



## COUNTY ADMINISTRATOR'S OFFICE

PIMA COUNTY GOVERNMENTAL CENTER  
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C.H. HUCKELBERRY  
County Administrator

June 2, 2014

Rod Pace, President/Chief Executive Officer  
Rosemont Copper Company  
P. O Box 35130  
Tucson, Arizona 85740

**Re: Rosemont Copper Mitigation Preferences**

Dear Mr. Pace:

In my last communication to you, I indicated Pima County would be prioritizing our preferences for additional mitigation we believe is necessary for the Rosemont Copper project. As you know, the impact is substantial and based on our Conservation Land System would require approximately 13,665 acres of habitat mitigation.

Of particular concern is the long-term sustainability of the Cienega and Davidson Creek. The County has invested millions in land conservation in the Cienega Watershed. Your proposed project has long-term adverse impacts on water resources within the Cienega Basin and causes both direct and indirect impacts.

We have highlighted in the attached exhibit our preference for continuing mitigation of these riparian and water-based environmental impacts. This package of mitigation provides opportunities to increase the number of acres conserved to 13,665 using State Trust lands only (Attachment 1). Given State support for your proposed activity, I must assume acquisition of State Trust lands through a public auction could be easily accomplished. Based on our last discussion, I understand you would desire to acquire these additional mitigation lands in two transactions, which I assume would be allowed by the federal permitting agency. I would suggest two acquisitions of approximately 5,000 acres each. A similar State Trust land auction resulted in Freeport McMoRan acquiring 8,300 acres of land for their operation and future mitigation.

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We certainly understand and appreciate your conservation efforts in Santa Cruz County and the Sierrita Mountains; however, these properties are not located within the basin of impact and do not minimize any indirect impacts of the mine.

Because Rosemont may need to provide additional federal mitigation requirements, the potential State Trust acquisitions have been divided into four groupings, each of which provides different benefits to consider. I attempted to exclude well-known mines and mineral deposits from the selections.

<b>State Trust Grouping</b>	<b>Total GIS Acres</b>
Davidson Canyon	2,739
Lower Cienega Creek	4,885
Santa Rita Linkage	1,675
Whetstone Riparian	1,675
<b>Total</b>	<b>10,974</b>

Attachment 1 shows each of the priority mitigation areas and their relationship or adjacency to existing conservation efforts of the County.

#### Davidson Canyon Additions

The Davidson Canyon additions are in an area of indirect effects of the mine. They are accessible to the public and include areas that would be vulnerable to future commercial or residential development. The additions include most of the Important Riparian Area along Davidson Canyon, as well as area identified as Biological Core in the Conservation Lands System (CLS). Long-term protection of these lands would maintain an important wildlife linkage to the Preserve and to some private lands that Rosemont has already acquired for mitigation, in addition to closing the "gap" between the Preserve and the portion of the Bar V Ranch that lies within Davidson Canyon. The land selection does not include the proposed limestone mine on Davidson Canyon. The southernmost portions of the addition include designated Critical Habitat for the jaguar.

#### Lower Cienega Creek Additions

These lands north of the interstate highway buffer the Preserve from existing and proposed future developments, including groundwater development. Much of the area is currently accessible to the public via existing trails or roads. North of Interstate 10, the additions are primarily uplands located in Biological Core but include a few small areas of riparian vegetation. These lands also include an area that would help maintain connectivity to the Rincon Mountains via the adjacent Mackenzie property. South of the interstate, the

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selections include Important Riparian Areas along the main stem of Cienega Creek itself and areas of adjacent Biological Core. These land selections would connect the Preserve to Las Cienegas National Conservation Area (NCA), and the portion just downstream of the NCA is considered Critical Habitat for the jaguar. Most of these lands are far from the mine and less affected than the Davidson Canyon Additions.

#### Santa Rita Linkage Additions

The main purpose of this land selection is to maintain connectivity for wildlife between the northern end of the Santa Rita Mountains and Davidson Canyon and to protect areas identified as Biological Core. This land selection also includes an intermittent stock tank that has in the past harbored invasive crayfish. The stock tank and contributing wash could be managed for more natural aquatic resource functions. A perennial lake (the Lake) that has been used as a public recreation area has previously been stocked with sportfish by the Arizona Game and Fish Department. The lake is located within designated Critical Habitat for the jaguar. These lands are close to the mine; and, therefore, their preservation could reduce or compensate for some of the mine's indirect impacts on recreation, land use and wildlife movement.

#### Whetstone Riparian Additions

The main purpose of this land selection is to protect Important Riparian Area along Wakefield Canyon and to maintain connectivity for wildlife between the Whetstone Mountains and areas to the north and east. The land selection includes areas of intermittent stream flow, springs, associated riparian vegetation and areas of Biological Core. Most of the area is within designated Critical Habitat for the jaguar and may contain suitable habitat for ocelot and yellow-billed cuckoo. The acquisitions would join the County's Empirita Ranch acquisition with adjacent federal lands. The land also includes a historically significant ranch structure. Of the four groupings, these lands are the most remote and least affected by the mine proposal.

Our priority would first be the Lower Cienega Creek acquisition of 4,885 acres, followed by Davidson Canyon at 2,739 acres; then the Santa Rita linkage, followed by the Whetstone Riparian Additions.

#### Water rights and water that will benefit the environment

Your purchase of water rights is also beneficial but only to the extent real, sustainable wet water is available. At our recent meeting with the Forest Service regarding our objections, Rosemont representatives heard my staff describe several additional ways that Rosemont could reduce effects of the mine on water resources, including recharging water derived

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from dewatering for the benefit of downstream riparian areas and modifying the design of stormwater controls to release more water downstream. These are described more fully in Attachment 2, which we provided to the Forest Service since our meeting.

Finally, we still believe the Pantano Dam, adjacent well and purchased water rights are helpful; but we would suggest that any recovered water associated with your proposed managed underground storage and recovery be conveyed in a pipeline and discharged at the Dam to assure sustainable riparian restoration within the Cienega Creek Natural Preserve.

Sincerely,



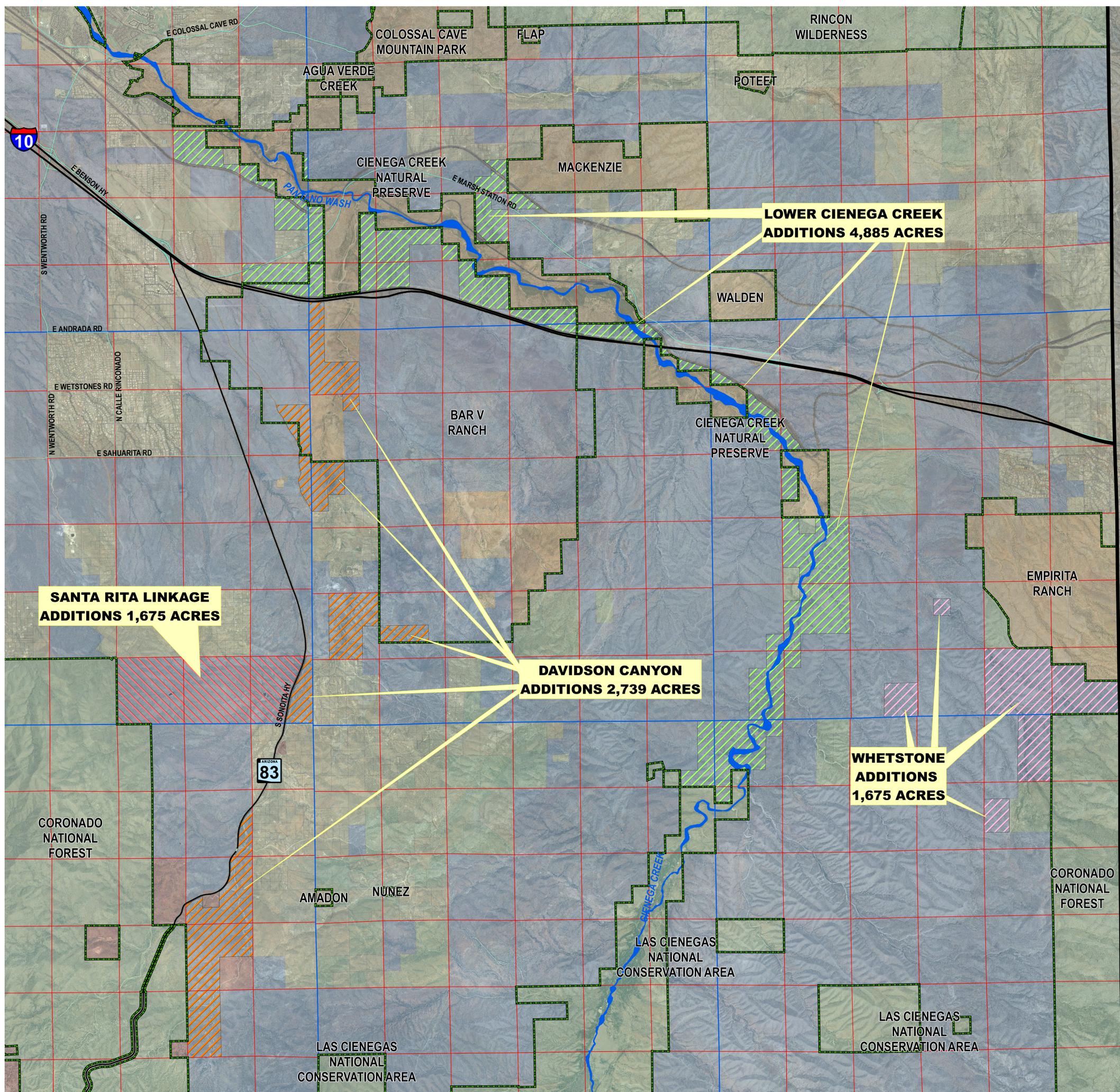
C.H. Huckelberry  
County Administrator

CHH/mjk

**Attachments**

- c: The Honorable Chair and Members, Pima County Board of Supervisors  
Colonel Kimberly Colloton, Los Angeles District Engineer, US Army Corps of Engineers  
Jared Blumenfeld, Region IX Administrator, US Environmental Protection Agency  
Jim Upchurch, Forest Supervisor, US Forest Service

# Cienega Watershed: Potential State Lands Acquisitions

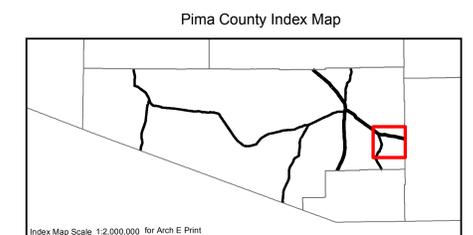


- Interstate Highway
- State Highway
- Major Streets
- Major Waterways
- Preserve
- Section line
- Township Range Line

## Ownership

- Private
- Pima County
- Rosemont Copper Co
- State of Arizona
- United States of America
- Union Pacific Railroad
- Davidson Canyon Additions
- Lower Cienega Creek Additions
- Santa Rita Linkage Additions
- Whetstone Additions

ATTACHMENT 1



May 22, 2014

Scale 1:30,000



GEOGRAPHIC INFORMATION SYSTEMS

# ATTACHMENT 2

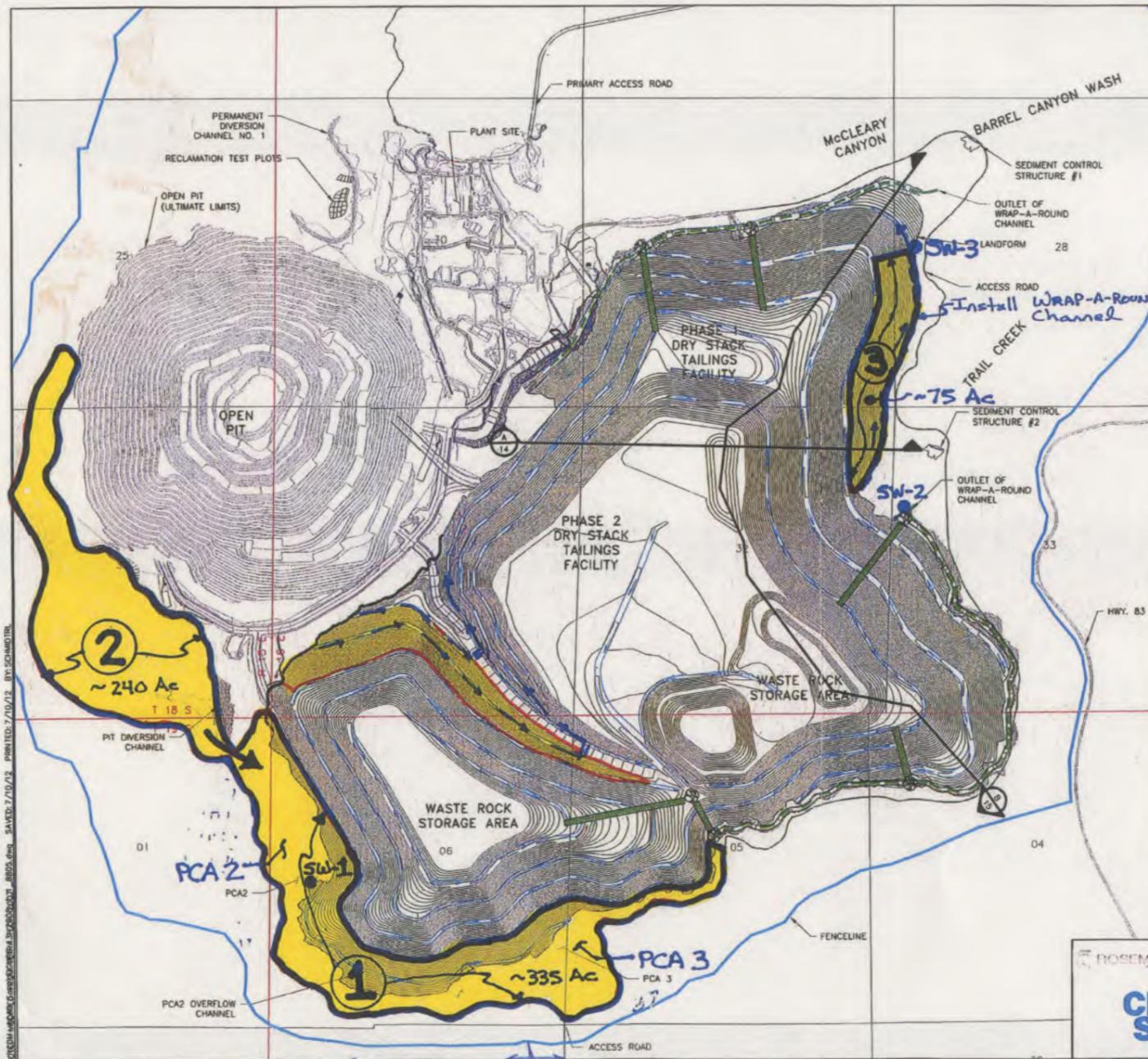
## PIMA COUNTY DISCUSSION ITEMS

1. Failure to Properly Define Mine Life When Evaluating Impacts (Julia) Various public documents released for comment by the Forest Service inconsistently define the life of the proposed Rosemont mine. Until the PAFEIS and FEIS, the inconsistencies pertained to the pre-mining and post-mining periods. The prior documents defined the actual mining operation period as 20 years. For the first time, the PAFEIS expands the total mine life as ranging from 24.5 to 30 years with the active mining period ranging from 20 to 25 years. The FEIS expands active mining life to 25 years. *Will FS adjust mine life back to 20 years?*
2. Temporary cessation (Julia) Despite the high likelihood of temporary cessations and the resulting significant extensions of mine life, the FEIS and ROD fail to adequately discuss the impacts of the temporary cessations and multiple cessations. *Will dewatering and other impact-causing activities occur at the facility during the cessations? Will Forest Service supplement the FEIS to include a discussion of temporary cessation impacts and their resulting extension of mine life?*
3. Adverse transportation impacts are anticipated on county roads but are not disclosed and mitigated. (Jonathan) Traffic impacts to Sahuarita Road not disclosed, nor mitigation proposed. County roadways include but are not limited to Sahuarita Road and Santa Rita Road.
4. Elsewhere, traffic mitigation not sufficient to address safety concerns. (Jonathan)
5. Groundwater impacts and mine life (Julia, Frank): It is not clear from the record that the Forest Service considered environmental impacts, especially groundwater extraction in the Sahuarita wellfield and the dewatering in the Cienega Basin, on a 25-year active mining basis. Was the basis for modelling a 20-year or a 25-year active mining period? Will the FEIS be modified? Furthermore, if the ROD is based on improper mine life modelling periods, the ROD must limit active mine life to 20 years.
6. Downstream Replenishment of downgradient streams with groundwater from the dewatered pit (Frank). Implementing this mitigation measure will partially address immediate downgradient impacts of pit dewatering. An adaptive management scheme can be developed to pump the pit water downstream over time to store water in advance to replenish areas that would become dewatered as a result of the pit. Downgradient wells could also benefit from this mitigation measure. An AZPDES permit will be needed to meet Federal and AZ WQ standards.
7. What is the Permitting Strategy for Wells and Pipelines? (Julia) There is no discussion of the Forest Service's past or proposed efforts to permit these wells and pipelines. Indeed, the FEIS fails even to disclose the locations, size, and impacts of the dewatering and construction wells and related pipelines. There is no mention of the Forest Service

## ATTACHMENT 2

permitting process required under FSM 2541.35, R3 supplement 2500-2001-1, nor of any intention to condition approval of the MPO on successful authorization of the wells and pipelines under that standard. This apparent permission to proceed without the necessary special use authorization is a new concern arising after the opportunity for public comment. Pima County recommends that the ROD be amended to condition approval of the MPO on Rosemont's receipt of special use authorization required by FSM 2451.35.

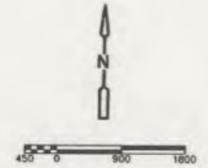
8. The Hydrologic Analysis is Inadequate and the Report Misrepresents the Hydrologic Analysis performed (Evan) Pima County clearly stated that the consultant should consider the results of a 3-hr storm (comment reference "n"), which was never done, and the FEIS implies that Pima County's concerns were addressed in the analysis they did, while they were not.
9. Potential impacts on downstream riparian and water resources for all phases of mine life are not fully disclosed (Evan, Brian) FEIS should fully analyze the runoff reduction impacts on downstream vegetation and water resources for all phases of mine life.
10. Release surface water into Trail Canyon from western and southern portion of the mine site, and allow runoff from northeastern tailings mound into Barrel Canyon (Mark) Modify the site water management plan to reduce impacts.
11. The FEIS waste rock seepage monitoring plan will not result in adequate seepage impact evaluation (Julia, Frank) Because preferential flowpaths could develop almost anywhere, there is little chance that the proposed monitoring will actually detect seepage if it occurs. Julia recommended monitoring for appearance of new, unplanned water bodies and testing.
12. Lack of proper accounting of soil salvage to ensure reclamation success.(Mark) Soil calculations are a significant underestimation of the actual soil needed. Recalculate soil needed and relate this to revegetation of the upper landform sideslopes and upper surfaces.
13. FEIS fails to disclosure impacts to Coleman's coralroot. (Brian) Barrel Alternative was chosen, in part, to avoid a population of Coleman's corralroot, but the company is proposing to divert water above the largest known population of this plant (representing 40% of all known individuals). Discuss in EIS.



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- DRAINAGE CHANNEL
- STILLING BASIN
- DROP STRUCTURE
- WRAP-A-ROUND CHANNEL ROUTING
- DRAINAGE BENCH
- FENCELINE

Objection Figure 1  
February, 2014



NOTE:  
OPERATIONAL PLANT SITE SHOWN  
WITH RECLAMATION LANDFORM.

	PRELIMINARY RECLAMATION AND CLOSURE PLAN FOR THE BARREL ALTERNATIVE	LOCATION: PIMA COUNTY, ARIZONA
	BARREL ALTERNATIVE LANDFORM - POST MINING FACILITIES LAYOUT	DATE: 07.09.12 PROJECT NO. 91146 FILE NAME: FIGURE 13.DWG
		FIGURE NO. 13

SW-1 → SW-2  
 $\frac{400 \text{ ft elev } \Delta}{20,000 \text{ ft}} = 2\%$   
 WR BR excavate  
 WR BR fill

