

Meeting Minutes

**Engineering/Minerals
Tonto National Forest
Phoenix, AZ**

To: Project Record

From: Donna Morey, SWCA

Re: Resolution Mitigation Discussion 6/17/2020

Attendees:

USFS: Mary Rasmussen, Lee Ann Atkinson

SWCA: Chris Garrett, Donna Morey

Resolution: Vicky Peacey, Jim Butler, Cameo Flood, Kami Ballard, Kartik Vommi

Handouts:

Agenda (5pg)

3/2 List (8pg)

5/4 List (8pg)

Discussion:

The goal of this meeting is to tackle item #1 of the agenda on voluntary mitigations that Resolution is willing to agree for addressing impacts. There have been many proposed or potential mitigations and it is now time to finalize the list. There is some outside feedback still expected on subsidence, 404, cultural, and water mitigations.

Mary wants to have a list for other permitting agencies to see as they go thru their permitting to determine if they have specific impacts their permitting should address. Vicky has a list prepared (will submit this week) with the comments and response.

Resolution notes there are some that are not necessarily voluntary approval/denied but instead could be already covered or a general response to comment.

How to look at voluntary measures if RCM says they will do it and even if in writing – is there any true mechanism to guarantee it? Could put in ROD that it informed the decision, but not sure it is guaranteeing. Mary doesn't want to guarantee the voluntary actions of resolution. ; Jim thinks we need to disclose XX have been done, YY are voluntary, ZZ are some voluntary measures already done or funded, and other measures we expect to happen as part of the SUP.

- MAQ1 – voluntary – yes & have a response and Rio Tinto policy on net zero and solar participation agreement with SRP. No concerns from Forest. Vicky to also add that these design ideas should also be committed to within the AQ permit.
- MAQ4 – noted no impacts to mitigate. Was not prescreened and group agrees analysis was done, project was designed to minimize with most of component either underground or enclosed for transfer points. More of a response than a denied mitigation, could also have RCM call out additional best practices that are already considered and within design for the response.

- MAQ5 – stockpile is enclosed once construction of building is complete, RCM to ensure that is fully enclosed or note that some gaps need to exist for equipment ventilation, but no impacts to mitigate.
- MC1 – create a cultural heritage & mining museum; Resolution will establish a fund for historic buildings, which could be used to create a museum as well as other activities. Resolution to note that language for this measure included consultation with SHPO. Voluntary by RCM but will be legally enforceable by PA once signed. Mary thinks we should add more in the response to comments as there are no specific impacts to mitigate and we are not directly addressing the museum or the specific building from the comment, but instead creating a fund. Smelter is not part of the action of FEIS, but US60 park was done as a mitigation for that.
- MC4 – agree completely – PA mitigation to be legally enforceable
- MC5- not specific to where/location. Need more information to address; instead can pivot and talk about campground to be kept open as long as possible, the 5-year Emory Oak project; and the Long-Term Emory Oak Plan.
- MC13 – Resolution does not feel impacts to mitigate but still establishing a fund at request of Town of Superior. Draft language they are trying to nail down for a community development corporation (Resolution would fund endowment); Change to EJ or Socioeconomics rather than Cultural categorization; Mary wants to consider capturing the beneficial outcome of project even when no identified impacts ; Plan is to fund at execution of the LEX and again another chunk of funds at ROD.
- ME11 – too generic to answer, recall the current EPM within plans
- MG1 – no impacts to mitigate but will have a publicly available website for adding regulatory required data. Restate response that any required reports would be posted on a Resolution website when delivered to the regulatory agency or authority requiring the reports. Resolution does not plan on allowing access to real time data that still has to be processed & interpretation, QAQC, and volume/size of data.
 - A different novel idea of could be installation and streaming of webcam showing subsidence or other area such as Queen Creek for rain response or at a spring.
- MG2 – Resolution already have a hotline for community complaints (phone and email)
- MG3 – vague – monitoring is established through other regulatory requirements. See the details in the individual monitoring plans. Addressed at a facility or resource basis.
- MG5 – already as a trigger action response in subsidence monitoring plan.
- MG6 – too general to do much with it and there are a variety of things already considered
- MG7 – Deny payment of \$5 Billion, can discuss the appraisal and other mitigation measures that will be in place
- ML1 – already mitigated impacts to Skunk Camp thru 404 mitigation programs for land, however Resolution is willing to extend the TNC management of 7B to cover transition period until BLM is ready to manage the property. BLM likes this plan and has agreed in meetings to the concept.
- ML2 – ASLD owns the land and the best interest will be determine by them for future use or sale of the land. It is not Resolution’s private land.
- ML3 – outside of area of impact, deny, other mitigations are provided for offsetting the impacts caused by the project.

- ML4 – BHP is not going to sell just the water parcels unless the entire San Manuel mining project is purchased and that still has mining value left. H&E was added as a 404 compensatory mitigation and that is in the same landscape area.
- ML7, 8, 9, 10, and 11 – Doesn't mitigate a project impact/Out of Scope. May be incorporated into ML15 as part of LEX agreement with TNC of 3 years post LEX. Related to 7B parcel. Being addressed through the ongoing land exchange process per Mary R
- ML12 – H&E incorporated into 404 mitigation
- ML13 – deny, do not own the BHP parcels, but these similar requested activities are planned for Lower San Pedro with a TNC agreement and on H&E for 404 mitigation.
- ML14 – deny, would cause more impacts to do this than existing conditions. Not found to be effective mitigation and does not fall under 404 guidance. Not feasible, practicable, or effective to limit impacts for endangered species and outside of an OHWM.
- ML15 – there is no impact to offset, Resolution is open to a 3-year TNC post exchange contact for 7B

Time check so skipping some that will come in writing anyways for group to review

- Public health – most covered by subsidence monitoring or MSHA
- Recreation – lots of requests – will fund Castleberry & short-term funding till the campground is revenue generating. Resolution to retain land ownership and BTA would manage. This is to ensure it can stay consistent to PA and other measures as needed. Imerys and Resolution open to adding fencing & working together on access across road to avoid conflicts.
- New climbing areas - upgrade 315 road back to level 2 travel, Inconceivables access and to build & fund maintenance for RUG plan as approved by TNF.
- Superior waters & trails – out of scope, not related, and NPS funding
- Public access
 - ASLD wants fencing for MARRCO to limit trespass or other possible public uses – could be turned into a trail for a post mine land use
 - Pipeline access conflicts with safety
 - Inconceivables – TNF envisions postponed decommissioning for existing road but not adding any new road. Not extension, park and hike.
 - MR36 - Hackberry trail – between Apache Leap and subsidence crater – not discussed in ALSMA EA. Should discuss as a recreation impact in EIS, but no way to keep access open by Resolution or Forest once mining begins. Mary says that is likely not an authorized route so not legal. Need to check if it is in or outside of the LEX parcel
- Socio – low income housing assistance – community development fund could be used for this, still being negotiated by Resolution to finalize the fund organization and set up.
- MS4 – not impacting housing but Resolution is willing to do. Creating a plan to buy BHP land along QC and hold in trust for Town of Superior.
- MS8 – already done, response to comment
- MS17 – no impact but will continue to fund; Want to add AWC 3rd party agreement with them to do the data as they provide water to areas of concern – transition from current review to new water reviewer but still have AWC present to CWG, they just won't continue to collect the data.
- MS18- no impacts to mitigation, RCM to give response about not having an impact on emergency services

- How should we handle the buying of Govt Springs and Dripping springs private land parcels? Some are purchased or the option to purchase is held by Resolution on at least 7 parcels. Resolution is in active negotiations with the rest. There is an NDA on at least 1 parcel, Vicky to check in with legal department to see what can be disclosed. *“RCM has entered into agreements for purchase with interested landowners in areas impacted by the project.”*

Next Steps List

Response to comment “this mitigation will address xx impacts” or if not bringing mitigation forward explain what else is being brought forward to minimize impacts

Get list in writing from Resolution and schedule next meeting once TNF has reviewed the list.

Action Items:

1. Get list in writing from resolution, can then schedule meeting to discuss once TNF has seen the list. **Will have from Resolution by 6/26.**
2. Vicky to share response to ASLD for the alignment consideration with agreement from ASLD.
3. Check if Hackberry Trail is legal recreation route

FINAL STEPS FOR LANDING MITIGATION FOR FEIS

1. AGREEMENT ON PUBLIC COMMENT MITIGATION SUGGESTIONS FROM RCM
 - a. Verbal – 6/17/20
 - b. Written

2. FOREST SERVICE DECISIONS
 - a. Any other public comment mitigation suggestions that can be required
 - b. Any additional mitigation that can be required
 - c. Revisit mitigations in DEIS

3. FINAL INPUT FROM RCM ON ADDITIONAL MITIGATIONS

4. MITIGATION FROM OTHER PROCESSES

5. DOCUMENT FOR FEIS

Agenda

To: Attendees, Project File
From: Donna Morey, SWCA
CC:
Date: 6/17/2020

Re: Resolution Copper Mine – Mitigation Discussion (6/17/2020)

Call-in Number: +1 (669) 900 6833

Meeting ID: 994 7109 6116

Meeting URL: <https://swca.zoom.us/j/99471096116>

1. Purpose of meeting
2. Discussion of mitigation suggestions raised in public comments
 - a. List provided 3/2/2020
 - b. Supplemental list provided 5/4/2020
3. Timing/status of potential additional mitigation components
 - a. 404 compensatory mitigation parcels
 - b. PA requirements
 - c. NDAA tribal mitigations
 - d. Cultural voluntary mitigations
 - i. Historic Property Treatment Plans
 - e. BA conservation measures and BO requirements
 - i. Coordination/mediation of SRP/Resolution collocation
 - ii. Long term monitoring
 - f. Conditions under state permits
 - g. Water-related monitoring/mitigation
 - h. Other Resolution voluntary mitigations
 - i. Forest counter proposal to RUG/Inconceivables
 - ii. Castleberry campground
 - iii. Climbing access on Resolution property
 - iv. Access points across JI Ranch
 - v. Socioeconomic mitigations
 1. Ongoing emergency services, senior center improvements, scholarships
 - vi. Sustainable energy – SRP battery/solar purchase
 - vii. Future ToS LEX parcels – funding of surveys
4. Next steps for mitigation process

REGULATORY FRAMEWORK FOR FOREST SERVICE CONSIDERATION OF MITIGATION

(ASSUMING 36 CFR 251, NOT 36 CFR 228 REGULATIONS)

Requirements under NEPA

§1502.14 Alternatives including the proposed action (emphasis added).

This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

§1502.16 Environmental consequences.

This section forms the scientific and analytic basis for the comparisons under §1502.14. It shall consolidate the discussions of those elements required by sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA which are within the scope of the statement and as much of section 102(2)(C)(iii) as is necessary to support the comparisons. The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or ir retrievable commitments of resources which would be involved in the proposal should it be implemented. This section should not duplicate discussions in §1502.14. It shall include discussions of:

(a) Direct effects and their significance (§1508.8).

(b) Indirect effects and their significance (§1508.8).

(c) Possible conflicts between the proposed action and the objectives of federal, regional, state, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the

area concerned. (See §1506.2(d).)

(d) *The environmental effects of alternatives including the proposed action. The comparisons under §1502.14 will be based on this discussion.*

(e) *Energy requirements and conservation potential of various alternatives and mitigation measures.*

(f) *Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.*

(g) *Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.*

(h) *Means to mitigate adverse environmental impacts (if not fully covered under §1502.14(f)).*

§1505.2 Record of decision in cases requiring environmental impact statements (emphasis added).

At the time of its decision (§1506.10) or, if appropriate, its recommendation to Congress, each agency shall prepare a concise public record of decision. The record, which may be integrated into any other record prepared by the agency, including that required by OMB Circular A-95 (Revised), part I, sections 6(c) and (d), and part II, section 5(b)(4), shall:

(a) *State what the decision was.*

(b) *Identify all alternatives considered by the agency in reaching its decision, specifying the alternative or alternatives which were considered to be environmentally preferable. An agency may discuss preferences among alternatives based on relevant factors including economic and technical considerations and agency statutory missions. An agency shall identify and discuss all such factors including any essential considerations of national policy which were balanced by the agency in making its decision and state how those considerations entered into its decision.*

(c) *State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.*

§1505.3 Implementing the decision (emphasis added).

*Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. Mitigation (§1505.2(c)) and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency. The lead agency shall:(a) *Include appropriate conditions in grants, permits or other approvals.**

(b) *Condition funding of actions on mitigation.*

(c) *Upon request, inform cooperating or commenting agencies on progress in carrying out mitigation measures which they have proposed and which were adopted by the agency making the decision.*

(d) Upon request, make available to the public the results of relevant monitoring.

Requirements under 36 CFR 251/Special Use Permits

§ 251.56 Terms and conditions.

(a) General.

(1) Each special use authorization must contain:

(i) Terms and conditions which will:

(A) Carry out the purposes of applicable statutes and rules and regulations issued thereunder;

(B) Minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment;

(C) Require compliance with applicable air and water quality standards established by or pursuant to applicable Federal or State law; and

(D) Require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance if those standards are more stringent than applicable Federal standards.

(ii) Such terms and conditions as the authorized officer deems necessary to:

(A) Protect Federal property and economic interests;

(B) Manage efficiently the lands subject to the use and adjacent thereto;

(C) Protect other lawful users of the lands adjacent to or occupied by such use;

(D) Protect lives and property;

(E) Protect the interests of individuals living in the general area of the use who rely on the fish, wildlife, and other biotic resources of the area for subsistence purposes;

(F) Require siting to cause the least damage to the environment, taking into consideration feasibility and other relevant factors; and

(G) Otherwise protect the public interest¹.

¹ NOTE TO PARAGRAPH (A)(1)(II)(G): The Department is making explicit its preexisting understanding of § 251.56(a)(1)(ii)(G) of this subpart in the context of authorizing noncommercial group uses of National Forest System lands. Section 251.56(a)(1)(ii)(G) provides that each special use authorization shall contain such terms and conditions as the authorized officer deems necessary to otherwise protect the public interest. In the context of noncommercial group uses, the Forest Service interprets the term “public interest” found in § 251.56(a)(1)(ii)(G) to refer to the three public interests identified by the Forest Service on August 30, 1995. These public interests include the protection of resources and improvements on National Forest System lands, the allocation of space among potential or existing uses and activities, and public health and safety concerns. Under this construction, § 251.56(a)(1)(ii)(G) allows the Forest Service to impose terms and conditions that are not specifically addressed in § 251.56(a)(1)(ii)(A)–(F) but only

(2) Authorizations for use of National Forest System lands may be conditioned to require State, county, or other Federal agency licenses, permits, certificates, or other approval documents, such as a Federal Communication Commission license, a Federal Energy Regulatory Commission license, a State water right, or a county building permit.

those that further these public interests. The Forest Service shall implement and enforce § 251.56(a)(1)(ii)(G) in accordance with this interpretation.

MITIGATION PROPOSALS FROM DRAFT EIS PUBLIC COMMENTS

MARCH 2, 2020

Overview

A total of 361 comments were coded as being related to mitigation. Of these, roughly 175 comments contained some suggestion for mitigation, though many of these comments were non-specific and general. The following is a summary of those mitigation proposals included in public comments that are specific enough to carry forward for consideration; the comments have been combined and condensed as much as possible into 85 individual mitigation suggestions. These fall under the following categories:

- General monitoring and reporting (3 proposals)
- Air quality – Greenhouse gases (1 proposal)
- Cultural resources – Museum (1 proposal)
- Lands (4 proposals)
- Noise (2 proposals)
- Public Health & Safety (4 proposals)
- Recreation – Campground (4 proposals)
- Recreation – Climbing (2 proposals)
- Recreation – Trails and Access (9 proposals)
- Recreation – Other (3 proposals)
- Socioeconomic – Housing (2 proposals)
- Socioeconomic – Workforce (3 proposals)
- Socioeconomic – Town of Superior; long-term funding (7 proposals)
- Socioeconomic – Rail (1 proposal)
- Transportation (2 proposals)
- Vegetation (3 proposals)
- Water Supply (3 proposals)
- Water – Compensatory; in-lieu mitigation; Queen Creek (3 proposals)
- Water – Monitoring (7 proposals)
- Water – Devil’s Canyon (1 proposal)
- Wildlife – Plans (1 proposal)
- Wildlife – Aquatics (2 proposals)
- Wildlife – Avian and Bat (8 proposals)
- Wildlife – Lighting (2 proposals)
- Wildlife – Exclusions (2 proposals)
- Wildlife – Species-specific mitigations (5 proposals)

General Monitoring and Reporting

- (M-G1). Create and maintain a public information repository, such as a community website, where all information on the investigation and related matters is readily available in a timely manner.
- (M-G2). Establish procedures for submittal of complaints relating to noise, light, loss of scenic value, and for mitigating actions to be taken in response to the complaints.
- (M-G3). Post-mining monitoring should continue until impacts are no longer occurring, plus another 15 years.

Air Quality – Greenhouse Gases

- (M-AQ1) - Develop mitigation to minimize greenhouse gas emissions or reach a net-zero carbon footprint.

Cultural Resources – Museum

- (M-C1) - Creation and maintenance of a Cultural Heritage and Mining Museum or fund, depicting the mining history and the story of Superior.
 - Specific proposal to purchase the old Harding School.
 - Specific request for funding to maintain museum.

Lands

- (M-L1). Implement mitigation through partnership with The Nature Conservancy on 7B Ranch to partially address the impacts of the tailings at Skunk Camp.
- (M-L2). Purchase and transfer to federal ownership a considerable portion of the lands suggested as "Preserve" in the Superstition Area Land Plan, an inclusive, 105-square mile study conducted by SALT in the early 2000's - with particular emphasis on adding land that would serve as a buffer between the south border of the Superstition Wilderness Area and Phoenix.
- (M-L3). Purchase a few hundred acres of private property to open up 38 square miles of public land, including the Needles Eye Wilderness area, in Gila County on Route 77.
- (M-L4). Acquire sufficient acreage within the lower San Pedro River watershed in order to achieve "no net loss" of habitat value from the proposed project. One possible location, currently owned by BHP, is the "Broken Hills Property".

Noise

- (M-N1). Require [construction] work be completed at night in order to reduce traffic relocations, thus reducing noise pollution.
- (M-N2). Mitigate noise and vibration impacts to residences near tailings facilities by rerouting access roads, purchase of affected properties, and establish a noise complaint phone number or similar procedure.]
- (M-N3). With two trains arriving and departing at night, this has the potential to increase nighttime noise in and around Superior. Noise control measures should be incorporated into this option so that there is minimal noise increase. [If train to Superior isn't incorporated into Preferred Alternative, this can be ignored]

Public Health & Safety

- (M-PH1). Near immediate reporting of spills or other reportable activities
- (M-PH2). Emergency Action Planning for all mine operations, not just tailings storage facilities. Note that FS-229 requires Emergency Action Plan for TSF.
- (M-PH3). Develop failure modes and effects analysis and emergency action plan for the selected tailings facilities before completion of FEIS. Note that FS-227 requires the FMEA and FS-229 requires the Emergency Action Plan for TSF.
- (M-PH5). Dispose of tailings as a hazardous waste, or put in place protective measures to prevent runoff with the predicted pH of 2.13.

Recreation – Campground

- (M-R1). Include a fund or endowment to cover the construction and maintenance of a campground.
- (M-R2). Fund the development of the Castleberry Ranch into a full-service campground with ongoing maintenance funded by the endowment.
- (M-R3). Transfer Castleberry campground management to the Town of Superior.
- (M-R5). Develop new campground near small unmaintained road with a cattle guard near westbound highway 60 mile marker 230.

Recreation – Climbing

- (M-R8). Provide new climbing areas, as well as access to areas that will not be directly affected, but access to them is.
- (M-R9). Replace access roads that are removed so that access to rock climbing in these areas is not lost.

Recreation – Trails

- (M-R17). Incorporate the RUG plan.
- (M-R18). Incorporate Superior Waters & Trails proposal.
- (M-R19). Mitigation for Forest Road 315 must include a re-route that will allow 4x4 traffic to the east of the mine site near Devil's Canyon and which links up with the 315-route south of the mine site.
- (M-R20). Develop comprehensive trails plan and ensure funding for construction and maintenance.
- (M-R23). Include mitigation to create or enhance public access to the areas south, east and west of the Oak Flat where TNF lands were exchanged with Resolution Copper through new/improved roads/routes, and provide access to Devil's Canyon, Oak Creek and/or eastern portions of Apache Leap.
- (M-R24). All efforts possible must be taken to assure that the northern pipeline design and construction does not negatively impact Devil's Canyon. Include an option to later include a parallel trail with the pipeline.
- (M-R26). Allow recreational access to the Queen Creek Canyon segment of the LOST trail (old Highway 60) including the historic Queen Creek tunnel in perpetuity.

- (M-R27). Fund the extension of the LOST Queen Creek segment south across the base of Apache Leap.
- (M-R28). Develop horse watering tanks with solar pumps along trails.

Recreation – Other

- (M-R13). The property on which the RUG trail system is located must either be bonded for full value against mineral exploration involving drilling or other disruption and mineral exploitation or the mineral rights must be signed over to the Town of Superior (i.e., Bronco Creek claims)
- (M-R14). Fund new recreation facilities including trails, campgrounds, park/pool facility, and school playgrounds.
- (M-S20). Offset the estimated \$70,000 in wildlife related tourism from the loss of Oak Flat and Skunk Camp.

Socioeconomic – Housing

- (M-S1). Develop mitigation for low income housing assistance; ensure low-income housing is available
- (M-S4). BHP to turn its Superior properties over to Superior to be incorporated into a land bank that for additional housing for local employees.

Socioeconomic – Rail

- (M-S6). Resolution Copper should commit to the reactivation of the rail system, with commercial and tourist service as a partial socioeconomic mitigation that will also benefit the project. A spur for a combination train station, welcome center, training center, and mining museum should be located parallel to Main St. near the Lone Tree Gate.

Socioeconomic – Town of Superior; Long-term Funding

- (M-S8). Require an independent third-party to establish a method for studying and documenting potential socioeconomic impacts, then provide adequate funding to mitigate these impacts. Resolution to make up any difference in costs versus revenues attributable to the Resolution project. Require both parties to agree upon an accounting and reporting structure. Mitigation relating to roads, utility infrastructure, housing, public safety, and water quality and quantity.
- (M-S10). Invest directly in the school system on a continual basis.
- (M-S11). The Superior/RCC Public Safety Contract should be a long-term agreement, based on current projected tax increases.
- (M-S13). Creation of an endowed foundation to allow the Town government and local nonprofits to maintain and increase services; further explore the concept of establishing a community fund or foundation to provide long-term support for local projects and initiatives aimed at mitigating mine-related impacts and enhancing the quality of life in the region.
- (M-S15). Bonding for potential socioeconomic impacts.
- (M-S17). Fund the Community Working Group and ongoing monitoring through the life of the mine and until reclamation is complete.

- (M-S18). Extend (as relevant) and negotiate new agreements with the Town of Superior to fund specific needs and projects based on mine development and operation impacts.

Socioeconomics – Workforce

- (M-S21). Creation/expansion of an apprenticeship program.
- (M-S22). Develop a workforce training program.
- (M-S23). Establish numeric or percentage targets for local hiring and for using local suppliers and services.

Transportation

- (M-T3). Develop traffic mitigation to prevent drop in LOS to "inadequate" levels, monitor traffic at affected intersections during construction, and contribute to road repair and maintenance.
 - Specific suggestion of SR177/US60 intersection
 - Specific suggestion of Skyline Road; this includes mitigation of effects caused by access to state land (there's a gate now to prevent access, that would be lost)
 - Specific inclusion of both Town of Superior and Town of Miami
 - Specific suggestion of mitigating impact on school bus/student safety
 - Specific suggestion to put this in the form of a traffic management plan
 - Specific suggestion to analyze passing lanes on SR77
 - Specific suggestion to upgrade Dripping Springs Wash Road
- (M-T5). Study the increased traffic, street maintenance, and public safety costs to the Town of Superior.

Vegetation

- (M-V3). Comprehensive revegetation plans should be required for the subsidence crater, the tailings slurry pipeline corridor, and the tailings facility as part of scenic resources mitigation. Such plans are noted as FS-226 for Soils and Vegetation for the tailings facility and should be referenced here and expanded to include the pipeline corridor and subsidence area, and to incorporate construction revegetation as well as end-of-mine revegetation.
- (M-V1). Develop a vegetation plan that includes monitoring to avoid invasive species in disturbance areas.
- (M-V2). Plant native shrubbery and trees west of Apache Leap and east of Picket Post Mountain that would be equivalent to the loss of natural habitat in the Oak Flat region.

Water Supply

- (M-WS3). Contract out the delivery of water to Top-of-the-World to a utility, such as Arizona Water, and have the water delivery system to Top-of-the-World in place before any mining activity is allowed to begin that could impact our GDE. Install fire hydrants along with water delivery system in Top-of-the-World.
- (M-WS2). Include mitigation requiring replacement of affected residential wells, with Resolution Copper funding assurance. Develop mitigation to monitor drinking water wells and provide contingency for alternative water sources.

- (M-WS4). Develop monitoring and mitigation measures that protect the resources of the Arboretum including RCM's provision for a secondary water source for the Arboretum to ensure preservation of well water levels and water quality in the event of emergencies.

Water – Compensatory; In-Lieu Mitigation; Queen Creek

- (M-W2). Implement of the strategies developed in the 1999 Restoration and Management Plan for Queen Creek and subsequent action plans developed by the Town of Superior.
- (M-W3). Review opportunities for in lieu compensation for impacted WOUS. Develop water resource mitigation that considers the relative ecological value of impacted waters, with habitat replacement occurring in closer proximity to impacted areas.
- (M-W16). Include mitigation requiring water levels be maintained at current levels, and replacement of water lost in fractured Queen Creek bed by pumping water into Queen Creek above Magma Bridge.

Water – Monitoring

- (M-W5). Develop mitigation specifying that any water quality impacts trigger mine operation shutdown.
- (M-W20). Water quality monitoring should remain in place until impacts are no longer measured - plus 15 additional years.
- (M-W6). Make water quality monitoring data publicly available on a website.
- (M-W21). Ensure that sampling is completed when streams are flowing.
- (M-W7). Commit to continuing the Community Monitoring Program through development, operation and closure of the mine, and for some reasonable period of time thereafter. Expand the program as necessary to include members from affected communities, and water sampling from areas potentially affected by the Skunk Camp tailings site - if selected.
- (M-W8). Include mitigation and bonding to monitor tailings and water for "decades" after mine closure; include mitigation and bonding to monitor water loss or reductions post-closure.
- (M-W10). Monitor water quality every mile between the Project area [Skunk Camp] and the Gila River.

Water – Devil's Canyon

- (M-W18). Mitigate the impacts of reduced runoff reaching Devil's Canyon to ensure no water loss; mitigate the impacts of reduced runoff reaching Devil's Canyon by bringing water to the canyon to preserve flow.

Wildlife – Plans

- (M-WL23). Develop Wildlife Management Plan in coordination with AGFD, USFWS and USFS biologists.
 - Concentrate on BMPs and site designs to minimize light pollution; traffic controls to reduce speed, and reduce dust; staff training to avoid wildlife collisions/mortality; and traffic management to reduce conflicts with local outdoor recreation.
 - Follow AGFD and FWS guidance for mitigation of impacts on wildlife.

- Include measures in the Wildlife Plan and in App J of the DEIS to limit the spread of non-native, invasive plant species through landscaping with drought-tolerant species that are native to Arizona.
- Include measures in the Wildlife Plan and in App J of the DEIS to minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens.
- Include in the Wildlife Plan and App J of the DEIS: Artificial night lighting, which may be intensified by the collection mirrors, may attract insects and the species that prey on them (e.g. bats). It could also impair the ability of nocturnal animals to navigate, and may negatively affect reptile populations. It is recommended to use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.
- Include in the Wildlife Plan and in App J of the DEIS. "If trenching will occur, trenching and backfilling crews should be close together to minimize the amount of open trenches at any given time. Avoid leaving trenches open overnight. Where trenches cannot be backfilled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The slope should be less than 45 degrees (1:1). Trenches that have been left open overnight should be inspected and animals removed prior to backfilling."

Wildlife – Avian and Bat

- (M-WL1). Include criteria for electrocution and bird strike prevention to Appendix J CA-185.
- (M-WL3). To mitigate impacts to migratory and breeding birds, initiate construction outside breeding periods for species that use Saguaros (SGCN: elf owl, Gila woodpecker, gilded flicker, white-winged dove).
- (M-WL36). Develop an Avian and Bat Protection Plan in coordination with AGFD.
- (M-WL4). Mitigate impacts to avian species by using existing transmission lines and access routes for construction, and installing and maintaining power line facilities in a way that will reduce raptor collisions and electrocution.
- (M-WL5). Construction should be initiated outside of the breeding season for most bats.
- (M-WL37). Buffers around bat hibernacula based on wind direction patterns, adjacent land use, and surrounding vegetation should be maintained.
- (M-WL7). Conduct pre-closure [bat] surveys multiple years and visits/year to document species presence/absence and develop appropriate closure methods in coordination with AGFD, BCI and USFS biologists.
- (M-WL38). Implement wildlife exclusion measures pre-closure to minimize wildlife entrapment and mortality during closure; consider seasonal timing of closure on any sites with potential maternity roosts.

Wildlife – Aquatics

- (M-WL2). Develop an "Aquatic Species and Habitat Biomonitoring and Response Strategy" (physical and chemical parameters) for incorporation into the EIS.

- (M-WL35). Add language specific to preventing loss of riparian habitat for power lines and the pipeline to Appendix J CA-187.

Wildlife – Lighting

- (M-WL11). Use all possible methods to minimize light impacts, including downward-pointing lighting; reduce lighting around complex.
- (M-WL14). Lighting should be reduced in flyways to prevent potential impacts to foraging behavior.

Wildlife – Exclosures

- (M-WL25). Include escape ramps, hazing, and monitoring of site for any mortality along with exclusion fencing for any ponds.
- (M-WL28). Develop an effective bird hazing protocol to prevent avian exposure to acidified and metalliferous waters.

Wildlife – Species-specific mitigations

- (M-WL30). Capture and relocate endangered animals.
- (M-WL31). Include mitigation stating that handling and transportation of Sonoran Desert tortoise and Gila monster will only be conducted by a trained biological monitor.
- (M-WL32). Work with AGFD to develop and implement kit fox mitigation plan.
- (M-WL33). Include mitigation to address impacts to burrowing owls, following AGFD guidance.
- (M-WL34). Ensure that Reptile and Sonoran Desert Tortoise Plan measures are taken, it should be made clear that even though it may be a voluntary agreement, due to the Forest requirements, it will be assured.

SUPPLEMENTAL MITIGATION PROPOSALS FROM DRAFT EIS PUBLIC COMMENTS

MAY 4, 2020

Overview

On March 5, 2020 a list was provided to Resolution Copper containing a series of 85 mitigation suggestions gleaned from roughly 361 individual public comments on the Draft EIS. Those comments were identified from the initial codes assigned by the comment analysis team.

The public comments have been re-screened in preparation to drafting the responses to comments. An additional 74 comments were identified that potentially contained mitigation suggestions that had not been captured in the March 5 list. The suggestions from these additional comments are provided below.

An additional 58 mitigation suggestions have been identified. In many cases, these additional suggestions are related to mitigation suggestions provided on March 5. Where this is the case, the original suggestion has been noted.

- General monitoring and reporting (3 proposals)
- Air quality (2 proposals)
- Cultural resources (2 proposal)
- Environmental justice (1 proposal)
- Lands (9 proposals)
- Noise (1 proposal)
- Public Health & Safety (6 proposals)
- Recreation (6 proposals)
- Recreation – Arizona National Scenic Trail (4 proposals)
- Socioeconomic (4 proposals)
- Vegetation (1 proposal)
- Water Supply (6 proposals)
- Water –Queen Creek (1 proposal)
- Water – Monitoring (1 proposal)
- Water – Devil’s Canyon (2 proposals)
- Wildlife – Plans (4 proposals)
- Wildlife – Avian and Bat (3 proposals)
- Wildlife – Aquatics (1 proposal)
- Wildlife – Species-specific mitigations (1 proposal)

General Monitoring and Reporting

- (M-G5). Mitigation plans should force a cessation of mining activities until problems are fixed.
Notes: 1) The comment points to a variety of resources this would apply to, including air quality, water quality, wildlife corridors, and resident and migrating wildlife species; 2) We recognize that triggers/actions are likely to be defined primarily by state permitting requirements for air quality and water quality; and 3) With respect to water supply and subsidence, in particular, the ongoing workgroup discussions have (or will) include discussion of the question of appropriate triggers, including cessation of mining.
- (M-G6). Request to take all measures possible to identify and mitigate any public health and safety, water resource, socioeconomic, and quality-of-life impacts of concern to Kearny, Winkelman, Dripping Springs, and other locations in Gila County.
- (M-G7). This comment is being provided in its entirety, as the best way to convey the request. Emphasis from original.

“Require a 5 BILLION DOLLAR non-refundable cash deposit, paid in full, to be held by a specific United States agency to be used for the following. Payments from interest of the sum to be dispersed on a bi-annual basis to the affected parties/entities from the mine's operation. These payments would be made on an equitable basis depending on need, size of entity, property at stake/risk, etc. These entities could be the Town of Superior/residents, Native American Tribes, residents of Oak Flat/Top of the World, Queen Valley, Pinal County, USFS and Tonto National Forest, etc. These payments would not take the place of any other mitigations but would be over and above. At the end of the mine's operation the principal would be used as additional funds for clean up and restoration of the area and other payments to affected entities. Obviously this proposal would require more detail than I may provide in this comment section. At the end of the mine's operation, title/deed/ownership of the land originally involved in the land swap would automatically revert back to it's original owners for a token payment amount of the smallest amount possible to make the swap legal. I propose \$1.00. The 5 Billion Dollar deposit would be required before any further mining operations would be allowed to continue. Given profit statements, fund dispersed to shareholders, operating capital, etc, this amount should not be considered excessive by any means.”

Air Quality

- (M-AQ4). The length of the overland portion of the conveyor at the West Plant Site should be minimized and enclosed to reduce possible dust in the area.
- (M-AQ5). The stockpiled ore needs to be enclosed (as opposed to "covered") to reduce dust in the area.

Cultural Resources

The development of cultural and tribal mitigations is being undertaken through a separate and extensive process, both through Section 106 consultation and separate discussions as required under the NDAA. Very few of the ideas currently being developed arose from the public comments.

- (M-C4). Provide jobs for tribal members through the tribal monitoring program.
- (M-C5). Allow unfettered access to Emory Oak resources.

Environmental Justice

- (M-EJ1). Provide a reasonable and reasonably complete suite of plans and options to avoid and mitigate the adverse impacts on environmental justice communities.
Notes: 1) It is recognized that this mitigation suggestion is too generic to be directly actionable; and 2) that many of the specific socioeconomic mitigation suggestions possibly are pertinent to environmental justice communities. However, this suggestion has been included in order to identify that mitigating impacts to environmental justice communities in particular were a focus of the public comments.

Lands

The March 5 list of mitigation suggestions included item M-L1, calling for a partnership with The Nature Conservancy for management of 7B Ranch. The following include more specific requests from letter from The Nature Conservancy (Letter 1137) and Audubon Arizona (Letter 1441).

- (M-L10). Staff a position with a new BLM employee, preferably operating somewhere in the greater San Pedro Watershed.
- (M-L11). Develop a strategy (prior to FEIS) to facilitate Interior's assumption of management of 7B Ranch and Appleton Ranch.
- (M-L7). Fencing repair and replacement, and additional cultural site fencing.
- (M-L8). Retire degraded irrigation ditches and berms; remove dilapidated structures and access roads.
- (M-L9). Undertake bosque restoration prior to BLM assuming ownership.

The March 5 list of mitigation suggestions also included Item M-L4, calling for additional acreage within the lower San Pedro watershed be obtained to achieve a "no net loss" in habitat value. The BHP "Broken Hills Property" was one specific suggestion. Below are additional related suggestions.

- (M-L12). Restoration and Enhancement of H&E Farm property owned by The Nature Conservancy.
- (M-L13). Specific to the BHP Property: 1) protection of riparian forest, wetlands, and springs; 2) restricting development of these areas; 3) limiting water use and/or withdrawals; 4) active management of this property for wildlife; and 5) partnering with conservation organizations to hold and manage these lands in fee or hold conservation easements.
- (M-L14). Address the tailings at the Grand Reef Mine.

- (M-L15). Set up an endowment to fund long-term management of the Lower San Pedro River sites, as well as the Appleton Ranch parcel, by non-profits. These sites would not have sufficient funding for a federal agency to manage them for ecological purposes.

Noise

- (M-N4). Mitigate noise to residents along Dripping Springs Road.
Note: This is a more specific version of M-N2 from the March 5 mitigation list.

Public Health & Safety

- (M-PH10). The subsidence area boundary should be fenced off to prevent cattle from entering the area if there is a safety hazard to the mine or the livestock.
- (M-PH6). All components of the pipeline should be engineered and constructed pursuant to best management practices to reduce the possibility of a breach or spill occurring on Arizona State Trust land. These design methods may include using thick single-walled or double-walled pipe sections lined with high-density polyethylene, installing a comprehensive pipeline monitoring network, and peer-review of the construction and design.
- (M-PH7). Continue ITRB reviews with public transparency through subsequent design, construction, operations, and closure of the selected tailings alternative.
- (M-PH8). Address potential rock/boulder slide that sits on the northern slope of the mountain between Milepost 228, going east to Queen Creek Tunnel.
Note: This comment was specifically brought forward through the Subsidence/Geology/Seismic workgroup, for consideration in the revised Subsidence Monitoring Plan.
- (M-PH9). Subsidence monitoring should be made available in real-time through a website.
Note: This comment is similar to item M-G1 brought forward in the March 5 mitigation list.
- (M-PH11). Conduct InSAR monitoring of any areas of potential subsidence, including the Oak Flat area and Desert Wellfield area.
Note: Remote sensing of subsidence has already been conducted at Oak Flat and has been brought forward through the Subsidence/Geology/Seismic workgroup, for consideration in the revised Subsidence Monitoring Plan. The potential to use InSAR also has been raised in the context of the Desert Wellfield potential subsidence and may be further discussed with the Water Resources Workgroup.

Recreation

- (M-R31). Access routes established for the tailings pipeline corridor should remain open to the public for access to the east side of Oak Flat so long as the access does not interfere with operations or public and worker safety.
Note: This is related to items M-R23 and M-R24 from the March 5 mitigation list.

- (M-R33). For climbing, replacement of the USFS roads that are lost with reasonable alternative alignments/replacements and improvements. Specific reference to Upper and Lower Devils Canyon, the Mine Area and Apache Leap. Include parking lots and trailheads along with the roads.
Note: This is related to items M-R8 and M-R9 from the March 5 mitigation list.
- (M-R34). Further details are requested on the Inconceivables mitigation potential.
Note: This is related to items M-R8 and M-R9 from the March 5 mitigation list.
- (M-R35). Identify funding strategies for the Superior Trail Network.
Note: This is related to item M-R18 from the March 5 mitigation list.
- (M-R36). Keep the Hackberry Creek off-road trail open.
- (M-R37). With respect to measure RC-216 (page J-17 in DEIS: “Develop access to Oak Flat Campground while safe per MSHA regulations”): Include alternative vehicular access for parking and trails to Devils Canyon on Forest Service lands upstream of the Grotto area as a part of access mitigation.

Recreation – Arizona National Scenic Trail

- (M-RAZ1). If the pipelines cross over the AZNST they should contain sound deadening materials.
- (M-RAZ2). Further details are needed for the crossings of the AZNST by any project components; with respect to crossings of the MARRCO Corridor, formally grant permission for users of AZNST to cross the corridor.
- (M-RAZ3). Incorporate construction measures into any road crossings, pipeline crossings, or reroutes of the AZNST to minimize impediments to trail use and minimize visual impacts on trail users.
- (M-RAZ4). Any construction closures should not last longer than one hour if there are AZNST users waiting to continue, and safety procedures must be a high priority.

Socioeconomics

- (M-S26). Compensatory mitigation for reduced property values (applies to impacts from water supply impacts from water quantity or water quality changes, impacts from traffic, and impacts from proximity to tailings/mine facilities).
- (M-S27). Establish a fund with a percentage of profits to the Town of Superior, as Superior will be impacted the most by the mine, but receives no or little tax income.

Note: This is related to a number of items on the March 5 mitigation list, including M-S13 and M-S15.

- (M-S28). With respect to ranching impacts, develop timely, economically viable alternatives for the ranchers who want it.
- (M-S29). Establish a longer-term agreement or an education to offset this loss of funding to schools.

Note: This is related to item M-S10 on the March 5 mitigation list.

Vegetation

- (M-V4). From AGFD: comply with the Arizona Native Plant Law regulations. Determine if a Native Plant Inventory should be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.

Water Supply

A number of additional comments are related to the potential mitigation to replace residential wells if impacted by drawdown (item M-WS2 on the March 5 mitigation list). Note that these comments are also slated to be part of the discussion on mitigation and monitoring that will take place with the Water Resources Workgroup.

- (M-W22). Ensure that mitigation of water supplies replaces the full value of what is lost (“restitution” is the term used by the commenter); is fully funded and in place prior to loss of water supply to avoid delays; and has clear triggers with data gathered relative to possibly affected wells provided to ADWR, Forest Service, the well owners, the Town of Superior, and Top-of-the World on an annual basis.
- (M-W23). The water supply mitigation agreed to right now is specific to possible drawdown impacts the mine site. Additional requests were made by the public for similar mitigation to be put in place near the Desert Wellfield (due to drawdown impacts), and residents along Dripping Springs Wash (due to water quality impacts).
- (M-W24). The mitigation should be extended to include not just replacement of water supplies, but compensation for other impacts due to groundwater drawdown, such as increased pumping costs.
- (M-W27). Financial resources should be set aside to mitigate the impact of land subsidence due to groundwater pumping.
- (M-W31). Partially mitigate impacts by withdrawing the Phoenix AMA Long-term storage credits from within the Area of Impact of storage.

- (M-W32). Arizona Water Company requests that appropriate funding or bonding be in place to ensure the project will not cause any significant water level declines or water quality impacts .

Water – Queen Creek

- (M-W33). Place new shafts and exhaust raises well away from the centerline of Queen Creek by an appropriate distance, say 500 feet.

Note: This mitigation suggestion is related to M-W16 from the March 5 mitigation list, which is concerned about lost water in Queen Creek due to fracturing.

Water – Monitoring

A number of additional comments are related to the potential monitoring and mitigation of GDEs. Note that these comments are also slated to be part of the discussion on mitigation and monitoring that will take place with the Water Resources Workgroup.

- (M-W28). More detail is needed in the monitoring and mitigation plan, including:
 - Exactly how we intend to differentiate the impacts from mine dewatering from other variables
 - Whether GDEs reliant on shallow fracture flow (as determined by the Forest Service for the DEIS) would be exempt from monitoring and mitigation requirements.
 - Clear quantitative triggers for each GDE (i.e., groundwater decline of greater than X feet over Y monitoring events).

Water – Devil’s Canyon

- (M-W26). Divert existing flows across the subsidence area around or away from this site, to preserve downstream flows, if possible.

Note: This is related to item M-W18 from the March 5 mitigation list.

- M-W30). More specifics are needed for mitigation and avoidance at crossings of Devils Canyon for Alternative 6 pipeline routes (north and south).

Wildlife – Plans

A number of measures were previously captured under the overarching requirement to develop a Wildlife Management Plan (M-WL23) in the March 5 mitigation list. The comments below likely fall under the same category.

- (M-WL39). From AGFD: 1) consider referencing the ERT and clarify ERT reports will be updated every 6 months to ensure the latest conditions/species are assessed over the life of the project; 2) consider coordinating with the Project Evaluation Program before, during, and after construction to assist with mitigation.
- (M-WL41). From AGFD: develop an Aquatic Species and Habitat Biomonitoring and Response Strategy (detailing physical and chemical parameters to sample)

- (M-WL45). From AGFD: consider the need, intensity, direction, duration, and spectrum of lighting. Options to consider include: eliminate any upward facing lights, use minimum needed for safety, shield, canter or cut lighting to ensure light only reaches areas needing illumination and reduce glow, light only high stretches of roads (i.e. crossings, etc.), do not install lighting in areas of wildlife linkage or connectivity.
Note: This item is also related to item M-WL11 from the March 5 mitigation list.
- (M-WL47). From AGFD: continue collaboration on a voluntary compensatory plan, beyond what is legally mandated, to achieve a no net loss of habitat.

Wildlife – Avian and Bat

- (M-WL42). From AGFD: Conduct nesting bird surveys no later than one week prior to any disturbance. The description of actions to be taken should include procedures for what to do if an active nest is discovered. In addition, if adult birds are present and nesting, ground and vegetation disturbing activities must be avoided until the young have fledged.
Note: This item is related to items M-WL36 and M-WL3 from the March 5 mitigation list.
- (M-WL43). From AGFD: Mitigate loss of habitat for bats, specifically roosting/maternity roost areas. Identify mines/adits/shafts with known bat roosting areas. If activities are adjacent to bat roosting/maternity sites, develop BMPs to reduce human encroachment.
Note: This item is related to item M-WL7 from the March 5 mitigation list.
- (M-WL45). From AGFD: Identify the actions to be taken if a new breeding pair of Golden Eagles appears in the project vicinity.

Wildlife – Aquatics

- (M-WL40). Stock tanks should be surveyed to determine what species are impacted and a mitigation plan should be developed if T&E species are identified.

Wildlife – Species-specific mitigations

- (M-WL49). Provide more detail on “establishing tortoise crossings for concentrate and tailings pipeline corridors in areas containing habitat” (Applicant-Committed Environmental Protection Measures, Section 3.8, DEIS p. 458).