Center. City Hall is located at 100 Civic Center Mall and is home to many City offices, while City Council Chambers are located at 150 Civic Center Mall. The County of Riverside also manages the Fairgrounds, and Library System Indio Branch. Indio is located within the Desert Sands Unified School District (DSUSD) and the Coachella



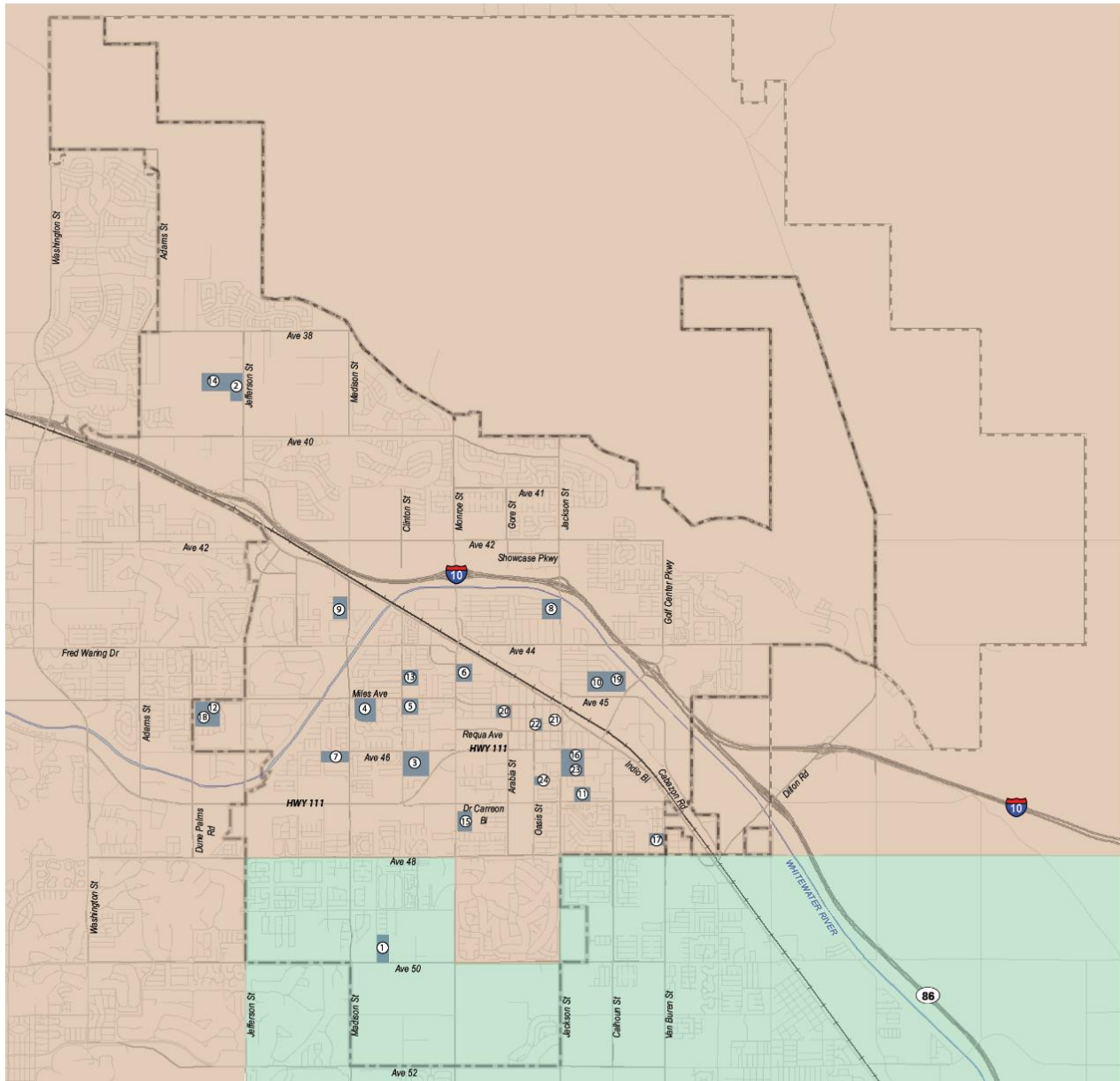
Indio Teen Center

Valley Unified School District (CVUSD) these boundaries are illustrated in Figure 9-2. There are 20 schools in Indio, as shown in Table 9-1. The City is also home to other educational institutions, including College of the Desert, and California Desert Trial Academy College of Law.

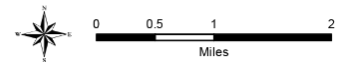
Table 9-1: Schools Serving Indio





	Schools	Address	Grades
1.	Mountain Vista Elementary School	49750 Hjorth St, Indio, CA 92201	K-6
2.	Shadow Hills High School	39225 Jefferson St, Indio, CA 92203	9-12
3.	Indio High School	81750 Ave 46, Indio, CA 92201	9-12
4.	Indio Middle School	81-195 Miles Ave, Indio, CA 92201	6-8
5.	John F. Kennedy Elementary School	45100 Clinton St, Indio, CA 92201	K-5
6.	Herbert Hoover Elementary School	44300 Monroe St, Indio, CA 92201	K-5
7.	James Madison Elementary School	80845 Ave 46, Indio, CA 92201	K-5
8.	Andrew Jackson Elementary School	82850 Kenner Ave, Indio, CA 92201	K-5
9.	Carrillo Ranch Elementary School	43775 Madison St, Indio, CA 92201	K-5
10.	Dwight Eisenhower Elementary School	83391 Dillon Ave, Indio, CA 92201	K-5
11.	Theodore Roosevelt Elementary School	83200 Dr Carreon Blvd, Indio, CA 92201	K-5
12.	John Glenn Middle School of Intl. Studies	79655 Miles Ave, Indio, CA 92201	6-8
13.	Lyndon B. Johnson Elementary School	44640 Clinton St, Indio, CA 92201	K-5
14.	Desert Ridge Academy Middle School	79767 Ave 39, Indio, CA 92203	6-8
15.	Dr. Reynaldo J. Carreon Jr. Academy	47368 Monroe St, Indio, CA 92201	K-5
16.	Thomas Jefferson Middle School	83-089 CA-111, Indio, CA 92201	6-8
17.	Martin Van Buren Elementary School	47733 Van Buren St, Indio, CA 92201	K-5
18.	Amelia Earhart Elementary School	45250 Dune Palms Rd, Indio, CA 92201	K-5
19.	Amistad Continuation High School	83501 Dillon Ave, Indio, CA 92201	9-12
20.	Our Lady of Perpetual Help School	82470 Bliss Ave, Indio, CA 92201	Preschool, K-8
21.	California Desert Trial Academy College of Law	45-290 Fargo St. Indio, CA	College of Law
22.	College of the Desert	45524 Oasis St, Indio, CA 92201	Community College
23.	Desert Sand Adult School	83089 CA-111, Indio, CA 92201	Adult School
24.	Don F. Kenny Regional Learning Center	47-336 Oasis St, Indio, CA 92201	Middle and High School, Independent Studies, Adult Transition Program

Figure 9-2: Schools and School District Boundaries



Schools and School District Boundaries



- | | |
|--|---|
|  City Boundary |  Roads |
|  Sphere of Influence |  Railroads |
|  Desert Sands School District |  Highways |
|  Coachella Valley District | |
|  Schools | |

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

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Goals and Policies

Surface and Subsurface Water Resources

The City will implement best practices and not only replenish, but improve the quality of surface and subsurface water resources in order to support water needs of present and future generations.

Goal IE-1: Surface and Subsurface Water. Surface and subsurface water resources that meet or exceed established water quality standards.

IE-1 Policies

- IE-1.1 Water supply.** Work with CVWD and IWA to ensure an adequate supply of domestic water facilities to sustain existing and projected water needs.
- IE-1.2 Water facilities.** Ensure adequate funding is available to accommodate existing and future water facilities.
- IE-1.3 NPDES compliance.** Ensure project developer compliance with the National Pollution Discharge Elimination System (NPDES) MS4 permit requirements.
- IE-1.4 Promote public awareness.** Continue to work with co-permittees of the NPDES permit to promote public awareness of water quality issues.
- IE-1.5 Agricultural contamination.** Work with the agricultural community to reduce or eliminate surface and groundwater contamination due to agricultural activities.
- IE-1.6 Public awareness.** Use agency websites, public service announcements, and other means to inform the public about water quality issues and methods to prevent contaminants from entering the storm drain system.

Goal IE-2: Storm Drain and Flood Control. Well-designed storm drain and flood control facilities that benefit the community and protect sensitive streams and watercourses.

IE-2 Policies

- IE-2.1 Facility capacity.** Ensure that local storm drain and flood control facilities are designed with sufficient capacity to protect the public and property from stormwater damage.
- IE-2.2 Stormwater facility funding.** Ensure adequate funding is available to maintain and improve existing local stormwater facilities
- IE-2.3 Storm Drain Master Plan.** Periodically review and update the City's Storm Drain Master Plan and Hydraulics Analysis to determine the facilities and improvements necessary to adequately service existing and future demand.
- IE-2.4 Multiple use.** Promote multiple use of flood control facilities where feasible, combining for example retention basins and recreational facilities.
- IE-2.5 Agency coordination.** Work with the CVWD when regional stormwater facility projects are planned in or adjacent to Indio.

- IE-2.6 Stormwater facility design.** Design storm drain facilities to allow for infiltration, evapotranspiration, or reuse of stormwater on the site where it is generated to the extent practical.
- IE-2.7 Mitigation measures for new development.** Restrict, or where feasible, require adequate mitigation measures for any development of habitable structures within watercourses and/or other stormwater facilities.
- IE-2.8 Flood control facilities.** Allow flood control facilities to be developed in conjunction with compatible recreational facilities or other land uses that are not susceptible to flood damage.
- IE-2.9 State and federal guideline.** Construct and maintain storm drains and flood control facilities in accordance with local, State, and federal guidelines.

Wastewater Collection and Treatment

The City will maintain a safe, efficient, and adequate wastewater system to meet the needs of current and future populations.

Goal IE-3: Wastewater Collection. Wastewater facilities that effectively collect and treat wastewater.

IE-3 Policies

- IE-3.1 Agency coordination.** Work with the Valley Sanitary District (VSD), CVWD, and IWA to ensure reasonable and adequate wastewater capacity is available to serve current and future demand and pursue opportunities to utilize reclaimed and recycled water.
- IE-3.2 Wastewater facility funding.** Ensure that adequate funding is available to maintain and improve existing facilities as well as construct new infrastructure as needed.
- IE-3.3 Sustainable wastewater systems.** Continue to provide innovative and sustainable wastewater systems, such as the biological wetlands at the Coachella Valley Wild Bird Center, that both treat wastewater and serve as habitat for waterfowl and shorebirds.
- IE-3.4 Greywater systems in new development.** Encourage new residential development to provide easy implementation of greywater systems that redirect water from washbasins, showers, and tubs for use in toilet flushing, irrigation, and other non-potable uses.
- IE-3.5 Agency coordination.** Work with the Coachella Valley Water District (CVWD), Valley Sanitation District (VSD), and the Indio Water Authority (IWA) to ensure that reclaimed water is available and used where appropriate and disseminate information about water conservation measures.

Electricity and Natural Gas Utilities

The City supports a more diverse portfolio of energy sources, particularly as renewable sources of energy, such as biomethane, solar, and wind power. The City will also ensure that electricity and natural gas services are available to the community.

Goal IE-4: Energy. Efficient electricity and natural gas utilities that ensure the availability of these resources for future generations.

IE-4 Policies

- IE-4.1 Agency coordination.** Work with the Imperial Irrigation District (IID) and the Southern California Gas Company (SCG) to ensure that cost-effective utilities are provided, maintained, and operated in a safe manner.
- IE-4.2 Environmental review.** Require the appropriate environmental review and clearance of electricity and natural gas infrastructure projects including solar generation, cogeneration facilities, wind energy systems, and similar developments to ensure proper siting and operation.
- IE-4.3 Methane reuse.** Partner with SCG and VSD to find a productive use for the methane produced at the wastewater treatment facility in Indio.
- IE-4.4 Below-ground utilities.** Phase out and replace overhead distribution lines with subsurface lines that will not be affected by fallen trees and branches during windstorms.
- IE-4.5 Tree trimming.** Enforce the national guidelines and IID landscape guidelines on tree trimming and vegetation management around electric transmission and communication lines to prevent or reduce the potential for felled branches or trees to cause power outages and disrupted communications.

Telecommunications

In an effort to attract business, institutional uses, and industry, Indio will support high quality telecommunication services and utilities.

Goal IE-5: Telecommunications. High-quality telecommunication services and utilities to meet the needs of residents and businesses.

IE-5 Policies

- IE-5.1 Public-private broadband partnership.** Actively seek a public-private partnership to provide ultra-high-speed fiber optic communications to businesses in Indio. When feasible and applicable, new construction shall install future cables to support citywide broadband internet accessibility.
- IE-5.2 Telecommunication facility siting.** Ensure that siting of telecommunication facilities provides efficiency and quality services to emergency response providers in the City.
- IE-5.3 Utility undergrounding.** Work with local utility providers and provide assistance in facilitation of complete community undergrounding of all utility distribution lines.
- IE-5.4 Visual impacts.** Power and other transmission towers, cellular communication towers, and other viewshed intrusions shall be designed and sited to minimize environmental hazards and visual impacts.

Solid Waste and Recycling

Indio strongly supports efforts to reduce, reuse, and recycle to divert as much solid waste as possible from landfills. The City is dedicated to maintaining a clean and safe environment.

Goal IE-6: Solid Waste and Recycling. Maximum diversion of solid waste from landfills through the reduction, reuse, and recycling of materials.

IE-6 Policies

- IE-6.1 Solid waste generated from landfills.** Develop strategies to divert a minimum of 75% of the solid waste generated from landfills through source reduction, recycling, and composting, with an ultimate objective of achieving zero waste whereby all discarded materials are designed to become resources for other uses.
- IE-6.2 Waste collection.** Work with Burrtec to expand residential and commercial services to include food waste collection in addition to recycling, green waste, and solid waste pick-up. Initiate food scrap program at City facilities.
- IE-6.3 Educate the public.** Provide information to the public on composting, recycling, and “green purchasing,” which refers to buying environmentally-friendly products and services that utilize fewer resources, are designed to last longer, and minimize impacts to the environment from production to disposal.
- IE-6.4 Commercial waste audit.** Work with Burrtec to continue to provide free waste audits to commercial customers
- IE-6.5 Waste management facilities.** Acknowledge that material recovery facilities and transfer stations are an important and fundamental component of effective waste management and allow such facilities to locate within limited and appropriate locations in employment districts where they will not negatively impact adjacent land uses.
- IE-6.6 Community reuse.** Support community-based programs that promote food sharing, electronics recycling, and the reuse of consumer goods.
- IE-6.7 Zero waste government operations.** Strive for zero waste government operations, modeling best practices in solid waste management and recycling for the rest of the community.
- IE-6.8 Recycled building material.** Encourage the use of recycled building and infrastructure materials in new public and private development.
- IE-6.9 Paper waste reduction.** Reduce paper waste and encourage the use of recycled paper in City operations.
- IE-6.10 Neighborhood cleanup.** Encourage neighborhood pride and cleanup events.
- IE-6.11 Street sweeping.** Continue to provide regular street sweeping for residential, commercial, and industrial areas.

Public Facilities

The City will maintain high-quality public facilities and schools for Indio residents and visitors.

Goal IE-7 Educational Opportunities. High-quality educational opportunities for lifelong learning.

IE-7 Policies

- IE-7.1 Future demand.** Coordinate with the local school districts in identifying potential school sites needed to meet future demand, as well as the planning, site acquisition, and development of educational facilities in the City.
- IE-7.2 Higher education.** Prioritize well-planned, higher-educational facilities in Indio, including satellite university campuses and vocational training schools in medical research, technology, and other trade areas as needed to support local industry needs.
- IE-7.3 Library space.** Continue to work with Riverside County to ensure adequate library space, services, books, and other resources are available to residents and students.
- IE-7.4 Quality early education.** Work with local school districts, private schools, pre-schools, and other agencies to maximize educational quality.
- IE-7.5 Senior and teen centers.** Continue to support Indio's Senior and Teen Centers as a local resource for youth and seniors.
- IE-7.6 Safe youth programs.** Prioritize programs for youth that serve as safe after school activities.

Implementation Actions

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

Table 9-2: Infrastructure and Public Facilities Programs

	DESCRIPTION	PRIORITY	TIME FRAME	RESPONSIBILITY
1	Plan consistency. Following adoption of the General Plan, review the existing utility master plans and make changes to ensure consistency with the General Plan.	High	Short	Public Works
2	City ordinances. Update the existing City code and ordinances to reflect current requirements and GP policies for water, sewer, and storm drainage requirements and policies. This should include low-impact development practices which improve water quality and promote groundwater recharge, increase on-site infiltration.	High	Short	Public Works, Planning
3	Groundwater management plan. Complete the groundwater management plan, as required by State law. Oversee the completion of the Plan and provide materials and resources as needed.	Medium	Short	Public Works
4	Solid waste diversion. Establish a waste diversion plan with a minimum diversion rate of 75% of solid waste generated from landfills.	High	Short	Public Works
5	Multifamily recycling. Establish a protocol to expand outreach and technical assistance to multifamily buildings to increase recycling in accordance with AB341.	Medium	Short	Public Works
6	Green purchasing. Implement a “green purchasing” program that minimize impacts to the environment from production to disposal. The program should address product stewardship and producer responsibility.	Medium	Short	City Manager
7	Food share programs. In conjunction with community partners and neighborhood organizations, explore and pilot food share programs reduce food waste.	Low	Medium	Planning, Public Works.
8	Event waste diversion. Require recycling and food waste diversion at special events, including City-hosted events.	High	Short	Public Works
9	Neighborhood clean-up program. In coordination with the Housing and Development Services Department, host community and neighborhood clean-up program, tree planting, and other beautification programs.	Low	Short	Planning, Public Works.

10	<p>Development impact fees. Adopt nexus-based impact fees that mitigate the cost of providing infrastructure and public facilities to serve new development. Address infrastructure improvements that are necessitated by new development – including water, sewer, stormwater, and utilities. Seek additional funding mechanisms as necessary.</p>	High	Ongoing	Planning, Public Works
11	<p>Sewer and stormwater user fees. Update existing user fees for sewer and stormwater to fund needed system upgrades and, to the extent feasible, allow for wastewater recycling and stormwater capture for beneficial use.</p>	Medium	Medium	Planning