
EXECUTIVE SUMMARY

ES.1 INTRODUCTION

The Vernal Field Office (VFO) of the Bureau of Land Management (BLM) Utah is revising and integrating the Book Cliffs and Diamond Mountain Resource Management Plans (RMPs) into a single new RMP. The revised RMP will be called the Vernal Field Office Resource Management Plan (VFO RMP) and will provide planning guidance for public land and the federal mineral estate managed by the VFO in Daggett, Duchesne, and Uintah counties, as well as in a small portion of Grand County in northeastern Utah. The consolidated Diamond Mountain and Book Cliffs areas will be referred to as the Vernal Planning Area (VPA) or the VFO.

There are 5,518,859 acres within the boundary of the VFO, of which 1,725,512 acres (approximately 30%) are BLM-managed surface lands. The VFO administers energy-related mineral activities on 3.9 million acres of federal mineral lands, including 1.3 million acres of U.S. Forest Service (USFS) lands, and post-lease mineral operations on Indian Trust mineral lands. The 1,911,000 acres of BLM-managed mineral estate includes the split-estate mineral lands within the Hill Creek Extension, comprising 185,500 acres of mineral estate underlying Indian Trust surface. Table 1.4.1 clarifies in detail land ownership in the VPA and surrounding areas.

Most of the land that the BLM manages is in the eastern and southern portions of the VPA and is generally characterized by habitats associated with the Uinta Basin and Colorado Plateau. Other agencies managing land in the vicinity of the VFO include the USFS, Bureau of Indian Affairs (BIA), National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), Utah Division of Wildlife Resources (UDWR), and Utah Division of Lands and Forestry. Additional lands are held in private ownership or in trust by the U.S. for the Ute Indian Tribe or for individual Native Americans.

The Diamond Mountain portion of the VPA includes BLM-administered lands and minerals in Daggett and Duchesne counties and a portion of Uintah County northwest of the Green River. The plan is responsible for the administration of public land in Browns Park and the Diamond Mountain Plateau for the Little Snake Field Office of Colorado. The Little Snake Field Office administers public land in Browns Park for some resources. Administration of these agreed-upon resources is in accordance with the parent resource area's management plan. There is also a fire-suppression agreement between the VFO and Little Snake Field Office.

The Book Cliffs portion of the VPA is located in northeastern Utah. It is bounded by the Utah–Colorado state line on the east, the Book Cliff Mountains to the south, the Green River to the west, and Blue Mountain to the north (see Map Figure 1). The Book Cliffs area includes public land and minerals in Uintah and Grand counties. The VFO boundary officially ends at the Uintah County line; however, a small portion of the public lands in Grand County of the Moab Field Office are administered by the VFO under a memorandum of understanding (MOU).

A small portion of the Flume Canyon Wilderness Study Area (WSA) lies within the VPA. However, this WSA is managed by the Moab Field Office due to easier access to this area from Moab.

A small portion of the West Cold Springs and Diamond Breaks WSAs lie within the Vernal Planning Area. A Memorandum of Understanding (MOU) is in place between the Little Snake Field Office in Craig, Colorado, and the VFO. The Little Snake Field Office has administrative responsibility for managing both of these areas.

A small number of grazing allotments straddle the Utah/Colorado border. An MOU is in place between the White River Field Office and the Vernal Field Office, where each office, depending on the allotment boundaries, administers livestock grazing for the other office.

Land ownership patterns within both the Diamond Mountain and Book Cliffs planning areas range from large blocks of BLM-administered public lands to small, privately owned blocks. This is complicated by lands where BLM administers a fractional percentage of the minerals, while other owners hold the other interests in the land. Land ownership, surface administration and mineral management responsibilities within the VPA are shown in Map Figure 1 and described in Table 1.4.1.

Decisions and actions of the RMP only apply to BLM lands. In the case of split estate lands, such as lands within the planning area that are split between the BLM and the Uintah and Ouray Indian Tribe, actions affecting the surface must be coordinated with the surface owner. Undertakings conducted on lands not wholly or partly administered by the BLM are subject to the laws, regulations, conditions, and policies of the relevant land management agency or other landowner.

ES.2 PURPOSE AND NEED FOR THE ACTION

ES 2.1 PURPOSE

The purpose of this project is to revise and integrate the Book Cliffs and Diamond Mountain RMPs into a new single comprehensive RMP that will guide management of public lands in the VPA. Mineral development in the VPA is one of the major issues driving this land use planning effort. However, due to mineral development, many of the other decisions necessary to complete a comprehensive resource management plan needed to be updated and revised.

In 2002, the BLM prepared a projected reasonable foreseeable development (RFD) scenario in order to project environmental impacts across a 15-year period; this RFD has been modified (2008) for oil and gas development only in order to project environmental impacts for up to five years. Development projections included in-depth reviews of potential for occurrence, past well production, current well production, and future potential for production. During the pendency of this planning effort (beginning with public meetings in 2001 and 2002 for scoping purposes through the notice of availability of the Draft RMP/EIS published in the Federal Register on January 14, 2005), the RFD scenario, which is a planning tool and not a prediction or limit to development, did not track completely with the pace of development in the Uinta Basin. The BLM has carefully monitored industry trends and believes that the RFD used as an analytical tool in this Proposed RMP can be considered accurate up to approximately five years from the time the Record of Decision (ROD) is signed.

Within the next five years, the BLM will monitor impacts to resources of continued development in the VPA and ensure that the impacts disclosed in this Proposed RMP are not exceeded by the pace of development.

ES 2.2 NEED

Current management of these public lands is guided by the Book Cliffs and Diamond Mountain RMPs. This RMP revision process is necessary because of the dated nature of the Book Cliffs RMP, completed in 1985, and to ensure consistency between the Book Cliffs and Diamond Mountain RMPs. Significant changes have occurred since completion of the Diamond Mountain and Book Cliff RMPs. Population growth and increased need for resource development has occurred, while concern for the environment has also increased. In addition to traditional consumptive uses (e.g., oil and gas development, mining and livestock grazing), there is now an increased interest in uses that emphasize aesthetic values such as open space and increased recreational opportunities. These often conflicting uses need to be addressed in terms of how they affect local communities; national, regional, and state interests; and ecosystem health. Additionally, policy guidance has resulted in the initiation or completion of local and national activity plans, recovery plans, and Programmatic Environmental Impact Statements (PEISs) that have changed land management direction in the VFO since the Book Cliffs RMP was written.

A large block of 188,500 acres of federal mineral estate within the Hill Creek Extension of the Uintah and Ouray Indian Reservation has not been previously analyzed for oil and gas leasing. This issue has been addressed as part of this RMP revision.

Ownership of federal land formerly managed by the Department of Navy and, more recently, by the Department of Energy (DOE) was transferred to the Ute Indian Tribe. The BLM managed certain resource programs for the Department of Energy on these 47,978 acres. This Vernal RMP will not analyze management of these programs.

These changes have been addressed as part of this RMP revision and integration process. See Section 1.5 for a description of the BLM's land use planning process.

ES.3 PLANNING ISSUES

Key planning issues identified through the scoping process that have been addressed in the RMP are:

- Air Quality
- Cultural and Paleontological Resources
- Fire Management
- Lands and Realty
- Minerals Management
- Non-WSA Lands with Wilderness Characteristics
- Off-highway Vehicle (OHV) Use and Transportation
- Rangeland Management and Health
- Recreation Resource Management
- Special Management Designations
- Visual Resource Management

- Watershed Management, Soils, and Vegetation
- Wild Horse Management
- Wildlife Habitat and Fisheries Management
- Woodland and Forest Management

ES.4 PROPOSED RMP AND DRAFT RMP ALTERNATIVES

Five management alternatives were developed to address the major planning issues and to provide direction for resource programs influencing land management. Each alternative emphasizes a different combination of resource uses, allocations, and restoration measures to address issues and resolve conflicts among uses to allow program goals to be accomplished in varying combinations across the alternatives. Management scenarios for programs not tied to major planning issues and/or mandated by law often contain few or no differences in management between alternatives.

Alternative D, continuation of current management (No Action), is based on existing planning decisions that remain valid, as well as on current direction and policy. The remaining alternatives were developed with input received during scoping and with expertise from the interdisciplinary planning team and input from local, state, federal, and tribal governments.

The alternatives were developed in response to the issues identified in the public scoping process and the planning criteria.

The BLM recognizes that social, economic, and environmental issues cross land ownership lines and that extensive cooperation is needed to actively address issues of mutual concern. To the extent possible, the alternatives were crafted using the input from public scoping comments and from comments submitted by Duchesne, Daggett, and Uintah county representatives and other cooperating agencies, including the Ute Indian Tribe.

All management under any of the alternatives would comply with state and federal regulations, laws, standards, and policies. Management items common to all and a more detailed discussion for each alternative may be found in Tables 2.1.1 through 2.1.27.

A comparison of the alternatives regarding these key management decisions are given in Tables ES.1 through ES.5 below.

Proposed RMP

The Proposed RMP/Final EIS is primarily based on the decisions from the Preferred Alternative (Alternative A) from the Draft RMP/EIS (January 14, 2005). However, it has been modified to include aspects of all alternatives analyzed after careful consideration of public comments, cooperating agency review, and internal review. The reviews were provided on the Draft RMP/EIS; call for information on Areas of Critical Environmental Concern (ACECs) (Federal Register Notice, December 13, 2005); and, Alternative E from the supplement that was issued on October 5, 2007, analyzing the management of non-WSA lands with wilderness characteristics. These alternatives are combined in the Proposed RMP/Final EIS. Some changes to the draft alternatives have been made in response to the public comments received during the comment period. These changes are limited, for the most part, to correcting mistakes and refining technical

points. Changes in the Proposed RMP/Final EIS from the Draft RMP/EIS Alternative A (Draft RMP/EIS Preferred Alternative) are summarized for the reader in Appendix N.

Alternative A (Draft RMP/EIS Preferred Alternative)

Management direction is generally broad and accommodates a wide variety of values and uses. The VPA would be managed to provide a sustainable flow of resources for human use, while protecting important watersheds and providing viable populations of native and desirable non-native plants species, and to provide wildlife habitat and opportunities for recreation use.

Alternative B

This alternative provides for most resource uses but would emphasize oil and gas development, where feasible. Renewable resources would be protected by balancing the development of mineral resources with focused and prudent mitigation measures.

Alternative C

The natural succession of ecosystems would be allowed to proceed in select management areas. This alternative would strongly emphasize maintenance of watershed conditions, species viability, properly functioning ecosystems, and a reduction of habitat fragmentation.

Alternative D (Current Management/No Action)

Maintain present uses by continuing present management direction and activities while abiding by all new mandates, executive orders, and directives that have been implemented since the previous RMPs were completed.

Alternative E

Alternative E gives emphasis to protection of all non-WSA lands with wilderness characteristics, including closure of these areas to mineral leasing and off-road vehicles, avoidance of rights-of-way, protection of undisturbed landscapes, and providing opportunities for primitive and semi-primitive recreation. The natural succession of ecosystems would be allowed to proceed in these and other select management areas. This alternative strongly emphasizes maintenance of watershed conditions, species viability, properly functioning ecosystems, and a reduction of habitat fragmentation. It also includes designation of ACECs and determinations for wild and scenic river suitability, while still providing for resource uses in other parts of the VFO, including mineral and energy development and motorized recreation use.

Alternative E is the same as Alternative C, except that it adds a protective management prescription to 277,596 acres of land in 25 areas that comprise non-WSA lands with wilderness characteristics. Alternative E, however, applies to all public lands within the VPA. The proposed decisions that apply to the lands outside of non-WSA lands with wilderness characteristics remain the same as those in Alternative C.

Table ES.1. Proposed RMP and Alternatives Comparison: Oil and Gas and Coal-bed Methane Leasing (acres)

Leasing Category	Proposed RMP	Draft RMP/EIS Alternative A (Preferred)	Alternative B	Alternative C	Alternative D (No Action)	Alternative E
Open	860,651	983,905	1,113,116	858,619	918,315	818,891
Administratively Open with Controlled Surface Use	779,730	796,955	706,281	768,466	617,715	680,570
Administratively Open with No Surface Occupancy	86,789	69,302	42,053	58,670	136,930	47,629
Closed	186,917	63,839	52,550	228,246	52,540	367,037

Table ES.2. Proposed RMP and Alternatives Comparison: ACECs (acres)

ACECs	Proposed RMP	Draft RMP/EIS Alternative A (Preferred)	Alternative B	Alternative C	Alternative D (No Action)	Alternative E
Bitter Creek	0	68,834	0	147,425	0	147,425
Bitter Creek–P.R. Spring	0	0	0	78,591	0	78,591
Browns Park	18,490	52,721	18,475	52,721	52,721	52,721
Coyote Basin	0	87,743	47,659	124,161	0	124,161
Four Mile Wash	0	0	0	50,280	0	50,280
Lears Canyon	1,375	1,375	1,375	1,375	1,375	1,375
Lower Green River Corridor	8,470	8,470	8,470	8,470	8,470	8,470
Lower Green River Expansion	0	1,700	0	1,700	0	1,700
Main Canyon	0	0	0	100,915	0	100,915
Middle Green River	0	0	0	6,768	0	6,768
Nine Mile Canyon	44,168	48,000	44,181	81,168	44,181	81,168
Pariette	10,437	10,437	10,437	10,437	10,437	10,437
Red Creek	24,475	24,475	24,475	24,475	24,475	24,475
Red Mountain–Dry Fork	24,285	24,285	24,285	24,285	24,285	24,285
White River	0	17,810	0	47,130	0	47,130
Total Acres	133,400	345,850	179,357	759,901	165,944	759,901

Table ES.3. Proposed RMP and Alternatives Comparison: Wild and Scenic River Suitability Recommendations (linear miles)

WSR Designations	Proposed RMP	Draft RMP/EIS Alternative A (Preferred)	Alternative B	Alternative C	Alternative D (No Action)	Alternative E
Argyle Creek	0	0	0	22	0	22
Bitter Creek	0	0	0	22	0	22
Evacuation Creek	0	0	0	21	0	21
Lower Green River	30	30	30	30	30	30
Middle Green River	0	0	0	36	0	36
Nine Mile Creek between Green River and Duchesne County Line	0	0	0	13	0	13
Nine Mine Creek between Carbon County Line and Confluence with Gate Canyon (two segments)	0	0	0	6	0	6
Upper Green River	22	22	22	22	22	22
White River (three segments)	0	44	0	44	0	44
Total Linear Miles	52	96	52	216	52	216

Table ES.4. Proposed RMP and Alternatives Comparison: OHV Use

Categories of OHV Use	Proposed RMP	Draft RMP/EIS Alternative A (Preferred)	Alternative B	Alternative C	Alternative D (No Action)	Alternative E
Open to OHV (acres)	6,202	6,202	5,434	5,434	787,859	5,434
Limited to OHV (acres)	1,643,475	1,643,475	1,659,901	1,353,529	887,275	1,326,024
Closed to OHV (acres)	75,845	75,845	60,187	366,559	50,388	392,818
Designated OHV Routes (miles)	4,860	4,860	4,861	4,707	0	4,654

Table ES.5. Proposed RMP and Alternatives Comparison: Non-WSA Lands with Wilderness Characteristics (acres)

PROPOSED RMP	Draft RMP/EIS Alternative A (Preferred)	Alternative B	Alternative C	Alternative D (No Action)	Alternative E
106,178	0	0	0	0	277,596

ES.5 AFFECTED ENVIRONMENT

Resources within the VPA include mineral resources, wildlife, fisheries, botanical (including listed and non-listed sensitive species), rangeland, wild horses, wilderness, cultural resources, water resources, wetlands and riparian resources, visual resources, and recreational resources. Land use and economic resources include oil and gas, phosphate, tar sands, gilsonite, livestock grazing, woodland products, building stone, and rights-of-way. Opportunities for hunting, sightseeing, hiking, viewing historic sites, camping, fishing, and OHV use provide public enjoyment, as well as additional revenues to businesses in and adjacent to the VPA. Unique features within the VPA include the White and Green rivers; Browns Park, which provides crucial deer winter range and a high density of cultural and historical sites; the Pariette Wetlands, which provide habitat for over 100 species of wildlife; Red Mountain, with its high mountain vistas and plentiful recreational opportunities; Nine Mile Canyon, with its Fremont rock art; and the Book Cliffs, an area rich in resources with abundant management opportunities.

ES.6 ENVIRONMENTAL IMPACTS

The environmental impacts of the project alternatives are summarized in Table 2.2 of Chapter 2 of this EIS.

ES.7 SUMMARY OF CHANGES MADE BETWEEN THE DRAFT RMP/EIS AND THE PROPOSED RMP/FINAL EIS

The BLM has made numerous changes between the Draft RMP/EIS and the Proposed RMP/Final EIS. These changes are described below and detailed in Appendix N. BLM has prepared this Appendix to document if changes between the Draft RMP/EIS and the Proposed RMP/Final EIS resulted in a significant change in circumstances or conditions, or if the Proposed RMP/Final EIS contains different information from that which was presented to the public in the Draft RMP/EIS. Finally, in order to confirm that all changes made to the Proposed RMP/Final EIS fall within the range of alternatives presented and analyzed in the Draft RMP/EIS and the Supplement to the Draft RMP/EIS.

The regulation controlling whether or not a supplement is required is found at 40 CFR 1502.9(c), which provides that agencies:

Shall prepare supplements to either draft or final environmental impact statements if:
The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact.

May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

Shall adopt procedures for introducing a supplement into its formal administrative record, if such a record exists.

Shall prepare, circulate, and file a supplement to a statement in the same fashion (exclusive of scoping) as a draft and final statement unless alternative procedures are approved by the Council.

All changes to the Vernal Field Office Draft RMP/EIS were made in response to public comment and/or internal review. The majority of the changes were editorial changes made to add clarity to the document. In some cases, alternatives presented in the Draft RMP/EIS were modified in the Proposed RMP to reflect technical corrections and data updates. In other cases, such as in Chapter 3, incorporation of updated information was necessary to refine the analysis in Chapter 4 that was incomplete or needed augmentation.

None of the changes described above and further detailed in Appendix N meet the regulatory definition for significance as found in 40 CFR 1508.27(a) and (b). These regulations require an agency preparing a NEPA document to review the changes for significant new circumstances or information relevant to environmental concerns and bearing on the Proposed RMP or its impacts, using context and intensity as the trigger for significance. The BLM has reviewed each substantive change through this regulatory standard and has determined that none of the changes, individually or collectively, require a supplement to this Final EIS.

Following is an executive summary of the major changes between the Draft RMP/EIS and the Proposed RMP/Final EIS. The summary of changes has been broken into two parts:

- Summary of Changes to Decisions Between the Draft RMP/EIS Preferred Alternative (Alternative A) and the Proposed RMP/Final EIS
- Summary of Editorial Changes Made Between the Draft RMP/Draft EIS and Proposed RMP/Final EIS.

ES 7.1 SUMMARY OF CHANGES TO DECISIONS BETWEEN THE DRAFT RMP/EIS PREFERRED ALTERNATIVE (ALTERNATIVE A) AND THE PROPOSED RMP/FINAL EIS

- **Air Quality** decisions were refined based upon State of Utah, Department of Air Quality correspondence included in Appendix O.
- The Draft RMP alternatives made proposed decisions for **Combined Hydrocarbon Areas/Special Tar Sand Areas**. The Proposed RMP now defers those decisions to the Programmatic Tar Sands Oil Shale EIS discussed in Section 1.10.9 of Chapter 1.
- **Wild horses** will no longer be permitted in the Winter Ridge Herd Area and Hill Creek Herd Area due to disease (e.g., Equine Infectious Anemia) and trespass of private horses because of mixed surface ownership with the Ute Indian Tribe, State of Utah, and privately held lands. The Draft RMP Preferred Alternative allocated 2,340 AUMs for wild horses in the Winter Ridge Herd Area and the Hill Creek Herd Area.
- The Proposed RMP provides **Greater Sage-grouse** additional protection during lekking, nesting, brooding, and during winter by selecting the protections in Alternative C.

- All or portions of 15 areas, approximately 106,178 acres, would be managed as **non-WSA lands with wilderness characteristics**: Beach Draw, Bourdette Draw, Bull Canyon, Cold Spring Mountain, Daniels Canyon, Dead Horse Pass, Diamond Breaks, Diamond Mountain, Lower Flaming Gorge, Moonshine Draw, Mountain Home, Stuntz Draw, Vivas Cake Hill, White River, and Wild Mountain. The Draft RMP Preferred Alternative did not specifically provide management for non-WSA lands with wilderness characteristics. The Proposed RMP preserves and maintains management prescriptions in these areas and does not allow for surface-disturbing activities.
- Bitter Creek, Coyote Basin, Lower Green River Expansion **ACECs** were not brought forward from the Draft RMP Preferred Alternative.
- White River, Browns Park, and Nine Mile Canyon **ACECs** were brought forward, with a reduction in acreage.
- Manage 24,259 acres in Red Mountain-Dry Fork as a **SRMA** to provide for maintenance and development of OHV or non-OHV trails, minimal facilities necessary for human health and safety, watershed values, relict vegetation communities, and crucial deer and elk winter habitat. An activity plan for the SRMA would be developed to determine what areas are appropriate for day use only.
- The Draft RMP Preferred Alternative proposed 24,183 acres as the White River **SRMA**. The Proposed RMP identified 2,831 acres as a SRMA. A portion of the lands not included in the SRMA in the Proposed RMP are being carried forward for management as non-WSA with wilderness characteristics.
- The Draft RMP Preferred Alternative recommended two segments of the White River, the Upper Green River and the Lower Green River, for inclusion in the **National Wild and Scenic River System** as well as the Upper and Lower Green River. The Proposed RMP recommends only the Upper and Lower Green River.
- In the Draft RMP Preferred Alternative, the BLM identified the **Hill Creek Extension** as available for leasing. The BLM, in cooperation with Ute Indian Tribe, identified in the Proposed RMP specific oil and gas leasing constraints for the Hill Creek Extension.

ES 7.2 SUMMARY OF EDITORIAL CHANGES MADE BETWEEN THE DRAFT RMP/DRAFT EIS AND PROPOSED RMP/FINAL EIS

Throughout the Plan

- The Supplement to the Draft RMP/EIS has been merged into the Proposed RMP/Final EIS. The Supplement presents an analysis of the effects of managing non-Wilderness Study Area (WSA) lands with wilderness characteristics in a protective manner. This analysis is identified as Alternative E in the combined RMP.
- Acreage numbers and figures have been revised and clarified based on refined GIS techniques throughout all chapters.

Chapter 1

- Chapter 1 has been rewritten to emphasize the decisions brought forward in the Proposed RMP/Final EIS.

- Discussion on monitoring and evaluation and how it plays into the planning process has been added in Chapter 1.
- Chapter 1, Language Added: Utah Division of Wildlife Resources (DWR) Wildlife Habitat Classification System Change and included specific language regarding exceptions, modifications and waivers (Appendix K). This information has been graphically displayed on all maps highlighting wildlife habitat.

Chapter 2

- In Chapter 2 an additional column has been added to the matrices Tables 2.1.1 through 2.1.27 reflecting the Proposed RMP.
- All implementation-level decisions in Tables 2.1.1 through 2.1.27 have been italicized and asterisked with a footnote at the bottom of the page as follows: *This is an implementation-level decision that cannot be protested under the planning regulations. Please see the cover letter for further information on protesting.
- Language provided by the State of Utah regarding Air Quality has been added to Chapter 2, Table 2.1.2 “Common to All” section.
- Language provided by the State of Utah concerning compressor engine emission controls has been added to Chapter 2, Table 2.1.9.
- Revised the WSR “Common to All” management actions in Table 2.1.19 to work with upstream and downstream water users and applicable agencies to ensure that water flows are maintained at a level sufficient to sustain the values from which affected river segments were designated.
- Table 2.4 in Chapter 2 of the Draft RMP/EIS was removed in the Proposed RMP/Final EIS.

Chapter 3 & 4

- Completely revised the Socioeconomics section of Chapters 3 and 4 to include the information provided by the State of Utah and cooperating counties included in the new Appendix M.

Chapter 5

- Chapter 5 – Table 5.7 has been added to show consistency findings between the Proposed RMP/EIS, Utah state law, and county plans.

References Added

- BLM, 2007. Northeast National Petroleum Reserve - Alaska Draft Supplemental Integrated Activity Plan/Environmental Impact Statement. USDOJ BLM, August 2007. Available on the Internet: http://www.blm.gov/ak/st/en/prog/planning/npra_general/ne_npra/ne_npra_supplement.html.
- Goddard Institute for Space Studies. 2007. Annual Mean Temperature Change for Three Latitude Bands. Datasets and Images. GISS Surface Temperature Analysis, Analysis

Graphs and Plots. New York, New York. Available on the Internet:

<http://data.giss.nasa.gov/gistemp/graphs/Fig.B.lrg.gif>.

- Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Basis (Summary for Policymakers). Cambridge University Press. Cambridge, England and New York, New York. Available on the Internet: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>.
- National Academy of Sciences. 2006. Understanding and Responding to Climate Change: Highlights of National Academies Reports. Division on Earth and Life Studies. National Academy of Sciences. Washington, D.C. Available on the Internet: <http://dels.nas.edu/basc/Climate-HIGH.pdf>.
- Jeffery C. Mosely, Prescribed Sheep Grazing to Enhance Wildlife Habitat on North American Rangelands. "Sheep Research Journal," 1994, pp. 79-91
- K.M. Havstad, Sheep Grazing as a Rangeland Improvement Tool, "Sheep Research Journal," 1994, pp.72-78
- B.E. Olson and J.R. Lacey, Sheep: A Method for Controlling Rangeland Weeds, "Sheep Research Journal," 1994, pp.105-112

Appendices Added

- Utah Public Lands Study – Key Social Survey Findings for Daggett, Duchesne, and Uintah Counties (Appendix M)
- Document Change Appendix (Appendix N)
- Air Mitigation Strategies Appendix (Appendix O)
- SHPO 106 Concurrence Letter (Appendix P)