

10. ENVIRONMENTAL RESOURCES ELEMENT

It is critical for a community to strike a balance at facilitating development without endangering the protection and sanctity of its natural resources. These resources should be managed in a way that sustains the natural environment and protects our foothills, desert washes, parks, wildlife and open space legacy. The policies and programs contained within this element also seek to foster energy and water conservation, cleaner air and cleaner water and the protection of our archaeological heritage.

The Environmental Resources Element is organized in the following manner:

- 10.a. Introduction
- 10.b. Goals, Objectives and Policies
- 10.c. Conservation and Environmental Plan

10.A. INTRODUCTION

The City of Peoria's explosive growth rate has been well documented in other sections of the General Plan. The growth rate is not unique to Peoria but rather indicative of the robust economy and quality of life in the Phoenix metropolitan area that has attracted newcomers at a high rate.

In many ways Peoria has benefited from this growth in its high-quality family oriented neighborhoods, enhanced city services and urban amenities. However, growth can also have unintended consequences on the natural environment including the degradation of air and water quality, the loss of habitats and the disruption of view corridors.

Fortunately for Peoria, most of the scenic desert landscape in the northern half of the city remains in its natural state. Several planning efforts have been completed in the last few years including the *Peoria Desert Lands Conservation Master Plan (1999)*, *Peoria Trails Master Plan (1999)*, *Peoria Rivers Master Plan (1999)*, *Peoria Parks, Recreation, Open Spaces and Trails Master Plan (2006)*, *Lake Pleasant North Area Specific Plan (1999)* and the *Loop 303 Specific Area Plan*. Although these plans each have their specific purposes, they do share common themes. Growth should be planned, attractive and directed into appropriate areas at reasonable densities with particular sensitivity to the natural landscape, recreational resources and viewsheds enjoyed by the community.

This element specifically discusses the resource elements listed below. The policies and strategies in this element are largely broad-based with community-wide applicability. The discussion and strategies are also intended to complement and support those identified in other sections, with specific attention to the *Recreation and Open Space Element*.

- Air Quality
- Water Quality
- Energy
- Urban Heat Island
- Archaeological Resources
- Natural Habitat Preservation
- Sensitive Lands Management

10.B. GOALS, OBJECTIVES AND POLICIES

GOAL 1:

PROMOTE A HIGH LEVEL OF ENVIRONMENTAL QUALITY WITH A SAFE, HEALTHY AND ENJOYABLE ENVIRONMENT FOR PEORIA RESIDENTS.

AIR QUALITY

OBJECTIVE 1.A:

Support efforts to attain high standards of air quality in Peoria.

Policy 1.A.1:

Utilize Transportation System Management (TSM) techniques (e.g. synchronized traffic signals, efficient traffic flow and turning movements, bus pullouts along arterials, HOV lanes for transit) to minimize automobile generated air pollution.

Policy 1.A.2:

Utilize Transportation Demand Management techniques, (e.g., employer-based carpooling and vanpooling, staggered work shifts, improved public transit service) to minimize congestion and automobile-generated air pollution.

Policy 1.A.3:

Strive to expand bus service in the City of Peoria through recommendations provided through the 2000 Long-Range Transit Study.

Policy 1.A.4:

Encourage new park and ride facilities at appropriate locations (i.e. near major employment centers, along the freeway corridor, along transit routes).

Policy 1.A.5:

Promote other modes of transportation (bikeways, walking) as an alternate to automobiles.

Policy 1.A.6:

Encourage the paving of dirt and gravel roads and discourage the creation of new unimproved roads.

Policy 1.A.7:

Encourage land use configurations in all new or revitalized development projects that minimize vehicle trips and trip lengths.

Policy 1.A.8:

Encourage jobs/housing balance by promoting land use patterns that decrease automobile travel between home and the workplace.

Policy 1.A.9:

Assist in the enforcement of federal government air quality and emissions standards for public and private entities. Encourage the adherence to federal Corporate Average Fuel Economy (CAFE) regulations.

Policy 1.A.10:

Promote the development of non-polluting industries and ensure compliance with current carbon emissions regulations.

WATER QUALITY

Objective 1.B:

Design, maintain and operate the City’s water and wastewater system and capital plants to efficiently provide healthful potable-water and wastewater services to our customers.

Policy 1.B.1:

Maintain Water Infrastructure, Water Resource and Wastewater Master Plans. These plans, taken as a whole, will define and describe the City’s comprehensive policy for conserving water resources and identifying appropriate uses for all available water resources.

Policy 1.B.2:

Promote the long-term conservation of water resources through the use of renewable water resources. This will include the development of infrastructure to treat and deliver surface water for potable uses.

Policy 1.B.3:

Develop the infrastructure necessary to treat and deliver reclaimed water and encourage its use for non-potable purposes including landscape irrigation and industrial processes.

Policy 1.B.4:

Treat reclaimed water for the purpose of groundwater recharge.

Policy 1.B.5:

Promote individual water conservation through the use of low-flow plumbing fixtures and the use of xeriscape landscaping principles, including the installation of low water use plant materials and efficient irrigation systems (drip/low-flow).

Policy 1.B.6:

Require the use of public wastewater systems for all types of development to minimize the potential for groundwater contamination.

Policy 1.B.7:

Devote time and resources toward the public education of the needs and benefits of water conservation.

ENERGY

OBJECTIVE 1.C:

Support efforts to reduce energy consumption.

Policy 1.C.1:

Utilize recycled products where appropriate in its operations, and encourage a “buy recycled” campaign to help create markets for recycled materials.

Policy 1.C.2:

Encourage a “buy local” campaign to reduce energy consumed and vehicular miles traveled in the delivery of goods and produce.

Policy 1.C.3:

Encourage transit-oriented development to reduce vehicular miles traveled.

Policy 1.C.4:

Encourage transit-oriented developments that address all transportation options (vehicular, pedestrian, bicycle, bus and rail).

Policy 1.C.5:

Reduce automobile dependency, promote mixed-use development templates that integrate employment, residential and commercial/entertainment uses.

Policy 1.C.6:

Provide an integrated multi-modal transportation system comprised of spaces devoted to pedestrians, bicycles, equestrians, the automobile and mass transit networks that increase mobility and accessibility.

Policy 1.C.7:

Plan for transit facilities and services within the Peoria planning area as well as coordinate with existing and future facilities beyond the City's planning area.

Policy 1.C.8:

Encourage an 'after hours' lighting program for municipal and private buildings to reduce light pollution and energy consumption.

Policy 1.C.9:

Utilize recycled products where appropriate in its operations, and encourage a "buy recycled" campaign to help create markets for recycled materials.

Policy 1.C.10:

Apply and upgrade energy conservation techniques in municipal facilities and operating procedures.

URBAN HEAT ISLAND

Objective 1.D:

Reduce the effects of the urban heat island.

Policy 1.D.1:

Encourage the installation of mature vegetation in parking lots and other hardscape areas.

Policy 1.D.2:

Promote permeable parking surfaces in residential and commercial applications.

Policy 1.D.3:

Consider alternative shade structures in parking areas and pedestrian walkways.

Policy 1.D.4:

Minimize parking fields by encouraging parking structures.

Policy 1.D.5:

Discourage the use of building materials that increase heat radiation and deflection. Such materials may include roofing materials, landscape gravel and certain window glazing.

EDUCATION

Objective 1.E:

Facilitate educational programs on the best practices in energy conservation and pollution prevention.

Policy 1.E.1:

Investigate and communicate opportunities to Peoria residents on practical, convenient and creative solutions for increasing energy efficiency.

Policy 1.E.2:

Promote the education of Peoria staff and community stakeholders on the numerous ways to create resource-efficient developments that build upon the quality of life of Peoria residents.

Policy 1.E.3:

Educate the public about preventing and reducing air pollution through public meetings, website information and printed materials.

PARTNERSHIPS

Objective 1.F:

Form environmental partnerships with various government agencies, utility providers, neighboring municipalities and private industry leaders to encourage cooperation in efforts to unify conservation measures.

Policy 1.F.1:

Partner with local energy providers to explore and enhance practices which conserve natural resources.

Policy 1.F.2:

Partner with West Valley municipalities, Maricopa and Yavapai Counties and Maricopa Association of Governments (MAG) to coordinate regional planning efforts in the area of natural resource management.

Policy 1.F.3:

Partner with educational institutions such as the Global Institute of Sustainability or the Decision Theatre at Arizona State University to promote understanding of growth and energy implications.

CITY COMMITMENT

Objective 1.G:

Explore methods of reducing energy usage and operating costs for residents.

Policy 1.G.1

When appropriate, utilize green building techniques in new construction and in the redevelopment of existing municipal buildings.

Policy 1.G.2:

Increase the use of renewable energy by the City.

Policy 1.G.3:

Utilize new technological advances in construction materials and retrofitting products (lighting, glazing, insulation, etc.) when possible to reduce operating costs.

Policy 1.G.4:

Encourage teleconferencing and electronic plan review to reduce trip generation and paper usage.

GREEN BUILDING PROGRAM

Objective 1.H:

Increase the amount of Green Building occurring in the City.

Policy 1.H.1:

Explore the creation and implementation of a Green Building Program for the City that addresses building technology, water conservation, site design, multi-modal enhancements to the transportation system and other similar elements.

Policy 1.H.2:

Develop a program to incentivize the use of Green Building techniques. This program may include expedited review, target density increases and other measures as appropriate.

GREEN SECTOR

Objective 1.I:

Capitalize on the green industry by encouraging the emergence of a new Green Sector.

Policy 1.I.1:

Explore refinements to the Zoning Ordinance to create overlay zones to allow unique, emerging industries and development types.

Policy 1.I.2:

Promote the use of overlay districts and Specific Area Plans to promote mixed-use development in appropriate areas.

Policy 1.I.3:

Encourage passive climate solutions, such as building orientation or architectural treatments and styles that maximize climate resources.

Policy 1.I.4:

Investigate the creation of new employment opportunities and training specializing in green building and development.

ARCHAEOLOGICAL RESOURCES

Objective 1.J:

Retain the archaeological resources of Peoria.

Policy 1.J.1:

Identify, and preserve all significant artifacts and archaeological features within the City.

Policy 1.J.2:

Identify and promote opportunities for adaptive reuse of underutilized historic structures.

NATURAL HABITAT PRESERVATION

Objective 1.K:

Maintain connections between wildlife habitats by identifying and protecting corridors for unimpeded movement.

Policy 1.K.1:

Establish sufficient trails, wildlife corridors, and other linear linkages between large open space areas.

Policy 1.K.2:

Provide an effective means for the safe and uninterrupted movement of wildlife through open space corridors at all infrastructure and roadway crossings (i.e. bridges, ramps, overpasses, oversized culverts).

Policy 1.K.3:

Minimize man-made environmental hazards.

Policy 1.K.4:

Limit development in areas that may pose natural or man-made environmental hazards, such as steep slopes and floodplains.

Policy 1.K.5:

Allow walls and fences where they do not disrupt natural wildlife movement patterns and design all infrastructure and roadways to minimize the impact on wildlife corridors.

Policy 1.K.6:

Incorporate design techniques and measures that minimize conflicts between humans and wildlife.

Policy 1.K.7:

Design public recreational spaces to be wildlife friendly whenever possible.

Policy 1.K.8:

Promote enhanced landscaping along washes and wildlife corridors to promote the use of such areas by native wildlife.

Policy 1.K.9:

Create a Sonoran Desert Preserve for public recreational uses, which encourage the protection natural resources and educates the public on the importance of preservation.

SENSITIVE LANDS MANAGEMENT

Objective 1.L:

Protect environmentally sensitive lands and lands with high scenic value.

Policy 1.L.1:

In the Site Plan Review Process, require Site Plans to designate rare-landscape elements.

Policy 1.L.2:

Promote minimum site grading to encourage integration with the natural contours of the land.

Policy 1.L.3:

Develop a Wash Setback Ordinance protecting riparian areas and wash corridors.

Policy 1.L.4:

Encourage that changes in natural drainage patterns be avoided. Where changes to the natural drainage patterns are necessary, a master drainage plan showing how the altered flows will be handled shall be prepared.

Policy 1.L.5

Study the Sonoran Desert Environment of the future and past annexation (not covered by the Desert Conservation Master Plan) and designate the appropriate sensitive lands for conservation.

Objective 1.M:

Promote the establishment of large, intact areas of native desert vegetation.

Policy 1.M.1:

Develop a Native Plant Restoration and Salvage Ordinance.

Policy 1.M.2:

Promote the restoration and revegetation of disturbed areas with native plant species and match the plant densities of these revegetated areas to be consistent with the undisturbed setting.

Policy 1.M.3:

Recognize and protect areas of significant natural vegetation (such as areas along washes, natural spring areas, or on slopes) which are advantageous to the increased densities of the native desert vegetation.

Policy 1.M.4:

Encourage the use of indigenous or desert adapted plant materials in new developments and minimize the use of invasive and non-native plant species in the study area identified in the Peoria Desert Lands Conservation Master Plan.

Objective 1.N:

Strive to create and maintain a consistent, high level of community appearance throughout Peoria.

Policy 1.N.1:

Encourage well designed landscaping for commercial, office and industrial uses through design guidelines.

Policy 1.N.2:

Discourage desert dumping and encourage regular area-wide cleanup on a scheduled basis.

Policy 1.N.3:

Develop visual resource corridors to protect views to and from prominent landscape features such as mountains, buttes, rock outcroppings, washes, and rivers.

Objective 1.O:

Strive to retain the Agua Fria River, Skunk Creek and New River as continuous open space and multi-use amenity.

Policy 1.O.1:

Minimize natural and man-made environmental hazards adjacent to the river corridors.

Policy 1.O.2:

Restrict residential development from known seismic and subsidence areas, or other known geological limitations such as sand and gravel operations in the river beds.

GOAL 2: PROMOTE PUBLIC AND PRIVATE SUSTAINABLE DEVELOPMENT PRACTICES

Objective 2.A:

Identify a strategy to advance sustainable development practices in the City.

Policy 2.A.1:

Develop a sustainable development web resource and presence.

Policy 2.A.2:

Identify and train City of Peoria employees in sustainable development. Identify key staff for potential USGBC LEED credentialing.

Policy 2.A.3:

Establish development incentives for projects demonstrating an exemplary commitment to sustainability.

Policy 2.A.4:

Identify and adjust Zoning Ordinance provisions where appropriate, for LEED certified buildings and/or unique green building types.

Policy 2.A.5:

Establish an objective in the General Plan establishing LEED silver certification as the target achievement for new municipal buildings and LEED-like design considerations as the target achievement where a LEED rating is not practical or is otherwise unattainable.

Policy 2.A.6:

Ensure model codes are aligned with sustainability objectives (i.e. low water use, alternate electrical energy sources, indoor air quality, HVAC and lighting efficiency).

Policy 2.A.7:

Develop an awards program to recognize sustainable development in the private sector.

Objective 2.B:

Support the creation of a local green business council that provides information exchange and promotes sustainable business practices that balance environment, equity and economy.

Policy 2.B.1:

Partner with the Peoria Chamber of Commerce to create the council, charter and board.

Policy 2.B.2:

Develop regular interactions between the Green Business Council and the City of Peoria.

Policy 2.B.3:

Investigate the creation of new employment opportunities and training specializing in green development.

10.C. CONSERVATION AND ENVIRONMENTAL PLAN

The Conservation and Environmental Plan is broken down into six major topic areas including:

- Air Quality Management
- Water Conservation and Management
- Energy Conservation
- Archaeological Resource Management
- Natural Habitat Preservation
- Sensitive Lands Management

AIR QUALITY MANAGEMENT

Air quality continues to be one of the more serious concerns in Maricopa County. Rampant urbanization has presented many challenges to regional air quality. The significant increase in population has added more cars to the transportation system; low-density development patterns have extended the urban environment further to the fringe areas resulting in longer trips and inefficient utilization of land use and; remaining unpaved roads, shoulders and parking lots continue to affect the amount of particulate matter in the air. These are a few of the factors that have contributed to the regions' air quality issues.

To exacerbate the problem, the metropolitan area is prone to a weather condition known as temperature inversion. In a temperature inversion, air doesn't rise because it is "trapped" near the surface by a warmer layer of air above it. Smog and other smog-forming pollutants become trapped as well. As people continue to drive and other sources continue to release pollutants, the smog level worsens until sufficient winds can disperse the "brown cloud."

The pervasive air quality conditions have affected the County's status as a designated "non-attainment" area for three criteria pollutants: carbon monoxide, ozone, particulate matter (PM₁₀). To enforce the requirements of the Clean Air Act and its subsequent amendments, the Environmental Protection Agency (EPA) is charged with administering national ambient air quality standards (NAAQS) for six criteria pollutants: ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), lead (Pb) and particulate matter whose aerodynamic size is less than ten micrometers (PM₁₀). In Maricopa County, there are 23 air-monitoring stations. The closest local monitoring sites are at the Lake Pleasant Desert Outdoor Center and in nearby Glendale at 59th and Olive Avenues.

Particulate matter or PM₁₀ is caused by two factors, one of which can be controlled. High winds and blowing storms cause the particulate matter to exceed national standards as can truck and automobile travel on unpaved roads. The standard for PM₁₀ is based on a 24-hour standard. The 24-hour standard is 150 ug/m (micrograms per cubic meter). The City is continually monitoring its existing dirt road inventory to determine when paving is necessary. The Arizona Department of Environmental Quality recommends paving or treatment of dirt roads when they exceed 250 trips per day. The City's transportation budget includes funding to improve dirt roads as necessary. The General Plan seeks to mitigate this problem proactively by discouraging new development that will place additional burden on nearby dirt roads.

Land Use designations and mixed-use development centers included in the Land Use Plan attempt to reduce unnecessary automobile trips that increase carbon monoxide levels from automobile emissions. Land use policies that support transit are also encouraged to decrease automobile use. Bicycle lanes and trail systems can also contribute to decreased automobile trips. Promotion of transportation demand strategies is another tool utilized to reduce the amount of cars on the road during peak hours. Telecommuting and flexible work schedules that avoid peak travel times are strategies of transportation demand management as well.

High levels of ozone have been significantly reduced in the valley. The Phoenix ozone non-attainment area is completing its third straight year of no violations of the NAAQS. This enables Maricopa County to a determination that the clean air standard has been attained avoiding a threat to be classified in the

severe non-attainment status. Programs eliminating gas powered movers and equipment and refueling vehicles in non-peak hours have proved successful.

WATER CONSERVATION AND MANAGEMENT

The dramatic growth of the City has made effective and efficient water management strategies essential to protecting the City's present and future water resources. The City's Principles of Sound Water Management, adopted in 2007, are a set of seventeen policies that are designed to guide the City in its water management decisions.

As the fourth phase of the Arizona Groundwater Management Act nears, Peoria is analyzing the current water conservation program and considering new measures to encourage reductions in water consumption by the City and its citizens. The City has adopted a water resources strategy in which the water supply is based on replenishable supplies from the Central Arizona Project and Salt River Project as well as underground storage of replenishable water that eventually can be recovered with wells. The City currently serves surface water from CAP and SRP for almost three-fourths of its total supply, with the remaining water from potable system production wells. Over the last ten years, the City has steadily decreased its reliance on groundwater, preserving this precious resource for times of drought when surface water supplies could run short.

Land use policy plays an important role in the impact of water usage. The Land Use Plan, Public Services and Facilities Plan, the Water Resources Master Plan, along with the City's Principles of Sound Water Management provide the City with consistent development policies to ensure a water supply for the growth and development through 2030. The City will continue to be proactive in educating residents and developers about the benefits of water conservation and in measures to reduce the City's reliance on groundwater.

ENERGY

The City's desire to preserve open space is out of respect for the natural environment and the desire to provide quality recreational opportunities for its residents. This respect for the natural environment manifests itself in Energy Conservation efforts and policies contained within this element. Energy Conservation comes in many forms ranging from automobile trip reduction to 'green' building techniques. Therefore the goals, objectives and policies in this element are intended to promote creative, but effective conservation techniques.

As we embrace the benefits of the 21st Century, we must also be prepared to embrace the problems that come with it. In an effort to remain progressive in matters of the environment, the City is looking to define logical methods of conserving Peoria's natural resources by capitalizing on new building technologies, planning methods, site development and opportunities involving renewable resources.

It is critical for a community to respond to its natural habitat; to understand its natural constraints and take advantage of its attributes. Peoria serves as the link between community growth and the natural desert beauty; finding a balance in which neither is compromised and is pertinent to the City of Peoria's existence is vital to its mission.

The City's commitment to energy conservation involves a responsible approach to the reduction of energy consumption and utilization of renewable energy sources. The implementation of this effort is envisioned through energy conservation, education, partnerships, leadership by the City, development of a green building program and the embracing of a green sector. The mutual, proactive collaboration of these many facets is critical to the success of such a program. thereby turning the City into a steward of change in order to preserve its future.

The City's ability to promote energy conservation encompasses a wide range of areas and disciplines within the governmental organization. Transportation planning which integrates the efficient mobility of pedestrian, bicycle, personal automobile and mass transit traffic throughout the City is crucial in reducing energy consumption, while improving the quality of life for Peoria residents. This can be accomplished through appropriate land use designations and zoning that encourages concentrated intensity in areas considered to be existing or future transportation corridors. Higher density residential neighborhoods near employment and commercial centers often reduce the number and frequency of trips as well as the distance traveled between home, employment and services. Similarly, large industrial users should be located near major transportation corridors eliminating additional trips within the City. The integration of a multitude of uses and maximizing the accessibility between them is crucial in the reduction of energy consumption and creating a community with efficient alternative modes of transportation. Site plan analysis for passive climate solutions and integration of alternative energy sources, such as window positioning and use of solar power, are vital in making the Sonoran Desert climate benefit the community far beyond its natural beauty.

Knowledge of the impacts of inefficient energy consumption, techniques to reduce energy consumption and the development of renewable energy sources are constantly maturing. The education of Peoria citizens, staff, and community stakeholders is essential to the successful implementation of energy-conscious practices within the City. The City must also utilize the vast number of institutions within the Valley and State to incorporate new design and information into City operations to continue the education of its citizens.

Site planning and building design have a significant effect on the amount of energy needed to heat, cool and light buildings to meet the needs of their occupants. Integration of green building practices in site and building design can significantly reduce energy consumption. Many green building techniques currently carry a higher capital cost, but when viewed in respect to life-cycle costs and the cost paid by the local environment, the savings payback the initial investment, while producing long-term operational and quality of life benefits.

The market is constantly changing and in order for the City to receive the full economic benefit it must adapt to such changes. The growing awareness of sustainability issues and the importance of addressing them in order to preserve our future are producing a new sector of the economy. This green sector consists of businesses centered around and the production and sales of products that conserve energy or capitalize on renewable energy sources. These businesses range from solar panel production, recycling plants, hybrid vehicle development and even local farmers markets. The City should encourage green businesses to locate within the City through refinements to the Zoning Ordinances to create overlay zones to allow unique, emerging industries and development types.

Energy consciousness adds value to a City beyond the apparent environmental and economic reasons. The value is an awareness of the natural environment and understanding its benefits for generations to come. Energy consciousness allows Peoria to remain a progressive City and an environmental leader in the Valley.

The City also promotes Transportation Demand Management and Transportation System Management that makes travel more efficient and less energy consumptive. These strategies reduce congestion on City streets and therefore decrease travel time while increasing traffic flow throughout the City.

ARCHAEOLOGICAL RESOURCE MANAGEMENT

Archaeological resources include residences occupied or utilized by humans both in historic and prehistoric times for a sufficient length of time to construct features or deposit artifacts. These features

and artifacts are resources that the City wishes retain as a cultural resource of the City. Current development projects and roadways are required to prepare an archaeological survey if the State Historic Preservation Office (SHPO) feels the area is a potential to contain historic features. An archaeological survey may result in further archaeological investigation, if deemed necessary. The City encourages protection of archaeological sites by requiring surveys and mitigation by developers (if necessary) and restricting information regarding the location of sites to potential vandals or artifact collectors. Future acquisition and/or protection of significant sites or features should be considered on a case by case basis as any of the following conditions occur.

- Significant sites or features are found in development applications or roadway improvements.
- Future or existing studies that identify significant archaeological sites for preservation.
- Significant sites and features Identified by the City Parks Department, Planning Division, or any other entity.
- Significant sites and featured identified by a community association, group, or coalition.

NATURAL HABITAT PRESERVATION

A diversity of plant and wildlife species plays a critical role in preserving the quality and function of the natural environment. To this end, it is imperative that land that supports diverse wildlife and plant communities be preserved and protected from fragmentation. The impacts from development and other human activities can be significant. An activity that disrupts a segment of the ecosystem may have ripple effects upon the rest of the system. Therefore, responsible planning principles would promote the preservation and conservation of significant plant and wildlife communities.

An objective within this element promotes the preservation and maintenance of connections between wildlife habitats by identifying open space corridors for unimpeded movement. These corridors can also function as trails linking pedestrians, bicyclists and equestrian users to open spaces. The adopted Trails and Rivers Master Plans referenced herein recognize the City's rivers corridors as the "recreational spines of the City." Additionally, this element promotes wildlife-friendly recreational spaces and addresses the impacts from development upon wildlife corridors.

- Preserve wildlife corridors for endangered and threatened species.
- Establish open space lands restricting and limiting human use to protect significant plant and animal habitats.
- Preserve a system of linkages, connections, and gateways between significant open spaces and significant animal and plant habitats.
- Identify areas to restrict the development of fences and barriers that will block the natural movement near wildlife corridors.
- Develop standards within the Design Guidelines to address measures that minimize conflicts between the built environment and open space, and wildlife habitat.

SENSITIVE LANDS MANAGEMENT

Peoria has completed groundwork efforts to protect sensitive lands by completing the Peoria Desert Lands Conservation Master Plan. The City can further this effort by utilizing GIS-based analysis to create detailed information that can help guide development near sensitive lands. The City is dedicated to further evaluate and protect the following resources.

- Limit man-made environmental hazards near sensitive lands and lands not suitable for intensive development or hazardous materials.
- Restrict development on steep slopes and floodplains.
- Utilize the river open spaces to provide multi-use corridors for wildlife access, recreational use, floodplain protection, and open space view corridors.
- Restrict development in the identified river corridor open space.
- Limit the development of hazardous man-made structures adjacent to the river corridor open spaces.
- Develop a GIS based inventory of seismic and subsidence area and other known geological limitations. Restrict development in these areas that is non-compatible.
- Develop a GIS based inventory for soils, vegetation, and habitats that can be utilized to direct preservation and development efforts.