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Mr. Adrian Garcia, Project Manager
SunZia Southwest Transmission Project
Bureau of Land Management
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NMSunZiaProject@blm.gov

Dear Adrian:

The Casacabel Working Group (CWG) would like to provide the following assessment of the Draft Environmental Impact Statement for the SunZia Southwest Transmission Project. This document includes several attachments in support of our recommendations.

The mission of the Cascabel Working Group is to educate others about the Middle San Pedro River Valley and to advocate for the protection of the valley's environment, culture and traditional land uses. The CWG represents a supermajority of valley residents and was formed specifically to represent them. We work closely with the Natural Resource Conservation Districts in the Middle and Lower San Pedro Valley, which represent predominantly the valley's ranchers. We also work collaboratively with a broad spectrum of environmental and public interest groups predominantly in southern Arizona.

Recommendation: The *No Action* Alternative

We strongly recommend that the "No Action" alternative is the only acceptable decision for this project. This recommendation is based upon the following:

1. The magnitude of the environmental values that must be sacrificed to complete this project
2. The sound and compelling alternatives that exist to achieve its stated objectives
3. The economic factors that make building this project untenable

The fact that solid, more economically feasible alternatives are available to achieve this project's purported goals supports our recommendation, as does the fact that this project cannot be profitably built. This project is also greatly muddled by having been specifically proposed to provide transmission capacity for the project proponent's own yet-to-be-built 1,000-MW natural gas-fired power plant. While we document this fact and take issue with the project's stated purpose and need, the following review focuses more on whether this stated purpose and need can be met in other, more efficient ways.

Thank you for considering these comments.

Sincerely,

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Attachments (4)

1. A Review of the Impacts Upon the San Pedro Valley and the Aravipa Region

1.1 Introduction

What argues most strongly against this project are the environmental sacrifices that must be made to complete it. The two primary alternative routes for this project in Arizona being considered between the Willow and Pinal Central substations –using the San Pedro River Valley or crossing the Galiuro Mountains near Aravaipa –both cross highly sensitive areas that have long been the focus of intense conservation efforts. The CWG extensively documented these values in our two contributions to the SunZia DEIS, “Draft Environmental Impact Statement Contributions for the Proposed SunZia Transmission Line Routes Traversing the San Pedro River Valley.” and “Draft Environmental Impact Statement Contributions for the Proposed SunZia Transmission Line Route Traversing the Aravaipa Watershed and Lower San Pedro River Valley.”¹

We have also documented our concerns in a letter to President Obama’s top energy and environmental policy advisors, which is included as Attachment A. The environmental values and investments that this project affects are listed in Tables 1, 2, and 3. Without this project being of critical and overriding importance to this nation’s well-being, the magnitude of its environmental impacts cannot be justified, especially when viable alternatives for achieving the project’s stated objectives exist and the project lacks financial viability.

1.2 Overview of the Impacts of the Preferred Alternative Segment 4C2c, San Pedro River Valley

What is most damaging about the preferred alternative is opening an entirely new corridor for 30 miles parallel to the San Pedro River, the most sensitive and highly valued valley in southern Arizona if not the Southwest. The route also parallels the El Paso Natural Gas pipeline for an additional 12 miles and then follows a new corridor segment for another 5 miles, following the valley for nearly 47 miles. This greatly impacts the valley’s highly prized conservation values, summarized in Tables 1–3.

This route seriously impacts the U.S. Fish and Wildlife Service’s current Collaborative Conservation Initiative for the Lower San Pedro River Valley (Figure 1). The route closely parallels the acquisition boundary for a new wildlife refuge for nearly the entire length that the route is in the valley. The federal government is working at cross purposes with its own conservation initiatives here.

In addition, the preferred alternative must cross the Catalina/Rincon-Galiuro corridor that has been part of an Arizona State Land Reform initiative for several years. This proposition seeks to conserve these Arizona State Trust lands in the San Pedro Valley for conservation purposes in perpetuity. The preferred alternative must bisect these lands (see Figure 2).

¹ For additional comments by the Cascabel Working Group on the SunZia DEIS related to these two Arizona route alternatives – using either side of the San Pedro Valley or crossing the Galiuro Mountains near Aravaipa – see submissions by Daniel Baker (San Pedro Valley with emphasis on subroutes 4C2a, 4C2b, and 4C2c) and David Omick (Aravaipa crossing with emphasis on subroutes 4A and 4B).

Table 1. Summary of Lower San Pedro River Valley environmental values

- One of the Nature Conservancy’s “Last Great Places”
 - Last free-flowing river in the Desert Southwest
 - Part of the largest unfragmented landscape in Arizona outside the Grand Canyon region
 - One of the three principal desert life corridors in the Southwest (along with Colorado and Rio Grande Rivers)
 - Exceeds the Rio Grande River Valley in biological richness
 - Hosts the largest mammal species diversity in North America
 - Recognized as a Globally Important Bird Area by the American Bird Conservancy
 - Principal north-south migration corridor for Central and South American birds
 - Habitat for numerous threatened and endangered species
 - Hosts one of the largest remaining intact mesquite forests in the world
 - Rich archaeological history dating from earliest North American human occupation (Clovis)
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Table 2. Current and recent federal conservation initiatives in the Lower San Pedro Valley

- *U.S. Fish and Wildlife Service* Lower San Pedro River Wildlife Refuge and Collaborative Conservation Initiative
 - *America’s Great Outdoors* Lower San Pedro River conservation initiative
 - *NRCS/USFWS* joint Working Lands for Wildlife Habitat initiative
 - *Resolution Copper Mine* Land Exchange (7B Ranch)
 - *USDA Forest Service* Forest Legacy Program’s #1 preservation objective in 2009
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Table 3. Other agencies and organizations with conservation lands and easements in the Lower San Pedro Valley

- *Archaeology Southwest* – Bingham Cienega, Redington Ball Court (fee lands) and easements on other privately owned parcels.
 - *Arizona Game and Fish Department* – newly acquired fee lands from ASARCO and John Smith near Aravaipa; holder of Forest Legacy conservation easements near Cascabel; other easements near ASARCO properties.
 - *Bellota Preservation Corporation* – lower Buehman Canyon (multiple fee parcels)
 - *Bureau of Land Management* – Cascabel conservation area (fee and easement), Muleshoe Joint Management Area and proposed 7B Resolution Mine land exchange.
 - *Bureau of Reclamation* – San Pedro Preserve at Dudleyville, Cook’s Lake, Spirit Hollow, Three Links Farm (fee and easement mitigation lands)
 - *Nature Conservancy* – San Pedro Preserve at Dudleyville, H&E Farm, Aravaipa Canyon, lower Hot Springs Wash, Muleshoe Ranch Preserve, Three Links Farm (fee and easement lands)
 - *Pima County* – A-7 Ranch, Buehman Canyon, Bingham Cienega, Six Bar Ranch (fee lands)
 - *Saguaro-Juniper Corporation* – lower Hot Springs Canyon (fee lands)
 - *Salt River Project* – Adobe Preserve North, Black’s Farm, Spirit Hollow (fee mitigation lands)
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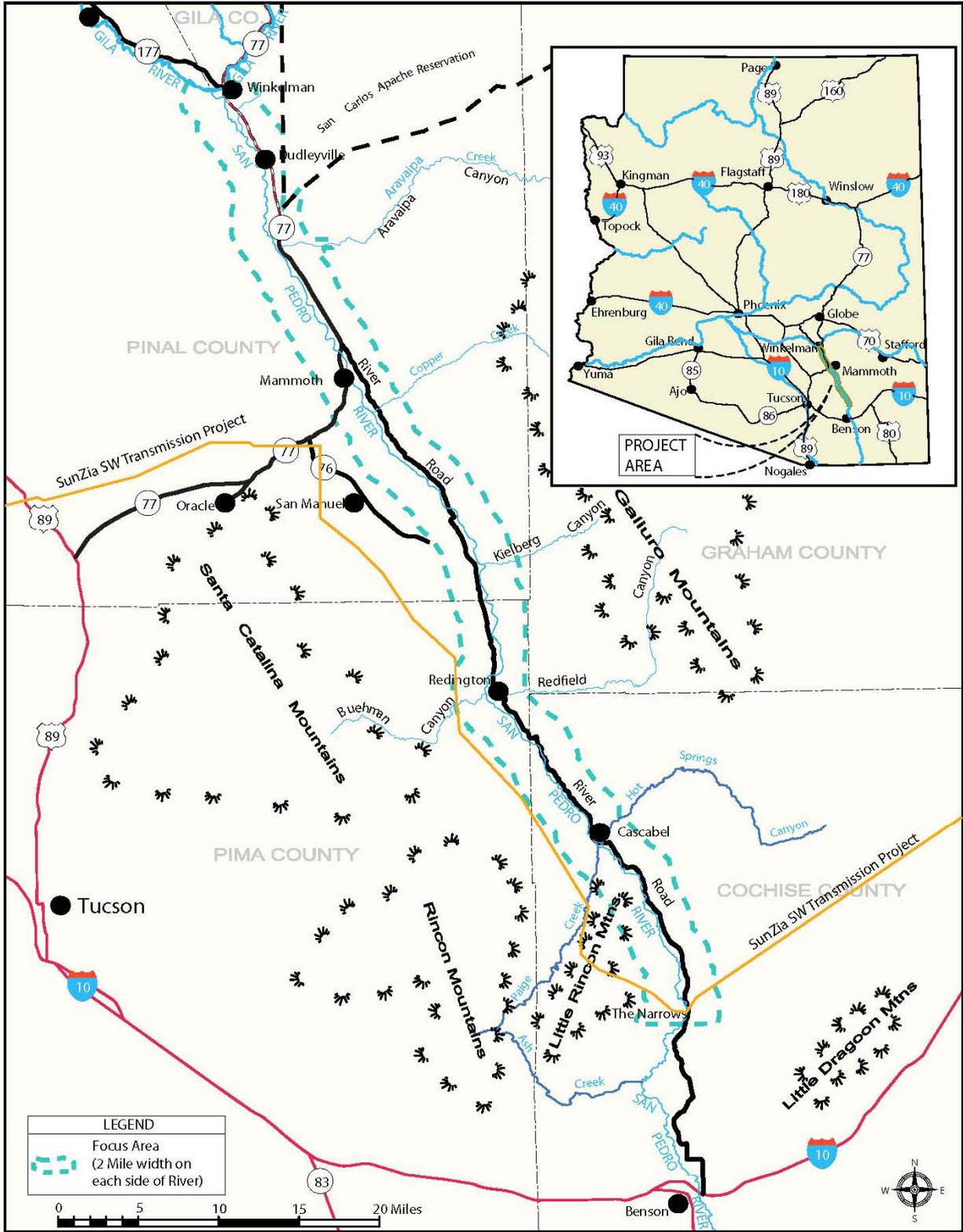


Figure 1. Impact of the SunZia preferred alternative on the acquisition envelope (dashed green line) for the Lower San Pedro River National Wildlife Refuge, proposed as part of the U.S. Fish and Wildlife Service’s current Lower San Pedro River Valley Collaborative Conservation Initiative.

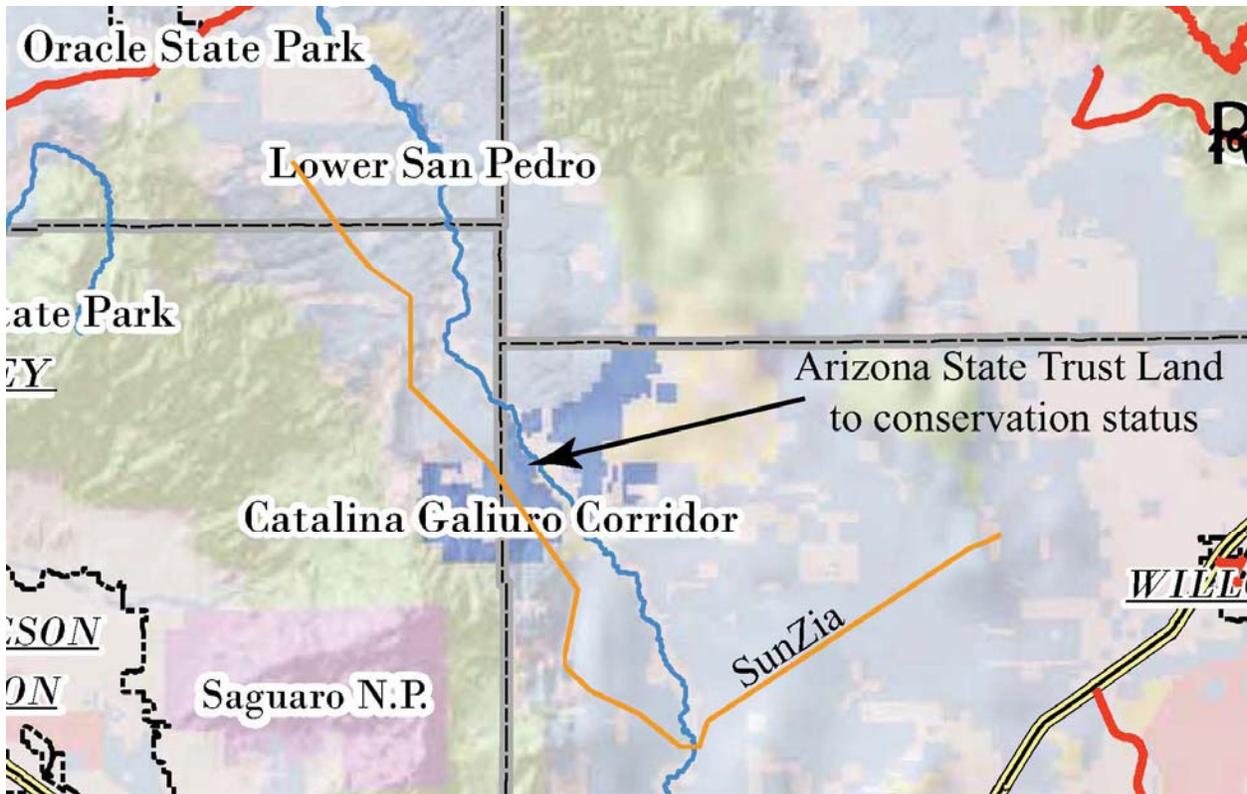


Figure 2. Impact of the SunZia preferred alternative on Arizona State Trust Land being considered for inclusion in conservation status in Arizona State Trust Land Reform initiatives (dark blue areas). The blue irregular line is the San Pedro River.

The important features that SunZia impacts within the San Pedro Valley portion of the preferred alternative are listed in Table 4. Of great importance is the largely unfragmented nature of this entire area, which includes the Aravaipa region. This is the largest unfragmented area in the state of Arizona outside the Grand Canyon area. Figure 3 is the habitat fragmentation map of Arizona produced by the Arizona Game and Fish Department, while Figure 4 shows the critical portion of the preferred alternative in the San Pedro Valley marked by the red line. The darker the blue in these figures, the more unfragmented the habitat. These maps demonstrate how unique this area is environmentally and why it is important to protect it against large infrastructure projects such as SunZia that would degrade it.

Table 4. Preferred alternative (route 4C2c) impacts in the San Pedro Valley from south to north

Feature	Sensitivity and impacts
Allen Flat	While the SunZia preferred alternative parallels Tucson Electric Power Company's 345-kV lines across Allen Flat, it is located 1,800-2,000 feet south of TEP's corridor, necessitating construction of an entirely new road to build and maintain the project. Creating an entirely new road undermines the reason for routing the project in this corridor. This area harbors a small pronghorn antelope herd.
San Pedro River crossing	Of critical sensitivity is the crossing of the San Pedro River just north of the Narrows. The riparian mesquite forest is particularly sensitive. Figure 5 shows the impact of clear-cutting of riparian

	vegetation associated with Tucson Electric Power Company's 345-kV lines across the river. This occurs downriver from the proposed SunZia crossing ~0.65 miles and is an unacceptable impact.
Little Rincon Area	The preferred alternative on the west side of the San Pedro River <i>follows a route that was not presented in public scoping</i> , crossing the Little Rincon area and dropping into Paige Canyon attempting to stay away from the river. The greatest impact occurs along Redrock Creek and McCormick Canyon.
Paige Canyon	Of particular concern with this route segment is its traverse down Paige Canyon, the principal wildlife corridor connecting the Rincon Mountains with the San Pedro River. The lines are sited just above the riparian area on the east side of the canyon for more than 2 miles.
Roble and Soza Canyons/A-7 Ranch	The preferred alternative must cross both Roble and Soza Canyons, large tributaries to the San Pedro River on the west. These canyons are part of Pima County's A-7 Ranch, which was acquired with open space bond funds at a cost of \$2 million. This acquisition was undertaken specifically to preserve these lands for conservation purposes. The preferred alternative splits this ranch lengthwise into two nearly equal halves.
Buehman Canyon	After crossing Pima County's A-7 Ranch, the preferred alternative must cross lower Buehman Canyon, which contains one of the rare perennial streams that enters the San Pedro Valley and has been designated 'Unique waters' status.. All of the private land within Buehman Canyon between the river and the National Forest is in conservation status, much of it having been transferred to Pima County from the Nature Conservancy.
Six-Bar Ranch/Edgar Canyon	After crossing Buehman Canyon, the preferred alternative must cross Edgar Canyon, which drains Pima County's Six Bar Ranch. The Six Bar Ranch was purchased at a cost of \$11 million by Pima County again as part of its open space acquisition program. The preferred alternative skirts the ranch on the east and then crosses associated State Trust Land grazing leases on the very northeast corner of the ranch.

1.3 Impacts of the Alternative Subroute 4B, Sulphur Springs Valley, Including the Aravaipa Valley–Galiuro Mountains Crossing

While the crossing of the Galiuro Mountains at Aravaipa was not selected as the preferred alternative, the pressures against using the San Pedro Valley for SunZia may make the Bureau of Land Management reconsider the Aravaipa route as a less impactful alternative. *We make the strongest statement possible that the Aravaipa route is not a better choice and that the impacts there would be as great and as damaging.* This route crosses the roadless area that unites the Aravaipa Canyon and Galiuro Mountain Wildernesses and impacts the viewshed of the Santa Teresa Wilderness. The total combined wilderness acreage is ~120,000 acres.

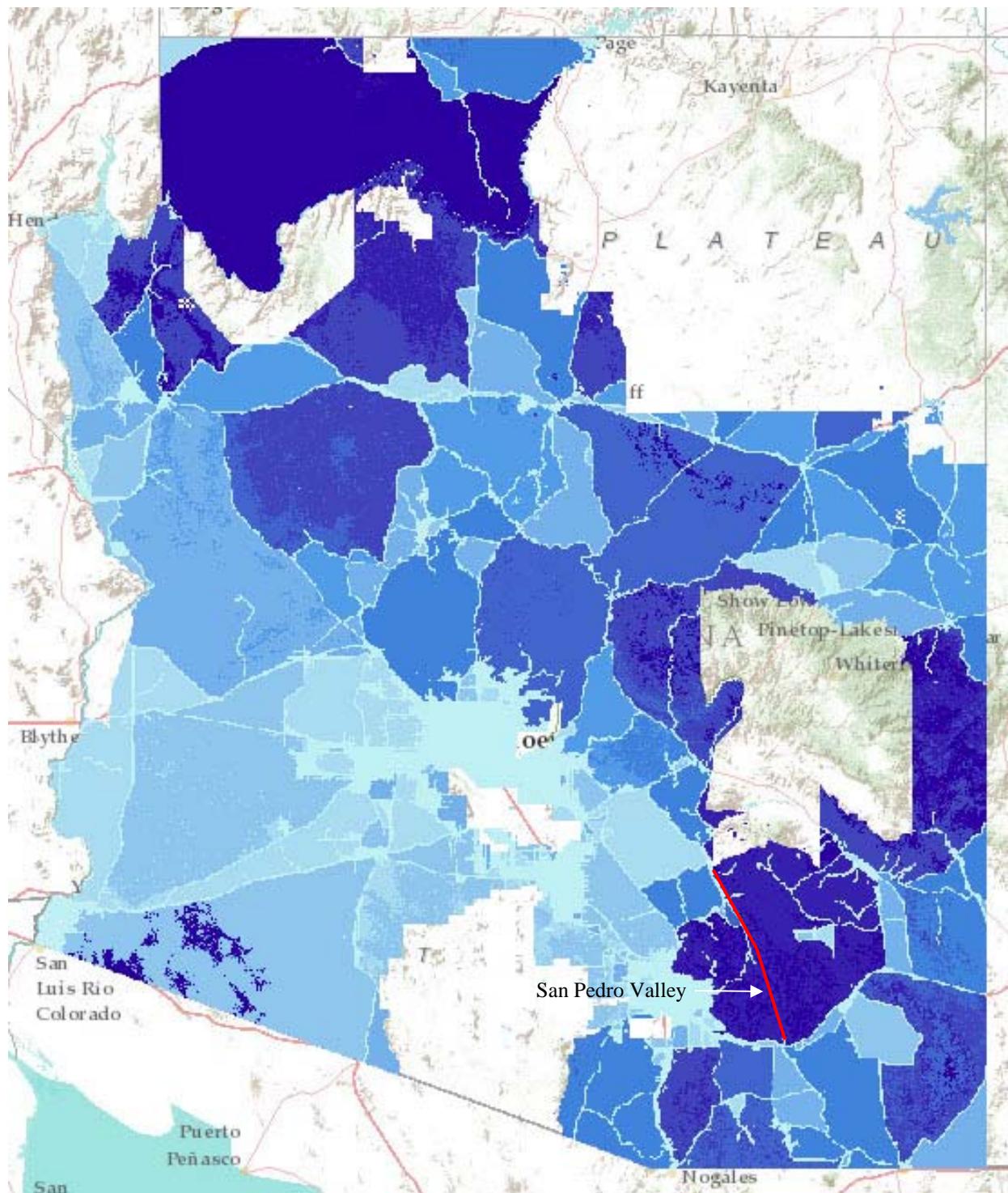


Figure 3. Habitat fragmentation map of Arizona produced by the Arizona Game and Fish Department, available from <http://www.habimap.org/habimap>. The darker the blue, the less habitat fragmentation. The lower San Pedro Valley/Aravaipa region remains the second least fragmented landscape in Arizona, surpassed only by the Grand Canyon area. The approximate location of the San Pedro River Valley is shown by the red line.

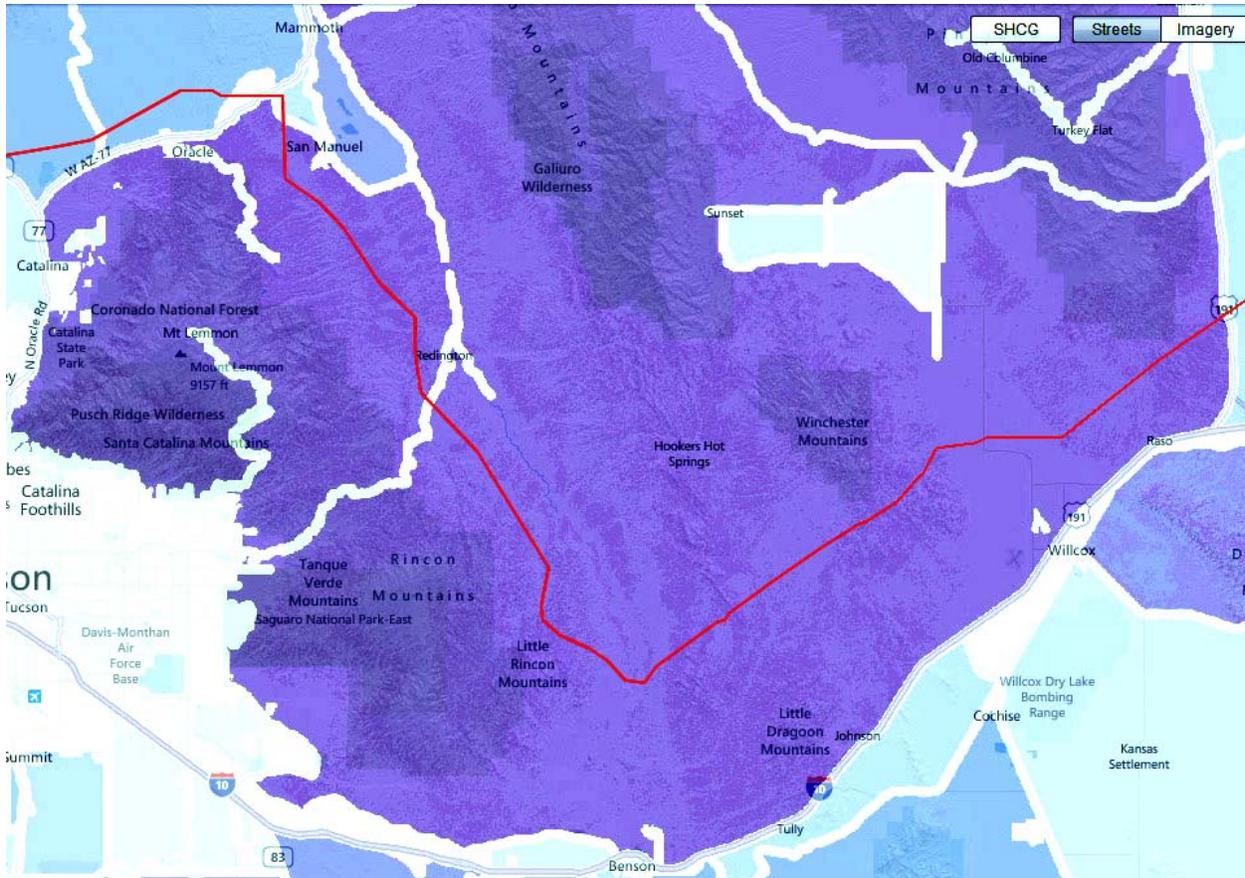


Figure 4. A more detailed view showing the SunZia preferred alternative (red line) in the San Pedro Valley superimposed on the Arizona Game and Fish Department’s fragmentation map for Arizona. The distance from Benson (south) to Mammoth (north) along the river is ~60 miles.

Subroute 4B threads its way through a narrow two-mile-wide passage between Bureau of Land Management lands incorporated into its Aravaipa Ecosystem Management Plan and lands within the Coronado National Forest being considered for addition to the Galiuro Wilderness. Conservation investments at both the east and west ends of Aravaipa Canyon and along its margins by the Nature Conservancy are substantial.

Again, we refer the reader to the Cascabel Working Group’s DEIS contribution, “Draft Environmental Impact Statement Contributions for the Proposed SunZia Transmission Line Route Traversing the Aravaipa Watershed and Lower San Pedro River Valley,” which documents the rich environmental and biological values of this area and its uniqueness. For a detailed analysis of the SunZia DEIS regarding routes that cross the Galiuro Mountains at Aravaipa, see David Omick’s submission for the Cascabel Working Group on subroutes 4A and 4B.

2. The Consequences of Choosing the *No Action* Alternative

2.1 Can Other Alternatives Meet the Objectives of the SunZia Project?

The DEIS states that the principal objectives of this project are to (1) provide transmission capacity for renewable energy generation development, largely to meet the renewable energy



Figure 5. Clear-cutting of riparian vegetation across the San Pedro River beneath the double 345-kV lines that connect Tucson Electric Power Company’s Springerville generating station with Tucson. The San Pedro River flows sinuously from north to south across the photo, with the Cascabel Road shown to the right. This clear-cut occurs 0.65 miles north of the crossing of the SunZia preferred alternative.

portfolio standards of Arizona, California, and Nevada, (2) relieve grid congestion across southwestern New Mexico and southeastern Arizona, and (3) increase overall system reliability. Notwithstanding that this project was proposed specifically to provide transmission capacity for the SouthWestern Power Group’s Bowie, Arizona, 1,000-MW natural gas-fired power plant, this section of our discussion specifically addresses whether other projects and strategies can meet these three stated objectives.

Given the other projects currently being proposed in the region and the developing physical and economic realities of renewable energy development in the states this project would purportedly serve, the answer to the question whether the “No Action” alternative can meet these needs is an unequivocal “yes.” That this is possible strongly supports the “No Action” alternative as a sound choice. This choice both protects critical environmental values while meeting essential regional needs more efficiently and economically using other currently proposed projects and strategies.

2.2 Meeting Arizona, California, and Nevada Renewable Energy Portfolio Standards

A fundamental justification given for this project by the BLM and the project proponent is the purported need to meet the renewable energy portfolio standards of the states of Arizona, California, and Nevada. New Mexico is portrayed as having an excess of renewable energy that it can sell to these states, which are portrayed as being unable to meet their needs with their own

resources. It has become clear, however, that these states do not need this power and are unlikely to avail themselves of the power that New Mexico might provide.

Attachment B includes a letter and email message from Michael Picker, Senior Adviser to Governor Brown of California for Renewable Energy Facilities, testifying that California utilities do not need this power and are unlikely to purchase it. In addition, Arizona is easily on its way to meeting its renewable energy portfolio standard with its own resources, and likewise, Nevada utilities have purchased enough Renewable Energy Credits to meet their needs through 2029. Attachment C contains published articles that confirm this. Utilities prefer to rely on renewable energy resources that can be developed closer to load rather than import power over many hundreds of miles from out of state.

What is lacking in proposing SunZia is an assessment of the magnitude of renewable resources in these southwestern states and whether these states need to import power from New Mexico, or for that matter, whether New Mexico needs to import power from them. To put this in perspective, Wyoming has enormous coal reserves, but no one would build a coal train to the Four Corners region to import coal there because that region already has enormous coal reserves. Yet in many respects, this is the rationale for building SunZia: a huge transmission system is being proposed largely because renewable energy sources exist in a particular region, not because those resources can or would be used in distant places. While proposing this project may satisfy a highly valued policy ideal, economics does not support building it. *These resources first need to have a use where they are proposed to be used.*

This is to say, the purported renewable energy objectives of SunZia can easily be met with more local resources, and building a huge transmission system to transfer renewable energy across vast distances within the Southwest is ultimately unnecessary. This lack of need is characteristic of how renewable resources are distributed. Coal is concentrated in very specific areas, and power generated by it must be transported long distances. Renewable energy is very much the opposite: it is a far more abundant local resource that lends itself to local or sub-regional development and distribution. This is a much more cost-effective and pragmatic approach to using this resource.

While huge renewable energy reserves may exist in more remote areas, this does not mean that a need exists to develop and deliver them. A large percentage of them will remain unused, held in reserve in the same way that the nation's huge coal reserves are. More local renewable resources must be exhausted first for these more distant sources to be useful and economic, and it is very possible that as demand grows and technology advances, utilities can and will progressively develop local reserves to fully meet their needs. This is because the local renewable energy potential in the Southwest is so huge.

2.3 Other Projects Being Developed to Deliver New Mexico Renewable Energy to Western States

In evaluating the need for SunZia, it is essential to consider the alternative projects that exist for exporting New Mexico renewable energy and increasing system reliability. New Mexico's Renewable Energy Transmission Authority has aggressively pursued the development of renewable transmission capacity largely at the behest of potential New Mexico wind energy providers who are eyeing Western markets to sell their power to. In doing so, they have largely ignored the actual markets for this power, which are far weaker than they have envisioned. They

have assumed that California or other states will purchase every watt of power they can produce, and it is clear now that this will not be the case. Table 5 gives a list of current projects being developed to export New Mexico renewable energy.

What is clear from this is that not all of this transmission capacity can be supported by generation in the time frame needed to pay for it. The immediate market for the magnitude of power that these lines can carry does not exist, and it may never exist because of the enormous renewable energy potential of the three states targeted for it: Arizona, California, and Nevada.

Table 5. Current high-voltage and extra-high-voltage New Mexico transmission projects focused on exporting renewable energy.

Project	Description	Capacity	Purpose
Southline	double-circuit 345 kV/230 kV-kV lines	1,000-1,500 MW	Southwestern New Mexico to Central Arizona. Develop solar energy and increase reliability.
High Plains Express	single 500 kV-kV line	1,500 MW	Central New Mexico to central Arizona. Develop predominantly wind energy. (currently on hold because the risks to build the project are considered too high)
Centennial West Clean Line	single HVDC 500-kV line	3,500 MW	Central New Mexico to California. Deliver predominantly wind energy.
Lucky Corridor	double-circuit 230-kV lines	1,100 MW	Deliver Northeastern New Mexico solar and wind generated electricity to Taos, with transfer to the Four Corners hub.
Power Network New Mexico	double-circuit 345-kV lines	1,500 MW	Deliver central and eastern New Mexico renewable energy to Rio Puerco, with transfer to the Four Corners hub.
Total Capacity		8,600-9,100 MW	

This strongly suggests that SunZia’s enormous amount of transmission capacity will likely not be used in the time frame required to recover costs and may never be fully needed. For this much total transmission capacity to be economically viable – up to 12,600 MW – it must be built over a much longer time frame with construction staggered in time. It must not be built simultaneously. Some of these projects are doomed to financial failure otherwise, and they may never be needed if the targeted states aggressively and efficiently development their own more local in-state renewable resources. Improvements in renewable energy technology and the changing economics of renewable generation will also reduce or eliminate the need to import power from out-of-state generation projects.

2.4 Reducing Grid Congestion and Increasing System Reliability

A more general regional issue that SunZia claims to address is grid congestion and system reliability across southwestern New Mexico and southeastern Arizona. This issue has been recognized by regional transmission planning groups in the Southwest as important. If the “No Action” alternative is selected, can these needs be met? Again, the answer is “yes.”

These issues are currently being addressed by the Southline Project, a transmission system proposed from the Afton generating station southwest of Las Cruces to the Saguaro generating north of Tucson. This project consists of (1) building a new double-circuit 345-kV line from the Afton generating station to the Apache power plant near Willcox, Arizona, and (2) replacing the single-circuit 115-kV transmission line between the Apache power plant and the Saguaro generating station with a double-circuit 230-kV line. This project is 355 miles long and essentially parallels the SunZia Southwest Project its entire length, although it will pass through Tucson rather than bypass it as SunZia does. This project will reduce congestion and increase reliability across this region in the same way that SunZia would. It will also provide transmission capacity for solar development along this corridor. This project will provide 1,500 MW or more of transmission capacity in southwestern New Mexico and 1,000 MW or more of transmission capacity in southeastern Arizona.

The Southline Project is more appropriately scaled for this region and will accomplish essentially all that SunZia would with minimal environmental impact. New transmission capacity requires generation capacity to support it, and this region cannot support building both of these projects simultaneously. Building SunZia merely to transport wind-generated electricity to Arizona and California is very risky in light of renewable energy development in those states. In addition, four other projects have been proposed to export wind-generated electricity from New Mexico, noted in Table 5. These four projects have a total capacity of 7,600 MW. One of these, the High Plains Express Project (HPX), begins at the same exact location as SunZia and ends ~30 miles northeast of where SunZia does. This project would accomplish precisely the same purpose as SunZia would in delivering New Mexico wind energy westward. It follows an existing corridor for its entire length from the Rio Grande River to Phoenix, greatly reducing environmental impacts. HPX is currently on hold for the very reasons that make SunZia so vulnerable financially.

We cannot recommend more strongly that the Southline Project rather than SunZia be chosen to meet the regional need for reducing grid congestion and increasing system reliability. The Southline Project will also provide vastly more benefit to southeastern Arizona because of the multiple grid interconnections it will have. This permits a much more adequate distribution of power in this region as well as more interconnection opportunities for renewable energy facilities. Building SunZia and the Southline simultaneously is redundant and jeopardizes the success of both projects. Both physical and economic pragmatism dictate that only one of these should be built at this time. Even then, the financial success of whichever project is favored depends upon the rate of construction of new generation facilities across this region. The slower this rate, the more vulnerable the project is. Whether these new facilities are renewable or nonrenewable, they are essential to the long-term success of either project.

3. The Lack of Project Economic Viability

3.1 Conclusions from High Plains Express Project Feasibility Studies Regarding SunZia

No feasibility study has ever been done for the SunZia Project, and the most relevant studies are those undertaken for the related High Plains Express Project (HPX). These studies provide the best information for assessing the economic feasibility of SunZia. SunZia is the southern leg of

that portion of the High Plains Express Project between central New Mexico and central Arizona, and SunZia was included as an integral part of the feasibility studies for HPX. The High Plains Express *Stage 2 Feasibility Report* came to the following conclusions. All of these points are relevant for SunZia and make clear the risks of this project.

- High level of uncertainty
 - Scenarios show wide range of outcomes.
 - Public policy adds additional uncertainty.
- Specific demand for HPX has not been identified.
- Although many of the resulting benefit-cost ratios indicate a net positive result, the overall economics and associated risks do not warrant development without further study.
- There is no clear method for cost allocation and cost recovery over multiple jurisdictions with varying benefits.
- At this time, key uncertainties do not merit moving forward with a full commitment to develop the overall project unless a customer is identified that provides for cost recovery.
- There is significant uncertainty around the base-case assumptions.
- The project risk in terms of both development capital and construction capital is very large.
- At this time, it is not reasonable to risk significant development capital based on the benefit-cost ratio for the entire project, in light of the uncertainties.

These multiple reasons for placing the High Plains Express Project on hold should be more than enough to give one pause about building SunZia.

3.2 Arizona and California Use of New Mexico Power – Will It Occur and Be Enough?

While New Mexico has substantial renewable energy resources, *the renewable energy resources of Arizona, California, and Nevada are in themselves huge and make these states self-sufficient in renewable energy for the reasonably foreseeable future* (see Attachment C). Rapidly increasing Arizona and California renewable energy capacity has sharply decreased the demand for out-of-state resources and makes the use of them by these states highly questionable. Utilities prefer to develop renewable generation close to load rather than import renewable energy from great distances.

The market potential for New Mexico power in western states is now clearly much less than anticipated than when SunZia was proposed, meaning that the out-of-state market for New Mexico power will develop far more slowly than expected, if at all. Consequently, this reduced or lacking market greatly reduces the amount of transmission capacity that can be financially supported. *Power must be sold to utilities through this project in order to pay for the project.* Development of these more local resources sharply reduces the need for the enormous amount of transmission capacity that SunZia would provide and greatly increases the project's financial vulnerability. SunZia is thus a very high risk project that demands close financial scrutiny, not only by the federal government but by potential investors as well.

In addition, delivering power to California would severely reduce central and western Arizona's transmission capacity (see Attachment D, CWG letter to the Arizona Corporation Commission). These impacts must be resolved before permitting SunZia to proceed. At a minimum, SunZia

would have to extend one 500-kV line from the Pinal Central substation to the Palo Verde hub to protect Arizona transmission capacity for in-state use and solar development. Without this, SunZia will *reduce* not *increase* transmission capacity in Arizona for solar development because most development is scheduled to occur in the central and western parts of the state.

4. Recommendation: The *No Action* Alternative

Given the route alternatives, the environmental impacts, the alternative projects and strategies for meeting the needs that SunZia would, and the lack of financial viability for the project, *the No Action alternative is the sound choice here*. Energy planners could consider combining the eastern portion of the SunZia Project with the Southline Project if they wish to provide some access to wind generation in central New Mexico. Again, the use of this wind generation by Arizona and California utilities is likely to be small, which places this project as a whole at great financial risk. Combining these two projects would make both more sound and more financially manageable. Even so, building a single combined project entails substantial risk.

This review makes apparent how haphazard and unplanned the strategies have been for proposing and building transmission capacity in this region. It is “every man for himself,” which leads to overlapping projects and excessive transmission capacity. That is, too much transmission capacity is being contemplated simultaneously, and energy markets cannot financially support it or pay for it. Regional transmission planning should be comprehensive and coordinated rather than piecemeal and contradictory. In addition, planners need to develop a comprehensive view of how renewable generation is likely to develop based upon (1) resource location, (2) local resource magnitude, and (3) market constraints.

In light of their immense reserves, Southwestern states should be self-sufficient in their renewable energy resources. This essentially eliminates the need for New Mexico to provide more western states with renewable energy and thus reduces the need to build large amounts of transmission capacity for this purpose. Building an efficient, cost-effective transmission system that can survive financially is difficult to do given all of the variables involved and the resulting risks.

SunZia’s proponents have clearly not adequately assessed these risks or adjusted for them. SunZia assumes that if the project merely obtains the necessary permits, the project will somehow succeed and renewable projects will be built to feed it with power. This is a financially hazardous and dangerous presupposition. The federal government must decide whether it should issue a permit for a project that will almost certainly result in excessive capacity and have a high likelihood of ending in financial failure. *The federal government must also decide whether it wishes to partially finance such a project or become a partner to it because ultimately this is what will be asked and required to build it.*