

1 PURPOSE OF AND NEED FOR ACTION

1.1 INTRODUCTION

The United States (U.S.) Department of Agriculture Forest Service (Forest Service) has received the a Stibnite Gold Project Plan of Restoration and Operations, (Midas Gold Idaho, Inc. [Midas Gold] 2016) (plan of operations) for review and approval in accordance with regulations at 36 Code of Federal Regulations (CFR) 228 Subpart A for the proposed Stibnite Gold Project (SGP) in central Idaho. The SGP proposes mining operations on federal, state, and private lands located in Valley County, Idaho. The proposed open pit hard rock mine and associated processing facilities would produce gold and silver doré, and antimony concentrate for commercial sale by the SGP's proponent, Midas Gold Idaho, Inc. (Midas Gold). The proposed SGP would have a life (construction, operation, closure and reclamation), not including post-reclamation monitoring, of approximately 20 years, with active mining and ore processing occurring over approximately 12 years. The discussion in this environmental impact statement (EIS) uses approximately 12 years to describe the mining and ore processing phase; however, Midas Gold's plan of operations indicates that the mining and ore processing phase could extend from 12 to 15 years. Major SGP components include: three open mine pits, ore processing facilities, development rock storage facilities, a tailings storage facility, a water treatment facility, access and haul roads, electrical transmission lines, and various other support facilities. The potentially affected area for the proposed SGP includes approximately 3,533 acres.

The National Environmental Policy Act of 1969 (NEPA) (42 United States Code 4321 – 4370f) and the Council of Environmental Quality's implementing regulations (40 CFR 1500-1508) require the preparation of an EIS for major federal actions that may significantly impact the quality of the human environment, such as approval of the proposed plan of operations by the Forest Service. The preparation of an EIS ensures well-informed decision-making through identification and analysis of the probable environmental impacts of a proposed action, the no action alternative, and a reasonable range of other alternatives. In addition, the NEPA process, including publication of a Draft EIS, provides stakeholders and the interested public with engagement, notice, and comment opportunities that further inform federal action on a proposal.

The Forest Service, acting through the Payette Forest Supervisor, is the lead agency (40 CFR 1500.1 – 1508.28) for purposes of the SGP mine plan approval process. As the lead agency, the Forest Service has determined that the SGP as proposed in the plan of operations, may significantly affect the quality of the human environment and approval of the operations or an alternative, pursuant to 36 CFR 228A, would be a major federal action requiring the preparation of an EIS. Accordingly, with publication of a Notice of Intent (NOI) to prepare an EIS on June 5, 2017, the Forest Service initiated the process to prepare an EIS. With the intent that

one NEPA document may be used to inform all federal decisions required for the SGP and include consideration of potential impacts of the SGP regardless of jurisdiction, other federal, state, and local agencies also are participating in this NEPA process as cooperating agencies. In addition to the participation of the Forest Service's Boise Forest Supervisor, the cooperating agencies are the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency, Idaho Governor's Office of Energy and Mineral Resources, Idaho Department of Lands, Idaho Department of Environmental Quality, and Valley County, Idaho.

The following sections of Chapter 1: (i) provide a brief overview of the proposed SGP, including a connected action, (ii) identify the purpose and need, and (iii) summarize the NEPA process framework, focusing on agency roles and responsibilities, a summary of the required federal permits, licenses and approvals, tribal and public participation, identification of significant issues, and tiering to other NEPA documents.

1.2 STIBNITE GOLD PROJECT OVERVIEW

A detailed description of the SGP is provided in Chapter 2. The following provides a brief overview of the SGP's location, component parts, and phases.

The proposed SGP consists of the mine site, associated access roads, and off-site facilities located in Valley County, in central Idaho. The mine site is located approximately 98 air miles and 146 miles by road northeast of Boise, approximately 44 air miles and 68 miles by road northeast of Cascade, and approximately 10 air miles and 14 miles by road east of Yellow Pine, Idaho (**Figure 1.2-1**). Proposed SGP activities would occur on lands administered by the Payette National Forest (1,640 acres), Boise National Forest (921 acres), the Salmon-Challis National Forest (5 acres), the Bureau of Reclamation (25 acres), the State of Idaho (62 acres), and private lands (including patented mining claims owned or controlled by Midas Gold) (880 acres) within the Salmon River Mountains. The lands within the Salmon-Challis National Forest boundary are administered by the Payette National Forest and are discussed throughout the document in conjunction with the Payette National Forest. The terrain in this area consists of narrow valleys ranging in elevation from 6,000 to 6,600 feet, surrounded by steep mountains with elevations over 8,500 feet. The SGP mine site is located in the East Fork South Fork Salmon River drainage basin. The SGP area is a complex blend of remote roadless lands with high recreational values and potential wilderness characteristics, as well as areas impacted by historical gold, silver, antimony, and tungsten mining, processing, and resulting legacy contamination. Information on the history of mining-related activities in the area, and the many state and federal evaluations and actions addressing legacy contamination, is provided in Section 3.7 (Hazardous Materials and Solid Waste) and Section 3.17 (Cultural Resources).

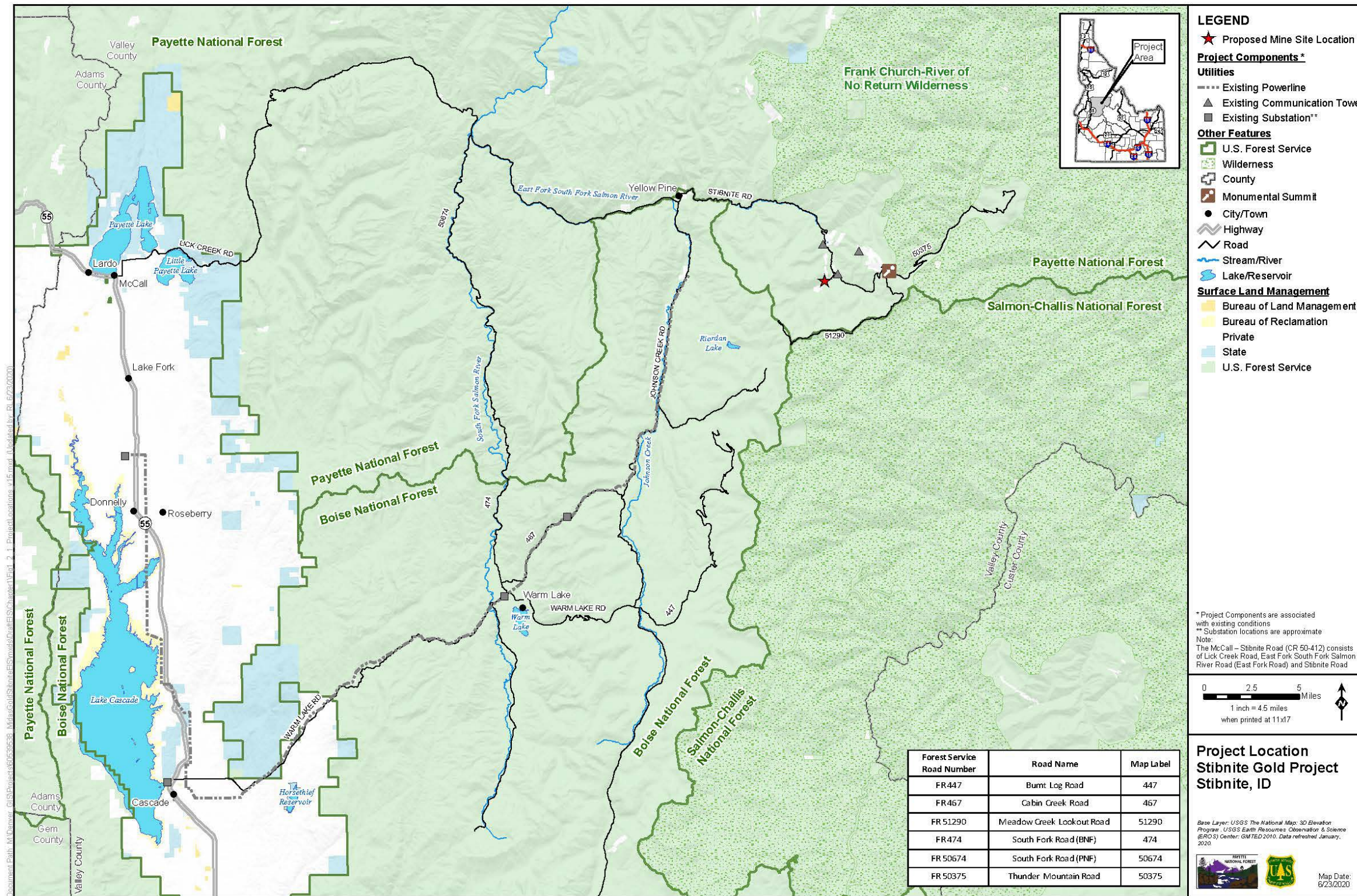


Figure Source: AECOM 2020

Figure 1.2-1 Project Location

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Midas Gold proposes to conduct mining operations that produce gold and silver doré, and antimony concentrates from ore deposits associated with their patented and unpatented mining claims. The current estimated recoverable mineral resource consists of 4 to 5 million ounces of gold, 6 to 7 million ounces of silver, and 100 to 200 million pounds of antimony (M3 Engineering and Technology Company 2019). Development of the mineral resources would require construction of new or widened access and haul roads within the mine site and adjacent connecting areas, construction of supporting infrastructure for the mine site, open pit mining, ore processing, placement of tailings in a tailings storage facility, placement of development rock, and additional offsite support facilities constructed along upgraded and extended access corridors. Electric power for the mine site and supporting infrastructure and facilities would be provided by constructing a new transmission line from the new Johnson Creek substation to the mine and upgrading the transmission line and substations all the way to Lake Fork. The SGP proposal incorporates closure and reclamation and a variety of mitigation measures detailed in Chapter 4 and **Appendix D**, which may avoid, minimize, or compensate for, adverse environmental effects resulting from the proposed operations, facilities, and activities. The SGP proposal also incorporates actions that mitigate legacy mining contamination at certain locations within the mine site.

The SGP would take place over a period of approximately 20 years, not including the long-term environmental monitoring and maintenance required for closure and reclamation. The phases of the operation are described in Chapter 2, and include: 1) Construction (approximately 3 years); 2) Mining and Ore Processing Operations (approximately 12 years); 3) Surface and Underground Exploration (approximately 15 years, beginning during construction and continuing concurrent with operations); and 4) Closure and Reclamation (approximately 5 years). The environmental monitoring and maintenance phase would continue for as long as needed to demonstrate that the site has been fully reclaimed.

1.3 CONNECTED ACTIONS

Connected actions, as defined in 40 CFR 1508.25(a)(1), are Federal actions that are closely related and therefore should be discussed in the same EIS. One connected action to the SGP was identified and is analyzed in this EIS.

Upgrades to 42 miles of existing 69-kilovolt line and 21.5 miles of existing 12.5-kilovolt line, substations, and associated access roads would be necessary to deliver required electrical power to the SGP. The upgrade of the transmission line and access roads would require the Forest Service and the Bureau of Reclamation to amend existing Idaho Power Company special use permits.

1.4 PURPOSE AND NEED

NEPA regulations mandate the lead agency specify the underlying purpose and need for the proposed project (40 CFR 1502.13). The purpose and need are key parts of the NEPA framework for screening and identifying a reasonable range of action alternatives to the

proposed action. Under NEPA, action alternatives that do not meet the purpose and need of the proposed action do not need to be analyzed in detail in an EIS.

1.4.1 PURPOSE AND NEED FOR FEDERAL ACTION

The Forest Service's purpose is to consider approval of the plan of operations submitted by Midas Gold in September 2016 (Midas Gold 2016), as supplemented, to mine and process gold, silver, and antimony from deposits at the SGP mine site in central Idaho for commercial sale. This purpose is consistent with Congress' declaration in the Mining and Mineral Policy Act of 1970 (Public Law 91-631 as amended through Public Law 106-193) that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in:

- The development of economically sound and stable domestic mining, minerals, and metal and mineral reclamation industries; and
- The orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help ensure satisfaction of industrial, security, and environmental needs.

The SGP also is consistent with applicable goals and objectives for minerals and geology resources, including mining, in both the Payette National Forest Land and Resource Management Plan, as amended (Payette Forest Plan) (Forest Service 2003) and the Boise National Forest Land and Resource Management Plan, as amended (Boise Forest Plan) (Forest Service 2010); specifically the goal to facilitate orderly and environmentally sound exploration, development, and production of mineral and energy resources (Mineral and Geology Resources Goal 01).

The Forest Service's need for action is established by the agency's responsibilities under the Organic Administration Act of 1897 (16 United States Code 478, 482, and 551) and the locatable minerals regulations at 36 CFR 228, subpart A, which set forth rules and procedures through which use of the surface of National Forest System (NFS) lands in connection with operations authorized by the United States Mining Laws (30 United States Code 21-54), which confer a statutory right to enter upon the public lands to search for minerals, shall be conducted so as to minimize adverse environmental impacts on NFS surface resources. These regulations require that all locatable mineral prospecting, exploration, development, mining, and processing operations, and associated means of access, whether occurring within or outside the boundaries of a mining claim located under the Mining Law, be conducted in a manner that minimizes adverse environmental effects on NFS surface resources. Under these and other authorities, the Forest Service may impose reasonable conditions to protect such surface resources. Accordingly, the need for federal action is to:

- Respond to Midas Gold's plan of operations for development of the SGP to mine gold, silver, and antimony deposits in central Idaho;
- Ensure that the selected alternative, where feasible, would minimize adverse environmental impacts on NFS surface resources;

- Ensure that, prior to approval, measures are included that provide for mitigation of environmental impacts and reclamation of the NFS surface disturbance; and
- Ensure that the selected alternative would comply with other applicable federal and state laws and regulations.

1.4.2 USACE'S PURPOSE AND NEED

Midas Gold's plan of operations includes the discharge of dredge and fill material into waters of the United States (WOTUS), including wetlands. Accordingly, the USACE, pursuant to Section 404 of the Clean Water Act (CWA), will review the proposed project and render a decision to either issue, issue with special condition, or deny a permit for the project. As a cooperating agency the USACE intends to use this EIS process and document for evaluating compliance with its responsibilities under NEPA and the CWA Section 404(b)(1) Guidelines. As part of its review, the USACE is required by the CWA to independently consider and express the activity's underlying purpose and need from Midas Gold's (the applicant) and the public's perspectives (33 CFR 325).

From the USACE's perspective, the basic purpose for the SGP is to extract gold, silver, and antimony from ore. Under the CWA Section 404(b)(1) Guidelines (40 CFR 230), the USACE uses the basic project purpose to determine if a project is "water dependent." A project is water dependent if it must be located in, or be close to, a WOTUS, including wetlands, to fulfill its basic purpose. The USACE has determined that mining gold, silver, and antimony ore is not a water-dependent activity. The overall project purpose for the SGP is to mine gold, silver, and antimony from ore deposits associated with Midas Gold's mining claims and rights in Valley County, Idaho. This overall project purpose will be used for evaluating practicable alternatives under the 404(b)(1) guidelines. **Appendix B** contains a draft Framework document prepared by Midas Gold to outline how the 404(b)(1) Guidelines for alternatives analysis for avoidance and minimization of impacts to WOTUS may be completed. The 404(b)(1) analysis will be completed by the USACE following the receipt of public comments on both this Draft EIS and Midas Gold's application for a Department of the Army permit for the SGP.

1.5 FEDERAL DECISION FRAMEWORK

This NEPA process is intended to inform the federal decisions required for Midas Gold to proceed with the SGP. The leading federal decisions applicable to the SGP are to be made by the Forest Service and USACE and are further explained in Sections 1.5.1 and 1.5.2 below. In Section 1.5.3, **Table 1.5-1** provides a list of the federal permits that are likely to be required for Midas Gold to implement the SGP. Midas Gold also must apply for and receive other state and local permits and approvals. Table 6.1 in Midas Gold's plan of operations provides a list of additional permits, approvals, and consultations (Midas Gold 2016).

1.5.1 Forest Service Decisions

Forest Service decisions pertaining to the SGP will be made by the Payette Forest Supervisor and the Boise Forest Supervisor. The primary decisions to be made are briefly explained below, and additional decisions identified in **Table 1.5-1**.

As described in Section 1.4.1 above, the Forest Service has adopted regulations at 36 CFR 228, subpart A, pertaining to operations conducted on NFS lands pursuant to the Mining Law. These regulations require a plan of operations for mineral prospecting, exploration, development, mining and processing operations, and associated means of access be conducted in a manner that minimizes adverse environmental impacts on NFS surface resources. As the responsible official acting on behalf of the Forest Service, the Payette Forest Supervisor will determine whether to approve the Midas Gold's plan of operations as proposed or as modified by all, or portions of, the other action alternatives considered in detail in the Final EIS, including associated mitigation. In making this decision, the Payette Forest Supervisor has discretion to determine whether changes in the proposed plan of operations will be required prior to approval in order to meet the requirements of 36 CFR 228 subpart A, and other laws and regulations applicable to operations on NFS lands.

In addition, the Payette Forest Supervisor will determine whether to amend portions of the Payette Forest Plan, and the Boise Forest Supervisor will determine whether to amend portions of the Boise Forest Plan, with respect to the SGP. Some plan of operations components described would be located within Management Area 13 - Big Creek/Stibnite of the Payette National Forest, and within Management Areas 17 - North Fork Payette River, 19 - Warm Lake, 20 - Upper Johnson Creek, and 21 - Lower Johnson Creek of the Boise National Forest. The Payette Forest Plan and the Boise Forest Plan provide applicable direction through forest-wide and management area-specific standards and guidelines. As detailed in **Appendix A**, in order for the SGP to be consistent with these forest plans, up to 5 standards in the Payette Forest Plan and 9 standards in the Boise Forest Plan could require a one-time, project-specific amendment. The number of forest plan standards or guidelines to be amended could be fewer depending on the selected alternative and mitigations required.

Consideration of these project-specific amendments, including applicable requirements of the 2012 Planning Rule (36 CFR 219), is contained in **Appendix A**. Updated notification on these forest plan amendments and opportunities for public participation will be combined with the public notification and participation processes for the SGP EIS and decision.

A small part of the SGP underlain by the Meadow Creek Lookout Road (Forest Road 51290) occurs on the Salmon-Challis National Forest. This road in this area is administered by the Payette National Forest but land and resource management is subject to the Challis Forest Plan. This area has no management area designation in the Challis Forest Plan; therefore, potentially applicable Land and Resource Management Plan management requirements are limited to Forest-wide standards and guides.

1.5.2 USACE Decisions

The USACE regulates the discharge of dredged and/or fill material into WOTUS, including wetlands, pursuant to Section 404 of the CWA. The proposed SGP would discharge dredged and/or fill material into WOTUS. Accordingly, Midas Gold must obtain a Department of the Army permit (33 CFR 323). In accordance with the Section 404(b)(1) Guidelines (40 CFR 230) under the CWA, the USACE may only permit the least environmentally damaging practicable alternative, considering cost, existing technology, and logistics in light of overall project purposes. The USACE may not permit a proposed discharge of dredged and/or fill material if there is a practicable alternative to the discharge, which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

1.5.3 Federal Permits Necessary to Implement the Plan of Operations

To implement the proposed plan of operations and activities described in the EIS, Midas Gold would need to obtain (or renew) permits and licenses. **Table 1.5-1** is a list of the federal permits likely required to implement the plan of operations or any other action alternative.

Table 1.5-1 Federal Permit Authorizations That Are Likely Required

Agency	Permit or Authorization
U.S. Forest Service	<ul style="list-style-type: none"> • Approved Plan of Operations • New Special Use Permit for extension of the transmission line (Payette National Forest) • Revised Special Use Permit for the upgrade of Line 328 (Boise National Forest) • Timber Sale Permit(s) and Contract(s)
USACE Regulatory Division	<ul style="list-style-type: none"> • Department of the Army authorization pursuant to CWA Section 404
U.S. Environmental Protection Agency	<ul style="list-style-type: none"> • Stormwater General National Pollutant Discharge Elimination System Permit(s) (construction or multi-sector)¹ • CWA Section 404 Permit Review
U.S. Fish and Wildlife Service	<ul style="list-style-type: none"> • Incidental Take Permit pursuant to Section 7 of the Endangered Species Act
U.S. Department of Transportation	<ul style="list-style-type: none"> • Hazardous Materials Transportation Permit
National Oceanic and Atmospheric Administration National Marine Fisheries Service	<ul style="list-style-type: none"> • Incidental Take Permit pursuant to Section 7 of the Endangered Species Act

Agency	Permit or Authorization
Mine Safety and Health Administration	<ul style="list-style-type: none"> • Issue a mine identification number • Legal Identity Report • Approval of Ground Control Plan
Federal Communications Commission	<ul style="list-style-type: none"> • Radio Authorizations
Treasury Department (Bureau of Alcohol, Tobacco, Firearms and Explosives)	<ul style="list-style-type: none"> • Permit for Transporting, Storing and Using Explosives

Table Source: Midas Gold 2016

Table Notes:

1 After July 1, 2021, U.S. Environmental Protection Agency will no longer be the National Pollutant Discharge Elimination System permitting authority for stormwater discharges in Idaho, with the exception of discharges on Indian country lands. National Pollutant Discharge Elimination System permits for stormwater discharges issued on or after July 1, 2021, will be State of Idaho actions.

1.6 TRIBAL PARTICIPATION

The government-to-government relationship between federal agencies and federally-recognized tribes is a special relationship based on Tribal Sovereignty. The Forest Service is conducting government-to-government consultation regarding the SGP with the following federally-recognized tribes: the Nez Perce Tribe; Shoshone-Bannock Tribes; and the Shoshone-Paiute Tribes. This consultation process was initiated with the tribes through a notification letter from the Forest Service offering opportunities to participate in formal government-to-government consultation, to participate in the NEPA process as a cooperating agency, or to routinely receive information about the proposed SGP. Details of the consultation, which will continue throughout the NEPA process, are included in Chapter 5, Section 5.1.2 Tribal Consultation and Government-to-Government Consultation.

1.7 SCOPING AND PUBLIC ENGAGEMENT

The Forest Service published a NOI to prepare an EIS for the SGP in the Federal Register on June 5, 2017. The NOI initiated a 45-day scoping period which ended on July 20, 2017. During this time period, the Forest Service conducted five public meetings, including meetings in Cascade, McCall, Yellow Pine, and two in Boise, Idaho.

A legal notice was published in The Idaho Statesman, Boise, Idaho (the newspaper of record), and The McCall Star News, McCall, Idaho on June 1 and June 8, 2017, respectively. Part of the SGP area description was incorrect in the legal notices. The SGP area is located 3 miles west of the Frank Church-River of No Return Wilderness, not 3 miles east as the notice misstated. Corrections were published on June 8, 2017 as legal notices in The Idaho Statesman and The McCall Star News.

The Payette National Forest received a total of 543 submissions during public scoping. Submitted comments and a Scoping and Issues Summary Report are available at <https://www.fs.usda.gov/project/?project=50516>. Additional details regarding public involvement and public scoping are provided in Chapter 5, Section 5.2, Public Involvement Summary. Additional documentation that describes development of this Draft EIS, the analysis of environmental effects, public involvement, and other relevant materials are located at the Payette National Forest Supervisor's Office, 500 North Mission Street, McCall, Idaho.

1.8 ISSUES

The Council of Environmental Quality's NEPA regulations at 40 CFR 1501.1(d) provide that the NEPA process should be used to identify at an early stage the significant environmental issues deserving of detailed study in an EIS. These regulations also provide that insignificant issues should be deemphasized, thereby narrowing the scope of the EIS. The identified significant issues are then used to inform federal agency decisions and public notice and comment by both guiding the development of action alternatives to the proposal, and by serving as the focus of the detailed comparative analysis of environmental impacts among the proposal, action alternatives, and the no action alternative in the EIS (36 CFR 220.5(e); 40 CFR 1501.7(a)).

The Forest Service, in coordination with the cooperating agencies, and informed by the NEPA scoping process, tribal consultation, and public comment, has identified eight significant issues. The order of the significant issues is based on their order of occurrence in Chapters 3 and 4. For each issue, indicators also have been identified in Chapter 4 to describe, compare, and contrast the effects of the proposal, the action alternatives, and the no action alternative.

1. Surface Water and Groundwater – Construction and operation of mine infrastructure may impact water quality and quantity.
2. Sensitive Plant Species – Construction and operation of mine infrastructure may impact habitat for sensitive plant species.
3. Wetlands and Riparian Areas – Construction and operation of mine infrastructure may affect quantity of wetlands (e.g., acres), impact ecological function, and fragment wetland habitat.
4. Federally-listed fish species – Construction and operation of mine infrastructure may impact habitat for steelhead, salmon, and bull trout.
5. Traffic – Construction, operation, and reclamation may affect traffic volumes, types of vehicles, and patterns of use.
6. Public and Tribal Access – Construction and operation of mine infrastructure may impact public access to NFS lands, travel routes, and access to reserved Tribal rights.
7. Visual Quality – Construction and operation of mine infrastructure may impact scenic integrity and quality and may result in change of the Forest Plan(s) Visual Quality Objectives.
8. Idaho Inventoried Roadless Areas (IRAs) – Construction and operation of mine infrastructure in IRAs may affect biophysical and social values of IRAs.

The Forest Service and the cooperating agencies also have analyzed in this Draft EIS additional resources and resource-use related issues that, while not identified as “significant,” remain relevant physical, biological, and social impact considerations for discussion, analysis, and possible mitigation as addressed in Chapters 3 and 4. Impact “indicators” for these issues also are identified in Chapter 4.

1.9 RELATED NEPA ANALYSES

Council of Environmental Quality’s NEPA regulations direct agencies to reduce excessive paperwork and eliminate repetitive discussion of issues by tiering to existing NEPA documents to focus on actual issues ripe for decision (40 CFR 1502.20.21). This Draft EIS tiers from and incorporates by reference the Final EIS and Record of Decision for the 2003 Payette Forest Plan, and the Final EIS and Record of Decision for the 2010 Boise Forest Plan.