# INCOMPLETE MINING PLAN

- Because Rio Tinto's most recent efforts to achieve a Congressional land exchange have stalled, Rio Tinto released an incomplete mining plan of operations in November of 2013, asserting their position that they can mine Oak Flat anyway under the 1872 Mining Law.
- Rio Tinto's "plan" reads like a PR document and not a mining plan. It is clear that the plan was only released due to extreme pressure from both sides and was meant by Rio Tinto to help pass the Congressional land exchange and not to be a meaningful planning document.
  - Still, the incomplete plan is helpful in gauging how destructive the proposed mine would be.

# INCOMPLETE MINING PLAN

- The US Forest Service is currently reviewing the mining plan for completeness, a process they estimate will take 6 to 9 months.
- There are many problems with the mining plan, but two main ones are:
  - The plan allows the destruction of ½ of Oak Flat campground even though the campground is permanently withdrawn from mining by Executive Order.
  - The plan would store 1.5 billion tons of mine tailings on nearby Forest Service Land, but hydrological and geological testing or environmental review has not even been conducted to see if the site is a safe location.

## INCOMPLETE MINING PLAN

Rio Tinto's incomplete plan contemplates the development of:

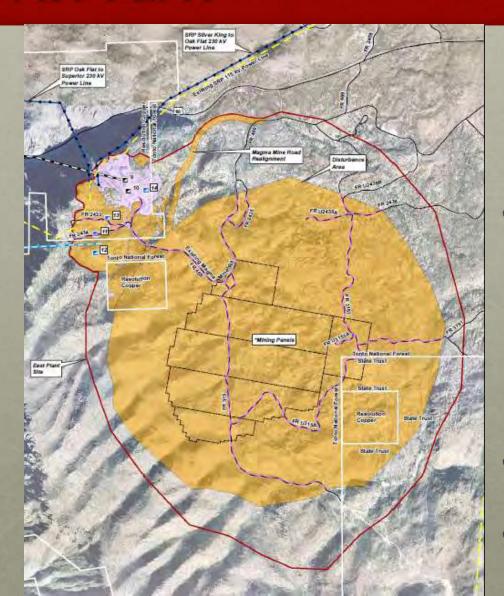
- A massive block cave mine at Oak Flat, to mine copper and molybdenum.
- A concentrating plant west of Superior outside the town boundary.



- A toxic tailing dump between Superior and Queen Valley in the Queen Creek watershed.
- A loading facility west of Florence Junction.

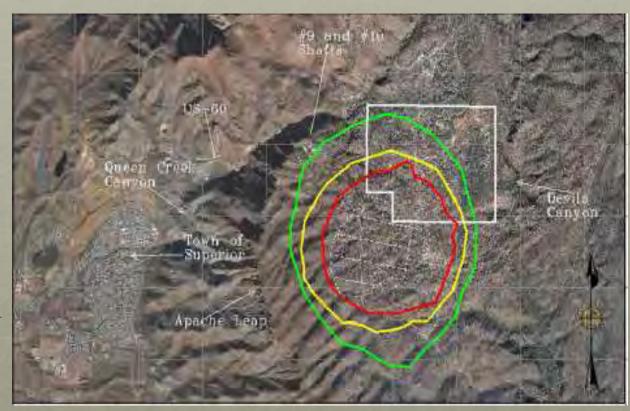
# UNDERGROUND MINE AT OAK FLAT

- The proposed "block cave" mine would be a cubic mile in size and located approximately a mile underground.
- Block caving is akin to an "upside-down open pit." All ore would be removed from 7,000 feet under the ground, resulting in a huge void in the earth.
- The massive void would cut through multiple underground aquifers and require intense mine dewatering.
- As the mine progresses, the ground would collapse, siphoning surface water and groundwater supplies from the area.



### SUBSIDENCE

- Rio Tinto estimates that subsidence would destroy or render unsafe at least half of the Oak Flat Campground.
- The plan calls for a subsidence crater 1,000 feet deep and 2.5 miles in diameter.
- The mining plan completely ignores the fact that 760 acres of land located at the heart of the proposed project was withdrawn from mining in 1955 by Executive Order.



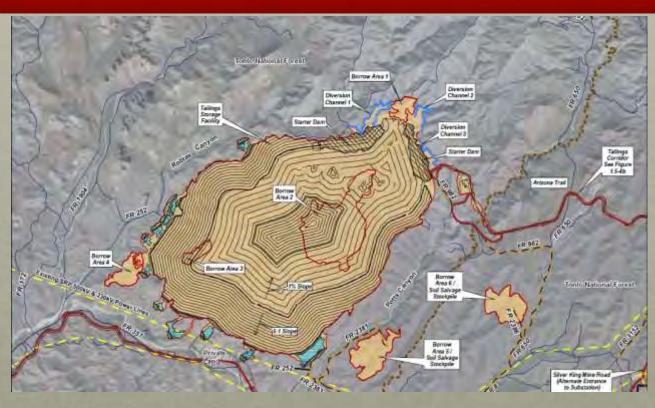
# CONCENTRATING FACILITY

- Ore would be delivered to the mill by a new tunnel under Apache Leap, despite the Leap's importance to the Western Apache.
- The entire facility would be located outside the Superior town boundary.
- Molybdenum concentrate would be trucked from the site.
- Copper concentrate slurry would be piped to a loading facility west of Florence Junction.
- Rio Tinto would ship the copper concentrate to the Mexican Port of Guaymas for transport overseas.



### TAILINGS

- 1.5 billion tons of toxic waste would be placed in the Queen Creek Watershed 6 miles upstream of the community of Queen Valley.
- The tailings would be placed directly on the ground without a liner to control acid mine drainage.



• Tailings would be acid generating and would contain elevated levels of chromium, selenium, uranium, and cobalt. Samples have elevated levels of aluminum, iron, manganese, chloride, fluoride, and sulfate when compared to US drinking water standards.

- The plans unrealistically reduces prior estimates of the projected water use for the proposed mine from 40,000 acre-feet per year to around 15,00 acre-feet without a realistic water balance assessment.
  - 40,000 acre feet is the same amount of water used by the City of Tempe (160,000 people).
- Water for mine processing would primary come from the Central Arizona Project (CAP) (either directly from the canal or from "banked" water pumped from the ground) and from mine dewatering and collection of surface water.
- While the CAP supply (which comes from the Colorado River) is subject to an impending shortage declaration, there are no backup sources of water or discussion of contingency plans if CAP water is not available to Rio Tinto.