



## Coalition for Sonoran Desert Protection

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Arizona Center for Law in  
the Public Interest  
Arizona League of  
Conservation Voters  
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Arizona Native Plant Society  
Center for Biological  
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Greater Tucson  
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Alliance  
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Coalition  
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Silverbell Mountain Alliance  
Sky Island Alliance  
Sky Island Watch  
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Sonoran Permaculture Guild  
Southwestern Biological  
Institute  
Tortolita Homeowners  
Association  
Tucson Audubon Society  
Tucson Herpetological  
Society  
Tucson Mountains  
Association  
The Wildlands Project  
Women for Sustainable  
Technologies

Ms. Beverley Everson, Geologist  
Coronado National Forest  
300 W. Congress St.  
Tucson, AZ 85701

### **RE: Rosemont Copper Project EIS Scoping Comments**

Dear Ms. Everson:

I am writing on behalf of the Coalition for Sonoran Desert Protection (Coalition), an alliance of 35 neighborhood, conservation, and community groups directly representing tens of thousands of residents throughout Southern Arizona. The Coalition's mission is *to achieve the long-term conservation of biological diversity and ecological function of the Sonoran Desert through comprehensive land-use planning, with primary emphasis on Pima County's Sonoran Desert Conservation Plan (SDCP)*. We respectfully submit the following scoping comments (found in full in the attachment) on the proposed Environmental Impact Statement (EIS) for the Rosemont Copper Project in the Coronado National Forest.

In summary, the Coalition requests that the EIS address the following issues:

- The proposed activities for the Rosemont Copper Project will significantly and detrimentally impact some of the most biologically important areas and wildlife habitat in Pima County as identified in the County's Sonoran Desert Conservation Plan. The project area occurs entirely within the County's Conservation Lands System, including the specific designations of Important Riparian Area, Biological Core Management Area, and Multiple Use Management Area. As well, this land contains "Special Elements" that Pima County has committed to conserve: springs, limestone outcrops, intermittent streams, oak/grass ecotone, mesquite, and un-incised floodplain. It is paramount that impacts to these biologically important lands be fully considered in the EIS.
- A suite of at-risk species inhabits or could potentially inhabit the project area. Some of these species include the Chiricahua leopard frog, Arizona shrew, Swainson's hawk, rufous-winged sparrow, giant spotted whiptail, Pima pineapple cactus, western red bat, Mexican long-tailed bat, pale Townsend's bat, lesser long-nosed bat, and jaguar. It is imperative that impacts to all species be considered, and especially those classified as endangered/threatened (federal), a species of concern (state), or vulnerable (Pima County).
- The Rosemont Copper Project will impact both the water resources and riparian areas within the project area along with all of the washes, creeks, springs and riparian habitat downstream, including Davidson Canyon and Cienega Creek. Both the on-site and downstream water resource impacts cannot be overemphasized.
- The project area is part of or adjacent to three potential wildlife linkage zones identified in the *Arizona Wildlife Linkages Assessment*, spearheaded by the Arizona Game and Fish Department and Arizona Department of Transportation in 2007. These wildlife linkage

zones are defined by the assessment as being “important to Arizona’s wildlife and natural ecosystems.” One of these zones was determined to be a “high priority” linkage zone, meaning it has both high biological value and high threat and opportunity value. In addition, one of the six “Critical Landscape Linkages” identified in Pima County’s SDCP lies just north of the project area (across I-10 and south into Cienega Creek).

- All possible scenarios for future mine operations should be considered, including the scenario that the mine may be forced to close at an earlier date than currently scheduled. If the mine is closed prematurely, the EIS should consider impacts to mitigation plans. One mechanism to ensure that mitigation does take place is to require that mitigation funding be provided upfront in a separate, autonomous account. Mitigation should also be in concurrence with the guidelines of Pima County’s Sonoran Desert Conservation Plan and Conservation Lands System.
- Impacts from various monitoring scenarios need to be thoroughly addressed. In general, monitoring for adverse environmental impacts needs to be both robust and continuous throughout construction, operation, and reclamation of the mine. In addition, an adaptive management strategy needs to be completed prior to the initiation of the project to ensure that monitoring results will be utilized in the most effective way possible. There is a vast array of parameters that could be monitored; a monitoring plan grounded in the best available science is crucial to ensure that adverse environmental impacts are avoided and minimized far into the future.
- Pima County should be invited to participate as a cooperating agency throughout the NEPA review process. Pima County has been a national leader in regional conservation planning through the adoption and ongoing implementation of the Sonoran Desert Conservation Plan. The County’s involvement will not only provide useful knowledge on the important ecological aspects of the project area; it will also provide some level of confidence that the NEPA process is being as inclusive as possible.

There are clearly a host of important issues and impacts that need to be thoroughly considered in the Environmental Impact Statement for the Rosemont Copper Project. There is no doubt that mining, leaching, dumping, stockpiling, and other activities associated with mineral extraction are not compatible with conservation of biologically-rich lands. The Tucson community has repeatedly supported conservation of such lands, including those in the project area. The Coalition expects that the Forest Service will make a concerted effort to weigh the full range of impacts associated with this project in the EIS.

Thank you for the opportunity to provide these scoping comments. Please contact me with any questions.

Sincerely,



Carolyn Campbell  
Executive Director

# Coalition for Sonoran Desert Protection

## Summary of EIS Scoping Comments for the Rosemont Copper Project

- **IMPACTS TO BIOLOGICALLY-IMPORTANT LANDS:** The proposed activities for the Rosemont Copper Project will significantly and detrimentally impact some of the most biologically important areas and wildlife habitat in Pima County as identified in the County’s Sonoran Desert Conservation Plan. The project area occurs entirely within the County’s Conservation Lands System, including the specific designations of Important Riparian Area, Biological Core Management Area, and Multiple Use Management Area. As well, this land contains “Special Elements” that Pima County has committed to conserve: springs, limestone outcrops, intermittent streams, oak/grass ecotone, mesquite, and un-incised floodplain. It is paramount that impacts to these biologically important lands be fully considered in the EIS.
- **IMPACTS TO AT-RISK SPECIES:** A suite of at-risk species inhabits or could potentially inhabit the project area. Some of these species include the Chiricahua leopard frog, Arizona shrew, Swainson’s hawk, rufous-winged sparrow, giant spotted whiptail, Pima pineapple cactus, western red bat, Mexican long-tailed bat, pale Townsend’s bat, lesser long-nosed bat, and jaguar. It is imperative that impacts to all species be considered, and especially those classified as endangered/threatened (federal), a species of concern (state), or vulnerable (Pima County).
- **IMPACTS TO WATER RESOURCES AND RIPARIAN AREAS:** The Rosemont Copper Project will impact both the water resources and riparian areas within the project area along with all of the washes, creeks, springs and riparian habitat downstream, including Davidson Canyon and Cienega Creek. Both the on-site and downstream water resource impacts cannot be overemphasized.
- **IMPACTS TO IMPORTANT WILDLIFE LINKAGES:** The project area is part of or adjacent to three potential wildlife linkage zones identified in the Arizona Wildlife Linkages Assessment, completed by the Arizona Game and Fish Department and Arizona Department of Transportation in 2007. These wildlife linkage zones are defined by the assessment as being “important to Arizona’s wildlife and natural ecosystems.” One of these zones was determined to be a “high priority” linkage zone, meaning it has both high biological value and high threat and opportunity value. In addition, one of the six “Critical Landscape Linkages” identified in Pima County’s SDCP lies just north of the project area (across I-10 and south into Cienega Creek).
- **UPFRONT MITIGATION FUNDING:** All possible scenarios for future mine operations should be considered, including the scenario that the mine may be forced to close at an earlier date than currently scheduled. If the mine is closed prematurely, the EIS should consider impacts to mitigation plans. One mechanism to ensure that mitigation does take place is to require that mitigation funding be provided upfront in a separate, autonomous account. Mitigation should also be in concurrence with the guidelines of Pima County’s Sonoran Desert Conservation Plan and Conservation Lands System.
- **ONGOING AND ROBUST MONITORING:** Impacts from various monitoring scenarios need to be thoroughly addressed. In general, monitoring for adverse environmental impacts needs to be both robust and continuous throughout construction, operation, and reclamation of the mine. In addition, an adaptive management strategy needs to be completed prior to the initiation of the project to ensure that monitoring results will be utilized in the most effective way possible. There is a vast array of parameters that could be monitored; a monitoring plan grounded in the best available science is crucial to ensure that adverse environmental impacts are avoided and minimized far into the future.
- **PIMA COUNTY AS A COOPERATING AGENCY IN THE NEPA REVIEW PROCESS:** Pima County should be invited to participate as a cooperating agency throughout the NEPA review process. Pima County has been a national leader in regional conservation planning through the adoption and ongoing implementation of the Sonoran Desert Conservation Plan. The County’s involvement will not only provide useful knowledge on the important ecological aspects of the project area; it will also provide some level of confidence that the NEPA process is being as inclusive as possible.



**1. Impacts to biologically-important lands**

The EIS should fully outline the impacts to the biologically-important lands present within the project area boundaries. The entire project area lies within Pima County's Conservation Lands System (CLS), as designated by the nationally recognized Sonoran Desert Conservation Plan (SDCP). The CLS consists of seven land designation categories, each of which has unique allowable uses and mitigation requirements. Three of these land categories are present in the project area: Important Riparian Area, Biological Core Management Area, and Multiple Use Management Area. In addition, the project is adjacent to a fourth category, Critical Landscape Connection. These land categories are defined as follows (paraphrased from Pima County Draft Multi-Species Conservation Plan 2006):

*Important Riparian Area (IRA)* - characterized by hydro-riparian, meso-riparian, and xero-riparian biological communities that are valued for their higher water availability, vegetation density, and biological productivity. Includes the associated upland areas that provide a framework for linkages and landscape connections. At least 95 percent of the total acreage of lands within IRAs shall be conserved in a natural and undisturbed condition. Every effort should be made to protect, restore, and enhance the structure and functions of IRAs.

*Biological Core Management Area* – characterized by the potential to support high value habitat for five or more priority vulnerable species as identified in the SDCP. At least 80 percent of the total acreage of lands within this designation shall be conserved as undisturbed natural open space, with mitigation required at a 4:1 ratio.

*Multiple Use Management Area* – characterized by the potential to support high value habitat for three or more priority vulnerable species as identified in the SDCP. At least 66 2/3 percent of the total acreage of lands within this designation shall be conserved as undisturbed natural open space, with mitigation required at a 2:1 ratio.

*Critical Landscape Connection* – areas that provide connectivity for movement of native biological resources, but which also contain potential or existing barriers that tend to isolate major conservation areas. Land use changes in these areas should protect existing biological linkages and barriers to the movement of native fauna and pollination of native flora across and through the landscape should be removed. Fragmented corridors of native biological communities should also be restored.

The project area also contains "Special Elements" that Pima County has committed to conserve, including springs, limestone outcrops, intermittent streams, oak/grass ecotone, mesquite, and un-incised floodplain.

Impacts to all of these biologically-important lands – IRAs, Biological Core, Multiple Use Management, Critical Landscape Connection, and Special Elements – should be fully considered in the EIS.

**2. Impacts to at-risk species**

The EIS should fully outline the impacts to all species present in the project area, and especially those classified as federally “endangered” or “threatened,” by the state of Arizona as a “species of concern,” and by Pima County as “vulnerable” under the SDCP. Some of these species include:

- Chiricahua leopard frog
- Arizona shrew
- Swainson’s hawk
- rufous-winged sparrow
- giant spotted whiptail
- Pima pineapple cactus
- western red bat
- Mexican long-tailed bat
- pale Townsend’s big-eared bat
- lesser long-nosed bat
- jaguar

**3. Impacts to water resources and riparian areas**

The EIS should consider impacts to all of the water resources and riparian areas in the project area, along with the washes, creeks, springs and riparian habitat downstream. This includes both groundwater and surface water resources. Impacts to all canyons proposed for dams or tailings, including Barrel, Scholefield and Davidson Canyons, and downstream along Cienega Creek, need to be evaluated in especially close detail, both during mine operation and after closure. It cannot be overemphasized that the EIS needs to consider impacts to water resources and riparian areas both within the project area *and* in all areas downstream of the project area.

The current Mine Plan of Operations outlines plans to create diversions, dams and tailings piles in Barrel and Scholefield Canyons. These activities will essentially destroy the riparian habitat within these canyons. Furthermore, according to a memo written on August 28, 2006 by Julia Fonseca, Pima County Environmental Planning Manager, “Dams and channels will intercept snowmelt and stormwater which would otherwise flow toward Davidson Canyon. The tailings themselves will be designed to inhibit percolation and runoff, so not only will the habitat be destroyed, but the watershed functions will cease...At present, Davidson Canyon underflow provides as much as 20 percent of the water to Cienega Creek near Marsh Station Road Bridge.” Thus, there will be significant ripple effects from the proposed mine operations downstream into the Cienega Creek area and beyond. These effects include significant and permanent degradation of the biological and water resources in these canyons, riparian areas, washes, creeks, and surrounding areas.

**4. Impacts to important wildlife linkages**

The EIS should consider impacts to wildlife linkage zones present in and adjacent to the project area. There are two previous efforts that should be especially considered when evaluating impacts to wildlife linkages.

First, Pima County’s Sonoran Desert Conservation Plan identified six “Critical Landscape Connections” in Pima County. One of these critical landscape connections, across the I-10 corridor along Cienega

Creek, lies due north and adjacent to the project area. Critical landscape connections are defined in section (1) above.

Second, in 2007, the Arizona Wildlife Linkages Workgroup, led by the Arizona Game and Fish Department and the Arizona Department of Transportation, completed the *Arizona Wildlife Linkages Assessment* (Arizona Wildlife Linkages Workgroup 2007). This statewide assessment identified 152 potential linkage zones in Arizona, three of which are in or adjacent to the project area. Furthermore, the assessment identified important habitat blocks; the project area lies almost completely within one of these blocks. Of particular note is that one of these potential linkage zones (San Xavier to Sierrita – Santa Rita, Zone 92) was classified as one of 28 “high priority” linkage zones. The workgroup assessed both the biological value and threat and opportunity value of each zone and those that fell in the top quarter of both values were designated as “high priority.” The biological importance score was dependent on the “size and habitat quality of habitat blocks and the ability of the zone to support special status species, aquatic ecosystems, and seasonal migrations.” The threat and opportunity score was dependent on the “barrier effect of canals, roads, urbanization, and railroads” (threat) and “ongoing and proposed conservation efforts [along with] whether impending major road projects provide the opportunity to increase permeability of roads” (opportunity).

Given the presence of multiple critical wildlife linkage zones in or adjacent to the project area, it is essential that the full range of impacts to these linkage zones be considered in the EIS. Possible impacts include:

- major habitat fragmentation from the open-pit mine and associated tailings piles and waste facilities;
- excessive noise;
- construction of new roads;
- an increase in large truck traffic on SR 83 and related impacts to wildlife crossing areas; and
- loss of downstream surface water resources from new dams.

## **5. Upfront mitigation funding**

The EIS should consider all possible scenarios for future mine operations, including the scenario that the mine may be forced to close at an earlier date than currently scheduled. If the mine is closed prematurely, the EIS should consider impacts to mitigation plans. One mechanism to ensure that mitigation does take place is to require that mitigation funding be provided upfront in a separate, autonomous account.

In a September 21, 2006 memo written by Kerry Baldwin, Natural Resources Division Manager for Pima County Natural Resources, Parks, and Recreation regarding review of the Mine Plan of Operations, he stated that, “Any commitments for funding, bonds, etc. should be planned into the initial phase of development as an upfront cost.” The Coalition concurs with this statement and encourages the Forest Service to consider impacts from various funding scenarios on mitigation plans and outcomes.

## **6. Ongoing and robust monitoring**

The EIS should consider the impacts from various monitoring scenarios. In general, monitoring for adverse environmental impacts needs to be both robust and continuous throughout construction,

operation, and reclamation of the mine. In addition, an adaptive management strategy needs to be completed prior to the initiation of the project to ensure that monitoring results will be utilized in the most effective way possible. There is a vast array of parameters that could be monitored; a monitoring plan grounded in the best available science is crucial to ensure that adverse environmental impacts are avoided and minimized far into the future.

#### **7. Pima County as a cooperating agency in the NEPA review process**

The Forest Service has the option of inviting other agencies to participate in the NEPA review process as a “cooperating agency.” The Coalition supports the inclusion of Pima County as a cooperating agency in the NEPA review process for the Rosemont Copper project. The entire project area occurs within Pima County. In addition, Pima County staff has a wealth of knowledge and experience related to the rich biological assets of the project area. In 2004, Pima County completed a biological assessment of the Rosemont Ranch as part of their due-diligence in considering purchase of the 2,960-acre ranch. While the land sale did not ultimately come to fruition, the information gathered as part of this report (Pima County 2004) remains relevant to the area. As the Forest Service drafts the EIS and ultimately issues a Record of Decision, Pima County’s input will be invaluable in the effort to thoroughly consider all of the potential environmental impacts of this project.

#### **References**

Arizona Wildlife Linkages Workgroup. 2007. “Arizona Wildlife Linkages Assessment.” Accessed throughout April 2008 at [http://www.azdot.gov/Highways/OES/AZ\\_WildLife\\_Linkages/assessment.asp](http://www.azdot.gov/Highways/OES/AZ_WildLife_Linkages/assessment.asp)

Pima County. December 2004. “Preserving the Santa Rita Rosemont Ranch.” A report prepared at the request of the County Administrator to evaluate the potential benefits of acquiring the Rosemont Ranch and associated water and mineral rights for open space preservation.

Pima County. July 2006. “Draft Pima County Multi-Species Conservation Plan, Pima County, Arizona.” Prepared by RECON Environmental, Inc. for Pima County.