

SECTION II ARIZONA WILDLIFE LINKAGES WORKGROUP



Our partnership is called the Arizona Wildlife Linkages Workgroup (AWLW). The goal of the AWLW is to provide information to land managers and transportation planners so that wildlife connectivity needs may be integrated into development and land use plans. Until very recently, transportation projects, urban expansion projects, border security projects, canals, and other projects were almost fully designed and ready to implement before connectivity issues were addressed. This report/project is to facilitate consideration of these concerns early in the planning process during design initiation.

Early integration of wildlife needs into projects and land-use plans before the design phase gives the greatest advantage to wildlife, because measures, such as avoidance, can still be considered with direct benefits to wildlife. The later connectivity is taken into account in planning, the likelihood of mitigation in the form of compensations becomes greater. Compensation mitigation is often the remedy that is most expensive and least favorable to wildlife. Therefore, early involvement and input by resource agencies in planning is critical to potentially affected wildlife and necessary to avoid inefficient use of resources.

Forming Partnerships

The AWLW developed a strategy to build on an already existing collaborative partnership between the Federal Highway Administration (FHWA), Arizona Department of Transportation (ADOT), Arizona Game and Fish Department (AGFD), and the USDA Forest Service, Tonto National Forest. These agencies have worked together to finance and design an innovative wildlife crossing research program as a part of the road-widening project on State Route (SR) 260 (Payson to Heber). Within this study segment, Rocky Mountain Elk, *Cervus elaphus*, have been captured and fitted with GPS collars to collect movement data in relation to SR 260. The first of its kind in Arizona, the SR 260 research illustrates how development projects can enhance rather than degrade wildlife movement. This study also provides a model for constructive collaboration between resource and transportation agencies. For

more information on ongoing wildlife permeability research projects in Arizona, please refer to *Section X Connectivity Related Projects*.

In recent years, conservation organizations, such as the Wildlands Project, have made great strides in identifying wildlife habitats and linkages across Arizona that need to be maintained and conserved. Additionally, some Arizona counties have also addressed wildlife linkages, or corridors in their planning documents. However, to date these efforts have had a regional, not statewide, emphasis. The AWLW is an important collaborative effort between public and private sector organizations working to address habitat fragmentation and connectivity needs in a comprehensive, systematic approach in order to maintain and improve wildlife biodiversity in Arizona. The workgroup is comprised of representatives from ADOT, AGFD, Bureau of Land Management (BLM), FHWA, Northern Arizona University (NAU), Sky Island Alliance, USDA Forest Service, U.S. Fish and Wildlife Service (USFWS) and Wildlands Project.

AWLW Mission Statement:

“To identify and promote wildlife habitat connectivity using a collaborative, science based effort to provide safe passage for people and wildlife”

This report (a) describes the AWLW membership, strategy, and goals; (b) provides a preliminary map of Arizona's *potential linkage zones*; (c) prioritizes the identified *potential linkage zones* for further consideration and analysis; and (d) provides a broad outline of the next steps to conserve and restore connectivity in Arizona. The maps and other products in this report are works in progress that will be updated as understanding improves and as Arizona's infrastructure develops.

The AWLW has appreciated the active participation and encourages the continued input from counties, cities, land management agencies and nongovernmental organizations. New partners are welcome to assist in addressing the needs associated with maintaining Arizona's wildlife connectivity.

Primary Goals

- 🐾 Identify and map areas (termed *potential linkage zones*, see *Table 4-1*) where connectivity between large blocks of publicly owned wildlife habitat has been, or is, at risk of being severed by human activities
- 🐾 Ascertain the associated threats to wildlife movement and list the important wildlife species that would be affected by loss of connectivity in each potential linkage zone
- 🐾 Identify and map existing potential linkage zones within habitat blocks in need of continued protection
- 🐾 Identify and map important riparian areas that function as a habitat as well as a corridor of connectivity
- 🐾 Encourage and promote the conservation, retention and acquisition of land where potential linkage zones exist
- 🐾 Integrate this information into transportation and regional development planning
- 🐾 Prioritize the potential linkage zones for refinement
- 🐾 Encourage the development of a linkage design for each potential linkage zone, that is, a detailed assessment and action plan to conserve or restore a wildlife linkage
- 🐾 Involve more stakeholders in the process, including tribal nations, engineers, wildland and urban planners
- 🐾 Develop an interactive decision support tool, both web-based and stand alone, for use by all resource stakeholders



Founding Individuals

Arizona Department of Transportation

Mission Statement:

"To provide products and services for a safe, efficient, cost-effective transportation system that links Arizona to the global economy, promotes economic prosperity, and demonstrates respect for Arizona's environment and quality of life"

Natural Resources Management Group

Bruce Eilerts
Section Chief/Statewide Planning Program Manager

Environmental Planning Group

Melissa Maiefski
Technical Environmental Section Manager

Natural Resources Management Group

Siobhan Nordhaugen
GIS/Special Projects Consultant

Arizona Game and Fish Department

Mission Statement:

"To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway recreation for enjoyment, appreciation, and use by present and future generations"

Research Branch

Norris Dodd
Wildlife Research Biologist

Habitat Branch

Evelyn Erlandsen
Project Evaluation Specialist

Research Branch

Ray Schweinsburg
Research Program Manager

Bureau of Land Management

Mission Statement:

"To sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations"

Ted Cordery
Endangered Species Coordinator

Federal Highway Administration

Mission Statement:

"Enhancing mobility through innovation, leadership, and public service"

Steve Thomas
Environmental Program Manager

Northern Arizona University

Mission Statement:

"Provide an outstanding undergraduate residential education strengthened by important research, graduate and professional programs and a responsive distance learning network delivering programs throughout Arizona"

Paul Beier
Professor of Wildlife Ecology, School of Forestry

Sky Island Alliance

Mission Statement:

"Sky Island Alliance is a grassroots organization dedicated to the protection and restoration of the rich natural heritage of native species and habitats in the Sky Island region of the southwestern United States and northwestern Mexico. Sky Island Alliance works with volunteers, scientists, landowners and government agencies to establish protected areas, restore healthy landscapes and promote public appreciation of the region's unique biological diversity."

Janice Przybyl
Wildlife Monitoring Program Coordinator

USDA Forest Service

Mission Statement:

"To sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations"

Tonto National Forest

Terry Brennan
Forest Engineer

US Fish and Wildlife Service

Mission Statement:

"Working with others to conserve, protect, and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people"

Stuart Wells
Fish and Wildlife Biologist

The Wildlands Project

Mission Statement:

"To protect and restore the natural heritage of North America through the establishment of a connected system of wildlands"

Kim Vacariu
Southwest Director

