

**U.S. Forest Service Draft Record of Decision
Authorization of Off-Lease Activities
Smoky Canyon Mine, Panels F & G Lease and
Mine Plan Modification Project**



December 2014

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Draft Record of Decision

Authorization of Off-lease Activities

Smoky Canyon Mine Panels F & G

Lease and Mine Plan Modification Project

JOINT LEAD AGENCY: U.S. Department of Agriculture
Caribou-Targhee National Forest
1405 Hollipark Drive
Idaho Falls, Idaho 83401
(208) 524-7500

LEAD AGENCY: U.S. Department of the Interior
Bureau of Land Management
Idaho Falls District
Pocatello Field Office
4350 Cliffs Drive
Pocatello, Idaho 83204
(208) 478-6340

COOPERATING AGENCY: Idaho Department of Environmental Quality

Abstract

J. R. Simplot proposed lease and mine modifications to the current Panels F and G mining and reclamation plan at the Smoky Canyon Mine in southeast Idaho. The Proposed Action included construction and operation of an ore conveyor system at Panel F; lease modification and expansion of the East overburden disposal area; expansion of the South overburden disposal area; replacing the currently approved geologic store and release cover with a geo-synthetic clay laminate liner; and construction of associated stormwater control measures. Two Action Alternatives to the Proposed Action were analyzed in the Final Environmental Impact Statement issued in December 2014. Alternative 1 was the same as the Proposed Action; however, a mixed cover would be used to cover overburden in Panel G. Under Alternative 2, the Agency Preferred Alternative, the proposed lease modification area and expanded East overburden disposal area disturbance would be smaller than under the Proposed Action or Alternative 1 and a mixed cover would be used to cover overburden in Panel G. Under the No Action Alternative, the 2008 Record of Decisions, based upon the 2007 Final Environmental Impact Statement, would continue to govern development of the phosphate resources of Panels F and G, and the currently approved mine and reclamation plan would be executed.

This Draft Record of Decision documents the U.S. Forest Service decision to issue Special Use Authorizations for 7.5 acres of off-lease disturbance on National Forest System lands for the ore conveyor system (6.8 acres) and stormwater control features (0.7 acres).

Table of Contents

Part 1	Introduction.....	1
1.1	About This Document	1
1.2	Purpose and Need for Action	2
1.3	Setting	2
1.3.1	Location, History, and Overview of Existing Operation	2
1.3.2	Previous Environmental Analyses.....	4
1.4	Simplot’s Proposed Lease and Mine Plan Modifications	4
1.4.1	Ore Conveyor System.....	4
1.4.2	Modification of Lease IDI-01441 for Expansion of the East ODA.....	4
1.4.3	Proposed Increase in South ODA Disturbance Area	5
1.4.4	Proposed Geo-synthetic Clay Laminate Liner (GCLL).....	9
1.4.5	On- and Off-lease Stormwater Control Features	9
Part 2	Decision	9
2.1	Introduction and Decision Authority.....	9
2.1.1	Decision Authority in NFS Inventoried Roadless Areas.....	10
2.1.2	BLM Consultation with the USFS	12
2.2	The USFS Decision	13
2.2.1	Construction, Operation, and Maintenance (Including Associated Access Roads) of the Off-Lease Portion of the Ore Conveyor System.....	13
2.2.2	Construction, Operation, and Maintenance of Off-Lease Stormwater Control Features Associated with Panel G Lease Modification and ODA Expansions.....	13
Part 3	Principle Reasons for the Decision	13
3.1	Principle Reason - Ore Conveyor System.....	14
3.2	Principle Reason - Panel G Off-Lease Stormwater Control Features	14
Part 4	Environmental Protection Measures, Monitoring, and Mitigation	15
Part 5	Public Involvement and Issues	17
5.1	Public Involvement Process.....	17
5.2	Consultation with Other Agencies and Tribes.....	18
5.3	Summary of Public Comment	19
5.3.1	Air Quality	19
5.3.2	Noise	19
5.3.3	Water Resources	19
5.3.4	Inventoried Roadless Areas	19
5.3.5	Visual Resources.....	19

5.3.6	Native American Concerns	19
5.3.7	Social and Economic Resources.....	19
Part 6	Alternatives Considered.....	20
6.1	Alternatives Considered in Detail in the FEIS.....	20
6.1.1	Alternative 1.....	20
6.1.2	Alternative 2.....	20
6.2	Environmentally Preferred Alternative	21
6.3	Alternatives Eliminated from Detailed Analysis	21
Part 7	Legally Required Findings	24
7.1	Caribou National Forest Revised Forest Plan	24
7.2	National Environmental Policy Act	24
7.3	National Forest Management Act.....	24
7.4	Endangered Species Act.....	24
7.5	National Historic Preservation Act.....	25
7.6	Migratory Birds.....	25
7.7	Invasive Species	25
7.8	Floodplains, Wetlands, and Clean Water Act	25
7.9	Clean Air Act.....	25
7.10	Idaho Stream Channel Protection Act	26
7.11	Environmental Justice.....	26
7.12	Consultation and Coordination with Native American Tribal Governments	26
7.13	Resource Conservation and Recovery Act.....	26
7.14	Safe Drinking Water Act.....	27
7.15	Idaho Ground Water Quality Rule	27
7.16	Idaho Roadless Rule.....	27
7.17	Multiple-Use Sustained Yield Act	27
7.18	Mineral Leasing Act	27
7.19	Special Uses.....	27
7.20	Best Available Science	28
Part 8	Administrative Review	28
8.1	Pre-decisional Administrative Review	28
8.1.1	Objection Opportunity	28
8.1.2	Implementation	29
8.2	Further Information and Contact Person	29

List of Figures

Figure 1	General Project Area.....	3
Figure 2	Panel F Mine Plan Modification and Proposed Ore Conveyor Route.....	6
Figure 3	Detail – Southern End of Conveyor Route.....	7
Figure 4	Panel G Lease Modification and Developments.....	8
Figure 5	Geo-synthetic Clay Laminate Liner (GCLL) Cross Section.....	11
Figure 6	Alternative 1: Proposed Action with Mixed Cover.....	21
Figure 7	Alternative 2: Reduced East ODA with Mixed Cover.....	23

Acronyms and Abbreviations

ACRONYM / ABBREVIATION	DEFINITION
AMP	Adaptive Management Plan
BA	biological assessment
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
Corps	U.S. Army Corps of Engineers
CNF	Caribou National Forest
CTNF	Caribou-Targhee National Forest
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
DOI	Department of the Interior
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EO	executive order
FEIS	Final Environmental Impact Statement
GCLL	geo-synthetic clay laminate liner
IDEQ	Idaho Department of Environmental Quality
IRAs	inventoried roadless areas
kV	kilovolt
M&RP	mine and reclamation plan
MOU	memorandum of understanding
MPRA	Meade Peak Roadless Area
MUSYA	Multiple-Use Sustained-Yield Act

ACRONYM / ABBREVIATION	DEFINITION
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFS	National Forest System
NOI	Notice of Intent
NOA	Notice of Availability
ODA	overburden disposal area
ROD	Record of Decision
ROM	run-of-mine
SDWA	Safe Drinking Water Act
SCRA	Sage Creek Roadless Area
SHPO	State Historic Preservation Office
SUA	Special Use Authorization
USC	United States Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service

This page intentionally left blank.

Preface

Authority to issue phosphate leases and approve mine and reclamation plans for mining operations within lease boundaries lies with the U.S. Department of the Interior, Bureau of Land Management (BLM), under the Mineral Leasing Act of 1920. The Secretary of the Interior has no authority to authorize the use of National Forest System (NFS) lands outside of the lease boundaries (“off lease”) for activities related to phosphate mining. Therefore, the use of NFS lands for off-lease activities necessary to conduct phosphate mining operations, such as the construction of off-lease portions of the ore conveyor system and stormwater features, must be authorized by the responsible U. S. Forest Service (USFS) official; in this case, the Caribou-Targhee National Forest (CTNF) Supervisor.

For leasable minerals such as phosphate, the BLM administers leases for subsurface mineral rights on federal land. Prior to authorizing the use of NFS lands off lease and approving a mining and reclamation plan for on-lease operations, the USFS and BLM must analyze the potential effects of the activities each agency will authorize in accordance with the National Environmental Policy Act. In this case, the proposed Smoky Canyon Mine Panels F and G lease and mine plan modification and associated off-lease activities (the Project), proposed by J.R. Simplot Company (Simplot) were analyzed in a Final Environmental Impact Statement (FEIS) (BLM and USFS 2014). The 2014 FEIS tiers to the 2007 FEIS (BLM and USFS 2007) developed for the original mine and reclamation plan for Panels F and G and uses as much information as possible from that document as applicable to Project.

I am the responsible official to decide whether or not to issue Special Use Authorizations (SUAs) to permit mining-related activities outside of lease boundaries on NFS lands, and determine the terms and conditions of any authorizations issued under regulations codified at 36 Code of Federal Regulations 251.54 et seq. As the responsible official for the CTNF, this Draft Record of Decision (ROD) indicates my intention to issue SUAs to Simplot to permit the following off-lease activities:

- Construction, operation, and maintenance (including associated access roads) of the off-lease portion of the ore conveyor system (6.8 acres) and
- Construction, operation, and maintenance of off-lease stormwater control features (0.7 acres).

Because of separate agency authorities, the USFS and BLM each prepare a separate ROD for their respective decision. The decision of each agency is developed in close coordination with the other because off-lease and on-lease operations are interconnected. However, because the BLM has not yet issued a ROD for the portion of the Project within their jurisdiction, this Draft ROD presumes the BLM will select an Action Alternative as opposed to the No Action Alternative. Should the BLM select the No Action Alternative or decide on a course of action that alters the proposed off-lease developments on NFS lands, the Final USFS ROD will be revised accordingly.

Opportunities to object to this Draft ROD within the 45-day objection period are described in Section 8.1.1 of this ROD. This Draft USFS ROD is being made available to people and entities on the Project mailing list, as well as the general public via the internet. Questions can be directed to Diane Wheeler, Project Lead, at (208) 557-5839 or dkwheeler@fs.fed.us.

Sincerely,

Garth Smelser

Forest Supervisor, Caribou-Targhee National Forest

This page intentionally left blank.

PART 1 INTRODUCTION

1.1 *About This Document*

The Bureau of Land Management (BLM) and U.S. Forest Service (USFS), in cooperation with the Idaho Department of Environmental Quality (IDEQ), prepared an Environmental Impact Statement (EIS) to review the potential environmental impacts of the Panels F and G Lease and Mine Plan Modification Project at the Smoky Canyon Mine (the Project). In addition to the Proposed Action, two Action Alternatives were considered along with the No Action Alternative. Public scoping for this Project began in 2013 and resulted in the identification of the issues described in Section 5.3 of this Draft Record of Decision (ROD). The Final Environmental Impact Statement (FEIS) (BLM and USFS 2014) was released to the public in December 2014. This Draft USFS ROD is specific to the off-lease portions of the Project and presumes the BLM will select an Action Alternative, most likely the Agency Preferred Alternative identified in the FEIS, as opposed to the No Action Alternative.

This ROD is organized into eight parts:

- *Part 1 – Introduction* provides background information about the Smoky Canyon Mine and describes the original proposal from J.R. Simplot Company (Simplot), who owns the leases for Panels F and G.
- *Part 2 – Decision* explains the authorities of the USFS to regulate use and occupancy of National Forest System (NFS) lands for off-lease operations associated with development of the Smoky Canyon Mine.
- *Part 3 – Principle Reasons for the Decision* describes the principal reasons for the USFS decisions.
- *Part 4 – Environmental Protection Measures, Monitoring, and Mitigation* specifies the requirements necessary for implementation of off-lease activities.
- *Part 5 – Public Involvement and Issues* describes the public involvement process, a summary of public comments, a description of government and tribal consultation, and a summary of the issues.
- *Part 6 – Alternatives Considered* briefly summarizes the two Action Alternatives that were considered in detail, the environmentally preferred alternative, and alternatives that were eliminated from detailed analysis.
- *Part 7 – Legally Required Findings* lists the laws and regulations that were considered during the decision-making process.
- *Part 8 –Administrative Review* provides the legal requirements for objecting to this decision under 36 Code of Federal Regulations (CFR) 218, Subparts A and B.

1.2 Purpose and Need for Action

The purpose of the proposed federal actions for the BLM and the USFS is to evaluate and respond to Simplot's proposed lease and mine plan modifications for Panels F and G at the Smoky Canyon Mine. The lease modification would enlarge the existing Panel G lease (IDI-01441) to accommodate expansion of the East overburden disposal area (ODA), without which Simplot would be unable to maximize ore recovery in Panel G. The ore conveyance system would allow for more economic and efficient transport of ore from Panels F and G to the existing mill for beneficiation.

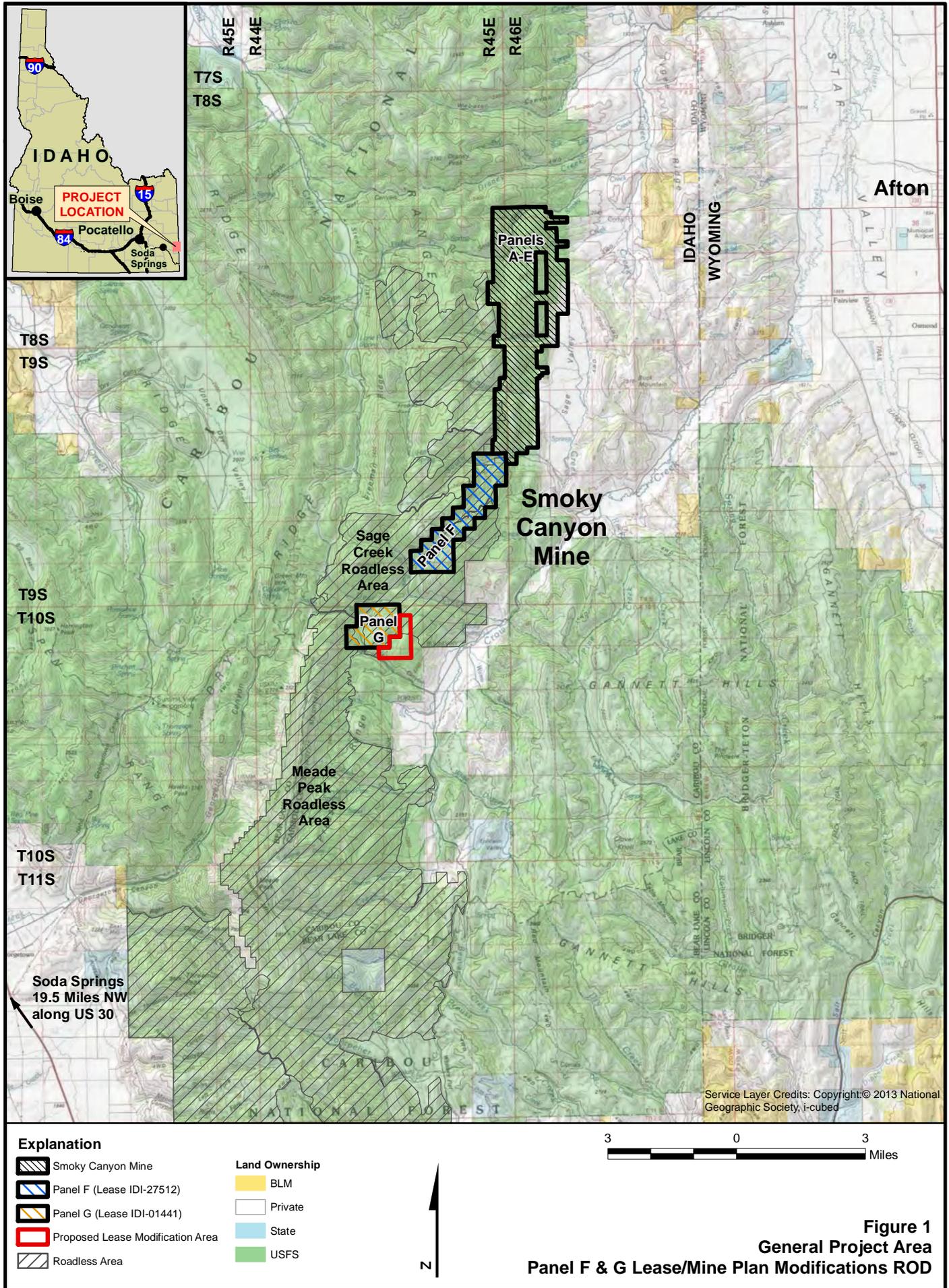
The need for the proposed federal actions for the BLM and the USFS is to evaluate Simplot's proposal pursuant to applicable laws and regulations. The BLM is required to evaluate mining proposals and issue decisions related to the phosphate leases, as directed by the Mineral Leasing Act of 1920. This includes ensuring economically viable development of the phosphate resources, in accordance with federal law and regulations governing federal leases, including the requirement for ultimate maximum recovery (43 CFR 3594.1), and allowing the lessee to exercise its contractual right to develop the lease. Such is the case for consideration of whether to enlarge lease IDI-01441. USFS authorization is required for operations related to the Project located outside of the phosphate lease boundaries on NFS lands, such as portions of the ore conveyor and stormwater control features associated with the proposed geo-synthetic clay laminate liner (GCLL). The USFS must determine whether and how to authorize these operations. Since the on-lease operations would occur on NFS lands, the USFS is a joint lead agency in the analysis of potential effects to those lands, and the BLM has consulted with the USFS in completing the effects analysis for on-lease operations.

1.3 Setting

1.3.1 Location, History, and Overview of Existing Operation

Simplot currently operates the Smoky Canyon Mine, located in Caribou County, Idaho. It is located approximately 10 air miles west of Afton, Wyoming (**Figure 1**). Simplot has been involved in phosphate mining in Southeastern Idaho since 1945 and began extracting phosphate ore from deposits located on federal land at its Smoky Canyon Mine in 1984.

The operation has included mining with standard open pit techniques in six mine panels (Panels A-F; mining of Panel G is authorized but has not yet commenced) and then concentrating the phosphate content of the ore in an onsite mill. The concentrate is pumped through a buried pipeline to Simplot's existing fertilizer manufacturing plant (Don Plant) in Pocatello, Idaho. Tailings from the Smoky Canyon milling operation are disposed in two on-site permitted tailings disposal ponds located on private land owned by Simplot. Other existing facilities at the mine include an access road, office/shop complex, mill, ore stockpiles, open pits, backfilled pits, external overburden disposal sites, power lines, and ancillary facilities such as sediment control structures, storage yards, equipment fueling areas, and parking areas.



Explanation

- Smoky Canyon Mine
- Panel F (Lease IDI-27512)
- Panel G (Lease IDI-01441)
- Proposed Lease Modification Area
- Roadless Area

Land Ownership

- BLM
- Private
- State
- USFS



Figure 1
General Project Area
Panel F & G Lease/Mine Plan Modifications ROD

1.3.2 Previous Environmental Analyses

There have been a number of environmental reviews conducted under the National Environmental Policy Act (NEPA) for the Smoky Canyon Mine.

The first EIS for the mine was prepared in 1981 by the U.S. Geological Survey, then in charge of administering phosphate mining in conjunction with the USFS. This initial EIS was followed by numerous NEPA documents examining the environmental impacts of various components and expansions of the mine. Ultimately, mining of Panels A through E was authorized.

Leasing, lease modifications, and exploration activities in Panels F and G (also known as the Manning Creek and Deer Creek lease areas) were analyzed between 1994 and 2005 through several environmental assessment and EIS documents. Decisions based on these NEPA documents authorized the current leases and associated past exploration activities on these properties.

Mining in Panels F and G was authorized by the 2008 RODs (BLM 2008 and USFS 2008a) issued upon the completion of the 2007 FEIS (BLM and USFS 2007), which thoroughly evaluated potential effects to resources such as threatened, endangered, and sensitive species; water resources; inventoried roadless areas (IRAs); Native American concerns and Treaty Rights Resources; as well as effects from selenium.

1.4 Simplot's Proposed Lease and Mine Plan Modifications

The Proposed Action submitted by Simplot (2013) consists of five distinct components, as described in the following subsections.

1.4.1 Ore Conveyor System

Under the Proposed Action, the approved mine and reclamation plan (M&RP) for Panels F and G would be modified to allow for construction and use of an ore conveyance system. The proposed ore conveyor system would be approximately 4.5 miles long, originating at the northern end of the Panel F lease (IDI-27512) and terminating at the mill (**Figure 2**), and would follow the existing haul road to the extent possible. Ore from Panels F and G would be transported via haul truck to the proposed Panel F stockpile. The ore would then be fed into the crusher and carried on a collection conveyor, where it would be loaded onto the proposed conveyor at a transfer tower. This operation would be situated within the disturbed and mined out northern portion of Panel F (**Figure 3**). The ore conveyor system would include a 25 kilovolt (kV) distribution power line secured to the conveyor structure to supply power for control and communications. The entire length of the conveyor would be covered with a hood designed to protect the conveyor and cable tray. The conveyor would be supported on ground modules or elevated frames (referred to as support bents), and portions would be constructed in underground culverts or elevated to create crossings for mine traffic and wildlife.

The conveyor system would replace the use of haul trucks to deliver ore from Panels F and G to the mill. The approved west haul road between Panel F and Panel G, currently under construction, would be used to haul ore mined from Panel G to the conveyor at Panel F for transport to the mill. Approximately 6.8 acres of disturbance associated with off-lease portions of the conveyor system would be authorized through a USFS Special Use Authorization (SUA).

1.4.2 Modification of Lease IDI-01441 for Expansion of the East ODA

The BLM's leasing regulations at 43 CFR 3403.36 state, "Generally a quarter-quarter section, a lot or a protraction block in the smallest subdivision for which you may apply [for a lease]. The lands must be in reasonably compact form." In following that direction, Simplot proposed to

enlarge lease IDI-01441 by 280 acres (**Figure 4**); the disturbance currently proposed within that area is 131 acres for the East ODA and eight acres for stormwater control features, for a total of 139 acres. The current lease boundary for Panel G is closely limited to the ore body and not large enough to allow for both maximum ore recovery and for ODAs sufficient to accommodate all the overburden. (It should be noted that approximately 70 acres of disturbance within the proposed 280-acre lease modification are currently authorized under a USFS SUA for a topsoil stockpile and access road as per the 2008 USFS ROD.)

The proposed modification to the lease would occur within Township 10 South, Range 45 East, Boise Meridian, Idaho, and specifically:

SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 3

W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 3

SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 3

N $\frac{1}{2}$ NW $\frac{1}{4}$ Section 10

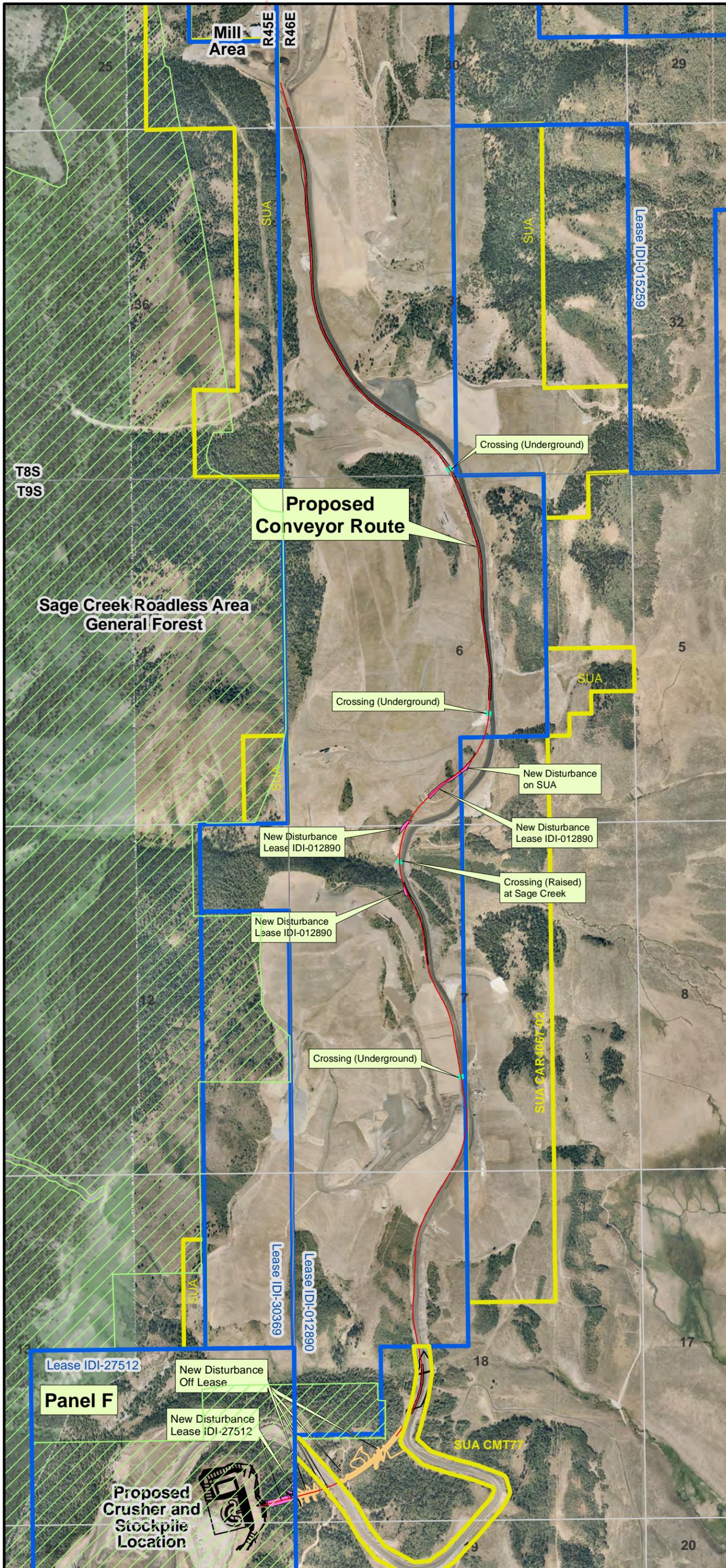
NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10

With modification of lease IDI-01441, the East ODA would be expanded by 131 acres (**Figure 4**). This would result in a larger seleniferous footprint (i.e., a term used to describe the area of overburden that contains selenium-bearing materials) from what was analyzed by the 2007 FEIS. In addition, the portion of the area within the proposed lease modification area previously authorized for the topsoil stockpile and access road (Section 2.4.2.3 of the FEIS) would eventually become part of the seleniferous footprint. Approximately 75 acres of the proposed new disturbance would be within the Sage Creek Roadless Area (SCRA) and the General Forest, Rangeland, and Grassland theme under the Idaho Roadless Rule.

1.4.3 Proposed Increase in South ODA Disturbance Area

The 2008 BLM ROD approved 96 acres of on-lease disturbance on the southwest side of Panel G, referred to as the South ODA. Approximately 22 acres of that total were for Dinwoody Formation¹ material borrow areas, and 74 acres were for storing non-seleniferous chert overburden removed prior to mining of Panel G and intended for use in final reclamation. Because the ROD approved the South ODA for chert only and not run-of-mine (ROM) as originally proposed by Simplot in 2003, Simplot had to re-evaluate the mining sequence for Panel G to maximize backfill and minimize the size of the East ODA. Simplot determined mining Panel G from south to north would meet these objectives; however, this change would require an additional 20 acres of temporary chert storage in the South ODA (**Figure 4**). This proposed expansion would occur entirely within the current lease boundary and result in a total of 116 acres of disturbance for the South ODA, of which 19.4 acres would be within the Meade Peak Roadless Area (MPRA) and the General Forest, Rangeland, and Grassland theme.

¹ The Dinwoody Formation is a stratigraphic unit in the overburden of the mine panels that consists of interbedded clay, shale, and siltstone.



Explanation

- Proposed Conveyor Route
- New Disturbance
- New Disturbance (New SUA Required)
- JR Simplot Lease
- Existing Special Use Authorization (SUA)
- Roadless Area



Figure 2
Panel F Mine Plan Modification and
Proposed Ore Conveyor Route
Panel F & G Lease/Mine Plan
Modifications ROD

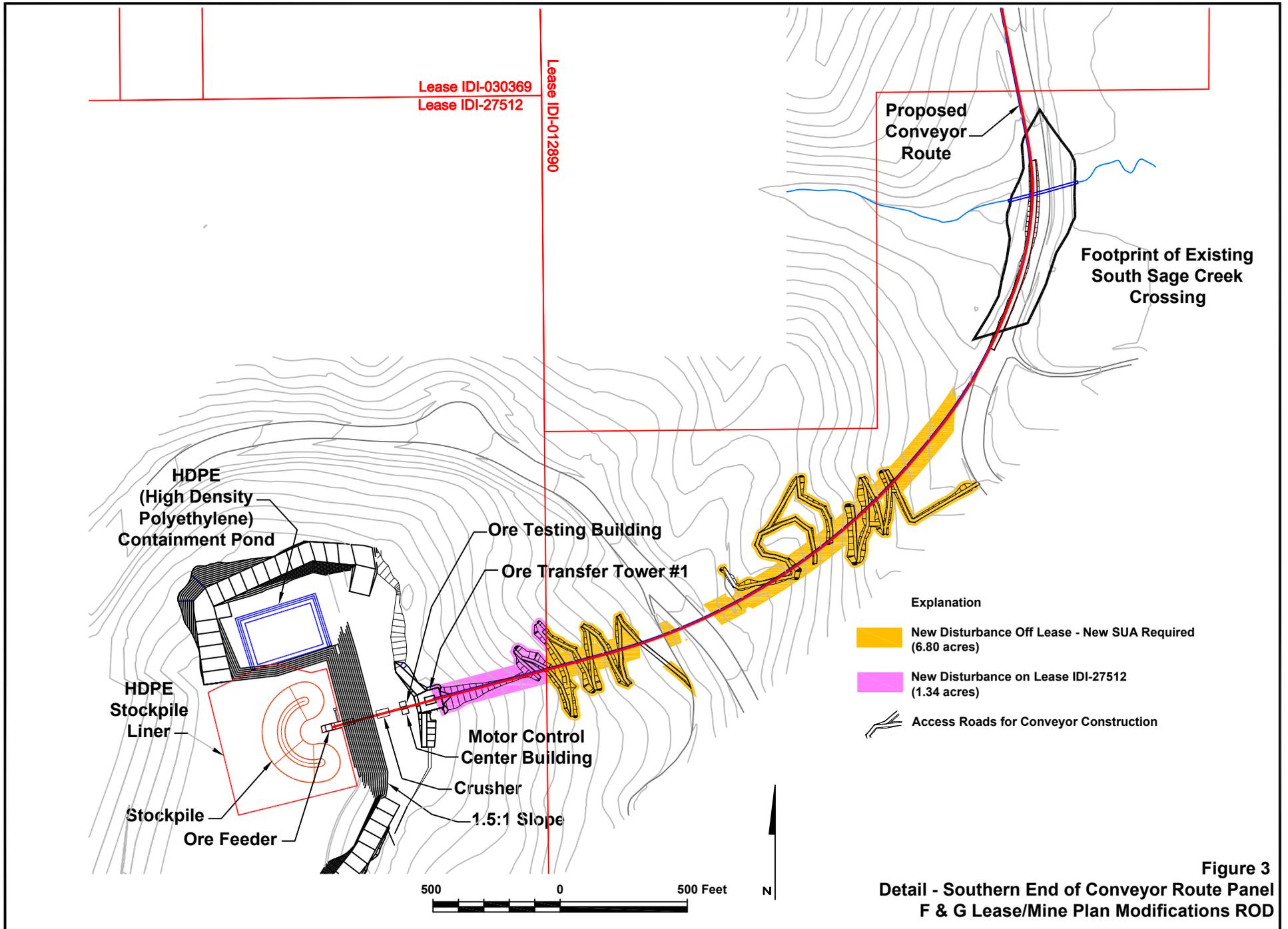
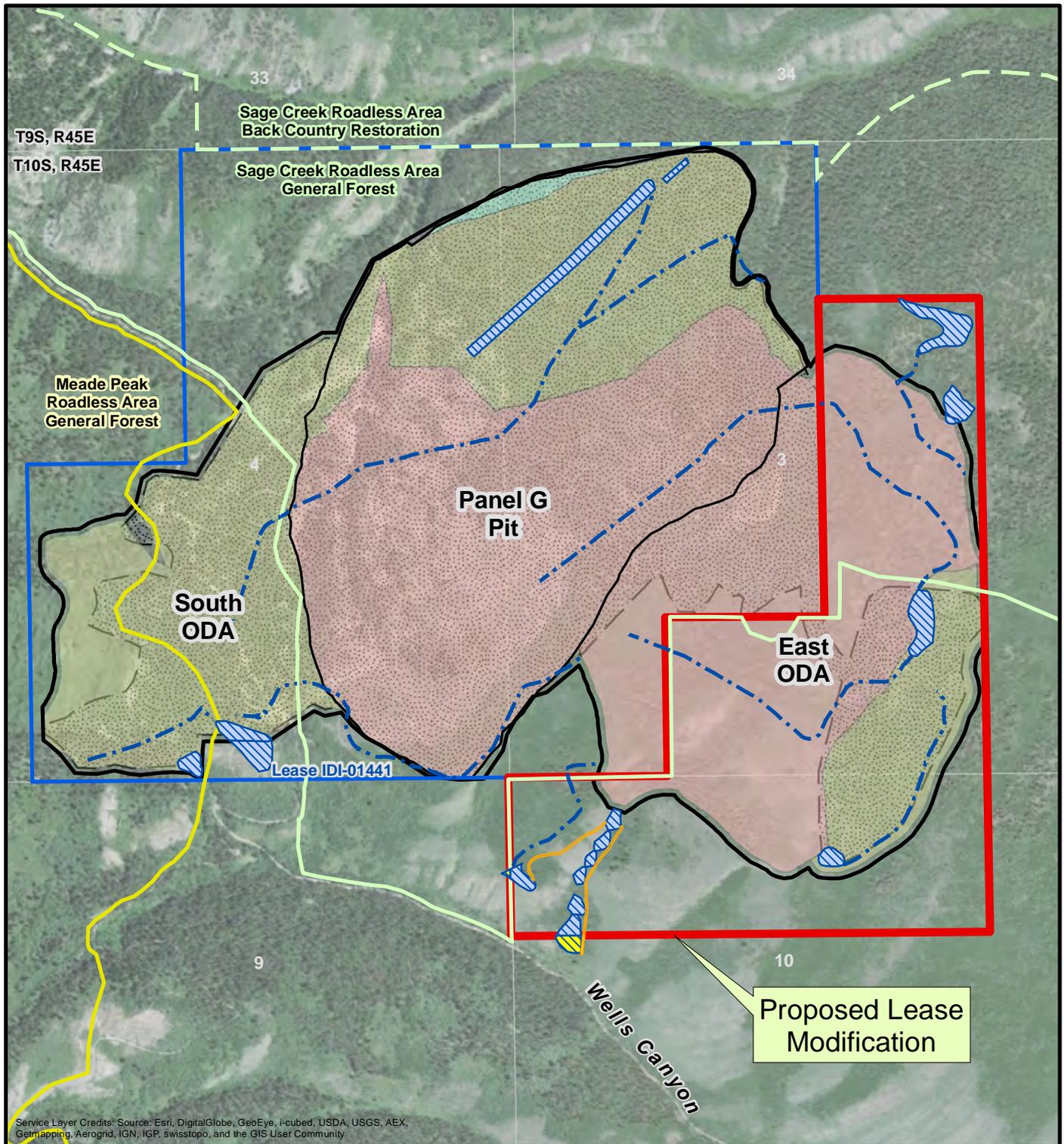


Figure 3
Detail - Southern End of Conveyor Route Panel
F & G Lease/Mine Plan Modifications ROD



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGR, swisstopo, and the GIS User Community

Explanation

- | | |
|--|--|
| Panel G Disturbance Boundary | Sage Creek Roadless Area |
| Panel G Pit Boundary | Meade Peak Roadless Area |
| Proposed Lease Modification Area (280 acres) | Proposed Stormwater Control Ditch (On Lease) |
| JR Simplot Lease | Proposed Stormwater Control Pond (On Lease) |
| Approved Panel G Disturbance | Proposed Stormwater Control Road Disturbance (On Lease) |
| GCLL (392.3 acres) | Proposed Stormwater Control Pond (Off Lease) |
| Topsoil Cover (266.6 acres) | Proposed Stormwater Control Road Disturbance (Off Lease) |
| Unreclaimed Highwall | |



Figure 4
Panel G Lease Modification and Developments
Panel F & G Lease/Mine Plan Modifications ROD

1.4.4 Proposed Geo-synthetic Clay Laminate Liner (GCLL)

Under the Proposed Action, all seleniferous overburden in Panel G would be covered with a GCLL in an effort to further reduce or eliminate water quality impacts due to increasing the size of the currently approved mine (**Figure 4**). A total of 392 acres in Panel G would be covered with a GCLL, which includes the in-pit backfill and the East ODA.

The GCLL cover would be constructed on a maximum of 3 horizontal to 1 vertical slope, with slope lengths up to 2,075 feet. The cover would be constructed in phases dependent on the mining operations.

The GCLL is an industrial manufactured cover that consists of a layer of bentonite clay inserted between two geotextile layers. A geotextile is a woven sheet material that provides enhanced resistance to penetration damage. The top geotextile layer is laminated with a 20-millimeter textured high density polyethylene geomembrane layer, which would provide an additional layer of protection against desiccation and ion exchange degradation.

The GCLL would be overlain with a 6-inch drainage layer of crushed chert or limestone. The drainage layer would be covered with a filter fabric that would separate the drainage layer from the overlying soils to prevent blinding or clogging of the drainage aggregate layer. A 12-inch layer of Dinwoody Formation material would be placed on top of the filter fabric and drainage layer. The final or uppermost portion of the GCLL cover would be a 12-inch layer of topsoil, resulting in a total cover thickness above the GCLL of at least 2.5 feet (**Figure 5**) (Geosyntec 2013).

1.4.5 On- and Off-lease Stormwater Control Features

Once the bentonite component of the installed GCLL becomes hydrated from natural moisture, the bentonite granules swell, effectively closing voids. This provides the GCLL with low permeability and inhibits percolation of water. Consequently, precipitation would be expected to flow through the drainage layer, collect in drainage pipes, and outlet at surface control features thereby increasing the surface stormwater volume. The Proposed Action includes an estimated 10.3 acres of stormwater control features to address the drainage layer volume and surface runoff. Of that area, 9.6 acres would be on-lease or within the proposed lease modification area and 0.7 acres would be off lease. The overall stormwater control features would include 13 ponds (three of them fully contained within ODA boundaries), two infiltration basins on the reclaimed limestone within the pit boundary, ditches, and associated road disturbance (**Figure 4**). The stormwater features were conservatively designed and sized to manage 100 percent of the runoff from the GCLL that would result from a 100-year, 24-hour storm event (Geosyntec 2013). Lateral cover drains (described in Section 2.4.4 of the FEIS) would discharge to the surface water drainage system. Simplot would be required to submit a final stormwater design plan, with features more fully designed and engineered, for agency review and approval. Approximately 0.7 acres of off-lease stormwater control features would be authorized through a USFS SUA.

PART 2 DECISION

2.1 Introduction and Decision Authority

In responding to Simplot's proposed Panels F and G Lease and Mine Plan Modification Project, the BLM and the USFS make separate but coordinated decisions. Decisions are based on the

FEIS and applicable laws, regulations, and policies, with consideration also to rights granted to Simplot in their federal phosphate leases. Authority to issue phosphate leases and approve M&RPs lies with the U.S. Department of the Interior (DOI) under the Mineral Leasing Act of 1920. The Secretary of the Interior does not have authority to authorize the use of NFS lands outside of the lease boundaries for activities related to phosphate mining. Therefore, off-lease activities necessary to conduct phosphate mining operations are authorized by the responsible USFS official; in this case, the Caribou-Targhee National Forest (CTNF) Supervisor.

SUA applications received by the USFS must be reviewed using screening criteria published at 36 CFR 251.54. Applications for uses of NFS lands that do not meet the requirements described there must be rejected, and those accepted for consideration must undergo environmental analysis in accordance with NEPA. In this case, a FEIS (BLM and USFS 2014) was used to analyze both the on-lease and off-lease proposed lease and mine plan modifications for Panels F and G.

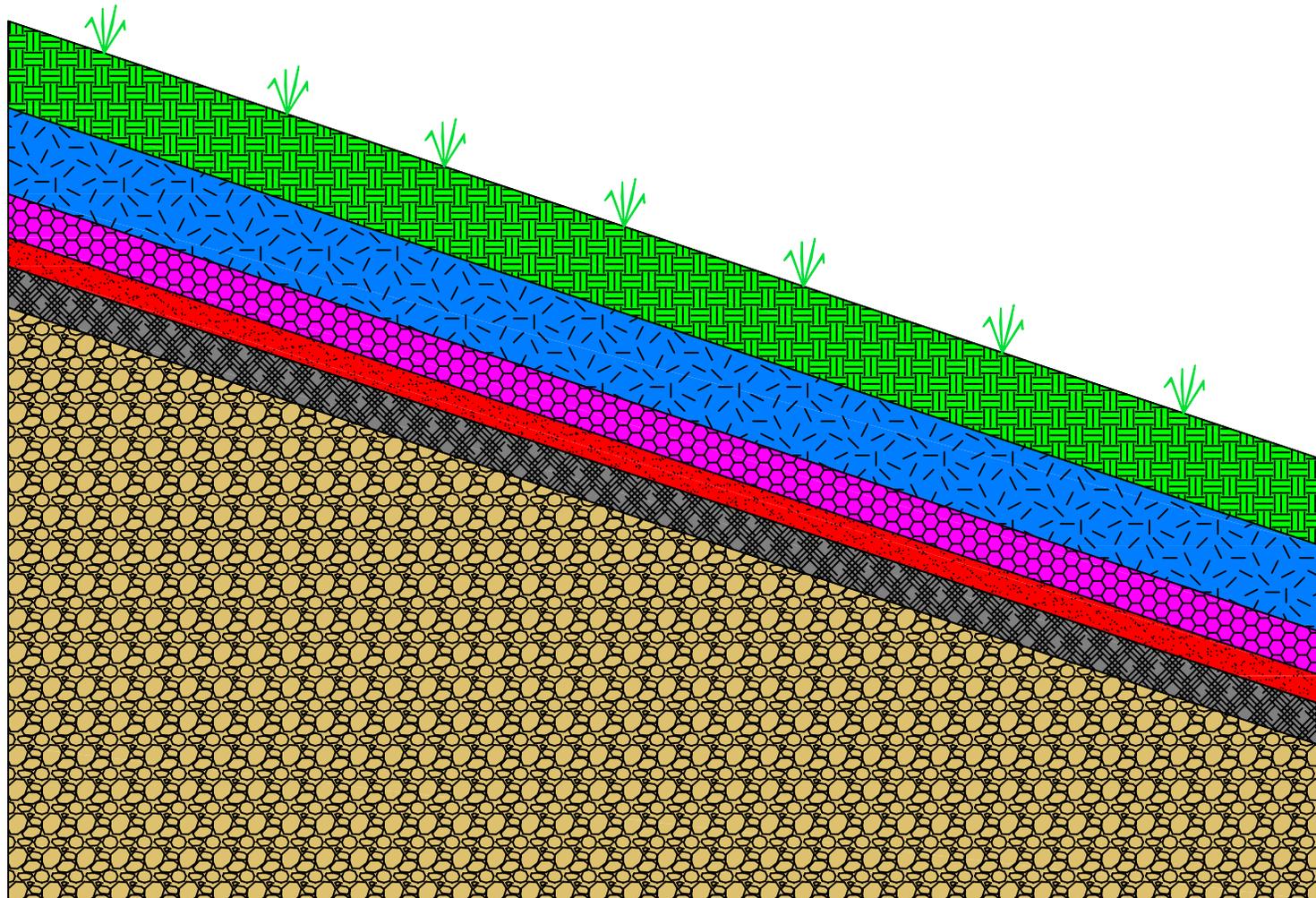
Because of their separate authorities, each lead agency must prepare a separate ROD. The decision of each agency is developed in close coordination, for neither decision can be implemented independently. The BLM's decision cannot be implemented without a decision by the USFS to authorize off-lease activities related to the Project. Similarly, the USFS decision would not be necessary if the lessee (Simplot) had not proposed development of the mineral leases. The USFS and BLM decisions are connected actions as defined in the Council on Environmental Quality regulations at 40 CFR 1508.25(a)(1)(ii).

In this Draft ROD, the USFS is making decisions regarding the issuance of SUAs for off-lease disturbances/structures located within the CTNF and associated with the Project (e.g., stormwater control features and portions of the ore conveyor system). The BLM will issue a separate ROD to approve, approve with modifications, or deny the proposed lease and mine plan modifications. The BLM's decision will consider any recommendations the USFS may have regarding surface management and mitigation of leased NFS lands. This USFS Draft ROD presumes the BLM will select an Action Alternative as opposed to the No Action Alternative. The off-lease actions subject to this Draft ROD do not differ between the Proposed Action and Action Alternatives.

I am the USFS official responsible for the decision whether to issue SUAs to permit mining-related activities outside of lease boundaries on NFS lands under regulations codified at 36 CFR 251 Subpart B.

2.1.1 Decision Authority in NFS Inventoried Roadless Areas

The SCRA and MPRA are present in the Project Area. Idaho Governor James Risch presented a petition for rulemaking under Section 553(e) of the Administrative Procedures Act on behalf of the State of Idaho on November 29 and 30, 2006. That proposal, the Idaho Roadless Rule, designated a system of lands titled Idaho Roadless Areas and established five management classifications for individual roadless areas: Wild Land Recreation; Special Areas of Historic and Tribal Significance; Primitive; Backcountry/Restoration; and General Forest, Rangeland, and Grassland.



- | | | | |
|---|--|---|--|
|  | 12" Topsoil |  | Geo-synthetic Clay Laminate Liner (GCLL) |
|  | 12" Dinwoody |  | Prepared Subgrade Surface (depth would vary) |
|  | 6" Drainage Layer (Crushed Chert or Limestone) |  | Run of Mine Overburden |

Figure 5
 Geo-synthetic Clay Laminate Liner (GCLL) Cross Section
 Panel F & G Lease/Mine Plan Modifications ROD

In August 2008, the Roadless Area Conservation, National Forest Lands in Idaho FEIS (USFS 2008b) was issued, and the Final Rule and Record of Decision on Idaho Roadless Area Conservation were published in the Federal Register on October 16, 2008. The October 16, 2008 Final Idaho Roadless Rule has been upheld by both the Federal District Court for Idaho and the Ninth Circuit Court of Appeals (2013), and it is currently the law of the land in Idaho.

Parts of my decision will authorize uses of NFS lands in IRAs. I, as the Forest Supervisor, am the responsible official for making the determination of whether or not lease and mine plan modifications in Panels F and G and located in the SCRA and MPRA may be authorized under exceptions to the prohibitions in the 2008 Idaho Roadless Rule at 36 CFR 294 Subpart C. The Idaho Roadless Rule applies to off-lease portions of the Project within IRAs and federal phosphate lease IDI-27512 (Panel F) because that lease was modified January 1, 2009 (after promulgation of the rule). The rule does not apply to the existing lease IDI-01441 (Panel G) because that lease was issued September 28, 1950 (36 CFR 294.25[a]). However, if the BLM approves the proposed modification to IDI-01441, the effective date of the lease would change and the Idaho Roadless Rule would apply.

The Idaho Roadless Rule prohibits a USFS responsible official from approving road construction and reconstruction and the cutting, sale, or removal of timber in IRAs except when the responsible official determines certain circumstances apply (36 CFR 294.23-25). The IRAs within the Project Area are under the General Forest, Rangeland, and Grassland theme (USFS 2008b, Figure 3-20). The following provision at 36 CFR 294.25(e) of the Idaho Roadless Rule allows activities associated with phosphate deposits in this particular theme:

For mineral leases, contracts, permits, and other associated activities authorized after October 16, 2008, the Forest Service will not recommend, authorize, or consent to road construction or reconstruction associated with mineral leases in Idaho Roadless Areas designated as General Forest, Rangeland, and Grassland theme; except such road construction or reconstruction may be authorized by the responsible official in association with phosphate deposits as described in Figure 3–20 in section 3.15 Minerals and Energy in the Roadless Area Conservation; National Forest System Lands in Idaho Final Environmental Impact Statement. Surface use or occupancy without road construction or reconstruction is permissible for all mineral leasing unless prohibited in the land management plan components.

The USFS presented the Project to the Idaho Roadless Commission on March 13, 2013 and November 6, 2014, and no issues were identified. The Project is determined to be in compliance with the Idaho Roadless Rule, regardless of the BLM decision to modify lease IDI-01441.

2.1.2 BLM Consultation with the USFS

The BLM is delegated authority by the Secretary of the Interior to administer phosphate leases under the Mineral Leasing Act of 1920. As such, the BLM is authorized to issue leases and to approve and administer on-lease operations for exploration, development, production, and transportation of phosphate on NFS lands. When administering phosphate development on NFS lands, the BLM and the USFS act as joint lead agencies in preparing the environmental analysis under NEPA to assess the potential effects of authorizing both on-lease and off-lease phosphate mining operation proposals under an interagency agreement signed in 1987. Under that agreement and regulations at 43 CFR 3520.2, the USFS, as the surface management agency, is consulted by the BLM regarding the protection of National Forest resource values and the continued post mine multiple use of lands mined for phosphate on lease. However, the

BLM is solely responsible for authorizing on-lease operations, and the USFS is separately responsible to authorize off-lease operations.

I have provided recommendations and advice to the BLM during the BLM's evaluation of the on-lease portions of the Project for the protection, reclamation, and restoration of NFS lands that would be directly and indirectly affected by the Project. My recommendations were based on the USFS mission to manage NFS lands for multiple use and the sustained yield of product and services. The Caribou National Forest Revised Forest Plan (Forest Plan) (USFS 2003) and other appropriate laws and regulations require that mining does not unnecessarily interfere with other land uses and restores long-term post mine use of NFS lands affected by phosphate mining.

As a component of the BLM's decision, the BLM will decide whether or not to issue modification to the lease associated with mining Panel G. By approving the lease and mine plan modifications the BLM will authorize on-lease mine operations for the recovery of phosphate ore and require mitigation necessary to protect leased lands from undue and unnecessary degradation from mining activities. In making its decision, the BLM will incorporate recommendations from the USFS.

2.2 The USFS Decision

As the responsible official for the CTNF, I have decided to issue SUAs for the following off-lease activities on NFS lands related to the proposed Panels F and G lease and mine plan modifications at the Smoky Canyon Mine.

2.2.1 Construction, Operation, and Maintenance (Including Associated Access Roads) of the Off-Lease Portion of the Ore Conveyor System

As analyzed in the FEIS (BLM and USFS 2014), the Panel F ore conveyor system portion of the Project would be the same under the Proposed Action and the Action Alternatives. The conveyor would transport ore between Panel F and the existing mill. A SUA is required for approximately 6.8 acres of off-lease disturbance associated with the ore conveyor (**Figure 2**).

In the event the conveyor is approved by the BLM but not constructed by Simplot due to economic considerations, an SUA will be required for installation of the 25 kV power line, which would be constructed on poles rather than attached to the conveyor. The power line would be located within the route analyzed for the conveyor. Should the power line be constructed in place of the conveyor, the power poles will range in height from 35 to 60 feet and have an average estimated span of 250 feet.

2.2.2 Construction, Operation, and Maintenance of Off-Lease Stormwater Control Features Associated with Panel G Lease Modification and ODA Expansions

As analyzed in the FEIS (BLM and USFS 2014), the disturbance for the off-lease stormwater control features related to the Panel G modifications would be the same under the Proposed Action and the Action Alternatives. A SUA is required for the 0.7 acres of new disturbance off-lease on NFS lands (**Figure 4**).

PART 3 PRINCIPLE REASONS FOR THE DECISION

My decision is based on review of the Project record, which shows a thorough examination of relevant and best available scientific information, consideration of responsible opposing views,

and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

I have taken into consideration the degree to which the environmental protection measures, monitoring, and mitigation measures will reasonably reduce potential impacts to the environment, and the predicted effects of the Action Alternatives on groundwater and surface water quality in the area in light of State and federal requirements. All practicable means to avoid or reduce environmental harm, while providing sufficient access to allow mining operations to proceed within the lease areas under the M&RP to be approved by the BLM, have been adopted. I have ensured that an evaluation of the environmental impacts in the FEIS was accomplished through coordination with other ongoing and planned studies by state and federal agencies in cooperation with Simplot.

The requirements of the 2003 Forest Plan were considered as I formulated my decision. My decision is consistent with the Forest Plan, which recognizes phosphate mining as an appropriate use of NFS lands in this portion of the CNF.

The Panel F portion of the Project where a new SUA is required for the off-lease section of the ore conveyor system is within Management Prescription 5.2 – CNF Vegetation Management (Figure 3.11-3 of the FEIS; BLM and USFS 2014). The Panel G portion of the Project where a new SUA is required for off-lease stormwater control features is within Management Prescription 6.2 – Rangeland Vegetation Management (Figure 3.11-4 of the FEIS; BLM and USFS 2014).

This section presents the principal reasons supporting the USFS decision to authorize the off-lease portions of the ore conveyor and stormwater control features. Rationale for approval of the on-lease portions of the Project is described in the separate ROD prepared by the BLM.

3.1 Principle Reason - Ore Conveyor System

Implementation of the ore conveyor system will result in approximately 6.8 acres of new off-lease disturbance to be permitted under a SUA. Less than 0.1 acres of this total are within the SCRA (General Forest, Rangeland, and Grassland theme). New disturbance associated with the conveyor will be immediately adjacent to existing mining disturbance and constitutes a minor amount compared to the total disturbance associated with the Smoky Canyon Mine. Implementation of the ore conveyor system will increase the efficiency of the mine and reduce haul truck ore transportation to the mill. Reduction of haul truck trips will reduce total emissions by a net amount of approximately 4,400 tons (considering emissions generated by the conveyor system). With regard to impacts from noise generated by the conveyor, no noticeable noise effects are anticipated at current residences along the Crow Creek Road. With regard to visual resources, the conveyor would be visible from one of the observation points designated in the 2007 FEIS; however, any disturbance would be viewed in the context of, and may not be distinguishable from, other surrounding mining activity.

3.2 Principle Reason - Panel G Off-Lease Stormwater Control Features

Implementation of the Panel G portion of the Project requires effective stormwater control features to assure protection of water quality. The off-lease disturbance for stormwater control features will be 0.7 acres to be permitted under a SUA, and will be in the immediate proximity of other mining disturbance.

PART 4 ENVIRONMENTAL PROTECTION MEASURES, MONITORING, AND MITIGATION

To the extent specific mitigation measures relating to the surface protection and reclamation aspects of the lease and mine plan modifications are not addressed in this ROD, they are contained in a letter of recommendation from the USFS to the BLM regarding their decision on this Project. All environmental protection measures, monitoring, and applicable mitigation measures required by the 2008 RODs (BLM 2008 and USFS 2008a) for the previously approved M&RP for Panels F and G will apply to the Project and include the following:

General

- Simplot will be responsible for acquiring and complying with all necessary local, state, and federal permits, and for providing documentation of those permits to the BLM and USFS as applicable.
- Simplot will continue to comply with existing conditions of approval contained in the 2008 RODs and all subsequent approvals.
- During operations, inspections will be performed by mine supervisory staff to ensure mine activities are conducted in compliance with conditions of approvals, applicable permits, and regulations. Records of these observations will be maintained at the mine and available for agency review upon request.
- Routine inspections of stormwater facilities will be conducted to verify compliance with applicable regulations and to detect any conditions requiring modification or repair. Maintenance and repair actions will be documented in mine records.
- The BLM and USFS will conduct routine inspections to determine compliance with M&RPs and SUAs.

Cultural Resources (including Paleontological Resources)

- If unanticipated cultural materials, historic sites, or vertebrate macrofossils are encountered, the USFS will be notified and operations halted in the vicinity of the discovery until inspected by a qualified USFS representative and a mitigation plan developed if determined necessary. At the discretion of the USFS, vertebrate macrofossils will be avoided for a length of time that is reasonable to allow the USFS to conduct field surveys and determine the significance of the fossils.

Air Quality

- Dust generated from Project activities will be controlled with dust suppressant water applied by water trucks. Dust suppressing chemicals such as magnesium chloride and calcium chloride may also be used as needed.

Soil

- Soil resources in the proposed disturbance areas have been described with baseline surveys. Suitable topsoil and growth medium from disturbed areas will be salvaged and stockpiled for use in reclamation. Stockpiles will be placed on stable landforms and protected from erosion by establishment of short-term vegetation cover. Reclamation of

disturbed areas that are no longer required for active mining operations will be conducted concurrent with other mining operations.

Water Resources

- Drainage and diversion ditches will be constructed to either divert run-on water around disturbance areas or to collect and route stormwater to infiltration basins or settling ponds. Sediment ponds will be designed and maintained to provide retention for runoff from a 100-year, 24-hour storm event. These ponds will be used to collect stormwater runoff and snow melt runoff exclusively; no other waste streams will be allowed to enter the ponds and/or commingle with this runoff. Simplot will also minimize the potential for dissolved constituents that may be present in this stored runoff from entering area streams by minimizing the hydraulic connection between the ponds and surface water.
- Stormwater will be managed to reduce or eliminate contact with ROM. During construction of the East ODA, material will be left at angle of repose (i.e., not sloped) in order to minimize infiltration of snowmelt and stormwater. Once the slope is reclaimed to a 3 horizontal to 1 vertical slope and the GCLL/geologic store and release cover installed, runoff and sediment control facilities will be located off the ODA to the extent feasible in order to protect the reclaimed slope from erosion and damage related to heavy equipment use.
- Stockpiled areas of snow will be controlled and placed in areas to reduce infiltration or mixing of snow or snow melt into/with external overburden to the extent practicable.
- Seleniferous overburden will be mined and disposed of in a timely manner to reduce exposure of this material to surface weathering and oxidation, the process that liberates soluble selenium compounds. Surface area of seleniferous overburden fills will be reduced by design to the extent practicable to limit the amount of water infiltration and potential release.
- Simplot will continue to monitor water quality at the Smoky Canyon Mine as per separate program requirements (e.g., IDEQ Consent Orders, National Pollution Discharge Elimination System Stormwater Permit). These ongoing programs are described in the Smoky Canyon Mine Comprehensive Environmental Monitoring Program Plan, which will be updated as needed to address monitoring requirements. Unless directed otherwise by the respective agencies, Simplot will provide monitoring data to the USFS, BLM, and IDEQ as part of the annual operations reporting. Water quality monitoring requirements for Panels F and G will include monitoring associated with off-lease stormwater control features requiring a SUA.
- The Adaptive Management Plan (AMP) (Appendix 2B in the FEIS) will be utilized to address any potential water quality management issues that may occur as a result of the Project, including those related to the off-lease disturbances. The AMP establishes specific contingencies and practices in the event that monitoring shows exceedance of numeric water quality standards for various constituents.

Vegetation

- Timber will be cruised by the USFS and then harvested from proposed disturbance areas as directed by the USFS. Simplot will purchase the timber at the market value

appraised at the time of harvest. Small brush and slash will be incorporated in the topsoil when it is salvaged.

- Reclamation earthwork will be timed to ensure that no large areas of untreated lands are exposed during the winter months. Revegetation of disturbed areas will be conducted during reclamation activities by seeding and planting with vegetation species approved by the USFS. Seeding will proceed no later than the first fall after earthwork is complete.
- Simplot will continue to monitor and prevent the spread of noxious weeds. Simplot will comply with guidelines established by the USFS including cleaning all off-road vehicles prior to entering and re-entering the Project Area and using only certified weed-free seed, mulch, straw bales, etc.

Wildlife

- To minimize the possibility of unintentional take of migratory birds, timber will be harvested incrementally with subsequent timber harvest scheduled to minimize impacts to bird species by delaying timber harvest as late in the nesting season as possible. Prior to timber removal, Simplot will perform surveys for raptor nests and other migratory birds (with emphasis on sensitive species including northern goshawk, flammulated owls, boreal owls, and great gray owls) before the onset of nesting seasons and remove or fell trees containing nests to prevent nesting. Ground clearing across the Project Area will be conducted incrementally as late in the nesting season as possible and in a manner to minimize impacts to migratory birds.

Grazing

- Simplot will be required to prevent livestock grazing on active and reclaimed mine disturbances until these areas are accepted for grazing management by the CTNF. This will be done by periodic coordination between Simplot and the grazing permittee to identify exclusion areas and to discuss additional measures that may be needed, such as fencing or bilingual signs designed to inform livestock herders of grazing restrictions.
- Simplot will collaborate annually with the grazing permittee to share mining progress plans and to discuss and resolve any potential access issues.

PART 5 PUBLIC INVOLVEMENT AND ISSUES

5.1 Public Involvement Process

The USFS and BLM conducted public involvement jointly for the analysis contained in the FEIS. Following receipt of Simplot's proposed lease and mine plan modifications, the BLM published a Notice of Intent (NOI) to prepare an EIS and to commence public scoping on June 24, 2013. Prior to initiation of formal scoping, the proposed Project was introduced to the Shoshone-Bannock Tribes and the Idaho Roadless Council on February 20 and March 4, 2013, respectively.

Legal notices and several press releases were published. Public comments received during the scoping period, which included comments received by the BLM and USFS at public meetings, were used to determine the issues and alternatives for evaluation in the environmental analysis. Public comments were submitted by agencies, groups, and interested citizens. Concerns

identified included potential effects of the Project on IRAs, water quality, wetlands, wildlife and fishery habitats, livestock grazing, soils, air quality, socioeconomics, private property values, forested areas, recreation, development of best management practices for mine operations, and 1868 Fort Bridger Treaty rights.

The Notice of Availability (NOA) for the Draft EIS (DEIS) was published in the Federal Register on May 30, 2014, and initiated the 45-day comment period on the DEIS. Agencies, organizations, and interested parties provided comments on the DEIS via mail, email, and public meetings. A total of seven comment letters were received.

The Project mailing list was originally compiled by the USFS and was composed of individuals, agencies, and organizations who had expressed interest in similar projects. The mailing list was revised as needed by adding individuals who responded to the scoping letter, legal notice, NOI, public meetings, DEIS, and unsolicited commenters. All commenters on the DEIS were added to the Project mailing list. The updated mailing list for the FEIS is located in Chapter 6 of the FEIS.

The FEIS was released in December 2014. The BLM and U.S. Environmental Protection Agency (EPA) NOAs were published in the Federal Register announcing the availability of the FEIS. The EPA's NOA started the BLM's 30-day FEIS availability period, after which the BLM decision can be issued.

5.2 Consultation with Other Agencies and Tribes

Because of its special expertise and authority under various environmental regulations for surface water and groundwater such as the Idaho Ground Water Quality Rule, the BLM invited the IDEQ to participate as a cooperating agency on the EIS. During the preparation of the groundwater and surface water related portions of the DEIS and FEIS, IDEQ participated in data analysis, document review, and in Project meetings as needed to provide overall regulatory advice and expertise.

The following state and federal agencies were consulted during preparation of the EIS:

- IDEQ
- Idaho Department of Fish and Game
- Idaho Department of Lands
- Idaho Department of Water Resources
- U.S. Army Corps of Engineers (Corps)
- EPA
- U.S. Fish and Wildlife Service (USFWS)

The following tribes were consulted:

- The Fort Hall Business Council of the Shoshone-Bannock Tribes

The BLM and USFS coordinated with the Shoshone-Bannock Tribes throughout the EIS process. BLM and USFS staff met with Tribal staff on February 20, 2013 and December 2, 2013 to provide descriptions of the Project and discuss items of concern. A third staff-to-staff meeting was held on November 18, 2014, to present the Agency Preferred Alternative for the Project. Formal government-to-government consultation with the Fort Hall Business Council of the Shoshone-Bannock Tribes was conducted on January 23, 2014 and again on December 17, 2014. Copies of both the DEIS and FEIS were provided to the Council Chairman in advance of document release to the public. Two of the public meetings were held at Fort Hall. It is

recognized that this is an ongoing process of open dialog and communication between the BLM, USFS, and the Fort Hall Business Council of the Shoshone-Bannock Tribes.

5.3 Summary of Public Comment

Comments received on the DEIS expressed support for the Project, as well as concerns about Project components and impacts including the conveyor system; surface and groundwater quality issues (i.e., selenium); financial assurances; use of the GCLL; and soils. A summary of the comments can be found in Chapter 7 of the FEIS.

None of the comments on the DEIS were specific to the off-lease portions of the Project, but several were indirectly related. For example, one concern related to the ore conveyor system was in regard to wildlife crossings, which are all located on-lease. As another example, concerns expressed about stormwater control features were related to stormwater interacting with seleniferous or ROM materials, which is not relevant to the off-lease stormwater control features.

This Draft ROD responds to concerns that pertain to the USFS authorization of off-lease operations. The BLM's separate, but coordinated ROD responds to concerns that pertain to federal phosphate leasing and lease development activities such as mining and reclamation. Issues on the Project derived from public scoping and consultation with other agencies and tribes are summarized as follows.

5.3.1 Air Quality

Commenters expressed concern about how the Project would impact overall diesel emissions from the haul road.

5.3.2 Noise

Commenters expressed concern about the noise levels associated with the Project (in the case of off-lease activities, the ore conveyor), how noise levels would be monitored, and what input neighbors would have in determining acceptable noise levels.

5.3.3 Water Resources

While commenters raised numerous issues in relation to water resources as described in Chapter 1 of the FEIS, none of those issues were specific to the off-lease portions of the ore conveyor system or off-lease stormwater control features.

5.3.4 Inventoried Roadless Areas

Commenters stated the Idaho Roadless Rule requires full analysis of the effects of this Project on the SCRA and MPRA.

5.3.5 Visual Resources

Commenters expressed concern about the visibility of the Project from an off-site location.

5.3.6 Native American Concerns

Commenters indicated that the analysis should consider whether or not the Project would affect tribal natural and/or cultural resources and address any concerns of the tribes in accordance with federal tribal trust responsibilities.

5.3.7 Social and Economic Resources

Commenters stated Smoky Canyon Mine is a major employer in the area and the surrounding communities have a vested interest in assuring the mine maintains a profitable position at the current location.

PART 6 ALTERNATIVES CONSIDERED

6.1 Alternatives Considered in Detail in the FEIS

The Proposed Action, two Action Alternatives, and the No Action Alternative were fully analyzed in the FEIS. Under both Action Alternatives, the Panel F ore conveyor system and the South ODA portions of the Project would be the same as described for the Proposed Action. Differences between the Action Alternatives and the Proposed Action include the type of cover that would be used over seleniferous overburden in the Panel G pit and East ODA and the consequent revegetation of the covered areas, the size of the lease expansion area, the size and composition of disturbance within the East ODA, and the size and location of stormwater control features.

6.1.1 Alternative 1

Under Alternative 1, the lease modification area, East ODA disturbance area, and associated stormwater control features would be the same as described for the Proposed Action; however, two cover types (i.e., a mixed cover) would be used to cover the seleniferous overburden in the Panel G pit and East ODA (**Figure 6**). The geologic store and release cover, previously approved by the 2008 RODs (BLM 2008 and USFS 2008a) and described in Section 2.6.1 of the 2007 FEIS (BLM and USFS 2007), would be used to cover the seleniferous portions of previously approved disturbance in the East ODA and in the Panel G pit. The GCLL would be used only on 143 acres of the expanded East ODA (131 acres of new disturbance and 12 acres of the previously approved ODA). Aside from the amount of acreage covered by the GCLL, all other aspects of the GCLL would be as described in Section 2.4.4 of the FEIS.

Use of a GCLL for the expanded portion of the East ODA disturbance would provide additional protection of surface water and groundwater resources. To ensure long-term integrity of the synthetic cover, areas covered by the GCLL would not be allowed to reforest, whereas the geologic store and release cover would be revegetated as described in the 2007 FEIS (Section 2.4; BLM and USFS 2007) with grasses and forbs surrounding “islands of diversity” (defined as native forbs, shrubs, and trees that would be seeded or planted in clusters where there are no concerns relative to cover integrity or potential selenium uptake). Such diverse vegetation is important to the functioning of the geologic store and release cover, and provides the benefit of a more natural appearance after reclamation. Combining the use of the GCLL with the geologic store and release cover would provide for a more diverse revegetation community while assuring water quality standards would continue to be met.

6.1.2 Alternative 2

Under Alternative 2, the lease modification area and East ODA disturbance area would be smaller than under the Proposed Action or Alternative 1 (**Figure 7**). As with Alternative 1, a mixed cover would be used over the seleniferous overburden in the Panel G pit and East ODA.

The proposed lease modification area would total 240 acres; 40 acres less than that under the Proposed Action. The East ODA would be expanded by approximately 86 acres, which does not include the 70 acres of the previously approved topsoil storage area that would be relocated into the northeastern portion of the Panel G pit. The seleniferous footprint of the East ODA would be expanded into the area previously approved for the topsoil storage. Relocation of the topsoil storage to the disturbed pit area would thus allow an overall reduction of approximately 46 acres (includes stormwater control features) in the amount of disturbance within the originally proposed lease modification area under the Proposed Action and within the SCRA.

A mixed cover would be used to cover all seleniferous overburden at Panel G. Approximately 138 acres would be covered by the GCLL and 257 acres would be covered by the previously approved geologic store and release cover. As with Alternative 1, the geologic store and release cover would be used to cover the previously approved disturbance in the East ODA and in the Panel G pit. Aside from the amount of acreages covered, all other aspects of the GCLL and the geologic store and release cover would be as previously described for Alternative 1. Under Alternative 2, the decision maker would have the option to increase the GCLL coverage to provide greater conservatism to measures designed to reduce groundwater impacts to the final decision.

Stormwater control features under Alternative 2 would be located and configured differently from the Proposed Action and Alternative 1. These features would result in approximately 9.1 acres of new disturbance, a reduction of approximately of 1.2 acres of stormwater control features as compared to the Proposed Action. Of the total, 1.6 acres would be on-lease, 6.8 acres would be in the lease modification area, and 0.7 acres would be off-lease.

Compared to the Proposed Action and Alternative 1, Alternative 2 would result in the smallest area of lease modification, the least new disturbance, the least disturbance within the SCRA, and the smallest area covered by the GCLL. As described for Alternative 1, combining the use of the GCLL with the geologic store and release cover would provide for a more diverse revegetation community, while assuring water quality standards would continue to be met.

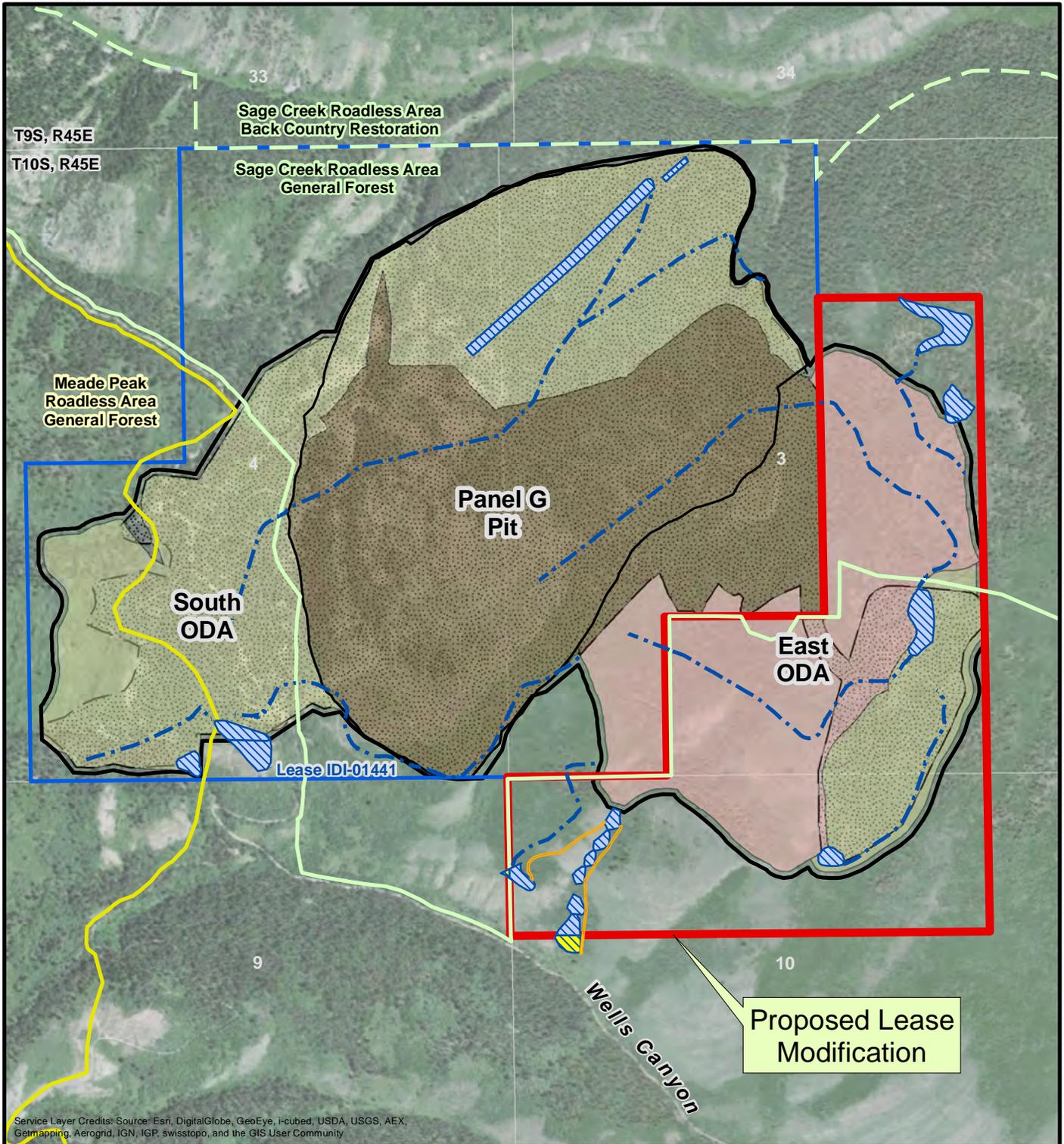
6.2 *Environmentally Preferred Alternative*

The Council on Environmental Quality regulations (40 CFR Part 1505.2) require agencies to identify the environmentally preferable alternative. The environmentally preferable alternative is the alternative that will promote the national environmental policy, as expressed in Section 101 of NEPA. It is the alternative that will cause the least damage to the biological and physical environment and best protect, preserve and enhance historic, cultural, and natural resources. Because the off-lease actions subject to this ROD do not differ between the Proposed Action and the two Action Alternatives, the environmentally preferred alternative is the Selected Action. Compared to the No Action Alternative, the Selected Action supports implementation of the ore conveyor system, expansion of ODAs, and implementation of the GCLL under any of the Action Alternatives. Implementation of the ore conveyor system will increase mine efficiency and reduce emissions as described in **Section 3.1** as compared to the No Action Alternative.

Compared to the No Action Alternative, issuing a SUA for development of off-lease stormwater control features will support expansions of the South and East ODAs. These expansions will allow for greater ore recovery than what would occur under the No Action Alternative, resulting in positive socioeconomic benefits to the local and area economy. The off-lease stormwater control features are associated with use of a GCLL, which will offer greater protection of water quality.

6.3 *Alternatives Eliminated from Detailed Analysis*

In addition to Alternatives 1 and 2 and the No Action Alternative, six other alternatives identified through the scoping process were considered in the FEIS. These alternatives and the reasons why they were eliminated from further consideration are discussed in Section 2.9 of the FEIS. Generally, the alternatives were found to be technically infeasible, economically unreasonable, would not meet the purpose and need of the Proposed Action, or the same issues raised were better addressed with one of the Action Alternatives carried forward for in-depth analysis in the EIS.



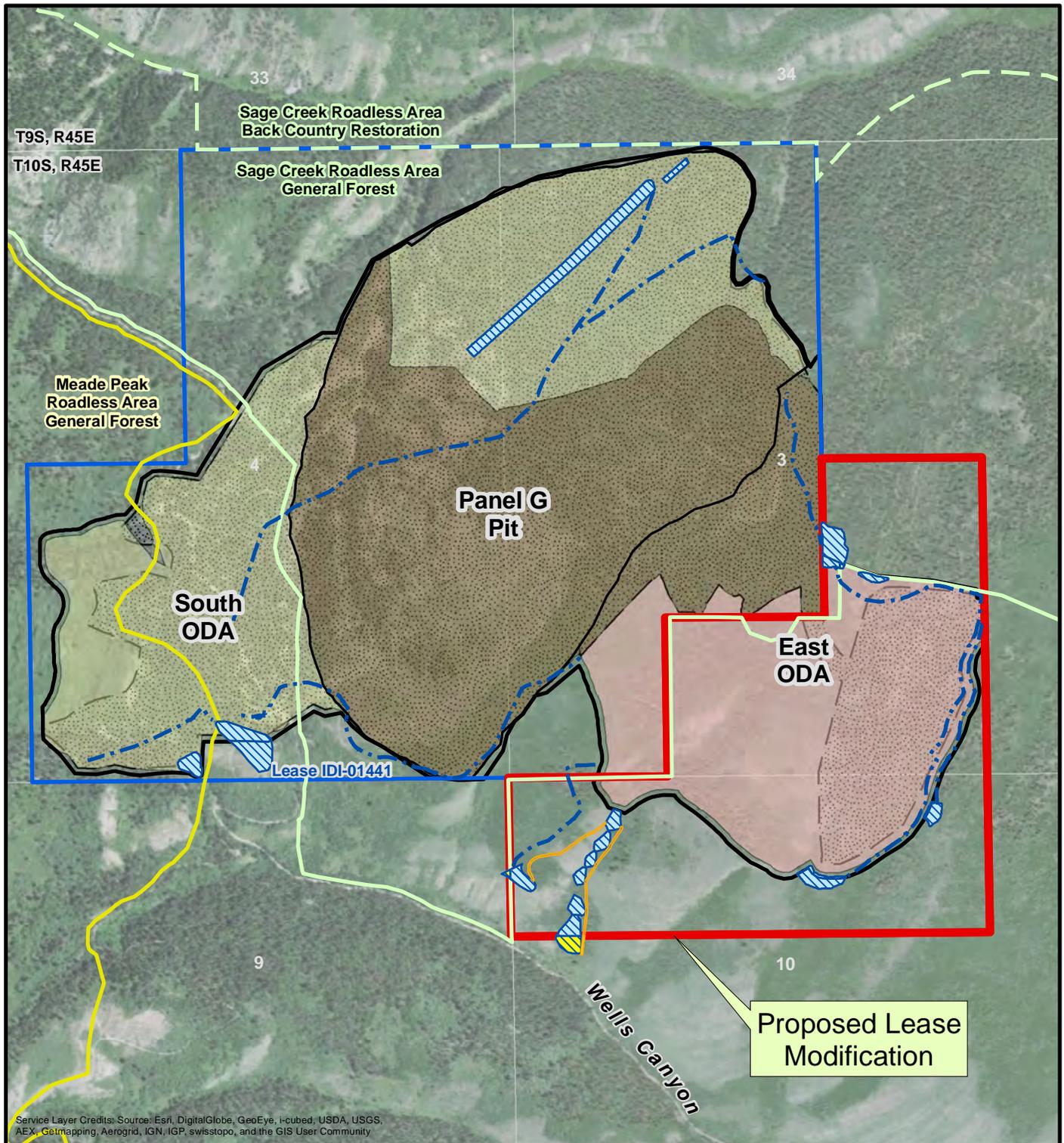
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGR, swisstopo, and the GIS User Community

Explanation

- | | |
|--|--|
| Panel G Disturbance Boundary | Sage Creek Roadless Area |
| Panel G Pit Boundary | Meade Peak Roadless Area |
| Proposed Lease Modification Area (280 acres) | Proposed Stormwater Control Ditch (On Lease) |
| JR Simplot Lease | Proposed Stormwater Control Pond (On Lease) |
| Approved Panel G Disturbance | Proposed Stormwater Control Road Disturbance (On Lease) |
| GCLL (142.5 acres) | Proposed Stormwater Control Pond (Off Lease) |
| Geologic Store and Release Cover (249.8 acres) | Proposed Stormwater Control Road Disturbance (Off Lease) |
| Topsoil Cover (270.4 acres) | |



Figure 6
Alternative 1: Proposed Action with Mixed Cover
Panel F & G Lease/Mine Plan Modifications ROD



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Explanation

- | | |
|--|--|
| Panel G Reduced Disturbance Boundary | Sage Creek Roadless Area |
| Panel G Pit Boundary | Meade Peak Roadless Area |
| Proposed Lease Modification Area (240 acres) | Proposed Stormwater Control Ditch (On Lease) |
| JR Simplot Lease | Proposed Stormwater Control Pond (On Lease) |
| Approved Panel G Disturbance | Proposed Stormwater Control Road Disturbance (On Lease) |
| GCLL (138 acres) | Proposed Stormwater Control Pond (Off Lease) |
| Geologic Store and Release Cover (257.3 acres) | Proposed Stormwater Control Road Disturbance (Off Lease) |
| Topsoil Cover (222.6 acres) | |



Figure 7
Alternative 2: Reduced East ODA with Mixed Cover
Panel F & G Lease/Mine Plan Modifications ROD

PART 7 LEGALLY REQUIRED FINDINGS

My decision is specific to the off-lease portions of the Project; however the following subsections consider the Project in its entirety.

7.1 Caribou National Forest Revised Forest Plan

The Project, including those portions off lease, is consistent with applicable Forest Plan standards, guidelines, goals, and objectives. The environmental impacts are predicted to be in compliance with established requirements of the Forest Plan.

7.2 National Environmental Policy Act

The USFS decision and the connected authorization of mining operations by the BLM have the potential to result in significant effects to the environment. Therefore, in accordance with the provisions of NEPA, the CTNF and the BLM have worked cooperatively with the IDEQ in preparation of an EIS. Public involvement and agency cooperation in the NEPA process were implemented early to ensure that agency planning and decisions reflected environmental values.

7.3 National Forest Management Act

In accordance with the National Forest Management Act (NFMA), the Forest Plan was approved to establish direction for future decisions to include “a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic and other sciences” (16 United States Code [USC] 1604). The Project incorporates all applicable Forest Plan standards and guidelines, management area prescriptions, and goals and objectives; therefore, the USFS decision is consistent with the Forest Plan and complies with NFMA.

7.4 Endangered Species Act

Under Section 7 of the Endangered Species Act, the USFS must consult with the USFWS to ensure that its actions are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species,” which the Secretary of the Interior determines to be critical (16 USC 1536). The USFS prepared a combined biological assessment (BA) and biological evaluation to identify endangered or threatened species likely to be affected by this decision. On April 8, 2014, the Project was presented at the annual meeting between the USFWS and the USFS in Pocatello, Idaho (USFWS 2014). The determination at this meeting was that re-initiation of consultation for the Project was not necessary and the previous determinations for threatened, endangered, proposed, and candidate species affected by the original Smoky Canyon Mine Panels F and G project as described in the BA (USFS 2006) and the USFWS concurrence on the BA (USFWS 2006) are still valid for the Project. Specifically, the effects determination of May Affect, Not Likely to Adversely Affect for Canada lynx (*Lynx canadensis*, as a Threatened species) is still valid because the elements of the Project would not result in effects not previously considered in the 2006 consultation process (USFWS 2014). The BA also states that the appropriate determination for the greater sage-grouse (*Centrocercus urophasianus*, as a Candidate species), if listed under the Endangered Species Act, would be May Affect, Not Likely to Adversely Affect. Those determinations are listed in Section 4.8 of the FEIS (BLM and USFS 2014). The USFS authorization therefore meets the requirements of the Endangered Species Act and no additional involvement by the USFWS is needed.

7.5 National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires federal agencies to identify historic properties, assess effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation an opportunity to comment. The State Historic Preservation Office (SHPO) administers the national historic preservation program at the State level. There are no cultural resources located along the ore conveyor system route. Two historic sites located in the Panel G portion of the Project Area are not eligible for the National Register of Historic Places and do not require further management (SHPO 2013). These findings meet the requirements of the National Historic Preservation Act.

7.6 Migratory Birds

In January 2001, President Clinton signed Executive Order (EO) 13186 requiring federal agencies (those taking actions that may negatively impact migratory birds) to develop a memorandum of understanding (MOU) with the USFWS to promote the recommendations of various migratory bird programs and conservation considerations. The USFS developed a MOU with the USFWS in 2008. The needs of migratory birds have been incorporated into the CTNF forest planning process and specific mitigation measures required in this decision.

7.7 Invasive Species

Noxious weed species, as defined in EO 13112, are those plants of foreign origin, not widely prevalent in the U.S. that can injure crops, ecosystems, interests of agriculture, or fish and wildlife resources. The State of Idaho is responsible for listing noxious weeds in Idaho. Idaho's current list, created in 2014, lists 65 species of noxious weeds. Two of these species were recorded in the Project Area, as described in Section 3.6.1.3 of the FEIS. In 1996, the CTNF adopted Integrated Pest Management guidelines to treat noxious weeds. The Forest Plan establishes standards and guidelines to be used for controlling and eliminating noxious weeds and other invasive plant species. The Project includes incorporation of the existing noxious weed program at the Smoky Canyon Mine, which follows guidelines established by the USFS, and would thus comply with Executive Order 13112.

7.8 Floodplains, Wetlands, and Clean Water Act

Because there would be no impacts to floodplains (EO 11988) or waters of the U.S., including wetlands (EO 11990), from the Project, no new certifications, permits, or decisions are required from the Corps. Simplot will update the Smoky Canyon Mine Storm Water Pollution Prevention Plan, which guides implementation of appropriate site specific activities designed to protect the quality of surface waters from stormwater discharge under the Clean Water Act (CWA). Streams not meeting beneficial uses are recommended by the states to EPA for listing as impaired under CWA, Section 303(d). The applicability of the latest 303(d) listing to the Project is discussed in the FEIS. The Project is anticipated to comply with State surface water quality regulations, the CWA, and the Idaho Ground Water Quality Rule through application of mitigation measures.

7.9 Clean Air Act

Air emissions from the Project are regulated by the IDEQ and EPA. Smoky Canyon Mine operates under an IDEQ permit issued July 6, 1983 (State of Idaho 1983), which addresses the mill boiler, fugitive dust control measures, haul truck speed limits, blasting and drilling dust suppression, and other air pollution control requirements.

In March 2013, Simplot submitted a Permit Applicability Determination along with an Air Permitting Analysis to IDEQ for the ore conveyor system. In April 2013, IDEQ issued a response

letter to Simplot indicating that the proposed conveyor system meets the permit to construct exemption requirements.

7.10 Idaho Stream Channel Protection Act

The Project meets the requirements of the Idaho Stream Channel Protection Act, which is intended to ensure protection of perennial stream channels, as no perennial stream channels will be impacted by the Project.

7.11 Environmental Justice

The Project will not have a discernible effect on minorities, Native Americans, women, or the civil rights of any U.S. citizen, nor will it have a disproportionate adverse impact on low income individuals. Minority and low income representation within the nearby communities, such as Afton and Fairview, Wyoming, or ranchers along Crow Creek Road is generally low. Exposure to disproportionately high or adverse human health or environmental impacts is not anticipated.

The Project Area represents a very small part of the lands available to the Shoshone-Bannock Tribes for exercising activities granted in Tribal Treaty Rights. The physical effects of the Project, hence the physical surface resources affected, would be localized to the Project Area. The physical occupation of the Project Area during the Project would be for a limited time and then the area would be reclaimed; therefore, the impacts to Tribal Treaty Rights would be temporary. Project design, environmental protection measures, best management practices, and mitigation measures have been designed and are required to ensure the health and safety of Tribal members that may exercise Tribal Treaty Rights by utilizing game, plants, and other materials. These project design features are intended to eliminate or reduce uptake of selenium in plants and animals and achieve compliance with applicable water quality standards. Overall, there would be no disproportionately high or adverse human health or environmental effects to the Shoshone-Bannock Tribes as a result of the Project.

7.12 Consultation and Coordination with Native American Tribal Governments

The U.S. has a unique legal relationship with Native American tribal governments as set forth in the U.S. Constitution, treaties, EOs, federal statutes, federal policy, and tribal requirements, which establish the interaction that must take place between federal and tribal governments. An important basis for this relationship is the trust responsibility of the U.S. to protect tribal sovereignty, self-determination, tribal lands, tribal assets and resources, and treaty and other federally recognized and reserved rights. Government-to-government consultation is the process of seeking, discussing, and considering views on policy, and/or, in the case of this Project, environmental and cultural resource management issues. The BLM and USFS initiated government-to-government consultation with the Fort Hall Business Council, the governing body of the Shoshone-Bannock Tribes, on January 23, 2014 and December 17, 2014. The consultation was conducted to inform the Council of the proposed Project and solicit their concerns and/or comments regarding the possible presence of traditional cultural properties or places of cultural, traditional, or religious importance to the Tribes in the proposed Project Area. Section 1.6 of the FEIS details the ongoing discussions about the Project with the Shoshone-Bannock Tribes.

7.13 Resource Conservation and Recovery Act

Hazardous waste is regulated under the federal Resource Conservation and Recovery Act regulations (40 CFR 260 et. seq.). Generators of hazardous waste must follow strict rules

regarding the generation, storage, handling, and disposal of their wastes. The Smoky Canyon Mine is considered a Conditionally Exempt Small Quantity Generator because it generates less than 100 kilograms of hazardous waste per month. The mine complies with applicable state and federal hazardous waste regulations, and the Project would not generate any new sources of hazardous waste.

7.14 Safe Drinking Water Act

Surface water downstream of the Project is not used as a drinking water source for human consumption. Modeling conducted in the preparation of the 2007 FEIS and additional impact analysis conducted for the 2014 in the FEIS for this Project indicates that groundwater quality will comply with the State drinking water standard under the Selected Action.

7.15 Idaho Ground Water Quality Rule

Existing monitoring plans for the Smoky Canyon Mine monitor the effectiveness of the mitigation needed to comply with State water quality standards. In addition, the AMP for the Project (see **Part 4**) establishes specific contingencies and adaptive management practices in the event that monitoring shows exceedance of numeric water quality standards for various constituents.

7.16 Idaho Roadless Rule

Based on my findings as shown in Section 2.1.1, I have found this Project compliant with the Idaho Roadless Rule at 36 CFR 294 Subpart C.

7.17 Multiple-Use Sustained Yield Act

The Multiple-Use Sustained-Yield Act of 1960 (MUSYA) directs the Secretary of Agriculture to administer renewable surface resources, including the products and services obtained from them, for multiple use and sustained yield. The MUSYA does not directly affect the use or administration of the mineral resources of NFS lands.

The USFS and BLM are required to consider Simplot's proposed lease and mine plan modifications relative to compliance with the Mineral Leasing Act, regulations, and land use plans. Environmental protection measures and mitigation measures analyzed in the EIS and incorporated into this decision are considered adequately protective of the environment. The USFS and BLM believe there is a place for ongoing natural resource production from federal lands in concert with multiple use management and post mining reclamation of these lands.

7.18 Mineral Leasing Act

Phosphate deposits on federal land are managed under the 1920 Mineral Leasing Act, as amended, and associated regulations at 43 CFR 3500. The BLM is the designated federal agency with authority to issue or modify federal phosphate leases and/or approve exploration and development activities. Where NFS lands are involved, the BLM consults with USFS regarding the potential effects of lease issuance and development proposals. The USFS provided recommendations and advice to the BLM during evaluation of the Project for the protection, reclamation, and restoration of NFS lands that would be directly and indirectly affected by the Project.

7.19 Special Uses

The Forest Plan allows special uses that serve the public, promote public health and safety, protect the environment, are legally mandated, and are compatible with other resources. This may include special uses for exploration and mining-related operations that lie on NFS lands

outside mineral lease boundaries. The off-lease portions of the Project meet the special uses screening criteria and considerations put forth at 36 CFR 251 Subpart B and support activities that are authorized under the Mineral Leasing Act.

7.20 Best Available Science

My conclusions are based on a review of the Project record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information, scientific uncertainty and risk. Chapter 8 of the FEIS contains a list of published scientific documents referenced in preparation of the EIS.

PART 8 ADMINISTRATIVE REVIEW

8.1 Pre-decisional Administrative Review

8.1.1 Objection Opportunity

The portion of the Project related to SUAs for off-lease activities is subject to the USFS objection process pursuant to 36 CFR 218 Subparts A and B. The USFS responsible official issuing a decision on this portion of the Project is Garth Smelser, CTNF Forest Supervisor. Objections will be accepted only from those who have previously submitted specific written comments regarding the Project either during scoping or other designated opportunities for public comment in accordance with 36 CFR 218.5(a). Issues raised in objections must be based on previously submitted, timely, and specific written comments regarding the Project unless based on new information arising after designated opportunities. Incorporation of documents by reference in the objection is permitted only as provided for at 36 CFR 218.8(b). Minimum content requirements of an objection are identified in 36 CFR 218.8(d).

Individual members of organizations must have submitted their own comments to meet the requirements of eligibility as an individual; objections received on behalf of an organization are considered as those of the organization only. If an objection is submitted on behalf of a number of individuals or organizations, each individual or organization listed must meet the eligibility requirement of having previously submitted comments on the Project (36 CFR 218.7). Names and addresses of objectors will become part of the public record.

Written objections, including any attachments, must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Reviewing Officer within 45 days following the publication date of a legal notice in the newspaper of record, which is the Idaho State Journal. The publication date in the Idaho State Journal is the exclusive means for calculating the time to file an objection to the Draft ROD. Those wishing to object should not rely upon dates or timeframe information provided by any other source.

The Reviewing Officer is the Regional Forester. Send objections to: Objection Reviewing Officer, USFS Intermountain Region, 324 25th Street, Ogden, Utah 84401; or fax to 801-625-5277; or by email to: objections-intermtn-regional-office@fs.fed.us. The office business hours for those submitting hand-delivered objections are: 8:00 AM to 4:30 PM Monday through Friday, excluding holidays. Electronic objections must be submitted in a format such as an email message, pdf, plain text (.txt), rich text format (.rtf), or Word (.doc or .docx). It is the responsibility of objectors to ensure their objection is received in a timely manner (36 CFR 218.9).

8.1.2 Implementation

If no objections are filed within the 45-day objection period, implementation of the decision may occur on, but not before, five business days from the close of the objection filing period. If objections are received on this Draft USFS ROD, the USFS must respond in writing to all objections and address all concerns and instructions identified in the objection response before signing the Final ROD and implementing the decision. When objections are filed, implementation may occur on, but not before, the fifteenth business day following the date of the last objection disposition.

8.2 Further Information and Contact Person

Diane Wheeler, Project Manager
4350 Cliffs Drive
Pocatello, Idaho 83204
Phone: (208) 557-5839
Fax: (208) 478-6376
Email: dkwheeler@fs.fed.us
Office hours: Monday through Friday, 8:00 am through 4:30 pm

References

- BLM (Bureau of Land Management) and USFS (U.S. Forest Service). 2014. Final Environmental Impact Statement for the Smoky Canyon Mine Panels F&G Lease and Mine Plan Modification Project. December 2014.
- BLM. 2008. Record of Decision. Environmental Impact Statement, Smoky Canyon Mine, Panels F and G. June 6, 2008.
- BLM and USFS. 2007. Smoky Canyon Mine, Panels F and G—Final Environmental Impact Statement.
- Geosyntec. 2013. Draft Preliminary Cover Design Report – Panel G Smoky Canyon Mine, Eastern Caribou County, Idaho. May 2013.
- SHPO (State Historic Preservation Office). 2013. Determination of Significance and Effect. January 7, 2013.
- Simplot (J.R. Simplot Company). 2013. Proposed Lease and Mine Plan Modifications for the Smoky Canyon Mine, Panels F and G.
- State of Idaho. 1983. Department of Health and Welfare, Air Pollution Permit, Smoky Canyon Mine. July 6, 1983.
- United States Court of Appeals for the Ninth Circuit. 2013. Gerald Jayne; Greater Yellowstone Coalition; the Lands Council; Natural Resources Defense Council; Sierra Club; The Wilderness Society, versus Harris Sherman, Under Secretary for Natural Resources and Environment; Tom Tidwell, Chief, U.S. Forest Service; Rowan Gould, Acting Director, U.S. Fish and Wildlife Service; Ken Salazar, Secretary, U.S. Department of the Interior; Tom Vilsack, Secretary, U.S. Department of Agriculture, in their official capacities. January 7, 2013.

- USFS. 2008a. Smoky Canyon Mine Panels F and G Authorization of Off-Lease Activities Record of Decision. June 2008.
- USFS. 2008b. Roadless Area Conservation, National Forest Lands in Idaho Final Environmental Impact Statement.
- USFS. 2006. Biological Assessment. Threatened, Endangered, Proposed, and Candidate Wildlife and Plant Species for the Preferred Alternative of the Smoky Canyon Mine Panels F and G. September 1, 2006.
- USFS. 2003. Caribou National Forest Revised Forest Plan.
- USFWS (U.S. Fish and Wildlife Service). 2014. Streamlining Section 7 Consultation - Caribou Targhee National Forest. April 8, 2014. Smoky Canyon Mine, Panels F & G Lease and Mine Plan Modification Project.
- USFWS. 2006. Biological Assessment for the Smoky Canyon Mine Panels F and G Expansion, Caribou County, Idaho Concurrence. File #1050.4025; TAILS # I-1049. (October 2, 2006).

This page intentionally left blank.