

Economic and Job Impacts of a Proposed Rio Tinto Copper Mine at Oak Flat are Greatly Exaggerated

Rio Tinto seeks to justify the destruction of Oak Flat in the name of jobs and economic benefits that it says will flow to the State of Arizona and the local economy as a result of their mine. However, Rio Tinto has based most of their glowing job and economic impacts figures on a report they hired Elliot D. Pollack & Company to prepare titled "*Resolution Copper Company Economic and Fiscal Impact Report, Superior, Arizona*". **This report is fraught with problems.** Among other flaws, the report assumes that there will be no environmental costs associated with the proposed mine and that the construction and operation of the proposed mine would not conflict with any other economic activities or values. The flaws in Rio Tinto's report were recently exposed in a report examining the Pollack study prepared in September of 2013, by the independent consulting firm of Power Consulting, Inc. titled "*Exaggerating the Net Economic Benefits of the Proposed Resolution Copper Mine, Superior, Arizona: A Critical Review of Resolution's Economic Impact Analysis*". Following are some data based on the Power report.

Rio Tinto's study assumes that a mine would only produce benefits with no costs. The Pollack report is based upon fundamental assumptions that are incorrect. For example, the report assumes there would be no environmental costs associated with a proposed mine and that a mine would not conflict with any other economic values or activities. This incorrect and one-sided look violates economic convention to look at both costs and benefits.

The Pollack study assumes that a proposed mine would operate continuously at full production and ignores the historic bust and boom cycle of mines in Arizona. Rio Tinto assumes that a proposed mine would operate 24/7 for 50 years at 100% of capacity, despite a century and a half of evidence to the contrary. The history of Arizona mines shows clearly that copper production, employment, payroll, and tax payments fluctuate widely due to changing international copper prices and other factors.

Rio Tinto's economic analysis grossly exaggerates any positive economic impact associated with a proposed mine.

- The Pollack report added the annual impacts over a 64 year period and reported that cumulative number as the impact rather than reporting the annual level of projected impacts. This is like saying that a projected mining job would pay \$3.8 million dollars rather than saying a job would pay \$75,000 annually and last 50 years. Therefore, many of Rio Tinto's economic impacts are 64 times to large.
- The report assumes there would be no requirements for public services such as road repair, police and fire protections, education, or social services as a result of the mine project. In this unbalanced approach, Rio Tinto's report claims a large generation of taxes, but fails to consider or calculate for any of the demands for services that taxes would pay for.
- Employment, payroll, tax revenues, and copper production were assumed constant for 50 years. None of the downward fluctuations associated with mining over the last century and a half were included in the projections.

The local economic impacts from a proposed mine would be much smaller than the projected in Rio Tinto's study.

If the same economic impact model that Rio Tinto used in its report focused on the region surrounding the proposed mine rather than all of Arizona or the entire nation, the projected impacts are a small fraction of what Rio Tinto estimated. Instead of Rio Tinto's estimate of \$10 billion from taxes to the state or Arizona, only \$284,000 would go to the local area. Instead of Rio Tinto's estimate of 3,700 direct and indirect jobs, only 893 would go to the local region. Instead of a projected \$221 million dollar payroll impact, the local payroll impact would be

\$56.2 million. These figures would also fluctuate with mine production in the future just as they have in the past, making these estimates even smaller.

Most of the value a proposed mine at Oak Flat could create would be realized out of state. Very little would stay in the region where the brunt of environmental and social impacts would be felt.

Only 4% of the mineral value produced from a proposed mine would go to local residents in the form of local wages. Over one-half would go to national and international investors.

Rio Tinto's economic benefits would flow away from the region immediately around the proposed mine.

71% of projected tax flows to governments would go to the federal government, not to Arizona governmental entities. Rio Tinto's economic impact study did not analyze the local area where a mine would be located, but rather focused on statewide and national benefits.

Metal mining jobs have not reduced unemployment or assisted local economic vitality.

For more than 100 years, copper mining has taken place in Superior and surrounding towns. Yet, there has not been a history of sustained prosperity and economic vitality. Rio Tinto's recent hiring of workers at its existing facilities near Superior actually created more area unemployment as more people moved in than the number of available jobs.

A mine at Oak Flat would cause significant degradation of natural landscapes and has the potential for serious pollution problems. These environmental impacts have significant long-term economic consequences for the State and region.

Mining displaces most other regional economic activities. Environmental degradation and the inherent instability of mining operations discourages growth in mining towns, causing further specialization and lack of economic diversification in mining in these towns. The environmental, social, and landscape costs associated with mining discourages residential and business growth, tourism and future opportunities for economic diversity.

Rio Tinto's plan to operate the mine at Oak Flat using highly automatic equipment will reduce blue collar jobs and shift toward a smaller, highly skilled workforce

Over the last 50 years, even while copper production rises, employment in copper production falls. This trend would continue dramatically as robotics and remote operating centers continue to change the landscape of mine employment.

Water problems associated with large mines displaces other economic activities.

A proposed mine at Oak Flat would increase competition for water in an already very arid region and would draw down the local water table to allow deep ore mining. A mine could also cause water pollution adding to the negative economic impact of a mine.

Arizona no longer depends on copper mining as a significant source of economic vitality.

Current total personal income resulting from metal mining statewide is only four-tenths of one percent. 50 years ago, that total was four percent. However, the state economy was able to expand steadily despite the dramatic decline of the role of metal mining in Arizona.

The full report can be found at:

http://www.oakflat.org/pdf/Resolution_Mine_Econ_Report_Power_Consulting_Final%209-9-2013.pdf