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CONSERVATION/ OPEN SPACE ELEMENT

E I C E N T R O G E N E R A L P L A N

INTRODUCTION

Some of El Centro's most valuable assets include its agricultural land, open space, parks, and community and historical resources. The Conservation/Open Space Element focuses on the protection and enhancement of open space and natural and historic resources to ensure a high quality living environment in El Centro.

Purpose of the Conservation/Open Space Element

The El Centro Conservation/Open Space Element meets the State requirements for Conservation and Open Space Elements as defined in Sections 65302(d) and 65301(e) of the Government Code. According to these requirements, the Conservation Element must contain goals and policies to protect and maintain natural resources such as water, soils, wildlife, and minerals, and prevent wasteful resource exploitation, degradation, and destruction. The Open Space Element must contain goals and policies to manage open space areas, including undeveloped lands and outdoor recreation areas. Specifically, the Open Space Element must address several open space categories such as those used for the preservation of natural resources and managed production of resources, as well as open space maintained for public health and safety reasons. This last category of open space is addressed in the Safety Element. Additionally, while air quality is not a state-mandated element, air quality is included in the Conservation/Open Space Element to address reducing pollutant levels through stationary source, mobile source, transportation and land use control, and energy conservation measures. Because the subjects required to be addressed under the Conservation Element and Open Space Element overlap substantially, the two elements have been combined for this Plan.

Scope and Content of the Conservation/Open Space Element

The Conservation/Open Space Element expresses community goals to protect environmental and historic resources and open space. Resources addressed in this element include: a) agricultural and soils conservation; b) water conservation; c) open space and natural resources; d) community and historic resources; e) air quality; f) health and safety; g) geothermal resources; and h) energy conservation.

The Conservation/Open Space Element is comprised of four sections: 1) this Introduction; 2) Issues, Goals, and Policies; and 3) the Conservation/Open Space Plan. In the Issues, Goals, and Policies section, community open space needs and resource management issues are identified and corresponding goals and policies are established. The goals, which are overall statements of the City desires, are comprised of broad statements of purpose and direction. The policies serve as guidelines for planning and maintaining recreational facilities, enhancing the natural amenities of El Centro and minimizing the environmental effects of planned development. The Plan explains how the goals and policies will be achieved and implemented, while the Implementation Program, included in Appendix A, identifies the specific implementation programs for this Element.

Related Plans and Programs

There are a number of existing plans and programs that directly relate to the Conservation/Open Space Element. These plans and programs have been enacted through federal, State and local action, and are administered by agencies and special districts. Federal laws pertaining to the protection of significant resources include the Endangered Species Act of 1973 and the National Environmental Policy Act. Other related plans and programs are described below.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) was adopted by the state legislature in response to a public mandate for thorough environmental analysis of projects impacting the environment. The provisions of the law and environmental review procedures are described in the CEQA statutes and CEQA Guidelines. CEQA will continue to be instrumental in ensuring that the environmental impacts associated with local development projects are appropriately assessed and mitigated.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish & Game Code §§2050, et. seq.) generally parallels the main provisions of the Federal Endangered Species Act and is administered by the California Department of Fish and Game (CDFG). CESA prohibits the “taking” of listed species except as otherwise provided in State law. Any future development or redevelopment in El Centro that has the potential to affect wildlife will be subject to the restrictions contained in the CESA.

Federal Endangered Species Act

The Federal Endangered Species Act (ESA), administered by the U.S. Fish and Wildlife Service, applies to federally listed species and habitat occupied by federally listed species. Federally listed species are most likely to occur within riparian habitat areas in the City’s floodplains. ESA Section 9 forbids specified acts that directly or indirectly harm listed species. Section 9 also prohibits “taking” any species of wildlife or fish listed as endangered. These restrictions apply to all federal agencies and all persons subject to United States jurisdiction.

U.S. Fish and Wildlife Service and California Department of Fish and Game

Both the U.S. Fish and Wildlife Service and California Department of Fish and Game have regulations to protect wildlife resources. Special permits are required for the alteration, dredging, or any activity in a lake or stream, as well as other activities that may affect fish and game habitat. Both agencies also regulate impacts to sensitive plant and animal species as described above. Future development in El Centro that has the potential to affect wildlife habitat will be subject to the regulations of both of these federal and State agencies.

National Pollutant Discharge Elimination System (NPDES)

Under the NPDES storm water permit issued to the City of El Centro, all development and significant redevelopment must be implemented with runoff pollution control measures known as Best Management Practices (BMPs). Proposed development projects (both public and private) within El Centro must incorporate structural and non-structural BMPs to preclude significant water quality impact from non-point source pollutants.

Regional Transportation Plan and Improvement Program

The Southern California Association of Governments has adopted a Regional Transportation Plan and a Regional Transportation Improvement Program to implement the projects and programs listed in the Regional Transportation Plan. These plans work together to help improve vehicular traffic within the region and thereby reduce air pollution.

El Centro Parks and Recreation Facilities Master Plan

In 2008, the City adopted a Parks and Recreation Facilities Master Plan to further develop the projects, programs and investments necessary to implement General Plan goals. While the Parks and Recreation Facilities Master Plan focuses primarily on public facilities, its recommendations also help implement goals for Water Conservation, Open Space and Natural Resources, Community and Historic Resources, Geothermal Resources and Energy Conservation.

Relationship to Other General Plan Elements

The Conservation/Open Space Element must be consistent with the other General Plan elements and all elements of the General Plan are interrelated to a degree. Certain goals and policies of one element may also address issues that are the primary subjects of other elements. Table COS-1 located in the following section identifies related goals and policies by General Plan element. The integration of overlapping issues throughout the General Plan elements provides a strong basis for the implementation of plans and programs and achievement of community goals. The Conservation/Open Space Element most closely relates to the Land Use and Safety Elements.

The Land Use Element provides a planned land use pattern with the following general land use designation categories: Residential, Commercial, Industrial, and Community Facilities. The more specific Public - Parks and Other Governmental designations are applied to public and private land that is intended for conservation, open space, and recreational uses. These designations apply to areas that have recreational value and/or public safety concerns, such as flood control basins.

The Safety Element relates to the Conservation/Open Space Element in that it identifies hazard-prone areas such as floodplains and seismic hazard areas that should be conserved as open space.



ISSUES, GOALS, AND POLICIES

El Centro possesses valuable assets in the form of its agricultural land, historic resources, water supply, and geothermal resources. Conservation and enhancement of these assets can be accomplished by addressing certain issues affecting the City. Eight major issues are addressed by the goals, policies, and plan in the Conservation/Open Space Element. These major issues include: 1) agricultural and soils conservation; 2) water conservation; 3) open space and natural resources; 4) community and historic resources; 5) air quality; 6) health and safety; 7) geothermal resources; and 8) energy conservation. Each issue and the related goals and policies are included in this section of the Conservation/Open Space Element.

Agricultural and Soils Conservation

Imperial Valley contains some of the most productive agricultural soils in the world. The economic base of El Centro and of the entire Valley has been, and continues to be, tied to that productivity. Therefore, it is important that the vitality of these agricultural resources be protected.

Conservation/Open Space Goal 1: Conserve and maintain farmland and prime soil areas surrounding El Centro so that agriculture remains a viable and dominant part of the community's character and local economy.

Policy 1.1: Direct future development away from prime soils areas to allow their continued use for agricultural uses.

Policy 1.2: Continue to implement the City's Urban Development Program to encourage compact and contiguous development within El Centro, minimizing the amount of agricultural land converted to urban uses.

Policy 1.3: Promote infill and compact development to minimize the amount of agricultural land necessary for future growth.

Policy 1.4: Maintain agricultural facilities and services including irrigation channels, commercial fertilization and pest control, and transportation of supplies, equipment, and harvested crops.

Policy 1.5: Continue to work with County and State agencies to ensure the effective conservation of agricultural lands within the region and to minimize the impacts of geothermal development on agricultural activities.

Water Conservation

El Centro's water supply comes from the Colorado River and is of fairly good quality, despite a relatively high salt content. In consideration of California's current overdraft of the Colorado River and the unpredictability of future climatic and population factors affecting water, conservation should be encouraged.

Conservation/Open Space Goal 2: Maintain and improve the quality of water used by the City and surrounding agricultural areas.

Policy 2.1: Coordinate water quality and supply programs with responsible water agencies.

Policy 2.2: Develop and implement standards for site design, storm water management, planting, irrigation and maintenance.

Policy 2.3: Promote water conservation by El Centro residents, businesses, agriculture, and government to reduce overall demand for water.

Policy 2.4: Use recycled water for irrigation.

Policy 2.5: Utilize drought tolerant materials in the design of parks, recreation facilities and detention basins.

Open Space and Natural Resources

Surrounded by agricultural uses, there are limited natural resources remaining in the El Centro Planning Area. The most prevalent open space and habitat areas are associated with agricultural operations, such as the channel system and the open space, rural character of the surrounding agricultural lands.

Conservation/Open Space Goal 3: Direct future urban growth and expansion of the City to promote the conservation of important natural habitats, ecosystems, and open space areas of unique natural quality and community significance.

Policy 3.1: Protect unique or high quality natural habitats through open space designation or parkland dedication.

Policy 3.2: Utilize the environmental review process to evaluate and mitigate impacts to natural resources and plant and animal habitats that may be affected by proposed development.

Policy 3.3: Develop pedestrian and bicycle trails to connect existing and new parks, consistent with the City of El Centro Bicycle Master Plan. Examine new street rights-of-way, utility easements, river banks, and the canal rights-of-way system to create the trail system.

Policy 3.4: Require new development to provide connectivity to the existing community and access to new park and open space features.

Policy 3.5: Develop a greenbelt system that provides buffer zones between potentially incompatible land uses, such as between industries and homes, and that upgrades the visual quality of the community.

Conservation/Open Space Goal 4: “Embrace the Desert” by investing in City programs and facilities that highlight the unique value of the landscape and appropriate use of materials.

Policy 4.1: Create an Environmental Education Program to help residents of El Centro understand the unique value of desert habitat.

Policy 4.2: Create a Desert Demonstration Garden to highlight desert plant material and adapted drought tolerant plant material.

Community and Historic Resources

El Centro’s rich historic past has grown out of the agricultural development of Imperial Valley and has been incorporated into the fabric of the City, providing a link to the community’s heritage and history. The many sites and structures of architectural and/or historic significance create focal points within the community and provide a sense of place. Areas within the City having historic resources and buildings should be protected and enhanced.

Conservation/Open Space Goal 5: Maintain local historic structures and places that provide a sense of continuity and unique character to El Centro.

Policy 5.1: Encourage the preservation of structures and places with historic or community value, including the post office, library, County Courthouse, arcades in the downtown, and the railroad buildings.

Policy 5.2: Protect and enhance the downtown area as the City's center of activity and community life.

Air Quality

Air quality in El Centro, which is within the Salton Sea Air Basin (SSAB), is generally very good, though particulate matter is generated by wind blowing dry soils, particularly during the late fall and during the dust storms of winter and early spring. Air pollutants from vehicles are found in very low concentrations within the SSAB. Cooperation among all agencies in the basin is necessary to achieve desired improvements to air quality. El Centro can participate and contribute its share in those efforts by proper planning for land use, transportation, and energy use.

Conservation/Open Space Goal 6: Protect and maintain good air quality in the Imperial Valley region.

Policy 6.1: Cooperate with the Imperial Valley Air Pollution Control District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.

Policy 6.2: Cooperate and participate in regional air quality management planning, programs, and enforcement measures.

Policy 6.3: Integrate air quality planning with land use and transportation planning.

Health and Safety

El Centro's geographic location and the composition of local soils expose the City to various environmental hazards. Risk from these hazards can be reduced by planning future development with these concerns in mind.

Conservation/Open Space Goal 7: Direct future urban growth and expansion of the City to minimize hazards from areas requiring special management and/or separation from other land uses, such as seismic fault zones, unstable soil areas, flood plains, and areas required for protection of water quality.

Policy 7.1: Reduce the risk of impacts from natural hazards by applying proper development engineering, building construction, and retrofitting requirements.

Policy 7.2: Develop controls to restrict access to the irrigation canal system, especially adjacent to residential areas.

Policy 7.3: Monitor and control agricultural activities within the City, such as pesticide and crop dusting adjacent to residential areas.

Geothermal Resources

Direct use of the hot geothermal brines for energy needs within El Centro is possible due to the City’s close proximity to the Heber Resource Area. Geothermal heat energy could potentially be used for air conditioning, refrigeration, space and water heating, food processing plants, aquaculture fish farms, and specialized green houses. Furthermore, geothermal development may be an important factor in the economic growth of El Centro.

Conservation/Open Space Goal 8: Encourage utilization of geothermal resources and develop the resources in a planned and efficiently managed manner by discouraging wasteful use, minimizing environmental impacts, and prolonging the economic production life of this resource.

Policy 8.1: Coordinate with County and State regulatory agencies to plan for the environmentally safe extraction of geothermal resources.

Policy 8.2: Support, generally, implementation of the Imperial County Geothermal Element policies, including:

- Geothermal plants shall be sited so as to have minimal impact upon agriculture;
- Slant drilling techniques shall be utilized in the irrigated areas of Imperial County where appropriate;
- The County shall seek the resources to prepare and publish anomaly-wide Environmental Impact Reports for each economic anomaly, to be used as a guide for development of each resource area;
- The County shall encourage the development of the direct use of geothermal energy; and
- The County shall initiate a study to determine the location of services required by the increased population, and any other effects engendered by geothermal development.

Policy 8.3: Regulate any geothermal activity within the City and ensure that local goals and concerns are taken into account in the formation of geothermal production policies.

Policy 8.4: Promote the use of geothermal energy by local residents and businesses.

Policy 8.5: Continue to identify funding sources for experimental demonstration projects adapting geothermal direct energy to residential and non-residential uses.

Energy Conservation

Urban development and agricultural activities depend on adequate supplies and distribution of energy. The City must promote the conservation of energy in order to sustain existing and future economic and population growth.

Conservation/Open Space Goal 9: Utilize all energy resources in an efficient, conserving manner, taking in to account local climatic factors, to reduce the consumption of valuable fossil resources such as oil and natural gas.

Policy 9.1: Promote energy conservation by the public and private sectors.

Policy 9.2: Provide incentives for subdivision plans that incorporate energy conserving design.

Policy 9.3: Encourage the use of passive solar design concepts and the retrofitting of older buildings with energy-conserving features as a way to reduce energy consumed.

Policy 9.4: Encourage the recycling of waste heat and the application of direct geothermal energy.

Related Goals and Policies

The goals and policies described in the Conservation/Open Space Element are related to and support subjects included within other General Plan elements. In turn, many goals and policies from other elements directly or indirectly support the goals and policies of the Conservation/Open Space Element. These supporting goals and policies are identified in Table COS-1.

Table COS-1
Related Goals and Policies by Element

General Plan Elements	Conservation/Open Space Issue Area							
	Agricultural and Soils Conversion	Water Conservation	Open Space and Natural Resources	Community and Historic Resources	Air Quality	Health and Safety	Geo-thermal Resources	Energy Conservation
Land Use	1.1, 2.1		1.1, 2.1	1.1, 1.14, 2.1	1.1, 2.1	1.1, 2.1		
Economic Development							1.10	1.10
Housing								
Circulation					2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 4.5	3.4		
Public Facilities		9.1	1.1, 1.4, 1.6	7.1		4.1, 5.2		
Conservation / Open Space								
Safety						1.2, 1.3, 2.1, 2.4, 2.5, 2.6, 3.2		
Noise								



CONSERVATION/ OPEN SPACE PLAN

The multi-cultural community of El Centro has a history rich in the agricultural industry. The City's array of historic downtown and surrounding agricultural uses create a distinct identity for the City. The Conservation/Open Space Plan establishes an approach for the balanced use, management, and conservation of the City's unique resources. The seven conservation and open space issue areas identified in the Issues, Goals and Policies section are the focus of this Plan. The related goals and policies are the basis of the Plan and are supported by approaches to protect and enhance natural resources. The Conservation/Open Space Implementation Program contained in Appendix A of this General Plan is an extension of this Plan and contains specific programs to achieve the City's goals related to conservation and open space.

Agricultural and Soils Conservation

Imperial Valley contains some of the most productive agricultural soils in the world. The deep, rich, silty soils found surrounding El Centro in its sphere of influence and throughout much of the Imperial Valley were created as a result of historic flooding of the Colorado River and were deposited over thousands of years. These soils provide a basis for the agricultural operations located throughout the area.

Soils

The General Plan area lies within the Salton Trough, the dominant landform within the County. The Salton Trough encompasses the Coachella, Imperial, and Mexicali Valleys and extends north from the Gulf of California. Ancient lakebed sediments, alluvial channels, and dune sands occur in the Salton Trough. Clay and silt deposits of the lakebed cover the central portion of the basin with shoreline deposits predominantly of unconsolidated sand and gravel, changing into the clays and silts around the prehistoric lake edge. Lakebeds are generally less than 100 feet thick. East and west of the central portion of the Trough there is dissected, flat-lying alluvium. These poorly consolidated silts, sands, and gravels form thin veneers of desert pavement between washes. Sand dunes up to 200 feet thick occur on mesa areas to the east and west sides of Imperial Valley.

Soils in the El Centro area are underlain by Late Pleistocene to Holocene lacustrine deposits associated with ancient Lake Cahuilla. These sediments are typically unconsolidated to poorly consolidated and porous, consisting generally of clay, silt, and sand. Clay and silt soils are expected to exhibit a medium to high expansion potential. Near surface soils are generally soft and/or loose due to recent agricultural processing. Some of the soils in the Imperial Valley area have a high expansion or shrink-swell potential. These are generally found where fine-grained clayey sediments occur.

Agriculture

El Centro is the largest urban center in Imperial County. Urban growth in the region has traditionally been concentrated around the County's regional agricultural centers and shipping stations. Highly productive soils, climate, and a reliable water source have combined to make agriculture the single most important economic activity of Imperial County. According to the County Agricultural Commissioner, agricultural production currently contributes close to one and a half billion dollars annually to the region's economy. More than 120 types of crops are grown in Imperial County, including field crops (such as alfalfa and sudan grass) and row crops (such as lettuce, carrots, and melons).

A critical factor in determining whether a particular property is suitable for agriculture is its soil composition. The agricultural soils found in Imperial County are considered to be among the finest in the world. Figure COS-1 depicts the Important Farmlands in the El Centro Planning Area as identified by the Department of Conservation. As shown, a substantial amount of land in the Planning Area is identified as Important Farmland. More specifically, as of 2000 there are approximately 270 acres of Farmland of Local Importance, 170 acres of Prime Farmland, and 850 acres of Farmland of Statewide Importance within El Centro. The sphere of influence has an additional 150 acres of Farmland of Local Importance, 4,000 acres of Prime Farmland, and 5,415 acres of Farmland of Statewide Importance.

These agricultural uses provide revenue for the City while preserving rural character and maintaining open space and scenic views. While many of the agricultural uses will continue to operate in the future, increasing pressures from surrounding urban development and changes in the economy will likely result in the development of many of these areas for urban uses. Planning for the eventual conversion of these areas into urban uses, while allowing agricultural areas to remain as an interim use, provides short- and long-term benefits to the City.

Under the Williamson Act, owners of prime farmlands are only taxed for the agricultural use-value of their land, in return for guaranteeing that the land will be kept in agricultural use for the term of the contract. The City will encourage voluntary enrollment by owners of local prime farmlands into agricultural preserve contracts to protect the continued use of these lands for agricultural use.

Figure COS-1
Important Farmlands

Water Conservation

El Centro's water supply comes from the Colorado River via the canals and facilities of the Imperial Irrigation District (IID). According to the IID, Imperial Valley's agricultural industry is estimated to use 98 percent of the region's water supply. The City owns and operates a water treatment plant that provides clarification, filtration, and disinfection of water from the Colorado River.

Colorado River water is of fairly good quality; however, the amount of total dissolved solids (primarily salt) is very high. The City has little control over the quality of the water supplied to it, since the quality is primarily determined by land uses located along the Colorado River outside the State of California. Water for residential and commercial use is treated at the City's water purification plant, which has a 12 million gallon per day (mgd) capacity. According to the City of El Centro Water Quality Report for Year 2001, the City's drinking water meets or exceeds all federal and State requirements. The City's goal is to maintain and improve the quality of water used by the City and surrounding agricultural areas.

California has consistently exceeded its yearly allocation of 4.4 million acre feet from the Colorado River by 20 percent over the past several years. Although the long-term supply of water to El Centro is fairly well protected by various laws and agreements over rights to the Colorado River, the State's overdraft potentially jeopardizes this long-term supply. As a result of California consistently exceeding this allotment, the IID has initiated many water conservation programs in Imperial County and participated in various programs in cooperation with governmental agencies.

In 1988, a Water Conservation Agreement was forged between the IID and the Metropolitan Water District of Southern California (MWD). The agreement provides for the implementation of water conservation projects, which are funded by the MWD. In return, MWD is eligible to divert additional water that is equivalent to the amount of water conserved. The water conservation projects implemented through the agreement primarily focus on increasing the efficiency of the IID's water conveyance system and conserving water in agricultural operations.

More recently, the Imperial Irrigation District (IID) has negotiated an agreement with the San Diego County Water Authority (SDCWA) for the transfer of conserved water from the Imperial Valley to the San Diego region. Under the agreement, IID and its agricultural customers will conserve water and sell it to the SDCWA for at least 45 years. In addition, the SDCWA will pay the costs of conserving water incurred to Imperial Valley farmers plus an incentive to encourage participation.

Prior to the implementation of the program, numerous negative impacts on the Salton Sea related to the transfer and concerns about the potential impact to the local economy must be mitigated.

Sustaining a reliable supply of water to El Centro in the long run may be very difficult. Although California has a guaranteed priority use of the Colorado River water, there will not be enough water to serve the needs of the projected population growth and development within California and the adjoining states in the future. While it appears that law protects the long-term supply, and that water resources are presently abundant, the future climatic and population growth factors affecting water use are unpredictable.

In order for the City of El Centro to sustain a reliable supply of water for the City residents, the City will promote water conservation by the residents, businesses, agriculture, and government to reduce overall demand for water in accordance with California's "4.4 Plan"; an ongoing effort to reduce the State's use of Colorado River water to 4.4 million acre-feet per year, California's entitled amount. Additionally, the City coordinates water quality and supply programs with responsible water agencies.

In addition to maintaining an adequate supply of water, the City of El Centro will reduce pollutants in urban runoff to improve water quality through participation in the National Pollutant Discharge Elimination System (NPDES) program. According to the City's NPDES permit, all new development projects and substantial rehabilitation projects are required to incorporate Best Management Practices (BMPs). Implementation of BMPs will enhance surface and ground water quality in the planning area.

Open Space and Natural Resources

El Centro is primarily surrounded by agricultural lands which are considered to be open space for the production of food and fiber. Most of the natural flora has been replaced by cultivation in the El Centro area. The remaining "natural areas" exist mostly along irrigation canal rights-of-way and other lowland areas created by agriculture and irrigation.

Currently, there are approximately 127 acres of public park land within the City. To increase the acreage for parks and open space areas, the City continues to examine utility easements, river banks, and the canal right-of-way system for recreational opportunities, such as bicycle and pedestrian corridors and linear parks. The City will continue to require new development to provide recreational opportunities as allowed by law.

In addition, the City will continue to promote the Planned Unit Development (PUD) provision in the zoning ordinance that encourages the incorporation of more useable open space than provided under traditional development standards.

Local drainage patterns within the valley have been altered through agricultural activities. The IID maintains about 1,600 miles of irrigation drainage structures, which collect surface water runoff and subsurface drainage from some 32,200 miles of agricultural drains (tile) and channel the flow into the New and Alamo Rivers, which ultimately drain to the Salton Sea. The canals and laterals are often open and unprotected. The City will require developers of land adjacent to these open drainage facilities to underground the facilities to protect public safety.

The irrigation and drainage canals network is within the City's area of influence and some portions of the City. Canal right-of-way will remain as open space, to provide access for maintenance, to protect water flow capacities as urban development expands into the immediately adjacent farmlands, and to provide linear pedestrian and bicycle pathways and park areas. The canal system provides habitat for saline adapted plant species. Populations of a number of fish species live in the canals. The mosquito fish has been introduced by the Imperial County Health Department for mosquito control, and species of Tilapia have been introduced to control aquatic weeds. The canal system has created an aquatic habitat within a naturally arid environment and provides opportunities for people to fish and observe wild species in a unique manmade "natural" environment. Pursuant to the California Environmental Quality Act (CEQA) and associated federal regulations, the City will continue to assess development proposals for potential impacts to significant natural resources and habitat.

Community and Historic Resources

El Centro has grown out of the agricultural development of the Imperial Valley and is the core of the Imperial Valleys' retail district. Agricultural processing and packing have dominated the City's industrial sector. The City preserves structures and places with historic or community value including the post office, County Courthouse, downtown arcades, library, and the railroad buildings. The City continues to maintain local historic structures and places that provide a sense of continuity and unique character to El Centro. The City will also enhance and protect the downtown area as the City's center of activity and community life through the continued implementation of recommendations made by the Downtown Business District Study.

In addition, as shown in Figure LU-3 in the Land Use Element, the City has identified some of the older residential single family neighborhoods for protection to maintain their existing historical character.

Presently the City supports an archaeological museum, a Community Center, a variety of informal theatre and recreation groups, and a number of community groups. A state of the art Southwest High School auditorium provides facilities for theatrical plays, master coral performances, and concerts.

El Centro may contain some archaeological resources; however, most of the Planning Area has been disturbed by urban development and agriculture. In the event that archaeological resources are located within the Planning Area, new development that has the potential to impact these resources will be required to mitigate its impact pursuant to the California Environmental Quality Act.

The City will foster local awareness of El Centro's rich heritage through a variety of programs including the placement of plaques or markers to highlight the significance of buildings or places and the designation of historic landmarks by the City Council.

Air Quality

As shown in Figure COS-2, El Centro lies within the Salton Sea Air Basin (SSAB). The SSAB includes Imperial County and the central part of Riverside County, including the Coachella Valley. The City's goal is to protect and maintain good air quality in the Imperial Valley Region.

Particulate matter (PM10) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, or mists. The size of the particles (10 microns or smaller) allows them to enter the air sacs deep in the lungs where they may be deposited, resulting in adverse health effects. PM10 also causes visibility reduction. Particulate matter is generated by wind blowing dry soils, particularly during the late fall, and during dust storms of winter and early spring. Agricultural burning and cultivation practices contribute most of the airborne dust in the El Centro area. Some agricultural practices that generate dust are regulated, including: leaving cultivated fields vacant and open to blowing winds, burning of crop residues to clear fields for new cultivation, and crop dusting for fertilization and pest control. Since agriculture contributes to the air quality issues in the region, the majority of the Imperial Valley Air Pollution Control District regulations relate to control of agricultural operations to reduce air pollution.

In an effort to reduce dust and particulate matter levels, the City will support the Imperial County Air Pollution District in the implementation of its regulations to control agricultural operations.

Air pollutants from vehicles are found in low concentration within El Centro area. Because the population and average density of development are very low, there is comparatively little air pollution from vehicular activity. In order to keep the low levels of air pollutants generated from vehicles in the future, the City will integrate air quality planning with land use and transportation planning.

Future geothermal energy production in Imperial County may generate a significant amount of air pollutants. The noncondensable gases that could be emitted from cooling towers would be primarily carbon dioxide, but could include hydrogen sulfide, sulfur dioxide, nitrogen, ammonia, methane, and hydrogen. Dissolved in precipitation, these products are highly corrosive to living tissue and to exposed metals and common surface coatings such as paints and plastics.

In order to protect the air quality in the Imperial Valley, the City will continue to cooperate with the Imperial Valley Air Pollution Control District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.

Figure COS-2
Salton Sea Air Basin

Health and Safety

Agricultural Activities

The City is surrounded by thousands of acres of prime farmland that have transformed the desert into one of the most productive farming regions in California. The extensive irrigation canal system is responsible for much of this transformation. Recently, much of the most productive farmlands lie on the fringe of developing areas. Residential land uses adjacent to farmlands are potentially subject to health and safety conflicts. For example, unsupervised children often have easy access to the irrigation canals, and airborne drift of chemicals from pesticide and crop dusting may adversely affect the residential population. The City will develop controls to restrict access to the irrigation canal system from residential uses and continue to monitor and control agricultural activities, including pesticide and crop dusting, as allowed by law. This can be done by designating land buffers between the two different land uses, and pesticide spraying can be conducted from the ground in agricultural areas in proximity to residences. Additionally, the use, storage, and transport of pesticides are strictly regulated by the State.

Geologic Hazards

As discussed in the Safety Element, the Imperial Valley is one of the most tectonically active regions in the United States. Since the Imperial Valley area is subject to frequent seismic events, there are concerns relating to ground shaking and liquefaction. The composition of geologic strata (bedrock and soil) determines what can be expected from an area as a result of ground shaking. It is therefore important to know the soil makeup in order to determine the design of structures proposed for an area. The City reduces the risks of impacts from geologic hazards by applying proper development engineering, building construction, and retrofitting requirements.

Flooding

The City of El Centro includes a small area on the eastern portion of the City within the 100-year flood hazard area. As depicted in Figure S-2 of the Safety Element, the flood hazard area is located in the vicinity of the intersection of Earls Road and East Gillette Street. Additionally, there is a small 100-year flood hazard area on the eastern portion of the City's sphere of influence, between Evan Hewes Highway and Interstate 8. As discussed in the Safety Element, the City will continue to fund needed infrastructure improvements, identifying new funding sources as necessary. The City will also promote programs and actions that educate the public about flood hazards and reduce the risk of flood losses.

Geothermal Resources

Thermal water of sufficient temperature for direct heat application underlies the Salton Trough at shallow depths. Distributed throughout the Trough are areas of hotter fluids suitable for electrical generation. Figure COS-3 shows the known distribution geothermal resource areas in the region. The City plans to educate the public and encourage utilization of geothermal resources, as well as develop the resources in a planned and efficiently managed manner.

Subsidence, a phenomenon associated with groundwater withdrawal and can occur as a result of geothermal energy generation; however, the potential is considered low to moderate on the valley floor under the current hydrological conditions. Due to the poor groundwater quality, little use is made of the existing groundwater resource. Poor groundwater quality and irrigation practices employing imported water in the Imperial Valley result in groundwater basin recharge exceeding extraction; therefore; creating rising groundwater levels. In addition, as discussed above, future geothermal energy production in Imperial County may generate a significant amount of air pollutants.

The City will coordinate with the Imperial County and State regulatory agencies to plan for the environmentally safe extraction of geothermal resources. Additionally, the City plans to develop the resources in a planned and efficiently managed manner by discouraging wasteful use, minimizing environmental impacts, and prolonging the economic production life of this resource.

Energy Conservation

A tight energy market and sometimes insufficient power supply highlights the continued need for both private and public energy conservation. Additionally, pollutants are generated by the combustion of fossil fuels to produce electricity and by the combustion of natural gas. Reducing energy usage decreases the amount of pollutants generated. The City supports reducing energy demand by encouraging the use of passive solar design concepts and the retrofitting of older buildings with energy-conserving features. The City will also provide incentives for subdivision plans that incorporate energy conserving design. Recycling of waste resources including aluminum, glass, and newspaper, waste heat and the application of direct geothermal energy is also supported by the City.

The City promotes energy conservation by implementing energy conservation measures in public buildings, and implementing State Title 24 energy performance requirements through building codes. In addition, the relationship between project design and future energy requirements is considered when reviewing proposals for new development.



CONSERVATION/ OPEN SPACE ELEMENT

E I C E N T R O G E N E R A L P L A N

This Implementation Program provides actions to implement the adopted policies and plans identified in the Conservation/Open Space Element. The Conservation/Open Space Element Implementation Program is a series of actions, procedures and techniques that includes a description of the responsible agency/department, funding source, time frame and related policies in the Conservation/Open Space Element.

Agricultural and Soils Conservation

COS-1: Agricultural Preservation: Use development incentives such as priority project processing, density bonuses, and infrastructure improvements to encourage redevelopment and infill projects that reduce development pressure on agricultural lands.

Responsible Agency/Department: Planning and Zoning, County of Imperial

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 1.1, 1.5

COS-2: Agricultural Buffers: Encourage the provision and maintenance of buffers, such as roadways, topographic features, and open space, to prevent incompatibilities between agricultural and non-agricultural land uses. During the development review process, a number of factors shall be used to determine the appropriate buffer, including the type of agricultural use, topography, and pesticide and machinery use.

Responsible Agency/Department: Planning and Zoning, County of Imperial

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 1.1, 1.5

Water Conservation

COS-3: Promote Water Conservation: Work with the Imperial Irrigation District to encourage water conservation throughout El Centro in the following ways:

- Require the use of drought resistant plant species in landscaping for private and public areas, including parks;
- Utilize xeriscape principles in all new parks, recreation facilities, public buildings and private developments.
- Work with the City and the El Centro Unified School District to establish water conservation educational programs; and
- Require the incorporation of water conservation devices (including low-flush toilets, flow restriction devices and water conservation appliances) in new development, public projects and rehabilitation projects.

Responsible Agency/Department: Planning and Zoning, Public Works, Parks and Recreation, Imperial Irrigation District, El Centro Elementary School District, Central Union High School District, McCabe Union Elementary School District

Funding Source: General Fund, project proponent

Time Frame: Ongoing

Related Policies: 2.1, 2.2, 2.3, 2.5

COS-4: 4.4 Plan: Support California's "4.4 Plan"; an ongoing effort to reduce California's use of Colorado River water to 4.4 million acre-feet per year, California's entitled amount.

Responsible Agency/Department: Development Services, Public Works

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 2.1, 2.2

COS-5: Water Recycling: Implement water recycling in El Centro in the following ways:

- Apply for funding for a Recycled Water Feasibility Study from the State Water Resources Control Board;
- Conduct Feasibility Study;
- Implement recommendations through the CIP process, a new recycled water use ordinance (if appropriate) and requirements for new development.

Responsible Agency/Department: Public Works
Funding Source: Water/Wastewater Enterprise Fund, SWRCB Grants
Time Frame: Ongoing
Related Policies: 2.4

Open Space and Natural Resources

COS-6: Subdivision Ordinance: Continue to implement and enforce the subdivision ordinance that contains provisions for the dedication of land for park and recreational purposes. The ordinance requires a land dedication calculated on a basis of a ratio of five acres of park for each 1,000 residents generated by the project. A fee can be paid in lieu of land dedication and the collection of these and fees and other funds can be used to set up a revolving fund to be used for the acquisition of park and open space lands.

Responsible Agency/Department: Planning and Zoning, Parks and Recreation, Public Works
Funding Source: General Fund, development fees, project proponent
Time Frame: Ongoing
Related Policies: 3.1

COS-7: Zoning Ordinance: Continue to promote the Planned Unit Development (PUD) provision in the Zoning Ordinance. PUDs are a way to encourage the development of residential environments containing more usable open space than provided under traditional development standards.

Responsible Agency/Department: Planning and Zoning, Parks and Recreation
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: 3.1, 3.3, 3.4

COS-8: Protect Natural Resources: Assess development proposals for potential impacts to significant natural and aesthetic resources pursuant to the California Environmental Quality Act (CEQA) and associated federal regulations. Require appropriate mitigation for all significant impacts if impact avoidance is not possible.

Responsible Agency/Department: Planning and Zoning, Parks and Recreation
Funding Source: General Fund, development fees
Time Frame: Ongoing
Related Policies 3.2

COS-9: “Embrace the Desert”: Invest in the City programs and facilities that highlight the unique value of the landscape and appropriate use of materials. City investments should include an Environmental Education Program and a Desert Demonstration Garden.

Responsible Agency/Department: Planning and Zoning, Parks and Recreation, Finance.

Funding Source: General Fund, Development Impact Fees, Water Enterprise Fund.

Time Frame: Ongoing

Related Policies: 4.1, 4.2

Community and Historic Resources

COS-10: California Environmental Quality Act: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA). Require appropriate mitigation for all significant impacts if impact avoidance is not possible.

Responsible Agency/Department: Planning and Zoning

Funding Source: General Fund, development fees

Time Frame: Ongoing

Related Policies: 5.1

COS-11: Downtown Business District: Continue to implement and update as necessary the recommendations of the Downtown Business District Study as one method of maintaining and enhancing the downtown area to retain the character of the central area, with its arcades and store fronts, and to create a more lively and vibrant city center.

Responsible Agency/Department: Redevelopment, Planning and Zoning

Funding Source: Redevelopment funds, General Fund, private business investment

Time Frame: Ongoing

Related Policies: 5.2

COS-12: Local Awareness of Community Heritage: Foster local awareness of El Centro’s heritage by:

- Implementing a program of recognition, for example, the placement of plaques or markers to highlight the significance of a building or place;
- Investigating the eligibility of local buildings for listing in the national, State, or local register of historic places;

- Designating historic landmarks, recognizing a building, structure, site or collection of buildings or sites which are found by the City Council to have historic, cultural, or architectural significance;
- Purchasing development rights to important buildings or property so as to provide protection from alteration or destruction; and
- Purchasing and re-selling important buildings or property with a covenant and reverter clause in the deed, restricting changes in the structure of the place.

Responsible Agency/Department: Public Works, Redevelopment, Finance

Funding Source: General Fund, redevelopment funds

Time Frame: Ongoing

Related Policies: 5.1

Air Quality

COS-13: Participation in Regional Air Quality Programs: Work with the Imperial County Air Pollution Control District and the Southern California Association of Governments (SCAG) to implement the Air Quality Management Plan and meet federal and State air quality standards for all pollutants. Participate in future amendments and updates of the AQMP to ensure that new measures can be practically enforced in the region.

Responsible Agency/Department: Planning and Zoning, Public Works, Imperial County Air Pollution Control District, SCAG

Funding Source: General Fund, state and federal funds

Time Frame: Ongoing

Related Policies: 6.1, 6.2

COS-14: Minimize Impacts of New Development: Review development proposals for potential air quality impacts pursuant to the California Environmental Quality Act. Reduce impacts using available land use and transportation planning techniques such as:

- Incorporation of public transit stops;
- Pedestrian and bicycle linkage to commercial centers, employment centers, schools and parks;
- Preferential parking for car pools;
- Traffic flow improvements; and
- Employer trip reduction programs.

Responsible Agency/Department: Public Works, Planning and Zoning, Imperial County Air Pollution Control District, SCAG
Funding Source: General Fund, development fees, project proponent, state and federal funds
Time Frame: Ongoing
Related Policies: 6.3

COS-15: Control Dust and Particulate Matter: To reduce dust and particulate matter levels, support the Imperial County Air Pollution Control District in the implementation of its regulations, including ICAPCD Rule 800 to control agricultural operations.

Responsible Agency/Department: Planning and Zoning, Public Works, Imperial County Air Pollution Control District
Funding Source: General Fund, state and federal funds
Time Frame: Ongoing
Related Policies: 6.1, 6.2

Health and Safety

COS-16: Irrigation Canal System: Develop controls to restrict access to the existing irrigation canal system from residential areas where unsupervised children currently have easy access. Require developers to underground the canals and laterals as new development occurs adjacent to existing open drainage facilities, as allowed by the Imperial Irrigation District.

Responsible Agency/Department: Planning and Zoning, Public Works, Imperial Irrigation District
Funding Source: General Fund, water usage fees, state and federal funds
Time Frame: Ongoing
Related Policies: 7.1, 7.2

COS-17: Pesticides and Crop Dusting: To the extent allowed by law, restrict the type and method of spraying activities related to agricultural use of pesticides and crop dusting within the City's area of influence to reduce the adverse effect from airborne drift of chemicals into adjacent residential areas.

Responsible Agency/Department: Community Development, County Agriculture Commission
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: 7.3

Geothermal Resources

COS-18: Regulate Geothermal Activity: Regulate any geothermal activity within the City with the goal of:

- Ensuring that the loss of productive agricultural lands due to geothermal development is minimized;
- Preventing geothermally-induced subsidence or seismicity; and
- Ensuring that local goals and concerns are taken into account in the formation of geothermal production policies and that the public is well informed about the effects of resource extraction and use.

Responsible Agency/Department: Planning and Zoning

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 8.1, 8.2, 8.3

COS-19: Promote Benefits of Geothermal Resources: In an effort to educate the public and promote the use of geothermal resources, the City shall:

- Promote the varied and experimental application of direct geothermal energy to activities within the City area;
- Support the development of a skills center for training local residents specific geothermal related skills required in local resource production;
- Encourage local business and industry to consider how direct geothermal energy could be applied to their energy needs;
- Continue to search out funding sources for experimental and demonstration projects adapting geothermal direct energy to industrial processing and to space heating and cooling; and
- Encourage factories and businesses that utilize geothermal energy to maintain an "open shop," allowing visitors to tour the facilities, in order to gain an understanding of the resource and its use.

Responsible Agency/Department: Planning and Zoning

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 8.4, 8.5, 9.4

Energy Conservation

COS-20: Implement State Energy Performance Requirements: Continue to implement building code requirements for energy performance according to Title 24 Energy Regulations to meet State energy conservation requirements. Encourage project proponents to incorporate energy conservation techniques in proposed projects. Provide brochures with information on energy efficient building and site design at the public counter.

Responsible Agency/Department: Public Works

Funding Source: General Fund, project proponent

Time Frame: Ongoing

Related Policies: 9.1, 9.2, 9.3

COS-21: Energy Efficient Public Buildings: Implement energy conservation measures in public buildings through the following actions:

- Promote energy efficient building and site design for all new public buildings during the site development permit process; and install energy saving devices in new public buildings and retrofit existing public buildings.
- Utilize light colored asphalt and light colored resin pavements which minimize the “heat island” effect caused by darker pavements.
- Utilize passive solar techniques; trees, architectural shading devices, etc.

Responsible Agency/Department: Planning and Zoning, Public Works

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 9.1, 9.2, 9.3

COS-22: Promote Energy Retrofit Programs: Promote retrofit programs by the City to reduce energy usage and consequently reduce emissions from energy consumption. Provide informational literature about available retrofit programs at City offices. Inform property owners of retrofit programs when plans for remodeling and rehabilitation projects are submitted.

Responsible Agency/Department: Public Works

Funding Source: General Fund

Time Frame: Ongoing

Related Policies: 9.1

COS-23: Coordination with Suppliers: Require project proponents to coordinate with IID and the Southern California Gas Company early in the development of development plans.

Responsible Agency/Department: Planning and Zoning
Funding Source: General Fund, developer fees, user fees
Time Frame: Ongoing
Related Policies: 9

COS-24: Local Resource Recycling: Remain compliant with AB 939 and increase recycling activities to maintain the mandated 50 percent waste diversion goal. Specifically, encourage the recycling of waste resources including aluminum, glass, and newspaper.

Responsible Agency/Department: Public Works
Funding Source: General Fund
Time Frame: Ongoing
Related Policies: 9.1