

# COUNTY ADMINISTRATOR'S OFFICE

PIMA COUNTY GOVERNMENTAL CENTER 130 W. CONGRESS, TUCSON, AZ 85701-1317 (520) 740-8661 FAX (520) 740-8171

C.H. HUCKELBERRY County Administrator

August 22, 2012

Mr. Adrian Garcia
Project Manager
Bureau of Land Management
New Mexico State Office
SunZia Southwest Transmission Project
P.O. Box 27115
Santa Fe, New Mexico 87502-0115

Re: Comments on Draft Environmental Impact Statement – SunZia Southwest Transmission Project

Dear Mr. Garcia:

Pima County's opposition to locating the SunZia Southwest Transmission Project (SunZia) anywhere within Pima County has been consistent since we first reviewed this project's scope and proposed alternatives. While the County applauds efforts that explore and develop renewable energy resources, it is important to also include a comprehensive assessment of where such resources should be appropriately located and where they can be developed with the least social, economic and environmental impacts. Given the nature and scale of this project, an inclusive statewide or regional assessment of energy resources would have been appropriate to identify where these resources could be located that do not threaten water resources, meet applicable environmental laws and policies, protect capital investments made for local conservation and do not impact wildlife and scenic areas supporting eco-based tourism. The County's position has not changed, especially in light of Subroute 4C2c, which is part of the Bureau of Land Management's (BLM) Preferred Alternative as presented in the May 2012 Draft Environmental Impact Statement (DEIS).

The Preferred Alternative is inconsistent with local conservation policies as expressed in the County's adoption of the Sonoran Desert Conservation Plan (SDCP). Subroute 4C2c crosses the northeastern corner of Pima County and bisects lands that the County secured with significant investment of voter-approved public funds for conservation - to maintain as undeveloped open space and preserve the community's ranching heritage. These lands

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are used to fulfill the biological and cultural conservation objectives of the County's SDCP and will also be used to comply with mitigation requirements of our forthcoming Section10 Incidental Take Permit from the U.S. Fish and Wildlife Service.

More recently, upon conclusion of an on-going negotiation for acquisition of additional land in the San Pedro Valley, the County will have created a 64,000-acre unit on par with the much-acclaimed Muleshoe Ranch Cooperative Management Area. Since the DEIS states that many of the substantive decisions about what actions will be taken to avoid and minimize impacts will be deferred to the Plan of Development (POD) as well as execution of certain Standard and Selective Mitigation Measures, all of which will occur post-completion of the NEPA process, we have little certainty of what practices will be implemented on lands within our management unit.

Despite being the active land managing entity with direct stewardship responsibilities, Pima County will not, because of a lack of fee ownership, have a mandated voice in determining what and where avoidance, minimization, and especially reclamation actions are to be applied. Consequently, we have concerns that this project, should it continue to be routed through Pima County, will compromise our ability to maintain quality management of these lands in order to accomplish conservation objectives. Given our previous experiences with the legacy of other linear projects such as the Kinder-Morgan Pipeline and the ineffectiveness of those mitigation treatments, which are similar to those proposed for the SunZia project, Pima County, the local jurisdiction, will be burdened with managing the undesirable consequences of additional disturbances such as introduction and spread of invasive species, restricting the use of fire to improve ecological condition, and fragmenting habitat and vegetation communities.

### Project Scope and Need

The project's purpose and need continues to be inadequately described in the DEIS, despite our earlier scoping comments. SunZia was advertised as a renewable energy project by BLM during the scoping period, but in fact it is a merchant transmission line which is not restricted to renewable energy generated power. The principal project proponent is a company with a significant investment in development of new fossil-fuel power generation in Bowie, Arizona. The DEIS has not provided adequate disclosure regarding the relationship of this transmission line to the motivations of the proponent in relation to their Bowie gas-fired power plant and the proximity of existing natural gas supplies and demands in the region.

While the DEIS estimates that between 81-94 percent of the energy SunZia moves would be renewable, it appears more likely that about a third of the line's capacity could be taken up from the 1000 MW Bowie gas-fired power plant alone, especially in the early years, when there would be little wind or solar power available from New Mexico. Given the glut of natural gas in our region, and the declining federal subsidies for renewables, it is entirely

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likely that wind and solar investments in New Mexico will not be built for decades. Furthermore, we understand that SunZia does not intersect with and thus would not be able to carry energy from BLM's Afton Solar Energy Zone and associated substation near Las Cruces, New Mexico. However, SunZia does connect with the natural gas-fired power plant and Willow substation, near Bowie, Arizona, and other gas-fired power plants and substations along the Interstate 10 corridor. Thus the purpose and need as stated by BLM in the scoping materials for this project, as well as information provided at public meetings and in the energy development forecast in the DEIS, gives a false impression of the purpose and need for the project as well as the benefits.

The Southwest Area Transmission Study was referred to as an impetus for this project. However, the document does not identify the need to tap wind resources from New Mexico over and through Arizona into California. It states that California needs more renewable energy and power in general and identifies western Arizona as a potential solar energy source. Since that time, we are aware that California officials have further expressed their preferences for in-state production of solar energy. In addition, several western Arizona solar projects have been completed far in advance of any western New Mexico wind projects.

Along these lines, BLM completed a regional assessment of potential renewable energy resource locations and set aside significant acreage in western Arizona for solar energy development. This should be considered as part of a needs assessment for the overall SunZia project. Energy resources can be generated in Arizona closer to the SunZia delivery destination, thus the need for developing transmission lines from New Mexico across Arizona should be re-examined in light of Arizona BLM's study.

Locally, Pima County has been cooperating with Tucson Electric Power (TEP) on specific Tucson area projects that contribute to TEP's renewable energy targets and are on a much faster track toward completion than what is being proposed by SunZia. It makes programmatic sense from a financial and environmental impact standpoint to locate and develop an energy source closer to the target area, as opposed to locating and constructing 500 miles of transmission lines across two vast landscapes to reach an intended target area.

The County does not feel the SunZia project will significantly advance local efforts in renewable energy or that enough evidence and information has been provided to justify need for the overall project.

#### Alternatives Analysis

The alternatives analysis contained in the DEIS does not evaluate a sufficient range of alternatives, given the stated purpose and need. All of the proposed alternative routes go through Bowie, Arizona, despite the fact that delivering energy from the proposed Bowie

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(gas) power plant is not expressly stated as a primary purpose and need of the proposed project. If SunZia is needed to deliver wind energy from central New Mexico to markets in Arizona and further west, it is unclear why all of the routes in the DEIS must go south to connect with Bowie – especially given that some of the routes head north after passing through Bowie. Routes connecting central New Mexico to central Arizona should have been evaluated in the DEIS, for instance, along the US 60 or US 70. We also question whether a modification of the Southline Project could fulfill much of the project purpose and need.

## BLM Preferred Alternative - San Pedro Valley Route

The San Pedro Valley is located in the far northeastern corner of Pima County, east of the Catalina Mountains, and encompasses the San Pedro River corridor. The San Pedro River is the last free-flowing river in the State of Arizona, and was identified as one of the ten most endangered rivers in the United States by American Rivers in 1999. Due to the river and its associated wetlands, it contains the highest quality riparian gallery forest in all of southern Arizona and remains a critical area for seasonal migratory birds between North, Central and South America.

The County's ownership in the area totals approximately 11,120 acres in fee and 43,100 acres in held State grazing leases. Currently, the County is in negotiations to acquire an additional 620 acres in fee and the associated 8,500-acre State grazing lease, essentially creating a 64,000-acre County management unit. Using 2004 voter-approved bond monies, the County acquired Six Bar Ranch and the A-7 Ranch in the San Pedro River Valley. Acquisition of the A-7 Ranch included 6,800 acres of fee lands, the 34,000-acre State grazing lease, and an 80-acre Bureau of Land Management grazing permit. The County manages the ongoing ranching operations, while conserving and protecting biological and ecological values of the lands. The BLM Preferred Alternative Subroute 4C2c passes right through the County-held State grazing lease for A-7 Ranch and cuts through a number of important conservation areas, wildlife travel corridors and cultural resources sites on the property that are large enough that minor adjustments to the line footprint will not adequately mitigate potential impacts. This alignment would cut across nearly all of the major A-7 Ranch roads, pastures and key use zones, which can hamper our operation and conservation ranching approach. Placement of a new transmission line inevitably results in increased public access across a landscape. No matter the steps taken, the lands become much more accessible and remain open because of the need to manage and repair the transmission lines and disturbances during construction that are never fully mitigated. A prime example has been the Kinder-Morgan pipeline project's ongoing impacts to the County's Cienega Creek Natural Preserve and Bar V Ranch management and protection. Despite mitigation efforts by the company, impacts continue for the County to address with no long-term support or ability to reconfigure the impacts due to the constraints now placed by the location of the utility infrastructure corridor.

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The County has made significant investment and commitment to long-term conservation in this area similar to the Muleshoe Ecological Management Area in Cochise County. It has been the County's stated intent to manage the property as a unit. The County should be afforded consideration and protection similar to the Muleshoe area.

### Area Archaeological Resources

The current BLM Preferred Alternative Route includes Subroute 4C2c, which crosses the northeast corner of Pima County as it parallels the west side of the San Pedro River Valley. The intact cultural landscape and high archaeological sensitivity of the San Pedro Valley are well documented and reflects important prehistoric occupations as well as historic ranching. There are dozens of recorded sites in the valley near this corridor, with excellent potential for additional, as yet undiscovered resources. Well-known sites in this area include the prehistoric villages of Reeve Ruin, Redington Ruin, and Bayless Ranch Ruin, as well as an historic cemetery near the river. The interactive map shows the Preferred Alternative running above the valley bottom to avoid crossing the river in this area, but the construction will cause disturbances that could result in direct and indirect impacts on sites and will certainly impact natural resources in the area. The County agrees with Tribal opposition to the BLM Preferred Alternative Route because of the high potential for impacts on ancestral Native American sites and, especially, the potential to disturb human burial remains in the San Pedro Valley.

#### Vegetation Management Along Transmission Lines

A present issue we face with electric utilities is vegetation loss due to clearing under federal rules for reliability standards. Attached is a brief report with information on vegetation management practices along transmission lines in Pima County and the dramatic example in one of the County's most valued riparian corridors along Cienega Creek. The photographs show the complete clearing of three acres of cottonwood gallery forest and mesquite bosque on land owned by Tucson Electric Power, which crosses through the County's Cienega Creek Natural Preserve. This clearing of streamside forests was done under the 2006 federal rule mandating power line maintenance for power reliability. What is of concern is the implementation of this rule. After this occurrence, the U.S. Fish and Wildlife Service hosted a meeting with Tucson Electric Power and advised that if this type of clearing would be a recurring practice, they would need to consult with the Service on the potential for Incidental Take and possibly consider developing a Habitat Conservation Plan. Also attached is a copy of a letter from Arizona Corporation Commission Chair, Kristin K. Mayes, to Don Brandt, President and CEO of Arizona Public Service, expressing concerns over their vegetation management practices and a similar clearing in the Phoenix area. The practice of clear-cutting vegetation below electric transmission lines significantly and dramatically increases the environmental impact of locating these facilities. Obviously, this practice is of significant concern to the County as it relates to the SunZia project

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overall, and especially as it relates to the BLM Preferred Alternative route, which will pass through significant riparian resources subject to similar widespread destruction.

### Wildlife Linkages

The DEIS needs to incorporate consideration of the soon-to-be-released Santa Catalina/Rincon – Galiuro Linkage (map attached). This report is a component of a larger undertaking sponsored by the Pima County Regional Transportation Authority to identify regionally important wildlife linkages. The analysis of impacts for this linkage as well as the others currently included in the DEIS needs to go beyond the cursory treatment of the current analyses and earnestly utilize the data in these reports to examine the likelihood that the construction of the SunZia Transmission Line will modify species' use of the linkage and the ramifications that may have for the effectiveness of the linkage. This is especially the case in the assessment of additive impacts where distances between blocks of useable habitat core and patches will be increased. Additionally, the analyses need to address the potential for the project to effect change in those habitat parameters crucial to linkage species because of the ensuing requirements to adjust vegetation management practices such as the use of fire in order to meet project maintenance and operation standards.

### Fire Management

Fire is recognized as an important vegetative management tool especially in the desert grassland ecosystem. Fire as a tool has the capability to maintain and enhance vulnerable grassland systems and can be used to restore previously damaged systems. Current discussions and practices of utilities regarding the full control or absence of fire, on or near utility corridors, has caused the use of this important tool to be impacted. The proposed project cuts a line across significant lands that are part of an active fire management zone. Restricting fire because of the presence of a new utility corridor will impact ongoing and future ecosystem restoration projects on private and government jurisdictional lands. This location of an obstructing presence across lands where controlled fire is currently allowed, as a beneficial and a cost productive management tool, is a negative impact that needs to be identified, quantified and mitigated in detail as it relates to any of the proposed routes within the SunZia project.

#### Summary

If BLM, in spite of our objections, approves a final route for SunZia that includes segments in Pima County and especially Subroute 4C2c, aside from the above recommendations the following stipulations need to be made mandatory:

 Pima County will have equitable status with land owners/land management agencies in the development and execution of the Plan of Development.

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- When the alignment crosses lands where Pima County is not the land owner, but is the active, on-the-ground land manager, Pima County requirements for and recommendations on suitable locations for the application of Standard and Selective Mitigation Measures will be accommodated.
- The project proponent and Pima County will seek mutual agreement on additional accommodations necessary to preserve the County's ability to rely on lands that the County manages for purposes of accomplishing our SDCP objective, and providing mitigation for our Section10 Incidental Take Permit from the U.S. Fish and Wildlife Service where those lands are crossed by the SunZia Transmission Line. Any agreements reached must be codified and enforceable.

Thank you for the opportunity to comment on this project, and we look forward to continued participation in this process.

Sincerely,

C.H. Huckelberry
County Administrator

CHH/dr

Attachments

c: The Honorable Chairman and Members, Pima County Board of Supervisors
Ray Suazo, Arizona State Director, Bureau of Land Management
Brian Bellew, Field Manager, Bureau of Land Management
Linda Mayro, Director, Office of Conservation and Sustainability
Sherry Ruther, Environmental Planning Manager, Office of Conservation and Sustainability
Kerry Baldwin, Parks Superintendent, Natural Resources, Parks and Recreation
Julia Fonseca, Environmental Planning Manager, Office of Conservation and Sustainability
Diana Durazo, Special Staff Assistant to the County Administrator

# **Vegetation Management Along Transmission Lines**

By Julia Fonseca, Pima County Office of Conservation Science and Environmental Policy

New standards require utilities to prevent power outages due to vegetation falling onto major power lines. The purpose of this document is to increase awareness of the impacts of transmission lines on natural and cultural resources for land managers. The impacts will occur along existing power lines, and should be considered when siting new power transmission corridors.

The photographs below illustrate 2009 vegetation management along a Unisource (Tucson Electric Power) power-line corridor, across a perennial stream that provides habitat for the federally listed Gila topminnow.



Cienega Creek, Pima County, Arizona, 2009 Landiscor aerial photograph. Complete clearing of approximately three acres of cottonwood gallery forest and mesquite bosque on land owned by Tucson Electric Power (TEP). Parcel boundaries are shown in black, section line in blue, location noted in Township/Range/Section format. Lands north and south of the clearing are part of Pima County's Cienega Creek Natural Preserve.



Cienega Creek, same area before clearing, same scale. Faint white traces are the power lines. This 2008 Pictometry photograph does not extend farther to the east.





At left, 2009 view along 345kv power line showing channel immediately after clearing. At right, June 2010 view of bosque on the left and margin of remaining cottonwood forest on the right. Photographs by David Scalero, Pima County Regional Flood Control District.

Tucson Electric Power's clearing of streamside forests is linked to a 2006 federal rule mandating power-line maintenance to improve the reliability of the national power grid. The Energy Policy Act of 2005 designated an electric reliability organization to develop and enforce compliance with reliability standards.

North American Electric Reliability Corporation (NERC) is an industry organization, whose authority was conferred by the Federal Energy Regulatory Commission. NERC does not requires vegetation clearing *per se*; it requires power companies to prepare, and implement, a formal transmission vegetation management program to prevent outages. NERC Standard FAC-003-1 was passed in the wake of several large-scale power outages caused by vegetation. Certain reportable outages can be subject to fines of up to \$1 million a day. Only power transmission lines operated at 200 kilovolts or higher are subject to the rule.

A reportable outage is caused by "grow-ins" and "fall-ins" or "flashover" which is the movement of electricity across air (see www.nerc.com). Grow-ins are outages caused by vegetation growing into lines from vegetation inside and/or outside of the right-of-way; fall-ins are defined as outages caused by vegetation falling into lines from inside or outside the rights-of-way.

Throughout Arizona, trees, shrubs and saguaros that exist below the power-lines are being felled, even where they are incapable of growing or falling into the power lines. In practice, the utilities are managing the hazard of electrical "flashovers" during fires by maintaining plenty of air space between the power line and the tops of trees. Saguaros are being cleared elsewhere for the same reason—the potential that electricity will arc downward through their watery bodies, causing fires that might jeopardize delivery of energy in a way that might be interpreted by NERC as a

In short, more vegetation is being cleared as each utility begins implementing its plan. In practice, utilities remove far more vegetation that the minimum needed to meet NERC rules, to minimize the need for repeated mobilization of field crews. Inadequate field supervision of contractors contributes to the problems. At right is the typical equipment used for clearing.

reportable outage.

Photo provided by TEP

Prioto provided by TEP

All trees, woody shrubs and saguaros may eventually be removed along power transmission lines rated at 200kV or higher, whether situated along public or private lands, along with impacts to plants and animals associated with repeated use of mechanical or herbicide treatments. Mechanical clearings may result in significant degradation of archeological resources. The cleared areas will alter fire behavior. In montane areas, the new clearings may serve as fire breaks. In some lower elevation areas, invasion of non-native grasses in the disturbed areas may actually increase the fire risk. In all locations, vegetation management will more or less permanently alter the characteristics of wildlife habitat under power lines.

Energy reliability standards may soon be extended to 100kV power lines not currently regulated by FAC-003-1.

In conclusion, land managers need to work with utilities, and possibly the Arizona Corporation Commission, to devise field practices appropriate for desert upland and riparian areas to reduce impacts of the sort described here. Better field supervision of contractors can also help. For more information see FERC's factsheet on vegetation management at <a href="http://www.ferc.gov/industries/electric/indus-act/blackout/vm-fag.pdf">http://www.ferc.gov/industries/electric/indus-act/blackout/vm-fag.pdf</a>.

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# ARIZONA CORPORATION COMMISSION

January 28, 2009

Mr. Don Brandt President and CEO Arizona Public Service 400 No. Fifth Street M.S. 9042 Phoenix, AZ 85004

Re: APS Vegetation Management Policies; Destruction of Saguaro Cactus Vegetation in the Black Canyon City area.

Dear Mr. Brandt,

Yesterday, I learned that Arizona Public Service Company's ("APS") vegetation management activities have resulted in the destruction of Saguaro cacti along APS' 500 KV Extra High Voltage Navajo to Westwing power line. It is my understanding that APS is conducting the clearing of most vegetation – including saguaros – in response to new North American Electric Reliability Corporation ("NERC") rules requiring utilities to keep important power lines free from trees and other vegetation that could cause the arcing of the lines resulting in power outages and grid disruptions. Nevertheless, the video footage of construction crews using what is apparently called a Shinn mower to obliterate some of Arizona's most majestic and valued vegetation is disturbing, and raises questions about whether these clearing efforts can and should be minimized. It would appear that some residents in the Black Canyon City area where the saguaro destruction has occurred have also expressed their displeasure regarding the activity.<sup>2</sup>

Therefore, before APS continues with its vegetation removal project beneath the power line, I would like the Company to assure the Commission that it is doing everything it can to limit the destruction of saguaros, and to relocate the cacti where possible. Please identify what APS' current policies are with respect to native plants and the reasoning grounding those policies. Please delineate the number of native plants or saguaros that have been destroyed as a result of these policies along the Navajo to Westwing power line, where these activities are currently occurring or are planned and the length of time these policies have been in place. Additionally, it is my understanding that APS has filed a vegetation removal plan with the Bureau of Land

<sup>&</sup>lt;sup>1</sup> A video apparently capturing an APS construction crew destroying a Saguaro cactus has been posted on YouTube at http://www.youtube.com/watch?v=rOwigQXpB68.

<sup>&</sup>lt;sup>2</sup> See "APS Forestry Program Clearing Right of Way,"

http://bigbugnews.com/main.asp?Search=1&ArticleID=49117&SectionID=1&SubSectionID=1&S=1

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Management. Please supply this plan to the Commission, and any maps in the possession of APS that outline where the saguaro removals have occurred or are slated to occur.

In a conversation with an APS official yesterday, I was told that APS believes that saguaros must be destroyed because they present a significant danger of acting as a conductor of electricity, due to their high water content, and could thus be the source of an arcing occurrence, in which electricity crossing Extra High Voltage power lines might conceivably pass from the line to the cactus below. Given this assertion, I would be interested in knowing whether APS has conducted, or is aware of, any studies demonstrating that saguaros have ever caused such an arcing incident, or have ever been the cause of a major power outage. If no such studies exist, please describe the Company's reasons for believing this threat exists.

Additionally, as you know, the Arizona Department of Agriculture has prescribed specific rules requiring an application and notice before a landowner can destroy native plants. While the Department of Agriculture has informed me that APS has consistently provided adequate notice as required by state law,<sup>3</sup> in the future, I believe it would be beneficial for the Commission to be notified of such major vegetation clearing projects prior to their commencement.

Finally, it would appear that APS' clearing efforts on the Navajo power line are soon scheduled to reach into areas near major population centers – including an area north of Anthem and north of Vistancia in Phoenix, where this power line traverses on its way to the Westwing substation. Please tell the Commission whether the Company has conducted any public outreach to nearby communities explaining the Company's view that it must conduct this clearing and any efforts APS is undertaking to mitigate impacts on saguaros and other vegetation. Please also describe the ways in which the Company has communicated with the Black Canyon City community regarding these issues.

Thank you for your attention to my questions.

It would appear that state law only requires those who wish to remove or destroy saguaros on private land to provide 20 days notice to the Department of Agriculture, and that such notice may be accomplished verbally. See ARS §3-904. The Commission's own power plant and line siting statute, ARS 40-360.06 requires that the Line Siting Committee specifically consider plant life, scenic areas and the total environment of the area in their review of power plant and power line applications, and provides the Committee the power to condition a decision upon these factors. For instance, the following language was included in the Line 136 case, Decision No. 70325: "The Applicant shall comply with the notice and salvage requirements of the Arizona Native Plant Law and shall, to the extent feasible, minimize the destruction of native plants during Project construction. Before construction on this Project may commence, the Applicant must file a construction mitigation and restoration plan ("Plan") with ACC Docket Control. Where practicable, the Plan shall specify that the Applicant use existing roads for construction and access, minimize impacts to wildlife, minimize vegetation disturbance outside of the Project right-of-way, and revegetate native areas following construction disturbance." Unfortunately, this provision does not extend to the maintenance of the power lines, something this Commission may want to consider including in future line siting Orders.

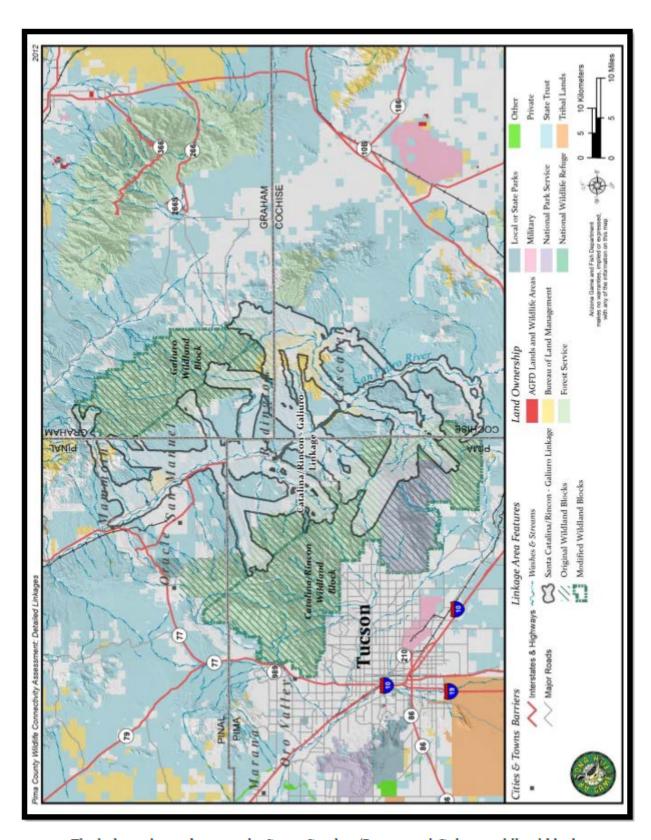
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Sincerely,

Kris Mayes Chairman

Cc: Ernest Johnson

Janice Alward Lyn Farmer Mike Kearns Rebecca Wilder



The linkage design between the Santa Catalina/Rincon and Galiuro wildland blocks

(As excerpted, with permission, from Pima County Wildlife Connectivity Assessment:

Detailed Linkages. Santa Catalina/Rincon – Galiuro Linkage Design.)