



UPDATE ON THE PROPOSED ROSEMONT MINE

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**Environmental History of the
Southwest**

University of Arizona

February 18, 2010

www.scenicantaritas.org

About Save the Scenic Santa Ritas

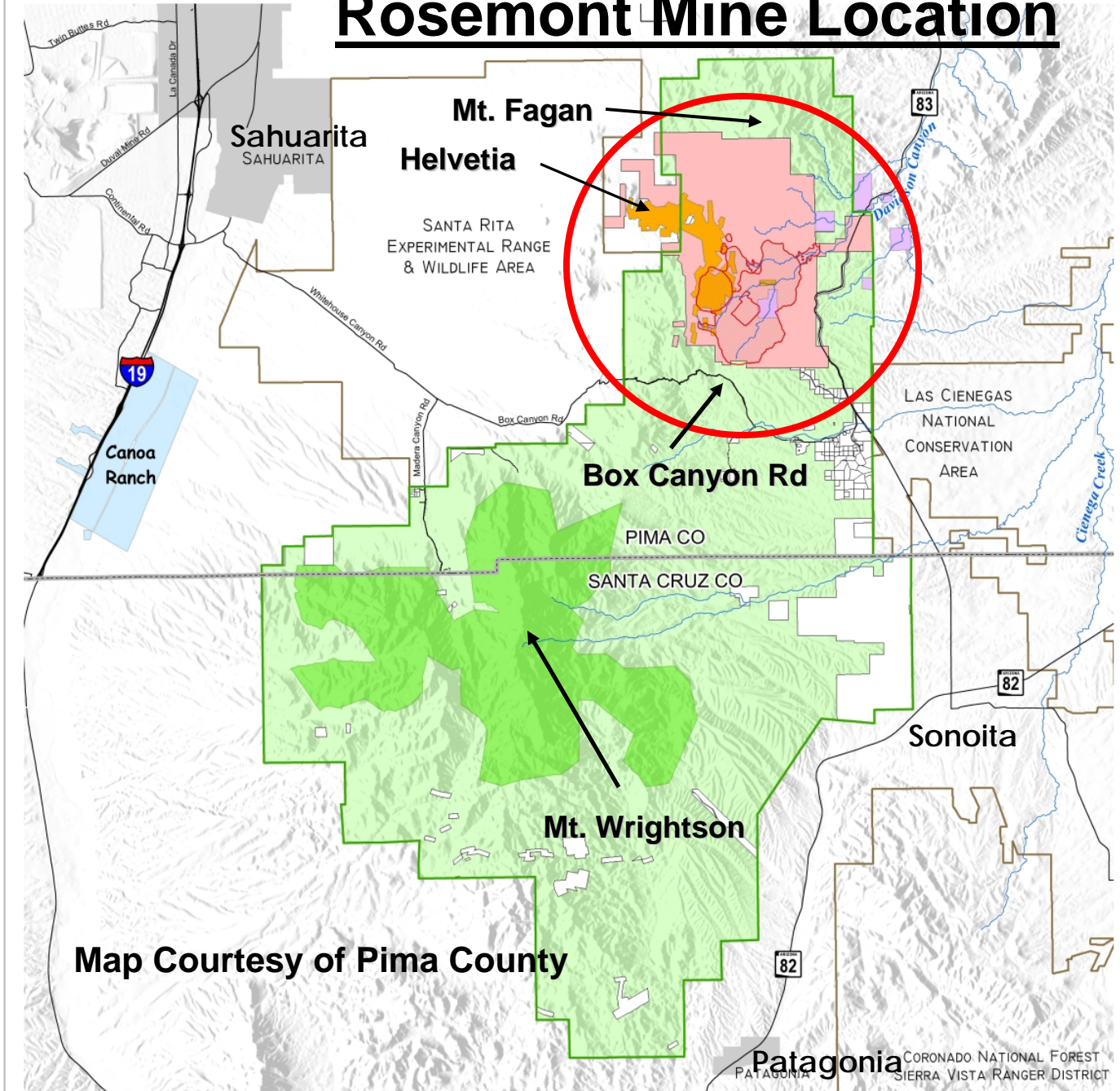
A volunteer-based non-profit organization based in Tucson, Arizona

Formed in 1996 to protect the Scenic, Aesthetic, Recreational and Wildlife Values of the Santa Ritas from degradation due to mining activities... now including the Patagonia Mountains, Canelo Hills, and San Rafael Valley

Volunteer Board of Directors and Advisory Board from many different communities in Southern Arizona with diverse backgrounds and fields of expertise

One Paid half-time Coordinator, Lisa Froelich

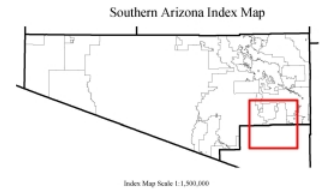
Rosemont Mine Location



Santa Rita Mountain Range

LEGEND

- Highway or Major Street
- County Line
- Jurisdictional Boundary
- Incorporated Area
- Coronado National Forest**
 - Santa Rita Mountains (110,620 ac)
 - Mt. Wrightson Wilderness
 - Private Inholding
- Proposed Rosemont Mine**
 - Fee Land
 - Patented Claim
 - Unpatented Claim (12,720 ac)
 - Proposed Facilities



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Pima County Department of Transportation



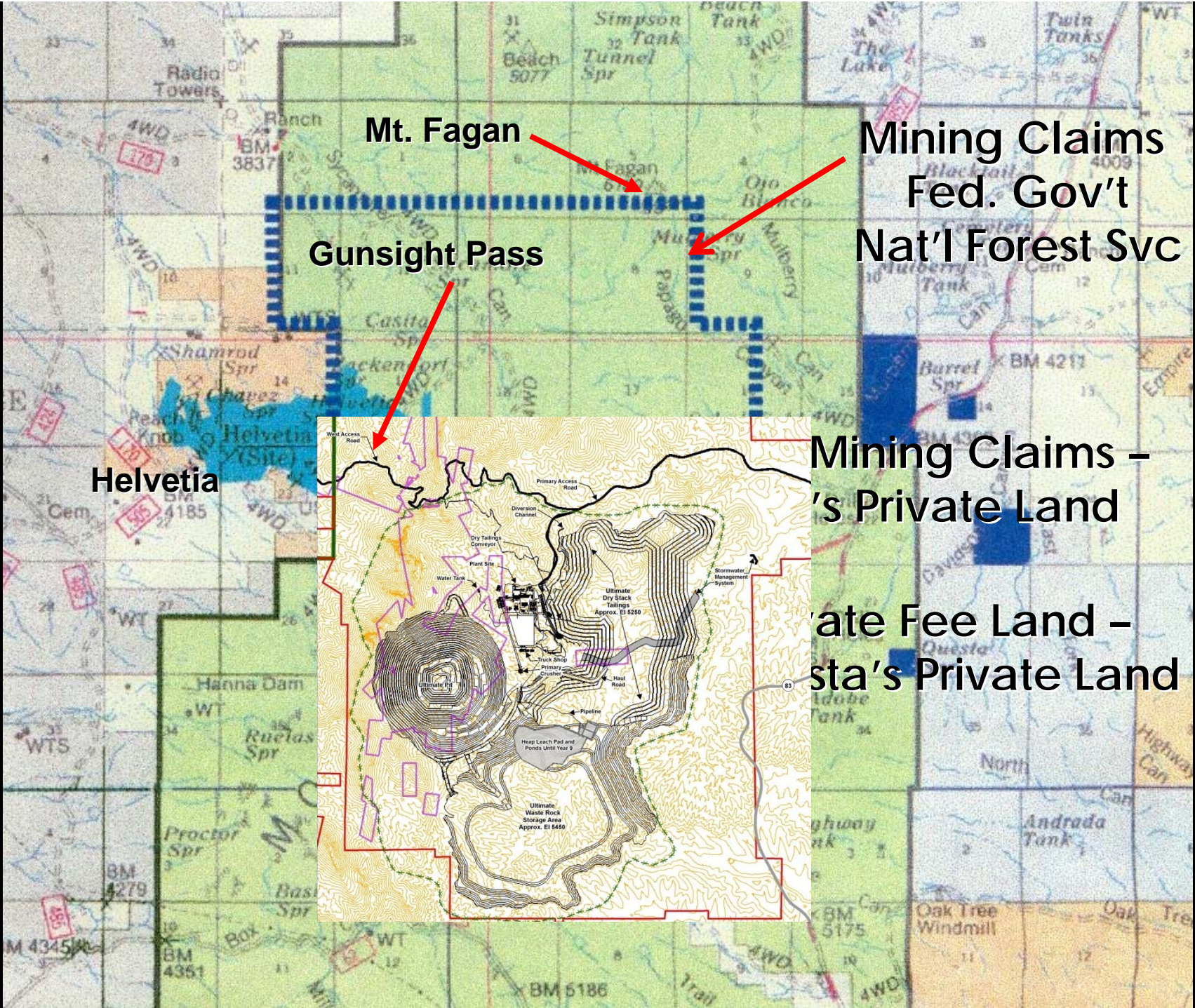
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3/21/07

Map Courtesy of Pima County

PATAGONIA CORONADO NATIONAL FOREST
SIERRA VISTA RANGER DISTRICT



Mt. Fagan

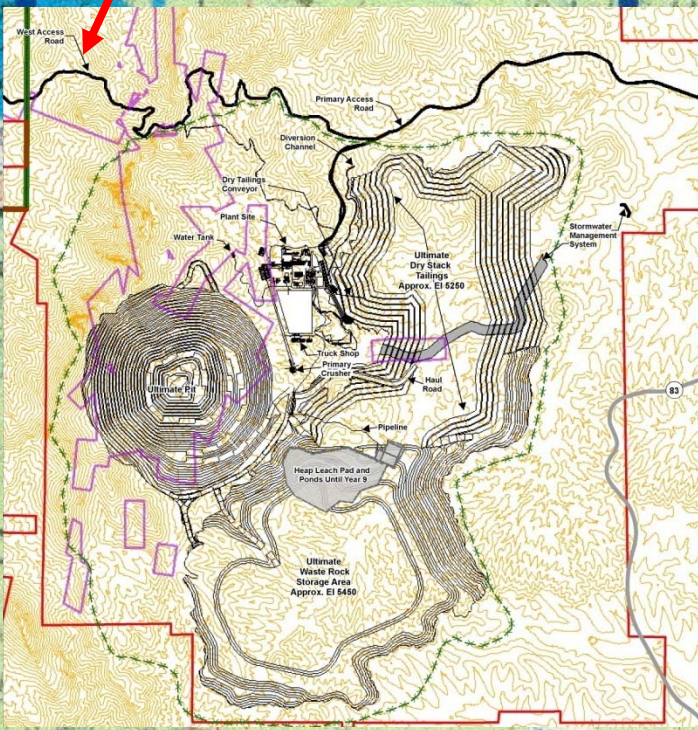
Mining Claims
Fed. Gov't
Nat'l Forest Svc

Gunsight Pass

Helvetia

Mining Claims -
Private Land

ate Fee Land -
sta's Private Land



Rosemont Mine

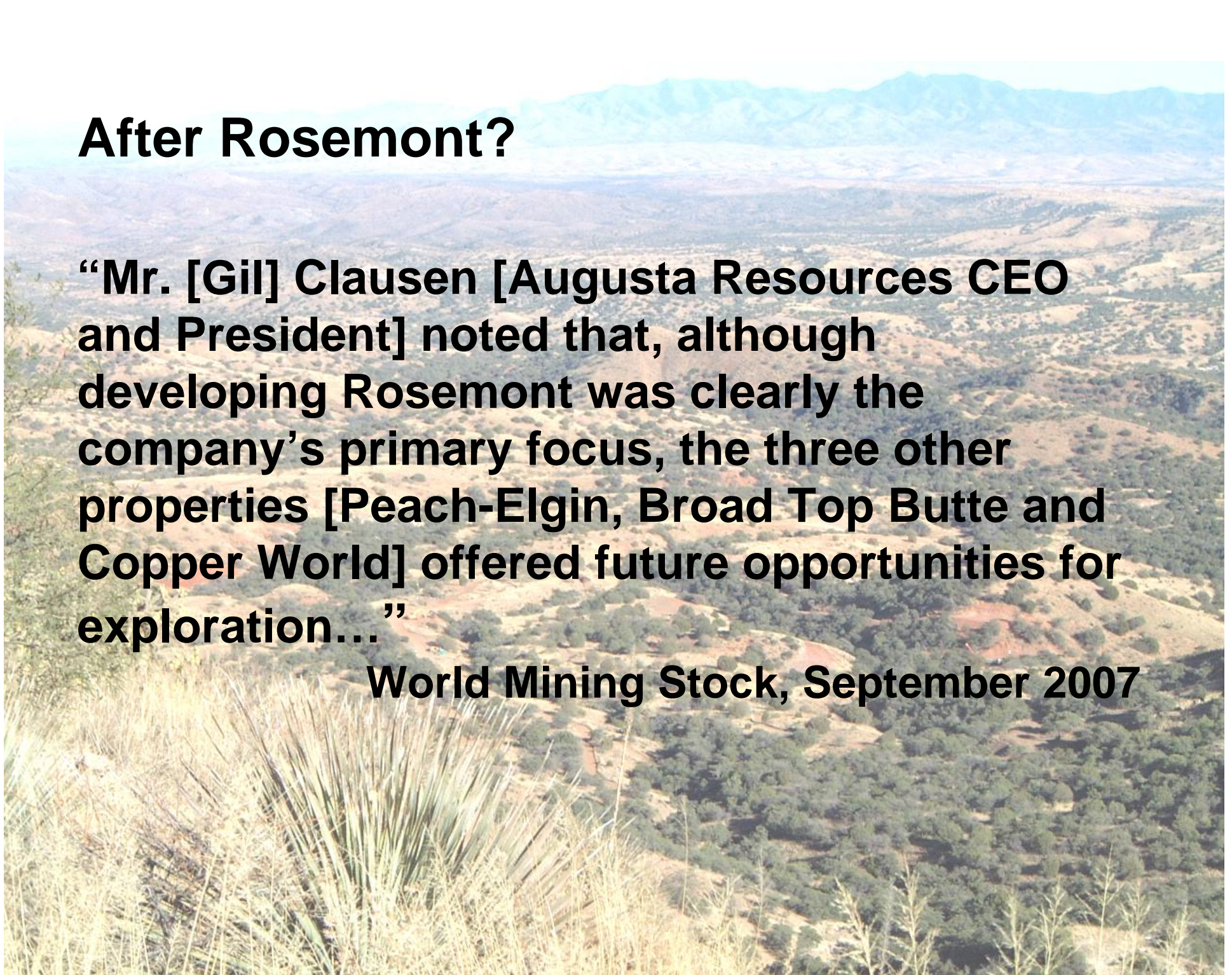
- Augusta Resource Corp. aka Rosemont Copper Co., Canada
- Open pit copper/molybdenum
 - 20+ year estimated mine life
 - 995 acres private land (pit)
 - 75 acres State Trust land
 - 3,345 acres FS + BLM land (tailings, waste dump, mill)
 - Open pit more than 1 mile wide, 1,800-2,900 ft. deep
 - Visible from Scenic Highway 83
- Augusta purchased private land & mining claims in 2005
- First mine plan rejected by FS in 2006
- NEPA process began March 2008, scoping done July 2008
- Oct. 14, 2009: NEPA process on hold until April, 2010



After Rosemont?

“Mr. [Gil] Clausen [Augusta Resources CEO and President] noted that, although developing Rosemont was clearly the company’s primary focus, the three other properties [Peach-Elgin, Broad Top Butte and Copper World] offered future opportunities for exploration...”

World Mining Stock, September 2007



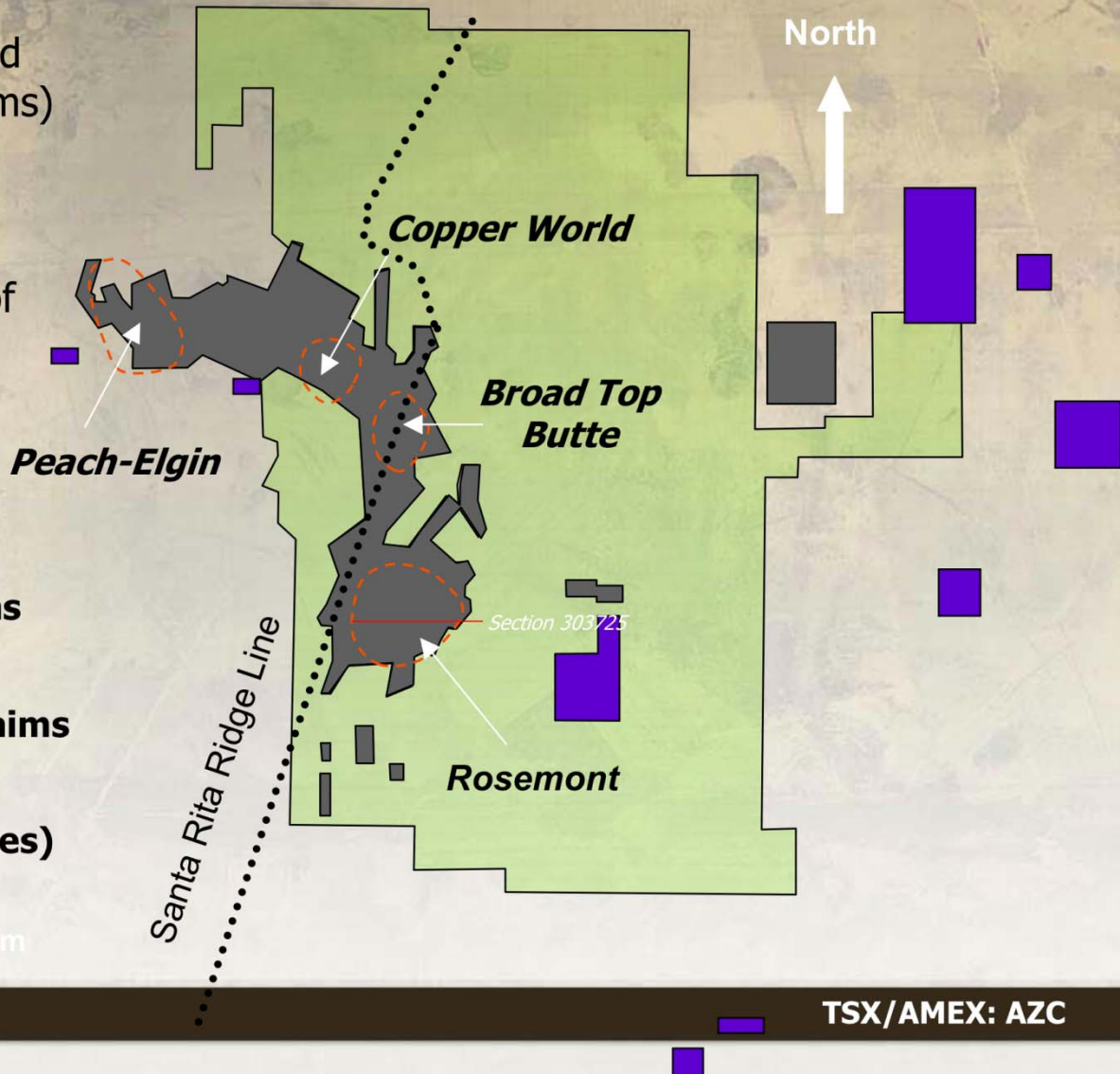
Huge Land Position

- 3,200 acres of private land (fee land + patented claims)
- Over 14,000 acre land package
- More than 30,000 acres of grazing lease

Legend

-  Patented Mining Claims
-  Unpatented Mining Claims
-  Fee Land (cattle ranches)

0 5 km



TSX/AMEX: AZC

Local Opposition - Resolutions

Resolutions opposing the Rosemont Mine and new mining in Southeastern Arizona have been passed by every governmental body in Southern Arizona including:

Pima and Santa Cruz Counties, City of Tucson, Towns of Marana, Oro Valley, Patagonia, Sahuarita, the Tohono O'odham Nation, and the Green Valley Community Coordinating Council

Elected Officials In Opposition

- Senator Paula Aboud, District 28
- Senator Manny Alvarez, District 25
- Tim Bee, former Senator, District 30
- Representative David Bradley, District 28
- Representative Olivia Cajero-Bedford, District 27
- Representative Steve Farley, District 28
- Senator Jorge Luis Garcia , District 27
- Representative Matt Heinz, District 29
- Representative Phil Lopes, District 27
- Marian McClure, former Representative District 30
- Senator Jonathan Paton, District 30
- Representative Daniel Patterson, District 29
- Representative Nancy Young Wright, District 26

United States Congressman Raul Grijalva
United States Congresswoman Gabrielle Giffords

SSSR Endorsements

Arizona Borderland Democrats - Arizona Herpetological Association - Arizona Native Plant Society-Conservation Committee - Camel Parts - Canelo Bistro - Casita Frontera - Center for Biological Diversity - Center for Environmental Ethics - Cienega Watershed Partnership - Circle Z Ranch - Citizens Water Action Coalition - Coalition for Sonoran Desert Protection - Creative Spirit Artists - Cross Creek Cottages - Darrell's Designs - Defenders of Wildlife - Democrat Club of Santa Rita Area - The Duquesne House Bed and Breakfast - Elvia's Beauty Salon - Empire Fagan Coalition - The Enchanted Garden - Farmers Investment Company - Friends of Madera Canyon/Defenders of Madera Canyon - Friends of the Jaguar - Friends of the Santa Cruz River - Friends of Scenic Highway 82 - Gathering Grounds - Global Arts Gallery - Greenhouse Graphic Design, LLC - Green Party of Pima County - Groundwater Awareness League - Jarnac Observatory - Kent A. Solberg - La Frontera Realty - La Hacienda de Sonoita - La Palomita de Patagonia - Loren Black - Long Realty Sonoita/Patagonia - Maricopa Audubon - Mariposa Books & More - Mesquite Grove Gallery - Metamorphosis Art Gallery - Mountain Empire Action Alliance (Sonoita) - Northern Jaguar Project - Painted House Studio - Pantano Christian Church Motorcycle Group - Patagonia Market - Patagonia Area Business Association - Perimeter Bicycling Association of America - Republicans for Environmental Protection - Saguaro Eastside Democrats - Santa Rita Abbey - Santa Rita Foothills Community Association - Save the Santa Cruz Aquifer - Sierra Club Grand Canyon Chapter - Sierra Club Rincon Group - Singing Valley North Home Owners Association - Sky Island Alliance - Sonoran Desert Mountain Bicyclists - Southern AZ Hang Gliding Association - Spirit Tree Inn Bed and Breakfast - Studio Gallery and Lodging - Summit Realty, Inc. - Tanque Verde Valley Association - Tucson Arts Brigade - Tucson Audubon - Tucson Orienteering Club - Wilderness Society - Zopilote Press

What is NEPA?



- **National Environmental Policy Act (1969)**
- **Requires Analysis of the Environmental Impacts of projects on Federal Land (FS & BLM)**
- **Identifies the Environmental, Social and Economic issues related to a proposed project, and analyzes the impacts**
- **Identifies alternatives to proposal - including the NO ACTION Alternative - and selects one preferred alternative**
- **Includes Public Participation and comment opportunities**

NEPA Analysis

Rosemont project requires full Environmental Impact Statement

Three major steps in EIS process:

1. **Scoping: Public submits concerns (7/14/08)**
2. **Draft EIS: Environmental Analysis of project, includes alternatives to proposed plan including the NO ACTION Alternative, public comment period (following release no earlier than April, 2010)**
3. **Final EIS: FS selects final alternative, public comment period, Record of Decision**

Appeals and litigation?

1872 Mining Law

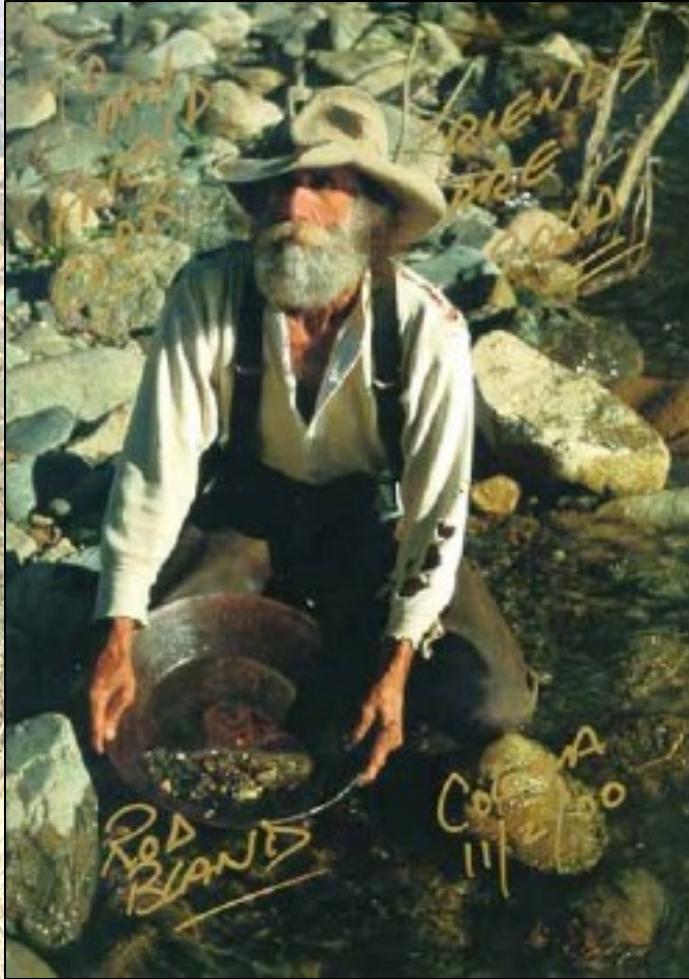
- Any individual or corporation can stake a mining claim on public land (FS & BLM)
- Claim is usually 20 acres, and can be staked for \$170.00, held for \$125/year
- Patenting previously allowed the purchase of mining claims for \$2.50/5.00 per acre. Moratorium on patenting passed in 1994 must be voted on each year
- Puts mining as Highest and Best use of Public Land!

1872 Law: No Environmental Protection or Reclamation Requirements!

Relies on State reclamation and environmental laws



1872 Mining Law = Outdated!



- To help settle the west...
- Passed when mining was done with a pick and shovel...
- Ulysses S. Grant was President...
- Before Arizona became a state...
- Before women could vote...

And, although the law hasn't substantially changed, mining has...

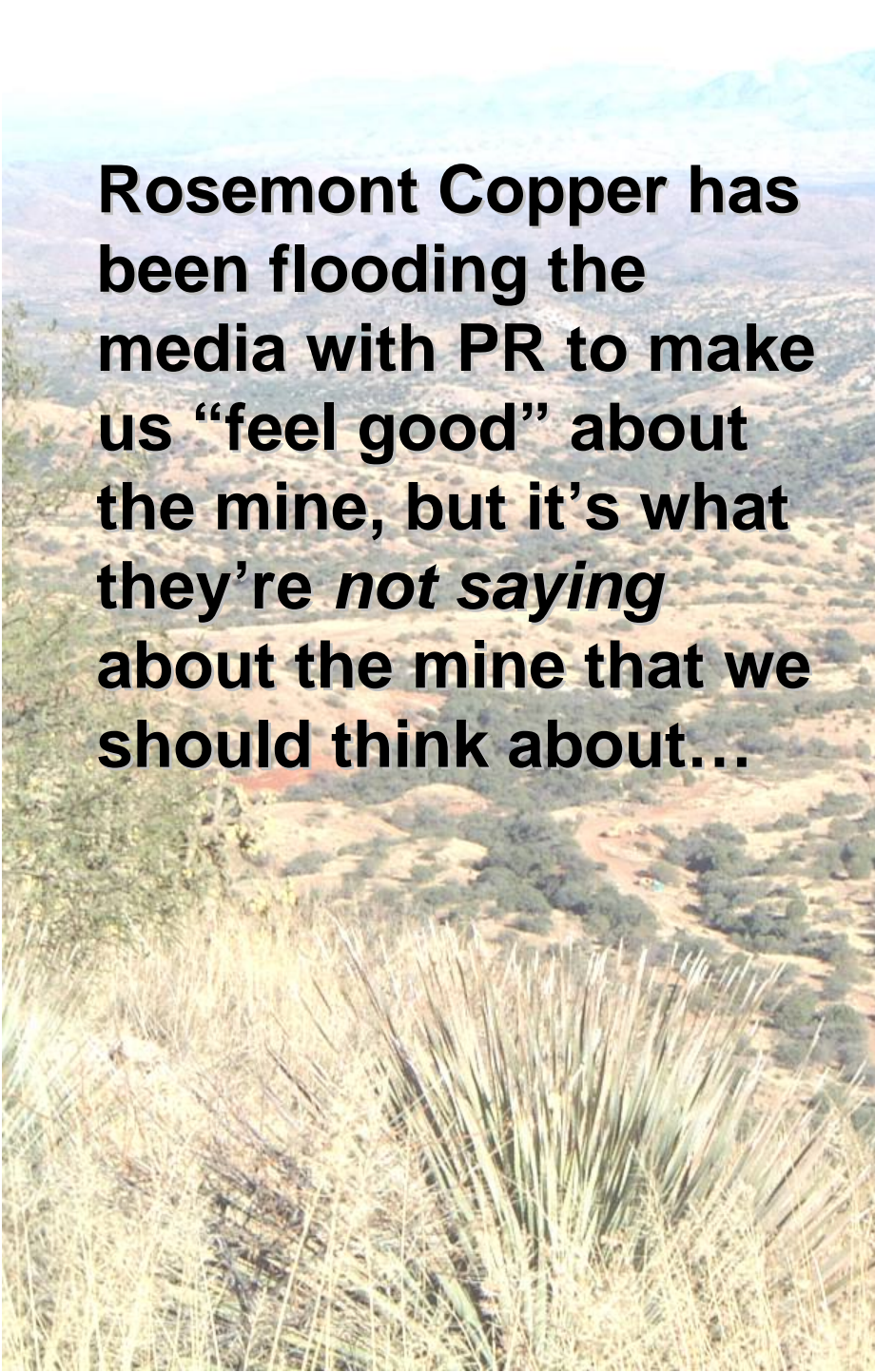
Modern Mining



Status of Local Copper Mines

- Of companies currently mining copper in Arizona and New Mexico, combined production is only running at 50% of capacity, industry experts say.
- Freeport McMoRan (Dos Pobres mine) near Safford, AZ has lowered production and the Morenci mine has cut production in half.





Rosemont Copper has been flooding the media with PR to make us “feel good” about the mine, but it’s what they’re *not saying* about the mine that we should think about...



ROSEMONT COPPER

Bridging to a Sustainable Future

Our plan will set new environmental standards for resource protection, water conservation, and land reclamation, creating a private stimulus for the local, regional, and state economy with new jobs, spending, and tax revenue.

As federal agencies, the State of Arizona, and Pima County continue an exhaustive study of our plan, we invite you to do the same by reviewing this fact booklet and giving us your comments and ideas.

Impacts from Copper Mining



- **Water - Quantity & Quality degradation**
 - **Surface water, Groundwater, Springs**
- **Air – dust, blowing toxics**
- **Noise & Lights – 24/7 blasting, crushing, trucks**
- **Scenic View – Scenic Hwy 83 marred forever**
- **Traffic Hazards – huge mine trucks on Hwy 83 with school buses, residents & tourists**
- **Loss of wildlife habitat and movement corridors**
- **Decrease in property values**
- **Economic losses – impacts to tourism revenues**
- **Loss of recreational uses & open space**

Santa Ritas & Rosemont Valley – From Mt. Fagan



Impacts to Water - Our Most Precious Resource!

40% of stream reaches in the headwaters of western watersheds in the United States are polluted by mine waste

- The U.S. Environmental Protection Agency, *Mine Waste Technology*, Feb. 2007





**A plume of sulfates
from the Green Valley
mines currently
contaminates local
groundwater**

**Water is our most
precious resource in
Arizona...**



Impacts on Water Quality & Quantity

- Over 20+ years the Rosemont Mine would create at least 4 square miles of mine and mill waste dumped at the headwaters of 3 streams in the Rosemont Valley on Coronado National Forest Service land
 - Possible Result?
Toxic runoff and leaching into Davidson Canyon and Cienega Creek
- At a minimum, the mine would use 6,000 to 8,000 acre-ft. per yr. of groundwater – enough for 32,000 people (GV Mines use over 25,000 acre feet/yr)
 - Possible Result?
Lowered water levels in nearby domestic & agricultural wells, and reduction in flow in nearby natural springs and creeks

Impacts on Water Quality & Quantity

Rosemont expected to become lake when done

But fears are raised it will be toxic

By Tony Davis, *Arizona Daily Star*, January 17, 2010

- **After the mine is exhausted, a lake will fill the pit, according to a Rosemont Copper consultant**
- **It will likely be toxic because of acidic compounds formed from sulfides in the underlying rock**
- **Berkeley Pit in Butte, Montana became a highly acidic lake and one of the country's largest Superfund sites.**

Impacts on Water Quality & Quantity

***Arizona Daily Star* Article from January 17, 2010**

- **74 springs and seeps identified within impact area**
- **Springs in Arizona support wildlife diversity**
- **“Disappearance of springs could have serious consequences for the surrounding ecosystem”**
- Julia Fonseca, Pima County hydrologist

Long-term problem

- **Example: Newmont Mining's Phoenix Project in Nevada**
 - **Scientists predict the mine will generate acid drainage for over 20,000 years**
 - **EPA predicts that a \$33.5 million trust fund would be required to pay for water treatment in perpetuity.**



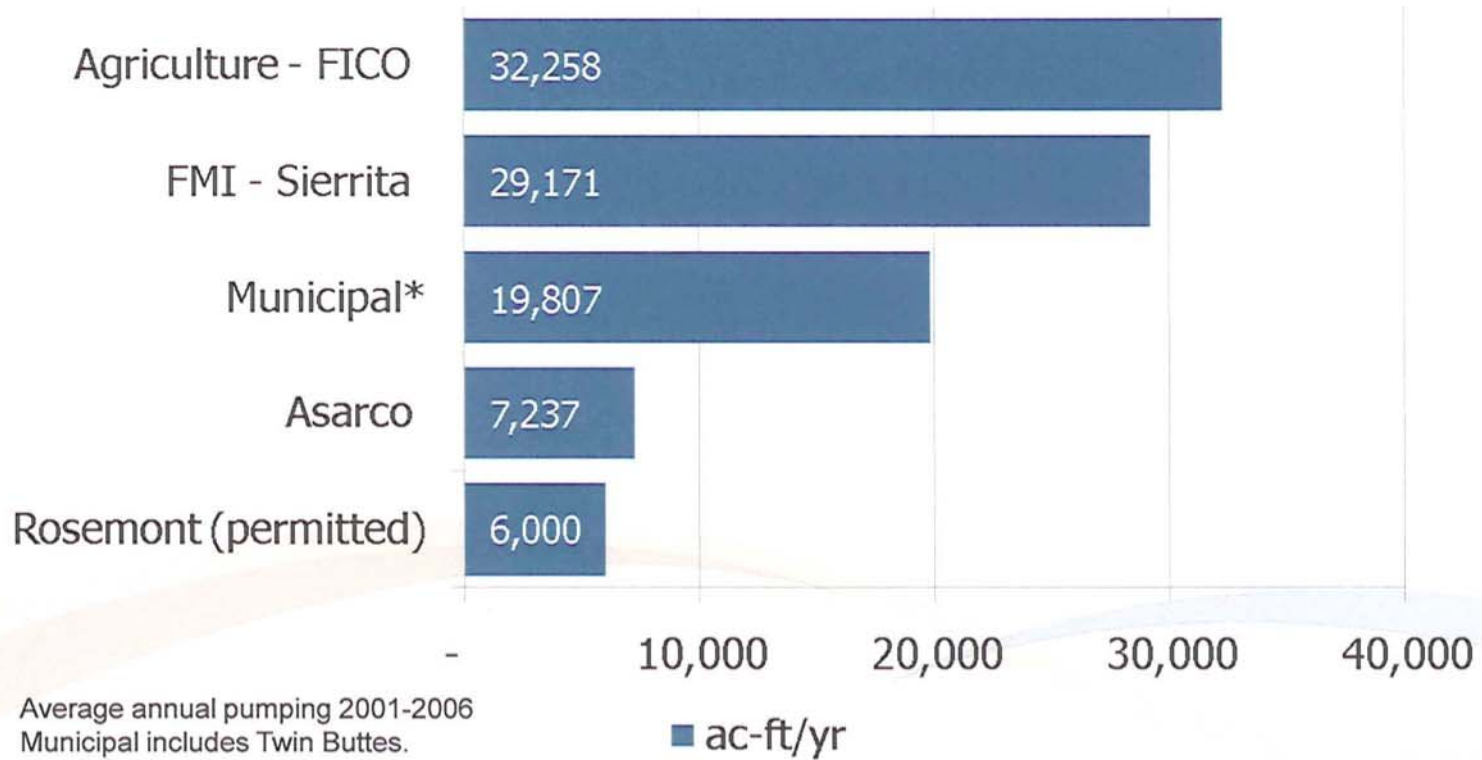
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Mines Acid Runoff May Be Forever

By JENNIFER McKEE
Gazette State Bureau

HELENA -- Benjamin Speakthunder said he isn't going anywhere -- nor is the acidic water washing off two abandoned open pit mines near his home. "I'll be here until I'm 100 years old, still testifying, trying to get this cleaned up," said Speakthunder, president of the Fort Belknap Indian Community Council, after a hearing of the House Appropriations Committee.

Water Comparison Chart



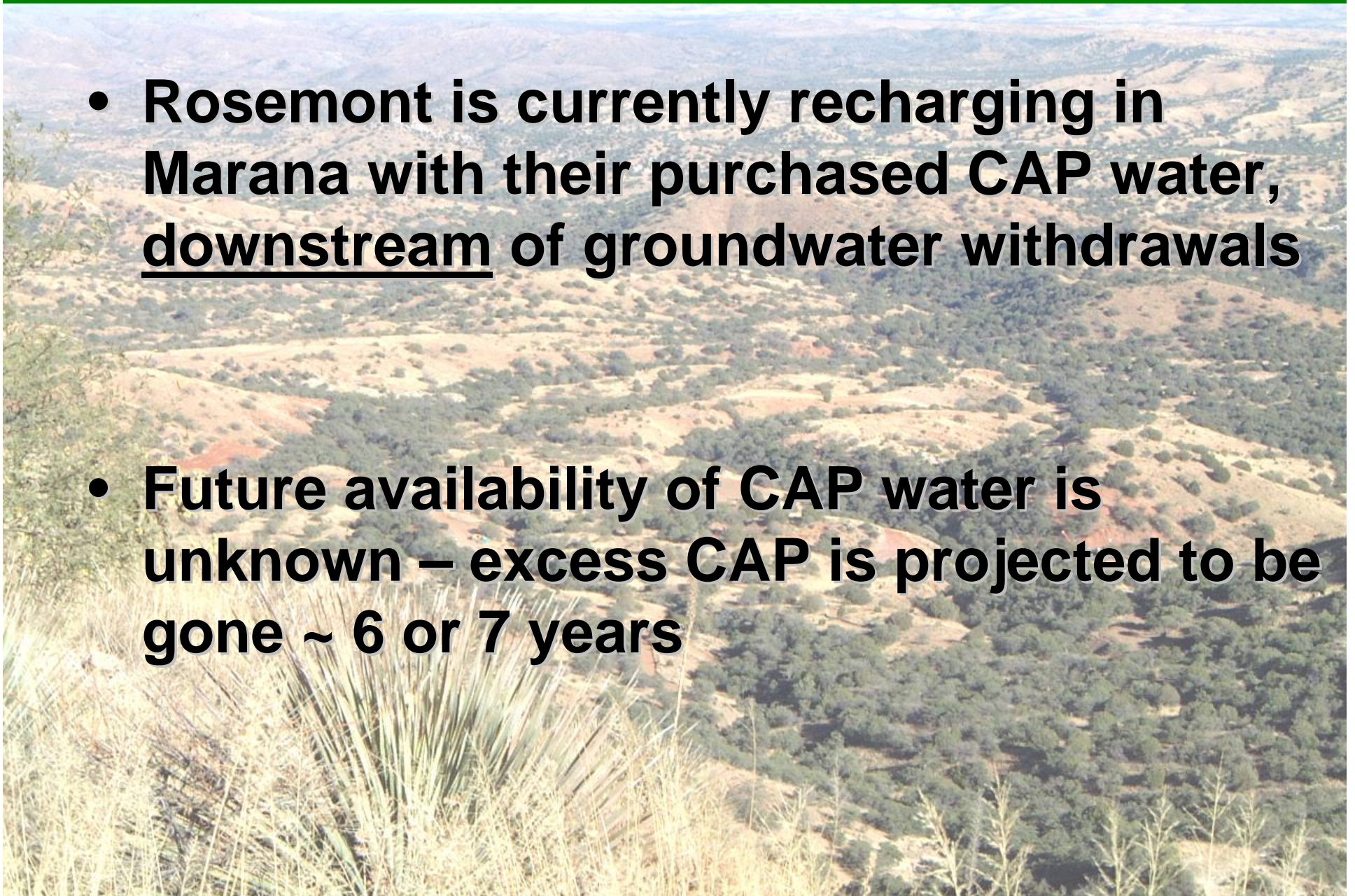
What Rosemont is not saying:

- Rosemont water use unregulated and impacts all other water users
- Rosemont turning high quality groundwater into industrial waste.



Central Arizona Project (CAP)

- Rosemont is currently recharging in Marana with their purchased CAP water, downstream of groundwater withdrawals
- Future availability of CAP water is unknown – excess CAP is projected to be gone ~ 6 or 7 years



Central Arizona Project (CAP)



'12 CAP shortage called likely

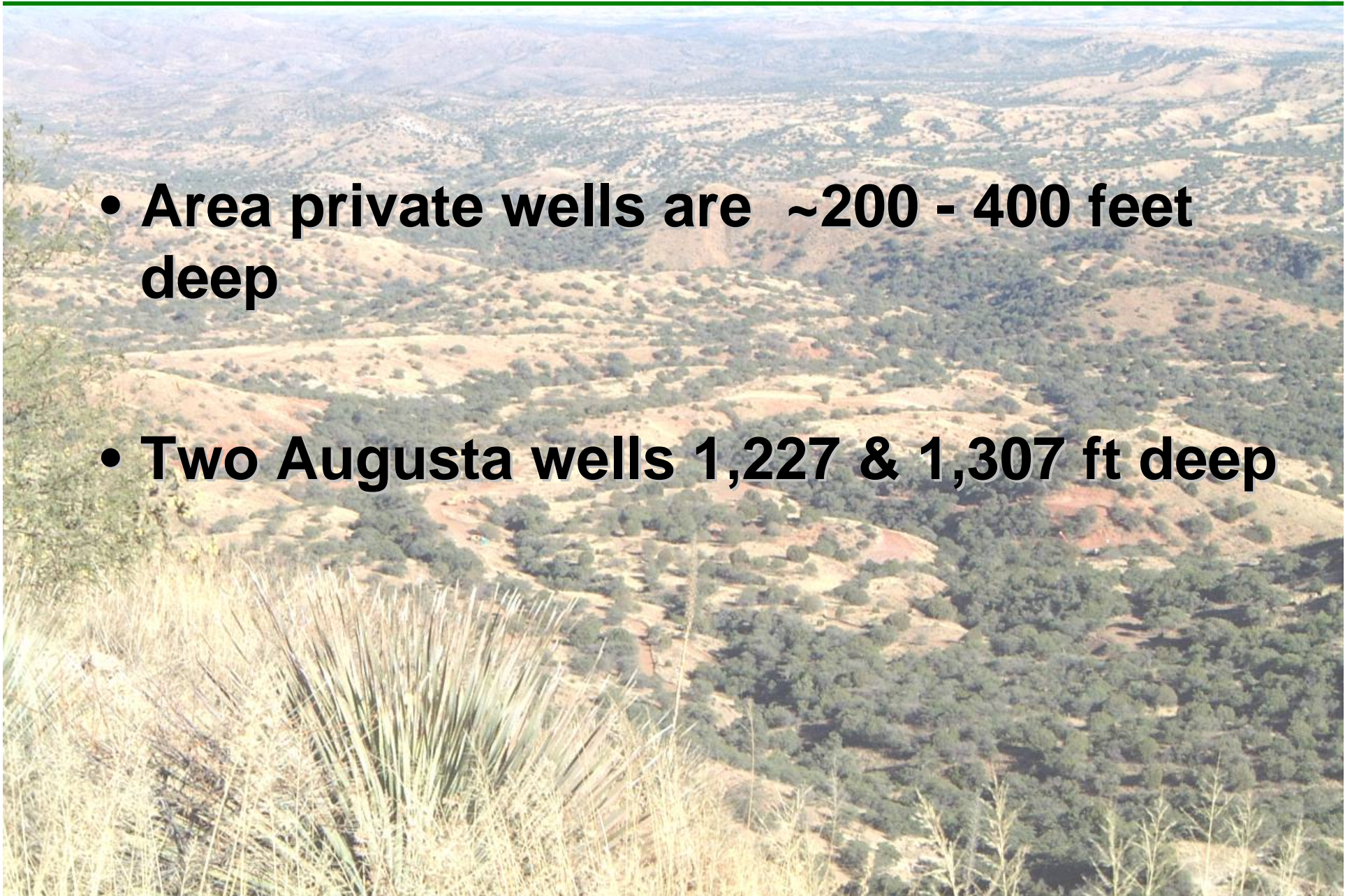
Tony Davis, *Arizona Daily Star*

January 12, 2010

- The shortage would reduce supplies sold for recharge into underground basins for future use
- Other buyers include mining companies such as Rosemont Copper.
- “Most of these users would likely be cut, wiped out or go down to a very small volume”
 - Kenneth Seasholes, CAP policy analyst

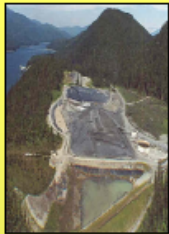
Impacts to Sahuarita & Santa Cruz Valley

- **Area private wells are ~200 - 400 feet deep**
- **Two Augusta wells 1,227 & 1,307 ft deep**



2007 Kuipers & Maest Study

Comparison of Predicted and Actual Water Quality Impacts at Hardrock Mines in the West



Comparison of Predicted and Actual Water Quality at Hardrock Mines

The reliability of predictions in Environmental Impact Statements



Bulka
Environmental



Kuipers &
Associates

Evaluated twenty-five representative western mines to determine whether water quality predictions in the EIS matched water quality impacts after construction

73% of mines violated groundwater or surface water quality standards when the EIS said they would NOT!

The Local Economy



Potential positive economic benefits from the proposed Rosemont project are small in comparison to local economy...

- **Projected Jobs at Rosemont represent less than three-tenths of one percent (0.3%) of total employment in Pima & Santa Cruz counties combined for 2005**
- **Projected Wages/salaries represent approximately one-tenth of one percent (0.1%) of total 2005 wages and salary in the two counties combined**

Economic Impacts

Joe Marlow, senior economist with the Sonoran Institute:

"If the proposed Rosemont mine operations displaced only *one percent* of travel and tourism-related spending in the region, the economic loss would be greater than the entire annual payroll of the mine...

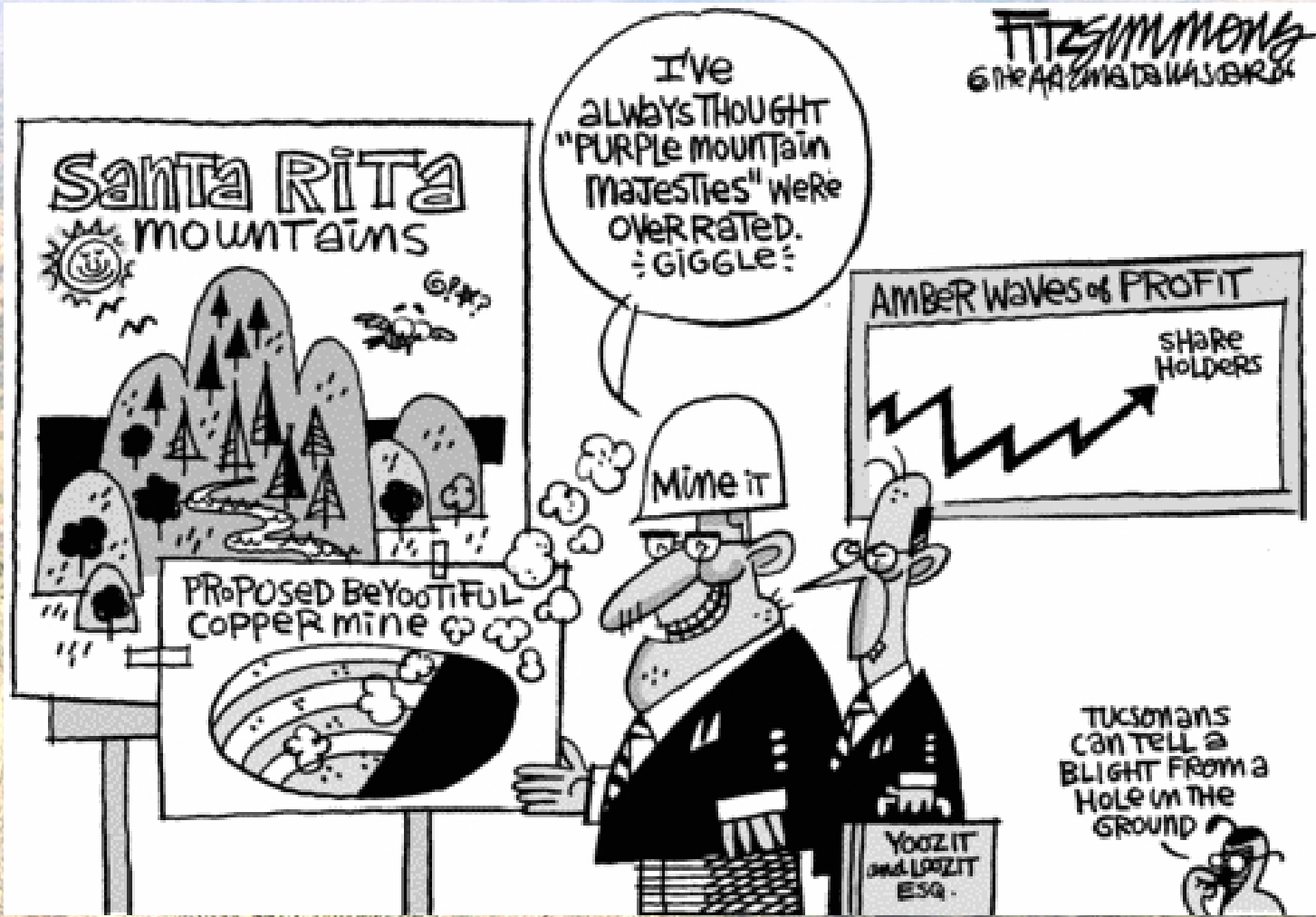
The potential economic benefits of this mine are small compared to the potential significant economic risks."

Mining's potential economic impacts in the Santa Rita and Patagonia Mountains Region of Southeastern Arizona, Sonoran Institute Economic Study, December 2007

Loss of Recreational Uses



Bicycling, Hiking, Camping, Equestrian activities, Picnicking, Photography, Birding, Caving, Hang Gliding, Rock Hounding, Wildlife study, Off-road vehicles, Amateur Astronomy, Botany, Geocaching, Orienteering, Running, Hunting



Santa Rita
MOUNTAINS

I've
ALWAYS THOUGHT
"PURPLE MOUNTAIN
MAJESTIES" WERE
OVER RATED.
GIGGLE

FITZSIMMONS
© THE ARIZONA DOLLARS BARDS

AMBER WAVES OF PROFIT

SHARE
HOLDERS

MIME IT

PROPOSED BEAUTIFUL
COPPER MINE

TUCSONANS
CAN TELL A
BLIGHT FROM A
HOLE IN THE
GROUND

YOOZIT
and LOOZIT
ESQ.

MY VIEW: *David Fitzsimmons*

Contact editorial cartoonist David Fitzsimmons at 573-4234 or tooner@azstarnet.com

FITZSIMMONS
THE ARIZONA DAILY
STAR 2008



THAT USED TO BE THE SANTA RITAS. AND THAT USED TO BE A SCENIC HIGHWAY AND WAY OVER THERE THAT'S TUCSON. USED TO BE A TOWN FULL OF PEOPLE WHO USED TO LOVE THIS KINDA PLACE MORE THAN THEY LOVED THE ALMIGHTY DOLLAR.

Help us keep the Rosemont Valley like this!



NOT THIS!



Save the Scenic Santa Ritas
8987 E. Tanque Verde #309-157
Tucson, AZ 85749

Thank you!

520-445-6615

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lainie@scenicsantaritas.org

www.ScenicSantaRitas.org

