



United States
Department of
Agriculture

Forest
Service

Intermountain
Region

October 2015



RECORD OF DECISION

for the

Consent with Stipulations to the BLM Offering for Lease Greens Hollow Federal Coal Lease Tract (UTU-84102)

**Manti-La Sal National Forest
Price, Utah
Fishlake National Forest
Richfield, Utah**

Sanpete and Sevier Counties, Utah



Contents

I. Decision and Reasons for the Decision	1
A. Background.....	1
B. Decision.....	2
Applicable Laws, Regulations, and Policy	3
How the Selected Alternative Best Meets the Purpose and Need	4
How Environmental Issues Were Considered and Addressed.....	4
Factors Other Than Environmental Effects Considered In Making The Decision	8
Identification of the Environmental Documents Considered in Making the Decision	8
C. Alternatives Considered	9
Alternative 1 -No Action	9
Alternative 2 - Proposed Action	10
Alternative 3 – Selected Alternative	10
D. Public Involvement	10
E. Findings Required by Other Laws and Regulations.....	12
Environmentally Preferable Alternative	19
II. Pre-decisional Administrative Review Process (Objection Process).....	20
III. Implementation	20
Implementation Date.....	21
IV. Contact Person	21
Appendix 1: Legal Description of the Greens Hollow Federal Coal Lease Tract.....	22
Appendix 2: Project Maps	23
Appendix 3: Special Coal Lease Stipulations	28
Appendix 4: Response to Objection Instructions.....	33

List of Figures

Figure 1.1 Project location map.....	24
Figure 1.2. Leases near the Greens Hollow tract.....	25
Exhibit 1. Consent Decision Map.....	26
Exhibit 2. Springs Identified for Protection.....	27

I. Decision and Reasons for the Decision

A. Background

On December 7, 2005 USDI-Bureau of Land Management-Utah State Office (BLM) notified the USDA-Forest Service (FS) Regional Forester, that they had received a competitive coal lease-by-application (LBA), and requested FS confirmation that “the leasing of this tract is in conformance with the Forests plans.” Applicable legal and regulatory framework require BLM to have consent of the FS before offering National Forest System (NFS) lands for coal leasing (see Section 1.5.2 of the Final SEIS, and Section E of this ROD). The LBA was made for federal coal resources in the Greens Hollow Federal Coal Lease Tract from Ark Land Company on September 7, 2006. Ark Land Company later requested assignment of the Greens Hollow LBA to Canyon Fuel Company LLC. The assignment request was approved July 1, 2014 by the BLM. The lease application includes NFS lands administered by the Manti-La Sal National Forest (MLNF) and Fishlake National Forest (FLNF). The application is for federal coal resources adjacent to existing leases and underground workings of the Southern Utah Fuel Company (SUFCO) mine at Convulsion Canyon, in Sanpete and Sevier Counties, Utah.

The LBA made application to lease about 6,175 acres of NFS lands, of which about 6,096 acres are administered by the MLNF, and about 79 acres are administered by the FLNF (Appendix 1). The coal in the Greens Hollow Federal Coal Lease Tract is administered by the BLM, Price Field Office. Maps associated with this decision are found in Appendix 2 of this document. The LBA as applied for was estimated to contain about 56.6 million tons of recoverable federal coal resources.

In response to the lease application, the Final Supplemental Environmental Impact Statement for the Leasing and Underground Mining of the Greens Hollow Federal Coal Lease Tract, UTU-84102 (Final SEIS) has been prepared to analyze the potential physical, biological, social and economic effects of leasing these federal coal resources for underground coal mining. The FS and BLM jointly prepared the Final Supplemental Environmental Impact Statement (Final SEIS), and the USDI-Office of Surface Mining Reclamation and Enforcement (OSMRE) participated as a cooperating agency.

The purpose of and need for this FS action is to respond to a request from the BLM for consent to offering a federal coal lease to comply with the Mineral Leasing Act (MLA) of 1920 as amended by the Federal Coal Leasing Amendments Act (FCCLA) of 1976. To that end, the FS must assess whether or not to consent to the BLM leasing NFS lands for coal resource recovery, while being consistent with the applicable Land and Resource Management Plans (LRMP), regulations, rules and laws; and prescribe conditions for the use and the protection of non-mineral resources. The BLM is responsible for assessing if the Greens Hollow LBA facilitates continued development and Maximum Economic Recovery (MER) of federally managed coal energy resources in a safe and environmentally sound manner. In addition, the BLM is responsible for the actual offering, selling, and issuing a lease for the mineral resources; and will issue a separate document pertaining to their individual decision on the LBA. The Final SEIS documents the analysis of three alternatives to meet these needs.

This Record of Decision (ROD) documents our decisions with regard to specific NFS lands contained in the Greens Hollow Federal Coal Lease Tract.

B. Decision

After careful review of the public comments, the objections, the analysis disclosed in the Final SEIS, and the project record; we have decided to consent to the BLM offering Greens Hollow Federal Coal Lease Tract for competitive leasing with stipulations for the protection of non-mineral resources as described in Alternative 3 of the Final SEIS, Chapter 2 and summarized in Section C below. This decision gives FS consent to the BLM to lease 6,175 collective acres of NFS lands on the MLNF and the FLNF contained in the Greens Hollow Federal Coal Lease Tract for underground development and production of approximately 55.7 million tons of federal coal reserves, consistent with applicable laws and regulations, including terms and conditions for protecting non-mineral resources. A legal description of the lands for which consent to lease is being given is in Appendix 1 and are shown on the map in Appendix 2 entitled Figure 1.2 – Leases Near Greens Hollow Tract.

Specifically, on the MLNF, consent is given to lease about 6,096 acres with conditions to protect non-mineral resources. On the FLNF, consent is given to lease about 79 acres with conditions consistent with those applied on the adjacent NFS lands of the MLNF.

Conditions for the protection of non-mineral resources are listed in the Special Coal Lease Stipulations in Appendix 3 of this document. These stipulations will be included on the federal coal lease, along with the Notice for Lands under the Jurisdiction of the U.S. Department of Agriculture. The Special Coal Lease Stipulations are derived from the LRMPs; laws, rules, and regulations; and also from the environmental consequences analysis in the Final SEIS (Chapter 4). Stipulation #14 was amended to require post lease activity to comply with the most current regulation and direction for protecting greater sage-grouse and its habitat. At the time of analysis, the most current guidance was the “Interim Conservation Recommendations for Greater Sage-grouse and Greater Sage-grouse habitat, USFS Regions 1, 2 and 4” and conditions in a letter from the Regional Forester dated October 5, 2012. This included restrictions on new surface facilities in priority habitat and restrictions on acceptable noise levels. On September 22, 2015, the Greater Sage-grouse Record of Decision for Idaho and Southwest Montana, Nevada and Utah and Land Management Plan Amendments for several forests including Manti-La Sal and Fishlake National Forests was signed and in effect. The Greater Sage-grouse Record of Decision supersedes the Interim Conservation Recommendations as the most current guidelines, and thus will be followed under Stipulation #14 until more current guidance becomes available. The Greater Sage-grouse Record of Decision required the same restrictions on noise levels and surface facilities as the Interim Conservation Recommendations; therefore there was no change in the analysis and Stipulation #14 is referred to throughout the ROD and supporting documents. Of note is that by selecting Alternative 3, Stipulation 9 (see Appendix 3) will be included. However, site-specific exceptions allowed by that stipulation will be limited to the locations shown on the map (Appendix 2, Exhibit 1) and subsidence may occur in those areas.

It must also be noted that the FS decision to consent to the BLM leasing these lands is not the final federal action. Based on FS consent, the BLM will make an independent decision on whether or not to offer these lands for lease. If a lease is issued, it would result in the conveyance of rights, and grant the successful bidder the right to develop the mineral therein, and would acknowledge the rights for surface use. The consent to lease decision with stipulations includes provisions for those locations where surface use would be appropriate or not, and where NFS lands and resources needed protection from effects of underground mine subsidence. Specific surface use, if proposed in the future, would be evaluated on its own merits through the established coal mine

permitting process as described in Sections 1.5 and 4.17 of the Final SEIS. Additional review would also occur. Any future proposal for surface use would need to be framed in context of the lease stipulations brought forward in this ROD (Appendix 3), BLM Standard coal lease terms and their requirements, as well as BLM regulations that require future operations be designed according to terms and conditions on the lease, 43 CFR 3400.

In making this decision, we considered what actions were necessary as part of our consent to protect the non-mineral surface resources and uses in context of potential underground mining activity and related subsidence of the land surface. Two concerns were long term functioning of surface water in perennial streams, and maintenance of the attributes and characteristics common in roadless areas. To address these concerns, we have specifically identified surface water features that will be protected from underground mining-related subsidence (See Stipulation #9 & 17). Water resources identified for protection within the lease are tabulated in Table 1 of Appendix 3, and on Exhibit 2, Springs Identified for Protection (Appendix 2). Protection of water resources are provided for through Special Stipulations #9 and 17 in Appendix 3. Flow from these springs must be maintained for ecosystem support, for maintenance of existing wildlife and riparian habitat, and as water sources for wild and domestic ungulate grazers. Stipulation #21 requires the lessee to comply with the Roadless Area Conservation Rule (36 CFR Part 294- Special Areas, Subpart B- Protection of Inventoried Roadless Areas), which prohibits road construction and reconstruction in inventoried roadless areas. A map showing the IRAs subject to this stipulation can be seen in Figure 3.9 of the Final SEIS. Long-term preservation of surface water will also add greatly to the natural setting that is important to the maintenance of attributes and characteristics of roadless areas associated with the decision. Based on our experience with surface effects resulting from underground mining on NFS lands adjacent to the Greens Hollow lease tract, together with the analysis of potential effects within the tract as disclosed in the Final SEIS, along with the restrictions included in Stipulation #9, 17, and 21, expected impacts from potential underground coal mine subsidence on other surface resources in the tract would be minimal.

We also considered the objections issues and the responses to the objections. In certain instances the Reviewing Officer issued instructions to the forest as part of the response to an objection issue. Responding to the objections resulted in clarification of the information considered in the Draft ROD. The clarifications did not result in a change to the analysis or determinations of impacts from the proposed project. Although modifications to the text occurred, the decision stayed the same from the Draft ROD to the Final ROD. Refer to Section 2 and Appendix 4 for details on how the objections were responded to.

In the event of any contradiction or conflict between descriptions or depictions of authorized actions, clarification is to be taken from the project documents in the following order of precedence: first the description in this ROD and its appendices, second the representations on the Decision Maps (Exhibits 1 & 2 of Appendix 2), and finally the descriptions and maps in the Final SEIS.

Applicable Laws, Regulations, and Policy

The selected alternative meets requirements of applicable laws, rules and regulations as listed in Section E of this ROD and Section 1.5.2 in the Final SEIS. The selected alternative will not require an amendment to either the Manti-La Sal or Fishlake National Forests Plans, and is consistent with direction in each of them.

How the Selected Alternative Best Meets the Purpose and Need

Alternative 3 best meets the purpose and need because it conveys FS consent to BLM offering federal coal resources in an LBA for competitive lease, while being consistent with laws, rules, regulations and LRMPs. Further, by selecting Alternative 3, the FS exercises its authority and responsibility to protect non-mineral surface resources through requiring all of the special coal lease stipulations outlined in the LRMPs, and by identifying specific areas needing protection from underground mining-induced subsidence per requirement of Stipulation #9. Analysis documented in the Final SEIS shows that potential impacts to surface resources would be minor and can be mitigated (Chapter 4 and summarized in Table 2.2). More detail is provided below.

Alternative 3 helps meet the nation's need for energy resources by facilitating access to about 55.7 million tons of high quality federal coal resources. Alternative 3 provides access to over 55.7 million tons more coal resources, than the No Action Alternative (Alternative 1), though 0.9 million tons less than the Alternative 2.

The selection of this alternative also satisfies the FS minerals program objectives to maintain opportunities to access energy resources important in sustaining rural economies, and to ensure that production of energy resources are conducted in environmentally sensitive ways. It fulfills the Federal government's ongoing policy for mineral resource management to "foster and encourage private enterprise in the development of economically sound and stable domestic mining minerals and mineral reclamation industries, (and) the orderly and economic development of domestic mineral resources...."

How Environmental Issues Were Considered and Addressed

As noted in the Greens Hollow Final SEIS (Section 1.10), the public scoping effort, internal agency review of the proposal, and the results of a 2004 scoping effort for similar lands in the Muddy Creek lease proposal were used to develop issue statements for each resource.

The issue statements guided the development of the Final SEIS. The affected environment and environmental consequences sections for each resource were structured around these issue statements (Final SEIS, Chapter 3 and 4). This process focused the analysis on the key concerns and impacts associated with the Proposed Action and alternatives.

Each of the issues was specifically considered as they related to the decision – the selection of Alternative 3. Specifically, selection of Alternative 3 reduces the potential for subsidence to impact surface resources where the overburden (rock layers between the coal seam and the land surface) is shallow, in order to protect water and related resources (Chapter 4 and Table 2.2 – Final SEIS). Alternative 3 establishes conservative stream protection buffer zones along Muddy Creek, Greens Hollow, Cowboy Creek, and intermittent tributaries to Muddy Creek (see Figure 4.4 in the Final SEIS and Appendix 2, Exhibit 2). Cliff escarpments that could fail due to subsidence would also be protected. Below is a summary of how implementation of Alternative 3 impacts each of the resource issues analyzed in the Final SEIS. This material is summarized from Chapter 4 and Table 2.2 of the Final SEIS.

- **Geology, Mining, Subsidence, and Seismicity:** Protecting surface resources from mining-induced subsidence where the overburden is shallow reduces the risk of spalling, rock fall, and associated public safety issues. Including these protection zones would decrease the total

recoverable coal slightly and would slightly increase the potential lost in-place coal resource. Effects to seismicity are essentially the same for the Proposed Action Alternative and Alternative 3. Surface tensile fractures that may appear in areas where shales and swelling clays are present would likely self-heal; however, in other areas the cracks may persist. Stipulation #13 requires the “restoration of surface improvements” which would include the repair of any persistent subsidence cracks.

- **Structures and Facilities:** Protecting surface resources from mining-induced subsidence where the overburden is shallow reduces the potential for impact to surface structures and facilities including cabins and stock ponds. Permanent strains or tensile cracks may cause slight damage if left un-repaired to these items. Stipulation #13 requires the repair of damaged surface improvements.
- **Surface and Groundwater:** Protecting water resources from effects of mining-induced subsidence by establishing buffer zones eliminates potential for subsidence fractures to form that could result in water loss or displacement of water to underground mine workings. Similarly, protecting areas with less than approximately 50 feet of Price River Formation above Castlegate Sandstone eliminates other impacts to hydrologic resources and protects spring M-SP87. Loss of water in areas of thicker overburden is expected to be unlikely. Changes in stream channel incision or deposition may not be visually apparent. Functional changes in channel morphology are not likely to occur. Short term water quality may experience some increase in dissolved metals and other constituents but this would diminish over time. Long term water quality would continue to meet current requirements and standards. Stipulation #17 requires replacement of water lost in sufficient quantity and quality to maintain existing surface resources and uses.
- **Terrestrial and Aquatic Wildlife:** Selecting Alternative 3 would have less impact on wildlife than Alternative 2, as fewer acres of land could experience subsidence. No effects are expected to endangered fishes within the watershed. Temporary impacts on fish and macro-invertebrates within the lease area may occur until tension cracks fill in naturally as described in Chapter 4 of the Final SEIS or are repaired as required by Stipulation #13 and the stream flow is restored. Minimal impact to amphibians is expected. Protecting segments of Muddy Creek, Greens Hollow and Cowboy Creek that are at greatest risk from subsidence mining would protect associated wildlife habitats, including riparian habitat and wetlands, as well as potential cutthroat trout and other aquatic species.

Stipulation #14 includes requirements that post lease activity comply with the most current regulation and direction for protecting greater sage-grouse and its habitat. The most current regulations include the “Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4” and conditions in a letter from the Regional Forester, dated October 4, 2012. However, new direction as outlined in the “Utah Greater Sage-Grouse Land Use Plan Amendment” project will be required when it is finalized.

On September 22, 2015, the Greater Sage-grouse Record of Decision for Idaho and Southwest Montana, Nevada and Utah and Land Management Plan Amendments for several forests including the Manti-La Sal and Fishlake National Forests was signed. The Greater Sage-grouse Record of Decision supersedes the Interim Conservation Recommendations as the most current guidelines, and thus will be followed under Stipulation #14, until more current

guidance becomes available. The Greater Sage-grouse Record of Decision required the same restrictions on noise levels and surface facilities as the Interim Conservation Recommendations; therefore there was no change in the analysis and Stipulation #14 is referred to throughout the ROD and supporting documents.

The provisions of Stipulation #14 will protect the greater sage-grouse and their habitat. Throughout the analysis of this proposal, the U.S. Fish and Wildlife Service was contacted as required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended. No further directions or stipulations were provided by them.

- **Vegetation Resources:** Impacts to upland vegetation from selection of Alternative 3 are expected to be minor to non-existent. Protecting sensitive areas and escarpments from subsidence reduces the acres of vegetation potentially affected by subsidence by approximately 698 acres in the Greens Hollow Federal Coal Lease Tract. Three wetland areas that occur in these areas would also be protected, as well as narrow riparian corridors along Muddy Creek, Greens Hollow, and Cowboy Creek.
- **Heritage Resources:** Local Indian Tribes expressed concern that underground mining-induced subsidence might affect rock shelters. This type of mining might also affect five prehistoric lithic scatter sites in the tract. Of these sites, one is recommended as eligible for inclusion in the National Register of Historic Places (NRHP). Since Alternative 3 precludes mining near canyon rims, this eligible site and rock shelters associated with escarpments would be protected from subsidence. Heritage resources are also protected by Stipulation #1.
- **Paleontological Resources:** Paleontological resources if present that are associated with escarpments in the Greens Hollow Federal Coal Lease Tract could be directly affected by underground subsidence mining. The magnitude of this affect is dependent upon mass rock movement and is expected to be small and localized. Since Alternative 3 reduces the area mined beneath escarpments and perennial streams, the extent of potential adverse effects to fossil resources would be similarly reduced. Special coal lease Stipulation #1 also protects paleontological resources which would result in no negative impacts to them.
- **Socioeconomic Resources:** Protecting certain surface resources from subsidence under Alternative 3 slightly reduces the amount of coal that could be extracted. This amount of coal is relatively small and represents about 2 months of mining. The loss of potential revenues from royalties is approximately 1.4 percent of the estimated revenue for Alternative 2, which considered high extraction mining methods over the entire tract. FS consent facilitates access to about 55.7 million tons of high quality federal coal resources to help supply local and national energy needs; and contributes to opportunities for continued employment in the surrounding communities, and provides additional economic returns to local, State, and Federal Governments.

It is recognized that some members of the public are generally averse to mining and concerned about what affect subsidence would have on landscape integrity. Others support the activity because of its benefits to the local economy and the importance of the energy resource. Comments related to the effects of this proposal on socioeconomic resources were received from the general public on the Draft SEIS and a discussion explaining how these comments were considered in preparing the Final SEIS is included in Appendix D of that document.

- **Recreation:** Selection of Alternative 3 with the stipulations ensures that limited impacts to roads and trails, safety risks, and recreational experiences occur. Stipulation #13 requires replacement/repair of FS owned or permitted facilities, including roads.
- **Visual Quality:** The effects of implementing Alternative 3 on visual quality can be reviewed in Table 4.11 of the Final SEIS. Effects on visual quality to effects on surface water including wetlands and riparian areas. Alternative 3 includes Stipulations #9 and #17, which ensures hydrologic resources are protected from the effects of subsidence. In areas or situations where subsidence mining affects surface water and associated resources, there may be a shift in vegetation type. However, this shift would not result in an area failing to meet Visual Quality Objectives of Modification or Partial Retention. Visual integrity will also be preserved as rock fall and other surface changes are reduced when additional areas are protected from subsidence.
- **Range:** Alternative 3 requires repair/replacement of surface facilities damaged by subsidence (Stipulation #13), and replacement of water lost in quantity and quality (Stipulation #17). These requirements would mitigate the limited, but potential damage to springs and ponds with associated developed spring boxes, pipelines and water troughs. Damage to other ponds would be unlikely because of the depth of the associated overburden. If tensile cracks did occur the impacts to surface facilities and water quantity and quality would likely be of short duration, as cracks are projected to heal relatively quickly due to the silts and clays in the soil and requirements of Stipulation #13.

The likelihood of losing water sources for the allotments due to mine subsidence impacts would be very low due to the depth of overburden and the clays and shales present in the area. The LRMPs do not consider any water loss to be acceptable, and Stipulations #13 and #17 would mitigate any impact.

- **Roadless & IRA:** The lease tract contains lands in the Muddy Creek – Nelson Mountain and White Mountain Inventoried Roadless Areas. Alternative 3 includes Stipulation 21 which requires the lessee to comply with the Roadless Area Conservation Rule (36 CFR 294, Special Areas, Subpart B-Protection of Inventoried Roadless Areas), which prohibits road construction and reconstruction in the IRAs. Thus roadless character would be preserved. Surface impacts resulting from subsidence may be visible in the IRAs associated with the Greens Hollow Federal Coal Lease Tract. As detailed in Table 4.11 of the Final SEIS, implementing this decision will have few if any impacts on attributes and characteristics of associated roadless areas.
- **Air Quality:** Analysis indicated that air quality would be minimally impacted by the selection of Alternative 3. Pollutant emissions rates would be very similar to current operations resulting in minor adverse impact to air quality resources. Capitol Reef National Park Class I Airshed would not be notably impacted. Prevention of Significant Deterioration thresholds requirements would not apply and Air Quality Related Values would not be notably impacted. Expected methane gas production would be minimal and not be at levels that would be feasible to capture and utilize using current technologies.

Factors Other Than Environmental Effects Considered In Making The Decision

In making this decision other factors were considered. The decision meets the purpose and need for the project. Our decision is consistent with the Federal Government's policy to foster and encourage mineral development (Mining and Mineral Policy Act of 1970), the Federal Land and Management Policy Act (FLPMA), and complies with Forest Plan direction on both the MLNF and FLNF as discussed in Section 1.8 of the Final SEIS.

In addition to how environmental issues were considered and addressed above, additional factors were also considered in reaching this decision. These factors include the following:

- By consenting to the lease with stipulations, and if the BLM were to issue the lease, natural resources of the area could continue to provide goods and services. It is estimated that the lease tract contains coal resources to support about 8 years of mining, assuming a similar production rate as what is currently being produced at the SUFCO mine. The FS decision contributes to continued employment opportunities for about 390 mining jobs, and 280 support jobs. In addition, there are an estimated two indirect support industry jobs for each direct mining job, amounting to about 1,170 jobs, or about 20% of Sevier County's non-agricultural private employment.
- The Decision provides for access to federal coal resources while ensuring that non-coal resources on NFS lands are protected.
- Consultation with the appropriate Native American tribes and the Utah State Historic Preservation Office (USHPO) has been completed. Concerns have been resolved through a Memorandum of Agreement signed on November 30, 2011 and authorization to proceed with implementing Alternative 3 given.
- National Historic Preservation Act consultation with the USHPO was completed on June 9, 2011. Concerns have been resolved through a Memorandum of Agreement signed on November 30, 2011 and authorization to proceed with implementing Alternative 3 given.

Identification of the Environmental Documents Considered in Making the Decision

This decision was made after carefully considering the contents of the EIS, public comments, agency response to comments, specialist reports, biological opinions, and concurrence documents from SHPO, tribes contacted, other supporting documents listed below, and the project record. The decision is considered to be in conformance with applicable land use plans (Final SEIS, Section 1.8).

The entirety of the project record was considered in making this decision including the following key documents:

- The response to objection issues and reviewing Officer Instructions as shown in Appendix 4 of the Final ROD and supporting information.
- Draft Supplemental Environmental Impact Statement for the Leasing and Underground Mining of the Greens Hollow Coal Lease Tract, UTU-84102. March 2014.

- Final Supplemental Environmental Impact Statement for the Leasing and Underground Mining of the Greens Hollow Federal Coal Lease Tract, UTU-84102. February 2015.
- Manti-La Sal National Forest Land and Resource Management Plan – United States Department of Agriculture Forest Service. Manti-La Sal National Forest, Price, Utah (Forest Service 1986a).
- Fishlake National Forest Land and Resource Management Plan – United States Department of Agriculture Forest Service. Fishlake National Forest, Richfield, UT (Forest Service 1986b).
- Coal tract evaluations on the Manti-La Sal National Forest: Muddy Creek Technical Reports. Prepared for the Manti-La Sal National Forest, Price, UT (Cirrus 2004).
- Assessment of the Effects of Surface Impacts Resulting from Longwall Mining in the Greens Hollow Tract, Utah (Maleki 2008).
- Surface and Ground Water Technical Report, Greens Hollow Coal Lease Tract (Cirrus 2014d).
- Final Surface and Ground Water Technical Report, Greens Hollow Coal Lease Tract, completed in 2015.
- Supplemental Biological Assessment prepared for the Greens Hollow Coal Lease Tract (Cirrus 2014f).
- Biological Evaluation prepared for the Greens Hollow Coal Lease Tract (Cirrus 2014g).
- Final Biological Evaluation prepared for the Greens Hollow Coal Tract, completed in 2015.
- Management Indicator Species Report prepared for the Greens Hollow Coal Lease Tract (Cirrus 2014h).
- Heritage Resources Investigation of Greens Hollow Mine Expansion. Cultural Resource Analysts, Inc., Sheridan, Wyoming. October 8, 2009.
- Unsuitability Criteria Assessment (Appendix A) Final SEIS.

C. Alternatives Considered

Three alternatives were considered in detail in the Greens Hollow Final SEIS, including the No Action and two action alternatives as noted below. Alternatives considered but not analyzed in detail can be found in the Final SEIS, Section 2.7. Potential impacts associated with each alternative are discussed in detail in Chapter 4 of the Final SEIS.

Alternative 1 -No Action

The No Action alternative assumed that the FS would not consent to the BLM leasing the Greens Hollow Federal Coal Lease Tract, and the tract would not be offered by the BLM for

leasing, and there would be no potential for coal mining within the tract at this time. The No Action alternative provided a baseline for estimating the effects of the action alternatives. Other approved activities and on-going natural processes would continue.

Alternative 2 - Proposed Action

In Alternative 2 – The Proposed Action, the FS would consent to the BLM offering for lease 6,175 acres of NFS lands in the Greens Hollow Federal Coal Lease Tract for development of federal coal resources. The Proposed Action assumed that FS consent would include special coal lease stipulations from the MLNF Plan to protect non-mineral resources, however would exclude Stipulation #9. The special coal lease stipulations are described in the MLNF Forest Plan and are attached as Appendix B of the Final SEIS.

Analysis of the Proposed Action Alternative projected effects based on BLM's issuance of the lease, and assumed a Conceptual Mine Plan and Reasonably Foreseeable Surface Use Scenario (Final SEIS, Section 2.6). For the Proposed Action, the Conceptual Mine Plan assumed full extraction mining could occur over the entire tract, and thus the analysis assumed that all lands in the tract could be subsided in order to present the environmental effects, and the effects of excluding Special Stipulation #9 from the special coal lease stipulations.

The Proposed Action was not selected because this alternative did not assure protection of non-mineral resources including water and heritage resources, and therefore this alternative was not consistent with either the MLNF or FLNF Forest Plans and other applicable laws.

Alternative 3 – Selected Alternative

Alternative 3 (the selected alternative) set out that the FS would consent to BLM leasing in the tract with all the special coal lease stipulations from the MLNF Plan, however specified areas to be protected from underground mining-induced subsidence per Stipulation #9. This alternative was developed to address issues raised during public and agency scoping regarding protecting certain critical surface resources from the effects of subsidence within the lease tract boundary. Issues driving this alternative included potential impacts to water, geology, vegetation, wildlife habitat, and cultural resources. The analysis showed that substantial surface impacts from underground mine subsidence could adversely affect perennial streams (where surface flow could be lost to subsidence-induced cracking of Castlegate Sandstone), or where escarpments could fail. Thus, this alternative was developed to protect certain areas from effects of subsidence.

This alternative assumed that the FS would consent to the BLM leasing 6,175 acres of NFS lands in the Greens Hollow Federal Coal Lease Tract with all special coal lease stipulations described in the MLNF Forest Plan. Limited site-specific exceptions to Special Stipulation #9 were developed for specific protection to surface resources as identified in Exhibit 1 - Consent Decision Map (Appendix 2).

D. Public Involvement

The public has been involved throughout the NEPA process that has culminated in this decision (Final SEIS, Chapter 5). Details of the methods and steps taken to involve the public can be reviewed in Section 1.10 of the Final SEIS. A public involvement plan (communications plan) was developed to describe the methods and techniques that would be used to involve the public in the environmental and socioeconomic analysis. The public actively participated in the NEPA

process and communicated issues of support, benefit, and concern regarding the proposed action. In addition, involvement of local, State, and other Federal agencies helped contribute to the analysis of the potential effects and benefits that could result from the project.

An important part of public involvement is scoping. In addition to disclosing potentially significant issues of support, benefit, and concern, this process also identified possible alternatives related to the Proposed Action for consideration in analyzing the impacts of the proposal.

The Notice of Intent (NOI) for the Greens Hollow Federal Coal Lease Tract EIS was printed in the *Federal Register* (Vol. 73, No. 29, pp. 8060-8062) on Tuesday, February 12, 2008. The NOI designated a 45-day comment period ending March 28, 2008 when comments would be most useful. A public scoping notice was also prepared and distributed on February 22, 2008 to interested individuals on the BLM, Price Field Office and Manti-La Sal and Fishlake National Forests mailing lists. A legal notice was also sent to local newspapers (*Richfield Reaper*, *Sun Advocate*, *Emery County Progress*, and *Salina Sun*) to notify the general public through newspaper releases and media coverage. Comments were to be directed to the agency project manager in the BLM, Price Field Office. A scoping content analysis of the comments received was prepared and used to develop the issues that would be considered in the EIS.

A Notice of Availability (NOA) announcing the availability of the Greens Hollow Draft EIS was published in the *Federal Register* by the EPA on April 3, 2009. Parties on the distribution list were sent copies of the Draft EIS at that time. A 45-day comment period on the Draft EIS commenced with publication of the EPA's Notice of Availability and ended on May 18, 2009. Comment letters and e-mails regarding the Final EIS were received from various parties opposing or expressing support of the proposed Greens Hollow coal leasing project.

A FEIS and Record of Decision (ROD) for the Greens Hollow Federal Coal Lease Tract were released by the FS and BLM in December 2011. Interested parties on the mailing list were sent a notification dated December 14, 2011 of the release of the FEIS and ROD. An EPA NOA was published in the *Federal Register* (Vol. 76, No. 247, pp.80367) on Friday, December 23, 2011.

An appeal of the ROD was filed with the Regional Forester on February 13, 2012. Based on issues raised in the appeal, the ROD was withdrawn pending further analysis on March 20, 2012.

An EPA NOI was published in the *Federal Register* (Vol. 77, No. 202, pp. 64097-64099) on Thursday, October 18, 2012 announcing the intent to prepare a supplemental EIS on the Greens Hollow Federal Coal Lease Tract. Additional scoping was not conducted in accordance with 40 CFR 1502.9(c) (4). There was a 45-day comment period after the Draft SEIS was issued.

The EPA published a NOA for the Draft SEIS in the *Federal Register* on March 14, 2014. Legal Notices of Opportunity to Comment were published in the *Richfield Reaper* and the *Sun Advocate* newspapers on March 19, 2014 and March 20, 2014, respectively. A total of seven individual letters containing comment were received along with 2,425 form letters. All comments and input were taken into consideration when developing alternatives and analyzing potential effects of alternative implementation. Comments and input received, agency response to the comment, and resulting change to the SEIS can be seen in Appendix D of the Final SEIS.

The EPA published a NOA for the Final SEIS in the *Federal Register* on February 27, 2015. Legal Notices of the opportunity to object following the 36 CFR Part 218 regulations were

published in the Richfield Reaper and the Sun Advocate newspapers of record for the Fishlake and the Manti-La Sal National Forests on March 4 and March 3, 2015, respectively. During the 45-day objection period, four objections were filed with the Regional Forester. All comments and issues were reviewed. The issues raised and the response to the issues can be found in Appendix 4 of the Final ROD.

E. Findings Required by Other Laws and Regulations

Numerous laws, regulations, and agency directives require that our decision be consistent with their provisions. A summary of the direction given in these laws, regulations and executive orders can be found in Section 1.5.2 of the Final SEIS. We have determined that our decision is consistent with all laws, regulations, and policies as summarized below.

Consistency with the Manti-La Sal and Fishlake Land and Resource Management Plans

Discussion, considerations, and Forest Plan emphasis and direction are given in Section 1.8 of the Final SEIS. Consistency determinations are given in Section 4.17 of the Final SEIS.

The proposed lease tract lies within management areas identified by the MLNF and FNF LRMPs that are acceptable for consideration for coal leasing.

Our decision is consistent with the direction given in the Manti-La Sal and Fishlake National Forests' Land and Resource Management Plans. Amendments to either Forest's LRMPs are not needed to implement our decision.

Multiple-Use Sustained Yield Act of 1960

Development of the coal resource as prescribed by our decision will not preclude administration of renewable surface resources in the project area as required by the Multiple-Use Sustained Yield Act of 1960. Furthermore, the findings and determinations detailed in Chapter 4 show that implementing our decision with the resulting impacts would have little if no effect on the continued use of the various surface resources in a sustained manner complying with the direction of this Act.

The National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190)

The purposes of this Act are "To declare a national policy which will encourage productive and enjoyable harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality" (CEQ) (42 U.S.C. Sec. 4321).

The process used in developing the Final SEIS provided a forum for public review and comment on the proposed leasing action. It documented and disclosed related issues, alternatives with stipulations considered, and analyzed potential effects of implementing each alternative. This Final SEIS meets the NEPA objectives and requirements. Our decision is consistent with the Act and the procedures outline in the CEQ regulations.

The National Forest Management Act (NFMA) of 1976 (P.L. 4-588)

The decision to consent to the BLM offering for lease the NFS lands in the Greens Hollow Federal Coal Lease Tract in accordance with the stipulations listed in Appendix 3 is consistent with the intent of each Forest Plan's long term goals and objectives listed in Section 1.8 of the Final SEIS. The action alternatives were designed in conformance with Forest Plan standards and incorporate appropriate Forest Plan guidelines and stipulations (Appendix 3) for minerals management, big game winter range, livestock grazing and riparian area management. Impacts on these resources are found in Section 4.4 (big game winter range), Section 4.5 (riparian area management), and Section 4.11 (livestock grazing) in the Final SEIS.

Selecting Alternative 3 with the resulting potential impacts as disclosed by the findings and determinations in the Final SEIS would comply with NFMA of 1976.

Consistent with regulations at 36 CFR 219.19, potential impacts (direct, indirect and cumulative) to habitats for Manti-La Sal and Fishlake National Forest Management Indicator Species were evaluated. This evaluation, as documented in the environmental consequences section above (Sections 4.4.4.2.4 and 4.4.4.3.4), determined that viable populations of management indicator species would be maintained in the project area (also on page 81 of the wildlife specialist report). The determinations made in this document would be consistent with current guidance on management indicator species.

Impacts on management indicator species were also disclosed in a report prepared for this project (Cirrus 2014h).

The Mining and Minerals Policy Act of 1970

This decision is consistent with the Mining and Minerals Policy Act of 1970 because it fosters and encourages private enterprise in the development of economically sound and stable domestic mining industries, and the orderly and economic development of domestic mineral resources (Final SEIS, Section 1.5.2).

Mineral Leasing Act of 1920, as Amended by the Federal Coal Leasing Amendments Act of 1975

The Final SEIS documents the authority under which the FS consents and prescribes conditions for protecting non-mineral resources (Appendix B) to a federal coal lease, and how the BLM must first secure consent for leasing federal coal resources on NFS lands. This decision is consistent with the Mineral Leasing Act of 1920, as amended by the Federal Coal Leasing Amendments Act of 1975, and implementing regulation at 43 CFR 3400.

Executive Order 13212 of May 18, 2001

As part of completing the Final SEIS and whenever possible, federal agencies expedited their review of permits for energy-related projects while maintaining safety, public health, and environmental protections. This process, including public involvement efforts, has been expedited to the extent possible while adhering to laws, procedures, and policies. The process of public and agency involvement is documented in Section 5.2. This decision is in compliance with Executive Order 13212.

The Endangered Species Act (ESA) of 1973, as amended

In compliance with the ESA, this analysis examined the impacts of the alternatives on wildlife and plant species listed under the ESA. Specifically, Sections 4.4.4.2.1 and 4.4.4.3.1 disclose the impacts on listed wildlife species and Sections 4.5.2.4 and 4.5.3.4 disclose the impacts on listed plant species.

None of the potential impacts disclosed in these sections would be contrary to any of the laws, regulations, and orders included in the ESA of 1973, as amended.

A supplemental biological assessment was prepared for the proposed Greens Hollow tract (Cirrus 2014f). That assessment determined that there would be no effect on federally-listed threatened and endangered species under the alternatives analyzed. Therefore, consultation with the U.S. Fish and Wildlife Service was not required. However, the greater sage-grouse, a candidate for federal listing at the time of analysis, received the determination of “not likely to jeopardize continued existence or adversely modify proposed critical habitat.” On September 21, 2015, the U.S. Fish and Wildlife Service completed a 12 month finding and found that listing the greater sage-grouse was not warranted at this time. The species still remains a forest service sensitive species and Stipulation #14 still applies, therefore the effects analysis remains the same.

There are no known federally listed plant species in the project area.

To keep in the spirit of the ESA, a biological evaluation was completed for FS Region 4 (R4) sensitive species and impacts to them from implementing our decision are discussed in Section 4.4.4.3.2 of the Final SEIS. As disclosed our decision could potentially impact the greater sage-grouse; however, it was determined that the impact would be “not likely to jeopardize continued existence or diversely modify proposed critical habitat.”

One sensitive plant species (Link Canyon columbine) occurs in the general analysis area but not in the proposed lease tract area and would not be affected by our decision.

The Migratory Bird Treaty Act of 1918

As required by the Migratory Bird Treaty Act, analysis documented in the Final SEIS examined the impacts of the alternatives on migratory birds. Specifically, the analysis related to impacts of our decision is found in Sections 4.4.3.1.3.

Our decision complies with Migratory Bird Treaty Act as indicated in that section and on page 295 of the Final SEIS.

Executive Order 13186 (Migratory Bird Treaty Act)

In January 2001, the President signed an executive order outlining responsibilities of federal agencies to protect migratory birds under the Migratory Bird Treaty Act. As a complementary measure to the Executive Order, the Forest Service and the U.S. Fish and Wildlife Service entered into a Memorandum of Understanding the purpose of which is to strengthen migratory bird conservation through enhanced collaboration between the agencies, in coordination with state, tribal, and local governments. Our decision is consistent with the Executive Order and the Migratory Bird Treaty Act.

The Federal Water Pollution Control Act of 1972 (P.L. 92-500) as amended in 1977 (P.L. 95-217) and 1987 (P.L. 100-4), also known as the Federal Clean Water Act

Existing water quality conditions in the project area were assessed in Sections 3.3.1 and 3.3.2 by comparing samples to appropriate numeric standards for the State of Utah. This assessment determined that water bodies in the project area currently support the beneficial use assigned by Utah Division of Water Quality. Potential impacts of implementing our decision on water quality were addressed in Sections 4.3.3.4 and 4.3.3.5 of the Final SEIS. Mining-induced subsidence impacts on water quality were based on a review of existing data describing geology, soils, hydrology, water quality, stream channel morphology as well as engineering studies examining potential mine scenarios in the project area (Maleki 2008).

Our decision complies with the Clean Water Act as indicated in Sections 4.3.3.4 and 4.3.3.5 of the Final Environmental Impact Statement.

Clean Air Act of 1970, as amended in 1990

Section 4.13 discloses potential impacts on factors used to evaluate air quality and compliance with the Clean Air Act. The analysis finds that “Based on the general excellent air quality in the region, cumulative impacts of the proposed project on ambient air quality would be minimal...” (Final SEIS Section 4.13.4.2). Our decision complies with the Clean Air Act as indicated in Section 4.13.4.2 of the Final Environmental Impact Statement.

Federal Noxious Weed Act of 1974

Impacts on vegetation from implementing our decision are described in Section 4.5.3 of the Final SEIS. Impacts related to the spread of noxious weeds following implementation of an action alternative, including agency required mitigation measures, are addressed in Section 4.5.4. Our decision considered and analyzed the risk of spreading noxious weeds and complies with the Federal Noxious Weed Act of 1974.

The Preservation of American Antiquities Act of 1906

As described in Section 3.6.2 of the Final SEIS, cultural resource inventories have been conducted in the project area boundaries. Concurrence from the Utah State Historic Preservation Office (SHPO) was obtained on June 9, 2011 for leasing the tract. Additional clearance surveys would have to be completed for all future planned project activities (including surface disturbance) and any cultural resources identified would be protected as required through consultation with the Utah SHPO. Any potential adverse effects from the lease to cultural resources would be resolved through guidance included in the FS/Utah SHPO Memorandum of Agreement signed on November 30, 2011 and through Stipulation #1 (see Appendix 3). Our decision complies with the Preservation of American Antiquities Act of 1906.

The National Historic Preservation Act of 1966, as amended

Section 3.6.2 of the Final SEIS describes the cultural resource inventory completed in the project area to identify and document those sites eligible for listing on the National Historic Preservation Act. Cultural resources recorded in the project area are evaluated in consultation with the State Historic Preservation Office or the Federal Advisory Council on Historic Preservation. Concurrence from State Historic Preservation Office was obtained on June 9, 2011. Potential

adverse effects from the lease to cultural resources would be resolved with measures outlined in Section 4.6.4 of the Final SEIS including a FS/Utah SHPO Memorandum of Agreement signed on November 30, 2011 and Stipulation #1 (see also Appendix 3). Our decision complies with the National Historic Preservation Act of 1966, as amended.

The Archaeological Resources Protection Act (ARPA) of 1979

Section 3.6.2 of the Final SEIS describes the cultural resource inventory completed in the project area to identify and document archaeological resources. Potential impacts on these resources from our decision are described in Sections 4.6.3. Concurrence from the State Historic Preservation Office was obtained on June 9, 2011. Potential adverse effects from the lease to cultural resources would be resolved through directions in the FS/Utah SHPO Memorandum of Understanding signed on November 30, 2011 and through Stipulation #1 as indicated in Section 4.6.4. Our decision complies with the ARPA of 1979.

Executive Order 12898 and Consumers, Civil Rights, Minorities, and Women

Socioeconomic conditions are identified in Section 3.8 of the Final SEIS and economic impacts resulting from proposed mining developments on society are reviewed in Section 4.8. None of the alternatives would disproportionately adversely affect minority or low-income populations (including American Indian Tribal members). The selected alternative will not disproportionately adversely affect minority or low-income populations (including American Indian Tribal members).

The need to conduct an analysis of this potential impact is required by FS Manual and FS Handbook direction. The civil rights of individuals or groups, including minorities, people with disabilities, and women, are not differentially affected by the selected alternative. Our decision is consistent with the Executive Order.

Executive Order 13443

Existing game species of wildlife identified in the project area are described in the Final SEIS, Section 3.4 and impacts from leasing are described in Section 4.4. Management of vegetation cover used by game species is described in Sections 3.4 and 3.5. Hunting within and around the project area as a recreational activity was addressed in Sections 3.9 and 3.12 and potential impacts to hunting were addressed in Sections 4.9 and 4.12. No issues in regard to impacts on hunting were identified or discussed in the Final SEIS. Our decision is consistent with Executive Order 13443.

Prime Farmland, Rangeland, and Forest Land (Secretary of Agriculture Memorandum 1827)

MLNF LRMP states “Prime farmland, rangeland, and forest lands, as defined in the Secretary of Agriculture's Memorandum Number 1827, Supplement 1, do not occur on the Forest” (MLNF LRMP II-57). Such lands also do not exist on the FLNF. This decision, therefore, will be in compliance with the Secretary of Agriculture’s Memo 1827 on the management of designated prime lands, rangelands, and forestlands.

2001 Roadless Rule

The 2001 Roadless Rule has general prohibitions for road construction, reconstruction and timber harvest (36 CFR 294 Part B, §294.13(b)(2) in inventoried roadless areas. However, the cutting, sale, or removal of timber that is incidental to the implementation of a management activity not otherwise prohibited by this subpart is permissible). Mineral leasing is a management activity not otherwise prohibited by the 2001 Roadless Rule, and our decision reflects via lease stipulation requirements to comply with the 2001 Roadless Rule for portions of the lease tract in IRA. Our decision is consistent with the 2001 Roadless Rule.

Executive Order 11988, Floodplain Management

Potential impacts of subsidence on channel morphology from implementing our decision are addressed in Section 4.3.3.3 of the Final SEIS. Subsidence impacts were determined from a review of existing information on geology, soils, stream gradient, and hydrology as well as engineering studies of potential mine scenarios in the project area. This review indicated that minor changes in stream gradient and channel stability could occur in localized areas where differential subsidence occurs at panel boundaries. However, given the nature of stream channels and floodplains in the analysis area (Section 3.3.2) and the level of surface impacts that would occur following subsidence, functional changes in channel morphology and floodplains would not be expected. Based on an assessment of data and understanding of proposed activities, our decision is consistent with EO 11988.

Executive Order 11990, Protection of Wetlands

Potential impacts of implementing our decision on wetlands were identified in Section 4.5.3.2 of the Final SEIS. Although minor changes in stream morphology are anticipated due to subsidence, the selected alternative excludes subsidence mining under streams where the geologic character would not protect the stream. Subsidence could result in changes in hydrology in some wetlands, but permanent hydrologic changes that would result in loss of wetlands would be expected to be minimal due to the depth and geologic makeup of the overburden (Sections 4.5.2.2 and 4.5.3.2). Our decision is consistent with Executive Order 11990, Protection of Wetlands.

Federal responsibilities to consult with Indian Tribes included in Executive Orders 12875, 13007, 12866, and 13084

Consultation on the proposed Greens Hollow tract began in 2008 by notifying several tribes of the project: the Paiute Indian Tribe of Utah, Northern Ute, Navajo Nation, Hopi Tribe, Skull Valley Goshute, Confederated Tribes of the Goshute Reservation, Moapa Band of Paiutes, Navajo Utah Commission, Southern Ute, Kaibab Band of Paiutes, Ute Mountain Ute, and the Northwestern Band of the Shoshone as indicated in Section 3.6.1.2. Only three tribes expressed interest in this proposal: the Paiute Indian Tribe of Utah in Cedar City, the Ute Indian Tribe located in Ft. Duchesne, Utah, and the Navajo Nation located in Window Rock, Arizona. The Utes wanted to review all pertinent materials on the Greens Hollow EIS, so specific project proposals were forwarded to them. All tribes except the Ute deferred to the Paiute Indian Tribe of Utah.

A Memorandum of Agreement (MOA) was created that takes into account the concerns that the Native American Tribes have for the sites that could be affected by Alternative 2 or 3. This MOA was developed in consultation with the Northern Ute Tribe, the State Historic Preservation Officer

(SHPO), SUFCO, the Advisory Council on Historic Preservation, and the FS. The Northern Utes approved the final draft of the document but chose not to be a signatory. As a result, the FS and SHPO are the signatories to the MOA. The Hopi Tribe and all other interested federally recognized tribes will continue to be consulted on the development and implementation of this project. Both the Paiute Tribe of Utah and the Ute Indian Tribe agree that potential effects to both specific sites and to the overall area landscape, although not desirable, could be resolved through application of special stipulations. This effort fulfills the Federal responsibility to consult with Indian Tribes. Tribes will continue to be involved in development and implementation of the Permit Application Package should the Greens Hollow tract be leased, and an application for actual mining be submitted to the Utah DOGM. Our decision is consistent with Executive Orders 12875, 13007, 12866, and 13084.

Surface Mining Control and Reclamation Act of 1977 (SMCRA)

Coal mine permitting processes required by SMCRA are described on pages 12 and 298-300 of the Final SEIS.

The SMCRA has a requirement in Section 522 regarding application of the general unsuitability criteria. This requirement is considered at the coal leasing stage by following BLM regulations at 43 CFR 3461. Lands in the tract were evaluated using the Unsuitability Criteria for Coal Mining cited at 43 CFR 3461 and attached in Appendix A of the Final SEIS. Application of the criteria did not result in any lands being identified as unsuitable or the identification of additional stipulations (Final SEIS Section 1.2.5). The Unsuitability Analysis review for the lands acceptable for further consideration for coal leasing in the respective Forest Plans also satisfies this requirement (Final SEIS Sections 1.8.1.1 and 1.8.1.2).

Our decision complies with the applicable portions of SMCRA.

Utah Schools and Lands Exchange Act (Public Law 105-335 – Oct. 31, 1998)

Consent to coal leasing is a discretionary action authorized under MLA as amended by FCCLA and not a requirement. However, the FS decision is to consent to the lease and this consent with stipulations will not conflict with established laws, regulations and environmental management objectives. The decision includes reasonable terms that will provide protection for surface resources consistent with both the Manti-La Sal N.F. and Fishlake N.F. Land and Resource Management Plans and will not prohibit reasonable economic development of coal estates.

Although the recent right-of-way by the BLM provides access to some of the State of Utah coal reserves, the FS acknowledges that there are portions of State of Utah coal east of the Greens Hollow tract that will be difficult to access and mine economically except in conjunction with the Greens Hollow tract. If Greens Hollow is not leased, "reasonable economic development" of the school trust coal will be possible but could become uneconomic, and the school trust could lose the benefit of the exchange with regard to that state coal.

Further discussion of this topic can be found under Comment 802-3 on page D-99 in Appendix D of the Final SEIS.

Clean Air Act

Greenhouse gas analysis: Impacts from greenhouse gas emissions on Global Climate Change are assessed in Sections 3.13.7, 4.13.3.6 and 4.13.3.8 of the Final SEIS. This assessment analyzes how greenhouse gases created by burning Greens Hollow coal may contribute to global greenhouse gas emissions. Section 4.13.3.6 examines greenhouse gas emissions from Greens Hollow coal as a percentage of global emissions. Section 4.13.3.8 examines the environmental impact of coal burned at regional power plants. This consideration of greenhouse gas emission and climate change fully complies with the recommendations from the Council of Environmental Quality's 2014 Draft Guidance.

Best Available Science

Based on requirements discussed in Section 1.2.6 of the Final SEIS, sufficient information was available to meet data adequacy standards when the project was initiated. The impacts disclosed and summarized in Chapter 4 of the Final SEIS are based on data that is described in Chapter 3, reviewed in more detail in resource technical reports, and clarified through the response to objections. The resource technical reports are included in the project record and referenced in Chapter 7. The discussion in Chapter 4 reflects consideration of relevant scientific information and responsible opposing views where raised by internal or external sources and the acknowledgement of incomplete or unavailable information, scientific uncertainty, and/or risk where pertinent to the decision being made.

Environmentally Preferable Alternative

The Council on Environmental Quality (CEQ) regulations for implementing NEPA require that the Record of Decision specify "the alternative or alternatives which were considered to be environmentally preferable" (40 C.F.R. §1505.2(b)). The CEQ has interpreted the environmentally preferred alternative to be "the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources" (CEQ's Forty Most-Asked Questions", 46 Federal Register, 18026, March 23, 1981).

From the perspective of causing the least amount of change to the natural environment, Alternative 1 (No Action) is the environmentally preferable alternative. The FS would not consent to the BLM to lease the Greens Hollow Federal Coal Lease Tract, the tract would not be offered by the BLM for leasing, and there would be no potential for coal mining within the tract at this time.

We believe that the selected alternative, Alternative 3, minimizes environmental harm from action due to the number of Special Coal Lease Stipulations required to avoid and minimize environmental harm (Appendix 3). All practical means to avoid or minimize environmental harm from the alternative selected have been adopted with this decision. As noted previously in Section C, the selected alternative; Alternative 3 was designed and developed to avoid and minimize potential environmental harm that could result from underground mining-induced subsidence. The analysis of potential impacts conducted for the Greens Hollow Final SEIS identified the potential for water loss to occur where there was insufficient overburden under perennial streams. Stream segments where this condition exists were delineated, and Alternative 3 requires protecting these areas from subsidence. In addition, the locations of sandstone escarpments that could fail as a result

of subsidence were identified and protected from subsidence mining under Alternative 3. This alternative allows near maximum extraction of federal coal reserves while protecting areas that could be subjected to undesirable environmental impacts if underground mining-induced subsidence were to occur to them.

II. Pre-decisional Administrative Review Process (Objection Process)

The Final SEIS and Draft Record of Decision (ROD) available on March 3, 2015 were subject to review and objection pursuant to 36 CFR 218 regulations. A legal notice of the opportunity to object was published in Sun Advocate on March 3, 2015, the newspaper of record for the Forest Supervisor of the Manti-La Sal National Forest, initiating a 45-day objection period. It was also published in the Richfield Reaper on March 4, 2015.

Objections were accepted only from those who previously submitted specific written comments regarding the proposed project either during scoping or other designated opportunity for public comment in accordance with § 218.5(a). Issues raised in objections were based on previously submitted timely, specific written comments regarding the proposed project unless based on new information arising after designated opportunities.

Four interested parties filed objections to the Objection Reviewing Officer (ORO). The objections were reviewed by the ORO. Responses were based on information in the Final SEIS, project records and Draft ROD. Meetings to discuss issues raised in the objection and potential resolution were requested. The meeting with the State of Utah resulted in a potential resolutions detailed in a letter dated June 16, 2015.

On August 25, 2015 after a deliberative and extensive review of the concerns raised by objectors, a formal response was mailed to each objector disclosing how the project record supported specific issues associated with objections filed. Within each letter, issue response instructions were given to the Manti-La Sal and Fishlake National Forests. See the project record for documentation of the objection process. This decision fully incorporates the response to the instructions from the reviewing officer. For documentation of the modifications and clarifications to the supporting documents refer to Appendix 4 of the Final ROD. The response to the instructions assisted in clarifying the information used in formulating the decision chosen in the Draft ROD. The clarification did not result in a change in analysis, and therefore no change to the decision identified in the Draft ROD.

This project is not subject to further administrative review by the FS or the Department of Agriculture pursuant to 36 CFR 218.11 (B) (2).

III. Implementation

The FS consent decision will be implemented through issuance of this ROD, formal notification of FS consent to BLM, and through federal coal leasing as described above and in Section 1.3 of the Final SEIS. In brief, if the BLM decides to offer the tract for lease, then the Greens Hollow tract will be offered at a competitive lease sale.

In a subsequent and separate process, the lessee would then be required to follow the established coal permitting process to incorporate the lands in the lease into a coal mining permit approved by

the Utah Division of Oil Gas and Mining (UDOGM), with oversight from the Office of Surface Mining Reclamation (OSMRE). Because the Greens Hollow tract contains federal lands and minerals, the mine permitting action may ultimately require approval from the Undersecretary of the Department of the Interior for Lands and Minerals. If and when a permitting action is undertaken, the FS would follow its defined roles and responsibility in the UDOGM and OSMRE permitting process, pursuant to 30 CFR 740.4(c)(2). The lessee will also be required to secure any additional local, state, or federal permits as applicable and required by law.

Implementation Date

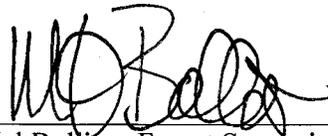
Implementation of the decision may begin immediately in accordance with 40 CFR 1506.10 and 36 CFR 218.12(c) (2).

IV. Contact Person

For additional information concerning this decision, contact Tom Lloyd, Manti-La Sal National Forest, 599 West Price River Drive; Price, Utah 84501, Telephone (435) 637-2817, Electronic mail: twlloyd@fs.fed.us or Rob Hamilton, 115 East, 900 North, Richfield, UT 84701, (435) 896-9233, e-mail rhamilton@fs.fed.us.



Brian M. Pentecost, Forest Supervisor
Manti-La Sal National Forest



Mel Bolling, Forest Supervisor
Fishlake National Forest

5 Oct 2015

Date

10.05.15

Date

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.
USDA is an equal opportunity provider, employer and lender.

Appendix 1: Legal Description of the Greens Hollow Federal Coal Lease Tract

Greens Hollow Federal Coal Lease Tract

Legal Description

T. 20 S., R. 4 E., SLM

Sec. 36: Lot 4, E2NE, NESE.

T. 20 S., R. 5 E., SLM

Sec. 19: Lots 5 – 8, E2SW, SE;

Sec. 20: S2;

Sec. 21: W2SW;

Sec. 28: W2;

Sec. 29: All;

Sec. 30: All;

Sec. 31: All;

Sec. 32: N2, N2S2;

Sec. 33: NWNW;

T. 21 S., R. 4 E., SLM

Sec. 1: Lots 1-4, S2;

Sec. 2: SE;

Sec. 11: E2, E2W2;

Sec. 12: W2, NE, W2SE;

Sec. 13: NW, W2NE;

Sec. 14: NE, E2NW;

T. 21 S., R. 5 E., SLM

Sec. 6: All.

Totaling approximately 6,175.39 acres (see Figure 1.2 - Appendix 2 of this document)

Appendix 2: Project Maps

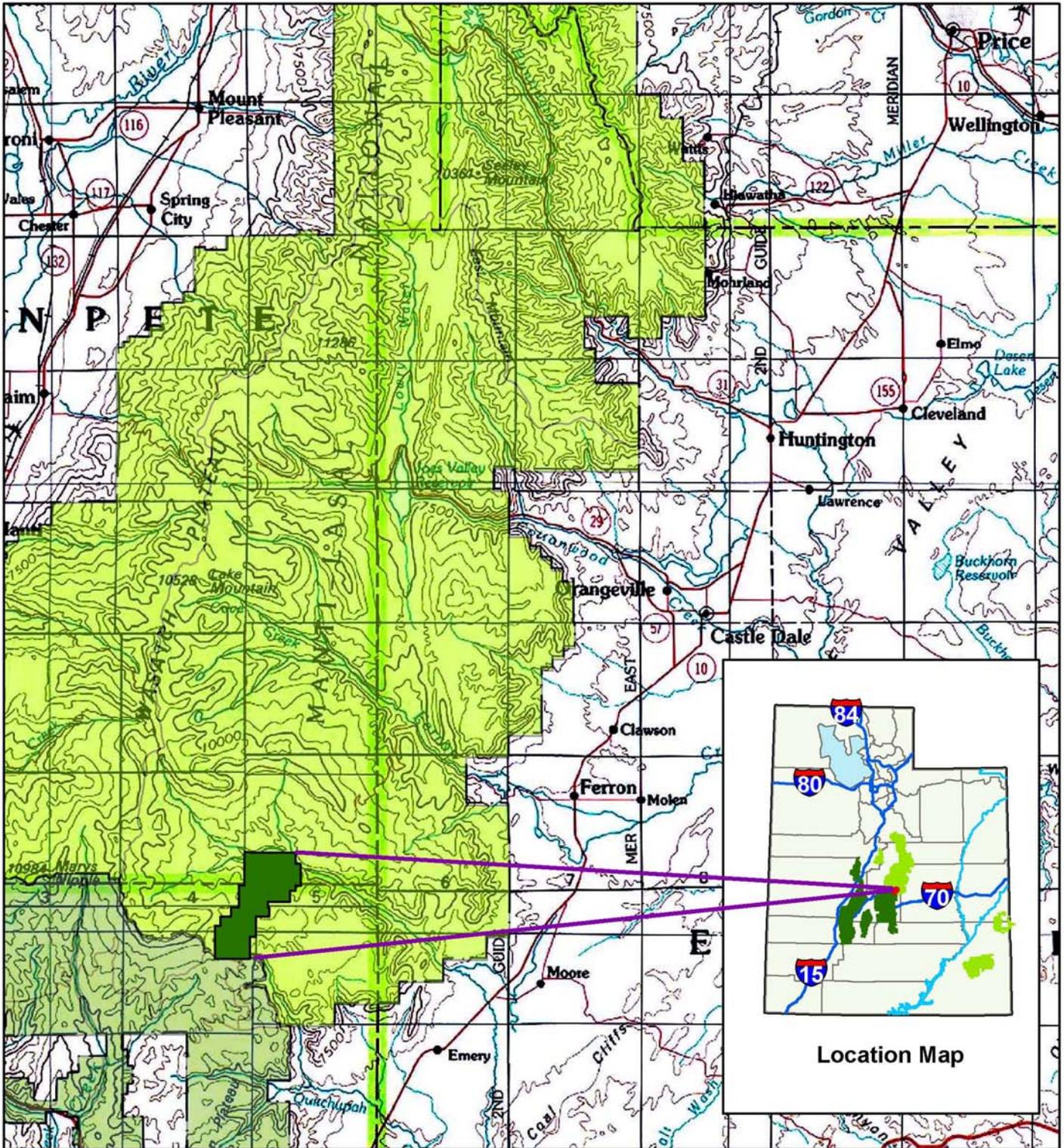
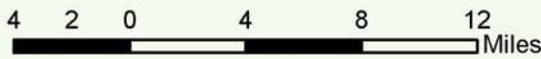


Figure 1.1. Project location map.



1:400,000

Legend

- Greens Hollow Coal Lease Tract
- Manti-La Sal National Forest
- Fishlake National Forest
- Private Land

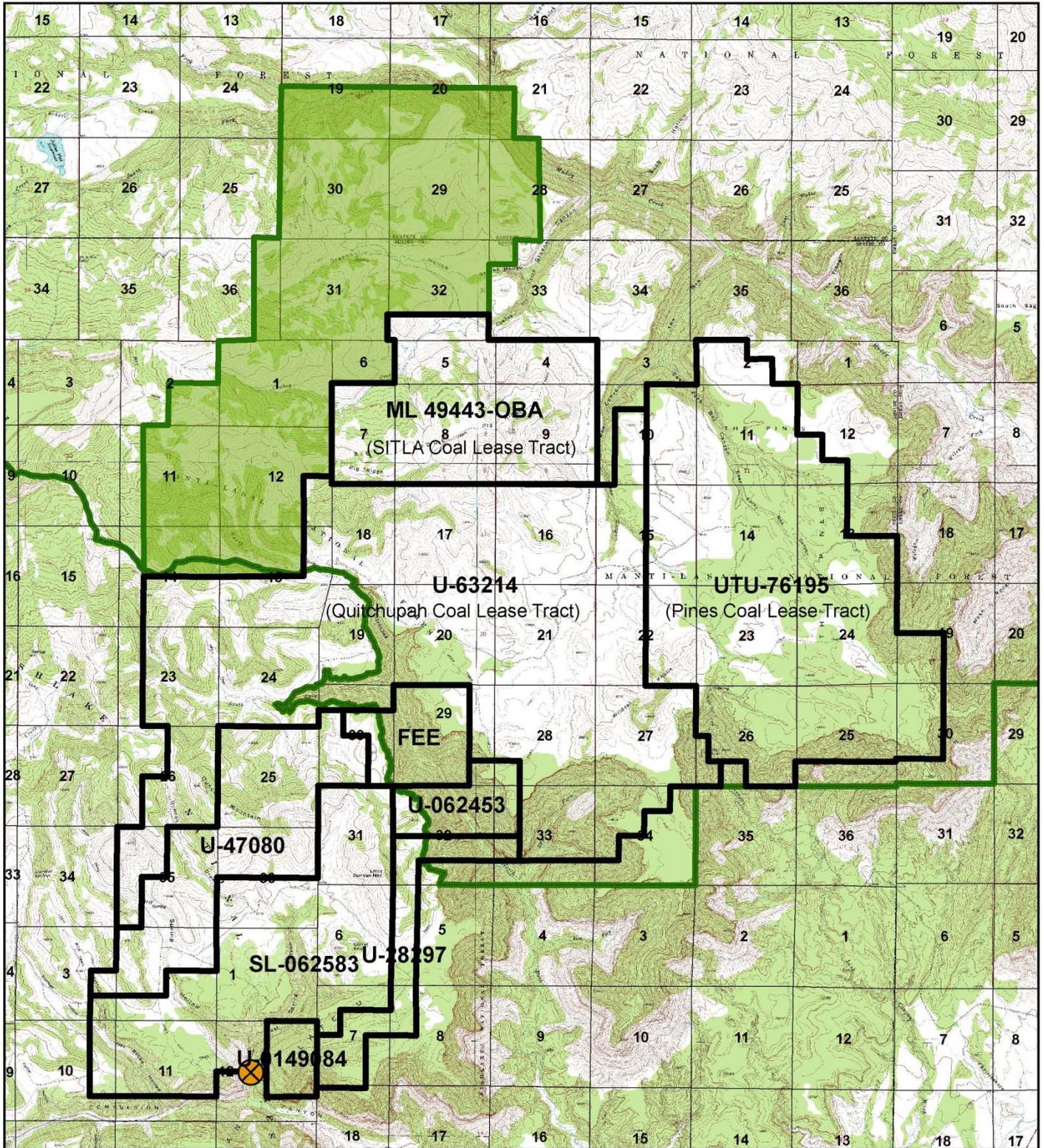
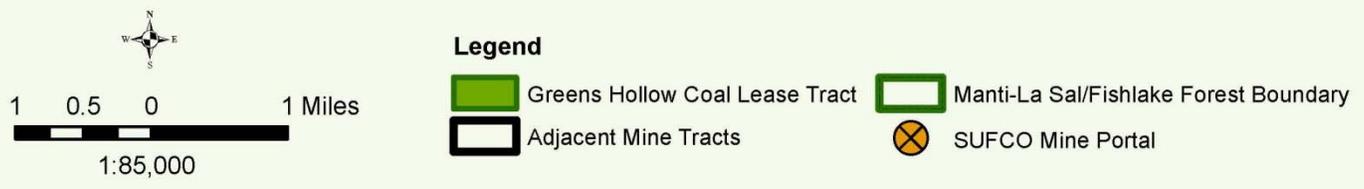


Figure 1.2. Leases near the Greens Hollow tract.



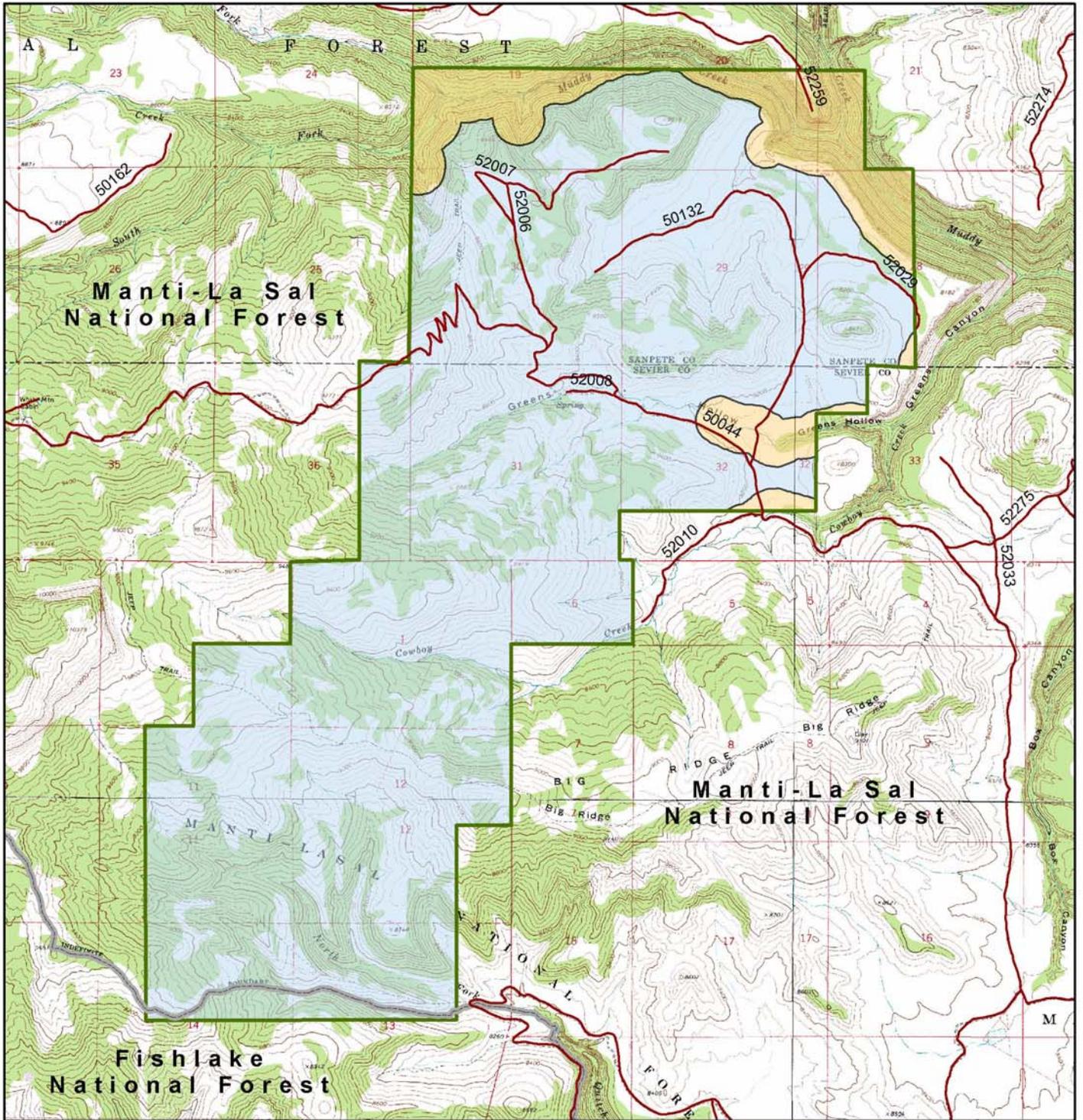
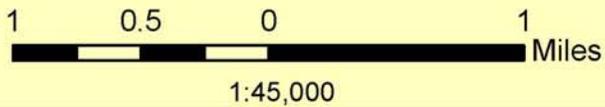


Exhibit 1. Consent Decision Map.



Legend

- MLNF/FLNF Boundary
- Greens Hollow Coal Lease Tract
- RoadsMLNF
- Area of Subsidence Mining
- Area of No Subsidence Mining



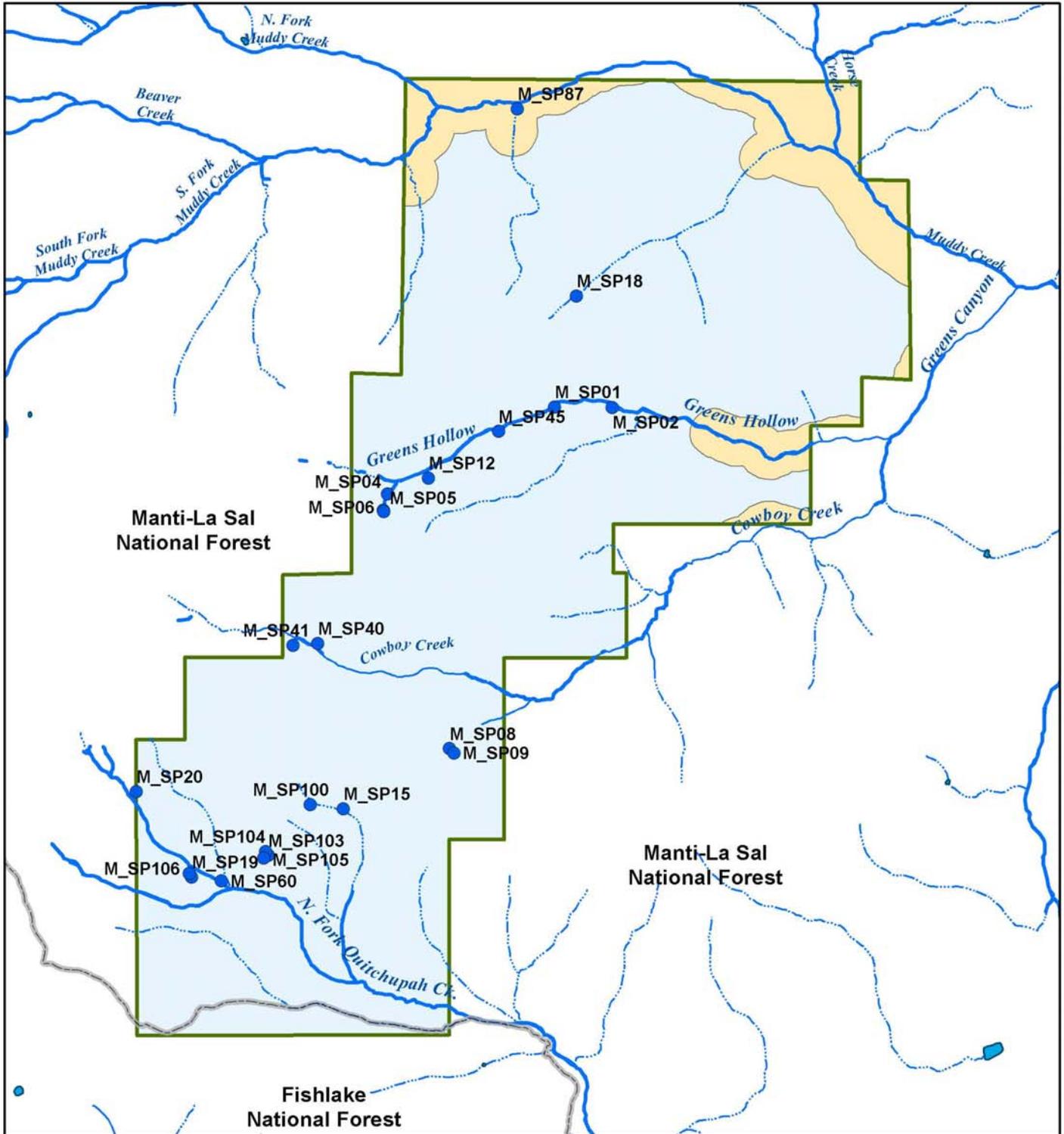
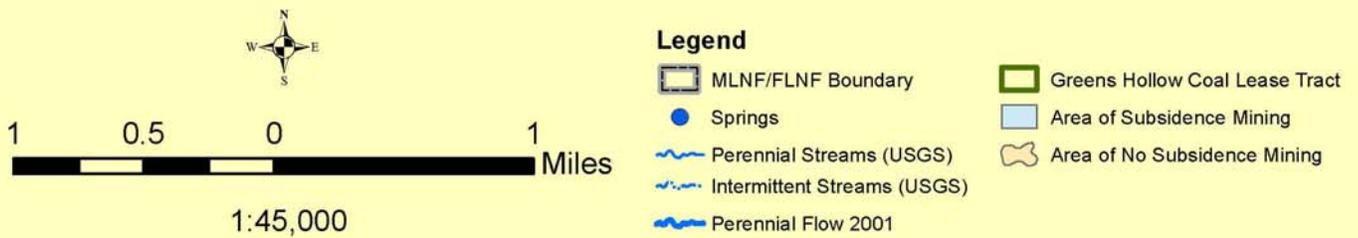


Exhibit 2. Springs Identified for Protection



Appendix 3: Special Coal Lease Stipulations

The Forest Service has identified the following stipulations which pertain to the Lessee responsibility for mining operations on the lease area and on adjacent areas as may be specifically designated on National Forest System lands. Note sequential numbering of stipulations will be maintained when both BLM & FS stipulations are included in the authorization.

Stipulation #1

Before undertaking activities that may disturb the surface of previously undisturbed leased lands, the Lessee may be required to conduct a cultural resource inventory and a paleontological appraisal of the areas to be disturbed. These studies shall be conducted by qualified professional cultural resource specialists or qualified paleontologists, as appropriate, and a report prepared itemizing the findings. A plan will then be submitted making recommendations for the protection of, or measures to be taken to mitigate impacts for identified cultural or paleontological resources.

If cultural resources or paleontological remains (fossils) of significant scientific interest are discovered during operations under this lease, the Lessee, prior to disturbance, shall immediately bring them to the attention of the appropriate authority. Paleontological remains of significant scientific interest do not include leaves, ferns or dinosaur tracks commonly encountered during underground mining operations.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessee.

Stipulation #2

If there is reason to believe that Threatened or Endangered (T&E) species of plants or animals, or migratory bird species of high Federal interest occur in the area, the Lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist and a report of findings will be prepared. A plan will be prepared making recommendations for the protection of these species or action necessary to mitigate the disturbance.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessee.

Stipulation #3

The Lessee shall be required to perform a study to secure adequate baseline data to quantify the existing surface resources on and adjacent to the lease area. Existing data may be used if such data are adequate for the intended purposes. The study shall be adequate to locate, quantify, and demonstrate the interrelationship of the geology, topography, surface and ground water hydrology, vegetation, and wildlife. Baseline data will be established so that future programs of observation can be incorporated at regular intervals for comparison.

Stipulation #4

Power lines used in conjunction with the mining of coal from this lease shall be constructed so as to provide adequate protection for raptors and other large birds. When feasible, power lines will be located at least 100 yards from public roads.

Stipulation #5

The limited area available for mine facilities at the coal outcrop, steep topography, adverse winter weather, and physical limitations on the size and design of access roads, are factors which will determine the ultimate size of the surface area utilized for the mine. A site-specific environmental analysis will be prepared for each new mine site development and for major improvements to existing developments to examine alternatives and mitigate conflicts.

Stipulation #6

Consideration will be given to site selection to reduce adverse visual impacts. Where alternative sites are available, and each alternative is technically feasible, the alternative involving the least damage to the scenery and other resources shall be selected. Permanent structures and facilities will be designed, and screening techniques employed to reduce visual impacts and, where possible, achieve a final landscape compatible with the natural surroundings. The creation of unusual, objectionable, or unnatural landforms and vegetative landscape features will be avoided.

Stipulation #7

The Lessee shall be required to establish a monitoring system to locate, measure, and quantify the progressive and final effects of underground mining activities on the topographic surface, underground, and surface hydrology and vegetation. The monitoring system shall utilize techniques which will provide a continuing record of change over time and an analytical method for location and measurement of a number of points over the lease area. The monitoring shall incorporate and be an extension of the baseline data.

Stipulation #8

The Lessee shall provide for the suppression and control of fugitive dust on haul roads, permitted roads, and at coal handling and storage facilities. On National Forest System Roads (NFSR), Lessees may perform their share of road maintenance by a commensurate share agreement if a significant degree of traffic is generated that is not related to their activities.

Stipulation #9

Except at locations specifically approved by the Authorized Officer, with the concurrence of the Forest Service, underground mining operations shall be conducted in such a manner so as to prevent surface subsidence that would: (1) cause the creation of hazardous conditions such as potential escarpment failure and landslides, (2) cause damage to existing surface structures, and (3) damage or alter the flow of perennial streams. Where the Forest Service specifically approves exceptions to the above restrictions on subsidence, the Lessee shall provide specific measures for the protection of escarpments, and determine corrective measures to assure that hazardous conditions are not created.

Stipulation #10

In order to avoid surface disturbance on steep canyon slopes and to preclude the need for surface access, all surface breakouts for ventilation tunnels shall be constructed from inside the mine, except at specific approved locations.

Stipulation #11

If removal of timber is required for clearing of construction sites, etc., such timber shall be removed in accordance with the regulations of the surface management agency.

Stipulation #12

The coal contained within, and authorized for mining under this lease shall be extracted only by underground mining methods.

Stipulation #13

Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replaced to provide for the continuance of current land uses.

Stipulation #14

In order to protect big-game wintering areas, elk calving and deer fawning areas, sage-grouse strutting areas, and other key wildlife habitat and/or activities, specific surface uses outside the mine development area may be curtailed during specified periods of the year.

Any post lease surface disturbing activities shall comply with the most current regulation and direction for protecting greater sage-grouse and its habitat. The most current regulations include the "Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4" and conditions in a letter from the Regional Forester, dated October 4, 2012. However, new direction as outlined in the "Utah Greater Sage-Grouse Land Use Plan Amendment" project would be required when it is finalized.

Stipulation #15

Support facilities, structures, equipment, and similar developments will be removed from the lease area within two years after the final termination of use of such facilities. This provision shall apply unless the requirement of Section 10 of the lease form is applicable. Disturbed areas and those areas previously occupied by such facilities will be stabilized and rehabilitated, drainages re-established, and the areas returned to a pre-mining land use.

Stipulation #16

The Lessee, at the conclusion of the mining operation, or at other times as surface disturbance related to mining may occur, will replace all damaged, disturbed or displaced corner monuments (section corners, 1/4 corners, etc.), their accessories and appendages (witness trees, bearing trees, etc.), or restore them to their original condition and location, or at other locations that meet the requirements of the rectangular surveying system. This work shall be conducted at the expense of the Lessee, by Bureau of Land Management (BLM) land surveyors to the standards and

guidelines found in the Manual of Surveying Instructions, United States Department of the Interior.

Stipulation #17

The Lessees, at their expense, will be responsible to replace any surface water and/or developed groundwater sources identified in the Record of Decision for protection that may be lost or adversely affected by mining operations, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, or other land uses.

Table 1. Spring sources identified for protection during mining operations.			
Spring Site ID ^a	Elevation	Easting	Northing
M_SP01	8420	465615	4319979
M_SP02	8335	466086	4319977
M_SP04	8812	464246	4319267
M_SP05	8937	464212	4319133
M_SP06	8952	464215	4319121
M_SP08	8820	464754	4317178
M_SP09	8849	464791	4317141
M_SP12	8739	464583	4319397
M_SP15	8811	463884	4316685
M_SP18	8295	465794	4320892
M_SP19	8968	462644	4316124
M_SP20	9395	462191	4316826
M_SP40	9163	463677	4318041
M_SP41	9223	463475	4318025
M_SP45	8505	465156	4319780
M_SP60	8801	462887	4316092
M_SP87	7922	465309	4322427
M_SP100	8975	463616	4316719
M_SP103	8999	463271	4316302
M_SP104	9052	463250	4316335
M_SP105	8971	463233	4316280
M_SP106	8997	462626	4316155

^a Derived from Table 3.2 in the Greens Hollow Federal Coal Lease Tract Final SEIS.

Stipulation #18

STIPULATION FOR LANDS OF THE NATIONAL FOREST SYSTEM UNDER JURISDICTION OF THE DEPARTMENT OF AGRICULTURE

The Licensee/Permittee/Lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor
Manti-La Sal National Forest
599 West Price River Drive
Price, Utah 84501
Telephone Number: 435-637-2817

who is the authorized representative of the Secretary of Agriculture.

Stipulation #21

The licensee/lessee must comply with the Roadless Area Conservation Rule, 36 CFR Part 294-Special Areas, Subpart B-Protection of Inventoried Roadless Areas, January 12, 2001.

In addition, on lands within inventoried roadless areas any surface disturbance from authorized temporary cross-country motorized access will be restricted to the minimum necessary to safely and efficiently complete surface activities.

Appendix 4: Response to Objection Instructions

Response to Instructions for Objection to the Final Supplemental EIS for the Leasing and Underground Mining of the Greens Hollow Federal Coal Lease Tract October 2015

Background:

A Final Supplemental EIS (FSEIS) and Draft Record of Decision (ROD) was prepared for the purpose of determining whether or not to consent to the BLM to offer the Greens Hollow Federal Coal Tract for the Lease and Underground Mining. As required by regulation and policy, these documents were made available for public review and comment during the 45 day objection period beginning on March 3, 2015. Four interested parties filed objections to the Regional Forester. The objections were reviewed by the Objection Review Officer (ORO). Responses to the objections were based on the FSEIS, project records and Draft Record of Decision (ROD). On Aug. 25, 2015 the ORO mailed formal response to each objector disclosing how the Manti-La Sal and Fishlake National Forests shall respond to specific issues associated with objections filed. Within each letter issue response instructions were given to the Manti-La Sal and Fishlake National Forests.

The following is the Forests' response to those instructions. Also, contained in this response is clarifying language developed through meetings with the State of Utah to discuss issues raised in the objection and potential resolution.

Objection/Issue	Number	Instructions	Response	Where changes were made
Henry Clayton				
The lease is discriminatory, arbitrary, capricious, and manifestly contrary to the indigenous custom and tradition.	1	Ensure that the FSEIS clearly describes the situation with regard to the MOA and the entities that are signatory to it.	<p>The text was changed in the ROD to reflect the clarification of the entities involved and the signatories for the MOA. The original text was removed, and the updated text was added.</p> <p>Original Text -A Memorandum of Agreement (MOA) between the State Historic Preservation Office (SHPO), the Tribes, SUFCO, the FS, and the Advisory Council on Historic Preservation accounts for the concerns that Native Americans have for the sites that are being affected by this project.</p> <p>Updated text – A Memorandum of Agreement (MOA) was created that takes into account the concerns that the Native American Tribes have for the sites that could be affected by Alternative 2 or 3. This MOA was developed in consultation with the Northern Ute Tribe, the State Historic Preservation Officer (SHPO), SUFCO, the Advisory Council on Historic Preservation, and the FS. The Northern Utes approved the final draft of the document but chose not to be a signatory. As a result, the FS and SHPO are the signatories to the MOA. The Hopi Tribe and all other interested Federally recognized tribes will continue to be consulted on the development and implementation of this project.</p>	<p>The original text is found in the FSEIS page 99 Section 3.6.1.3 and in the Draft ROD, page 17.</p> <p>The clarification language is found in the Final ROD on page 17.</p>

Objection/Issue	Number	Instructions	Response	Where changes were made
Hopi Tribe				
Future Mining may affect cultural resources significant to the Hopi Tribe.	1	Ensure that the FSEIS clearly describes the situation with regard to the MOA and the entities that are signatory to it.	<p>The text was changed in the Final ROD to reflect the clarification of the entities involved and the signatories for the MOA. The original text was removed, and the updated text was added.</p> <p>Original Text -A Memorandum of Agreement (MOA) between the State Historic Preservation Office (SHPO), the Tribes, SUFCO, the FS, and the Advisory Council on Historic Preservation accounts for the concerns that Native Americans have for the sites that are being affected by this project.</p> <p>Updated text – A Memorandum of Agreement (MOA) was created that takes into account the concerns that the Native American Tribes have for the sites that could be affected by Alternative 2 or 3. This MOA was developed in consultation with the Northern Ute Tribe, the State Historic Preservation Officer (SHPO), SUFCO, the Advisory Council on Historic Preservation, and the FS. The Northern Utes approved the final draft of the document but chose not to be a signatory. As a result, the FS and SHPO are the signatories to the MOA. The Hopi Tribe and all other interested Federally recognized tribes will continue to be consulted on the development and implementation of this project.</p>	<p>The original text is found in the FSEIS page 99 Section 3.6.1.3 and in the Draft ROD, page 17.</p> <p>The clarification language is found in the Final ROD on page 17.</p>
State Of Utah				
	1	Resolution	<p>Added the following text to Final ROD to clarify that the Forest Service was aware of the Utah School and Land Exchange Act. Because this was considered in the original EIS, there was no change in the analysis or the decision.</p> <p>Utah Schools and Lands Exchange Act (Public Law 105-335 – Oct. 31, 1998) inclusion and discussion: Consent to coal leasing is a discretionary action authorized under MLA as amended by FCCLA and not a requirement. However, the FS decision is to consent to the lease and this consent with stipulations will not conflict with established laws, regulations and environmental management objectives. The decision includes reasonable terms that will provide protection for surface resources consistent with both the Manti-La Sal N.F. and Fishlake N.F. Land and Resource Management Plans and will not prohibit reasonable economic development of coal estates.</p> <p>Although the recent right-of-way by the BLM provides access to some of the State of Utah coal reserves, the FS acknowledges that there are portions of State of Utah coal east of the Greens Hollow tract that will be difficult to access and mine economically except in conjunction with the Greens Hollow tract. If Greens Hollow is not leased, "reasonable economic development" of the school trust coal will be possible but could become uneconomic, and the school trust could lose the benefit of the exchange with regard to that state coal.</p> <p>Further discussion of this topic can be found under Comment 802-3 on page 485 of the FSEIS.</p>	<p>This text was added to the Final ROD page 18. This text was not in the Draft ROD.</p>
	2	Resolution	<p>Stipulation 14 was clarified. The Draft ROD had the following language:</p> <p>Original Text: Stipulation #14 includes requirements that post lease activity comply with direction for protecting greater sage grouse and its habitat according to "Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4" and conditions in a letter from Regional Forester, dated October 4, 2012, or other direction when available. The provisions of Stipulation #14 will protect the greater sage-grouse and their habitat.</p>	<p>Clarifications to stipulation 14 were added to Section B Page 6 of the ROD.</p>

Objection/Issue	Number	Instructions	Response	Where changes were made
			<p>Throughout the analysis of this proposal, the U.S. Fish and Wildlife Service was contacted as required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended. No further directions or stipulations were provided by them.</p> <p>As per the informal resolution with the State of Utah the following language was clarified. The bold and italic text was added to the Final ROD, and the strike through text was deleted.</p> <p>Updated text: Stipulation #14 includes requirements that post lease activity comply with <i>the most current regulation and</i> direction for protecting greater<i>greater</i> sage-grouse and its habitat according to to. <i>The most current regulations include the</i> "Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4" and conditions in a letter from the Regional Forester, dated October 4, 2012, or other. <i>However, new</i> direction when available. The provisions of Stipulation #14 <i>as outlined in the "Utah Greater Sage-Grouse Land Use Plan Amendment" project</i> will protect the greater sage-grouse and their habitat. <i>be required when it is finalized.</i></p> <p><i>The provisions of Stipulation #14 will protect the greater sage-grouse and their habitat.</i> Throughout the analysis of this proposal, the U.S. Fish and Wildlife Service was contacted as required by Section 7(a)(2) of the Endangered Species Act of 1973, as amended. No further directions or stipulations were provided by them.</p> <p>Updated text in Appendix 3</p> <p>Stipulation 14 - Any post lease surface disturbing activities shall comply with the most current regulation and direction for protecting greater sage-grouse and its habitat. The most current regulations include the "Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4" and conditions in a letter from the Regional Forester, dated October 4, 2012. However, new direction as outlined in the "Utah Greater Sage-Grouse Land Use Plan Amendment" project would be required when it is finalized.</p>	<p>Changed in Appendix 3 pg. 31</p>
		Resolution	<p>The Utah Schools and Land Exchange Act was considered during the analysis of the proposed alternatives. The following text provides clarification of the review.</p> <p>Utah Schools and Lands Exchange Act (Public Law 105-335 – Oct. 31, 1998)</p> <p>The Utah Schools and Lands Exchange Act of 1998 (Act) provided for the exchange of certain lands and mineral rights within the State of Utah. A Memorandum of Understanding (MOU) between the Utah School and Institutional Trust Lands Administration, the USDA and the USDI with its amendment were accepted in 1999 to facilitate the implementation of the Act.</p> <p>Specifically related to the mining of coal, Finding #13 of the Act states, "...the use of any mineral interests obtained by the State of Utah where the Federal Government retains surface and other interest, will not conflict with established Federal land and environmental management objectives, and shall be fully subject to all environmental regulations applicable to development of non-Federal mineral interest on Federal lands. Recital 5 of the MOU states "Subject to reasonable terms and conditions for the protection of the surface estate consistent with the Forest Plan, any permit requirement may not prohibit reasonable economic development of the conveyed coal estates."</p>	<p>No changes made.</p>

Objection/Issue	Number	Instructions	Response	Where changes were made
			The federal government has complied with and has been receiving benefits of the exchange since its conclusion.	
Wild Earth Guardians				
The Agency Failed to Analyze and Assess Impacts Related to Combustion of Coal.	1	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
The Agency Failed to Analyze and Assess Impacts Related to Coal Transportation Activities.	2	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
The Agency Failed to Analyze and Assess Impacts related to International Coal Export Activities.	3	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
The Agency Failed to Analyze and Assess Climate Impacts Resulting from Direct and Indirect Greenhouse Gas Emissions	4	Explain in the socioeconomic analysis why the social cost of carbon protocol is inappropriate for a socioeconomic analysis and that a cost-benefit analysis is not required under NEPA.	<p>A detailed explanation about the Social Cost of Carbon (SCC) was provided in the August 25, 2015 Objection Response Letter from George C. Iverson, Objection Reviewing Officer. The text is available below for review. The 2015 Final Socioeconomic summary report was clarified to state why the SCC was not used in this analysis. It is also incorporated here.</p> <p><i>The social cost of carbon (SCC) protocol was developed by an Interagency Working Group (IWG), including the Environmental Protection Agency (EPA) and others, for use in cost-benefit analyses of proposed regulations that could impact cumulative global emissions (Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866). The SCC is used to estimate the monetized damages associated with an incremental increase in carbon emissions in a given year. It includes (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change. The SCC was developed to assist agencies in meeting Executive Order (EO) 12866's requirement to assess costs and benefits during the development of regulations.</i></p> <p><i>EO 12866 requires a cost-benefit analysis to be conducted when developing regulations and the IWG encourages the use of the SCC protocol in those cases. NEPA does not require a quantitative cost-benefit analysis (40 CFR 1502.23).</i></p> <p><i>The Greens Hollow Federal Coal Lease Tract Project includes a socioeconomic analysis (Final SEIS pp. 242-246), to be distinguished from a cost-benefit analysis. A cost-benefit analysis examines the economic efficiency of a proposed action—the net change in social welfare resulting from the costs and benefits of a proposal, including consideration of market and non-market values. Presenting the SCC cost estimates quantitatively, without a complete monetary cost-benefit analysis which includes the social benefits of energy production, would be misleading.</i></p>	<p>Added as Section 1.4 Social Cost of Carbon of the 2015 Final Socioeconomic Summary Report (page 8).</p> <p><i>Additional text in italics.</i></p> <p>This text was not in the original Socioeconomics Summary Report.</p>

Objection/Issue	Number	Instructions	Response	Where changes were made
			<p><i>In contrast, the socioeconomic analysis for the Greens Hollow Federal Coal Lease estimates the distributional effects of an action on sectors of a regional economy, primarily by measuring the changes in employment and income within the geographic area where workers or businesses are most affected by the action. The Greens Hollow socioeconomic analysis appropriately weighs the merits and the drawbacks of the proposed action and alternatives, without reduction to a monetary or quantitative cost-benefit analysis which would likely be so imprecise as to be misleading.</i></p> <p><i>The fact that the effects or costs of carbon emissions were not quantified does not mean that they were ignored. The Final SEIS quantified the estimated greenhouse gas emissions that would result from fossil fuel combustion and coal mining operations from both the Greens Hollow lease and the end user (Final SEIS p. 286). These emissions were compared with global emissions values from coal mining.</i></p> <p><i>The commenter cites EPA’s comments on the proposed Keystone XL oil pipeline EIS as an indication that the EPA has recommended use of the SCC protocol for project-level decisions. The EPA reviewed and commented on this Supplemental EIS based on its authority under section 309 of the Clean Air Act (document 0544). EPA’s comments did not include a recommendation to use the SCC protocol or any other estimate of the social cost of carbon or to prepare a quantitative cost-benefit analysis.</i></p>	
Development of Surface Facilities will Impact Sage Grouse Habitat	5	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
SUFCA Mine, Greens Hollow Coal Lease, and Priority Sage Grouse Habitat Overlap and National Technical Team Recommendations were Not Taken into Consideration.	6	Include additional discussion on the current direction for sage grouse habitat management and how considerations of the National Technical Team (NTT) Recommendations are incorporated in the Greater Sage-Grouse EIS’s.	<p>The NTT recommendations were considered in the original BE and are cited on page 41 as Morales et al 2011. The Biological Evaluation was clarified to explicitly identify some of the specific NTT recommendations that will be required per Stipulation #14. The clarifying text is included in italics below.</p> <p><i>Current guidelines for vent shaft and power line construction preclude its placement in sage-grouse habitat by stating that new leases must have all appurtenant facilities placed outside of priority sage-grouse habitat (Morales et al 2011). Since all sage-grouse habitat in the analysis area is classified as priority sage-grouse habitat, the reasonably foreseeable vent shaft and power line may not be placed within any sage-grouse habitat and therefore there is no potential for habitat loss due to construction of these facilities. Impacts of fan maintenance traffic on sage-grouse are expected to be minimal.</i></p> <p><i>Current guidance limiting noise impacts to 10 dB above ambient (as measured at the edge of the lek) would eliminate noise impacts, from either vent shaft construction or operation, on lekking sage-grouse (Morales et al 2011).</i></p> <p>None of the areas within the Greens Hollow tract have been proposed as critical habitat. Additionally, according to Stipulation #14, mining “shall be consistent with the most current Forest Service direction regarding management of Greater Sage Grouse habitat.” <i>In addition to the guidance from the National Technical Team Report mentioned in the previous paragraphs (Morales et al 2011), this would include compliance with the Utah Greater Sage-Grouse Land Use Plan Amendment and Environmental Impact Statement, once finalized.</i></p>	<p>BE dated December 2014 - Page 41</p> <p>Final BE dated August 2015 - Page 47</p> <p><i>Additional text in italics</i></p>

Objection/Issue	Number	Instructions	Response	Where changes were made
			<p>Due to the recent signing of the Greater Sage-grouse Record of Decision for Idaho and Southwest Montana, Nevada and Utah and Land Management Plan Amendments for several forests, the following text was added to the ROD.</p> <p><i>Stipulation #14 was amended to require post lease activity to comply with the most current regulation and direction for protecting great sage grouse and its habitat. At the time of analysis, the most current guidance was the "Interim Conservation Recommendations for Greater Sage-grouse and Greater Sage-grouse habitat, USFS Regions 1, 2 and 4" and conditions in a letter from the Regional Forester dated October 5, 2012. This included restrictions on new surface facilities in priority habitat and restrictions on acceptable noise levels. On September 22, 2015, the Greater Sage-grouse Record of Decision for Idaho and Southwest Montana, Nevada and Utah and Land Management Plan Amendments for several forests including Manti-La Sal and Fishlake National Forests was signed and in effect. The Greater Sage-grouse Record of Decision supersedes the Interim Conservation Recommendations as the most current guidelines, and thus will be followed under Stipulation #14 until more current guidance becomes available. The Greater Sage-grouse Record of Decision required the same restrictions on noise levels and surface facilities as the Interim Conservation Recommendations; therefore there was no change in the analysis and Stipulation #14 is referred to throughout the ROD and supporting documents.</i></p> <p>Additional Text</p> <p><i>On September 22, 2015, the Greater Sage-grouse Record of Decision for Idaho and Southwest Montana, Nevada and Utah and Land Management Plan Amendments for several forests including Manti-La Sal and Fishlake National Forest was signed. The Greater Sage-grouse Record of Decision supersedes the Interim Conservation Recommendations as the most current guidelines, and thus will be followed under Stipulation #14, until more current guidance. The Greater Sage-grouse Record of Decision required the same restrictions on noise levels and surface facilities as the Interim Conservation Recommendations; therefore there was no change in the analysis and Stipulation #14 is referred to throughout the ROD and supporting documents.</i></p>	<p>Additional text on Page 2 of the ROD</p> <p>Additional text on page 5 of the ROD</p>
Construction, Road Impacts	7	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
Noise from Ventilation Fan was Not Analyzed	8	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
The SEIS Does not Adequately Analyze and Assess Impacts from Transmission Line Development and New Rights of Ways.	9a	Include discussion on the feasibility of burying the transmission lines	<p>A discussion regarding the feasibility of burying the transmission lines was included in the Power Line Alternatives Review Report (dated February 2011 – located in the project record).</p> <p>The text is as follows -</p> <p>Section 2.6.3.2 Power Transmission Buried Below the Surface states the following: The feasibility of burying the power line to avoid wildlife and visual resource concerns was reviewed. Burying a power line of the size required (69 kV) would result in a major disturbance to the ground surface. The line would have to be insulated (approximately one foot in diameter) and would require excavating a large trench and encasing the line in concrete. Much of the ground surface from Link Canyon consists of shallow soils and sandstone at or near the surface. Ripping and blasting would be required and fully successful reclamation would be difficult and likely not possible. In the event of an outage, repair</p>	No changes were made. Refer to Power Line Alternatives Review Report (Feb. 2011) Section 2.6.3.2

Objection/Issue	Number	Instructions	Response	Where changes were made
			would be difficult and would require extensive time requirements. The area to be crossed has also been subsided in the past so ground stability and line integrity would be a great concern. Public safety issues would also be of concern with such a high voltage line. Junction boxes could be easily vandalized. The power company does not bury this size of line due primarily to electrical impedance, safety, and cost issues. After consideration of the above concerns it was determined that burying the power line would not be feasible and was eliminated from detailed analysis.	
	9b	Ensure discussions about power poles and the potential impacts to sage grouse as a result of raptors using them for hunting perches is consistent throughout the record.	The FSEIS, BE, BA, and Technical Report were reviewed and are consistent related to this topic. FSEIS page 212, BE page 39, BA (no ESA listed raptors so not included in this document), and Wildlife Technical Report page 99.	No changes required.
Cumulative Impacts	10a	Clearly show how the cumulative impacts were determined.	Biological Evaluation (refer to the Final BE 2015) was revised to clearly show that all impacts were considered in reaching associated determinations. The revised text from page 45 is in bold and italics below: Based on the analysis <i>of direct, indirect, and cumulative effects</i> provided in this document, it is determined that this action would have no impact on the following Region 4 species: Information that lead to the determinations in Section IX is found in Sections VII and VIII of the BE.	Final BE August 2015 Pages 18-45
	10b	Discuss grazing impacts to the current sage-grouse habitat condition in the BE.	The impacts from grazing to greater sage grouse were considered. A general discussion of the impacts of livestock grazing as a cumulative impact is found in the original Biological Evaluation (2014), page 42. The Rangeland Summary report (2013) discloses that long-term trend studies indicate that soil and vegetation conditions on the allotments are in a stable to upward trending condition. No change to permitted livestock grazing is proposed under any alternative. Annual surveys for greater sage grouse within and adjacent to the project area indicate healthy populations (refer to the wildlife technical report and BE) In addition, livestock grazing is reviewed annually and modified when appropriate in response to current conditions through the annual operating instructions. According to regulations, the authorized livestock grazing will comply with the most current regulation and direction for protecting greater sage- grouse and its habitat. The most current regulations include the "Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat, USFS Regions 1, 2, and 4" and conditions in a letter from Regional Forester, dated October 4, 2012. However, new direction as outlined in the "Utah Greater Sage-Grouse Land Use Plan Amendment" project will be required when it is finalized.	No changes made - BE dated December 2014 page 42 Text from BE in italics

Objection/Issue	Number	Instructions	Response	Where changes were made
			<p>The text in the original BE is as follows.</p> <p><i>In general, livestock grazing poses a potential threat to both terrestrial and aquatic habitat. Improper grazing practices can degrade terrestrial habitat, streams, riparian habitats, and fish populations. It can also reduce the quality of habitat for terrestrial species associated with riparian systems. Degradation occurs when soils are compacted and the vegetation composition is changed. This can lead to increased runoff and erosion, reduced stream bank vegetation and stability, changes to aquatic habitat, and adverse impacts to fish and other aquatic species (Platts 1991). Impacts from cattle grazing could add cumulatively to the impacts to aquatic habitat from mining-induced subsidence and escarpment failure. Further, if proper grazing practices are not followed, terrestrial habitats could be impacted and forage available for wildlife could be reduced and habitat value diminished. Further, if vegetation is stressed due to lack of surface water, livestock and big game grazing and browsing compounded with subsidence impacts due to surface cracks could cumulatively affect vegetation and habitat for wildlife.</i></p>	
Protection in Accordance with the LRMP requirements and the Sensitive Species Handbook	11	None	No additional instruction beyond the formal response letter mailed on August 25, 2015.	
The DROD and FEIS Fails to Ensure Compliance with the Endangered Species Act	12	It would strengthen the cumulative effects analysis in both the hydrology and wildlife reports to document that the 303/305 listing does not include selenium or mercury for the waters in question.	<p>The Final Surface and Ground Water Technical Report and the Final Wildlife Technical Report were updated with information regarding the 303/305 listing.</p> <p>The following additional text was added to the Final Surface and Ground Water Technical Report-2015:</p> <p><i>The State of Utah 2014 303(d) list of impaired waters (Utah 303(d) list) did not include any water bodies in the project area that were impaired for mercury or selenium (Utah DWQ 2015). Furthermore, no water bodies in the project area were assigned a fish consumption advisory due to elevated levels of mercury. This review was expanded outside of the project area to include watersheds that comprise the DWQ West Colorado management unit. This management unit includes nine major watersheds in Utah that drain into the Green River, a major tributary of the Colorado River.</i></p> <p><i>In regard to mercury, the air quality assessment completed by Marquez (2015) indicated "The vast majority of mercury emissions are expected to undergo long-range transport and entry into the global atmospheric cycle, which can be deposited anywhere in the world. Only a small fraction of mercury emissions from coal combustion is expected to deposit in the local region. Deposition in the U.S. is dependent on climate, with greater deposition in humid areas and less deposition in areas with arid and semi-arid climates like the West." It is uncertain what portion of mercury generated by burning coal would be deposited in local watersheds (West Colorado management unit) that incorporate and are adjacent to the project area.</i></p> <p><i>In regard to selenium, Marquez (2015) indicated there was no National Ambient Air Quality Standard for selenium and direct measurement of this parameter is not required by federal air quality regulations.</i></p>	<p>Addressed in the Final Surface and Ground Water Technical Report on page 37 and in the Final Wildlife Technical Report on page 39</p> <p><i>Clarification Text added to reports shown in italics</i></p>

Objection/Issue	Number	Instructions	Response	Where changes were made
			<p><i>Two streams and one reservoir with fish consumption advisories are located in the West Colorado management unit and outside of the project area. These water bodies include Calf Creek, Pine Creek, and Joes Valley Reservoir.</i></p> <p><i>No lakes/reservoirs in the West Colorado management unit were included on Utah 303(d) list for impairment due to either mercury or selenium (Utah DWQ 2015). No streams in the West Colorado management unit were included on the 2014 303(d) list for mercury (Utah DWQ 2015).</i></p> <p><i>Streams and segments of stream that were included on the 2014 303(d) list for selenium include Price River-3 (Price River and tributaries (excluding Gordon Creek and Pinnacle Wash) from Coal Creek confluence to Carbon Canal Diversion), Price River-4 (Price River and tributaries (except Desert Seep Wash, Miller Creek, and Grassy Trail Creek) from Woodside to Soldier Creek confluence) Huntington Creek (Huntington Creek and tributaries from confluence with Cottonwood Creek to Highway 10) and Wahweap Creek (Wahweap Creek and tributaries from Lake Powell to headwaters) (Utah DWQ 2015).</i></p> <p><i>In general, mercury accumulation in fish tissue is considered to be the result of natural conditions. The Updates to Utah Mercury Fish Consumption Advisory List (DWQ 2014) said “Mercury is a naturally occurring element that can be transformed into methylmercury, a toxic form found in some natural waters...Any health risks associated with eating fish from the fish advisory areas are based on long-term consumption and are not tied to eating fish occasionally...There is no health risk associated with mercury in the water for other uses of the reservoirs, streams, rivers, or creeks, such as swimming, boating and waterskiing.”</i></p> <p><i>Impairment by selenium in the Colorado River Basin in Utah (including the West Colorado management unit) is generally considered a result of local geologic formations (e.g. Mancos Shale) and seepage from irrigated agriculture.</i></p> <p>Source:</p> <p>Marquez Environmental Services Inc. 2015. Attachment A: Fate of Mercury in the Atmosphere, dated August 6, 2015. In: Additional response to region office questions related to the Greens Hollow Federal Coal Lease Tract. September 1.</p> <p>Chapter 5 303(d) list of rivers and streams. 2014 Integrated Report Utah Division of Water Quality.</p> <p>Chapter 6 303(d) list of lakes and reservoir. 2014 Integrated Report Utah Division of Water Quality.</p> <p>Utah Environmental Interactive Map. http://enviro.deq.utah.gov/ Query water quality in assessed lakes, assessed waters, and mercury in fish tissue. Boundary layer drawn around West Colorado Management Unit.</p> <p>Utah Department of Environmental Quality. 2014. Updates to Utah Mercury Fish Consumption Advisory List – New waterways and species added. Available at www.fishadvisories.utah.gov.</p> <p>Added a sentence in the Final Wildlife Technical Report (page 39) referring to the updated Surface and Groundwater Technical report.</p>	

Objection/Issue	Number	Instructions	Response	Where changes were made
			Wildlife Technical Report-2015: <i>None of these waterbodies in the project area are impaired by selenium or mercury (Cirrus 2015).</i>	
Effects to IRAs and PWAs were not studied	13	None	No additional instruction beyond the formal response in the form of a letter mailed on August 25, 2015.	
Wilderness Designation Availability	14	None	No additional instruction beyond the formal response in the form of a letter mailed on August 25, 2015.	