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SERVING THE MOUNTAIN EMPIRE COMMUNITIES OF CANELO, ELGIN, PATAGONIA AND SONOITA

Report Projects Consequences of Hermosa Mine

By Ann Katzenbach

Sometimes numbers speak louder than words. Pete Dronkers and the Patagonia Area Resource Alliance (PARA) have recently published a report about the potential impact of an open pit mine in the Patagonia Mountains, and some of the numbers used in reference to the mine's proposed activities are staggering.

Dronkers is a member of Earthworks, a nonprofit organization that works with communities that are dealing with mineral and energy development. He

was in Patagonia on November 9 at a PARA event to talk about his research, which included hydrologic and geologic studies, a careful reading of Wildcat Silver documents, a study of local groundwater and wells. historic data on mining in the area and its resulting effects on the environment, and comparisons with similar mines in the west. He has done modeling to determine how much water and energy (diesel and electric) would be required (continued on page 2)

Photo of red-tailed hawk in flight by Jim Johnson (more on page 2)



About Us

MISSION STATEMENT

To publish a nonprofit community newspaper which serves the Mountain Empire communities of Santa Cruz countyincluding Canelo, Elgin, Patagonia, and Sonoita-and which is open to all views, highlighting local issues and emphasizing the contributions of local talent.

WHO WE ARE

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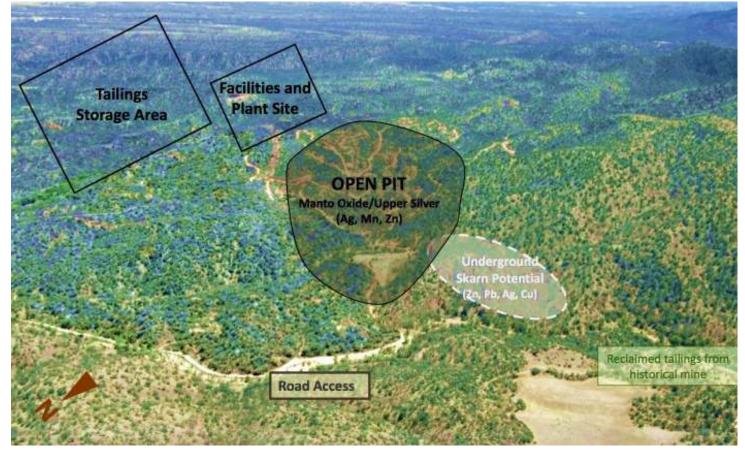
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The entire area depicted as "open pit" in the photo above would become a pit and much later, a lake. It is **4,000** feet across, the length of over **13** football fields, or slightly less than **a mile**. It would be slightly bigger than the Copper Queen Mine in Bisbee, and deeper by **600** feet.

to dig the proposed mine and how long its effects would be felt in the region.

Two hydrologists and a research geologist reviewed Dronkers' research and have verified his information and conclusions insofar as possible. Hydrology is not a perfect science, and some of Dronker's conclusions are based on strong suppositions about drainage in the area, but if you read the entire report, his conclusions are very hard to refute.

Following are the results of some of the numbers Dronkers put together for this report. All the sources for these conclusions are carefully noted in the report.

The Hermosa Mine would move 1.679 times more rock than the largest of the historic mines in the area.

The Hermosa open pit mine would consume between 670 million and 1.2 billion gallons of water. That figure is 53 times more water than the town of Patagonia consumes annually and is equal to the amount of water consumed annually by 4,600 Arizonans.

When the mine is closed, the

abandoned pit will become a lake containing billions of gallons of water. The pit will draw water from the surrounding aquifers. The resulting lake will evaporate rapidly and will be replaced by groundwater at a rate comparable to when the mine was operating. This will go on and on until there is not groundwater to fill the lake.

·Hermosa proposes to use a method of watering its tailings dump that would use 25 percent more water than a dry stack operation because it will save the company money.

Wildcat Silver's Prefeasibility Study contains only one sentence on the topic of water supply. The projected financial return on investment is given nearly 100 pages.

Water treatment costs to mitigate the effects of a mine continue indefinitely. At the Red Dog Mine in Alaska, that cost is roughly \$10 million per year.

In the past year alone, three large tailings impoundments in North America have failed and dumped millions of tons of contaminated sediment into watersheds.

·Mitigation costs for acid mine drainage contamination from large, modern mines can cost hundreds of millions of dollars and are often paid for by taxpayers rather than mining companies.

Mining industry experts suggest that electricity consumption for mines like Hermosa average between 30 and 50 kilowatt-hours per ton. To put this in perspective, the mine could consume as much electricity as 16,640 single-family homes or **one-fifth** of the energy currently generated by Sulphur Springs Valley Electric.

·Transportation of ore from the mine would consume approximately 9.3 million gallons of fuel a year.

Sulphur Springs uses coal to make electricity. Every megawatt hour of coal-generated electricity consumes 510 gallons of water.

Putting all these energy numbers together, the Hermosa operation would generate as much as

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591 million pounds of greenhouse gas emissions each year. That's about the equivalent of **71,000** automobiles.

Dronkers' report is not just about numbers, but I cite them to give a sense of the range and complexity of the whole project as it has taken shape over time. People who favor mining here point to more modern methods of mitigation, and Wildcat Silver insists that its open pit mine is not part of Patagonia's watershed. For those who were comforted by these assertions, this report makes it clear that there is no way to prevent most of the environmental harm that mines cause-here or anywhere. It is also quite clear from this report that Patagonia's water comes from rain, groundwater, and aquifers in the same mountains that would be the site of Wildcat's operations.

And finally—two more numbers that might interest Wildcat investors. At his presentation in Patagonia, Dronkers pointed out that it takes **one ton** of ore to produce **one ounce** of silver. Considering the tremendous costs associated mining that ore, it is hard to understand the value of the outcome, when one ounce of silver is currently selling for about **\$16**.



Jim Johnson took this amazing photograph of a red-tailed hawk at his property in Sonoita. He calls it a lucky shot, but it takes skill to capture such a sharp image of a big bird in flight. Avian experts identified it as an immature bird because of its light eye color and faint red markings.



Above, from left, Pete Dronker, Ron Pulliam, and Annie McGreevy, at the gathering hosted by Patagonia Area Regional Association (PARA) on November 9 in Patagonia. At the event, Pete Drinker answered questions about his recently published report on the environmental impact of Wildcat Silver's proposed Hermosa Mine (see front page article.)

A Question of Space

This fall the town of Patagonia received an unexpected request. A couple went to the town hall and asked if they could bury their mother in the town cemetery. They said they had explored all the cemeteries in the region and thought Patagonia's was the perfect place. Apparently, the woman had been a bird lover, and they also loved the view from the hilltop. The couple was told there was no room and was sent off to find another resting place. Then questions arose as to just how much room there is and how many reservations there are and who is buried where. Figuring all this out will cost some money, which is not in the budget at this point. The town council plans to take up the matter in the near future. Meanwhile, if you've been hoping to be buried in the Patagonia cemetery, you might need a contingency plan.



The Patagonia Cemetery; the gravestone shown at bottom right is dated 1899