

**Executive Summary**  
**Protection Measures for Certain Lands North of the Sonoita Valley**  
**Acquisition Planning District in Pima County, Arizona**  
**(“Missing Link Assessment”)**

by Sonoran Institute

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Introduction

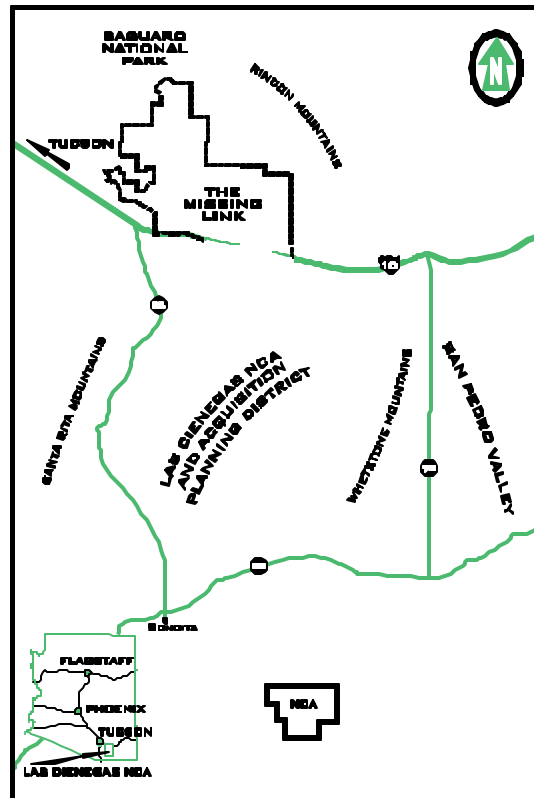
In 1999-2000, stakeholders involved with efforts to create Las Cienegas National Conservation Area identified lands north of the designated NCA and Acquisition Planning District boundaries as important to protect as well. These lands, known as the Missing Link and described as “north of the Sonoita Valley Acquisition Planning District in Pima County, Arizona,” lie just a few miles east of the City of Tucson and yet they represent some 50,000 acres of critically important wildlife habitat and corridors, open space, cultural and economic resources, and watershed for recharge of Tucson’s groundwater. But the area is under imminent threat of development.

Since 1990, Pima County has grown by more than 26 percent, and projections are for an annual growth rate of 2 percent through 2020, adding an additional 416,000 new residents. Because of critical habitat designations for endangered species in northwest Tucson, it is expected that much of the future growth will occur in the Southeast sector—the Missing Link, which is highly desirable for development because it is adjacent to existing large-scale development on the burgeoning Houghton Road corridor and on Old Spanish Trail. It also offers many amenities including stunning views of and access to protected natural areas such as Saguaro National Park, Coronado National Forest’s Rincon Wilderness, and Cienega Creek Natural Preserve.

Additionally, the majority of the lands in the Missing Link are Arizona State Trust Lands, most of which are currently leased for cattle grazing. The Arizona State Constitution mandates that State Trust Lands produce the maximum economic benefit for the beneficiaries of the Trust, most of which are school districts. One of the primary ways in which the State Land Department raises funds is to auction its Trust Lands for commercial or residential development. Over two sections (1300 acres) of State Trust

Lands were auctioned off in the region this year; pressure mounts to earmark more of the Missing Link lands for sale for development.

If not protected soon, the important cultural and natural values—including one of the most important wildlife corridors linking Saguaro National Park and Las Cienegas National Conservation Area—will be lost forever.



### Background

In December 2000, President Clinton signed into law the Las Cienegas National Conservation Area Establishment Act (HR 2941), creating a 47,000-acre NCA within a 143,000-acre Sonoita Valley Acquisition Planning District (SVAPD) in southeastern Arizona, 5 miles from the eastern edge of Tucson. The Sonoita Valley Planning Partnership (SVPP), an ad-hoc volunteer group of local residents and environmental, ranching, and recreational interests, worked together with BLM, the Sonoran Institute, and Congressman Jim Kolbe to achieve passage of the legislation. In order to move the legislation through the House and Senate in 2000, the following changes were made and final provision added:

Approximately 50,000 acres at the north end of the watershed were left out of the initial federal designation. Although these lands link the NCA to national park and forest lands in the Rincon Mountains east of Tucson (hence the name “Missing Link”), they comprise a mix of state, county, and private lands, which

raised concerns in Congress and the Arizona State Land Department about how they would be acquired and managed. However, the NCA legislation did require that the Secretary of the Interior submit a report to Congress within two years that describes “the most effective measures to protect the lands north of the [SVAPD and NCA] within the Rincon Valley, Colossal Cave area and Agua Verde Creek corridor north of Interstate 10 to provide an ecological link to Saguaro National Park and the Rincon Mountains.” (Section 8.a.)

The successful outcome of the Cienega Creek watershed assessment that the Sonoran Institute conducted for the BLM in 1999 (particularly the public involvement process) led the BLM’s Tucson Field Office to invite Sonoran Institute to take the lead on gathering and compiling the resource information and public input necessary to prepare the report required by the NCA legislation. With additional support from Saguaro National Park, the BLM contracted with Sonoran Institute to conduct a series of workshops and public open houses designed to:

1. Generate as much information as possible about the significant natural and cultural resources—including ecological linkages—found in the Missing Link (i.e., the Rincon Valley, Colossal Cave area, and Agua Verde Creek corridor).
2. Solicit feedback from resource experts and the lay public on alternative protection options and management strategies.
3. Compile and analyze this information, and provide recommendations about which protection measures would be most effective.

### Findings

This report represents the culmination of these tasks, completed during 2001 and 2002. Results indicate there is broad consensus among stakeholders and science experts that the Missing Link is an important and valuable area, and that some form of protection is necessary, and urgently needed, for its varied cultural and natural resources, including endangered and/or rare wildlife and plant species, open spaces, and recreational opportunities. In particular, there was a strong emphasis on the importance of wildlife corridors in the Missing Link, including riparian corridors.



Highlights of findings include:

1. The area is biologically and geologically significant:

- The Missing Link provides habitat for six federally endangered plant and animal species, and 12 species of special concern.
- According to data gathered in field studies conducted by the Sky Island Alliance for this report, the Missing Link lands are important movement corridors for “sky island” mountain mammals, especially black bears, mountains lions, coatimundis, and mule deer.
- Resource specialists, including biologists working with Pima County on its Sonoran Desert Conservation Plan, place the land in the Missing Link at the highest-level priority for protection because of the presence of important habitat for endangered and threatened species, as well as its value as a wildlife corridor in a “biological core” area.
- The watershed, including Las Cienegas NCA, provides the City of Tucson with up to 20% of its groundwater recharge system, according to data from the Arizona Department of Water Resources (an average of 16,000 acre-feet per year, out of an estimated 50-60,000 acre-feet total).
- The area contains some 21 distinct and rare soil types, as well as numerous unique and rare limestone caves such as Colossal, Arkenstone, and Carter Caves. These caves are important because they provide habitat for the endangered lesser long-nosed bat and the threatened Mexican long-tongued bat, as well as for several species of rare invertebrates.

2. The area is culturally and economically important:

- Numerous archaeological sites dating to 8000 B.C. and many historical sites, including Butterfield Stage stop and working ranches, are scattered throughout the Missing Link on unprotected lands.
- The open space in the Missing Link provides multiple recreation opportunities for the rapidly growing Tucson population: hiking, birdwatching, biking, horseback riding, scenic drives, photography, cultural site exploration, hunting, camping, cave exploration, and picnicking.
- Tucsonans are taxing recreation carrying capacity levels of current protected lands adjacent to city limits, including Tucson Mountain Park and Saguaro National Park.

- The regional identity of the Rincon Valley is strongly based on Western rural lifestyle values, which include ranching and love of wildlife, open space, and outdoor recreation.
3. There is strong local support for protection of the resource:
- Strong support for protecting open space and ecological linkages already exists in the Rincon Valley region, through the work of the Bureau of Land Management, community collaborators in the Sonoita Valley Planning Partnership, the Sonoran Institute, and others to establish the Las Cienegas NCA in 2000.
  - A poll conducted in spring of 2002 indicates that of 400 high-propensity voters surveyed, 63% consider preservation of wildlife habitat to be extremely/very important.
  - A local non-profit conservation and community stewardship organization — the 12-year-old Rincon Institute—already exists in the region and could provide the local stakeholder leadership and contact point necessary for a strong coalition to support protection measures in the area. The Rincon Institute has established community-rallying points such as its highly successful Rincon Valley Farmer’s Market.
  - Local land agencies and managers are currently working well together and are favorably inclined toward protection of the Missing Link.

In addition to natural resources, the value and challenges of the economic and social complexity of the Missing Link were noted. The area contains an irregularly dispersed combination of private, federal, state, and county lands with a broad spectrum of land uses, including recreation, ranching, and gravel mining. Although the Missing Link includes Pima County parklands (Cienega Creek Natural Preserve and Colossal Cave Mountain Park), the majority of the area are State Trust lands, which are managed to produce maximum financial benefit to the Trust beneficiaries. As stated in the opening paragraphs, sales of Trust lands, especially those close to urban areas like the Missing Link, are one of the primary ways funds are raised. Growth projections for Pima County indicate that in the next 20 years we will see nearly half a million people move to the region, and the Missing Link lands lie in the path of much of that growth.

Although the short-term view is to insist that growth is good for the local economy—jobs and home sales adding tax revenue—the longterm economic costs of additional sprawl is staggering: according to a Pima County study in 2000, each new home built in a development outside the city infrastructure (accounting for over 40% of all new, single-family building permits) costs the county \$23,000 while contributing only about \$1,700 in property taxes. The report estimates that providing infrastructure and emergency services to these developments costs between \$35 and \$55 million a year.

The need for protecting the Missing Link lands is therefore urgent. Each passing year means that seven square miles of wildlife habitat and open space are lost to development. These lands are lost forever. Action must be taken now to ensure that the Missing link lands—which we know through the results of the assessment process are valued by the community, important wildlife habitat, crucial to Tucson’s water recharge, and culturally priceless—are protected for future generations.

Recommendations for Action at Congressional and Local Levels:

After 15 months of community scoping, experts’ input, literature review, and field study, the Sonoran Institute recommends pursuing a two-part strategy: 1) that Congress strongly consider the following actions:

- Support legislation that would enable land exchange authority between state and federal agencies; this would allow the BLM to move forward on outright acquisition of the important State Trust Lands in the Missing Link and for Congress to authorize appropriations for acquisitions. The management of such lands could be through cooperative management agreements; transfer of lands to other federal agencies or the county; or remain with BLM.
- Support legislation that would authorize the State of Arizona to amend its constitution to manage State Trust Lands for conservation as well as for economic benefit. (A multiple-stakeholder coalition, including ranchers, developers, educators, and environmentalists, is currently working on drafting reform language for a future initiative.)

In tandem with these important Federal actions, 2) local partners launch a community-based, collaborative management approach to protecting the Missing Link lands, including creation of an ad hoc organization with a governing board comprising land managers, landowners, and local stakeholders including ranchers, recreationists, and other land users. This approach would have the effect of moving ahead with locally driven, on-the-ground protection and management of a significant landscape while important Federal actions get underway to support permanent protection of the Missing Link lands.

We base these recommendations on the knowledge that collaborative conservation is effective and cost-efficient, and that the Missing Link region’s cultural and natural geography lends itself well to this approach:

- Surveys of cooperative management projects in the West indicate that such an approach yields more successful long-term conservation of landscapes and resources than traditional approaches that are expensive (e.g. – federal land acquisition) and do not encourage local stewardship.

- There is a growing interest at the national level in pursuing collaborative management solutions to complex conservation challenges (e.g., the Department of the Interior’s Cooperative Conservation Initiative).
- The geography of the Missing Link and adjacent lands—a distinct valley linked on three sides to large protected preserves—lends itself well to rallying a core of community support for a collaboration initiative.
- Different resource needs and recreation demands for the different habitats of the Missing Link—riparian, upland desert, and desert grassland—would be better served by a cooperative and variable management approach than by imposing one management style or directive over vastly different landscapes.

A campaign to develop a cooperative management agreement for the Missing Link would entail:

1. Identifying and helping establish a core leadership group of land managers and local stakeholders to lead the effort to develop a cooperative management agreement for the Missing Link.
2. Hosting additional, more-focused visioning workshops in the Rincon Valley and Agua Verde/Mescal area in order to help people identify what they hold most important in their community, to find common ground among neighbors and land management officials, and take the next steps in protecting their shared values.
3. Helping the group find the tools and financial resources needed to succeed in their goals of protecting open space and resource values in the Missing Link.



Current and potential partners for a collaborative management agreement are:

Bureau of Land Management, Tucson Field Office  
National Park Service, Saguaro National Park  
Pima County Parks and Recreation Department  
Pima County Flood Control District  
Arizona Game and Fish Department  
U.S. Fish and Wildlife Service  
U.S. Forest Service, Coronado National Forest  
Arizona State Land Department  
University of Arizona, Department of Renewable Natural Resources  
Community leaders of the Rincon Valley, nearby settlements, Benson, and Tucson  
Rincon Institute  
Vail School District  
Colossal Cave Mountain Park  
Friends of Saguaro National Park  
Sonoran Institute  
Sky Island Alliance  
Tucson Rough Riders  
Arizona Open Land Trust  
Southeast Arizona Land Trust  
Friends of the Sonoran Desert  
Center for Desert Archaeology  
Sonoita Valley Planning Partnership  
State Parks Department  
Arizona-Sonora Desert Museum  
Mule Deer Foundation  
Empire Ranch Foundation  
Coyote Creek, Antler Crest, Academy Village, X-9 Ranch, and Rocking K housing  
development representatives and homeowners associations  
Pima Trails Association  
Southern Arizona Mountain Bike Association

The timeline for developing a long-term, collaboratively produced vision and plan for protecting the lands of the Missing Link is urgent. In the next 20 years population expansion will consume a land base that is as big as the present City of Tucson, and most of this growth will occur in what is now unincorporated Pima County in areas such as the Missing Link. The State Land Department continues to dispose of land which would increase urban sprawl in northeastern Pima County, and private landowners will not be able to withstand pressures to sell land for development for much longer, especially as the first wave of land-hungry, newly retired Baby Boomers arrives in the region.

The Sonoran Institute recommends embarking as soon as possible on developing broad community and agency support for a protection campaign for the Missing Link lands that would encompass both national and state policy changes as well as a collaborative approach to management with the target of a draft plan to be completed by December 2004.

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