

## Meeting #37

# October 14, 2015 MEETING SUMMARY

#### **Meeting Attendees**

Community Working Group members present:

Rick Cartier – Superior Chamber of Commerce alternate

Pam Bennett – Queen Valley Community Liaison

Bruce Wittig - Queen Valley Water Board

Cecil Fendley - Queen Valley Water Board

JoAnn Besich - Superior Optimist Club

Pamela Rabago – Superior Chamber of Commerce

George Martin – JF Ranch

Lynn Martin – JF Ranch

Jeff Bunkelmann - Central Arizona College

Arlynn Godinez, Superintendent - Superior Unified School District

Fred Gaudet – Arizona Trail Association

Tiffany Rowell – Superior resident

Community Working Group members not present:

Matt Nelson – Arizona Trail Association

Michael Lira – Central Arizona College

Evelyn Vargas - Cobre Valley Regional Medical Center

Nancy Vogler - LOST Trail

Bill Vogler - Superior Copper Alliance

Roy Chavez - Concerned Citizens and Retired Miners

Mark Siegwarth – Boyce Thompson Arboretum

Hank Gutierrez - Superior Copper Alliance

Anthony Huerta – Town of Superior

Resolution Copper Company:

Jim Schenk – Manager for Communities & Social Performance

Vicky Peacey - Senior Manager of Approvals, Communities & Environment

Guest Speaker:

Ian Edgar - Resolution Copper Company, General Manager of Studies

Facilitators – Godec, Randall & Associates (GRA)

John Godec

Debra Duerr

Public Guests:

Nathan Higgenbottom – University of Arizona

Michael Betom - Resolution Copper

Tara Kitcheyan – Resolution Copper

Robert S. Cervantes

Adriana Crittcovic

Ryan Craig

Member of San Carlos Apache Tribe



## Housekeeping

John Godec noted that several members are unable to attend tonight because of travel. He told the group that there are two new members who will be representing the Superior Unified School District as a replacement for Patrick O'Donnell. The group welcomed Arlynn Godinez; her alternate will be Valerie Garcia-Denogean. Lynn Martin recommended that Tiffany Rowell be invited to join the CWG as a member, although she does not have a specific organizational association. She asked if the group could make an exception to the operating procedures in this case, noting that Ms. Rowell has attended many meetings, has always offered input, and is an active community member. All agreed to do this, and welcomed Ms. Rowell to the CWG as an 'at-large' member and resident of Superior.

Godec said that Mark Nipp, one of the Town of Superior CWG representatives, has taken a job as police chief of Globe. Godec will inquire whether the Mayor has an interest in appointing someone to replace him on the group. David McNeiss is the new police chief for Superior.

## **Update on Exploration Activities & RCP Environmental Impact Statement**

Vicky Peacey – Resolution Copper Company

Peacey observed that everyone is generally aware of the partnership between Rio Tinto & Bronco Creek Exploration Company, which has been discussed at previous CWG meetings. She updated the group on the status of current exploration of unpatented mining claims on the Tonto National Forest. The contractors, Quantec, will have 3 teams of 3 people each conducting geophysical surveys, using a magneto telluric methodology (measures earth's magnetic field). From this, they can evaluate whether they want to start drilling. Once Bronco Creek explorations are finished, they will start assessing Resolution patented and unpatented ground. These activities are expected to continue through the rest of the year. She noted that another group partnered with Bronco will be doing drilling near Whitford Canyon and Hewitt Station. Peacey is putting together a map showing these locations that she will send to the CWG. An excerpt from the plan of operations for these activities is attached to this summary.

#### CWG members asked the following questions:

- Do the exploration companies do any work with satellites first?
  - They typically evaluate the geology for the kinds of rocks that could contain porphyry deposits. If that looks promising, the second phase could be an airborne or ground geophysical survey.
- What's Rio Tinto's role in this?
  - Rio Tinto Exploration is another division of the parent company, in addition to Resolution Copper Company. If promising results are found, the exploration group would turn the project over to another group who will do more detailed studies.

Peacey also updated the group on the status of the Environmental Impact Statement (EIS) for the Resolution Copper Project. She said that the Forest Service has selected a third-party contractor for the EIS, which will cover both the mine plan and the land exchange. The first order of business is to review baseline data from Resolution. The Forest Service will publish in



the Federal Register a Notice of Intent to Prepare an EIS; this will announce the start of the public scoping process, perhaps in the early part of 2016. The Forest Service will likely hold scoping meetings at a number of locations in the region and with the tribe.

Regarding the Environmental Assessment (EA) for the tailings site baseline characterization, Peacey said that the Final EA will be completed before the end of the year. This will kick off the Forest Service's formal objection process. A CWG member asked if there is any possibility that a more detailed EIS will be required; Peacey indicated that this would be a Forest Service decision.

## **Resolution Copper Project Employment and Job Profiles**

Ian Edgar - Resolution Copper Company

Ian Edgar introduced himself; he oversees the study program at Resolution. He offered to answer any questions tonight and follow up with additional information if needed. He stressed that the company's main goal is to get all employees and contractors home safely each day to their families. Health and safety is a priority.

As reported in the press, there will be about 1400 direct and 2300 indirect jobs from the project. Edgar said that tonight he wanted to focus on the types of jobs and how they develop over time to get to the peak employment. He showed a graph indicating numbers of jobs, both employees and contractors, over the period 2014 to 2032. On completion of the Draft EIS, employment will pick up to about 600, as the company would have a higher level of confidence that the project will go ahead. Once the Forest Service Record of Decision (ROD) is signed, jobs increase to about 1000. The project is expected to begin operation in about 2026 or 2027, but this date is not within Resolution's control. Another milestone that will increase jobs is the start of concentrator construction, then as operations ramp up employment increases significantly to about 3800 in 2026. It then drops and levels off at about 1700 as the mine continues to operate. Edgar noted that there are also risks associated with mining and mine development that could affect the schedule. For example, as the CWG knows, there were some problems with the cooling system at No. 10 Shaft last year that caused temporary shutdowns.

Currently, Resolution has about 100 employees and about 200 contractors, as shown on the following table. In general, the number of permanent employees will increase continuously over time, compared to the number of contract employees.

The types of work being done now and over the next 5 years include rehabilitation of Magma Mine, small infrastructure upgrades and additions, rehabilitation and deepening of No. 9 Shaft, drilling data collection, technical analysis and engineering, and regulatory work. Many of these jobs are relatively short term although some can last for several years.



#### **HUMAN RESOURCES**

Staffing levels for September 2015 are shown in the table below:

	Copper	San Carlos	Other Pinal	East	Out of State		
	Triangle		County	Valley	Other		
RCC Employees	26	4	21	42	4	2	99
Category 1 (includes Interns)	14	1	3	1	0	1	20
Contractors	82	18	14	19	48	23	204
Totals	122	23	38	62	52	26	323

During the 5 to 10 year timeframe, the project will get final permits to allow full construction to begin. Work at that time will be dominated by contractors and large work 'packages' of longer duration. Total employment numbers will climb throughout this period. The types of work include major infrastructure installation, shaft construction, and the start of underground mining activities.

In the 10 to 15 year period, construction hits the peak and then ramps down, while operations ramp up. Work will transition from large-scale contractors doing to operations with small contracts for plan improvements and repairs. Total employment numbers peak, fall, and then remain steady with employment of the operations team consisting of equipment operators, technical trades, supervisors and managers, engineers and scientists, and support staff. Much of this work will be done remotely through technology and robotics rather than in the mine itself. Construction of the tailings facility would also start during this timeframe, after the mill is operational.

The group had the following questions and comments:

- Can we have a copy of this presentation, because many people ask about jobs and employment?
  - Yes. Godec said the presentation would be posted on the CWG website with the meeting summary.
- Are there a lot of robotics involved in this type of mining?
  - Yes, particularly for the most hazardous jobs.
- Has Rio Tinto had other mines where they had to use such sophisticated equipment so far underground?
  - Yes, there were similar operations at a Rio Tinto mine in Australia. The controlling issue tends to be data speed for operations control, rather than the depth of the mine.
- A member noted that technology has advanced a great deal in recent years, using San Manual Mine as an example.
- Do you emphasize local employees?
  - Company policy is to hire local employees as much as possible, and this is also a consideration in bidding for contract work.



- How do you deal with the boom/bust phenomenon with contract labor that occurs at the peak of construction from 2024 to 2027?
  - Resolution will try to ensure that permanent employees are from the Copper Triangle.
     Edgar noted that worker development, education, and training will be required to meet this objective. Contractors are managed differently because they are mainly temporary jobs. Education is a key to success because both permanent and contract jobs will likely require similar skills.
  - A social impact assessment will be done to evaluate what effects there might be on the community, housing, education, services, and the like. The company will need to participate in mitigation programs.
- A CWG member observed that it's easy to say we'll hire locally, but the skills aren't here. The boom is only for about 2 years, and then it's over. The permanent jobs after that are the most important. What is the skill breakdown for these? Can we figure out these numbers and the specific associated skills (e.g. welders)?
  - There will be a range of skills needed including operators, technical trades, managers, engineers, scientists, and support staff.
  - Permanent operators will be trained directly by Resolution. Technical tradesmen will likely get skills in community college or other schooling. Hiring can be staggered to accommodate transitioning local employees into the project.
  - There will also be a number of 'indirect' jobs to support the population and workers in the Superior area.
- Would a high school graduate be appropriate for this training?
  - Yes
- What's Central Arizona College teaching that would be applicable to this project?
  - Or. Bunkelmann said that there is electrical and some mechanical engineering, but these are not taught much anymore. There have been partnerships with some of the mines to develop short-term focused programs as needs are identified. The District is currently exploring what the standard technology paths should be to better serve local industry. The Aravaipa campus was built because of the mines, to prepare students for mine jobs.
  - Peacey observed that the hardest challenge is getting K-12 students interested in technical and engineering areas.
- A member noted that there used to be trade high schools, especially in the East. That's what's needed here, to capture high school students before it's too late.
  - Bunkelmann explained that there is now a notion called "Hidden STEM economy" (an acronym for Science, Technology, Engineering and Math education), encompassing skills that have not been very obvious in recent years.
- Does Resolution have a tuition support program for its employees?
  - Yes, they offer 20 scholarships at \$3000 for graduating high school seniors to pursue science and technical areas.
- Will there be formal mentorship programs available? This could be a good way to promote consistency and succession planning.
  - Yes, that's the concept but there is no formal plan yet.
- A member explained that at one time, at Magma, a person started as an apprentice and advanced to a journeyman. The mine paid for this.



- For those people who work for contractors, what if they want to stay on and work permanently with Resolution?
  - o If there's a position open and the skill is needed, this would probably be a good option, since they would have the skills and be familiar with the local area.
  - For an example, when shaft construction workers were laid off, Resolution tried to place these workers in other jobs at the project.
- A member said she'd like to see older people being considered for jobs as well as young people and students.
  - There is a wide range of ages represented in the work force today, and this will likely continue.
  - o This could be largely a function of timing, and what's available when.

## **Introduction to NEPA Scoping**

Debra Duerr - Godec, Randall & Associates

Debra Duerr said that, last week, a few CWG members attended a training session on the National Environmental Policy Act (NEPA). The instructor, Mr. Rhey Solomon, focused particularly on Forest Service NEPA practices and on making legally defensible comments on the Draft EIS. Since the EIS is starting soon, the first step will be the public comment period known as 'scoping'. The CWG has expressed an interest in participating in the scoping process. Duerr presented a short description of the purpose of scoping as outlined by NEPA, what scoping is, how it influences preparation of the EIS, and some guidance on developing comments for submission to the Forest Service. The group asked a number of questions about how such comments might be prepared and submitted, how the group would agree on consensus comments, the types of comments allowed, and the decision-making process. They agreed that they would like to work on developing scoping comments from the group at upcoming meetings, and clarified that this would not in any way preclude individuals from making their own separate comments.

#### **New CWG Subcommittee Planning**

John Godec asked the group if they would be interested in forming additional issue task forces dealing with community concerns that have been raised Resolution and others. These might include those described below, and would be in addition to the CWG task force dealing with Historic Preservation and the CWG subcommittee dealing with community investment.

Recreation & Access: A suggestion has been made to combine the Recreation and Access Task Force with a new Recreation User Group (RUG) that has been convened by Resolution to explore a joint Environmental Assessment application to the Forest Service for a comprehensive regional recreation proposal. The group felt that this might make sense.

Conservation Lands Task Force: Godec told the group that the Superstition Area Land Trust (SALT) has asked Resolution about the possibility of forming a Conservation Lands Task Force. They are interested in working with Resolution to identify lands that might be traded for conservation as 'offsets' for the tailings area land located on the National Forest. Members of the CWG thought their group should be represented in this task force; some members were



concerned that East Valley interests would otherwise dominate the conversation. A member noted that SALT helped with a recent cleanup outside of Superior, and seems to be a good group. Fred Gaudet volunteered to participate in this task force.

Community Monitoring Team: In response to a suggestion made by Casey McKeon of Resolution at the previous CWG meeting, several CWG members have volunteered to be part of this effort. The initial task could be related to an offsite monitoring well for discharges to Queen Creek. McKeon is heading up this initiative. CWG members who verified their interest in serving on this team are Pam Bennett, Cecil Fendley, Bruce Wittig, Mark Siegwarth, Lynn and George Martin, and Tiffany Rowell.

#### **Underground Mine Tour for CWG**

Jim Schenck has offered to arrange this tour, in response to a request from the CWG. Resolution has offered several dates from which to select. Schenck asked the group to pick a date that worked for those who want to attend and on which there could be two trips, due to the limitation on the number of people who can go at one time. There was a conflict with November 10; any other day would work for most people who want to go. Times would probably be from 9:00am to 12:00pm and 1:00pm to 4:00pm. Schenck will consult with the Resolution site manager to see if tours could be provided on two separate days, but couldn't promise that this would be feasible.

#### **Public Questions & Comments**

A San Carlos Apache Tribe member mentioned that he is interested in the topic of employment, and would like to learn more about jobs. He asked how this group got started and what it does, and whether it has invited the tribe to participate. A group member explained that the CWG has met 37 times in reviewing issues associated with the project and obtaining information about a wide variety of subjects. The visitor said he believes the San Carlos community should be involved in this group, and observed that he has never associated Oak Flat with any sacred or historical significance. He's glad he came, and will talk to the tribal leaders about participation; he felt that they should know what's going on. Ian Edgar noted that there are 23 San Carlos tribal members currently employed at Resolution, both as employees and contractors.

#### **Next Meeting**

The next CWG Meeting will be: 5:30 PM
Wednesday, November 11, 2015
Superior Chamber of Commerce

The main topic will be visual simulations of the tailings site.



## **ATTACHMENT**

RESOLUTION COPPER MINING, LLC MT GEOPHYSICAL SURVEY

PLAN OF OPERATIONS

#### 3.0 DESCRIPTION OF ACTIVITIES

#### 3.1 MT GEOPHYSICAL SURVEY ACTIVITIES

Resolution proposes to conduct a MT survey within portions of Tonto National Forest. MT geophysical survey is a passive geophysical technique conducted by two to six mobile crews deploying recording units at predetermined stations.

Excavations required for survey at each station will be performed with a narrow shovel, pick-axe, or post-hole digger by experienced surveyors. Each excavation will be backfilled within 24 to 48 hours. At the approximate center of each station, the magnetic coils are each buried in an area about 4 ft in length, 0.5 ft in depth, and 0.5 ft in width. The coils are connected by wire to an acquisition and processing unit. Exhibits 1 and 2 show equipment used and a schematic of the layout at each survey station. Four electrodes are placed in a "+" configuration with 330-ft (100-meter) spacing in each direction. The electrodes consist of small sealed cylinders with diameters of about 4 in by 4 in and are placed 1 to 2 in into the ground in an approximately 6-in-diameter hole to which water is added (in order to make a good electrical contact). All electrodes are attached to the processing unit by wire, and the processing unit itself is attached to an external battery and computer system. All wires would be placed across the landscape to avoid roadways and trails.

Upon completion of the survey, all equipment is removed and all holes are filled using the earth previously set aside from the excavation. Grass or plants placed aside during excavation are carefully replaced. Special care is taken to minimize the removal or destruction of any plant materials. In many instances, plant materials can be avoided.

The Plan involves the completion of 135 of these stations on Forest System lands (Figures 2a and 2b). All equipment will be moved to the proposed activity areas by four-wheel-drive vehicles along existing Forest System roads (Figures 2a and 2b) and then backpacked into the station location. No survey activities will occur within the Oak Flat Picnic and Campground Withdrawal Area, an area that has been withdrawn from mineral entry (Figures 2a and 2b). To ensure the withdrawal is avoided the boundary will be flagged in the vicinity of survey stations to be located along the periphery of the withdrawal area (Figures 2a and 2b).

Precise placement of survey equipment requiring surface disturbance will be determined in the field to avoid vegetation to the extent practicable. Proposed activities at each survey station require minimal surface disturbance and include the placement of the four electrodes (each requiring 0.5 ft by 0.5 ft of disturbance) and the installation of the two coils (each requiring 4 ft by 0.5 ft of disturbance). The minor disturbances at each station total 5 ft². In areas where the magnetic coils cannot be installed in the ground, they will be covered with sandbags to minimize wind vibration and provide thermal stability. Exhibits 3 through 5 provide photographs of the equipment used and illustrate the minimal disturbance required at each survey station.



RESOLUTION COPPER MINING, LLC MT GEOPHYSICAL SURVEY

PLAN OF OPERATIONS

Acquisition Boxes and coils during a test.



Exhibit 1. MT Survey Equipment (Acquisition and processing units and coils).

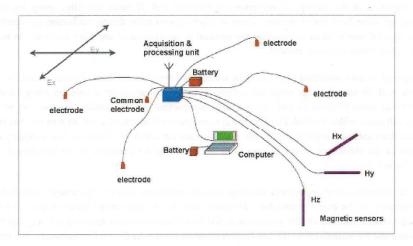


Exhibit 2. Schematic of MT survey station set up.

Note: The distance between electrodes is typically 100 m in a "+" configuration. Survey proposed as part of this Plan includes the placement of two coils (not three coils [or magnetic sensors] as illustrated in this schematic).

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