To: Reviewing Officer, Regional Forester

USDA Forest Service

Southwestern Regional Office

333 Broadway Boulevard SE

Albuquerque, New Mexico 87102

OBJECTION TO:

Proposed Project: Pinto Valley Mine

Responsible Official: Neil Bosworth, Forest Supervisor

Location: Tonto National Forest, Globe Ranger District

Objectors: U.S. Forest Service Retirees

Richard Martin, Grant Loomis, Janet Grove, Kathy Nelson, Lynn Mason

Lead Objector: Richard Martin

May 12, 2021

Dear Reviewing Officer,

Thank you in advance for reviewing our objection.

This objection is the collective effort of the five individuals listed on the previous page who have a combined total of 154 years of experience working for the U.S. Forest Service. Most of those years (120) were spent on the Tonto National Forest primarily in the fields of watershed, riparian and minerals management. We all had gratifying careers and greatly enjoyed our work. We are now all retired and not normally involved with the current challenges facing the Forest Service today. However, the current state of affairs regarding Pinto Creek and the Pinto Valley Mine compels us to voice our collective concerns by filing this formal objection.

We are extremely concerned about the potential impacts to valuable National Forest resources if the Pinto Valley Mine project is implemented as written. We will do our best to convey those concerns in our comments that follow.

Our comments will focus primarily on the impacts of the proposed project on water and riparian resources located on the National Forest downstream from the Pinto Valley Mine.

OBJECTION:

Issue 1. Dewatering of Pinto Creek

Approval of the Pinto Valley Mine Plan of Operations as written will allow the Mine to further dewater Pinto Creek for an additional 19 years. Even then, it is estimated that 100 years after mine closure, flows in Pinto Creek will not fully recover (see page 3-476 of FEIS). This will have an adverse and unacceptable effect on the creek, riparian vegetation, fish and aquatic life, wildlife and dispersed recreational opportunities for **generations** to come.

Connection to previous comments [per 36CFR218.8(c)]: See page 1 of our comments to the Draft EIS (copy enclosed).

Background

Pinto Creek is a perennial stream in a semi-arid environment....something rare and valuable. The creek and associated riparian area form a green oasis that provides invaluable habitat for fish and wildlife.

Pinto Creek has received both statewide and national attention: It was nominated for Unique Waters (now known as Outstanding Arizona Waters) status, it was considered eligible for inclusion in the nations wild and scenic rivers system during a Forest-wide eligibility study (1993), it was listed as one of the ten most threatened rivers in the nation three years in a row by the American Rivers environmental group, it was identified as an Aquatic Resource of National Importance by the EPA, and it was called a "Jewel in the Desert" by the late Senator Barry Goldwater.

Our greatest concern centers around a nine mile perennial reach of Pinto Creek located below the Pinto Valley Mine on the Tonto National Forest. In December of 2013, the upper most segment of this stream reach suddenly quit flowing. It was almost as if someone had turned off a spigot. Whereas before this time the stream rarely dried up at this location, known as the Magma Weir, it now is commonly dry (Please see Figure 1). **More specifically, the stream flowed every single day for over 15 years from 1998 up the end of 2013. During all of 2015, it only flowed for a total of 4 days.**

Soon after the stream ceased to flow, many of the trees and other riparian vegetation in the upper reach started to die off (Please see Figures 2, 3 & 4).

Figure 1. Photo of Pinto Creek at the Magma Weir taken on July 30, 2005. The weir is located approximately one-half mile below Pinto Valley Mine property on the National Forest. The creek flowed everyday at this location for over 15 years between 1998 and the end of 2013. Now, it is commonly dry. In the lower right hand corner of the photo can be seen the top of the weir which was constructed in the mid-1980's to measure streamflow and water quality as part of a cooperative study. In 1994, the U.S. Geological Survey started maintaining this gage and monitoring flows, and still does so today (USGS Gage 09499502 - Pinto Creek Near Miami, AZ).

Figure 2. Dead riparian trees located on the National Forest near what was previously the beginning of the nine mile perennial reach of Pinto Creek.

Figure 3. A large number of dead and down trees are scattered along the upper one quarter mile reach of Pinto Creek.

Figure 4. A very large and old Arizona ash tree that was barely clinging to life on the bank of Pinto Creek in Novemeber of 2017. Since that time, the tree has died.

At that time, Forest hydrologists felt that the most likely cause of the dry up was pumping from a large water well field (known as the Peak Well Field) located immediately upstream from the perennial reach of Pinto Creek. The well field was originally developed in the 1970's to provide water to the Pinto Valley copper mine. The mine and well field were inactive from 1998 until 2013 when a Canadian Company, Capstone Mining Corporation, purchased the mine and commenced operations. The well field has been used continuously since that time and currently provides about 36% of the total water needs of the operation. This amounts to 7.8 cubic feet of water continuously 24 hours a day 365 days of year, which is a large volume of water in a semi-arid environment. Whereas it was originally suspected that the well field was the cause of the dry up, it was certainly not proven.

Meanwhile in 2016 the Pinto Valley Mine asked the Forest Service to approve a new Mine Plan of Operation that would authorize the use of more National Forest System lands for mining purposes and extend the life of the mine another nineteen years to 2039. Due to the significance of this request and potential impacts, the Forest chose to analyze the proposal via an Environmental Impact Statement.

During the analysis process, Pinto Valley Mine personnel were initially very reluctant to disclose any information regarding the well field. Such information was obviously necessary to determine the impacts of pumping from the Peak Well Field for an additional 19 years on Pinto Creek flows and associated water dependent resources. In fact, Pinto Valley Mine personnel implied that the loss of flows in Pinto Creek were probably due to drought, something that Forest Service hydrologists were able to discredit. After considerable effort on the Forest's part, Pinto Valley Mine did hire a consulting firm that modeled the impacts of pumping and provided it to the Forest.

The comprehensive groundwater model utilized by the consultant clearly demonstrates that pumping is having a profound adverse impact on Pinto Creek flows and will continue to do so well into the future. **The model results indicate that baseflows in Pinto Creek as measured at the Magma Weir have already been reduced a whopping 82%, from 1070 gallons per minute (gpm) to 188 gpm, between the beginning of 2013 when the mine was in a "care and maintenance period" and 2018 (FEIS 3-450). Under the proposal submitted by the mine, reductions in baseflow would continue for another 19 years, with estimated flows falling as low as 73 gpm (2026) or a total reduction in flow of 93% (FEIS Appendix E, Page 131).**

And that is not the end of it. After closure in the year 2039, baseflows would improve, but this is only because it is anticipated that poor quality water seeping primarily from Tailings Storage Facility No. 4 will be discharging into Pinto Creek. **Even 100 years after closure, baseflows in Pinto creek are estimated to be only 430 gpm or a 60 % reduction from the 2013 flows (FEIS 3-476)**.

The groundwater model also predicts that pumping from the Peak Well Field will cause significant reductions in groundwater levels. Decreases of 5 feet or more are expected to occur

over 23.8 square miles at the end of mining in 2039. **Even worse, this drawdown area is predicted to expand to 37.9 square miles 100 years after mine closure (FEIS 3-474). It is also estimated that almost 5 miles of the perennial reach of Pinto Creek will be impacted (FEIS Table 3-1-129, Page 3-457), either with reduced flows or complete dry up (FEIS 3-475). This is over half the total length of the perennial reach located on National Forest System lands below the mine property. Needless to say, this will result in mortality of additional riparian vegetation and loss of fish and wildlife habitat.**

When the Draft Environmental Impact Statement (DEIS) was issued in late 2019, numerous individuals and entities expressed concerns over the loss of Forest aquatic and riparian resources and the lack of adequate mitigation. In response to these concerns, the Forest had the mine prepare a "Comprehensive Water Resources Monitoring and Mitigation Plan" which was incorporated into the recently issued Final Environmental Impact Statement (FEIS). This plan details all the water monitoring, methods, and reporting that the mine will conduct (interestingly it leaves the selection of key monitoring wells solely up to Pinto Valley Mine). Unfortunately, in the entire 16 page document there is only brief mention of any mitigation. It states that the mining company will annually **review** sources of alternative water supply to offset pumping in the Peak Well Field, and the effectiveness of the well field pumping configuration. More definitively, it stipulates that, **Pinto Valley Mine** "**....will develop site specific mitigation plans, as necessary and feasible, to address reductions in baseflows or drying up of perennial stream reaches or springs that are directly and reasonably attributable to the mine operations**." In other words, no mitigation will be required at this time even though a portion of the stream on the National Forest has already ceased to flow, vegetation is dying and things are predicted to get worse if the mine is allowed to continue pumping at its current rate. In addition, if any mitigation is to be done in the future, Pinto Valley Mine will develop it if and when they think it is necessary and feasible.

When one considers the likelihood of the Pinto valley Mine spending funds to voluntarily mitigate environmental impacts they should be aware of the following: Pinto Valley mine is a totally owned subsidiary of Capstone Mining Corporation, a Canadian owned company headquartered in Vancouver, British Columbia. Their financial records indicate that the corporation has lost money every year for the past 8 years (2013 through 2020) except two (2017 and 2020). As might be expected for a company in this financial situation, Capstone appears to be focused on efficiency which includes controlling costs. In light of the above, it is highly likely that Capstone will balk at any substantial expenditures aimed at environmental protection that are not required under the terms and conditions specified in the Mine Plan of Operation.

In summary, if the FEIS and Draft Record of Decision is approved as written it will authorize the dewatering of at least five miles of a perennial stream in the desert for decades to come! Needless to say, this will have a devastating effect on aquatic life, wildlife, riparian vegetation, dispersed recreation and other valuable Forest resources and activities

dependent on Pinto Creek. It is also contrary to various policies and management goals aimed at protecting riparian areas. Leaving mitigation for loss of stream flow up to the discretion of the mining company is a total abdication of Forest Service stewardship responsibilities.

Suggested Solution Please see Item 2.

Issue 2. Tonto National Forest Instream Flow Water Right

The Tonto National Forest has an instream flow water right issued by the State of Arizona for the perennial nine mile reach of Pinto Creek below the Pinto Valley Mine. It conveys a legal right to the Forest to keep specified flows in the creek for wildlife, fish and recreational purposes. Recent hydrologic modeling done by Pinto Valley Mine consultants clearly demonstrates that pumping water from the Peak Well Field is infringing on that right by causing dramatic reductions in streamflow. As such, **some of the water being pumped is being done so illegally** without the appropriate water right required by the State of Arizona, and to the detriment of Forest resources.

Connection to previous comments [per 36CFR218.8(c)]: See page 8 of our comments to the Draft EIS (copy enclosed).

Background

The Forest has been concerned about the impact of pumping large quantities of water from the Peak Well Field on flows in Pinto Creek since the mid 1970's. As a result of this concern, the Forest filed an application for an instream flow water right with the Arizona Department of Water Resources (ADWR) in December of 1983. This was one of the first instream flow rights filed for in the State of Arizona. The reasons for selecting Pinto Creek were twofold: 1) The high likelihood of an impact to flows from the Peak Well Field, and 2) the need to protect high resource values associated with a riparian area located in a semiarid environment. After the Forest submitted documentation proving the need for the water to ADWR, the Certificate of Water Right (No 33-89109) was finally issued in 1999 (copy enclosed). **This certificate is extremely important in that it gives the Forest the legal right to maintain specified monthly flows in Pinto Creek for wildlife, fish and recreational purposes.** It should be noted that it required a considerable amount of time, effort and money on the part of the Forest to acquire this Certificate.

Very little use of this right has been made to date to protect flows in Pinto Creek from pumping of the Peak Well Field. This is largely due to the fact that it could not be proven that pumping was removing water that supported stream baseflows. All that changed dramatically when the mine had their own consultants model the hydrology of the immediate area utilizing actual well locations and existing pumping rates. The results clearly show a direct hydrologic connection to the creek. In other words, at least some of the water the mine is diverting from the Peak Well Field is defined as subflow which is legally considered "surface" water under state law. The mine has no legal right to divert this water without first obtaining a water right from the Arizona Department of Water Resources. Even if the State issues the mine a water right, they would not be able to withdraw these waters until the Forest's instream flow needs were met (as their rights would be "junior" to the Forest).

Last May, the Forest asked the Department of Water Resources to perform an appropriabilty determination which could clarify what water rights the mine might need. The Department declined to do so "at this time." This is unfortunate and could well be due to the fact that they do not have the resources to complete the analysis. It does not, however, negate the validity of the hydrologic modeling results or the fact that the Forest Service has a legal right to the water in any way (In fact the groundwater model used is very similar or the same as the one that has been approved for use in the Gila River Adjudication to determine which wells are removing surface water near the San Pedro River).

The FEIS recognizes that the Forest has a water right to maintain flows in Pinto Creek. It addresses concerns regarding this right with Mitigation Measure WR-4 which states **"Adverse impacts on water wells and surface water rights would be identified and mitigated by Pinto Valley Mining Corp., as required under Arizona State law."**

This is difficult to believe. The enforcement of the water right acquired by the Forest Service and designed to keep water in the stream for fish, wildlife and recreational purposes is being delegated to the mining company who has a vested interest in using that water for mining purposes.

When discussing "The Role of the Tonto National Forest" the FEIS states (Pages H-3 and H-4) that "The Forest Service may impose reasonable conditions to protect surface resources but cannot materially interfere with reasonably necessary activities under the General Mining Law of 1872 **that are otherwise lawful"** (Emphasis added). It has been shown conclusively that pumping water from the Peak Well Field is removing surface water from Pinto Creek. As the Pinto Valley Mine has no surface water right to Pinto Creek as required by State law, **it is diverting this water illegally**. In addition, it is currently infringing upon (causing injury to) the instream flow water right held by the Forest Service. As such, reasonable mitigation to restore flows to the creek and protect water dependent resources downstream from the mine is warranted and not constrained in any way by the 1872 mining law.

Suggested Solutions to Issues 1 &2

- **The Forest Supervisor should meet with the Pinto Valley Mine General Manager and explain to him that we have a legal right to maintain flows in Pinto Creek below the mine. Furthermore, that it has been clearly demonstrated by their own consultants that pumping from the Peak Well Field is infringing on U.S. Forest Service rights by removing baseflows to Pinto Creek. In addition, the loss of five miles or more of a perennial stream along with associated riparian resources in a semi-arid environment is not acceptable. Finally it should be made clear that the Forest Service cannot approve the FEIS, Draft Record of Decision, and proposed Mine Plan of Operation until this issue is resolved.**

Hopefully this action will encourage Pinto Valley Mine to come to the negotiating table where a solution could be reached that would allow the mine to proceed with their expansion while at the same time protecting Forest resources. (Please note that in the 1990's the Forest faced a similar situation with the Carlota Copper Mine as it faces today with the Pinto Valley Mine. Carlota Copper Company production wells were found to be impacting surface flows in Haunted Canyon and Pinto Creek. The Forest used its instream flow right for Pinto Creek as "encouragement" to negotiate a mitigation plan with Carlota that would protect the flows in Haunted Canyon and Pinto Creek while allowing the company to construct and operate their mine. The mitigation plan was incorporated into their Plan of Operation prior to approval).

It is critical not to approve the FEIS, Draft Record of Decision, and Mine Plan of Operation until the issue of flows in Pinto Creek is resolved. Once the Mine Plan of Operation is approved, it may be difficult given the convoluted nature of Arizona water laws (ground water and surface water are governed under totally different legal doctrines) and limited enforcement options to effectively assert the Forest's legal right to the water.

- Forest and Regional personnel should consult with OGC (someone familiar with Arizona water law) and Department of Justice (DOJ) attorneys to discuss various options (including the one presented above) for asserting the Forest Service instream flow water right. (Please note, the BLM and DOJ are currently facing somewhat similar challenges along the San Pedro River where proposed wells could affect flows in the San Pedro River through the Riparian National Conservation Area and they may have insights on the best strategies to utilize).

- It would also be a good idea to meet with the Salt River Project (SRP) and their attorneys to discuss possibilities for restoring flows to Pinto Creek. SRP has a vested interest in what happens to Pinto Creek (see their comments to the Draft EIS) as they hold senior water rights to the creek, and their attorneys are experts in Arizona water law. They have been very supportive of the Forest Service in the past (In fact they played a key role in the Cherry Creek case where a large mining company, Freeport-McMoRan, argued that the State had no authority to issue instream flow water rights and that the

Forest Service (Tonto National Forest) had no authority to apply for such a right. The case went all the way to the Arizona Supreme Court a few years ago where the Forest Service, State of Arizona, and SRP prevailed).

- The Forest Supervisor, Arizona Game and Fish Department leadership and SRP should personally meet with the Director of the Department of Water Resources and request that the decision not to conduct an appropriability determination be reconsidered. It should be pointed out that ADWR has completed these analyses in the past, and that such a determination is extremely important in resolving conflicts between the Pinto Valley Mine, existing water right holders and resources managers.

Issue 3. Water Quality Impacts to Pinto Creek

After closure, several of the existing mine facilities could degrade water quality in Pinto Creek. These include Tailings Storage Facility No. 4, Tailings Storage Facility No. 3, and the Heap Leach Facility. Some of the seepage from these facilities is projected to migrate downgradient and eventually enter Pinto Creek within the Forest. These waters would be high in sulfates and total dissolved solids which could have an adverse effect on numerous aspects of the aquatic and riparian ecosystems.

Connection to previous comments [per 36CFR218.8(c)]: See page 8 of our comments to the Draft EIS (copy enclosed).

Background

The mine currently contains seepage from Tailings Storage Facilities No. 3 and No. 4 by utilizing production wells to pump back the low quality water. However, according to the FEIS "....the current and post-closure strategy does not include a commitment for the construction, long-term operation, and maintenance of a pump-back (seepage capture system) and treatment system to manage the predicted seepage over the post-closure period for Tailings Storage Facility No. 3 and Tailings Storage Facility No. 4. Without long-term capture and treatment, seepage from Tailings Storage Facility No. 3 and Tailings Facility No. 4 would likely migrate downgradient (outside the Pinto Valley Mine project boundary) and potentially discharge as baseflow (and degrade water quality) in Pinto Creek. **The high total dissolved solids, high sulfate concentrations in the seepage from the facilities would likely degrade water quality in the groundwater system and in Pinto Creek downgradient of these facilities**" (Emphasis Added) (FEIS 3-478).

According to the FEIS (Page 3-102) **"Potential impacts on aquatic macroinvertebrates caused by high levels of total dissolved solids include reduced survival, growth, reproduction, and family-level community richness**, especially within the sensitive insect orders of Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies) (Scannell and Jacobs 2001; Timpano et al. 2010)." Also, it states that "**Potential effects on fish include reduced fertilization and hatching rates, extended developmental time, and toxicity to adult fish at concentrations above 2000 milligrams per liter** (Scannell and Jacobs 2001). Effects on the macroinvertebrate and aquatic plant communities may also affect fish via reduced food availability" (FEIS 3-103).

In order to address these concerns, the Forest had Pinto Valley Mine prepare a "Post-closure Tailings Seepage Management and Mitigation Plan" which was included as part of the FEIS. A key provision of the Plan states that "**Should relevant numeric water quality standards be exceeded on a consistent basis during the post-closure period, PVMC will consider other adaptive or mitigation steps** ....." (Emphasis Added), (Page 20). It then lists possible mitigation measures that could be undertaken to address the water quality violations.

In other words, **this leaves Pinto Valley Mine totally responsible for determining what, if anything, would be done to protect water quality in Pinto Creek on the National Forest** (including what constitutes a "consistent basis"). As the potential for high levels of total dissolved solids and sulfates from the mine will be greatest after mine closure, the mine will no longer be producing revenue and it could be very difficult to have the company commit to appropriate, effective mitigation unless required to do so when the Mine Plan of Operation is initially approved. (This is not just a hypothetical issue. There are numerous abandoned mines scattered across the Western United States that are creating water quality problems many of which are being remediated at taxpayer expense).

There are other important issues left unanswered by the Post-closure Tailings Seepage Management and Mitigation Plan that need to be addressed. For instance, how high levels of total dissolved solids, which noted above can have a detrimental effect of aquatic life, will be addressed as they currently do not have **numeric** standards. Under the mitigation plan as written, the mine could conceivably just ignore these constituents despite their impacts. Also, it appears that the predicted high levels of total dissolved solids and sulfates may violate the narrative biological standards for wadeable perennial streams (R18-31-108.01), and the antidegradation provisions specified in the surface water quality standards of the State.

Suggested Solution

The specific actions required of Pinto Valley Mine to address water quality issues on the Forest including those potentially occurring post-closure must be addressed and included in the Mine Plan of Operation prior to approval. Otherwise, it could be very difficult to get Capstone to agree to undertake meaningful corrective measures years after the mine had closed.

Issue 4. Riparian Areas

The Final Environmental Impact Statement does not adequately portray the importance of riparian areas in the Southwest, nor comply with the regulations, policies and goals established to protect them. In addition, the proposed action will result in the continued destruction of the riparian area associated with Pinto creek for decades to come as a result of continued pumping from the Peak Well Field.

Connection to previous comments [per 36CFR218.8(c)]: See pages 5 & 6 of our comments to the Draft EIS (copy enclosed).

Background

- Importance of Riparian Areas. Nowhere does the FEIS discuss the unique nature and importance of riparian areas, particularly those such as Pinto Creek that are located in a semi-arid environment. This information should be highlighted so that the public has a full understanding of the resource impacts of the proposed mine expansion.

For instance, it should be pointed out in the FEIS that riparian areas are the most ecologically diverse and productive areas in the western United States. It should also be highlighted that riparian areas are very limited in size...occupying only about two percent of the land area within the Southwestern Region. Furthermore, that riparian areas occurring in arid and semi-arid regions take on added importance due to the scarcity of water in the adjacent uplands (Please see Figures 5 & 6).

Other facts that are important to understand could also be presented, such as:

> Fish must have these areas in order to exist. Up to 80 percent of all vertebrate wildlife species in Arizona depend on riparian areas at some stage in their life cycle. Bird life is particularly dependent on riparian areas. Studies have shown that riparian areas provide habitat for more species of breeding birds than all other western habitats combined. Riparian areas also have many other values which include providing tremendous recreational opportunities, reducing erosion, improving water quality, recharging ground water, sustaining baseflows, and reducing the magnitude of flood flows.

Without this information, the public at large cannot get a clear picture of the environmental consequences of the proposal.

Figure 5. Riparian area in a semi-arid landscape. Not all streams and their associated riparian vegetation are of equal value. Those that flow through arid and semi-arid regions take on added importance due to the scarcity of water in the surrounding country side. You can see why ecologists often call riparian areas the "green ribbon of life." Photo is of Coon Creek on the Tonto National Forest.

Figure 6. The nine mile perennial reach of Pinto Creek located below the Pinto Valley Mine, pictured here, provides a green oasis critical for fish and wildlife. The presence of saguaro cactus attests to the dryness of the surrounding uplands.

- Lack of compliance with regulations , policies, and goals intended to protect riparian areas. Forest Service laws, regulations, policies and goals recognize the tremendous value and need to protect aquatic and riparian resources.

Forest Service policies related to riparian and aquatic ecosystems are directed by several foundational laws. One of these is the Organic Act of the Forest Service which states that "....no national forest may be established **except to improve and protect the forest, or secure favorable conditions of water flows**, and to furnish a continuous supply of timber" (Emphasis Added).

Long standing National Forest Service Policy states that riparian areas will be managed "....under the principles of multiple use and sustained-yield, while **emphasizing protection and improvement of soil, water, and vegetation, particularly because of effects upon aquatic and wildlife resources. Give preferential consideration to riparian dependent resources when conflicts among land use activities occur"** (See FSM 2526.03 - Policy) (Emphasis added).

The Southwestern Region's recently issued Riparian and Aquatic Ecosystem Strategy states that the fundamental purpose of the strategy "**.... is to ensure the ecological integrity of riparian and aquatic ecosystems is maintained and restored....."** (copy of INTRODUCTION enclosed).

In addition, the Tonto National Forest Plan "Management Emphasis" for the area on the Globe Ranger District that includes Pinto Creek below the mine property states: "Manage for a variety of renewable natural resources with **primary emphasis on wildlife habitat improvement, water quality maintenance,** livestock forage production, and dispersed recreation.....**Improve and manage the included riparian areas (as defined by FSN 2526) to benefit riparian dependent resources**."

The Forest Plan also contains "Management Direction" for minerals management. It is concise and directs the Forest to "**Support environmentally sound** energy and mineral management"(emphasis added).

The proposed action will result in further degradation of the extensive riparian area located downstream of the mine, which is in direct conflict with these laws, policies, goals and management direction.

- Implementation of the Proposed Action will result in the further degradation and loss of the Pinto Creek riparian area for decades to come.

The comprehensive groundwater model utilized by the mine consultants predicts that pumping from the Peak Well Field will cause significant reductions in groundwater levels. Decreases of 5 feet or more are expected to occur over 23.8 square miles at the end of mining in 2039. Even worse, this drawdown area is predicted to expand to 37.9 square miles 100 years after mine

closure (FEIS 3-474). **It is also estimated that almost 5 miles of the perennial reach of Pinto Creek will be impacted, either with reduced flows or complete dry up** (FEIS 3-475). **This is over half the total length of the perennial reach located on National Forest System (NFS) lands below the mine property**. Needless to say, this will result in mortality of additional riparian vegetation and loss of fish and wildlife habitat.

The FEIS states (page 3-140) that groundwater drawdown would affect 12.8 percent of all the interior riparian deciduous forests and woodland (mixed-broadleaf deciduous riparian forest) vegetation on the Globe Ranger District. Authorizing Pinto Valley Mine to further degrade and in some cases eliminate such a large percentage of some of the most valuable resources on the Forest (particularly when located so far from the mining operation) for decades to come is ill advised and unacceptable.

In response to public concerns voiced over the loss of riparian habitat, the Forest had Pinto Valley Mine provide a "Biological Resources and Monitoring and Mitigation Plan" which was included as part of the FEIS. The plan requires some worthwhile riparian vegetation monitoring and also specifies "thresholds/triggers." When it comes to mitigation, however, there is a list of potential mitigation measures that **"<u>may</u> be considered and implemented." Once again, it does not specify that the Forest Service can require the mine to implement any of these potential mitigation measures.**

<u>Suggested Solution</u>

Require mandatory mitigation measures in the Mine Plan of Operation necessary to protect Forest riparian resources. This must be done prior to approval of the FEIS and Draft Record of Decision.

Implement the Suggested Solutions listed under Item 2.

Issue 5. Water Pipelines

Authorization of pipelines transporting water across National Forest System lands to the Mine should be authorized by Special Use Permit, not the proposed Mine Plan of Operation.

<u>Connection to previous comments [per 36CFR218.8(c)]:</u> See page 11 of our comments to the Draft EIS (copy enclosed).

Background

When the Peak Well Field was being developed in the early 1970's, pipelines were constructed across National Forest System lands to convey water from some of the well heads located on small tracts of private land to the mine. The construction and maintenance of these pipelines was authorized by Special Use Permit. This has worked well for the past 45 years. Now the mine has requested that the pipeline authorizations be included as part of the Mine Plan of Operation. This makes sense from an administrative standpoint, but will take away a potential tool that the Forest could use to determine if the pumping of a particular well (or wells) is affecting flows in Pinto Creek.

To further explain, in the 1990's the Tonto National Forest was receiving a considerable number of requests to drill water wells on the Forest and pipe the water off Forest for use elsewhere. Often times these proposed wells were located adjacent to streams and rivers. The Forest was concerned that pumping such wells would diminish flows in Forest streams and negatively impact water dependent resources such as fish and wildlife as well as recreational opportunities. In response to these concerns, the Forest developed a policy that required applicants for wells to prove that pumping would not adversely affect National Forest resources by conducting on site pump tests. Later, the Southwestern Region adopted this ground water policy and incorporated it into the Forest Service Manual System (R3 Manual Supplement 2500-2001-1) where it remains today.

To date, Pinto Valley Mine has refused to cooperatively conduct pump tests that would help determine which wells are affecting flows in Pinto Creek. The knowledge gained from such pump tests could be of significant value in reducing the impacts to Pinto Creek and associated riparian resources located downstream on the Forest.

Suggested Solution

Continue to authorize the approval of pipelines that cross National Forest System lands by Special Use Permit. When the Permit(s) are due to be reauthorized, the Forest could, as needed, require a pump test(s) under provisions of the ground water policy and NEPA (connected actions). This will give the Forest more and better opportunities to consider the impact of pumping from specific wells in the Peak Well Field on the flows in Pinto Creek. According to discussions with OGC several years ago, these pump tests could not be required if the pipelines are authorized under the Mine Plan of Operation as the Ground Water Policy requirements only pertain to Special Use Permits.

FURTHER THOUGHTS:

We fully recognize the right of the mining company to extract locatable minerals on National Forest lands. For ten years our Forest Staff group (which included Minerals Management) was responsible for dealing with proposals put forth by large mining companies such as Cypress, Broken Hill Proprietary (BHP), Resolution Copper, and the permitting of the controversial Carlota Mine to use National Forest lands for mining and milling purposes. That said, mining companies have limits on what they can do to in terms of disturbing adjacent National Forest surface resources.

The Forest Service is inherently given a tough task in regards to minerals management. On one hand you are to facilitate the development of mineral resources while at the same time you are directed to ensure that these operations are conducted in an environmentally sound manner that safeguards other Forest resources. Usually this results in a negotiating process between the operator of the mine and the Forest Service with the objective of reaching a reasonable compromise. However, in this case the action being proposed by the Forest errors on the side of authorizing the mining company to proceed unabated without adequate safeguards to protect valuable National Forest resources. Many of the key mitigation measures mentioned in the proposal are to be implemented solely at the discretion of the mining company, not the Forest Service. This is an abdication of the Forest Service's stewardship responsibilities. The fact that the Forest would knowingly allow a mining company to dewater a perennial stream in a semi-arid environment for a minimum of 5 miles distant from the mine (and very possibly further) is a case in point and we believe unacceptable.

Never before in our collective careers have we seen a proposed project that has the potential to be so devastating to valuable National Forest Resources as this one. Honestly, just think about it. This proposal will allow the mine to dry up a minimum of five miles of a perennial stream (and quite possibly the entire 9 mile reach) located on a National Forest.

If the project is approved without requiring adequate mitigation safeguards, the fate of Pinto Creek and associated water dependent resources will rest with Capstone Mining Corporation instead of the U.S. Forest Service. This appears to us as an abdication of the Forest's stewardship responsibilities.

When the public at large sees a large swath of dead trees instead of the "green ribbon of life" that currently exists, we do not think they will be pleased, nor should they be (please see Figure 7).

Figure 7. Pinto Creek near Henderson Ford approxximately 8 miles below the Pinto Valley Mine (photo taken in the 1990's). The creek has always flowed at this location until recent years. It is quite possible that continued pumping of the Peak Well Field at the current rate will dewater even this reach.

The late Senator Barry Goldwater called Pinto Creek a "jewel in the desert"..... an "exceptional" place that should be protected.

For all of the foregoing reasons, we strongly urge you to uphold our objection and not allow the FEIS, Draft Record of Decision and Mine Plan of Operation to be approved as written.

Thank you for your consideration. If you have any questions or issues that you would like to discuss, feel free to contact us via the Lead Objector, Richard Martin. Rich's email address and phone number are included on the cover page.

Respectfully,

[redacted]

Richard Martin
Lead Objector

Enclosures:

Comments on Pinto Valley Mine Draft EIS submitted to Forest, including a letter conveying a copy directly to Supervisor Bosworth.

Copy of Certificate of Water Right issued to USDA, Tonto National Forest by the State of Arizona granting the right to instream flows in Pinto Creek.

Riparian and Aquatic Ecosystem Strategy prepared by USDA Forest Service, Southwestern Region - Page 7, INTRODUCTION.