

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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Decision Record

Copper Creek Exploration Project

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**DOI-BLM-AZ-G010-2023-0003-EA**

June 2025

Safford Field Office  
711 South 14<sup>th</sup> Ave, Suite 100  
Safford, Arizona 85546

**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**Bureau of Land Management**  
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**DECISION RECORD**  
**for Copper Creek Exploration Project**  
**DOI-BLM-AZ-G010-2023-0003-EA**

June 30, 2025

**I. DECISION**

The Bureau of Land Management Safford Field Office (BLM) received a mining plan of operations application from Redhawk (the applicant), the *Copper Creek Exploration Drilling Program Plan of Operations, Pinal County, Arizona*, to conduct mineral exploration activities in portions of Sections 03, 04, 10, 11, 14, and 15 of Township 08 South, Range 18 East, Gila and Salt River Meridian and Baseline. The proposed copper mineral exploration activities consist of 67 drill pad sites and associated access roads within unpatented claims on BLM-managed public lands. The 67 proposed drill pad sites that are part of Redhawk's proposed copper mineral exploration activities in the mining plan of operations would include six of the drill pads that are part of Redhawk's existing notice-level operations. The BLM analyzed this action as the Proposed Action Alternative in Environmental Assessment (EA) DOI-BLM-AZ-G010-2023-0003-EA as part of its responsibility to respond to the proposed plan of operations in accordance with mining law, Section 302 of the Federal Land Policy and Management Act of 1976 (FLPMA), and the BLM Surface Management Regulations at 43 CFR 3809.

The BLM considered three alternatives in the EA: the Proposed Action Alternative, the No Action Alternative and the Preferred Action Alternative. The Preferred Action Alternative is the same as the Proposed Action Alternative with the additional implementation of an Adaptive Management Plan (AMP) related to groundwater pumping. Under the No Action Alternative, Redhawk would continue exploration activities on Bureau of Land Management (BLM)- administered public lands as outlined in the active Notice of mineral exploration operations (Notice; AZAZ106362501), but neither the Proposed Action Alternative nor the Preferred Action Alternative would be implemented.

BLM has selected the Preferred Action Alternative as described in EA Section 2.3 as its approved action alternative. Under this alternative, the BLM will implement the AMP as described in EA Section 2.3.1 and Appendix F. This will require continuous groundwater monitoring and sharing of groundwater withdrawal data from Redhawk, and annual monitoring of parameters including wetted width, thalweg depth, and hydric vegetation composition in the Greenline through Lotic AIM monitoring. Groundwater pumping and climate data, as collected and described in the AMP, will be used by BLM specialists in conjunction with groundwater elevations and AIM data to determine whether the groundwater pumping from this project is producing negative effects on surface and groundwater, associated vegetation, and aquatic resources of Copper Creek. If as such

effects are observed, it will trigger reductions in groundwater use for project purposes as described in the AMP.

#### A. Mitigation Measures

There are no mitigation measures added for this action. The Design Features and Best Management Practices are described in EA Section 2.2.10 and the AMP is detailed in EA Section 2.3.1.

#### Overview of AMP

The BLM intends to monitor BLM resources and location specific parameters to inform an adaptive management strategy to prevent loss of aquatic and riparian habitats and the biological communities that are supported by the ecosystem of Copper Creek. These concerns were identified by the BLM, Arizona Game and Fish Department,, U.S. Fish and Wildlife Service, and various other stakeholders throughout the project, including public comments, and the BLM will monitor for these concerns through adaptive management monitoring as described below.

The BLM, through the collection of data as described below, will monitor hydrological and biological conditions on an on-going basis. The BLM may recommend management actions directly linked to the information derived from the AMP data and baseline data sources as described in Section 2.3.1.1 of the EA. Groundwater, surface water, pumping records, and weather data will be compiled by Redhawk quarterly and shared with BLM via a Redhawk hosted SharePoint site. The data shared will be included in an Excel document with tabs for each of the raw data sources and additional tabs for data interpretation and for the methods of correction and/or calculations. BLM will have continuous, long-term access to this SharePoint and will back up the data on BLM internal drives for evaluation and QA/QC. The data described in association with the AMP will be publicly available.

#### **AMP Parameter 1 - Groundwater Monitoring DTG**

Groundwater monitoring will occur at several locations representing the current depth to groundwater (DTG) within and immediately adjacent to Copper Creek informed by three shallow wells (**Figure 4a**). These probes and data loggers will be serviced and downloaded by Redhawk to produce a continuous groundwater monitoring record over the life of the project. Redhawk will provide all data from those identified existing wells and from any proposed new monitoring wells for the duration of the project; the BLM will have continuous access to all gages and data loggers for data QA/QC of collected data for the duration of the exploration project. The groundwater level record will be updated quarterly for the duration of project related activities. The resulting record of groundwater elevations will be shared with the BLM for evaluation quarterly, as updates are made. The comparative baseline DTG that will be used by the BLM in their evaluations will be comprised of monthly averages of DTG elevations collected in the corresponding previous year periods at each specific well (e.g., Average April 2024 DTG at Well 1 would be compared to Average April 2025 DTG at Well 1). No evaluation will be produced for any well which is missing the previous year's data for a corresponding evaluation period. Each well is independently evaluated. The conditions at any well may trigger adaptive management measures as described in the AMP. DTG will not be used to evaluate the cause of another parameter being outside of a range of natural variation.

The parameters will be measured independently and compared against themselves and potentially other comparable streams in the region. The parameters, either all together or separately, will be used as information to determine if impacts to biological resources may be occurring and, if so, if those impacts may be related to groundwater pumping. Redhawk will provide, concurrently to groundwater elevation record updates, groundwater withdrawal logs for each well to include the location pumped, the pumping time periods, and the quantities of water pumped during each period.

#### Depth to Groundwater (DTG) Triggers:

- If the DTG is between 1 ft and 2 ft lower than expected DTG elevations relative to baseline data (i.e., the previous period average DTG data at a specific site) and considering recent climate conditions, Redhawk will reduce groundwater withdrawals for the project purposes on BLM lands by up to 25 percent of the total water volume extracted during the previous period, from Hendrickson Wells pending the next evaluation period's determination.
- If the DTG is between 2 ft and 3 ft lower than expected DTG elevations relative to baseline data (i.e., the previous period average DTG data at a specific site) and considering recent climate conditions, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 25 to 75 percent of the total water volume extracted during the previous period, from Hendrickson Wells pending the next evaluation period's determination.
- If the DTG is 3 ft or greater below expected DTG elevations relative to baseline data (i.e., the previous period average DTG data at a specific site) and considering recent climate conditions, Redhawk will discontinue groundwater withdrawals for project purposes on BLM lands from Hendrickson Wells pending the next evaluation period's determination.

#### **AMP Parameters 2-4 –Wetted Width, Thalweg Depth, Greenline Composition**

Three methods of Lotic Assessment Inventory and Monitoring (AIM) protocol will be used as primary indicators of ecosystem health for the purposes of the adaptive management and include wetted width, thalweg depth, and Greenline composition (EA Section 2.3.1.4) to assess water quality, watershed functions and instream habitat, and riparian habitat quality. Redhawk will conduct Lotic AIM data collection annually, between April 21 and May 5, for the life of the project of up to three years using BLM trained field crews composed of either Redhawk staff or a contracted crew.

**Adaptive Management Parameter 2:** Determine that wetted (channel) width is not reduced due to groundwater withdrawals. Wetted Width Triggers:

- If the average wetted width is within 25 percent compared to the baseline average wetted width determined through Lotic AIM data collection in the previous years and considering climate variations, no reductions of ground water withdrawals for project purposes on BLM lands will be implemented.
- If the average wetted width is reduced by 25 to 50 percent compared to the baseline average wetted width determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 25 to 50 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.

- If the average wetted width is reduced by 50 to 75 percent compared to the baseline average wetted width determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 50 to 75 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.
- If the average wetted width is reduced by 75 percent or greater compared to the baseline average wetted width determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will discontinue groundwater withdrawals for project purposes on BLM lands from Hendrickson Wells pending the next evaluation period's determination.

**Adaptive Management Parameter 3:** Determine that water depth in the thalweg as measured during Lotic AIM data collection is not reduced due to groundwater withdrawals for project purposes on BLM lands. Thalweg Depth triggers:

- If the average water depth in the thalweg is within 25 percent compared to the baseline average thalweg depth determined through Lotic AIM data collection in the previous years and considering climate variations, no reductions of ground water withdrawals for project purposes on BLM lands will be implemented.
- If the average water depth in the thalweg is reduced by 25 to 50 percent compared to the baseline average thalweg depth determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 25 to 50 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.
- If the average water depth in the thalweg is reduced by 50 to 75 percent compared to the baseline average thalweg depth determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 50 to 75 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.
- If the average water depth in the thalweg is reduced by 75 percent or greater compared to the baseline average thalweg depth determined through Lotic AIM data collection in the previous years and considering climate variations, Redhawk will discontinue groundwater withdrawals for project purposes on BLM lands from Hendrickson Wells pending the next evaluation period's determination.

**Adaptive Management Parameter 4.** Determine that the percentage of hydric plants present in the Greenline riparian vegetation communities as measured during Lotic AIM data collection are not affected by groundwater withdrawals for project purposes on BLM lands. Greenline Composition triggers:

- If the total composition of hydric plants on the Greenline is reduced by less than 25 percent compared to the baseline total percent composition of hydric plants on the Greenline determined through Lotic AIM data collection in the previous year and considering climate variations, no reductions of ground water withdrawals for project purposes on BLM lands will be implemented.
- If the total composition of hydric plants on the Greenline is reduced by 25 to 50 percent compared to the baseline total percent composition of hydric plants on the Greenline

determined through Lotic AIM data collection in the previous year and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 25 to 50 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.

- If the total relative abundance of hydric plants on the Greenline is reduced by 50 to 75 percent compared to the baseline total percent of relative abundance of hydric plants on the Greenline determined through Lotic AIM data collection in the previous year and considering climate variations, Redhawk will reduce groundwater withdrawals for project purposes on BLM lands by 50 to 75 percent of the total water volume extracted during the previous year from Hendrickson Wells pending the next evaluation period's determination.
- If the total Greenline relative abundance of hydric plants is reduced by 75 percent or greater compared to the baseline total percent of relative abundance of hydric plants on the Greenline determined through Lotic AIM data collection in the previous year and considering climate variations, Redhawk will discontinue groundwater withdrawals for project purposes on BLM lands from Hendrickson Wells pending the next evaluation period's determination.

### *Summary*

If groundwater withdrawals for project purposes on BLM lands are required to be reduced, concurrent monitoring using Proper Functioning Condition Protocol (PFC) and/or Lotic AIM Protocol by an appropriate Interdisciplinary Team (IDT) will occur during the following evaluation period to determine the degree of potential resource impacts. Groundwater withdrawals for project purposes on BLM lands may be restored to proposed levels following BLM evaluation of contributing factors.

Upon receipt of quarterly DTG record updates, the BLM will evaluate water table levels. The BLM will consider the data, including annual Lotic AIM data, DTG records, pumping withdrawals records and other environmental data, and determine if the measures set forth in the AMP are triggered. The BLM will follow the Management Decision Wheel and Data Process Flowcharts that describe the elements of the AMP decision process (**Appendix F**).

BLM will also monitor hydrological and biological conditions within the Copper Creek ecosystem using independent, site-specific parameters that are measured against themselves. A combination of this data will help in determining effects of project related groundwater pumping versus effects of natural climatic variation on the local aquifer.

Additional design features the applicant will integrate into operations are in Section 2.2.10 of the EA, including, no vegetation clearing, drilling or reclamation would occur within the 0.25 mi buffer of the centerline of Copper Creek riparian areas (**Figure 5**) during the yellow-billed cuckoo (*Coccyzus americanus*) breeding season, from May 25 to September 30.

## **II. COMPLIANCE AND CONFORMANCE**

The Preferred Alternative has been determined to conform to the Safford District Resource Management Plan (RMP) (BLM 1991b) and Partial Record of Decisions (BLM 1991b, 1994), as amended.

The Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and the Mining Law of 1872, as amended (43 CFR 3802 & 43 CFR 3809) provide BLM with the authority to make this decision.

### **III. CONSULTATION AND COORDINATION**

Arizona Game and Fish Department has been a cooperating agency with the proposed project, and their concerns have been adequately incorporated in the final biological evaluation to the US Fish and Wildlife Service and are reflected in the EA.

The BLM has consulted with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act on this project and received a concurrence on the effects determinations on June 27, 2025 (**Appendix H** in the EA).

The BLM has also consulted with tribes and the State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act (NHPA). A summary of this consultation is described in Section 4.2 of the EA.

### **IV. PUBLIC INVOLVEMENT**

The BLM SFO posted the preliminary EA to ePlanning and announced the initiation of the 45-day public comment period via News Release on February 27, 2025. A public meeting was held on March 6, 2025. SFO held a separate meeting with tribes the same day to give them a specific venue to voice their concerns. No concerns were raised by the attending tribal members.

The BLM received approximately 2,300 comment letters on the preliminary EA. Those 2,300 comment letters were parsed into approximately 7,500 comments which were summarized into approximately 300 unique comments.

Public comments generally provided opposition for the action, with few in support of the exploration project. Key issues identified were:

- Need for an Environmental Impact Statement (EIS) for the project
- Concern about segmentation of the project under the National Environmental Policy Act (NEPA) regarding the notice-level activities
- Lack of hydrological data
- Cumulative impacts from other mining and other surface disturbing projects
- A full-scale mine was not considered as a reasonably foreseeable action
- Lack of tribal consultation
- Alternatives that should have been considered, and those that were dismissed
- Negative impacts to water, riparian, and wildlife habitat
- Negative impacts to wildlife due to noise and light pollution from continuous drilling
- Impacts to the 7B Ranch

Changes to the EA based on public comments included clarifying how the Cumulative Effects Study Area was determined (EA Section 3.3), expanding upon the continuous drilling effects on wildlife analysis (EA Sections 3.4.1 – 3.4.3), clarification in the AMP's processes (EA Section 2.3.1), including the addition of the 7B Ranch in the analysis, and updating the tribal consultation information in Chapter 4. Public comments and the responses can be found in Appendix G of the EA.

## **V. RATIONALE FOR DECISION**

The BLM considered three alternatives in the EA: the Proposed Action Alternative, the No Action Alternative and the Preferred Action Alternative. The Preferred Action Alternative is the same as the Proposed Action Alternative with the additional implementation of an Adaptive Management Plan (AMP) related to groundwater pumping. Under the No Action Alternative, Redhawk would continue exploration activities on BLM- administered public lands as outlined in the active Notice of mineral exploration operations (Notice; AZAZ106362501), but neither the Proposed Action Alternative nor the Preferred Action Alternative would be implemented.

Under the Proposed Action, Redhawk proposes to conduct copper mineral exploration activities in Pinal County, Arizona. The proposed copper mineral exploration activities consist of 67 drill pad sites and associated access roads within unpatented claims on BLM-managed public lands and will expand upon the six notice-level drill pads currently in operation by Redhawk.

Total ground disturbance on BLM-managed lands is estimated to be 18 ac, which includes six acres for 67 existing drill pads, eight acres of re-established access roads, and 4 ac of road widening on existing access roads with minor maintenance and/or improvements as described in EA Section 2.2.1 and summarized in Table 2-5 in the EA. Approximately 35,254 linear ft of roads are existing access roads that are currently 8 ft wide and could be expanded up to a maximum of 12 ft in width (2 feet on either side). Drill pads and access roads will be cleared of vegetation using hand tools and leveled using heavy equipment as explained in EA Section 2.2.1. Of the estimated 18 ac proposed for disturbance, the 14 ac of pads and re-established or improved access roads will be reclaimed pursuant to the reclamation plan (EA Section 2.2.11).

The Proposed Action Alternative includes drilling up to 100 boreholes up to 4,900 feet in depth. Up to two drill rigs will be in operation at any one time, with one hole open at a time on each pad. Drill holes could be vertical or angled. The proposed timeframe for exploratory drilling is 2-3 years, and drilling is proposed to always occur: 24 hours per day, 7 days per week, 365 days per year. Realistically, drilling activities will occur nine months of the year with breaks during inclement weather events and for holidays. Best management practices and design features are built into the Proposed Action in EA Section 2.2.10.

The Reclamation Plan in EA Section 2.2.11 explains that all reclamation work will be completed within six months of the conclusion of exploratory drilling activities, apart from revegetation, which will take place during the next growing season. Reclamation is intended to return disturbed land to a level of productivity comparable to the level of productivity of any specific area as it was prior to activities associated with the Proposed Action Alternative.

The Preferred Alternative was selected to address Redhawk's request for mineral exploration activities per mining law, FPLMA, and the BLM Surface Management Regulations (EA Section 1.2), while allowing BLM to monitor and mitigate degradation of the Copper Creek riparian ecosystem with implementation of the AMP. The Proposed Action Alternative does not provide an avenue for BLM to address the concerns relating to groundwater pumping and the riparian ecosystem, and the No Action Alternative does not comply with mining law.

The key issues are identified in EA Section 1.6 and analyzed in Sections 3.4.1 -3.4.4; all are related to the effects on wildlife, wildlife connectivity, and hydrologic function. Wildlife concerns included surface disturbance, groundwater pumping, noise, lighting, and dust. Design features and BMPs such as secondary mufflers on drill rigs, light hoods, and slower speed limits are included



in the Preferred Alternative to address these concerns. The AMP was incorporated in EA Section 2.3.1 as a design feature and allows for BLM to measure changes in location-specific, independent parameters that could signal adverse effects to groundwater levels related to the exploration activities as described in the mining plan of operations. It allows BLM to make changes to the exploration activities to address changes in hydrologic function based on the results of the monitoring data.

This management decision for the Exploration Plan of Operations for the Redhawk project is issued pursuant to 43 CFR §3800 regulations.

## **VI. RIGHT OF PROTEST AND/OR APPEAL:**

### **Appeal of a Decision under 43 CFR 3809**

If you contend this decision is incorrect, you may ask the Arizona State Director of the Bureau of Land Management to review this decision. If you request a State Director Review, the request must be received in the BLM Arizona State Office (State Director Review) at One North Central Ave., Ste. 800, Phoenix, AZ 85004-4427 no later than 30 calendar days after you receive or have been notified of this decision. The request for State Director Review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director Review is pending, unless a stay is granted by the State Director. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the Interior Board of Land Appeals (IBLA). You may contact the BLM Arizona State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with this office at 711 S 14 Ave, Safford, AZ 85546, which we will forward to IBLA.

If you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations at 43 CFR 3809.801(a)(1). Your Notice of Appeal must be filed in this office at Safford Field Office, 711 S 14th Ave, Safford, AZ 85546 within 30 days from receipt of this decision. As the appellant you have the burden of showing that the decision appealed from is in error. Enclosed is BLM Form 1842-1 that contains information on taking appeals to the IBLA.

This decision will remain in effect while the IBLA reviews the case, unless a stay is granted by the IBLA. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Any appeal taken with IBLA must be in accordance with 43 CFR 4.400 et seq. If you decide to appeal, your Notice of Appeal (NOA) must be filed in writing and in accordance with Form 1842-1 (enclosed) at the Safford Field Office, 711 S 14th Ave, Safford, AZ 85546, and with Office of the Solicitor (Department of the Interior, Office of the Field Solicitor, Sandra Day O'Connor U.S. Court House #404, 401 W. Washington Street SPC44, Phoenix, AZ 85003-2151).

The required Statement of Reasons (SOR; see 43 CFR 4.412) may be filed with the NOA or, if not, it must be filed with the IBLA, U.S. Department of the Interior, MS 300-QC, Arlington, VA 22203, within 30 days after the NOA was filed. See also required service at 43 CFR 4.413. The decision, signed by the Field Office Manager, will remain in effect during the appeal unless a written request for a stay is granted.

If you wish to file a petition pursuant to regulations 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by IBLA, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of this notice of appeal and petition for a stay must also be submitted to each party named in the decision, to the IBLA, and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

#### Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1. The relative harm to parties if the stay is granted or denied.
2. The likelihood of the appellant's success on the merits.
3. The likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether the public interest favors granting the stay.

Requests for State Director Review or Notices of Appeal must be in writing and must be hand delivered, mailed, or faxed. Requests cannot be accepted via email, voicemail, or other electronic means.

## **VII. APPROVAL**

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Sharisse Flatt

Field Manager  
BLM Safford Field Office

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Date

#### **ATTACHMENTS:**

1. Form 1842-1, Appeals form