

## **5.0 NATURAL ENVIRONMENT ELEMENT**

### **5.1 NATURAL, WILDLIFE, AND VISUAL RESOURCES**

Pinal County's environmental ecosystems and land ownership patterns provide a complex natural setting and planning agenda. The Comprehensive Plan recognizes the importance of conserving natural habitat and creating open space lineages in order to increase biological diversity. The Plan focuses on maintaining and improving the physical environment, natural resource conservation, and other environmental considerations. The Natural Environment Element summarizes existing conditions within the natural environment and identifies objectives that will ensure protection for the County's air, water, land, and cultural resources.

The environmental uniqueness of Pinal County is due in large measure to the three major riparian areas associated with the San Pedro, Gila, and Santa Cruz Rivers. These three waterways helped to define the native ecosystem and their association of plant and animal species within the Upper Sonoran Desert Region. These same topographical features have also had a great influence on the settlement of the county, from the prehistoric people to modern humankind.

Pinal County's environmental heritage includes non-renewable resources such as extensive undisturbed natural areas, historic/archaeological sites and natural landmarks. As irreplaceable resources they warrant preservation from destruction or harmful alteration. In order to accomplish this, Pinal County should identify and designate these areas as Public Resource lands. Limit the extent and type of development that may occur in close proximity, and minimize or prevent potentially harmful emissions or discharges to the air, soil, or water. Environmental diversity could be maintained and enhanced by avoiding depletion through the preservation and conservation of critical habitats and by recognizing the importance of whole systems approach in protecting all species and habitat types currently found in Pinal County in order to balance natural systems and human use.

Wetlands are also a critical environmental resource that function as wild life habitat, aquifer recharge areas, and linkages in the overall county wildlife system.

Other significant natural features include the following Mountain ranges: San Tans, Superstition, Table Top, Sierra Estrella, Santa Catalina, Palo Verde, Casa Grande, Sacaton, Picacho Peak, Sawtooth, Tortolita, Black, and Samaniego Hills. These features serve as landmarks and are defined as prominent landscape features that distinguish a specific locality in Pinal County and are important because of the views they afford, their value as scenic vistas and backdrops, and the intrinsic value they hold for wildlife or plant habitat, natural areas, parks and open space preserves. Natural landmarks are designated for scenic, visual and aesthetic values, providing a record of the natural heritage of Pinal County.

### **5.2 CULTURAL RESOURCES**

As time progresses, Pinal County will face the loss of more and more of one of its truly non-renewable resources. These resources are the archaeological and historical sites that give the County's modern day residents a tie to the past. Many of these cultural resources are being demolished or destroyed while others face the natural elements and are slowly eroding away. Encroaching development and modernization lend urgency to the need for preservation of archaeological and historically significant sites.

Archaeologists typically describe before the first contact by people of European, African, and Asian decent as prehistoric. The term "prehistoric" is used because there were no written records. Instead of researching past cultures by studying their written records, archaeologists must study prehistoric

cultures by excavation and similar techniques. Unlike historic sites that are above ground and visible, archaeological sites are often hidden from view, buried underground. Most Pinal County archaeological sites are of the prehistoric, Native American cultures known as Hohokam and Salado. The Hohokam and Salado are ancestral to modern Akimel O'odham (Pima), Tohono O'odham and Sobaipuri Native American Communities.

Prehistoric sites are protected through federal, state, and local historic preservation legislation. The exact location of sensitive archaeological sites may be withheld from the public in order to prevent artifact gathering and other forms of destruction. Additionally, archaeological sites must be addressed in a manner that is sensitive to the cultural beliefs of the affiliated tribes

The unique landscape of Pinal County with its rich, fertile agricultural lands attracted prehistoric peoples and, in later epochs, the mountain men who trapped fur bearing animals along the San Pedro, Gila and Santa Cruz Rivers, and still later farmers and miners to the rural mountainous portions of the county. In order to protect this diversity, a Historic Preservation Advisory Commission or Board should be formed.

Acknowledgment that pressures from growth place historic rural areas in danger, combined with education and respect for the past, create an atmosphere in which the goals and objectives of a successful Historic Preservation Program could flourish.

### **5.3 Goals, Objectives and Policies**

The goals of the natural environment element:

**Goal 1. Protect Pinal County's natural beauty and environmental quality.**

**Goal 2. Protect and preserve the natural and cultural heritage of Pinal County.**

**OBJECTIVE NE1: Encourage development and recreation uses sensitive to the environment while minimizing negative impacts.**

Policy NE1.1 Encourage the preservation of the natural desert landscape, wilderness areas, and major topographic features.

Policy NE1.2 Encourage the development of open space areas where the natural desert landscape can be preserved and enhanced .

Policy NE1.3 Encourage the protection and preservation of existing habitat areas for threatened or endangered plant and wildlife species.

Policy NE1.4 Encourage land uses and development designs that are compatible with environmentally sensitive areas such as parks, open space, floodplains, hillsides, habitat for rare and sensitive plant and wildlife species, scenic areas, washes, and unstable geologic and soil conditions.

Policy NE1.5 Encourage the placement of low intensity land uses around federally-owned lands including Resource Conservation Areas and National Monuments.

- Policy NE1.6 Encourage new developments to include a comprehensive landscape plan to indicate retained vegetation, relocated vegetation and introduced vegetation.
- Policy NE1.7 Encourage consideration of the natural environment, during the review of new development projects including options for the preservation of the native vegetation, wildlife and washes.
- Policy NE1.8 Encourage the Arizona State Land Department and the Bureau of Land Management to be sensitive to environmental concerns (overgrazing of cattle, mining operations, woodcutting, cacti removal, etc.) in the management of their land holdings.
- Policy NE1.9 Encourage new mining operations to utilize, wherever possible, innovative mining technologies that maximize environmental protection and minimize visual impacts to neighboring property owners.
- Policy NE1.10 Encourage the adoption of State legislation requiring reclamation of mining facilities upon completion of operations.

**OBJECTIVE NE2: Maintain the natural scenic qualities of the County.**

- Policy NE2.1 Encourage nighttime lighting be kept to a minimum to maintain the dark sky.
- Policy NE2.2 Encourage the preservation of the scenic quality and vistas of all mountain ranges in the County.
- Policy NE2.3 Discourage new and replacement billboards, where such structures would detract from the natural beauty of mountain or desert vistas.
- Policy NE2.4 Encourage the enforcement of measures necessary to maintain and improve the existing national ambient air quality standards and the reduction of dust pollution.
- Policy NE2.5 Consider minimizing air pollution emissions.
- Policy NE2.6 Protection of existing air quality shall be a major consideration in the review of plans for new industrial, commercial and residential projects. New developments should be required to show that the impact of their proposed facilities are in compliance with County, State, and Federal air quality plans and standards.
- Policy NE2.7 Encourage the paving of unpaved roads where dust pollution affects residents and the environment and is in violation of State and Federal air quality standards.
- Policy NE2.8 Encourage the coordination of noise and nuisance control programs and standards with state, local and federal agencies.

Policy NE2.9 Encourage all new development (subdivisions, lot splits, commercial and industrial) to provide paved streets, roads, and parking lots designed and constructed to Pinal County standards.

Policy NE2.10 Encourage agriculture related businesses, feedlots, feed companies, mulch plants and cotton gins, to comply with regulations for fugitive dust and particulate emissions.

**OBJECTIVE NE3: Encourage preservation of significant mountainous areas.**

Policy NE3.1 Discourage development and roads in severe erosion and landslide hazard areas should be free of development and roads.

Policy NE3.2 Encourage site evaluations in the planning stage. Include slope information with each building permit.

Policy NE3.3 Discourage industrial and commercial uses on slopes greater than 10% and residential uses on slopes over 15%.

**OBJECTIVE NE4: Maintain and preserve existing drainage ways to minimize flood hazards.**

Policy NE4.1 Prohibit all permanent structures within identified floodways.

Policy NE4.2 Encourage the retention of washes with 100-year flows of 500 cfs and greater in their undisturbed condition.

Policy NE4.3 Encourage development to retain washes in their natural state.

Policy NE4.4 Encourage new flood control projects to consider storm water recharge designs and other alternatives to channelization and other alternatives to impermeable bank protection..

**OBJECTIVE NE5: Identify and protect cultural resources.**

Policy NE5.1 Encourage cultural resource preservation using education and incentives.

Policy NE5.2 Encourage the protection of cultural sites which meet national, state, or local criteria for historic designation from destruction or harmful alteration.

Policy NE5.3 Encourage the preservation of significant cultural and archaeological resources within all developments.

Policy NE5.4 Encourage pursuing Certified Local Government status with the State of Arizona and the United States Department of the Interior and participate in the nomination and designation of state and national landmarks.

Policy NE5.5 Encourage interjurisdictional cooperation to further the goals of historic and archaeological preservation.

Policy NE.5.6 Encourage the use of intergovernmental agreements for incorporated municipalities to take advantage of the County's planned Certified Local Government status.

**Objective NE.6                      Protect wildlife habitat, natural plant communities, and riparian areas.**

Policy NE6.1 Encourage partnerships, and to the extent appropriate, participate with various public (state and federal agencies) and private land owners, in the development of community-based resource management plans to preserve and protect areas for wildlife.

Policy NE6.2 Encourage land use decisions that maintain the function and quality of watercourses, riparian corridors, and other significant environmental resources as needed to sustain aquatic and terrestrial ecosystems.

Policy NE6.3 Encourage site evaluation and classification of riparian areas as required by the U. S. Army Corps of Engineers 404 permit program or by other state or federal laws, regulations, and/or guidelines.

Policy NE6.4 Promote the environmentally-sensitive design and location of developments, their associated infrastructure, and other linear transportation structures. Minimize impacts to ecosystem continuity and impediments to wildlife movement.

Policy NE6.5 Encourage development of land use proposals to avoid damaging, disturbing, or disrupting any natural or rare plant communities. Encourage use of appropriate mitigation measures during the review of these proposals.

Policy NE6.6 Encourage four wheel and off-highway vehicle use only on existing, lawful routes.

Policy NE6.7 Encourage protection of ecosystems to enhance and maintain the biodiversity of the region.