



Lower Mineral Creek at Government Springs Ranch, located southwest of Globe, Arizona.

Resolution Copper is permitting one of the world's largest untapped copper deposits in Arizona's Copper Triangle. Once in operation, the mine could supply up to one-quarter of the nation's copper demand, providing a vital resource for America's clean energy transformation.

We take water conservation very seriously. We're committed to transparency and constant improvement when it comes to water use, seeking ways to implement state-of-the-art technology to help further minimize our water needs in the long-term.

Water Supply Stored for the Future

Resolution Copper has spent millions of dollars securing surface water and storing it as groundwater, otherwise known as long-term storage credits, to provide water for our future operations. Resolution Copper stored surface water is used by farmers in the New Magma Drainage and Irrigation District to grow crops, which leaves that same volume of water in the ground. As a result, water levels in the ground have risen in the area. We've already stored enough surface water in the ground to sustain our operations for decades, resulting in a net zero impact to the groundwater upon pumping of the long-term storage credits.

Developing & Implementing the Leading Water Savings Technology

We continue to seek out new sources of renewable water and use water responsibly by implementing water saving technologies and recycling as much as possible. State-of-the-art thickener technology in Resolution Copper's current mine plan and EIS will result in the lowest water use in gallons per pound of copper produced compared to other operating mines in Arizona. Our key water reduction methods include:

- Operating as an underground mine, which requires less water for dust control as compared to open-pit mines.

- Lining a portion of the tailings facility, reducing water loss.

- Thickening tailings to higher solids concentrations (60%) resulting in 43% of water being recovered for recycling and reuse, in comparison to typical tailings facilities in Arizona with 50% solids concentration, resulting in 29% of water being recovered.

But we still think that we can do better by investing in technology over time. It will be at least a decade until Resolution Copper begins formally operating. Resolution Copper's parent companies are already investing in water savings technology to implement in their operations across the globe. Rio Tinto (manager), has already implemented industry-leading filter press technology at its Vaudreuil alumina refinery in Quebec, Canada, a process that will produce a filter cake with 70% solids concentration, resulting in 57% of water being recovered. Rio Tinto is looking at additional partnerships to evaluate filter technologies for large scale copper mining that will produce a solids concentration up to 80-86%, resulting in 71%-80% of water being recovered, for recycling and reuse. If successful, these technologies combined with other technologies such as evaporative covers have the potential to drop Resolution Copper's water needs up to 50% and there would be more water stored for future use than needed for the mine. If this is the case, Resolution Copper has the potential for the project to become part of the water supply solution in the East Phoenix Valley.

Net Positive Impact on Arizona's Water

As we work to safely gain access to areas we want to mine, we must “dewater” or remove water deep within the bedrock. Since 2009, the water we remove goes through a treatment process on-site before being pumped 27 miles away to the New Magma Irrigation and Drainage District, for beneficial use where farmers use it to grow their crops. Continuous monitoring ensures the water meets regulatory standards. Since 2009 Resolution Copper has provided approximately 6 billion gallons of water to farmers, resulting in that same volume of water staying in the ground and saving it for future use. Since Resolution Copper does not get any long term storage credits for that water savings, it is a net positive impact on groundwater in the East Phoenix Valley area. Resolution will also contribute to the groundwater levels in the East Valley by entering into a contract for Central Arizona Project water. The CAP water will allow additional renewable water supplies to be brought to the valley for either storage or direct use.

In mining, water is required to uncover the naturally occurring valuable minerals in the production process, known as concentrating. But water is also essential to other aspects of mining operations for the protection of human health and the safety of our environment, workers and surrounding communities from dust control, cooling, potable use and fire protection.

Strict Adherence to Environmental Regulations

Multiple federal, state and local regulators will oversee our work to monitor, prevent, offset and replace potential impacts to water flow, water quality and ground water levels. Resolution Copper must comply with the National Environmental Policy Act (NEPA), the Clean Water Act, Endangered Species Act and state laws for water quality and water use, which in turn, requires rigorous water studies and substantive plans to monitor and protect groundwater, surface water and seeps and springs important for wildlife and cultural heritage. As such, we have invested in an extensive surface and groundwater-monitoring network. Additionally, we have partnered with the Town of Superior to collaborate on water studies, monitoring, restoration and enhancement of Queen Creek, an important local riparian area.



Resolution Copper employees and Community Monitoring Group member collect groundwater and surface water samples.

Protecting Aquatic Habitats

Through a proposed land exchange, Resolution Copper would deliver 5,459 acres of privately-held land to the government for conservation, including areas that are home to endangered species and rich riparian wildlife. The Lower San Pedro River parcel, the largest of all the land parcels in the exchange, has an ecosystem noted by the Nature Conservancy as one of the “Last Greatest Places on Earth” and has earned the distinction of “Important Bird Area” from prominent bird groups. Transferring these lands into public hands will enable the government to prioritize conservation efforts and protect vulnerable habitats of threatened and endangered aquatic creatures, while preserving miles of creeks and rivers in their entirety.



The 7B Ranch parcel is located primarily on the eastern side of the lower San Pedro River and east of Mammoth, Arizona.



The East Clear Creek parcel is a private inholding within Coconino National Forest, located along East Clear Creek about 38 miles southwest of the town of Winslow.

At Resolution Copper, conservation and beneficial use of water for communities, wildlife and cultural heritage is a priority.

Water Use and Monitoring

In 2017, Resolution Copper partnered with the local Community Working Group (CWG) to form a community monitoring program. The CWG hired a consultant to take quarterly groundwater samples from locations surrounding the project area to establish baseline conditions and monitor current activities. Samples are sent to an independent testing laboratory and the results are compared against compliance requirements and shared with the CWG and Resolution Copper for discussion. The sampling fosters transparency, information sharing, two-way dialogue, and trust.