




MEMORANDUM

Date: June 13, 2018

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator 

Re: **Acquisition of Willock Property/Tesoro Nueve Ranch**

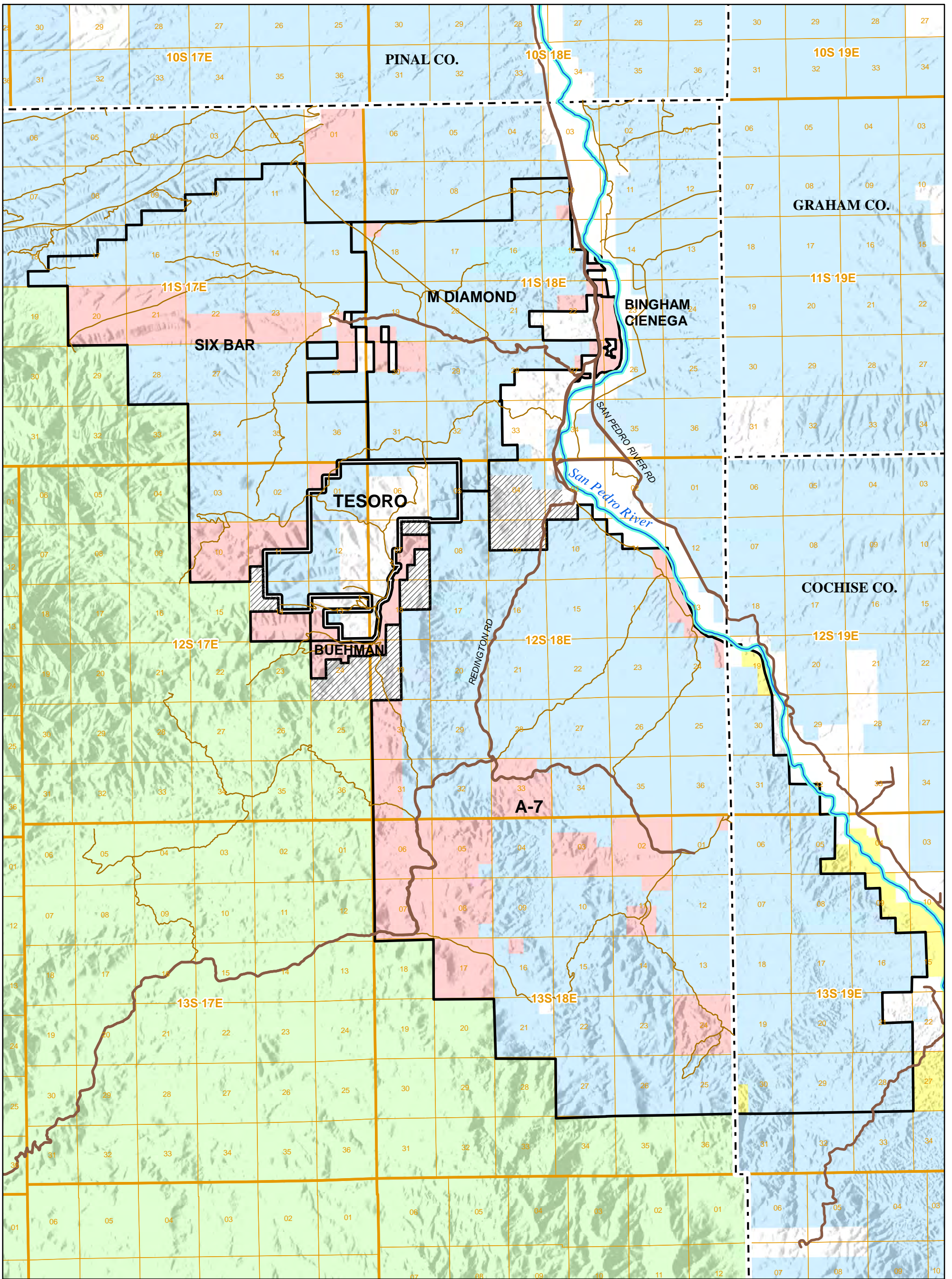
On the Board of Supervisors June 19, 2018 Agenda is an agreement to acquire the Tesoro Nueve Ranch. The property includes 1,476 acres in fee and another 1,807 acres of State grazing leases. It is located along the eastern slopes of the Catalina Mountains in the San Pedro River watershed, and is surrounded by County and Regional Flood Control District (RFCD) conservation properties, as well as the Coronado National Forest. The attached report demonstrates how important a property this is to conserve, based on its important riparian habitat, springs and streams, vulnerable and threatened species including fish, frogs, birds and other wildlife. The report also includes photographs and a link to wildlife camera footage from a camera located along the northern edge of the property.

The report also addresses the County's Section 10 permit and how properties like this one serve as mitigation for County and RFCD capital improvement projects. The RFCD in particular undertakes capital improvements in watercourses for which this kind of mitigation land is most applicable. My May 23, 2018 memorandum to the Board provided a recent example of the time and costs saved on one particular RFCD project because of the Section 10 permit. In addition, residents in unincorporated Pima County within a FEMA flood zone receive a 25 percent reduction in flood insurance premiums based in part on the purchase of properties such as this.

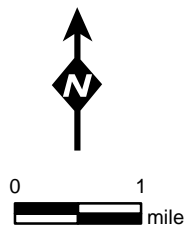
No general funds will be used to acquire this property. The funding sources include \$488,000 from the RFCD tax levy, and \$1,070,500 from the County Administrator's Special Revenue Fund. The County Administrator's Special Revenue Fund includes \$1 million received from Kinder Morgan (owner of El Paso Natural Gas) as part of a 2014 mitigation agreement for impacts to the County's Conservation Lands System from a pipeline developed through the Altar Valley to serve customers in Mexico. The additional funds resulted from a separate mitigation payment from a residential developer for impacts to the County's Conservation Lands System from a road that will be developed in Oro Valley crossing a County conservation property. These special revenue funds cannot be spent for purposes other than purchasing land for conservation.

Attachments

c: Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Suzanne Shields, Director, Regional Flood Control District
Chris Cawein, Director, Natural Resources, Parks and Recreation
Linda Mayro, Director, Office of Sustainability and Conservation
Neil Konigsberg, Manager, Real Property Services
Nicole Fyffe, Executive Assistant to the County Administrator



TESORO NUEVE RANCH & ENVIRONS



- Pima County
- Coronado National Forest
- Private
- TNC Conservation Easement
- State Trust
- BLM



11/30/2017

Biological and Cultural Values of the Tesoro Nueve Ranch

Summary report prepared by staff from the Pima County Office of Sustainability and Conservation and Natural Resources, Parks and Recreation.

Report Overview. This report provides biological and cultural resource information on Pima County’s potential acquisition of the Tesoro Nueve Ranch (herein Ranch) located near Redington in the San Pedro River watershed. The Ranch is 1,476 acres of deeded land and 1,807 acres of State Trust Land.

Reserve Configuration. The Ranch is ideally situated to complete the reserve system in the San Pedro River watershed, which is anchored by Pima County’s A7, Six Bar and M Diamond ranches, and complemented by the existing Regional Flood Control District-owned Buehman Canyon Preserve. Because the acquisition boundaries run along the middle of Buehman Canyon, acquiring this property would greatly simplify—and make consistent—the management of this rare flowing stream.

Riparian and Aquatic Resources. The acquisition contains portions of a flowing stream (Buehman Canyon), a broad-leaved deciduous riparian forest (Figure 1), and at least two springs or seeps (Figure 2). Buehman Canyon is a tributary to the San Pedro River and is thought to be



Figure 1. Buehman Canyon runs through the eastern portion of the Tesoro Nueve Ranch. Buehman Canyon is an important riparian and aquatic stream resource in the San Pedro River watershed and is home to rare and important species in our region.



Figure 2. A key feature of the Tesoro Nueve Ranch is Carpenter Spring, which gushes from the hillside just above Buehman Canyon and feeds a large wetland system that is home to longfin dace (a small minnow-sized fish) and one of the largest populations of lowland leopard frogs in the Santa Catalina Mountains.

an important water source to that regionally significant river. Pima County Regional Flood Control District holds an instream flow right approved by the State of Arizona on the upstream portion of the stream that runs through the proposed acquisition. The State is also compelled to protect water quality in this stream against point source pollution via an Outstanding Arizona Waters designation, one of only 23 streams currently accorded such protection in the state. Surface water in the Ranch section of Buehman Canyon hosts the lowland leopard frog and longfin dace, both Covered Species under the County's Multi-species Conservation Plan (MSCP). Partnering with Arizona Game and Fish, additional aquatic species could also be introduced to the site including the endangered Gila topminnow.

The riparian vegetation community hosts a huge array of additional species including many neotropical songbirds, most notably the yellow-billed cuckoo, a federally threatened and MSCP Covered Species that require tall riparian trees for nesting. During a visit to the area County staff noted luxuriant clumps of a species of orchid, the stream orchid, that is restricted to moist, riparian habitats, illustrating the value of this particular area (Figure 3). Other species with specialized/ restricted breeding habitat requirements in this area include yellow-breasted chats and yellow warblers, as well as a variety of large and small mammal species. For example, multiple deposits of black bear scat were seen on a recent field trip to the property, and nearby wildlife cameras show evidence of large troops of coati using the area (see coatis at <https://youtu.be/QFz43A8Vc2E>). Recent County field work upstream of the riparian habitat has documented an undetermined species of freshwater limpet (*Ferrissia* species) in the stream stretches, which is highly likely to also occur in the aquatic habitat on Tesoro Nueve. This species has not been documented in this stream before, highlighting its biodiversity value. Acquisition and preservation of this property forwards the County's Sonoran Desert Conservation Plan (SDCP) and MSCP-related goals of preserving and enhancing species preservation and ecosystem functioning.

Upland Resources. The Ranch uplands, though not as biodiverse as riparian areas, nonetheless host substantial levels of biodiversity and are critical to maintaining landscape connectivity. In this area, the vegetation is a mixture of Sonoran desert upland and semi-desert grasslands, and are conducive to raising livestock. Good livestock management in these uplands will contribute to improved watershed conditions, particularly if fire can be restored as an ecosystem process



Figure 3. The stream orchid (*Epipactis gigantea*) is found in two areas of the Tesoro Nueve Ranch.

to appropriate sites. The uplands include areas of limestone and other rock outcrops used by MSCP-covered species such as the talussnail, bats, desert tortoises, needle-spined pineapple cactus, and other species of limited distribution. The presence of these and other species further demonstrates the value that the Ranch represents to healthy ecosystem function and preservation.

Wildlife Linkage Zones and Ecosystem Connectivity. Acquisition of the Ranch would make a valuable contribution to the wildlife corridor linking the Santa Catalina and Rincon Mountains to the Galiuro Mountains to the east (Figure 4). The Arizona Department of Transportation and Arizona Game and Fish Department designated the area between these mountain ranges as a habitat linkage zone (Linkage 82), with Buehman Canyon as an important feature in this corridor. Species identified as benefiting from this linkage include desert bighorn sheep, black bears, mountain lions, and mule and white-tailed deer, many of which will use both the riparian and upland environments.

As noted previously, Buehman Canyon sustains native aquatic species of conservation concern including robust populations of longfin dace and lowland leopard frogs that are ultimately linked to broader regional metapopulations in the San Pedro watershed during times of floods. County acquisition of the portion of Buehman Canyon and its adjacent uplands taken in by the Ranch would further consolidate land ownership and management of conservation lands contributing to preservation of wildlife corridors as well as improve the conservation value of Buehman Canyon through prevention of potential development and water depletion.

MSCP Mitigation Value. The County's MSCP provides a blueprint for compliance with the Endangered Species Act via a Section 10 Permit, and a critical element of the MSCP is for the County to provide mitigation for land disturbance (i.e., Covered Activities). In total, the County must provide approximately 116,000 acres of mitigation, of which we have acquired almost 110,000 acres (95% of needed mitigation). It is anticipated that all 3,294 acres of the Ranch would be eligible for MSCP mitigation, and when considering the partial (25%) mitigation value of State Trust Land, Pima County would be able to claim 1,930 acres towards our mitigation goal. This represents 39% of the remaining mitigation that is anticipated to be needed to fully meet our mitigation obligation.



Figure 4. The Tesoro Nueve Ranch property (foreground) is an area identified as an important wildlife corridor, linking the Santa Catalina and Rincon mountains with the Galiuro Mountains (background).

The Ranch would also have significant mitigation value beyond the total number of acres. A key measure of our mitigation obligation relates to the Maeveen Marie Behan Conservation Lands System, or CLS. The Ranch lies within Important Riparian Area and Biological Core areas of the CLS, which an independent committee of experts deemed to have particular ecological significance. Known populations of MSCP-covered species in or near this property including the longfin dace, lowland leopard frog, Sonoran desert tortoise, giant spotted whiptail, needle-spined pineapple cactus, Arizona Bell's vireo, western yellow-billed cuckoo and the Santa Catalina talussnail. Additional covered species that are likely to inhabit this property, based on known distribution patterns and habitat requirements include Townsend's big-eared bats, Mexican long-tongued bats, lesser long-nosed bats, western red bats, western yellow bats, and the groundsnake.

One of the springs in particular provides a refuge for fish and frogs during drought and floods, and thus is of special significance to the biological value of the rest of the corridor that is already in the Flood Control District's ownership. The acquisition will also facilitate access to the entire stream for biological monitoring and management needs.

Cultural Resources. The San Pedro Valley has been occupied by humans for over 13,000 years and the San Pedro River watershed has been a natural corridor between the Gila River and Sonoran Desert of Northern Mexico. The Tesoro Nueve property is part of this cultural landscape that represents important traditional places and areas that were used for gathering plants, resources, and for hunting for thousands of years. Ethnographic studies that involve archaeology and Tribal oral histories and knowledge are beginning to show the significance of the cultural values held by the descendent communities of Native Americans for ancestral places within the San Pedro Valley. The Tohono O'odham, Zuni, Hopi, and Apache all have ancestors who thrived in San Pedro Valley. Ethnographic research suggests that the important water sources such as the Buehman Canyon stream, a tributary of the San Pedro River and the two known natural springs located in the Tesoro Nueve property have been places of traditional significance to Native Americans. Their ancestors who lived in large villages along the San Pedro River around a thousand years ago most likely traveled frequently to the Tesoro Nueve property and the procurement of resources over time and the knowledge of this rich land contributed to a sense of place and meaning. Although the Tesoro Nueve Ranch Property has never been surveyed for cultural resources and no archaeological sites have been previously identified, significant cultural resources likely exist on the property. Archaeological sites that may exist on the property include the early Archaic, Hohokam, Sobaipuri, and Apache cultural periods and also sites dating to the Historic periods occupied by Euro-American ranchers and farmers.

It is known that the region was used for early settlement and ranching. The remnants of a historic adobe-walled homestead (Figure 5), a hand-dug well and windmill, and the "line shack" identified on the property contribute to the sense of history and provide evidence of the 'homesteading' era. GLO maps for T12S, R17E and T12S, R18E (dated 6/28/35 and 3/6/1880) show old roads running through the property. An archaeological survey to document archaeological sites and historic standing structures and features and capturing the oral histories and stories from some of the local families who still live in the area and who have long histories ranching, farming, and mining in the region would add historical and cultural value to this acquisition.



Figure 5. Remnants of adobe-walled homestead located on the Tesoro Nueve Ranch.

Management. The Outstanding Arizona Waters designation will make it difficult for the State of Arizona to issue any permit that would degrade the water quality, and is a key protection against the potential for nearby future mining operations from affecting this water resource. This is important because of historic and significant mining operations upstream of the Ranch and active mining claims in the area.

The water rights associated with the property are for Carpenter Spring near the main channel of Buehman Canyon and various stock-watering locations. One objective of owning the rights would be to prevent any potential de-watering of the stream and spring. Another is to incorporate livestock production with best management practices as part of the larger County-managed M Diamond Ranch. Individual wells would need evaluation to determine whether they should be used, capped, abandoned, or otherwise protected. At least one of the wells has historic significance, having been constructed in 1935 as part of the Bingham Ranch.

Most of the riparian habitat has been fenced off from cattle grazing and is thus in excellent condition. Pima County will continue to exclude livestock grazing from the Buehman Canyon riparian corridor, and promote good grazing management in the uplands. Maintaining a working ranch landscape with good livestock grazing management in the uplands portion of this property and on adjacent ranches will meet the Ranch Conservation element of the SDCP. In addition, continuing livestock production on this property will keep the State grazing lease active and allow Pima County to control how the land is used for grazing livestock. This acquisition would enhance flexibility in sustainable grazing management of the uplands across a continuous swath of State Lands linked across several of the County's ranches north and south of the Tesoro Nueve.

Native fish and frog conservation and management will be an important focus of management. Actions to promote this will include maintaining the exclusion of cattle from Buehman Canyon and monitoring these populations over time. Arizona Game and Fish Department (AGFD) is very interested in maintaining native species in this watershed and towards this end the Agency has expressed interest in establishing native fish species such as Gila topminnow. These actions

would contribute towards recovery of these species and support the goals and objectives of the MSCP.

The acquisition would also provide a key access point across the creek. At present, there is a locked gate that prevents any access across Buehman Canyon, even by Arizona Game and Fish Department personnel. If the County acquires the land, then pedestrian public access could be provided. However, motor vehicular access is complicated by the fact that the entry road traverses other private land as well. Some discussions with landowners and agencies would be needed before public vehicular access could be permitted.

The Sunzia power lines are set to be placed through the ranch's State Trust Land on the eastern portion of the property and the extent and anticipated impact of these features has not been evaluated. It is unknown if, for example, the riparian vegetation below the powerlines will be cut down, though we assume this to be the case based on similar actions by power companies in the recent past. Such an action would negatively impact the ecological value of this riparian area and Pima County should work with Sunzia to seek to minimize the line's impact.