# Lone Star Ore Body Development Project Environmental Impact Statement



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# **External Scoping Summary Report**







U.S. Army Corps of Engineers Arizona Regulatory Branch ATTN: SPL-2014-00065-MWL 3636 N. Central Ave, Suite 900 Phoenix, AZ 85012-1939

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# **List of Acronyms**

ADEQ Arizona Department of Environmental Quality

AGFD Arizona Game and Fish Department

ARNI aquatic resource of national importance

AZPDES Arizona Pollutant Discharge Elimination System

CEQ Council on Environmental Quality

CFR Code of Federal Regulations
Corps U.S. Army Corps of Engineers

CWA Clean Water Act

DPM diesel particulate matter

EIS Environmental Impact Statement

EO Executive Order

EPA Environmental Protection Agency
FMSI Freeport-McMoRan Safford Inc.

GBRNCA Gila Box Riparian National Conservation Area

GHG greenhouse gas

HAP hazardous air pollutant

NAAQS National Ambient Air Quality Standards

NEPA National Environmental Policy Act

NOA Notice of Availability

NOI Notice of Intent

 $PM_{10}$  particulate matter with an aerodynamic diameter of 10 microns or less  $PM_{2.5}$  particulate matter with an aerodynamic diameter of 2.5 microns or less

PSD Prevention of Significant Deterioration

ROD Record of Decision

THPO Tribe Historic Preservation Office

U.S. United States

USDA U.S. Department of Agriculture USFWS U.S. Fish and Wildlife Service

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# 1.0 Introduction

The U.S. Army Corps of Engineers (Corps) Los Angeles District is examining the environmental consequences associated with the application from Freeport-McMoRan Safford Inc. (FMSI) for a Department of the Army permit under Section 404 of the Clean Water Act (CWA) for the proposed development of the mineral resources associated with the Lone Star ore body for the purpose of producing copper (the Lone Star Project). The proposed development would be the construction of mining facilities, including an open pit mine and attendant development rock stockpiles and heap leach facilities, which will allow continued mining at the Safford Mine Facility using conventional open pit mining, heap leaching techniques, and solution extraction/electrowinning processing, and utilizing as much of the existing Safford Mine Facility infrastructure and processing facilities as practicable. The construction of the proposed facilities would discharge fill materials into approximately 90.27 acres of Waters of the United States (U.S.). The primary federal environmental concerns are the proposed discharges of fill material into waters of the U.S. and the potential for significant adverse environmental effects resulting from such activities. Therefore, to address these concerns in accordance with the National Environmental Policy Act (NEPA), the Corps is requiring preparation of an Environmental Impact Statement (EIS) prior to consideration of any permit action. The action must comply with the section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] part 230) and not be contrary to the public interest to be granted a Corps permit. The Corps may ultimately make a determination to permit or deny the above project, or permit or deny modified versions of the above project.

Two primary principles of the NEPA are full disclosure of potential environmental effects and open public participation throughout the decision-making process. Through the public involvement process, the public is able to participate in the NEPA process. NEPA requirements for public involvement are set forth in Council on Environmental Quality (CEQ) regulations 40 CFR 1500 – 1508.

This Scoping Summary Report provides an overview of the public scoping process and a summary of the scoping comments, issues, and concerns identified during public scoping. Although the Corps encourages commenting on the Project throughout the preparation of the Draft EIS, the range of issues summarized in this report is based on the comments received during the public scoping period.

#### 1.1 Purpose of Scoping

The purpose of the public scoping process is to identify issues and planning criteria that should be considered in the Draft EIS and to initiate public participation in the planning process. The Corps follows the public involvement requirements according to the CEQ regulations set forth in 40 CFR 1501.7, which states, "there should be an early and open process for determining the scope of issues to be addressed and for identifying the process for determining the scope of issues to be addressed during the planning process." The scoping process is open to all interested agencies and the public. The intent is to solicit comments and identify the issues that help direct the approach and depth of the environmental studies and analysis needed to prepare the Draft EIS and incorporate the views and concerns of federal, state, and local agencies, as well as the public, regarding the scope of issues to be analyzed in the EIS. Other objectives of scoping include:

- Identifying and inviting agencies with jurisdiction or special expertise relevant to the Proposed Action and alternatives to participate in the NEPA process as cooperating agencies;
- Identifying other environmental review and consultation requirements;
- Identifying the relevant and substantive issues that need to be addressed in the EIS analyses;
- Determining the range of alternatives to be evaluated; and
- Developing the environmental analysis criteria and systematic planning process and allocating EIS assignments among agencies as appropriate.

## 1.2 Document Organization

This document contains summary descriptions of the:

- Scoping process, including scoping meetings, advertising leading up to the meetings, and opportunities for public comment during the scoping period (Chapter 2.0);
- Scoping content analysis process, including how individual letters and comments were coded and tabulated (Chapter 3.0);
- Comments organized by resource (Chapter 4.0);
- Issues raised by public comment (Chapter 5.0); and
- Next steps in the EIS process (Chapter 6.0).

All comments were given equal consideration, regardless of method of transmittal.

# 2.0 Scoping Process

This chapter provides a description of the scoping process, the means by which the public and agencies were notified and given opportunities to comment on the Lone Star Project, and a brief summary of the meetings that were held.

### 2.1 Federal Register Notice of Intent

The scoping comment period began January 5, 2015, with the publication of the Notice of Intent (NOI) to prepare an EIS in the *Federal Register* (Vol. 80, No. 2, pages 212 to 213). The NOI notified the public of the Corps' intent to prepare an EIS for the Lone Star Project and the beginning of a 45-day scoping period. The Corps also posted the NOI on the project website (http://tinyurl.com/USACE-LoneStarEIS).

A copy of the NOI is provided as **Appendix A**.

## 2.2 Public Notification of Permit Application and Public Scoping

On January 5, 2015, the Corps posted on its website *Public Notice SPL-2014-00065-MWL*, *Receipt of Application for a Corps Permit, Notice of Intent to Prepare a Draft EIS and Hold a Public Scoping Meeting for the Lone Star Ore Body Development Project*. The notice indicated that FMSI had applied for a Section 404 permit, provided project information and invited the public to comment on the project. The notification indicated that the comments would be used in preparation of an EIS. The notification also provided the date and time of the public scoping meeting, and identified February 20, 2015 as the close of the scoping comment period.

The Corps published four newspaper display advertisements providing information on the public scoping meeting. Ads were published in the Apache Messenger and Eastern Arizona Courier on January 21, and 28, 2015.

Copies of the public notice and a sample newspaper advertisement are included in **Appendix B**.

### 2.3 Scoping Meetings

The Corps hosted one scoping meeting on February 4, 2015 in Safford, Arizona. The meeting provided an opportunity for the Corps to inform those in attendance about the Proposed Action and alternatives and the EIS process and to solicit input on the scope of the analysis and potential issues. The meeting was held from 6:00 p.m. to 9:00 p.m. The 3-hour meeting comprised an open house with a 30-minute presentation at 7:00 p.m.

Attendees were greeted, asked to sign in, given a comment form, and informed about the meeting agenda, the general flow of information (display boards) in the room, and ways to submit comments to the Corps.

Informational display stations positioned around the meeting room described the project and environmental resources in the project area, and outlined the CWA Permitting and NEPA processes scoping process, described the type of comments most useful to the Corps, and provided methods and deadlines for comment submittal. Technical experts from the Corps and FMSI were present to answer questions about the project.

The Corps presented a PowerPoint slideshow with information on the background information about the proposed project and information about the Corps permitting and EIS processes, and methods for public comment.

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Copies of the display boards, presentation, and the comment form are provided in **Appendix C**.

# 2.4 Opportunities for Public Comment

Members of the public were afforded several methods for providing comments.

- Comments could be recorded on comment cards at the scoping meeting.
- E-mails could be sent to the Corps Project Manager's e-mail address: Michael.W.Langley@usace.army.mil.
- Letters could be mailed to: U.S. Army Corps of Engineers, Los Angeles District, Arizona Regulatory Branch, Attn: SPL-2014-00065-MWL, 3636 N. Central Ave, Suite 900, Phoenix, Arizona 85012-1939.

# 3.0 Scoping Content Analysis

Upon receipt, all contact information for all submittals was entered into the comment database and project mailing list (unless there was a specific request for contact information not to be included), along with the submittal method and entity/affiliation of each submittal. Each submittal was labeled with a numeric identifier, and was reviewed to capture both submittal-level and specific comment level information.

#### 3.1 Submittal-level Coding

Each submittal was reviewed as a whole to specifically identify the following submittals.

- Out-of-scope submittals: those submittals that did not pertain to the Lone Star Ore Body
  Development Project at all (for example, a submittal pertaining to another project or seeking
  employment).
- Submittals requiring immediate attention, such as submittals containing requests for maps or
  other data; official Freedom of Information Act requests; requests for comment period extension;
  or other comments that needed to be brought to the attention of the Corps immediately.
- Form letters (standardized and duplicated letters that contain the same text or portions of text and comments) and "form pluses," which are form letters that have been modified to contain additional unique comments.

As shown in **Table 3-1**, the Corps received a total of 12 unique submittals. No out-of-scope, immediate attention, form letters or "form-plus" submittals were received.

Method of submission to the Corps was fairly evenly divided between the three submittal options.

Table 3-1 Submittal Summary by Method

Code	Submittal Method	Number of Submittals
Е	Email	4
М	Comment submitted at meeting	4
L	U.S. Postal Service letter	6
	Total	14

Table 3-2 shows the affiliation of each commenter.

Contact information was gathered for all submittals. **Appendix D** provides a list of individual commenters and their affiliations.

Table 3-2 Submittal Summary by Affiliation

Code	Туре	Number of Submittals
1	Individual	5
F	Federal Agency	3
S	State Agency	2
L	County or Local Agency	0
0	Non-government Organization or Special Interest Group	0
В	Business	0
Т	Native American Tribe	4
	Total	14

Note: Total is inclusive of multiple but non-duplicative letters submitted by same entity.

#### 3.2 Comment-level Coding

After initial processing, each unique submittal was reviewed for the specific comments it contained. Each submittal contained one or more comments, and each comment was categorized and coded by primary resource issue or topic. Comments were assigned a general code corresponding to their respective resource issue or topic (for example, "WL" for wildlife), and a numeric sub-code specific to that resource to further group similar comments (as an example, comments suggesting wildlife existing condition data that should be used in the EIS were coded as "WL-2"). This form of analysis is used to allow resource specialists to view public concerns by general resource issue as well as resource-specific topics. In some cases, comments were given codes for a second primary resource; for example a comment about erosion affecting streams might be given primary resource issue or topic codes (and appropriate subcodes) for both soils and water resources.

A total of 172 comments were identified and coded. Of this total, 46 comments also were coded to a second primary resource, for a total of 188 comments to be considered in the following resource summaries (**Table 3-3**). **Figure 3-1** graphically identifies the percentage of comments by general resource issue or topic.

Table 3-3 Comment Summary by Resource Issue

Resource Issue	Resource	
NEPA Process Issues (EIS Chapter 1)		
Purpose and Need	1	
Process	35	
Project Design (EIS Chapter 2)		
Alternatives	8	
Impact Analysis (EIS Chapter 3 and 4)		
Air Quality	7	
Cultural Resources	13	

Table 3-3 Comment Summary by Resource Issue

Resource Issue	Resource
Geology/Paleontology	1
Hazardous Materials	6
Land Use	1
Recreation	1
Socioeconomics	4
Soils	2
Special Designations	1
Vegetation, including Threatened and Endangered Species (TES)	13
Visual Resources	3
Water Resources	40
Wildlife, including TES	34
Cumulative Impacts	5
Mitigation	2
Reclamation	7
Opinion Only	4
Total	188

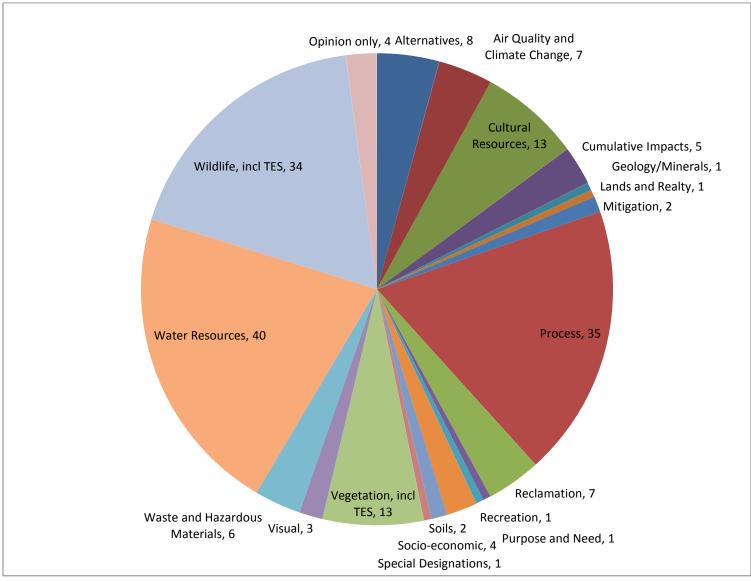


Figure 3-1 Percentage of Comments by General Resource Issue or Topic

# 4.0 Substantive Public Comment Summary

Substantive scoping comments fell into the following four broad categories: Process, Purpose and Need, Alternatives Development, and Impacts Analysis (including resource-specific concerns and cumulative impacts). Comments are summarized below in narrative form for each resource issue area (e.g., all comments specific to wildlife are included under the Wildlife category; all comments specific to visual resources are in the Visual Resources category, etc.). This section represents a summary of the formal comments received during public and agency scoping. A more detailed record of all unique comments is included as **Appendix E**.

The narrative summary is organized in the following order, which generally mirrors where the comments would be addressed in the resulting Draft EIS.

- Process (Chapters 1.0 and/or 6.0 of an EIS).
- Purpose and Need (Chapter 1.0 of an EIS).
- Alternatives (Chapter 2.0 of an EIS).
- Impact Analysis (Chapters 3.0 and 4.0 of an EIS), organized by resource type (Physical Resources, Biological Resources, and Human Resources) and followed by general cumulative impacts and mitigation comments and other comments that do not fit other resources categories).
- Non-substantive comments, including statements of support for lease reaffirmation and statements of opposition to lease affirmation.

#### 4.1 Process

### 4.1.1 CWA 404 Permitting Process

Comments requested that the Draft EIS describe the CWA Section 404 permitting process and the status of the project in that process. The Environmental Protection Agency (EPA) indicated that pursuant the 1992 Memorandum of Agreement between the USEPA and Department of the Army regarding CWA Section 404, the USEPA has identified the Lone Star permit action as a candidate for review by USEPA and Corps' headquarters. The USEPA provided instruction for Draft EIS submission.

#### 4.1.2 Coordination with Other Agencies and Other Permitting Processes

Comments suggested that the project also may require coordination with the following agencies.

- Office of Surface Mining (permits needs not described).
- State Historic Preservation Office (also see Section 4.4.7, Cultural Resources).
- Arizona Department of Agriculture (coordination per Arizona Native Plant Law and Antiquities Act; also see Section 4.4.5, Vegetation Resources).
- Arizona Department of Environmental Quality (ADEQ) (water quality permitting; also see Section 4.4.4, Water Resources).
- Arizona Department of Water Resources (water quality permitting; also see Section 4.4.4, Water Resources).
- Arizona Game and Fish Department (AGFD) (coordination regarding wildlife and in particular, bats; also see Section 4.4.6, Wildlife).
- U.S. Fish and Wildlife Service (USFWS) Ecological Services Offices (consultation per the Endangered Species Act; also see Section 4.4.6, Wildlife).

Comments requested that the EIS describe all permits and permits requirements that apply to the project.

The AGFD requested cooperating agency status, and proposed communication on an ongoing basis rather than just during formal comment periods. They AGFD suggested that they should be a resource for both nongame and threatened and endangered wildlife and requested participation in the Section 7 consultation. The AGFD also requested specific review periods for Administrative Draft EIS and Draft EIS.

#### 4.1.3 Government-to-Government and Section 106 Consultation

Comments cited an April 29 1994, presidential memorandum and Executive Order (EO) 13175 (2000) as containing the principles guiding formal government-to-government consultation with Native American tribal governments and recommended that the EIS discuss the Corps' consultation with all tribes potentially affected by the proposed project or may have resources (e.g., traditional cultural properties, groundwater resources, etc.) that could be affected by the project. Comments recommended that consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EIS, and indicated that efforts should be made to avoid or mitigate impacts to culturally significant sites. No official Government-to-Government Consultation requests were received from tribes during scoping; however several tribes requested consultation and coordination with the Corps during the EIS process.

Respondents specifically suggested coordination with the San Carlos Apache Tribal Council and noted that the proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; Ak-Chin Indian Community and the Tohono O'Odham Nation).

The Gila River Indian Community Tribal Historic Preservation Office (THPO) indicated they would participate as a consulting tribe for this undertaking. The White Mountain Apache THPO requested the Cultural Survey report conducted for the project. The San Carlos Apache Tribe indicated that they requested the Cultural Survey report conducted for the project and requested that the Corps contact them to clarify potential impacts to cultural and water resources.

## 4.1.4 Public Involvement

Comments noted that EO 12898 requires consideration of the disproportionate adverse impacts of federal actions on minority and low-income populations and indicated the Corps should present opportunities for affected communities to provide input into the NEPA process.

#### 4.2 Purpose and Need

Comments stated that the EIS needs to adequately identify and describe the underlying need(s) for the project and the associated objectives or outcomes for purposes of both the NEPA analysis and the CWA Section 404(b)(1) alternatives analysis.

#### 4.3 Alternatives

#### 4.3.1 Proposed Action

Comments requested the following types of information related to FMSI's Proposed Action, including the following.

- Potential water sources and the amount of water needed for the project.
- Inclusion of best available demonstrated control technology to be used to Arizona groundwater standards.

- Procedures for how waste rock (or "development" rock) will be handled, disposed, and reclaimed
  at the mine, including how potentially acid generating material would be encapsulated or
  intermixed to prevent the development of seepage with adverse water quality, as supported with
  geochemical testing data and on-site current or historic monitoring data (existing seepage water
  quality, on site pan evaporation rates, documentation of the successful closure of some existing
  facilities, etc.).
- Facility designs and control measures to ensure against leaching and release of contaminants under both acidic and non-acidic conditions, and degradation of surface water and groundwater quality.
- Procedures outlining how accidental releases of hazardous materials would be handled.
- A petroleum-contaminated soil management plan.
- A comprehensive reclamation plan that includes:
  - A detailed account of measures that would be taken to decommission mine operations and stabilize and revegetated slopes, waste rock facilities, heap leach pads, roads and other areas (also see Section 4.4.5, Geology and 4.4.6, Water Resources);
  - Estimated acreage and areas targeted for reclamation, and description of the intended degree of treatment in each area;
  - Timing of reclamation relative to mining operations, procedures for concurrent reclamation activities, and duration of reclamation treatment;
  - Standards for determining and means of assuring successful reclamation; and
  - Commitments by the mine company and agencies regarding operation and maintenance of caps/covers, draindown systems and any proposed evapotranspiration cells, fencing and wildlife protection measures, diversion channels, underdrain systems, wells, and other elements of the plan.

Respondents also stated that the Proposed Action should clearly identify any connected actions.

#### 4.3.2 Action Alternatives

Comments stated the EIS should explore and objectively evaluate all reasonable alternatives, including reasonable alternatives not within the jurisdiction of the Corps.

Respondents suggested that reasonable alternatives could include, but are not necessarily limited to alternative designs or methods, smaller projects, and a reconfigured project design.

The AGFD requested to participation in the alternatives development process.

#### 4.3.3 Alternatives Eliminated

Comments stated the EIS must include a rationale for the elimination of any alternatives that were not evaluated in detail.

#### 4.4 Impact Analysis

Comments stated that the alternatives analysis must assess the direct, indirect and cumulative impacts from the proposed project. Respondents stated that the EIS should disclose potential environmental impacts of the alternatives in comparative form, thus sharply defining the issues among the options for decision makers and the public.

Comments indicated that the EIS must identify the "Least Environmentally Damaging Practicable Alternative" and disclose if the alternatives meet any of the other restrictions on discharges, including the

need to ensure appropriate compensatory mitigation for unavoidable impacts. Comments suggested the Corps should only select the "Least Environmentally Damaging Practicable Alternative".

Respondents indicated that the EIS analysis should include closure and post-closure activities associated with the tailings, heap leach pad, waste rock piles, and other facilities, including implementation, performance, and effectiveness monitoring, and follow up actions that would be taken should destabilization or contamination be detected.

#### 4.4.1 Air Resources, including Climate Change

Comments indicated that the EIS should include a robust analysis of the project's potential to affect air quality.

#### 4.4.1.1 National Ambient Air Quality Standards and Prevention of Significant Deterioration

Comments expressed concern about impacts to of National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) elements and requested that that the EIS include the following.

- Descriptions of existing air quality in the project vicinity.
- Discussions of the NAAQS and PSD increments applicable to air quality in the project area.
   Comments noted that PSD increments exist for sulfur dioxide, nitrogen dioxide, and Particulate Matter smaller than 10 microns in diameter (PM<sub>10</sub>), and PM<sub>2.5</sub> (particulates smaller than 2.5 microns in diameter).
- Identification of all Class I PSD areas located within 100 kilometers of the proposed project site.
   Comments stated that the Corps should consult with the U.S. Forest Service and National Park Service for a determination of which areas could be adversely affected by the Proposed Action.
- Summaries of project emissions from all facilities and roads related to the mine's operations, including any off-site processing and support activities, such as vehicle traffic and delivery trucks for fuels, maintenance supplies, and other materials.
- Consideration of cumulative emissions from other sources in the project area, including existing facilities and ongoing operations associated with the Dos Pobres and San Juan pits;
- Modeling to determine concentrations of criteria air pollutants for an accurate comparison with the NAAQS. The air quality analysis presented in the EIS should demonstrate that new emissions emitted from the proposed project, in conjunction with other applicable emissions increases and decreases from existing sources, will not cause or contribute to a violation of any applicable NAAQS or PSD increment.
- Discussions of potential impacts to Class I PSD areas, including visibility impacts.
- Potential for fugitive dust, especially dust that contains toxins, abrasives, or otherwise ecologically disruptive compounds.

Respondents indicated that the EIS should discuss mitigation measures to minimize air pollutant emissions from the mine, and include measures to address potential impacts to nearby residents, including sensitive receptors. Comments suggested that diesel particulate matter (DPM) and other criteria pollutants from fugitive sources at the mine could be reduced by implementing appropriate mitigation measures, such as:

- Using particle traps and other appropriate controls to reduce emissions of DPM and other air pollutants;
- Minimizing construction-related trips of workers and equipment, including trucks and heavy equipment;

- Leasing or buying newer, cleaner equipment (1996 or newer model); and
- Employing periodic, unscheduled inspections to ensure that construction equipment is properly
  maintained at all times and does not unnecessarily idle, is tuned to manufacturer's
  specifications, and is not modified to increase horsepower except in accordance with
  established specifications.

Comments also stated that EIS should discuss whether and how air quality monitoring would be implemented to ensure project compliance with all applicable air quality standards and permits.

#### 4.4.1.2 Hazardous Air Pollutants

Comments related to hazardous air pollutants (HAPs) indicated the EIS should list in detail all possible sources of HAPs and the unit processes that generate this material; estimate releases of HAPs from the proposed project to air, soil, and water resources; and describe the HAPs monitoring that would be conducted, including locations and reporting requirements. Respondents stated the EIS should discuss how all HAPs would be controlled to reduce their emissions as much as possible, including from any off-site facilities that will process ore from this project, and that the EIS should describe the equipment included in the system to condense, capture, and/or treat HAPs and reduce their emissions and disclose the effectiveness of these measures in removing HAPs and making it unavailable for release into the environment

#### 4.4.1.3 Greenhouse Gases

Comments stated that the analysis of greenhouse gases (GHGs) and climate change should be consistent with new CEQ draft guidance provided in December 2014, which indicates that impact analysis should consider both the potential effects of a Proposed Action on climate change as well as the implications of climate change. Respondents also noted that the revised draft guidance suggests that if an agency determines that evaluating the effects of GHG emissions would not be useful in the decision making process and to the public to distinguish between the Proposed Action, alternatives and mitigations, the agency should document the rationale for that determination.

Comments recommended that sustainable design and operation measures that reduce greenhouse gases be identified in the EIS with an estimate of the greenhouse gas emissions reductions that would result if these measures were implemented.

Respondents suggested the following mitigation measures to reduce GHGs.

- Using conveyors rather than haul trucks where possible, e.g., for transporting ore to processing areas and the heap leach facility.
- Incorporating alternative energy components into the project such as on-site solar and/or geothermal power generation.
- Offering ride sharing or shuttle opportunities for mine employees commuting to the site from both nearby and distant communities.
- Committing to using high efficiency diesel particulate filters on new and existing diesel engines to provide reductions of black carbon emissions.

Comments stated the EIS should then clearly indicate whether these measures would be required and explain the quality of each mitigation measure, including its permanence, verifiability and enforceability.

#### 4.4.2 Geological Resources

Comments related to geological resources focused solely on geochemistry and stated that accurate characterization of the mine's geochemistry would be critical in identifying the project's potential for leaching and release of contaminants and indicated the EIS should include the following information.

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- Descriptions of the static and humidity cell tests that have been conducted on ore and waste rock to characterize them, and a summary of the test results.
- Identification of how the geochemical testing procedures were designed to comply with all applicable guidance and industry standards.
- Descriptions how waste rock or "development" rock) will be handled, disposed, and reclaimed at the mine:
  - Facility designs and control measures that would be implemented to ensure against leaching and release of contaminants under both acidic and non-acidic conditions, and degradation of surface water and groundwater quality;
  - Whether a synthetic geomembrane cap will be required to prevent infiltration into heap leach, tailings or waste rock facilities. Cover design should be described in detail with supporting data to demonstrate anticipated effectiveness; and
  - Process by which potentially acid generating material would be encapsulated or intermixed to prevent the development of seepage with adverse water quality, supported with both geochemical testing data and on-site current or historic monitoring data (existing seepage water quality, on site pan evaporation rates, documentation of the successful closure of some existing facilities, etc.).

Comments stated that where existing waste rock and heap leach facilities can be reasonably used as analogs for the new or expanded facilities, such comparisons should be made and clear data should be presented for why the proposed designs would be more or equally successful in avoiding the production of adverse seepage water.

Comments related to closure and post-closure activities associated with the tailings, heap leach pad, waste rock piles, and other facilities requested information regarding commitments by FMSI and agencies regarding operation and maintenance of caps/covers for heap leach, tailings or waste rock facilities.

#### 4.4.3 Soils

Comments stated that the EIS should include details regarding the mine's petroleum-contaminated soil management plan (also see Section 4.4.9, Hazardous Materials).

Comments regarding project reclamation (also see 4.3.1 Proposed Action, and Section 4.4.4, Water Resources) noted that reclamation and closure of the tailings, heap leach facilities and waste rock disposal areas would involve placing growth media over rock material to provide store-and-release covers for the purpose of reducing infiltration of meteoric water. Respondents stated that the EIS should describe the availability, properties, and sources of cover material and/or growth media (including the permeability standard that growth media or other cover material for the heap leach, tailings, and waste rock facilities would be designed to achieve, the basis for infiltration rates and cover/growth media thickness estimates) and discuss how it would be applied to disturbed areas. Comment stated the EIS must evaluate the effectiveness in minimizing exposure of mined material to meteoric water that could mobilize contaminants, and identify any additional measures (e.g., amendments) that may be needed to ensure successful reclamation and revegetation of the project site.

#### 4.4.4 Water Resources

#### 4.4.4.1 General Concerns

Comments expressed concern about impacts to water quantity and water quality for both groundwater and surface waters (wetlands, streams, springs, and/or riparian habitats).

Comments related to water quantity stated the EIS should identify:

- Potential water sources and the amount of water needed for the project;
- All potential project discharges, seepage, temporary ponding, surface water diversions, and groundwater pumping/dewatering;
- Potential impacts associated with using each proposed water source, including direct, indirect, and cumulative impacts to water rights, surface water flow, beneficial uses, and impacts to water supply wells, wetlands, springs and seeps, vegetation, wildlife, and other surface-or groundwater-dependent resources as a result of surface diversion or groundwater pumping associated with the proposed project; and
- Post-closure groundwater elevation recovery.

Comments stated that headwater streams within the project area provide valuable surface water and groundwater recharge for the Gila River watershed. Comments also cited data showing that he Gila River hydrologic units provide approximately 35% of total surface water withdrawals for all water uses in Arizona and 37% of the surface water withdrawals used for irrigation. Comments expressed concern that groundwater pumping and interception of groundwater by the pit may cause a dewatering cone of depression around the mine and dewater springs, seeps, and similar features.

Comments related to water quality expressed concern about:

- Impact to wetlands, streams, springs, and/or riparian habitats;
- Pollution from storm water runoff;
- Hazardous materials or pollutants entering the Gila river via ephemeral washes or other methods;
- Abandoned wells resulting in leaking into other wells that are currently in use;
- The potential for contamination of meteoric water that contacts existing and proposed waste rock, pit wall rock, heap leach, stockpiles, roads, and other mine facilities; and
- Potential for and effects of movement of any contaminated surface water to the subsurface, including through the pit bottom.
- Impacts to tanks and other water sources used by wildlife.

Comments identified the Gila River as an aquatic resource of national importance (ARNI) and stated that given the ongoing open-pit mining operations in the Dos Pobres and San Juan pits, and the facility's proximity to the Gila River, it is critical that the EIS thoroughly analyze and discuss the proposed project's potential impacts upon water resources in the context of the impacts that have already resulted from past and current mining activity. Comments identified the importance of several riparian areas in and adjacent to the Gila River, including Coyote and Watson Washes and Bear Springs Canyon. The USEPA stated that impacts may contribute to the significant degradation of the Gila River, and thus may represent substantial and unacceptable impacts to an ARNI.

Comments noted that the Gila Box Riparian National Conservation Area (GBRNCA) is located within two miles of the mine and includes four perennial waterways, the Gila and San Francisco Rivers and Bonita and Eagle Creeks. Comments expressed concern about the Bonita Creek watershed in particular, identifying it as a riparian s ecosystem with plant and animal diversity.

The AGFD recommended early direct coordination with its Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, or riparian habitats.

#### 4.4.4.2 Applicable Water Permits

Comments requested that the EIS describe the applicable permits and state-adopted, USEPA-approved water quality standards, including beneficial uses, in the project area, and discuss each alternative's compliance with the standards and permits.

Other comments regarding the various permits related to water resources included the following permits.

- CWA Section 404 Permit: Comments stated that the EIS should describe the CWA Section 404 permitting process and the status of the project in that process and provided information that should be included in the site characterization and impact analyses in order to accurately understand the potential impacts of the proposed discharge of fill materials into approximately 90.27 acres of Waters of the U.S., including identification of the "Least Environmentally Damaging Practicable Alternative" (see subsections 4.4.5.3 and 4.4.5.4, below). Comments also stated that the applicant is required to obtain water quality certification from the ADEQ per CWA, Section 401 prior to Section 404 permit issuance.
- Aquifer Protection Permit: Comments stated that that although the FMSI has amended its
  individual Aquifer Protection Permit in 2014, the Lone Star project was not addressed in this
  amendment and the permit may still need to be modified. Comments indicated the EIS should
  identify the specific requirements of the Arizona's Aquifer Protection Program permit for this
  project and discuss how the project would meet the groundwater standards included in its
  permit.
- Arizona Pollutant Discharge Elimination System (AZPDES) program: Comments stated that
  stormwater discharges require a permit under AZPDES program and that EIS should discuss
  the applicability of Arizona's General Permit for Storm Water Discharges Associated with
  Industrial Activity Mineral Industry (AZMSG2010-003) to this project. Comments indicated that
  although FMSI has coverage for two existing facilities, they may need to update the Stormwater
  Pollution Prevention Plan and submit a revised notice of intent if they are expanding or seek
  separate coverage under the Multi-Sector General Permit for any new site.

#### 4.4.4.3 Project Design Elements Relevant to Water Resources

As discussed under Section 4.3.1, Proposed Action, comments requested design information to allow the Draft EIS to assess potential impacts to resources. With respect to water resources, comments requested that the Draft EIS disclose how the project would be designed with best available demonstrated control technology for purposes of meeting Arizona groundwater standards included in its Aquifer Protection Program permit.

Respondents also requested a description of the procedures that would be used for monitoring the functioning of the waste rock stockpiles and heap leach pads in controlling contact between this material and surface or meteoric water (e.g., maintenance of run on/runoff channels, liners, underdrains, seepage collection areas, growth medium covers; ponding on top of facilities; etc.). Comments indicated the Draft EIS should describe all monitoring locations for surface water, ponded water, and collected seepage; groundwater monitoring wells; and points of compliance on the site.

Comments regarding the proposed Project's Reclamation Plan requested that the EIS include a detailed account of closure and post-closure activities associated with the tailings, heap leach pad, waste rock piles, and other facilities, including:

- Whether a synthetic geomembrane cap will be required to prevent interstitial water infiltrating
  into heap leach, tailings or waste rock facilities, with details to demonstrate anticipated
  effectiveness of cover design:
- How draindown fluids from the tailings and heap leach pads would be captured, treated and controlled over the closure and post-closure period;

- Capacity of any proposed evapotranspiration cells, the likelihood that this capacity will be sufficient and the contingency in the event of evapotranspiration cell overflow;
- Fate and transport of acidic fluids and the other constituents in the heap over the course of closure and post-closure, projected draindown rates, and any ecological risks posed by evapotranspiration cells or other open water;
- Commitments by the mine company and agencies regarding operation and maintenance of caps/covers, draindown systems and any proposed evapotranspiration cells, fencing and wildlife protection measures, diversion channels, underdrain systems, wells, etc.; and
- Details regarding the growth media that would be placed over rock material for the purpose of reducing infiltration of meteoric water, including the permeability standard that growth media or other cover material would be designed to achieve, the basis for infiltration rates, and their effectiveness in minimizing exposure of mined material to meteoric water that could mobilize contaminants and any additional measures that may be needed to ensure successful reclamation (also see section 4.4.3, soils).

#### 4.4.4.4 Affected Environment

Comments requested that the EIS provide a complete hydrologic characterization of the project vicinity and the cumulative impact area, describing all existing water resources and baseline groundwater and surface water quality, quantity, flow regimes, groundwater adjudication, and current drainage patterns in the existing mine facilities and across the project area. Comments indicated the following information should be included in the site characterization.

- Identification of potential water sources for the project.
- Descriptions of all existing water resources and baseline groundwater and surface water quality, quantity, flow regimes, and groundwater adjudication, including groundwater/surface water connections (e.g., springs, seeps, interception of the water table by existing or proposed mine pits).
- Description of all existing mine facilities and their relevance to site hydrology.
- Current drainage patterns in the existing mine facilities and across the project area.
- Past and current monitoring results and trends for surface water and groundwater quality in the existing mine area.
- Ongoing and proposed monitoring plans and their relevance in predicting the potential for, and protecting against, contaminated drainage from historic, existing and future mine facilities.
- Any existing groundwater contamination associated with ongoing activities at the Safford mine.
- Graphic descriptions and narratives of the acreages and channel lengths, habitat types, values, and functions of waters of the U.S. that may be impacted by the potential discharge of fill materials.

#### 4.4.4.5 Impact Analysis

Comments stated that the EIS should include the following disclosures related to Water Resources.

- The potential environmental impacts of the fill and should identify project alternatives designed to avoid or minimize discharge to waters, as well as all possible and required measures to mitigate potential impacts.
- The potential for groundwater pumping and interception of groundwater by the pit to cause a dewatering cone of depression, as determined through groundwater modeling.

- The potential for contamination of meteoric water that contacts existing and proposed waste rock, pit wall rock, heap leach, stockpiles, roads, and other mine facilities.
- The projected chemical characterization of water in open ponds that would be located at the site, including whether a pit lake or ponding of precipitation might occur in the mine pits.
- The potential for and effects of movement of any contaminated surface water to the subsurface, including through the pit bottom.
- Maps of descriptions of the designs of the proposed run-on/run-off channels, seepage collection systems, collection and sedimentation ponds, pump back systems, and any necessary treatment or disposal of these solutions.
- Discussion of how drainage patterns would change (including post-closure drainage patterns)
  under each alternative that includes hydrologic and topographic maps of the project area and
  cumulative impact area.
- Identify any project components within 25- and 100-year flood plains and disclose potential for runoff to transport sediment or contaminants from disturbed areas at the mine to any surface waters or other potential receptors outside the mine boundaries.
- Discussion of how accidental releases of hazardous materials would be handled (see Section 4.4.8, Hazardous Materials).
- Evaluation of each alternative's compliance with the standards and permits. The EIS should
  discuss how the project would be designed with best available demonstrated control technology
  for purposes of meeting Arizona groundwater standards included in its Aquifer Protection
  Program permit.
- Disclosure by alternative of whether the tailings facility would achieve zero discharge for all
  phases of the project and, if so, how zero discharge would be achieved.
- Potential for the Proposed Action or alternatives to affect any existing groundwater contamination plumes and describe any and all measures proposed or implemented to control such contamination.

Comments also stated that the cumulative impacts analysis must include analysis of the connected habitats in the Gila River watershed, particularly the Gila River and connected environment downstream and cumulative impacts such as potential pollutant inputs downstream, water diversion upstream, and reduced surface flow into the Gila River.

#### 4.4.4.6 Mitigation and Monitoring

Comments suggested that mitigation for impacts to surface flows and/or groundwater levels might include riparian habitat enhancement or creation; preservation of habitat along the Gila River, San Pedro River, or Bonita Creek; purchase of water rights to secure flows in the Gila or Bonita Creek; funding of habitat projects at Cluff Ranch and the Willcox Playa (new or reestablished lakes and ponds); and/or a solar water pumping system at Roper Lake to maintain that recreation area's lake levels.

The AGFD indicated it would seek compensation for at least two water tanks used by wildlife.

Respondents indicated that the EIS should include a comprehensive water quality and quantity monitoring and reporting plan that includes:

 Procedures for monitoring the functioning of the waste rock stockpiles and heap leach pads in controlling contact between this material and surface or meteoric water (e.g., maintenance of run on/runoff channels, liners, underdrains, seepage collection areas, growth medium covers; ponding on top of facilities; etc.);

- A description of all monitoring locations for surface water, ponded water, and collected seepage;
   groundwater monitoring wells; and points of compliance on the site; and
- Monitoring frequencies, screening intervals, and parameters to be monitored during all phases of the project, including post-closure.

Comments also suggested the EIS should include a storm water pollution prevention plan what discusses specific mitigation measures that may be necessary during operations, closure, and post-closure for each alternative.

Respondents recommended that the EIS should include mitigation measures to prevent contamination of water and sediment but did not provide suggestions on the measures that could be incorporate into the water quality plan.

#### 4.4.5 Vegetation

The AGFD, who provided preliminary issues via an Arizona Environmental Online Review Tool Report, identified the Pima Indian Mallow as a Special Status Species documented within five miles of the project area. The report indicated that this species is a species of concern to the USFWS and is classified under the Arizona Native Plant Law (2008) as Salvage Restricted (collection only with permit). Comments requested coordination with the Arizona Department of Agriculture regarding native plants listed on the Arizona Native Plant Law and Antiquities Act. Comments also suggested that revegetation should only be done with only native species indigenous to the area in order to restore the ecosystem to as natural a state as possible after mine closure.

Comments indicated that that invasive species may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, or increase wildfire risk). Respondents requested that the EIS evaluate the potential for the introduction of noxious weeds, pathogenic fungi (chytridiomycota), and other organisms which may cause disease or alteration to ecological functions. Comments referenced Arizona's noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245) and noted that the Arizona Department of Agriculture website contains a list of restricted plants (https://agriculture.az.gov/).

Respondents expressed concern about impacts to riparian areas and wetlands. Respondents noted that the GBRNCA is located with two miles of the mine, and indicated that the project area includes part of the Bonita Creek watershed, which contains a riparian ecosystem with plant and animal diversity. Comments also expressed concern about impacts to the xeroriparian areas associated with the Gila River. These comments identified several large washes that traverse the proposed sites of the leach pad (Coyote and Watson Washes and side drainages) and waste rock areas (Bear Springs Canyon) as xeroriparian areas of significant environmental importance (see also Section 4.4.6, Wildlife).

Comments stated the EIS should identify both jurisdictional and non-jurisdictional wetland and riparian habitats adjacent to or within the project area, and describe how these waters have already been affected by existing operations, and the extent to which each action alternative might further degrade the quality of these resources. The AGFD recommended early direct coordination with the Project Evaluation Program for projects that could impact any wetlands or riparian habitats.

Respondents suggested preparation of the following plans in order to avoid or minimize impacts to vegetation resources.

- A revegetation plan that identifies:
  - Environmental conditions necessary to re-establish native vegetation outlines species;
  - Density, method of establishment for revegetation, and outlines treatments of invasive of noxious species;

- Estimated acreage and areas targeted for reclamation, and description of the intended degree of treatment in each area, including the density, method of establishment for revegetation;
- Timing of reclamation relative to mining operations, procedures for concurrent reclamation activities, and duration of reclamation treatment;
- Standards for determining and means of assuring successful reclamation;
- Means of assuring that all maintenance required for reclaimed areas would continue after operations cease or while operations are suspended; and
- Prevention and treatment of invasive of noxious species through BMPs such as washing
  equipment before leaving the site or use of pest and invasive plant control methods
  recommended by the U.S. department of agriculture (USDA).
- A short- and long-term monitoring plan with adaptive management guidelines to address needs for replacement vegetation and that monitors revegetation success for at least 5 years.
- A detailed mitigation plan for jurisdictional and non-jurisdictional wetland and riparian habitat replacement, identifying:
  - Acreage and habitat type that would be created or restored;
  - Resources needed to maintain the mitigation area;
  - Numbers and age of each species to be planted;
  - Maintenance and monitoring plans, including performance standards to determine mitigation success;
  - Size and location of mitigation zones;
  - Parties that would be ultimately responsible for the plan's success; and
  - Contingency plans that would be implemented if the original plan fails.
- Compensatory mitigation such as riparian habitat enhancement or creation; preservation of
  habitat along the Gila River, San Pedro River, or Bonita Creek; funding of habitat projects at
  Cluff Ranch and the Willcox Playa (new or reestablished lakes and ponds), as was included in
  the ROD for the Dos Pobres mine.

#### 4.4.6 Wildlife Resources

#### 4.4.6.1 General Concerns

Comments expressed concern about the potential impacts to wildlife movement, habitat connectivity, and access to habitat needs. Respondents stated that that development may prevent wildlife from accessing resources, reproducing, re-colonizing areas where local extirpations may have occurred, and ultimately preventing wildlife from fully contributing to ecosystem functions. Comments noted that upland areas support a large diversity of species and stated that streams and washes may provide natural movement corridors for wildlife. Respondents stated the EIS should address the interaction of multiple impacts on wildlife. While individually, each impact may not have a significant effect on any species, analysis of their additive and interactive impacts may reduce the suitability of the area for occupation or use by certain species.

The AGFD identified the proposed pit and development rock stockpiles as being located in an area that is important for bighorn sheep habitat connectivity. Comments stated that over 30 bighorn sheep were observed during the 2014 survey in the area and expressed concern that habitat modification may segregate the bighorn population and stop sheep movement between the Gila Mountains and Bonita Creek Canyon.

Comments expressed specific concerns about the impacts of artificial lighting, noise and contact with hazardous and other human-made substances in facility water collection/storage basins, evaporation or settling ponds and/or facility storage yards.

Respondents expressed concern about impacts to hunting and game species, noting that the mine historically has provided access for hunting, but that this opportunity has been lost the mine has progressed.

Comments expressed concern that groundwater pumping and interception of groundwater by the pit may cause a dewatering cone of depression around the mine and dewater springs, seeps, and similar habitat features important to wildlife. Respondents also expressed concern that hazardous spills, standing water, or pollutants may create a hazard to wildlife including the potential to impact migrating birds or dispersing amphibians such as leopard frogs.

Respondents also expressed concern about impacts to aquatic species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Comments included concerns about impacts to the biota of the Gila River through releases of toxins into the river. Comments also identified the Bonita Creek watershed as a riparian ecosystem with plant and animal diversity. Respondents identified the several large washes within the project area (Coyote and Watson Washes and side drainages and Bear Springs Canyon) as potential habitat for numerous species including special status species as well as high value to game species such as desert mule deer and javelina. Comment stated these areas traverse the proposed leach pad and waste rock areas.

Comments expressed concern with impacts to avian species including direct mortality, or disturbance of birds nesting, roosting, and utilizing the area. Comments stated that golden eagles are commonly observed in the Gila Mountains in the area of the proposed Lone Star pit and development rock stockpiles. The AGFD noted that Arizona Revised Statutes § 17-236 prohibits the take of birds (and disturbance of nests and eggs) including migratory and non-migratory birds and requested coordination with the USFWS if a take would be a part of this project.

Comments noted that exotic invasive wildlife species may include can cause alteration to ecological function. Comments also indicated that the EIS must address the potential for potential for fugitive dust, especially dust that contains toxins, abrasives, or otherwise ecologically disruptive compounds to impact wildlife, especially amphibians and mollusks.

Comments specific to reclamation processes asked for additional details regarding commitments by the mining company and agencies regarding operation and maintenance of fencing and wildlife protection measures.

#### 4.4.6.2 Affected Environment

Comments indicated that the EIS should Identify all petitioned and listed threatened and endangered species and critical habitat, as well as sensitive species, that might occur within the project area. The AGFD provided an Arizona Environmental Online Review Tool Report as part of its scoping submission, and requested that the data contained therein be utilized in the EIS. The report, a preliminary environmental screening tool, identified the following:

- Special status wildlife species/habitat documented within 5 miles of project vicinity, including federally listed and other special status species (23 species);
- Wildlife species having of greatest conservation need predicted within project vicinity based on predicted range models (64 species); and
- Wildlife species of economic and recreation importance predicted within project vicinity (10 species).

Comments specifically requested surveys to determine species with in the project area, and more specifically, to determine if the project area contains noise-sensitive species.

#### 4.4.6.3 Impact Analysis

Comments suggested that the EIS analysis should:

- Identify all species or critical habitat that could potentially be directly, indirectly, or cumulatively affected by each alternative;
- Discuss how surveys were conducted for each species, their findings, and all follow-up surveys and monitoring that would be conducted before, during, and after mining occurs;
- Include the biological assessment for federally listed species by reference or as an appendix, if one is prepared (to be determined through coordination with the USFWS; and
- Summarize or include the biological opinion as an appendix in the EIS to demonstrate that the preferred alternative is consistent with the biological opinion.
- Identify all significant impacts to recreational use, and economic impacts related to wildlife resources and recreation.

Comments also stated that the cumulative impacts analysis must include analysis of the connected habitats in the Gila River watershed, particularly the Gila River and connected environment downstream and cumulative impacts such as potential pollutant inputs downstream, water diversion upstream, and reduced surface flow into the Gila River. Respondents stated the analysis must consider cumulative and additive impacts from pollution, habitat fragmentation, transportation and infrastructure, water diversion, groundwater pumping, and other disturbance.

#### 4.4.6.4 Mitigation and Monitoring

Comments indicated that the EIS should discuss the mitigation measures that would be taken to minimize impacts to special status species; address any dewatering or other water-related impacts to wildlife; and prevent exposure of migratory waterfowl and other wildlife to any mine-influenced waters or other hazards associated with the proposed operation. Respondents provided the following suggestions to avoid or minimize wildlife impacts.

#### Project Design

- Maintain streams and washes in their natural state and retain upland areas to facilitate wildlife movement.
- Design slopes to discourage wading birds and/or use fencing, netting, hazing or other measures to exclude wildlife from in water collection/storage basins, evaporation, settling ponds and/or facility storage yards.
- Incorporate exclusionary fencing and netting for leach pads to prevent ongoing take of terrestrial and avian wildlife.
- Consider species and purpose in fencing design; see AGFD Fencing Guidelines located at http://www.azgfd.gov/hgis/guidelines.aspx. General project area fencing specifications should generally include barbless wire on the top and bottom, with a maximum fence height of 42 inches, and a minimum bottom height of 16 inches, but may depend on big game present within project area.
- Limit lighting to minimum amount needed for safety. Use narrow spectrum bulbs as often as
  possible to lower the range of species affected by lighting. Shield or otherwise direct lighting
  so that light reaches only areas needing illumination.
- Improve irrigation design to decrease water use.

Coordinate with AGFD Bat Coordinator when developing alternatives to mine closures.

#### Timing Stipulations

- Conduct dredging (if applicable) outside of spawning seasons for fish and other aquatic species.
- Conduct project activities outside of breeding seasons to minimize impacts to noise-sensitive species.
- Measures to minimize spread of noxious or invasive wildlife species as identified by USDA and per AGFD regulations regarding the importation, purchasing, and transportation of wildlife and fish.
- Pre- and post-project survey/monitoring to determine alternative access/exits to mines and to identify and/or minimize potential impacts to bat species.
- Development of an avian conservation plan.

Comments also suggested that compensatory mitigation should be identified for any residual impacts to wildlife resources and habitat. Suggested included:

- For bighorn sheep: the construction of bighorn sheep crossings on the haul road to and from the
  Lone Star area and on the surrounding development rock stockpiles, forming waste rock piles in
  a way that maintains a corridor through the area, funding capture/relocation efforts to expand
  bighorn sheep populations, research, monitoring, or other mitigations. Such mitigation might
  include grassland restoration within the area, habitat improvements through prescribed fire, or
  direct purchase of property currently unavailable but necessary to improve management
  capability.
- For mule deer, javelina and quail: grassland restoration within the area, habitat improvements through prescribed fire, or direct purchase of property currently unavailable but necessary to improve management capability.
- For impacts to surface flowers and groundwater levels that would impact wildlife: preservation of habitat along the Gila River, San Pedro River, or Bonita Creek; funding of habitat projects at Cluff Ranch and the Willcox Playa.
- For loss of wildlife tank: two new mule deer/javelina wildlife waters in areas where needed.

Comments also noted that the EIS should discuss the effectiveness of mitigation measures to protect wildlife, indicate how they would be implemented and enforced, and describe the maintenance and monitoring requirements necessary to ensure their effectiveness.

The AGFD also indicated that they would like to discuss with the Corps how to incorporate costs in planning for conservation purposes into the cost of the project. The AGFD also stated that it is the policy of the Arizona Game and Fish Commission that the AGFD seek compensation at a 100% level (i.e. no net loss), when feasible, for actual or potential habitat losses resulting from land and water projects.

#### 4.4.7 Cultural Resources

Comments noted that while the project is anticipated to adversely impact cultural resources that are eligible for listing on the National Register of Historic Places, the scoping notice did not contain information regarding the type of resources that will be impacted.

Respondents indicated that there are Tribal Lands within the vicinity of the project area and suggested coordination with the San Carlos Apache Tribal Council. Comments also noted that the proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; Ak-Chin Indian Community and the Tohono O'Odham Nation).

Comments recommended that tribal consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EIS, and indicated that efforts should be made to avoid or mitigate impacts to culturally significant sites.

The White Mountain Apache THPO requested the Cultural Survey report conducted for the project. The Gila River Indian Community THPO indicated they would participate as a consulting tribe for this undertaking. The White Mountain Apache THPO requested the Cultural Survey report conducted for the project. The San Carlos Apache Tribe indicated requested the Cultural Survey report conducted for the project and requested that the Corps contact them to clarify potential impacts to cultural and water resources.

#### 4.4.8 Hazardous Materials

Comments expressed concern about potential impacts to wildlife from hazardous materials (see Sections 4.4.6) and provided design specification to help reduce contact with these materials). Respondents indicated that the EIS should discuss how accidental releases of hazardous materials would be handled, and identify the potential impacts of failure of the solution containment systems, methods for discovering such failures, and the degree to which impacts would be reversible. Comments also stated that the EIS should include details regarding the mine's petroleum-contaminated soil management plan.

#### 4.4.9 Recreation

The AGFD Environmental Review Report identified ten wildlife species projected to occur within the project vicinity as having economic and recreation importance. Comments expressed concern about impacts to hunting and game species, noting that the mine historically has provided access for hunting, but that this opportunity has been lost the mine has progressed.

#### 4.4.10 Socioeconomics, including Environmental Justice

Comments contained a concern about the "boom and bust" effect on the community after non-local workers leave the area. Comments included a summary from the Town of Clifton Police regarding a public nuisance violation detail conducted in February 2014. The summary noted that the detail was organized due to ongoing complaints from citizen and business owner regarding people sleeping in vehicles; inappropriate usage of public parks; and other areas; and garbage, human waste and other waste materials being disposed of improperly. The detail focused on three areas of concern (Clifton Recreational Vehicle Park, a dirt lot at the intersection of Skyline Road and Highway 191, and a public parking lot across from the Sacred Heart Church on Chase Creek Road. The detail resulting in 14 documented violations in the Town of Clifton. All but one violator provided information regarding employment. The submission suggested that all employees associated with the project should comprise locals, i.e., those with a permanent residence.

Respondents noted that EO 12898 on Environmental Justice requires analysis of disproportionate adverse impacts of federal actions on minority and low-income populations and indicated that the EIS document opportunities for affected communities to provide input into the NEPA process; identify minority and low-income populations potentially affected by the project; address whether any of the alternatives would cause any disproportionate adverse impact (such as displacement, changes in existing resources or access, or community disruption); explore potential mitigation measures for any adverse environmental justice effects; and state whether the analysis meets the Corps' environmental justice requirements.

The AGFD Environmental Review Report identified 10 wildlife species of economic and recreation importance predicted within the project vicinity. The list included quail, pigeon and dove species, big game (mule deer, bighorn sheep, bear, and mountain lion) as well as javelina and squirrel. Comments expressed concern about the loss of hunting access (also see Section 4.4.9, Recreation).

Comments cited positive social and economic contributions of mining companies such as FMSI to the overall condition of Greenlee and Graham counties, local communities, and individuals living therein, both in terms of employment opportunities as well as specific infrastructure projects that have benefitted communities in the area.

#### 4.4.11 Special Designations

Comments indicated the GBRNCA, designated under the authority of the Arizona Desert Wilderness Act of 1990 (Public Law 1 01-628), is within two miles of the project area boundary and expressed concern about impacts to the GBRNCA.

#### 4.4.12 Visual Resources

Submissions expressed concern about visual impacts to the GBRNCA and other nearby areas as a result of landform alterations. Comments indicated that a view of a flat plateau in between two mountains would not mitigate the impacts from mining to the maximum degree possible. Submittals also expressed concern about mine lighting, particularly as it related to wildlife.

Comments recommended that the project utilize the contouring proposed at the Rosemont mine, as a better way to ensure that discarded rock fits into the surrounding environment and reduce visual impacts.

Comments suggested minimizing lights to the degree only needed for human safety, using narrow spectrum bulbs as often as possible, and shielding or otherwise directing lighting so that light reaches only areas needing illumination.

### 4.4.13 Cumulative Impacts

Comments provided links to cumulative impact analysis guidance provided by the CEQ and USEPA; stated that the EIS should describe the potential cumulative impacts associated with the proposed project and alternatives in light of other past, present, and reasonably foreseeable future actions (as the methodology used to assess those impacts); and identified the adjacent and active Dos Pobres and San Juan operations as actions that should be considered in this analysis. Comments suggested the following element to be included in the cumulative impacts analysis.

- A description of the cumulative effects study areas for each resource that could be affected by the proposed project, focusing on natural boundaries, resources of concern, and identifying which resources are analyzed, which ones are not, and why.
- Identify all other on-going, planned, and reasonably foreseeable projects in the study area, including not only existing operations but also other mining projects and non-mining activities in the project area, using existing studies as available for quantifying cumulative impacts.
- Include appropriate baselines for the resources of concern with an explanation as to why those baselines were selected.
- Identify mitigation as needed, stating who would be responsible and how mitigation implementation would be ensured.

#### 4.4.14 Reclamation

Comments listed details regarding reclamation processes that respondents felt should be included in FMSI's Reclamation Plan in order to accurately assess project impacts. These are discussed in Section 4.3.1, Proposed Action; Section 4.4.2, Geology; Section 4.4.3, Soils; Section 4.4.5 Vegetation; and Section 4.4.6, Wildlife.

Comments expressed concern about the potential for success of reclamation and stated that the Corps must include *restoration* of mine tails, dumps, and pit to preconstruction conditions after closure of the mine where feasible and environmentally advisable.

Comments also stated that the EIS should include reclamation bonding requirements and amounts for the proposed project and alternatives; how the bond could be modified during the course of operations if temporary, long term, or perpetual treatment and/or remediation needs are discovered during operations; as well as any other measures regulators have in place to ensure funds would be immediately available should the mine operator or its insurer be unable to fund the required reclamation or closure activities.

#### 4.4.15 Mitigation and Monitoring

Comments indicated that the Draft EIS must thoroughly identify and describe appropriate mitigation measures associated with the project, specifying which ones would be committed to by the mine operator (i.e., design features) and those required by the Corps or other federal, state, or local agencies. Comments stated that discussions of mitigation should include the following:

- How each measure would mitigate the impact,
- Anticipated effectiveness of the measure,
- The means of implementing each mitigation measure,
- Who would be responsible for implementing the measure, and
- Whether the measure is enforceable.

Comments stated that the EIS should include a mitigation and monitoring plan that include:

- Implementation monitoring and effectiveness monitoring;
- Contingency measures that would be implemented if initial mitigation measures are unsuccessful;
- The agency responsible for enforcement and oversight should the mine operator fail to properly follow the long-term post-closure plan;
- The time frame over which long term management activities would occur or if they might be
  necessary into perpetuity. If long-term post-closure monitoring and management would be
  needed, the plan should include a general description of the funding mechanism, including:
  - Timing of payments into the trust fund,
  - How to ensure the trust fund would be bankruptcy remote,
  - Acceptable financial instruments,
  - Tax status of the trust fund,
  - Trust fund beneficiaries, and
  - Operator with responsibility/liability for financial assurance at this site.

Comments stated that the inclusion of such information into the mitigation and monitoring plan of this mitigation plan would be essential in determining if impacts are mitigated over the long term and would be the difference between a project sufficiently managed over the long-term by the site operator, or an unfunded/under-funded contaminated site that becomes a liability for the Federal government.

## 4.5 Non-substantive Comment Summary

### 4.5.1 Statements of Support of the Project

Some comments from individuals expressed support for the project and/or commended FMSI for its reclamation record or contributions to the community.

### 4.5.2 Statements of Opposition to the Project

Several comments from individuals and tribes expressed a general opposition to mining, the discharge of fill into Waters of the U.S., or the expansion of existing mining site.

# 5.0 Issue Summary

Based on these external scoping efforts, the Corps has identified a number of issues for the proposed Lone Star Ore Body Development Project EIS.

#### 5.1 Process

Scoping comments identified a need for multiple consultation and coordination processes, including:

- Biological consultations and coordination (USFWS, AGFD);
- Cultural resources consultations (State Historic Preservation Office);
- Consultation with tribes (including Ak-Chin Indian Community, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, Tohono O'Odham Nation, and the White Mountain Apache Tribe); and
- Coordination with other agencies from which permits are required, such as ADEQ.

The Corps has been in contact with these federal, state, and local agencies and tribes for comments and concerns. The comments contained in Section 4.0, Comment Summaries, include preliminary comments from responding interested agencies and tribal entities, and the issues below reflect their concerns and interests. The Corps will continue to be in contact with applicable federal, state, and local agencies and tribes throughout the NEPA process.

#### 5.2 Purpose and Need

Comments stated that the EIS needs to adequately identify and describe the underlying need(s) for the project and the associated objectives or outcomes for purposes of both the NEPA analysis and the CWA Section 404(b)(1) alternatives analysis.

#### 5.3 Proposed Action and Alternatives

#### 5.3.1 Proposed Action

Comments stated that the Proposed Action description needs to adequately identify all resource requirements and include clear description of the processes and best available demonstrated control technology that would be used during the life of the project. Respondents also requested that the EIS include a petroleum-contaminated soil management plan, hazardous material storage plans and comprehensive reclamation plan for review and incorporation into the analysis.

#### 5.3.2 Range of Alternatives

As part of the EIS process and in accordance with the USEPA's 404(b)(1) guidelines, the Corps will conduct a comprehensive alternative assessment. Social and environmental issues, concerns, and opportunities will be considered in this assessment.

The Corps will develop a range of reasonable alternatives to be considered in detail in the Draft EIS. In reviewing possible project alternatives for consideration in the EIS, the Corps will examine numerous locations, operational methods, and mitigation measures. The type and range of alternatives will be determined from public comments and key issues that have been identified during the scoping process, as well as reviewing the purpose of and need for the proposed tailings storage facility. Some alternatives may be eliminated from detailed evaluation because they do not meet the purpose and need of the project, because they are outside the bounds of this project, or they have technical complications that would prohibit implementation. In addition, alternatives may be eliminated because they do not meet practicability requirements as described in the USEPA's 404(b)(1) guidelines (40 CFR Part 230).

NEPA requires that a "no action" alternative be considered in EIS documents. Under the no-action alternative, the 404 permit for the proposed tailings storage facility would be denied. This alternative serves as the baseline for estimating the effects of action alternatives. The baseline for analysis would be the existing condition of the environment.

#### 5.4 Resource Issues

The actual analysis of the Proposed Action and alternatives will be included in the Draft EIS and will include a discussion of environmental protection measures, mitigation requirements, and operational constraints. The Draft EIS also will identify the "least environmentally damaging practicable alternative."

Based on the comments submitted during external scoping and summarized above, the Corps has identified the following significant issues to be analyzed in depth in the EIS.

### 5.4.1 Air Resources, including Climate Change

**Identify project-related air quality impacts**. Areas of concern include: 1) impact to NAAQS; 2) impact to impacts to Class I PSD areas, including visibility impacts; 3) releases of HAPs to air, soil, and water resources; 4) impacts of the project on climate change; and 5) consideration of mitigation measures to reduce air pollutant emissions and GHGs

#### 5.4.2 Geology and Geochemistry

**Evaluate the area's geochemistry**. Areas of concern include 1) potential for leaching, and 2) other release of contaminants.

#### 5.4.3 Soil Resources

**Evaluate the area's soil resources**. Areas of concern include 1) the effectiveness of mine's petroleum-contaminated soil management plan; and 2) the effectiveness of the proposed usage of growth media in minimizing exposure of mined material to meteoric water that could mobilize contaminants.

#### 5.4.4 Water Resources

Identify impacts to water quality and water quantity. Areas of concern include: 1) the impacts to waters of the U.S.; 2) impacts to the Gila River or other aquatic resource of national importance (ARNI); 3) impacts to water resources that would affect the GBRNCA, the Bonita Creek watershed, and other wetland and riparian habitats; 4) potential for contamination of meteoric water via existing and proposed waste rock, pit wall rock, heap leach, stockpiles, roads, and other mine facilities; and 5) potential for and effects of movement of any contaminated surface water to the subsurface, including through the pit bottom; and pollution from storm water runoff.

#### 5.4.5 Vegetation

**Identify project-related impacts to vegetation**. Areas of concern include: 1) impacts to special status or native plant species and habitat; 2) impacts to riparian areas and other vegetation communities, including with the GBRNCA and the Bonita Creek Watershed; and 3) control of noxious and invasive species.

#### 5.4.6 Wildlife

Identify impacts to wildlife and wildlife habitats. Areas of concern include: 1) the impacts to wildlife habitat, such as the physical loss of habitat and a reduction in diversity and habitat effectiveness; 2) the impacts on any threatened, endangered, and candidate wildlife species as identified by the USFWS; 3) impacts to wildlife species found in the area, including those species listed in the Arizona Game and Fish Department's Species of Greatest Conservation Need and Species of Economic and Recreational Importance; and 4) Impacts to wildlife from noise and light.

#### 5.4.7 Cultural Resources

Identify cultural resources and conduct Native American consultation. The areas of concern include: 1) impacts to cultural resources eligible for or listed on the National Register of Historic Places; and 2) the potential to affect cultural resources or traditional cultural properties of Native American tribes.

#### 5.4.8 Hazardous Materials

Identify potential impacts that may occur from the accidental releases of hazardous materials. Areas concern include impacts to wildlife and water resources such as wells and the Gila River; and 2) development of appropriate storage and disposal methods.

#### 5.4.9 Socioeconomics

Address the social, economic and lifestyle effects on residents in the local communities surrounding the mine. Areas of concern include: 1) project-related construction and operational social and economic impacts to the local communities and counties surrounding the mine; 2) impacts to wildlife species that could affect economic contribution of hunting; and 3) disproportionate impacts to minorities or low income populations

#### 5.4.10 Special Designations

**Identify Impacts to the values of the GBRNCA**. Areas of concern include viewshed and riparian values.

#### 5.4.11 Visual Resources

**Identify project-related impacts to visual resources**. The areas on concern include: 1) views from the GBRNCA or other key areas around the project; and 2) impacts from project lighting.

#### 5.4.12 Cumulative Impacts

Address the cumulative impacts of the proposed project with other adjacent activities. The area of concern includes: 1) development of an appropriate process for analyzing impacts consistent with CEQ and USEPA guidance; and 2) consideration of the current mining activities.

#### 5.4.13 Mitigation and Monitoring

Develop a comprehensive mitigation and monitoring plan. Areas of concern include:

- 1) effectiveness and enforceability of mitigation; 2) responsibility for implementation and enforcement
- 3) contingency measures if mitigation is not successful; 4) timeframe for management and monitoring; and 5) funding mechanisms.

# 6.0 Next Steps

The Corps will consider the comments submitted during scoping and the issues identified in this Scoping Report when developing alternatives to the Proposed Action. The Corps will continue to consider issues identified during scoping, along with other issues and potential impacts, during preparation of the EIS. The Corps will analyze and document potential impacts that could result from implementing the Proposed Action and the alternatives in a Draft EIS.

The Draft EIS is currently scheduled for publication in early 2016. A Notice of Availability (NOA) for the Draft EIS will be published in the *Federal Register* announcing availability of the Draft EIS for review and comment. Publication of the NOA for the Draft EIS will initiate a 45-day public comment period during which the Corps will invite the public and other interested parties to provide comments on the Draft EIS. The Corps will hold a public meeting during the public comment period and will advertise meetings through notification methods similar to those used during public scoping.

The Corps will review and consider all comments received on the Draft EIS and will revise the Draft EIS as appropriate. All substantive comments and responses will be incorporated into the Final EIS. A NOA for the Final EIS will be published in the *Federal Register* announcing the availability of the Final EIS. The Final EIS is scheduled to be released in January of 2017. The Corps will prepare a Record of Decision (ROD) to document their documenting their decision to: 1) issue a Section 404 permit under the CWA, 2) issue the permit with modifications or special conditions, or 3) deny the permit. The ROD would be issued no sooner than 30 days after the NOA for the Final EIS is published in the *Federal Register*.

**Figure 6-1** shows the steps of the NEPA process.

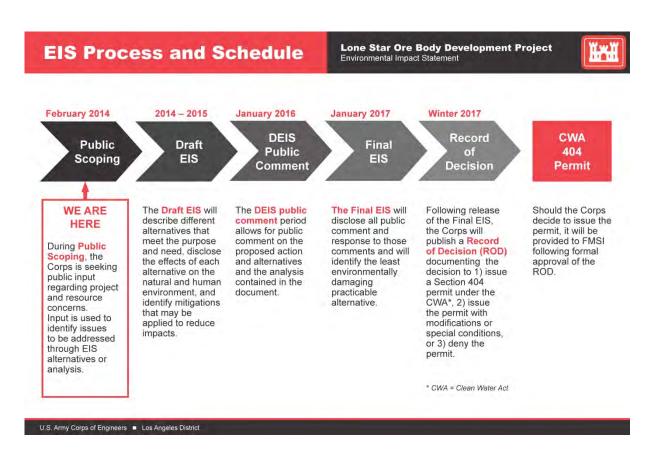


Figure 6-1 EIS Process and Schedule

External Scoping Summary Report March 2015

#### Appendix A

**Federal Register Notice of Intent** 



#### DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Notice of Intent To Prepare a Draft **Environment Impact Statement for the** Proposed Lone Star Ore Body **Development Project in Graham** County, Arizona

AGENCY: U.S. Army Corps of Engineers,

DoD.

**ACTION:** Notice of Intent.

SUMMARY: The U.S. Army Corps of Engineers, Los Angeles District (Corps) is examining the environmental consequences associated with Freeport-McMoRan Safford Inc.'s (FMSI) application for a Department of the Army permit under section 404 of the Clean Water Act for the proposed development of the mineral resources associated with the Lone Star ore body for the purpose of producing copper (the Lone Star Project). The proposed development would include the construction of mining facilities, including an open pit mine and attendant development rock stockpiles and heap leach facilities, which will allow continued mining at the Safford Mine Facility using conventional openpit mining, heap leaching techniques, and solution extraction/electrowinning (SX/EW) processing, and utilizing as much of the existing Safford Mine Facility infrastructure and processing facilities as practicable. The construction of the proposed facilities would discharge fill materials into approximately 90.27 acres of waters of the United States (U.S.). The primary federal environmental concerns are the proposed discharges of fill material into waters of the U.S. and the potential for significant adverse environmental effects resulting from such activities. Therefore, to address these concerns in accordance with the National Environmental Policy Act (NEPA), the Corps is requiring preparation of an Environmental Impact Statement (EIS) prior to consideration of any permit action. The action must comply with the section 404(b)(1) Guidelines (40 CFR part 230) and not be contrary to the public interest to be granted a Corps permit. The Corps may ultimately make a determination to permit or deny the above project, or permit or deny modified versions of the above project.

#### FOR FURTHER INFORMATION CONTACT:

Questions about the proposed action or the scoping of the Draft EIS can be answered by Michael Langley, Corps Senior Project Manager, at (602) 230-6953. Comments regarding scoping of

the Draft EIS shall be addressed to: U.S. Army Corps of Engineers, Los Angeles District, Arizona Regulatory Branch, ATTN: SPL-2014-00065-MWL, 3636 North Central Avenue, Suite 900, Phoenix, Arizona 85012-1939, or michael.w.langley@usace.army.mil. Comment letters sent via electronic mail shall include the commenter's physical address and the project title "Lone Star Ore Body Development Project" shall be included in the subject line.

#### SUPPLEMENTARY INFORMATION:

1. Project Site and Background Information: The Lone Star copper ore body proposed for development is located within the boundary of the existing FMSI Safford Mine Facility, north of the City of Safford, Graham County, Arizona. FMSI owns and manages approximately 36,050 acres of privately held lands within and surrounding the Safford Mine Facility, which has been in operation for almost 7 years. The Safford Mine Facility is located within the Safford Mining District, and lands within the district have been used for mining activities by various entities for more than a century. FMSI (formerly Phelps Dodge Safford Inc.) first began development of an underground copper mining operation in the district in the 1960s, and later purchased other copper mining operations in the vicinity.

Between 1994 and 1996, FMSI initiated discussions to obtain authorization from the Bureau of Land Management (BLM) and the Corps to develop open pit copper mining operations in the district, and in May 1996, formally initiated NEPA review of these proposals through submission of a Mine Plan of Operations (MPO) to the BLM. NEPA review of the project, termed the Dos Pobres/San Juan Project (DP/SJ Project) after the ore bodies proposed for development, involved the publication of a Draft Environmental Impact Statement (DEIS) in September 1998, a Final Environmental Impact Statement (FEIS) in December 2003, and a BLM Record of Decision (ROD; No. 1793 [AZ-040] AZA-31133) in June 2004. As a component of the NEPA review, the Corps completed a section 404(b)(1) Alternatives Analysis in October 1997 and issued a section 404 Individual Permit (No. 964–0202–MB) for impacts to waters of the U.S. from development of the DP/SJ Project on September 27, 2004.

The Safford Mine Facility is currently an open-pit copper mining operation consisting of two pits: The Dos Pobres Pit and the San Juan Pit. The handling, processing, and support infrastructure for mineral resources recovered from the two pits is integrated into a single system consisting of a three-stage crushing system, two drum agglomerators, a single heap leach pad, SX/EW processing facility, and support facilities. Each of the pits has an associated development rock stockpile: For Dos Pobres immediately west of the pit, and for San Juan immediately south of the pit. A clay borrow pit is located in the southeastern portion of the

Safford Mine Facility.

2. Proposed Action: FMSI has proposed the development of the mineral resources associated with the Lone Star ore body, located on FMSI's privately owned lands and proximate to the existing Safford Mine Facility. Development of the Lone Star copper ore body (the Lone Star Project) was considered as a Reasonably Foreseeable Future Action (RFFA) and was included in the NEPA review of cumulative impacts for the 2003 FEIS. The applicant has designed the proposed Lone Star Project to make use of as much of the existing Safford Mine Facility infrastructure as is practicable. Although the location of the open pit for the Lone Star Project is tied to the physical location of the mineral resource, the locations of the remaining project elements have been optimized to continue using existing infrastructure wherever possible. New elements anticipated as necessary for the development of the Lone Star Project include the open pit, a heap leach stockpile and associated solution management systems, development rock stockpiles, the ore haulage/conveyance route between the pit and crusher, additional power distribution infrastructure, an expanded clay borrow source, and additional stormwater management facilities.

The Lone Star Project proposes discharges to waters of the U.S. for the development and operation of the heap leach stockpile, the development rock stockpiles, the haul road, and for the expansion of the clay borrow pit. Continued use of the existing facilities including the existing crushing facilities, SX/EW facilities, the majority of the existing support infrastructure for the current leach pad, and the mine access road are not anticipated to require the discharge of fill to waters of the U.S. Construction and operation of the remaining Lone Star Project elements including the open pit and power distribution infrastructure are not anticipated to require the discharge of additional fill to waters of the U.S.

3. Issues: There are several potential environmental issues that will be addressed in the Draft EIS. Additional issues may be identified during the

scoping process. Issues initially identified for evaluation in the Draft EIS include:

a. Visual/aesthetics impacts from landform alterations,

b. air quality impacts from construction and operation of the facility,

c. cultural resources (prehistoric and historic resources),

d. surface water hydrology and quality.

e. groundwater hydrology and quality, f. potential land use incompatibility,

g. noise impacts from construction and operation,

h. socioeconomic effects,

i. soils and geology resources,

j. transportation network impacts,

k. environmental justice

l. biological impacts

m. impacts to waters of the U.S., and

n. cumulative impacts.

4. Alternatives: Alternatives to the proposed action are being developed for evaluation in the EIS. The Draft EIS will include a co-equal level of analysis of the No-Action and project alternatives considered. Alternatives will be further formulated and developed during the

scoping process.

5. Scoping: The Corps will conduct a public scoping meeting in an open house format for the proposed Lone Star Ore Body Development Project Draft EIS to receive public comment and to assess public concerns regarding the appropriate scope and preparation of the Draft EIS. Participation in the public meeting by federal, state, local, and tribal agencies and other interested organizations is encouraged. The meeting will be held on February 4, 2015, 6:00 p.m. to 9:00 p.m. (Arizona Time Zone) at the Manor House Convention Center, 415 E. U.S. Highway 70, Safford, Arizona 85546. Representatives from the Corps and Freeport-McMoRan Safford Inc. will provide a presentation for attendees at 7:00 p.m. Comments on the proposed action, alternatives, or any additional concerns should be submitted in writing. Written and electronic comment letters will be accepted through February 20, 2015.

The Corps also anticipates formally consulting with the U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act and with the State Historic Preservation Officer and appropriate Tribal Historic Preservation Officers under section 106 of the National Historic Preservation Act.

6. Availability of the Draft EIS: The Draft EIS is expected to be published and circulated in the fourth quarter of 2015, and a public meeting will be held after its publication.

Dated: December 12, 2014.

David J. Castanon,

Division Chief, Los Angeles District, U.S. Army Corps of Engineers.

[FR Doc. 2014–30864 Filed 1–2–15; 8:45 am] BILLING CODE 3720–58–P

#### **DEPARTMENT OF ENERGY**

#### Federal Energy Regulatory Commission

[Project No. 719-033]

Trinity Conservancy, Inc.; Notice of Application for Amendment of License and Soliciting Comments, Motions To Intervene, and Protests

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. Application Type: Amendment to modify approved resident fish habitat and project tailrace plan and effectiveness monitoring plan

b. Project No: 719-033

c. Date Filed: July 11, 2014

d. Applicant: Trinity Conservancy, Inc.

e. Name of Project: Trinity Hydroelectric Project

f. Location: The Trinity Project is located on Phelps and James Creeks, tributaries of the Chiwawa River in the Columbia River Basin, near the city of Leavenworth, in Chelan County, Washington.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a)–825(r)

h. Applicant Contact: Reid L. Brown, President, Trinity Conservancy, Inc., 3139 E. Lake Sammamish SE., Sammamish, WA 98075, (425) 392– 9214.

i. FERC Contact: B. Peter Yarrington, telephone (202) 502–6129 or email peter.yarrington@ferc.gov.

j. Deadline for filing comments, motions to intervene, protests, and recommendations is 30 days from the issuance date of this notice by the Commission. The Commission strongly encourages electronic filing. Please file motions to intervene, protests, or comments using the Commission's eFiling system at http://www.ferc.gov/ docs-filing/efiling.asp. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at http:// www.ferc.gov/docs-filing/ ecomment.asp. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866)

208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. Please include the project number (P–719–033) on any comments, motions to intervene, protests, or recommendations filed.

k. Description of Request: Trinity Conservancy, Inc. (license) requests amendment of the Trinity Project's resident fish habitat and project tailrace plan and effectiveness monitoring plan, which was approved in a Commission order issued April 22, 2008.1 The Trinity Project uses water from Phelps Creek, then returns it via the project tailrace to the Chiwawa River, several hundred vards above where the historic natural channel of Phelps Creek meets the Chiwawa River. The April 22, 2008 order approved two alternatives for the tailrace plan, both involving routing of water through a short section of pipe to a new 858-foot open tailrace channel that would follow natural contours to a confluence with Phelps Creek above where it meets the Chiwawa River. The licensee now requests, based on consultation with resource agencies, an amendment of the tailrace plan which would utilize 680 feet of primarily buried pipe for the first section of the new tailrace, leading to a shorter open reach. The change would reduce water loss and provide enhanced salmonid habitat in the area where the tailrace would join Phelps Creek. The licensee also requests approval of minor modifications to the effectiveness monitoring plan.

l. Locations of the Application: A copy of the application is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street NE., Room 2A, Washington, DC 20426, or by calling (202) 502-8371. This filing may also be viewed on the Commission's Web site at http://www.ferc.gov/docs-filing/ elibrary.asp. Enter the docket number excluding the last three digits in the docket number field to access the document. You may also register online at http://www.ferc.gov/docs-filing/ esubscription.asp to be notified via email of new filings and issuances related to this or other pending projects. For assistance, call 1-866-208-3676 or email FERCOnlineSupport@ferc.gov, for TTY, call (202) 502-8659. A copy is also available for inspection and

<sup>&</sup>lt;sup>1</sup> Order Modifying and Approving Resident Fish Habitat and Project Tailrace Plan and Effectiveness Monitoring Plan per Article 401, Appendix A Condition 1, and Appendix B Condition 6 (123 FERC ¶ 62,062).

Appendix B

**Public Notice and Newspaper Advertisement** 

March 2015



#### **PUBLIC NOTICE**

U.S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

**BUILDING STRONG®** 

#### RECEIPT OF APPLICATION FOR A CORPS PERMIT, NOTICE OF INTENT TO PREPARE A DRAFT EIS AND HOLD A PUBLIC SCOPING MEETING

#### **Lone Star Ore Body Development Project**

Public Notice/Application No.: SPL-2014-00065-MWL Project: Lone Star Ore Body Development Project Comment Period: January 6, 2015 to February 20, 2015

Project Manager: Michael Langley; 602-230-6953; Michael.W.Langley@usace.army.mil

#### **Applicant**

Brian Musser Freeport-McMoRan Safford Inc. P.O. Box 1019 Safford, AZ 85548

#### Contact

Thomas Klimas WestLand Resources, Inc. 4001 E. Paradise Falls Drive Tucson, Arizona 85712

#### Location

The Lone Star copper ore body proposed for development is located within the boundary of the existing Safford Mine Facility, north of the City of Safford, Arizona. The Safford Mine Facility is located in portions of Sections 35 and 36, Township 5 South, Range 25 East; portions of Sections 19-22 and 26-36, Township 5 South, Range 26 East; portions of Sections 31-33, Township 5 South, Range 27 East; portions of Sections 1, 2, and 11-14, Township 6 South, Range 25 East; portions of Sections 1-18, 23-26, 35, and 36, Township 6 South, Range 26 East; portions of Sections 3-10, 17-20, 30, and 31, Township 6 South, Range 27 East; and portions of Sections 5 and 6, Township 7 South, Range 27 East.

#### Activity

To discharge fill materials into approximately 90.27 acres of waters of the U.S. associated with Coyote Wash, Watson Wash, Peterson Wash, and unnamed washes to construct a copper heap leach stockpile, development rock stockpiles, the ore haulage/conveyance route between the pit and crusher, additional power distribution infrastructure, an expanded clay borrow pit, and additional stormwater management facilities (see attached drawings). For more information, see page 4 of this notice.

Interested parties are hereby notified that an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you

to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that support the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act.

Written comments should be mailed to:

U.S. Army Corps of Engineers, Los Angeles District Arizona Regulatory Branch ATTN: SPL-2014-00065-MWL 3636 N. Central Ave, Suite 900 Phoenix, AZ 85012-1939

Alternatively, comments can be sent electronically to: Michael.W.Langley@usace.army.mil.

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

#### **Evaluation Factors**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics,

aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. In this case, comments are used in the preparation of an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act. Comments are also used to determine the overall public interest of the proposed activity.

#### **Preliminary Review of Selected Factors**

<u>EIS Determination</u>- A determination has been made that an EIS is required for the proposed activities, based on the Corps's independent determination that the proposed action could potentially result in significant impacts. The Draft EIS is expected to be published in late 2015.

<u>Water Quality</u>- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the Arizona Department of Environmental Quality. Section 401 requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance.

<u>Cultural Resources</u>- Based on information collected thus far, the project will adversely impact cultural resources that are eligible for listing on the National Register of Historic Places. Consultation with Native American Tribes and the State Historic Preservation officer will occur with respect to cultural resources impacts associated with this project. Native American Tribes will also be consulted regarding the presence of any traditional cultural properties that could potentially be affected by this project.

<u>Endangered Species</u>- Preliminary determinations indicate that the proposed activity would potentially affect federally-listed endangered or threatened species, or their critical habitat. Therefore, formal consultation under Section 7 of the Endangered Species Act is required at this time.

<u>Public Hearing</u>- The Corps is conducting a public scoping meeting to solicit input from the public about the proposed project and the preparation of the EIS. This meeting will be held on Wednesday evening, February 4, 2015 at the Manor House Convention Center, 415 E. U.S. Highway 70, Safford, Arizona, 85546 from 6:00 to 9:00 PM (Arizona time). A presentation will be given by representatives from the Corps and Freeport-McMoRan Safford Inc. starting at 7:00 PM (Arizona time).

The meetings will consist of an open house and presentation. During approximately the first hour of the meeting, attendees will have the opportunity to view displays provided by the Corps and the applicant that provide information on various aspects of the project, environmental resources in the project area, and the Clean Water Act Permitting and NEPA processes. Technical experts will be available at these displays to answer questions about the project. After this initial open house period, a presentation will be provided by the Corps Project Manager and a representative from Asarco. This

presentation will provide background information about the proposed project and information about the Corps permitting and EIS processes. Information will also be provided regarding various ways to provide input to the project manager for inclusion in the administrative record. After the presentation concludes, the open house will continue until the meeting ends.

Attendees who wish to comment on this project can do so during the meeting by providing written comments that can be left with Corps staff or submitted at a later date. There will be no provisions made for public oral comments during the course of these meetings.

The Corps will be receiving scoping comments until the close of the comment period on February 20, 2015.

#### **Proposed Activity for Which a Permit is Required**

<u>Basic Project Purpose</u>- The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). Because no special aquatic sites would be impacted, identification of the basic project purpose is not necessary. The project is not water dependent.

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is the construction of mining facilities, including an open pit mine and attendant development rock stockpiles and heap leach facilities, which will allow continued mining at the Safford Mine Facility through the development of the mineral resources associated with the Lone Star ore body using conventional open-pit mining, heap leaching techniques, and solution extraction/electrowinning (SX/EW) processing, and utilizing as much of the existing Safford Mine Facility infrastructure and processing facilities as practicable, for the purpose of producing copper.

#### Additional Project Information

<u>Background</u> – Located in eastern Arizona, the Safford Mine Facility has been in operation for almost 7 years under the ownership of the applicant, formerly Phelps Dodge Safford Inc. The applicant owns and manages approximately 36,050 acres of privately held lands within and surrounding the existing Safford Mine Facility, north of the City of Safford, Graham County, Arizona. The Safford Mine Facility is located within the Safford Mining District, and lands within the district have been used for mining activities by various entities for more than a century. The applicant (or its predecessors) first began development of an underground copper mining operation in the district in the 1960s, and later purchased other copper mining operations in the vicinity.

Between 1994 and 1996, the applicant initiated discussions to obtain authorization from the Bureau of Land Management (BLM) and the Corps to develop open pit copper mining operations in the district, and in May 1996, formally initiated National Environmental Policy Act (NEPA) review of these proposals through submission of a Mine Plan of Operations (MPO) to the BLM. NEPA review of the project, termed the Dos Pobres/San Juan Project (DP/SJ Project) after the ore bodies proposed for development, involved the publication of a Draft Environmental Impact Statement (DEIS) in

September 1998, a Final Environmental Impact Statement (FEIS) in December 2003, and a BLM Record of Decision (ROD; No. 1793 [AZ-040] AZA-31133) in June 2004. As a component of the NEPA review, the Corps completed a Section 404(b)(1) Alternatives Analysis in October 1997 and issued a Section 404 Individual Permit (No. 964-0202-MB) for impacts to waters of the U.S. from development of the DP/SJ Project on September 27, 2004.

The Safford Mine Facility is currently an open-pit copper mining operation consisting of two pits: the Dos Pobres Pit and the San Juan Pit. The handling, processing, and support infrastructure for mineral resources recovered from the two pits is integrated into a single system consisting of a three-stage crushing system, two drum agglomerators, a single heap leach pad, SX/EW processing facility, and support facilities. Each of the pits has an associated development rock stockpile: for Dos Pobres immediately west of the pit, and for San Juan immediately south of the pit. A clay borrow pit is located in the southeastern portion of the Safford Mine Facility.

<u>Project Description</u> – The applicant has proposed the development of the mineral resources associated with the Lone Star ore body, located on the applicant's privately owned lands and proximate to the existing Safford Mine Facility. Development of the Lone Star copper ore body (the Lone Star Project) was considered as a Reasonably Foreseeable Future Action (RFFA) and was included in the NEPA review of cumulative impacts for the 2003 FEIS. The applicant has designed the proposed Lone Star Project to make use of as much of the existing Safford Mine Facility infrastructure as is practicable. Although the location of the open pit for the Lone Star Project is tied to the physical location of the mineral resource, the locations of the remaining project elements have been optimized to continue using existing infrastructure wherever possible. New elements anticipated as necessary for the development of the Lone Star Project include the open pit, a heap leach stockpile and associated solution management systems, development rock stockpiles, the ore haulage/conveyance route between the pit and crusher, additional power distribution infrastructure, an expanded compactible soil borrow source, and additional stormwater management facilities.

The Lone Star Project proposes discharges to waters of the U.S. for the development and operation of the heap leach stockpile, the development rock stockpiles, the haul road, and for the expansion of the clay borrow pit. Continued use of the existing facilities including the existing crushing facilities, SX/EW facilities, the majority of the existing support infrastructure for the current leach pad, and the mine access road are not anticipated to require the discharge of fill to waters of the U.S. Construction and operation of the remaining Lone Star Project elements including the open pit and power distribution infrastructure are not anticipated to require the discharge of additional fill to waters of the U.S.

<u>Issues</u> – There are a number of potential issues that will be addressed in the Draft EIS. Additional issues may be identified during the scoping process. Issues initially identified for evaluation in the EIS as potentially significant include:

- Aesthetics and Visual Resources
- Air Quality
- Cultural and Historic Resources
- Surface Water Hydrology and Watershed Resources
- Groundwater Hydrology
- Land Use/Planning
- Blasting Noise and Vibration
- Socioeconomics
- Soils and Geology Resources
- Transportation

- Environmental Justice
- Biological Resources
- Cumulative Impacts

<u>Alternatives</u> – Several alternatives are being considered for the proposed action. The Draft EIS will include a co-equal level of analysis of the No Action Alternative and the project alternatives considered. Alternatives are currently being developed to address the alternatives evaluation requirements under both the 404(b)(1) alternatives analysis guidelines required for evaluation of the Section 404 permit and the NEPA process. These alternatives will be further formulated and developed during the scoping process and assessed in the Draft EIS.

<u>Proposed Mitigation</u> – The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

Avoidance/Minimization – According to the applicant, the project was designed to avoid impacts to waters of the U.S. to the extent practicable. The continued use of existing operational infrastructure wherever possible was considered a general criterion of this minimization. Proposed elements of the Project include the continued use of the existing facilities including the existing crushing facilities, SX/EW facilities, the majority of the existing support infrastructure for the current leach pad, and the mine access road.

Compensation – The applicant proposes compensatory mitigation for unavoidable impacts to waters of the U.S. through permittee-responsible habitat restoration, contribution to an in-lieu fee program, or a combination thereof.

#### **Proposed Special Conditions**

Special Conditions have not yet been developed and will be based on the results of the EIS and 404 permit analysis.

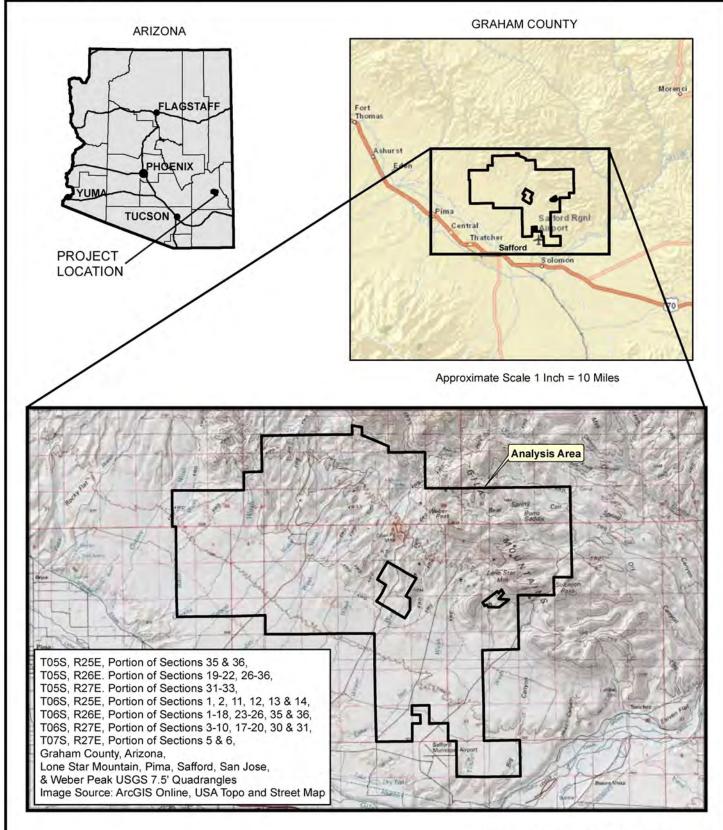
For additional information please call Michael Langley of my staff at 602-230-6953 or via e-mail at Michael.W.Langley@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.



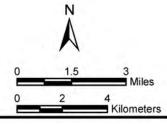
#### Regulatory Program Goals:

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

U.S. ARMY CORPS OF ENGINEERS – LOS ANGELES DISTRICT 3636 N. Central Ave, Suite 900 Phoenix, AZ 85012-1939



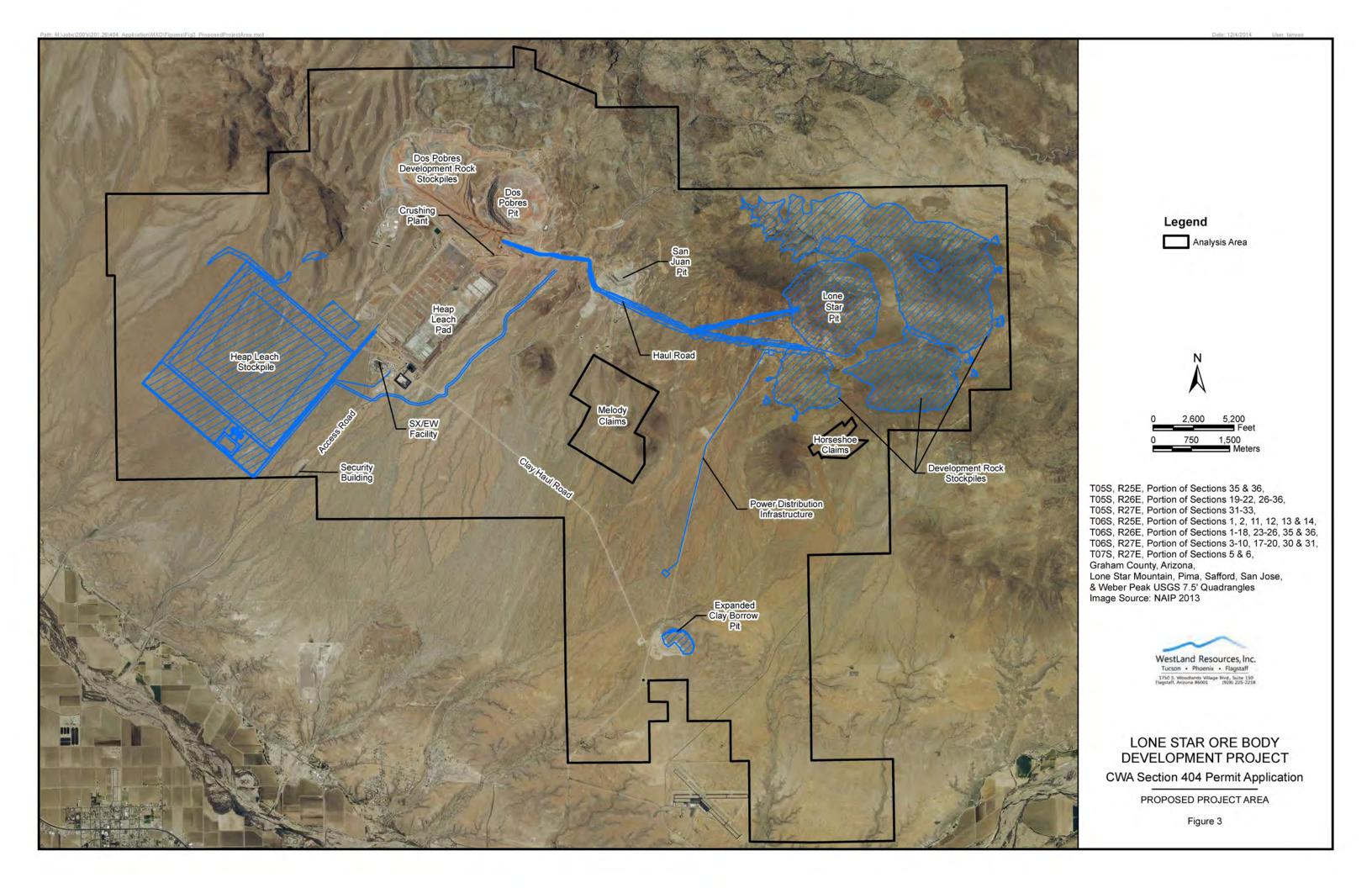




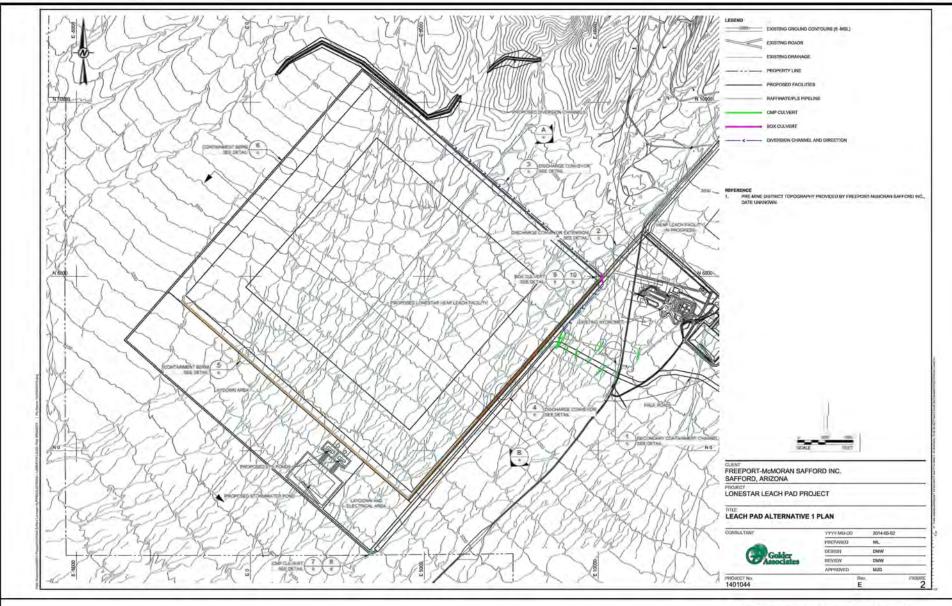
LONE STAR ORE BODY DEVELOPMENT PROJECT

CWA Section 404 Permit Application

Vicinity Map Figure 1



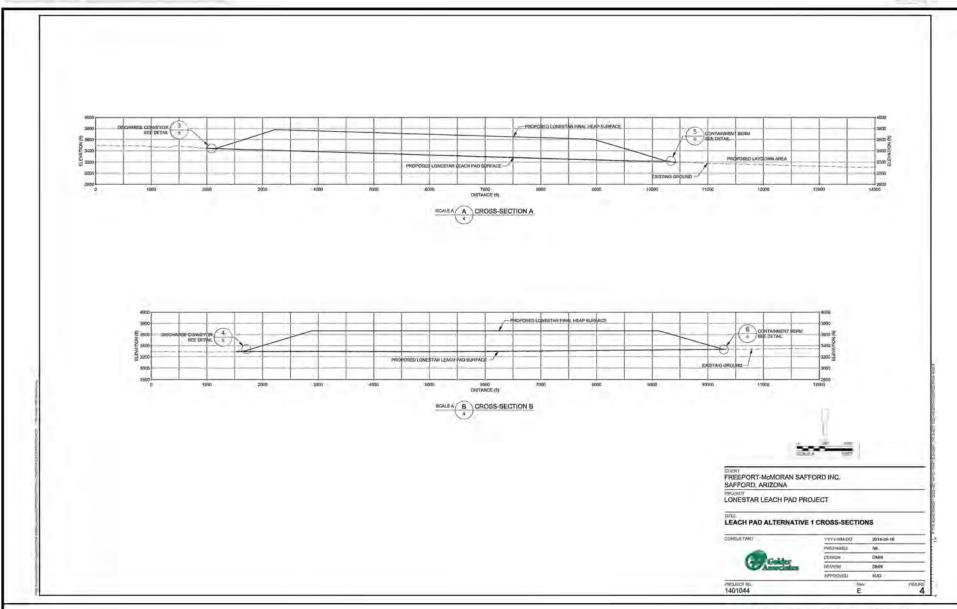
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LONE STAR ORE BODY DEVELOPMENT PROJECT CWA Section 404 Permit Application

HEAP LEACH STOCKPILE PLAN VIEW Figure 4

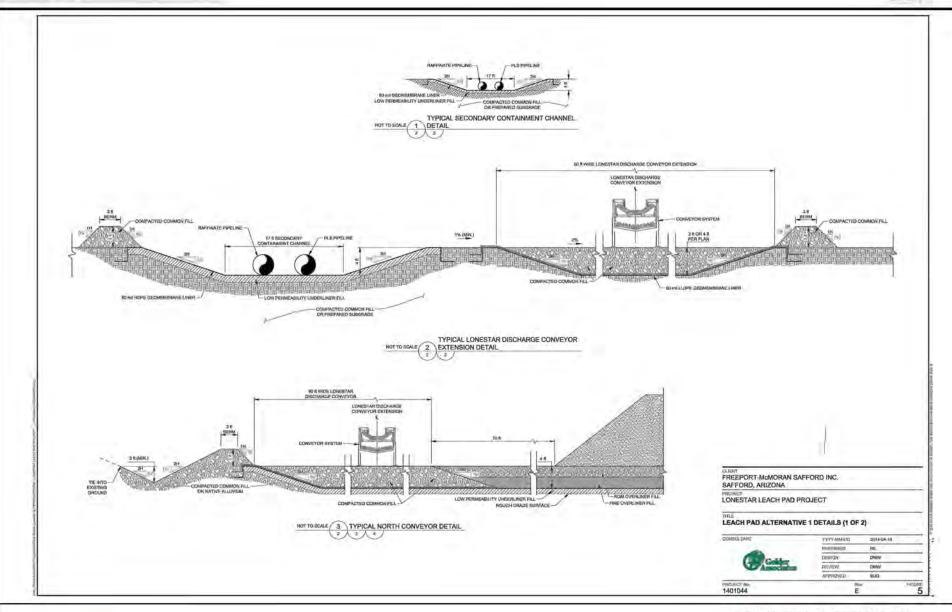


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1750 S. Woodlands Village Blvd., Suite 150 Flagstaff, Arizona 86001 (928) 225-2218 LONE STAR ORE BODY DEVELOPMENT PROJECT CWA Section 404 Permit Application

HEAP LEACH STOCKPILE CROSS-SECTION Figure 5

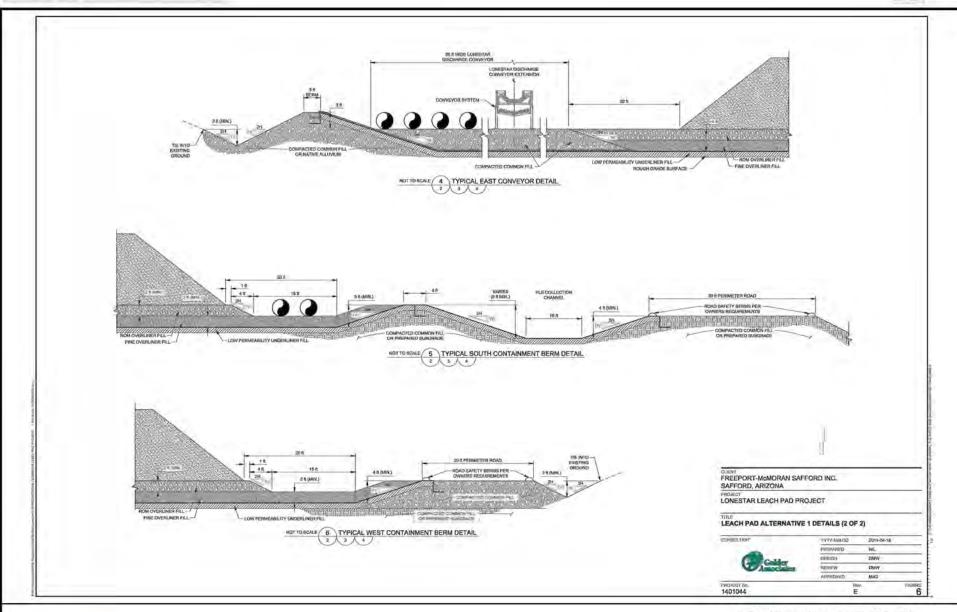


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HEAP LEACH STOCKPILE APPURTENANT FEATURE DETAIL 1 Figure 6

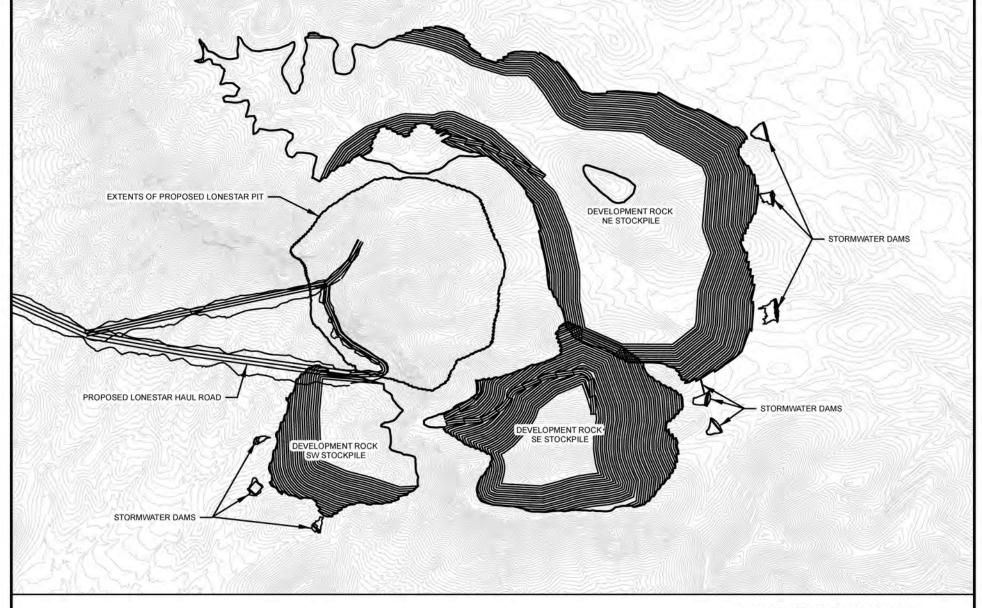


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HEAP LEACH STOCKPILE APPURTENANT FEATURE DETAIL 2 Figure 7



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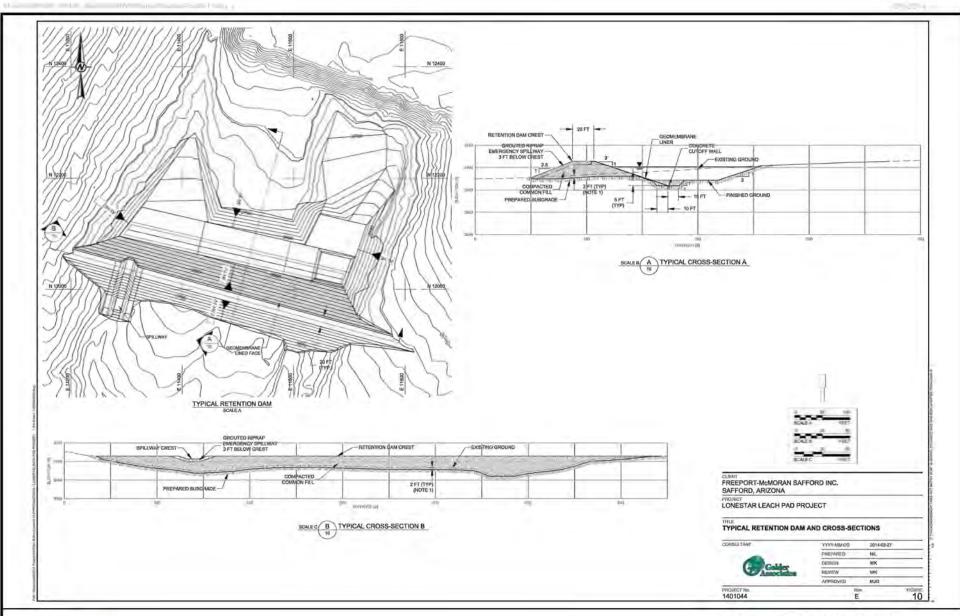
Tucson • Phoenix • Flagstaff 1750 S. Woodlands Village Blvd., Suite 150 lagstaff, Arizona 86001 (928) 225-2218 2,800 1.000



LONE STAR ORE BODY **DEVELOPMENT PROJECT** 

CWA Section 404 Permit Application

DEVELOPMENT ROCK STOCKPILE PLAN VIEW Figure 8

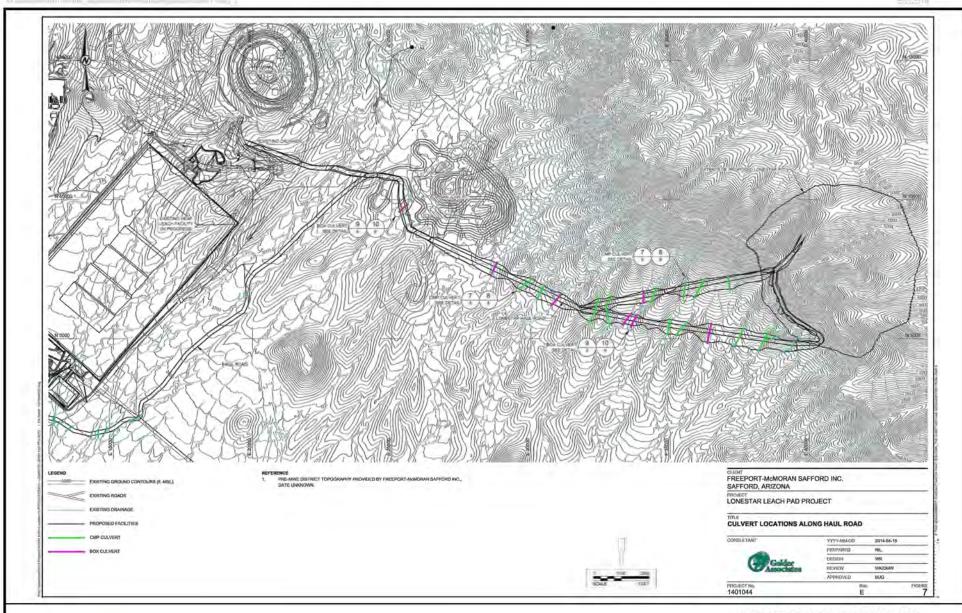


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#### LONE STAR ORE BODY DEVELOPMENT PROJECT CWA Section 404 Permit Application

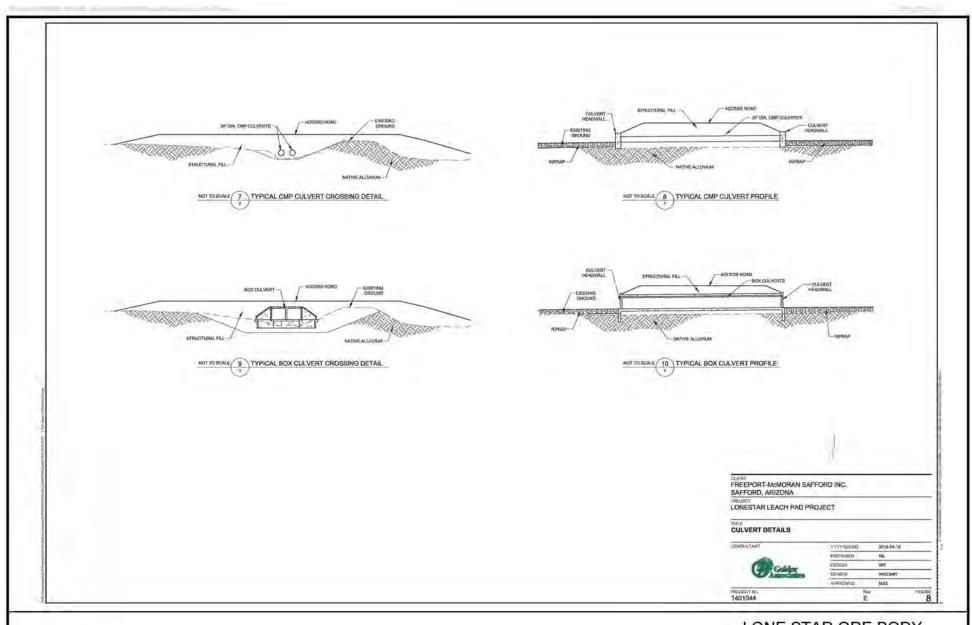
STORMWATER DAM DETAIL Figure 9





LONE STAR ORE BODY DEVELOPMENT PROJECT CWA Section 404 Permit Application

> HAUL ROAD PLAN VIEW Figure 10



LONE STAR ORE BODY DEVELOPMENT PROJECT CWA Section 404 Permit Application

> HAUL ROAD CROSS-SECTION Figure 11

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# Lone Star Ore Body Development Project

**Environmental Impact Statement** 

# **Public Scoping Meeting**

What: Public scoping meeting for the Lone Star Ore Body Development Project

analyzed in the Draft EIS (EIS) process, and to gather public comments on the issues that should be Why: To provide information about the Project, the Environmental Impact Statement

Who: Held by the U. S. Army Corps of Engineers, lead agency for preparing the EIS

When: February 4, 2015, 6:00 pm to 9:00 pm. Project presentation at 7:00 pm

Where: Manor House Convention Center, 415 E. U.S. Highway 70, Safford, AZ

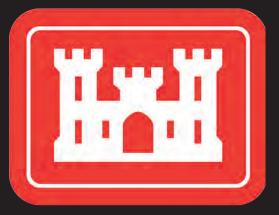
# Written and electronic comment letters will be accepted through February 20, 2015

For more information, please visit the following link and select the attachment for the Lone Star Ore Body Development Project: http://tinyurl.com/USACE-LoneStarEIS Or contact Michael Langley, Corps Senior Project Manager, at (602) 230–6953.

#### **Appendix C**

Scoping Meeting Display, Presentation Materials, and Comment Form

March 2015



Welcome to U.S. Army Corps of Engineers (Corps) public scoping meeting for the Lone Star Ore Body Development Project Environmental Impact Statement (EIS).

While you are here, please take time to learn about the proposed project, ask questions, and discuss your concerns with the Corps project manager, Freeport-McMoRan staff and consultants, and resource and EIS specialists involved with this project.

Written comments may be submitted tonight or at any point until February 20, 2015.

# Thank you for joining us.







## Lone Star Ore Body Development Project **Environmental Impact Statement**



The U.S. Army Corps of Engineers is the Federal agency that regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA).

Freeport-McMoRan Safford Inc. (FMSI) applied for a CWA Section 404 Individual Permit to discharge fill materials into waters of the U.S. as part of establishing the new mine and associated facilities adjacent to existing mining operations. In accordance with the National Environmental Policy Act (NEPA), the Corps is requiring preparation of an Environmental Impact Statement (EIS) to inform their decision to:

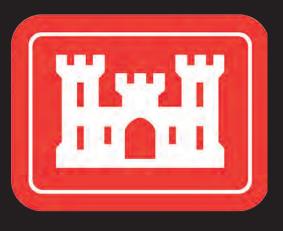
- Issue a CWA Act Section 404 individual permit to discharge fill materials into waters of the U.S. outlined in FMSI's permit application;
- Issue a CWA Section 404 individual permit with modifications or special conditions; or
- Deny a CWA Section 404 individual permit.





# EIS Process and Schedule

### **Lone Star Ore Body Development Project Environmental Impact Statement**



2014 - 2015February 2014 January 2016 January 2017 **Winter 2017** DEIS Record Public Draft Final Public Of EIS EIS Scoping Decision Comment

**CWA** 404 Permit

# **WE ARE** HERE

During Public Scoping, the Corps is seeking public input regarding project and resource concerns. Input is used to identify issues to be addressed through EIS alternatives or analysis.

The **Draft EIS** will describe different alternatives that meet the purpose and need, disclose the effects of each alternative on the natural and human environment, and identify mitigations that may be applied to reduce impacts.

The **DEIS** public **comment** period allows for public comment on the proposed action and alternatives and the analysis contained in the document.

The Final EIS will disclose all public comment and response to those comments and will identify the least environmentally damaging practicable alternative.

Following release of the Final EIS, the Corps will publish a Record of Decision (ROD) documenting the decision to 1) issue a Section 404 permit under the CWA\*, 2) issue the permit with modifications or special conditions, or 3) deny the permit.

Should the Corps decide to issue the permit, it will be provided to FMSI following formal approval of the ROD.

<sup>\*</sup> CWA = Clean Water Act

# Lone Star Ore Body Development Project Environmental Impact Statement



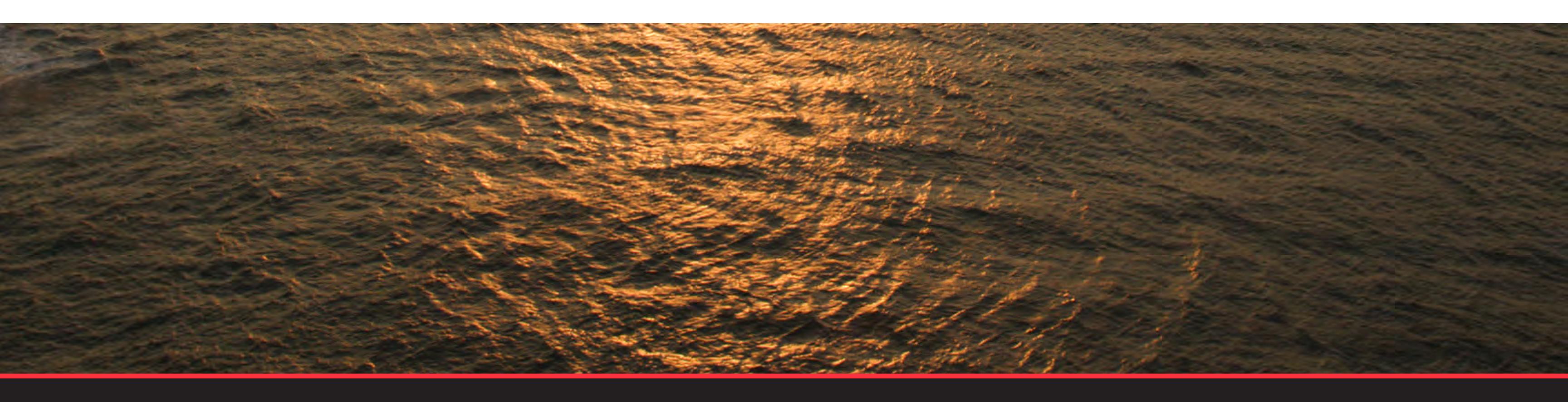
# Groundwater

The Lower Basin Fill Aquifer, the Project's proposed water source, is isolated from the alluvial aquifers used for local community water supplies by a confining clay unit.

# **Surface Water**

Project proposes discharge of fill to waters of the U.S. for construction/operation of the heap leach pad, waste rock stockpiles, haul road, and clay borrow pit. FMSI proposed avoidance and minimization measures in its Project design, and compensatory mitigation for unavoidable impacts through habitat restoration or contribution to a fee program.

The EIS will disclose how the Project would affect groundwater and surface water quality and quantity and identify appropriate mitigation measures to be incorporated to minimize adverse impacts to water resources, if necessary.



# Biological Resources

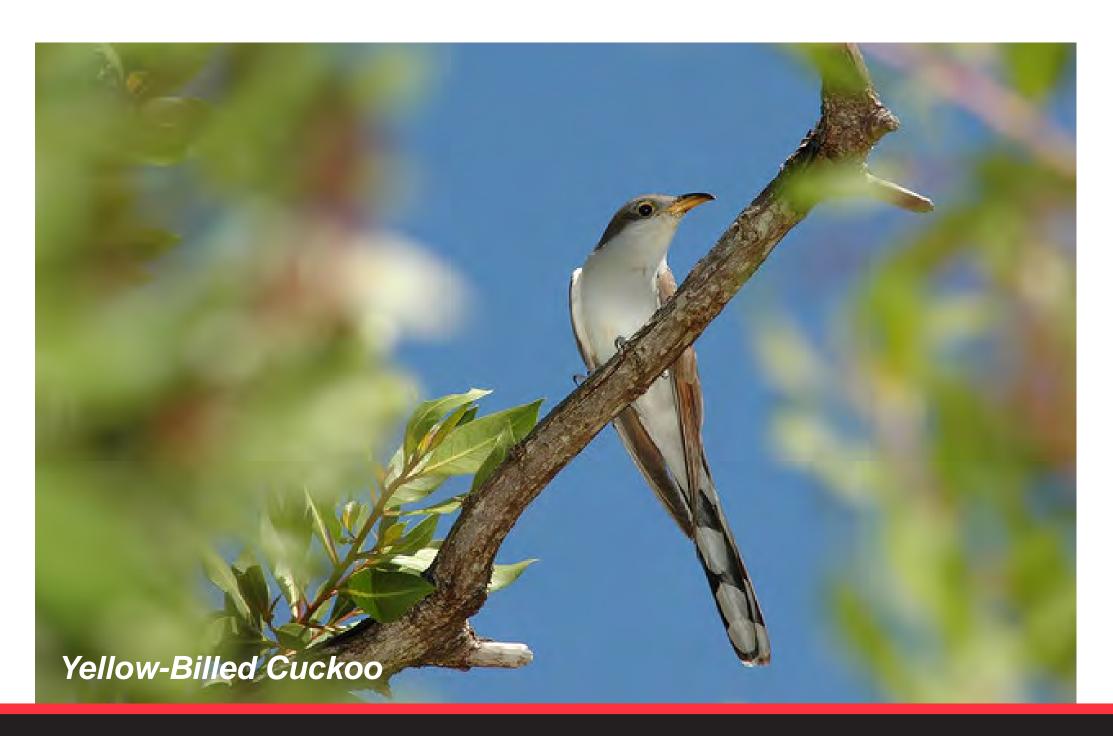


The EIS will analyze how wildlife resources, threatened and endangered species, sensitive species, and habitat would be affected.

Section 7 of the Endangered Species Act directs federal agencies to ensure authorized actions are not likely to jeopardize the continued existence of threatened or endangered species or result in destruction of critical habitat. A biological assessment will be prepared to examine impacts to federally listed species (anticipated to include southwestern willow flycatcher and yellow-billed cuckoo).

Are there other issues regarding wildlife or threatened and endangered species that should be considered during alternatives development or impact analysis?

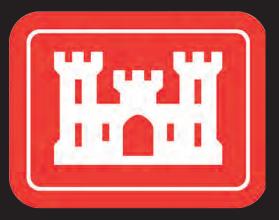
Do you have proposed mitigation measures that may help minimize adverse impacts to species or habitat?







# Cultural Resources



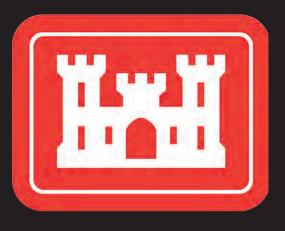
# The EIS will analyze how recorded archaeological resources would be affected and consider how to minimize adverse effects to areas of cultural importance.

Based on information collected to date, the Project would adversely impact cultural resources that are eligible for listing on the National Register of Historic Places. Potentially eligible cultural resources include prehistoric Native American sites and historic Euroamerican sites associated with ranching and agriculture or mining.

Consultation with Native American Tribes and the State Historic Preservation officer will occur with respect to cultural resources impacts associated with this project. Native American Tribes will also be consulted regarding the presence of any traditional cultural properties that could potentially be affected by this project.



# Other Resources



Other key resource issues to be examined in the EIS include:

# **Air Quality**

What are the direct and indirect local impacts by alternative? Would the project affect air quality a significant distance away? How would adverse impacts be minimized? Would the project contribute to climate change?

# Socioeconomics/Environmental Justice

How would the project affect local and regional social values and economics? Would low income or minority populations be subject to disproportionate adverse impacts?

# **Human Health and Safety**

How would potential public health and safety issues resulting from noise and blasting, or potential chemical spills or fires be managed?

# Transportation

Would there be direct and indirect impacts from traffic changes?

Are there other resource issues that should be considered during development of alternatives or impact analysis?

Do you have proposed mitigation measures that may help reduce impacts to the human environment?



# Lone Star Ore Body Development Project **Environmental Impact Statement**



To help the Corps understand and address your concerns about the Project, you can comment in the following ways:



# **Submit Comment Form**

Submit a comment form at this meeting.



# Mail a Comment Letter to

U.S. Army Corps of EngineersLos Angeles District Arizona Regulatory Branch ATTN: SPL-2014-00065-MWL 3636 N. Central Ave, Suite 900, Phoenix, AZ 85012-1939



# E-Mail Comments to

Michael.W.Langley@usace.army.mil

(please put Lone Star Ore Body Development Project in the subject line and include your physical mailing address)

ALL COMMENTS MUST BE RECEIVED BY FEBRUARY 20, 2014.

# EFFECTIVE PUBLIC COMMENTING

Comments are most effective when they are as specific as possible. The most helpful scoping comments are those that:

- 1. Identify design elements that should be considered in developing a reasonable range of alternatives
- 2. Raise resource issues
- 3. Identify data sources
- 4. Suggest analysis methodologies that should be used in the EIS



## Lone Star Ore Body Development Project **Environmental Impact Statement**



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# Pre-NEPA scoping and Early Coordination

UP TO 3 MONTHS

- Applicant's proposed project submitted to Corps
- Corps provides guidance on Federal permitting requirements, avoidance and minimization measures
- Corps reviews permit application for completeness

# **NOI** and

**2-3 MONTHS** 

**NEPA Scoping** 

- Establish NEPA project purpose and need for project
- Invite cooperating agencies to participate in
- Publish NOI in Federal Register
- Issue Public Notice soliciting public scoping comments on what to include in the DEIS
- Hold scoping meetings
- Prepare jurisdictional determination for waters of the U.S.

**18-22 MONTHS** 

**Draft EIS** 

**Preparation** 

- Conduct alternatives analysis (NEPA and 404(b)(1), as applicable) and identify range of alternatives
- Complete impacts analyses
- File DEIS with EPA and publish Notice of Availability in Federal Register
- Issue "permit" Public Notice
- Hold public comment meetings.

# Final EIS

3-6 MONTHS

# **Preparation**

- Incorporate comments on DEIS
- Approve applicant's mitigation plan
- Finalize compliance w/ applicable laws/regs.
- Consider public interest review factors
- File FEIS with EPA and publish Notice of Availability in Federal Register
- Issue Public Notice re: applicant's preferred alternative

**Record of Decision** 

1-2 MONTHS

- Document basis for decision
- Make permit determination
- Identify the LEDPA\* and the Environmentally Preferable alt. (if not the same)

**Pre-Application Consultation and Permit Application Review** 

2-6 MONTHS

Corps Permit Application Review and Evaluation

**22-30 MONTHS** 

**Permit** Decision

Corps

\* LEDPA = Least Environmentally Damaging Practicable Alternative

#### **Lone Star Ore Body Development Project**

#### **Environmental Impact Statement**



#### U.S. Army Corps of Engineers PUBLIC SCOPING MEETING WRITTEN COMMENT FORM

We welcome your comments! If you have any concerns or questions you would like addressed in the Lone Star Ore Body Development Environmental Impact Statement (EIS), please complete and submit this comment sheet to ensure your input is considered. You may attach additional pages. You may submit this sheet to a Corps representative at this meeting. You can also drop this comment sheet in the mail to the address on the reverse side of this sheet (fold comment sheet on the lines with the return address showing, tape it closed, affix a stamp, and mail). You can also email comments to michael.w.langley@usace.army.mil (please put *Lone Star Ore Body Development Project* in the subject line and include your physical mailing address).

Scoping comments are most effective when they are as specific as possible. The most helpful comments are those that are focus on the proposed project and identify: 1) specific resource concerns; 2) data that should be included in analysis; 3) alternative elements that should be considered in the EIS; 4) mitigation that would help reduce impacts.

All mobile comments and does by Fabruary 20, 2015

All publ	ic comments are aue by i	-ebruary 20, 2015.	
Name (Please print):			
Organization (if applicable):		Title:	
Mailing address (Street and number):			
City:	State:	Zip Code:	
F-mail Address:	Telenhone No :		

DATA REQUIRED BY THE PRIVACY ACT

**AUTHORITY: 33 CFR 327** 

**PRINCIPAL PURPOSE:** Distributed at Public Meetings and Workshops to provide a record of attendees, and to develop a mailing list for future public meetings in keeping with the policy of OCE to conduct Civil Works Program in an atmosphere of public understanding, trust and mutual cooperation. All interested individuals and agencies are to be informed and afforded an opportunity to be heard and their views considered in arriving at conclusions, decisions, and recommendations in the formulation of civil works proposals, plans, projects, and on the proposed uses of navigable waters.

**ROUTINE USES:** Utilized for determining attendance at Public Meetings and developing mailing lists for various Corps studies. **DISCLOSURE:** Voluntary. Failure to provide information may result in not being contacted for future public meetings, etc.

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# U.S. ARMY CORPS OF ENGINEERS Los Angeles District Arizona Regulatory Branch ATTN: SPL-2014-00065-MWL 3636 N. Central Avenue, Suite 900 Phoenix, Arizona 85012-1939

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**Appendix D** 

**Scoping Submittal Contact Information** 

**Table D-1** contains the contact information associated with each submittal. The submittal ID number contained in **Table D-1** can be cross referenced to the comment table contained in **Appendix E** to identify the respondent associated with each comment.

Table D-1 Submittal Lookup Table

Table B.1. Gabrilla Lookap Table				
Submittal ID Number	Name	Entity Type		
7	Arizona Game and Fish Department	State agency		
8	"Jean Public"	Individual		
9	White Mountain Apache Tribe	Tribe		
10	Environmental Protection Agency	Federal agency		
11	Arizona Department of Environmental Quality	State agency		
12	Bureau of Land Management	Federal agency		
13	Daniel Cervantes	Individual		
14	Environmental Protection Agency	Federal agency		
15	Steve Maracigan	Individual		
16	The Navajo Nation	Tribe		
17	"Retired American Citizen"	Individual		
18	Susan Syfert	Individual		
19	Gila River Indian Community	Tribe		
20	San Carlos Apache Tribe	Tribe		

## Appendix E

**Substantive Comments by Submittal** 

**Table E-1, Scoping Comments**, contains all comments from scoping letters. As discussed In Section 3.2, each unique submittal (or form master or "form plus") was reviewed for the specific comments it contained and each comment was categorized and coded by primary resource issue or topic.

**Table E-2, Resource Code Lookup Table**, contains a list of the resource codes that were assigned to comments.

The submittal ID number contained in **Table E-1** can be cross referenced to **Table D-1**, **Submittal Lookup Table**, to identify the respondent associated with each submittal.

Table E-1 Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
7	The Department requests coordination on the EIS with the Corps under the Fish and Wildlife Coordination Act (FWCA) or via Cooperating Agency status based on our statutory authorities and special expertise related to wildlife resources potentially affected by the project.	PRO-4	
7	The FWCA (16 USC § 662.d) provides that the cost of planning for, and the construction or installation and maintenance of, means and measures adopted to carry out conservation purposes constitute an integral part of the cost of projects. The Department expects to incur costs in planning for conservation of the wildlife resources affected. The Department is interested in discussing how the Corps may be able to incorporate our costs in planning for conservation purposes into the cost of the project and how mitigation measures preventing, or compensating for, the loss of and damage to wildlife resources, including compensatory land acquisitions, as well as the development and improvement thereof, may be incorporated into the costs of the project. Such mitigation measures should be described for each alternative.	WL-4	
7	The Department anticipates that an external contractor will be responsible for writing the EIS. It is our experience that informal, direct, open, and regular communication with project staff results in a better document than when the Department is limited to formal comment opportunities with short timelines. The Department requests that the Corps request the contractor invite us to participate in project team meetings when appropriate, and that Corps staff, and external contractor staff, consult us informally at any time via phone and Email. The Department requests continuous communication and would like to provide regular input as the project develops. The Department requests the opportunity to comment on the Administrative Draft EIS (ADEIS) and be provided 30 days to compile such comments. The Department requests a minimum of 90 days to comment on the Draft EIS (DEIS). The Department will provide input and be a resource for the Corps regarding nongame and threatened and endangered wildlife. Through the Department's Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service (USFWS), and because of the FWCA, the Department is able to participate in the Endangered Species Act (ESA) Section 7 consultation process including helping to develop conservation measures and providing input to the Biological Opinion (BO). The Department requests that the Corps invite our participation in Section 7 consultation from the beginning of the process and continue our participation throughout the consultation to ensure that Section 7 consultation is efficient and effective, and that any responsibilities of the Department are thoroughly vetted. We ask that you involve us early in the process and communicate with us throughout the process so we can provide the best input in a timely	PRO-4	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	manner. The Department offers our data, information, assistance, and expertise in developing and planning for means and measures to mitigate impacts through the National Environmental Policy Act (NEP A) process with a view to preventing unnecessary loss of, and damage to, wildlife resources and expect such information will become integral to the EIS.		
7	The Arizona Game & Fish Department requests that the data we have made available via the State Wildlife Action Plan (SWAP), Online Environmental Review Tool (Online Tool), and various planning tools be utilized and summarized in the EIS for all SWAP-listed species as encouraged by the FWCA (16 usc§ 662.b).	WL-5	
7	In addition to federally listed species, the preferred alternative of the EIS should describe impacts to state responsibility species and mitigation for those impacts. The Department requests that the Corps evaluate the project in the context of the SWAP and that the EIS consider impacts to Species of Greatest Conservation Need (SGCN) and Species of Economic and Recreational Importance (SERI). A report inclucling information from the Department's Heritage Data Management System (HDMS) providing potentially affected species is attached.	WL-2	
7	The Department requests the NEP A analysis be informed by survey and inventory of wildlife resources in the analysis area and an evaluation of impacts to those resources be part of the EIS. The Corps should consult with the Department in determining the reasonable scope of such evaluation.	WL-3	
7	The Council on Environmental Quality (CEQ) requires a discussion of the impacts on all natural resources and the conservation potential of various alternatives and mitigation measures [ 40 CFR 1502.16(£)]. It is important to note that mitigation under the NEPA must not be limited to mitigation for impacts to Waters of the U.S. (WUS) but must include impacts from the entirety of the project including impacts to state responsibility species and habitats directly and indirectly impacted by the project and its connected actions.	WL-4	
7	The Department also expects a thorough discussion of cumulative impacts, to include existing and additional foreseeable mining activity in the Gila watershed which could have a detrimental effect on the biota of the Gila River and associated riparian area.	WL-1	Veg-6
7	The Department expects that all viable alternatives will be analyzed and that the alternative chosen will clearly be the least environmentally damaging practicable alternative.	ALT-1	
7	The Department requests coordination when examining the range of potential alternatives and in developing alternatives.	PRO-4	ALT-2
7	The EIS should address the interaction of multiple impacts on wildlife. While individually, each impact may not have a significant effect on any species, analysis of their additive and interactive impacts may reduce the suitability of the area for occupation or use by certain species; especially those that are rare, secretive and do not tolerate human activity, rely on those that are rare, secretive and do not tolerate human activity, rely on high ecosystem integrity, or are dependent on large blocks of unfragmented habitat. The EIS should clearly identify connected actions and the rationale behind including or excluding analysis of potentially connected actions and the rationale behind including or excluding analysis of potentially connected actions and the rationale behind including or excluding analysis of potentially connected actions.	WL-3	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
7	The project must be evaluated with the greater ecosystem in mind including connected habitats in the Gila River watershed, particularly the Gila River and connected environment downstream and cumulative impacts such as potential pollutant inputs downstream, water diversion upstream, and reduced surface flow into the Gila River. Potential impacts, including cumulative and additive impacts from pollution, habitat fragmentation, transportation and infrastructure, water diversion, groundwater pumping, and disturbance must be evaluated.	CUM-1	Wat-3
7	The project may leach toxins into the groundwater and release toxins into the Gila via stormwater runoff. The Department is particularly concerned with impacts to groundwater, and impacts to the Gila, including releases of toxins into the river which may kill or injure aquatic wildlife, or which may harm invertebrates, creating cascading effects in the ecosystem, effectively degrading it for the species dependent on that ecosystem. The EIS must address the potential for the project to pollute waters that support wildlife, including aquatic species, amphibians, and drinking water for terrestrial and avian species and prescribe all possible measures to prevent such pollution.	Wat-2	WL-1
7	The Department is concerned with any potential for hazardous spills, standing water, and pollutants which may create a hazard to wildlife including the potential to impact migrating birds or dispersing amphibians such as leopard frogs. The EIS should prescribe all possible measures to prevent such pollution.	Haz-1	WL-1
7	Any potential for fugitive dust, especially dust that contains toxins, abrasives, or otherwise ecologically disruptive compounds must be analyzed for the potential to impact wildlife, especially amphibians and mollusks and all possible measures to prevent such pollution should be prescribed in the EIS.	WL-1	AQ-1
7	The Department is concerned especially with groundwater pumping and interception of groundwater by the pit causing a dewatering cone of depression around the mine. The Department expects a full analysis in the EIS describing groundwater modeling and expectation of dewatering springs, seeps, and similar habitat features important to wildlife.	Wat-1	WL-1
7	Again, mitigation or compensation for loss of these habitat features should be included in, and integral to, the preferred alternative.	Wat-4	
7	The Department is concerned about impacts to riparian habitat and water sources. The project area contains several large washes which are tributaries to the Gila River. Several of these traverse the proposed leach pad (Coyote and Watson Washes and side drainages) and waste rock areas (Bear Springs Canyon). These desert xeroriparian areas are potential habitat for numerous species including special status species as well as being of high value to game species such as desert mule deer and javelina. It is the policy of the Arizona Game and Fish Commission (Commission) that the Department shall recognize riparian habitats as areas of critical environmental importance to wildlife and fisheries and that the Department shall actively encourage management practices that will result in maintenance of current riparian habitat, and restoration of past or deteriorated riparian habitat.	WL-1	Veg-6
7	Riparian habitat is defined by the Commission as distinct vegetation and land shape, which occur in or adjacent to drainage ways and/or their flood plains. It is characterized by different species or life forms, both plant and animal, than those of the immediately surrounding	Veg-6	

**Table E-1** Scoping Comments

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	habitat. the Gila River and tributary washes, which would be indirectly impacted by the project, meet the definition of riparian areas. As such, the Department recognizes the area as being of significant environmental importance.		
7	At least six dirt tanks that seasonally supply wildlife water will be lost or compromised as a result of the project. These tanks provide important water for wildlife and the Department requests the loss of these tanks be mitigated.	Wat-4	
7	The Department is concerned about impacts to hunting and game species. Historically, the mine has provided access for hunting where feasible. This opportunity was available even recently, but it has been lost as the mine has progressed. The loss of access to wildlife resources should be analyzed in the EIS and mitigation should be described in the preferred alternative.	WL-1	REC-1
7	The proposed Lone Star pit and development rock stockpiles will be located in an area that is important for bighorn sheep habitat connectivity. Over 3 0 bighorn sheep were observed during the 2014 survey in the area the Lone Star ore body is located. If this section of habitat is modified, it may segregate the bighorn population and stop sheep movement between the Gila Mountains and Bonita Creek Canyon. The Department expects the EIS to describe the potential for impacts and to incorporate mitigation for this loss of important wildlife habitat into the preferred alternative. Such mitigation might include the construction of bighorn sheep crossings on the haul road to and from the Lone Star area and on the surrounding development rock stockpiles, landformning waste rock piles in a way that maintains a corridor through the area, funding capture/relocation efforts to expand bighorn sheep populations, research, monitoring, and other mitigations which may be prudent and feasible.	WL-5	
7	The area also supports mule deer, javelina and Gambel's quail populations, important game species. The EIS should discuss mitigation for the loss of this habitat. Such mitigation might include grassland restoration within the area, habitat improvements through prescribed fire, or direct purchase of property currently unavailable but necessary to improve management capability.	WL-5	WL-4
7	Golden Eagles are commonly observed in the Gila Mountains in the area of the proposed Lone Star pit and development rock stockpiles. Two golden eagles were observed in the proposed Lone Star development area during the 2014 bighorn sheep survey. If take of golden eagles is possible, the Department requests coordination in consultation with the U.S. Fish and Wildlife Service on this take.	WL-5	
7	The Department is concerned with take of birds or disturbance of birds nesting, roosting, and utilizing the area. The Department recommends that the proponent develop an avian conservation plan in consultation with the Arizona Game and Fish Department to address the potential for take and disturbance of birds and nests. Arizona Revised Statutes § 17-236 prohibits the take of birds (and disturbance of nests and eggs) including migratory and non-migratory birds.	WL-1	
7	The Department is concerned with potential for spread of invasive species and pathogens. The Corps should determine if there is potential for the introduction of noxious weeds, pathogenic fungi (chytridiomycota), and other organisms which may cause disease or alteration to ecological functions.	Veg-5	
7	The Lone Star EIS must thoroughly explore and describe mitigations to prevent ongoing take of wildlife, including impacts from extending	WL-4	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	the Dos Pobres operation. For example, exclusionary fencing and netting for leach pads to prevent ongoing take of terrestrial and avian wildlife. The Department expects to be included in development of a preferred alternative that includes actions that avoid, minimize, mitigate, and compensate for take of wildlife. All reasonable and prudent mitigation should be included and integral to the preferred alternative.		
	It is the policy of the Arizona Game and Fish Commission that the Department seek compensation at a 100% level (i.e. no net loss), when feasible, for actual or potential habitat losses resulting from land and water projects. The Department requests details regarding the project footprint and GIS files to begin our analysis.		
7	The Dos Pobres ROD listed as mitigation the compensation of BLM allottees for lost range improvements; purchase of agricultural operations and water rights in the Gila Valley, and fallowing of fields to preserve water for the Gila River if mine operations were having an impact on surface flows; maintaining surface flows at Watson Wash artesian well; and creating 30 acres of riparian habitat, enhancing 18 acres of riparian and wetland habitat, and preservation of 160 acres of riparian habitats in the Gila Valley for the loss of 68 acres of WUS.	Veg-4	
7	The Department requests information be included within the EIS regarding impacts to surface flows and groundwater levels from the original mine operation and the efficacy of subsequent mitigation measures to adequately inform development of alternatives which incorporate mitigations for the new mine project. Such mitigation might include riparian habitat enhancement or creation, preservation of habitat along the Gila River, San Pedro River, or Bonita Creek, purchase of water rights to secure flows in the Gila or Bonita Creek, funding of habitat projects at Cluff Ranch and the Willcox Playa (new or reestablished lakes and ponds), and a solar water pumping system at Roper Lake to maintain that recreation area's lake levels.	Veg-4	Wat-4
7	For the loss of wildlife water sites (dirt tanks), the Department seeks compensation for at least two new mule deer/javelina wildlife waters in areas where needed.	WL-4	Wat-4
7	The Department is concerned about the potential for success of reclamation. It is the Department's experience that reclamation has a very limited definition in mining nomenclature. To the extent possible, the Corps must include restoration of mine tails, dumps, and pit to preconstruction conditions after closure of the mine where feasible and environmentally advisable. Compensatory mitigation should be identified for any residual impacts to wildlife resources and habitat. Adequate bonding should be required to ensure that reclamation successfully restores the site.	RCL	
7	Fence recommendations will be dependent upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on the home page of this application at http://www.azgfd.gov/hgis/guidelines.aspx.	WL-4	
7	During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife	WL-1	

**Table E-1** Scoping Comments

Table E-1	Scoping Comments		
Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife.		
7	Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. 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, cantered, or cut to ensure that light reaches only areas needing illumination.	WL-1	Vis-1
7	Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). Theterms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, https://agriculture.az.gov/. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, http://www.usda.gov/wps/portal/usdahome. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml	WL-1	Veg-5
7	Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity ,chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.	WL-1	Wat-1
7	The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.	WL-2	
7	Based on the project type entered, coordination with the Office of	PRO-3	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	Surface Mining may be required(http://www.osmre.gov/index.shtm).		
7	Based on the project type entered, coordination with the Environmental Protection Agency may be required(http://www.epa.gov/).	PRO-3	
7	Based on the project type entered, coordination with State Historic Preservation Office may be required(http://azstateparks.com/SHPO/index.html).	PRO-3	CUL-1
7	Pre- and post-survey/monitoring should be conducted to determine alternative access/exits to mines and to identify and/or minimize potential impacts to bat species. For further information when developing alternatives to mine closures, contact the Arizona Game and Fish Department Bat Coordinator at the Main Office in Nongame Branch, http://www.azgfd.gov/inside_azgfd/agency_directory.shtml.	WL-4	
7	Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required(http://www.azdeq.gov/).	PRO-3	
7	Based on the project type entered, coordination with Arizona Department of Water Resources may be required(http://www.azwater.gov/azdwr/default.aspx).	Wat-1	PRO-3
7	Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan(species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.	Veg-4	
7	Avoid/minimize wildlife impacts related to contacting hazardous and other human-made substances in facility water collection/storage basins, evaporation or settling ponds and/or facility storage yards. Design slopes to discourage wading birds and use fencing, netting, hazing or other measures to exclude wildlife.	WL-4	
7	HDMS records indicate that one or more native plants listed on the Arizona Native Plant Law and Antiquities Act have been documented within the vicinity of your project area. Please contact: Arizona Department of Agriculture1688 W Adams St. Phoenix, AZ 85007Phone: 602.542.4373https://agriculture.az.gov/environmental-services/np1	Veg-6	
7	HDMS records indicate that one or more listed, proposed, or candidate species or Critical Habitat (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at http://www.fws.gov/southwest/es/arizona/ or: Phoenix Main Office 2321 W. Royal Palm Rd, Suite 103 Tucson, AZ 85745 Phone: 602-242-0210 Tucson Sub-Office 201 N. Bonita, Suite 141 SW Tucson, AZ 85745 Phone: 520-670-6144 Flagstaff Sub-Office	WL-5	PRO-3

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	Forest Science Complex 2500 S. Pine Knoll Drive Flagstaff, AZ 86001 Phone: 928-556-2157		
7	Tribal Lands are within the vicinity of your project area and may require further coordination. Please contact:  San Carlos Apache Tribal Council PO Box 0 San Carlos, AZ 85550 (928) 475-2361 (928) 475-2567 (fax)	CUL-1	PRO-3
8	I oppose this project. I oppose the USACE being involved in the project.	00-2	
8	I object to 90 acres of ill into our nations waters.	Wat-1	
8	confine the operations of this mine to the 36,000 acres it owns. That is enough degradation	ALT-2	
8	please make sure I am on the distribution list for any further action.	PRO-5	
9	I breify reviewed the document for the proposed Ore Body Development project in Safford, Arizona, and I noticed the report mentioned the project will adversely impact cultural resources that are eligible for listing on the National Register of Historic Placesbut doesn't indicate or state the types of resources that will be impacted.	CUL-1	
9	Although I doubt there are any Apache archaeological sites within the Area of Potential Effect, we would appreciate receiving the Cultural Survey report conducted for the project for our review. Please forward as appropriate.	PRO-3	CUL-1
10	The EIS needs to adequately identify and describe the underlying need(s) for the project and the associated objectives or outcomes for purposes of both the National Environmental Policy Act (NEPA) analysis and the Clean Water Act Section 404(b)(1) alternatives analysis. Clear descriptions of project needs and objectives set the stage for thorough consideration of a range of alternatives and their effectiveness in meeting the needs and objectives of the project.	PN-1	
10	The EIS should rigorously explore and objectively evaluate all reasonable alternatives, including reasonable alternatives not within the jurisdiction of your agency. (40 CFR 1502.14).	ALT-2	
10	The EIS should provide a clear discussion of the reasons for the elimination of alternatives which were not evaluated in detail.	ALT-2	
10	The document should discuss potential environmental impacts of the alternatives in comparative form, thus sharply defining the issues among the options for decision makers and the public. Reasonable alternatives could include, but are not necessarily limited to alternative designs or methods, smaller projects, and reconfigured projects.	ALT-2	
10	The EIS should thoroughly identify and describe appropriate mitigation measures associated with the project, specifying which ones would be committed to by the mine operator and/or required by the Corps or other federal, state, or local agencies. The EIS should address how each measure would specifically mitigate the targeted impact, provide substantial detail on the means of implementing each mitigation measure, identify who would be responsible for implementing it, indicate whether it is enforceable, and describe its anticipated effectiveness. For some impacts, there may be several appropriate	MIT	

**Table E-1** Scoping Comments

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	and effective measures. Conversely, some measures may turn out to be less effective than anticipated. Therefore, implementation and effectiveness monitoring should be conducted and contingency measures should be considered and discussed. The mitigation plan in the EIS should, therefore, include implementation monitoring and effectiveness monitoring, as well as contingency measures that would be implemented if initial mitigation measures are unsuccessful.		
10	Given the ongoing open-pit mining operations at the Safford Mine Facility in the Dos Pobres and San Juan pits, and the facility's proximity to the Gila River, it is critical that the EIS thoroughly analyze and discuss the proposed project's potential impacts upon water resources in the context of the impacts that have already resulted from past and current mining activity.	Wat-3	
10	The EIS should provide a complete hydrologic characterization of the project vicinity and the cumulative impact area, describing all existing water resources and baseline groundwater and surface water quality, quantity, flow regimes, and groundwater adjudication. All existing mine facilities and their relevance to site hydrology should be discussed. Information on groundwater properties and groundwater/surface water connections (e.g., springs, seeps, interception of the water table by existing or proposed mine pits, etc.) are needed to identify and assess potential impacts to water resources and risks to receptors of contaminants. This baseline information is critical to understanding the project's potential environmental impacts and should be described in the EIS rather than included by reference.	Wat-2	
10	The EIS should completely describe the current drainage patterns in the existing mine facilities and across the project area. The EIS should describe how drainage patterns would change (including post-closure drainage patterns) under each alternative. Include hydrologic and topographic maps of the project area and cumulative impact area. Identify any components of the proposed project that would fall within 25- and 100-year flood plains. Discuss the potential for runoff to transport sediment or contaminants from disturbed areas at the mine to any surface waters, as well as any potential receptors outside the mine boundaries.	Wat-3	
10	The EIS should discuss all direct, indirect, and cumulative impacts to surface water and groundwater quality and quantity from the proposed project and alternatives both during operations and after closure. The EIS should describe all potential project discharges, seepage, temporary ponding, surface water diversions, and groundwater pumping/dewatering, as well as the potential effects of these activities on water rights, quality, and flow; beneficial uses; and wildlife.  Discuss the potential for contamination of meteoric water that contacts existing and proposed waste rock, pit wall rock, heap leach, stockpiles, roads, and other mine facilities.  Describe the projected chemical characterization of water in open ponds that would be located at the site, including whether a pit lake or ponding of precipitation might occur in the mine pits.  Discuss the potential for and effects of movement of any contaminated surface water to the subsurface, including through the pit bottom.  Describe the designs of the proposed run-on/run-off channels, seepage collection systems, collection and sedimentation ponds, pump back systems, and any necessary treatment or disposal of these solutions. Depict these facilities on a map.	Wat-3	
10	Describe mitigation measures to prevent contamination of water and	WL-4	

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	sediment.		
10	The EIS should discuss how accidental releases of hazardous materials would be handled. Identify the potential impacts of failure of the solution containment systems, methods for discovering such failures, and the degree to which impacts would be reversible. Describe the mine's petroleum-contaminated soil management plan.	Haz-1	
10	The EIS should provide past and current monitoring results and trends for surface water and groundwater quality in the existing mine area. In light of the historic and existing mining operations on site, substantial monitoring data should be available to the applicant and the Corps. EPA requests that such monitoring data be used to inform facility design, impact analyses, and mitigation, where applicable. Discuss all ongoing and proposed monitoring plans and their relevance in predicting the potential for, and protecting against, contaminated drainage from historic, existing and future mine facilities.	Wat-2	
10	The EIS should describe procedures for water quality and quantity monitoring and reporting. The EIS should also describe procedures for monitoring the functioning of the waste rock stockpiles and heap leach pads in controlling contact between this material and surface or meteoric water (e.g., maintenance of run on/runoff channels, liners, underdrains, seepage collection areas, growth medium covers; ponding on top of facilities; etc.).	Wat-4	Haz-1
10	Describe all monitoring locations for surface water, ponded water, and collected seepage; groundwater monitoring wells; and points of compliance on the site. The EIS should discuss monitoring frequencies, screening intervals, and parameters to be monitored during all phases of the project, including post-closure.	Wat-4	
10	The EIS should describe the applicable permits and state-adopted, EPA-approved water quality standards, including beneficial uses, in the project area, and discuss each alternative's compliance with the standards and permits. The EIS should discuss how the project would be designed with best available demonstrated control technology for purposes of meeting Arizona groundwater standards included in its Aquifer Protection Program permit. The EIS should describe Arizona's Aquifer Protection Program, as well as the specific requirements of the particular APP permit for this project.	Wat-1	PRO-3
10	The EIS should discuss the applicability of Arizona's General Permit for Storm Water Discharges Associated with Industrial Activity – Mineral Industry (AZMSG2010-003) to this project. The EIS should include a storm water pollution prevention plan and discuss specific mitigation measures that may be necessary during operations, closure, and post-closure for each alternative. The EIS should also indicate, for each alternative, whether the tailings facility would achieve zero discharge for all phases of the project and, if so, describe how zero discharge would be achieved.	Wat-1	PRO-3
10	The EIS should identify potential water sources and the amount of water needed for the project, and describe the potential impacts associated with using these sources. The EIS should identify direct, indirect, and cumulative impacts to surface water flow, water supply wells, wetlands, springs and seeps, vegetation, wildlife, and other groundwater-dependent resources as a result of groundwater pumping associated with the proposed project. Describe post-closure groundwater elevation recovery.	Wat-3	
10	EPA understands that the development of this project would require discharge of fill materials into approximately 90.27 acres of waters of	Wat-1	PRO-2

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	the U.S, as well as potential indirect affects upon a currently unknown number of additional acres through dewatering. The EIS should describe the Clean Water Act Section 404 permitting process and the status of the project in that process. The EIS should specify acreages and channel lengths, habitat types, values, and functions of these waters. The extent of waters should be clearly identified graphically. The EIS should describe the potential environmental impacts of the fill and should identify project alternatives designed to avoid or minimize discharge to waters, as well as all possible and required measures to mitigate potential impacts.		
10	In a letter dated March 2, 2015, EPA affirmed to the Corps that the Lone Star Ore Body Development Project would result in impacts that may contribute to the significant degradation of the Gila River, and thus may represent substantial and unacceptable impacts to aquatic resources of national importance. EPA therefore respectfully identified the Lone Star mine permit action as a candidate for review by EPA and Corps headquarters. EPA is concerned that the substantial loss and/or degradation of water quality and other aquatic ecosystem functions is likely, if the mine is constructed and operated as proposed. Headwater streams, located within the Lone Star Ore Body Development Project, provide valuable surface water and groundwater recharge for the Gila River watershed.	Wat-1	PRO-3
10	The EIS should present sufficient information to conclude that the proposed project is the "Least Environmentally Damaging Practicable Alternative" and meets any of the other restrictions on discharges, including the need to ensure appropriate compensatory mitigation for unavoidable impacts. The alternatives analysis must assess the direct, indirect and cumulative impacts from the proposed project.	ALT-1	
10	The EIS should identify both the jurisdictional and non-jurisdictional wetland and riparian habitats adjacent to or within the project area. The EIS should describe how these waters have already been affected by existing operations, the extent to which the functions of these waters has been degraded and the extent to which each action alternative might further degrade the quality of these resources.	Veg-6	
10	The EIS should discuss measures for the avoidance, minimization, and mitigation of losses, and address strategies for improving the quality and quantity of these areas. We recommend that the EIS discuss and include as an attachment the detailed mitigation plan for habitat replacement, identifying:  Acreage and habitat type that would be created or restored; Resources needed to maintain the mitigation area; The revegetation plans including the numbers and age of each species to be planted; Maintenance and monitoring plans, including performance standards to determine mitigation success; The size and location of mitigation zones; The parties that would be ultimately responsible for the plan's success; and Contingency plans that would be implemented if the original plan fails	Veg-6	
10	Accurate characterization of the mine's geochemistry is critical in properly identifying the project's potential impacts and addressing them through facility design and mitigation measures. The EIS should discuss the mine's geochemistry, including the neutralization/acid generation potential and non-acidic chemical leaching potential of the waste rock, pit wall rock, ore, old tailings, and historic/existing mine	Wat-1	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	facilities. Describe the static and humidity cell tests that have been conducted on ore and waste rock to characterize them, and provide a summary of the test results. The EIS should identify how the geochemical testing procedures were designed to comply with all applicable guidance and industry standards.		
10	In addition to characterization, the EIS should describe how waste rock (in this letter, the term waste rock can also mean "development" rock) will be handled, disposed, and reclaimed at the mine. The EIS should describe facility designs and control measures that would be implemented to ensure against leaching and release of contaminants under both acidic and non-acidic conditions, and degradation of surface water and groundwater quality. The EIS should describe how potentially acid generating material would be encapsulated or intermixed to prevent the development of seepage with adverse water quality. This discussion should be supported with both geochemical testing data and on site current or historic monitoring data (existing seepage water quality, on site pan evaporation rates, documentation of the successful closure of some existing facilities, etc.). Where existing waste rock and heap leach facilities can be reasonably used as analogs for the new or expanded facilities, such comparisons should be made and clear data should be presented for why the proposed designs would be more or equally successful in avoiding the production of adverse seepage water.	Haz-1	Wat-1
10	The EIS should address if there is any existing groundwater contamination associated with ongoing activities at the Safford mine and the potential for the proposed actions to affect any contaminated plumes. Any and all measures proposed or implemented to control such contamination should be described in detail.	Wat-1	
10	The EIS should include a robust analysis of the project's potential to affect air quality. The EIS should describe existing air quality in the project vicinity. The EIS should discuss the National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increments applicable to air quality in the project area. PSD increments exist for sulfur dioxide, nitrogen dioxide, and PM10 (particulates smaller than 10 microns in diameter), and PM2.5 (particulates smaller than 2.5 microns in diameter). The EIS should describe the project's emissions to insure that the PSD increments are not exceeded. The air quality analysis presented in the EIS should demonstrate that new emissions emitted from the proposed project, in conjunction with other applicable emissions increases and decreases from existing sources, will not cause or contribute to a violation of any applicable NAAQS or PSD increment.  The EIS should summarize project emissions from all facilities and roads related to the mine's operations, including any off-site processing and support activities, such as vehicle traffic and delivery trucks for fuels, maintenance supplies, and other materials. The EIS should also consider cumulative emissions from other sources in the project area, including existing facilities and ongoing operations associated with the Dos Pobres and San Juan pits. The EIS should include the air emissions resulting from the construction and operation of these facilities, including those resulting from right-of-way disturbance and road construction and use. Modeling should be conducted to determine concentrations of criteria air pollutants for an accurate comparison with the NAAQS.  PSD increments are highly protective of air quality in Class I areas such as wilderness areas and national parks. The EIS should identify all Class I PSD areas located within 100 kilometers of the proposed	AQ-3	

**Table E-1** Scoping Comments

Submittal ID No.	ID No. Comment Text		Resource Code2
	project site. Class I areas even farther away could potentially be affected as well. The Corps should consult with the U.S. Forest Service and National Park Service for a determination of which areas could be adversely affected by the proposed action. Potential impacts to Class I PSD areas, including visibility impacts, should be discussed.		
10	The EIS should discuss mitigation measures to minimize air pollutant emissions from the mine, and include measures to address potential impacts to nearby residents, including sensitive receptors. Diesel particulate matter (DPM) and other criteria pollutants from fugitive sources at the mine can be reduced by implementing appropriate mitigation measures, such as the following.  Use particle traps and other appropriate controls to reduce emissions of DPM and other air pollutants. Traps control approximately 80 percent of DPM, and specialized catalytic converters (oxidation catalysts) control approximately 20 percent of DPM, 40 percent of carbon monoxide emissions, and 50 percent of hydrocarbon emissions;  Minimize construction-related trips of workers and equipment, including trucks and heavy equipment;  Lease or buy newer, cleaner equipment (1996 or newer model);  Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained at all times and does not unnecessarily idle, is tuned to manufacturer's specifications, and is not modified to increase horsepower except in accordance with established specifications.  The EIS should discuss whether and how air quality monitoring would be implemented to ensure project compliance with all applicable air quality standards and permits.	AQ-4	
10	The EIS should list in detail all possible sources of hazardous air pollutants (HAPs) and the unit processes that generate this material. The EIS should estimate releases of HAPs from the proposed project to air, soil, and water resources. The EIS should also describe the HAPs monitoring that would be conducted, including locations and reporting requirements.  The EIS should discuss how all HAPs would be controlled to reduce their emissions as much as possible, including from any off-site facilities that will process ore from this project. The EIS should describe the equipment included in the system to condense, capture, and/or treat HAPs and reduce their emissions. It should also discuss how these measures are effective in removing HAPs and making it unavailable for release into the environment.	AQ-3	
10	On December 18, 2014, the Council on Environmental Quality released revised draft guidance for public comment that describes how Federal departments and agencies should consider the effects of greenhouse gas emissions and climate change in their National Environmental Policy Act reviews. The revised draft guidance supersedes the draft greenhouse gas and climate change guidance released by CEQ in February 2010. This guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated greenhouse gas emissions, and the implications of climate change for the environmental effects of a proposed action.  "CEQ recognizes that many agency NEPA analyses to date have concluded that GHG emissions from an individual agency action will have small, if any, potential climate change effects. Government action occurs incrementally, program-by-program and step-by-step, and	AQ-1	

**Table E-1** Scoping Comments

Submittal Comment Text		Resource Code1	Resource Code2
	climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions, including decisions made by the government. Therefore, the statement that emissions from a government action or approval represents only a small fraction of global emissions is more a statement about the nature of climate change challenge, and is not an appropriate basis for deciding whether to consider climate impacts under NEPA. Moreover, these comparisons are not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations."		
	The revised draft guidance suggests that, if an agency determines that evaluating the effects of GHG emissions would not be useful in the decision making process and to the public to distinguish between the proposed action, alternatives and mitigations, the agency should document the rationale for that determination.		
	The Corps should ensure that the discussion of climate change in the Lone Star Ore Body Development Project EIS is consistent with this recent guidance. This guidance is available in full at: http://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft _ghg_guidance_searchable.pdf .		
	In addition, we recommend that any sustainable design and operation measures that reduce greenhouse gases be identified in the EIS with an estimate of the greenhouse gas emissions reductions that would result if these measures were implemented. The EIS should then clearly indicate whether these measures would be required. Attention should be paid to explaining the quality of each greenhouse gas mitigation measure – including its permanence, verifiability and enforceability. We offer the following potential measures for the Corps' consideration:		
10	Use conveyors rather than haul trucks where possible, e.g., for transporting ore to processing areas and the heap leach facility; Incorporate alternative energy components into the project such as onsite solar and/or geothermal power generation; Offer ride sharing or shuttle opportunities for mine employees commuting to the site from both nearby and distant communities; Commit to using high efficiency diesel particulate filters on new and	AQ-4	
	existing diesel engines to provide reductions of black carbon emissions.		
10	The EIS should provide the most up to date information available with regard to consultation with the U.S. Fish and Wildlife Service and Arizona Game and Fish on the potential for impacts of the project on plant and wildlife species, especially special status species.	WL-5	
	The EIS should: Identify all petitioned and listed threatened and endangered species and critical habitat, as well as sensitive species, that might occur within the project area;		
10	Identify all species or critical habitat that could potentially be directly, indirectly, or cumulatively affected by each alternative;  Discuss how surveys were conducted for each species, their findings,	WL-5	
10	and all follow-up surveys and monitoring that would be conducted before, during, and after mining occurs;		
	Include the biological assessment by reference or as an appendix, if one is prepared; and		
	If a biological opinion is prepared by the USFWS, it should be summarized or included as an appendix in the EIS to demonstrate that		

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	the preferred alternative is consistent with the biological opinion.		
10	The EIS should discuss the mitigation measures that would be taken to minimize impacts to special status species, and prevent exposure of migratory waterfowl and other wildlife to any mine influenced waters or other hazards associated with the proposed operation. The EIS should discuss the effectiveness of mitigation measures to protect wildlife, and indicate how they would be implemented and enforced. Describe maintenance requirements and monitoring to ensure their effectiveness.	WL-4	
10	Given the mine's history of operations and the potential for any adverse water quality generated to affect the adjacent Gila River or its tributaries, the reclamation, closure and post-closure components of this project are of particular importance for this EIS analysis and should be described in detail.	RCL Wat-3	
	The EIS should describe and discuss the following components of mine reclamation:		
	A detailed account of measures that would be taken to decommission mine operations and stabilize and revegetate slopes, waste rock facilities, heap leach pads, roads and other areas;		
40	Identification (including estimated acreage) of the areas targeted for reclamation, and description of the intended degree of treatment in each area;	DOI	
10	Timing of reclamation relative to mining operations, procedures for concurrent reclamation activities, and duration of reclamation treatment;	RCL	
	Standards for determining and means of assuring successful reclamation; and		
	Means of assuring that all maintenance required for reclaimed areas would continue after operations cease or while operations are suspended.		
10	The EIS should describe all closure and post-closure activities associated with the tailings, heap leach pad, waste rock piles, and other facilities, including commitments by the mine company and agencies regarding operation and maintenance of caps/covers, draindown systems and any proposed evapotranspiration cells, fencing and wildlife protection measures, diversion channels, underdrain systems, wells, etc. The EIS should describe implementation, performance, and effectiveness monitoring, and follow up actions that would be taken should destabilization or contamination be detected.	RCL	
10	The EIS should describe in detail how draindown fluids from the tailings and heap leach pads would be captured, treated and controlled over the closure and post-closure period. The EIS should describe the capacity of any proposed evapotranspiration cells, the likelihood that this capacity will be sufficient and the contingency in the event of ET cell overflow. The EIS should discuss the fate and transport of acidic fluids and the other constituents in the heap over the course of closure and post-closure, identify the projected draindown rates, and address any ecological risks posed by evapotranspiration cells or other open water.	NOL	
10	Reclamation and closure of the tailings, heap leach facilities and waste rock disposal areas will involve placing growth media over rock material to provide store-and-release covers for the purpose of reducing infiltration of meteoric water. The EIS should describe the availability, properties, and sources of cover material and/or growth	RCL	SOI-4

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	media, discuss how it would be applied to disturbed areas, and identify any additional measures (e.g., amendments) that may be needed to ensure successful reclamation and revegetation of the project site. The EIS should describe whether a synthetic geomembrane cap will be required to prevent interstitial water infiltrating into heap leach, tailings or waste rock facilities. Cover design should be described in detail with supporting data to demonstrate anticipated effectiveness. The EIS should identify the permeability standard that growth media or other cover material for the heap leach, tailings, and waste rock facilities would be designed to achieve, provide the basis for infiltration rates and cover/growth media thickness estimates, and discuss their effectiveness in minimizing exposure of mined material to meteoric water that could mobilize contaminants.		
10	We recommend that any revegetation to be accomplished with only native species indigenous to the area in order to restore the ecosystem to as natural a state as possible after mine closure. If revegetation is required, we recommend that its success be monitored for at least five years.	Veg-4	
10	EPA recommends that the EIS discuss the reclamation bonding requirements and amounts for the proposed project and alternatives. The viability of the bond can be a critical factor in whether a project is environmentally acceptable; therefore, this information should be disclosed in the Draft EIS. The EIS should also discuss how the bond could be modified during the course of operations if temporary, long-term, or perpetual treatment and/or remediation needs are discovered during operations. The EIS should describe bonding requirements and other measures that regulators have in place to ensure funds would be immediately available should the mine operator or its insurer be unable to fund the required reclamation or closure activities.	RCL	
10	The EIS should describe all necessary long-term monitoring and management of the mine, as well as identify the agency responsible for enforcement and oversight should the mine operator fail to properly follow the long-term post-closure plan. The EIS should describe the time frame over which long term management activities would occur or if they might be necessary into perpetuity.  If long-term post-closure monitoring and management would be needed to ensure post-closure care and resource protection, the Draft EIS should include a general description of the funding mechanism, such as a long-term trust fund, that would be required, and identify the agency that would require and oversee it. The financial assurance necessary to fund all post closure activities must be kept current as conditions change at the mine, and the permitting agency should ensure that the form of the financial assurance does not depend on the continued financial health of the mine operator or its parent corporation. The mechanics of the fund are critical to determining whether sufficient funds would be available to implement the post-closure plan and reduce the possibility of long-term contamination problems. The discussion in the Draft EIS should include the following information:  Requirements for timing of payments into the trust fund; How to ensure the trust fund would be bankruptcy remote; Acceptable financial instruments; Tax status of the trust fund; Identity of the operator with responsibility/liability for financial assurance at this site.	MIT	

**Table E-1** Scoping Comments

Table E-1	Scoping Comments		
Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	If the potential impacts of the project would necessitate a long-term trust fund, EPA believes this information is essential in the Draft EIS because it could make the difference between a project sufficiently managed over the long-term by the site operator, or an unfunded/under-funded contaminated site that becomes a liability for the Federal government. In the absence of an appropriate guarantee, EPA could consider a project unacceptable if it could result in unmitigated impacts exceeding environmental standards on a long-term basis.		
10	Executive Order 12898 on Environmental Justice addresses disproportionate adverse impacts of federal actions on minority and low-income populations. The EIS should identify minority and low-income populations potentially affected by the project, and address whether any of the alternatives would cause any disproportionate adverse impact, such as displacement, changes in existing resources or access, or community disruption. The document should also explore potential mitigation measures for any adverse environmental justice effects. The EIS should describe the measures taken by the Corps to: (1) fully analyze the environmental effects of the proposed Federal action on minority communities and low-income populations; and (2) present opportunities for affected communities to provide input into the NEPA process. The EIS should state whether the analysis meets requirements of your agency's environmental justice strategy.	SOC-1	
10	We recommend that the EIS discuss the Corps' consultation with all Native American tribal governments that could be potentially affected by the proposed project or may have resources (e.g., traditional cultural properties, groundwater resources) that could be affected. The principals for interactions with tribal governments are outlined in an April 29, 1994, presidential memorandum and Executive Order 13175, dated November 6, 2000. It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EIS. Where feasible, efforts should be made to avoid or mitigate impacts to culturally significant sites.	CUL-1	PRO-3
10	Cumulative impacts analyses are important as they assess the threats to resources as a whole. Understanding cumulative impacts can illuminate opportunities for minimizing those threats. The EIS should provide a description of the cumulative effects study areas for each resource that could be affected by the proposed project. The EIS should describe the potential cumulative impacts associated with the proposed project and alternatives in light of other past, present, and reasonably foreseeable future actions, including the adjacent and active Dos Pobres and San Juan operations.	CUM-1	
10	The EIS should describe the potential cumulative impacts associated with the proposed project and alternatives, as well as the methodology used to assess them. Guidance on how to analyze cumulative impacts has been published by the CEQ 1 and EPA.2 In addition, you may also wish to refer to http://www.dot.ca.gov/ser/cumulative_guidance/purpose.htm. This cumulative impact guidance was prepared by the California Department of Transportation, the Federal Highway Administration, and EPA Region 9 for transportation projects in California. However, the principles and the 8-step process in this guidance can be applied to other types of projects, both within and outside of California. We recommend the principles and steps in this guidance to other agencies as a systematic way to analyze cumulative impacts for their projects. 1Considering Cumulative Effects Under the National Environmental	CUM-1	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	Policy Act, Council on Environmental Quality, January 1997. http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm  2Consideration of Cumulative Impacts in EPA Review of NEPA Documents, U.S.EPA, May 1999. http://www.epa.gov/compliance/resources/policies/nepa/index.html		
10	The description of the affected environment should focus on each affected resource or ecosystem. Determination of the affected environment should not be based on a predetermined geographic area, but rather on perception of meaningful impacts and natural boundaries.  Focus on resources of concern, i.e., those resources that are "at risk" and/or are significantly affected by the proposed project, before mitigation. Identify which resources are analyzed, which ones are not, and why;  Identify all other on-going, planned, and reasonably foreseeable projects in the study area. While the existing operations and their impacts to date should certainly be analyzed, all other mining projects and non-mining activities in the project area which may contribute to cumulative impacts should also be assessed and considered. Where studies exist on the environmental impacts of these other projects, use these studies as a source for quantifying cumulative impacts;  Include appropriate baselines for the resources of concern with an explanation as to why those baselines were selected; and  When cumulative impacts occur, mitigation should be proposed.  Clearly state who will be responsible for mitigation measures and how	CUM-1	
10	mitigation implementation will be ensured.  Please provide one hard copy and one electronic copy of the Draft EIS to this office (mailcode ENF-4-2) when it is electronically submitted to EPA's EIS submittal tool, e-NEPA.	PRO-4	
10	The development of this project would require discharge of fill materials into approximately 90.27 acres of waters of the U.S and would indirectly affect a currently unknown number of additional acres through dewatering.	Wat-1	
10	The development of this project would require discharge of fill materials into approximately 90.27 acres of waters of the U.S and would indirectly affect a currently unknown number of additional acres through dewatering.	Wat-1	
10	Please provide one hard copy and one electronic copy of the Draft EIS to this office (mailcode ENF-4-2) when it is electronically submitted to EPA's EIS submittal tool, e-NEPA.	PRO-4	
11	The Freeport-McMoRan Safford mine amended its individual Aquifer Protection Permit (P-100534) in May 2014. The Lone Star Ore Body Development Project was not addressed in this 2014 amendment. Freeport-McMoRan may need to further amend its Aquifer Protection Permit to include the Lone Star Ore Body Development Project.	Wat-1 PRO-3	
11	Stormwater discharges associated with industrial activity require coverage under the Arizona Pollutant Discharge Elimination System (AZPDES) program. The AZPDES Multi-Sector General Permit (MSGP) for the Mineral Industry is a stormwater general permit that is required of any operator that conducts mining activities, including exploration, construction, active, and reclamation phases of mining activities. Freeport-McMorRan has the necessary stormwater permit coverage for two facilities in the area: Does Pobres/San Juan Mine, and Lone Star Mine. If Freeport-McMoRan is expanding one of these sites, it may need to update the Stormwater Pollution Prevention Plan	Wat-1	PRO-3

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	(SWPPP) and submit a revised Notice of Intent. If Freeport-McMoRan is establishing a new site in the area, it would likely need to seek separate coverage under the MSGP for that site. For questions on MSGP coverage, please contact Spender York at 602-771-4509 or by e-mail at spencer.york@azdeq.gov. ADEQ may require an industrial facility to apply for an individual stormwater permit.		
11	ADEQ agrees with the statement from the section Preliminary Review of Selected Factors/Water Quality that "The applicant is required to obtain water quality certification, under Section 401 requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance." For questions relating to CWA 401 please contact Nicole Coronado at 602-771-4245 or by e-mail at nm1 @azdeg.gov.	PRO-3 Wat-1	
12	While the SFO does not manage any public lands within the boundary of the proposed project area, we do manage the majority of the land immediately adjacent to the project area.	LU-1	
12	the Gila Box Riparian National Conservation Area (GBRNCA) is located within two miles ofthe project area boundary. The GBRNCA was designated under the authority of the Arizona Desert Wilderness Act of 1990 (Public Law 1 01-628). It includes four perennial waterways, the Gila and San Francisco Rivers and Bonita and Eagle creeks. Of particular interest is the portion of the project that occurs within the Bonita Creek Watershed. This area includes a very special riparian ecosystem abounding with plant and animal diversity.	GBRNCA Wilderness ial and Eagle at occurs erry special Wilderness Veg-1 Wat-1	
12	the Gila Box Riparian National Conservation Area (GBRNCA) is located within two miles ofthe project area boundary. The GBRNCA was designated under the authority of the Arizona Desert Wilderness Act of 1990 (Public Law 1 01-628). It includes four perennial waterways, the Gila and San Francisco Rivers and Bonita and Eagle creeks. Of particular interest is the portion of the project that occurs within the Bonita Creek Watershed. This area includes a very special riparian ecosystem abounding with plant and animal diversity.	SD-1	
12	Of the issues initially identified for evaluation in the Draft EIS, SFO is particularly interested in: surface water hydrology and quality, groundwater hydrology and quality, biological impacts, soils and geology resources,	WL-1	Wat-1
12	Of the issues initially identified for evaluation in the Draft EIS, SFO is particularly interested in: surface water hydrology and quality, groundwater hydrology and quality, biological impacts, soils and geology resources,	SOI-1	GEO-1
12	Of the issues initially identified for evaluation in the Draft EIS, SFO is particularly interested in: visual/aesthetic impacts from landform alterations as these impacts will be visible from the GBRNCA.	Vis-1	
12	The SFO would like to be included throughout the development of this EIS and requests to be included in any updates and opportunities to review and comment on the EIS.	PRO-4	
13	Many of Greenlee County residents are grateful for the contributions Freeport-McMoRan makes to Greenlee/Graham County	SOC-1	
14	EPA appreciates the extension of the PN comment period to March 2, 2015.	<sup>h 2,</sup> PRO-5	
14	publication of the PN requires the EPA to register our objections to the proposed discharges of dredged or fill material into waters of the		

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
	United States. Impacts of this magnitude may contribute to the significant degradation of the Gila River, and thus may represent substantial and unacceptable impacts to aquatic resources of national importance (ARNI).		
	We therefore respectfully identify the Lone Star mine permit action as a candidate for review by EPA and Corps headquarters-1.		
14	1- This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.	PRO-2	
14	In 2005, EPA identified the Gila River as an ARNI, citing critical functions in municipal and agricultural water supply, as well as habitat for important fish and wildlife resources (see attached September 8, 2005 letter regarding the proposed Cotton Lane Bridge project).	Wat-2	
14	Headwater streams, located within the Lone Star mine site, provide valuable surface water and groundwater recharge for the Gila River watershed, and the site may support seep and spring resources (see final environmental impact statement (FEIS) for the adjacent Dos Pobres/San Juan Project, Appendix F, Mitigation and Monitoring Plan, p.3).  ii Water use data indicate that the Gila River hydrologic units provide approximately 35% of total surface water withdrawals for all water uses in Arizona and 37% of the surface water withdrawals used for irrigation (water.usgs.gov/lookup/getwatershed?15050100).	Wat-2	
14	EPA is concerned that the substantial loss and/or degradation of water quality and other aquatic ecosystem functions to the Gila River may be likely if the mine is constructed and operated as the PN describes.	Wat-1	
14	At present, it is our understanding the applicant has not completed an alternatives analysis or mitigation plan. We note that only discharges meeting all of EPA's 404(b)(l) Guidelinesi-a series of independent tests including the analysis of practicable offsite and onsite alternatives-can be permitted. There is presently insufficient information to conclude that the proposed project is the "Least Environmentally Damaging Practicable Alternative" (LEDPA) or meets any of the other restrictions on discharges, including the need to ensure appropriate compensatory mitigation f or unavoidable impacts.	ALT-1	
14	In addition to assessing the significant direct impacts of filling over 90 acres of desert streams, it will be critical for the Corps to assess the indirect and cumulative impacts of the proposed project prior to making a permit decision. Consistent with the adjacent Dos Pobres/San Juan Mine, the indirect impacts of the permitted fill activities (including groundwater drawdown) may be substantial and require mitigation (see Dos Pobres/ San Juan Mine FEIS, Appendix F dated December 2003 and 404 Permit Special Conditions dated September 27, 2004).	CUM-1	
14	Thank you for your ongoing partnership in implementing the regulatory programs of the CWA. As we work with your staff and the applicant to resolve the important environmental issues concerning the proposed project, please provide Elizabeth Goldmann, our lead reviewer for this permit action, with project information as it becomes available. Elizabeth can be reached at (415) 972-3398. If you wish to discuss the project directly, please call me at (415) 972-3275, or have your Regulatory Division Chief contact Jason Brush at (415) 972-3483.	PRO-3	
15	I appreciate the process and respect all comments.	PRO-5	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
15	my only concern are air pollution, water pollution, and usage.	AQ-1	Wat-1
15	Freeport has a great record for reclamation.	RCL	
15	I have no issue with mining.	OO-1	
16	After reviewing the information documents provided, HPD-TCP has determined the proposed project efforts to discharge fill materials into approximately 90.27 acres of waters of the U.S. associated with Coyote Wash, Watson Wash, Peterson Wash, and unnamed washes to construct a copper heap leach stockpile, development rock stockpiles will have no adverse effects to Navajo Traditional Cultural Properties. HPD-TCP on behalf of the Navajo Nation has no concerns at this time.	PRO-3	CUL-1
16	If the proposed application inadvertently discovers habitation sites, plant gathering area, human remains and objects of cultural patrimony, HPD-TCP request that we be notified respectively in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). (The Navajo Nation claims cultural affiliation to all Anaasazi people (periods from Archaic to Pueblo IV) of the southwest. The Navajo Nation makes this claim through Navajo oral history and ceremonial history, which has been documented as early as 1880 and taught from generation to generations).	PRO-3	CUL-1
16	The HPD-TCP appreciates the United States Department of the Army Corps' consultation efforts regarding this document. Should you have any additional concerns and/or questions do not hesitate to contact me electronically at tony@navajohistoricpreservation.org or telephone at 928-871-7750.	PRO-3	CUL-1
17	I am concerned about the possibility of hazard material or pollutants entering the Gila River via ephemeral washes,	Haz-1	Wat-1
17	Also old or abandoned wells which can result in leakage into other existing wells in use.	Haz-1	Wat-1
17	What about the "boom and bust" effect left on the town after the influx of outside workers are gone?	SOC-1	
17	All employment should be local "permanent residence"! No Transients!	SOC-4	
18	Having toured the site and listened/view the on-going plans at Rosemont Mine, I find the view from east to west of the mine operation to be very old style. Rosemont is using contouring to fit the discarded rock into its surrounding environment. The view of a flat plateau between the remaining mountains shouts "mine operating". More can be done to mitigate the industrial view. Please do your best.	Vis-4	
19	The GRIC-THPO will participate as a consulting tribe for this undertaking. Please submit copies of all related documents to our office for review.	PRO-3	CUL-1
19	The GRJC-THPO and the GRIC Community do not support mining activities of any type.	PRO-3 CUL-1	
19	The proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; Ak-Chin Indian Community and the Tohono O'Odham Nation).	PRO-3	CUL-1
19	The GRJC-THPO and the GRIC Community do not support mining activities of any type.		
20	We have a few questions regarding this proposed project. Regarding affects on Cultural Resources and Water in the area.	PRO-3 CUL-1	

**Table E-1** Scoping Comments

Submittal ID No.	Comment Text	Resource Code1	Resource Code2
20	We were taught traditionally not to disturb the natural world in a significant way, and that to do so may cause harm to oneself or one's family. Apache resources can be best protected by managing the land to be as natural as it was in pre-1870s settlement times. Please contact the THPO, if there is a change in any portion of all previously discussed projects. Thank you for contacting the San Carlos Apache Tribe, your effort is greatly appreciated.	CUL-1	PRO-1
20	We were taught traditionally not to disturb the natural world in a significant way, and that to do so may cause harm to oneself or one's family. Apache resources can be best protected by managing the land to be as natural as it was in pre-1870s settlement times.	00-2	

Table E-2 Resource Code Lookup Table

Code	Subject Group	Subject Subgroup
PRO-1	Process	NEPA Process-Timeline
PRO-2	Process	404 Permit Process-Timeline
PRO-3	Process	Other Parallel Processes
PRO-4	Process	Public Involvement
PRO-5	Process	Cooperating Agency Requests
PN-1	Purpose and Need	Corps PN
PN-2	Purpose and Need	Operators PN
ALT-1	Alternatives	Proposed Action
ALT-2	Alternatives	Action Alternatives
ALT-3	Alternatives	No Action Alternative
AQ-1	Air Quality	General Concerns
AQ-2	Air Quality	Affected Environment
AQ-3	Air Quality	Impacts Analysis
AQ-4	Air Quality	Mitigation/Monitoring
CUL-1	Cultural Resources	General Concerns
CUL-2	Cultural Resources	Affected Environment
CUL-3	Cultural Resources	Impacts Analysis
CUL-4	Cultural Resources	Mitigation/Monitoring
GEO-1	Geology/Minerals	General Concerns
GEO-2	Geology/Minerals	Affected Environment
GEO-3	Geology/Minerals	Impacts Analysis
GEO-4	Geology/Minerals	Mitigation/Monitoring
HHS-1	Human Health/ Safety	General Concerns
HHS-2	Human Health/ Safety	Affected Environment
HHS-3	Human Health/ Safety	Impacts Analysis
HHS-4	Human Health/ Safety	Mitigation/Monitoring
LU-1	Land Use	General Concerns

Table E-2 Resource Code Lookup Table

Code	Subject Group	Subject Subgroup
LU-2	Land Use	Affected Environment
LU-3	Land Use	Impacts Analysis
LU-4	Land Use	Mitigation/Monitoring
GRA-1	Livestock Grazing	General Concerns
GRA-2	Livestock Grazing	Affected Environment
GRA-3	Livestock Grazing	Impacts Analysis
GRA-4	Livestock Grazing	Mitigation/Monitoring
REC-1	Recreation	General Concerns
REC-2	Recreation	Affected Environment
REC-3	Recreation	Impacts Analysis
REC-4	Recreation	Mitigation/Monitoring
SOC-1	Socioeconomics	General Concerns
SOC-2	Socioeconomics	Affected Environment
SOC-3	Socioeconomics	Impacts Analysis
SOC-4	Socioeconomics	Mitigation/Monitoring
SD-1	Special Designations	General Concerns
SD-2	Special Designations	Affected Environment
SD-3	Special Designations	Impacts Analysis
SD-4	Special Designations	Mitigation/Monitoring
SOI-1	Soils	General Concerns
SOI-2	Soils	Affected Environment
SOI-3	Soils	Impacts Analysis
SOI-4	Soils	Mitigation/Monitoring
TRN-1	Transportation	General Concerns
TRN-2	Transportation	Affected Environment
TRN-3	Transportation	Impacts Analysis
TRN-4	Transportation	Mitigation/Monitoring
Veg-1	Vegetation	General Concerns
Veg-2	Vegetation	Affected Environment
Veg-3	Vegetation	Impacts Analysis
Veg-4	Vegetation	Mitigation/Monitoring
Veg-5	Vegetation	Noxious or Invasive Weeds (All)
Veg-6	Vegetation	Riparian or Wetland (All)
Veg-7	Vegetation	Special Status Species
Vis-1	Visual Resources	General Concerns
Vis-2	Visual Resources	Affected Environment
Vis-3	Visual Resources	Impacts Analysis
Vis-4	Visual Resources	Mitigation/Monitoring
Haz-1	Waste and Hazardous Materials	General Concerns
Haz-2	Waste and Hazardous Materials	Affected Environment
Haz-3	Waste and Hazardous Materials	Impacts Analysis

Table E-2 Resource Code Lookup Table

Code	Subject Group	Subject Subgroup
Haz-4	Waste and Hazardous Materials	Mitigation/Monitoring
Wat-1	Water Resources	General Concerns
Wat-2	Water Resources	Affected Environment
Wat-3	Water Resources	Impacts Analysis
Wat-4	Water Resources	Mitigation/Monitoring
WL-1	Wildlife and SSS	Affected Environment
WL-2	Wildlife and SSS	Impacts Analysis
WL-3	Wildlife and SSS	Mitigation/Monitoring
WL-4	Wildlife and SSS	Big Game
WL-5	Wildlife and SSS	Special Status Species
CUM-1	Cumulative	General Concerns
RCL	Reclamation	General
MIT	Mitigation/Monitoring	General
00-1	Opinion Only	General Support For Project
00-2	Opinion Only	General Opposition To Project