

APPENDIX 11—CHANGES BETWEEN THE DRAFT RMP/EIS AND THE PROPOSED RMP/FINAL EIS

This appendix details the changes between the Draft RMP/EIS and Proposed RMP/Final EIS. 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, BLM wanted 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.

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

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 Kanab 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 below meet the regulatory definition for significance 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 Plan or its impacts, using context and intensity as the trigger for significance. 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.

Table A11-1 describes the changes from Alternatives B of the Draft RMP/EIS to the Proposed RMP in Chapter 2 of this Proposed RMP/Final EIS. The section titled “Changes to the Draft RMP/EIS” that follows the table describes the changes and updates to the Draft RMP/EIS.

Table A11-1. Changes from Alternative B of the Draft RMP/EIS to the Proposed RMP

Change from Alternative B of Draft	Reason for Change	Significance
Added additional management actions for air quality.	Based on public comments received on the Draft RMP/EIS, particularly comments from the State of Utah	The additions do not result in any changes to the impact analysis and are not significant.
Added restrictions on surface disturbing activities in pygmy rabbit habitat.	The Draft RMP/EIS addresses pygmy rabbit habitat; however since publication of the Draft RMP/EIS additional populations have been identified in the planning area.	No change in the impact analysis. Mitigation would be applied on a case-by-case basis with additional NEPA required. Not a significant change.
Removed several management actions (conservation measures) from the special status species section in Chapter 2.	Based on BLM review and coordination with USFWS. This was due to duplication of conservation measures in Chapter 2 and Appendix M of the Draft RMP/EIS.	No change in the impact analysis. This was done for clarification and to eliminate duplication. This is not a significant change.
Manage oil and gas leasing as open subject to major constraints (NSO) in Welsh's milkweed designated critical habitat.	Changed due to comments from the USFWS. The majority of Welsh's milkweed habitat is inside the Moquith Mountain WSA and is therefore closed to oil and gas leasing. This change was due to the sand hills area, 790 acres, not having a protective oil and gas leasing stipulation.	The small acreage adjustment (790 acres) makes this change not significant.
Preclude surface disturbing activities in crucial mule deer and elk winter range from November 15 to April 15 unless the activity would improve mule deer or elk habitat.	This decision was included in Alternative B of the Draft RMP/EIS. However, since the publication of the Draft RMP/EIS, UDWR adjusted the habitat layers for crucial habitat. This caused a large shift in acres affected by this decision.	The larger crucial winter habitat area was analyzed in the Draft RMP/EIS in Alternative C. Additionally, Appendix 3 includes exception, waiver, and modifications available for this stipulation. Because this information was taken into consideration and analyzed in the Draft RMP/EIS, these changes are not considered significant.
Added two cultural sites to the Public Use category.	Based on public comments received on the Draft RMP/EIS.	No changes to the impact analysis. This change is not significant.
Made minor adjustments to VRM II and VRM III acreages.	Changed to due management of non-WSA lands with wilderness character and adjustments due to oil and gas leasing categories.	Increased VRM II by 800 acres and decreased VRM III by 800 acres. This small acreage change is not significant.
Added Management of five areas (27,700 acres) to maintain, protect and preserve their wilderness characteristics.	Change made due to public comments received on the Draft RMP/EIS and further BLM review.	Management of these areas was analyzed in Alternative C of the Draft RMP/EIS.
Added language on drought and natural disasters.	Based on BLM review.	This change is a list of BMPs that address drought conditions and natural disaster. No change to impact analysis. This is not a significant change.

Change from Alternative B of Draft	Reason for Change	Significance
Closed the Water Canyon Allotment to livestock grazing for the life of the plan.	Based on public comment and coordination with the State of Utah, this allotment was closed to livestock grazing for the life of the plane rather than being reallocated to wildlife (Alternate B of the Draft RMP/EIS).	No change in impact, not a significant change.
Removed language about allocating any future AUMs (identified through forage surveys) to livestock for the following allotments: Lydia, Zion Park, and South Canyon.	Based on BLM review.	No change in the impact analysis. This is not a significant change.
Removed the Parunuweap SRMA.	Based on BLM review.	The Parunuweap SRMA was located entirely inside Parunuweap WSA. Removing the Parunuweap SRMA reduced the area closed to OHV use by 3,900 acres. Alternative A of the Draft RMP/EIS analyzed not managing the Parunuweap SRMA and therefore this change is within the range of alternatives. This is not a significant change.
Made adjustments to the OHV area designations.	The OHV area designations were adjusted due to a mapping/GIS error in the Draft RMP/EIS. The BLM portion of the Coral Pink Sand Dunes (that is open to cross-country travel) acreage and map has been adjusted. The Parunuweap SRMA was removed as described above.	Change affected 100 acres in the Coral Pink Sand Dunes and 3,900 acres in the Parunuweap SRMA. This is not significant change.
Made adjustments to the total number of miles of routes.	Alternative B of the Draft RMP/EIS listed a total of 1,505 miles of routes. The Proposed RMP has a total of 1,478 miles of routes. Due to GIS/data errors the total mileage of routes in the Draft RMP/EIS was overstated. Adjustments were made to correct this total mileage. Some roads were added to the GIS dataset that were unintentionally omitted from the initial inventory (Neuts Canyon). Based on public comment and BLM review, adjustments were made to the transportation network (see Map 10).	The difference in total miles of routes is 27 miles. This difference between miles stated in the Draft RMP/EIS and the Proposed RMP/Final EIS is a change of less than 2 percent of the routes in the planning area. This is not a significant change.
Areas where ROWs would be avoided was increased by 27,770 acres.	This was due to management of non-WSA lands with wilderness characteristics (27,770 acres).	Analyzed under Alternative C of the Draft RMP/EIS, not a significant change.

Change from Alternative B of Draft	Reason for Change	Significance
Added language about giving priority to the State of Utah in land exchanges and a statement about the Cotter Decision (access to state lands).	This was the result of coordination with the State of Utah.	No change to impact analysis. This is not a significant change.
Adjustments were made to the oil and gas leasing categories.	This adjustments to oil and gas leasing were due to changes in the big game crucial winter habitat mentioned above.	The larger habitat layer was analyzed under Alternative C of the Draft RMP/EIS. This change is within the range of alternatives. This is not a significant change.
Removed the suitability recommendation for the East Fork Virgin River – Segment 36-37 (Recreational classification).	This was done based on BLM review.	Upon further review by the BLM, there were concerns about the manageability of this segment due to the physical nature of the way (route) (e.g., several river crossings that vary with changing runoff conditions and flood events). Not carrying this segment forward was analyzed under Alternative D of the Draft RMP/EIS and is not a significant change.
Added language to work with the State of Utah, federal agencies, and tribal governments in taking Wild and Scenic River recommendations forward to Congress.	This was the result of coordination with the State of Utah.	No change to impact analysis. This is not a significant change.
Specified by WSA, the miles of inventoried ways in WSAs designated as open to OHV use.	Based on BLM review.	This change was made to clarify the miles of inventoried ways in WSAs that are open to OHV use. This is not a significant change.
Made adjustments to the miles of inventoried ways available for OHV use.	Based on public comment and BLM review.	Alternative B of the Draft RMP/EIS identified 15 miles of inventoried ways as open to OHV use. The Proposed RMP identifies 25 miles of inventoried ways as open to OHV use. This change is within the range of alternatives analyzed in the Draft RMP/EIS (Alternative D identified 32 miles of inventoried ways). This is not a significant change.

CHANGES TO THE DRAFT RMP/EIS

This section describes the changes and updates to the Draft RMP/EIS. The page numbers that appear along the left margin throughout this section indicate the page of the Draft RMP/EIS on which the addition or correction would appear if the entire draft were reprinted.

Chapter 1 of the Draft RMP/EIS

Page 1-6

Insert the following at the end of the Vegetation section on page 1-6:

“The RMP will need to ensure that vegetation management activities and treatment of invasive species will follow principles of integrated pest management. The following documents are incorporated by reference as current national guidance, although they may be updated over the life of this plan:

- Vegetation Treatments on BLM Lands in 17 Western States Programmatic Environmental Report, 2007
- Vegetation Treatments Using Herbicides in 17 Western States Programmatic Environmental Impact Statement, 2007
- Final Environmental Impact Statement Vegetation Treatment on BLM Lands in Thirteen Western States and Associated Records of Decision, 1991.”

Page 1-9

Change the first bullet under the Livestock Grazing heading to:

“A limited number of necessary changes in the current forage allocation.”

Chapter 2 of the Draft RMP/EIS

Page 2-14

Following the discussion of the management of Greater sage-grouse habitat insert the following:

“Management of Pygmy Rabbit Habitat

Apply restrictions (e.g., avoidance or mitigation) to surface disturbing and disruptive activities on a case-by-case basis in occupied and potential pygmy rabbit habitat for the protection of this species and its associated habitat. Site-specific NEPA documentation would address restrictions around pygmy rabbit habitat.”

Page 2-23

Insert the following at the end of Section 2.2.1:

“Drought and Natural Disasters

Coordinate appropriate management responses with affected parties when natural resources may be affected by drought, insects, diseases, or natural disasters. A variety of emergency or interim actions may be necessary to minimize land health degradations such as reduced forage allocations, reductions in the number of livestock and/or wildlife, increased mitigation measures to ensure reclamation, and limitations on energy field activities and recreational uses.

Incorporate current Utah BLM *Standards for Rangeland Health*, as appropriate, across all resource programs as a minimum. Management prescriptions in the form of constraints to use, terms and conditions, and stipulations may be needed to sustain rangeland health and viability. Management prescriptions will consider the following:

- Surface disturbing activities. These will be closely monitored to ensure compliance with authorizations and the permit’s conditions of approval or terms and conditions. Actions minimizing new surface disturbance

allowed by regulations and actions ensuring successful reclamation will be emphasized. During periods of drought, the BLM could require additional actions such as changes to standard seed mix compositions, amount, and/or method of application. Methods to ensure successful revegetation following disturbance could also include hydromulching, installation of drip irrigators, and fencing to exclude ungulate grazing/browsing.

- Livestock grazing. During periods of prolonged drought, use will be allowed in both quantity and timing that will not result in a downward shift in rangeland health and/or production. The BLM will work cooperatively to effect a grazing strategy specific to a grazing permittee's individual grazing allotment(s) and make changes to the grazing authorizations, as appropriate, in accordance with the grazing regulations. In the case of drought, the BLM could temporarily close the range, or portions of it, to livestock grazing.
- Wildlife management. During periods of prolonged drought to the extent that vegetation monitoring indicates that habitat for wildlife ungulate populations cannot be sustained and overall animal health is compromised, the BLM will enter into discussions with the Utah Division of Wildlife Resources (UDWR) regarding herd numbers and overall management options to combat the effects of drought.
- Recreation. During periods of prolonged drought, the BLM, in cooperation with local and state fire management agencies, will limit campfires to established fire rings or fully contained fires. The last resort will be to close the public lands to campfires of any kind.
- OHVs. Off-highway/road vehicle use during periods of prolonged drought could be further restricted; or, if site-specific conditions warrant, closure to OHVs could be implemented to minimize vehicle-induced injury or damage to rangeland and/or woodland resources and to minimize the potential of spark-caused fires.”

Page 2-26

Insert the following transportation common to all management actions:

“BLM, in preparing its RMP designations and its implementation-level travel management plans, is following policy and regulation authority found at 43 CFR 8340, 43 CFR 8364, and 43 CFR 9268.

Where the authorized officer determines that OHVs are causing or would cause considerable adverse impacts, the authorized officer shall close or restrict such areas. Local highway authorities would be consulted as appropriate. The public would be notified.

BLM could impose limitations on the types of vehicles allowed on specific designated routes if monitoring indicates that a particular type of vehicle is causing disturbance to the soil, wildlife habitat, cultural or vegetative resources, especially by off-road travel in an area that is limited to designated routes.

As per the *State of Utah v. Andrus*, October 1, 1979 (Cotter Decision), BLM would grant the State of Utah reasonable access to state lands for economic

purposes on a case-by-case basis.

Where routes would remain available for motorized use within WSAs, such use could continue on a conditional basis. Use of the existing routes in the WSAs (“ways” when located within WSAs) could continue as long as the use of these routes does not impair wilderness suitability, as provided by the IMP (BLM 1995). If Congress designates the area as wilderness, the routes will be closed. In the interim, if use and/or non-compliance are found through monitoring efforts to impair the area’s suitability for wilderness designation, BLM would take further action to limit use of the routes or close them. The continued use of these routes, therefore, is based on user compliance and non-impairment of wilderness values.”

Page 2-27 Insert the following in the lands and realty common to all management actions:

“Give land exchanges with the State of Utah priority consideration to resolve inholdings issues.

As per the Cotter Decision, reasonable access to state lands would be authorized for economic purposes.”

Page 2-38 Revise Alternatives B and C under the general vegetation heading by adding the following:

“unless site-specific management objectives for other resources dictate otherwise (e.g., special status species adapted to 0 percent to 25 percent of PNC).”

Page 2-42 Under vegetation restoration treatments management actions (Alternatives B, C, and D), revise the term “wildland fire” to “wildland fire use.”

Page 2-43 Add the following to the list of factors for Alternatives B and C:

- “Restore special status species habitats to achieve long-term conservation and recovery objectives.”

Page 2-50 Revise the Alternative C management action to read:

“Preclude surface disturbing activities in mule deer and elk crucial winter range from November 15 to April 15 for protection of winter habitats.”

The revision is necessary because UDWR has combined what was termed high-value and crucial habitat in the Draft RMP/EIS to be crucial habitat. The term high-value winter habitat is no longer used by UDWR.

Page 2-50 Add the following reference to Alternatives B and C under management of bighorn sheep habitat: “(Bighorn Institute 2008).”

Page 2-54 Under Alternative B, revise the management action to the following:

“Close the Water Canyon Allotment to livestock grazing for the life of the plan

	in order to protect the Fredonia City Culinary water supply.”
Pages 2-59 and 2-60	Remove the following from the list of areas managed to maintain wilderness characteristics under Alternative C: Black Hills, Heaps Canyon, Little Valley Canyon, North Escalante Canyon, and Paria/Hackberry. These lands were found not to have wilderness characteristics during inventory maintenance as identified in Chapter 3 of the Draft RMP/EIS. They were inadvertently placed on the table in Chapter 2. In addition, Jolley Gulch is included within the Orderville Canyon non-WSA (wilderness study area) lands with wilderness characteristics area and was incorrectly listed separately from Orderville Canyon.
Pages 2-64 and 2-65	Under Alternative B, revise the management action to the following: “Close the Water Canyon Allotment to livestock grazing for the life of the plan in order to protect the Fredonia City Culinary water supply.”
Page 2-65	Remove the following decision from the Lydia’s Canyon/Lydia Allotments decision: “AUMs identified through future forage surveys would be allocated for livestock.”
Page 2-66	Remove the following decision from the Sawmill/South Canyon Allotments decision: “AUMs identified through future forage surveys would be allocated for livestock.”
Page 2-69	Remove the Parunuweap SRMA from Alternative B.
Page 2-73	Remove the last bullet under Ponderosa Grove campground in Alternative B.
Pages 2-74 and 2-75	Remove the Parunuweap SRMA and associated management prescriptions from Alternative B.
Pages 2-81 and 2-82	Revise the acreage for open to cross-country OHV use for Alternatives B and D to 1,000 acres.
Page 2-84	Under seasonal limitations, insert the following sentence: “If no nesting behavior is initiated prior to June 1, a BLM authorized officer could open the route to motorized use.”
Pages 2-87 and 2-88	Add the following to the lands and realty management action under Alternatives B and C: “The addition of new communications devices on existing towers will be considered where it is practical and does not present a safety or operational risk.”

Page 2-98

Under the Hazard/Safety/Public Welfare heading for Alternative B, revise the management action to the following:

“Close the Water Canyon Allotment (48 AUMs) to livestock grazing in order to protect the Fredonia City Culinary water supply for the life of the plan.”

Chapter 3 of the Draft RMP/EIS

Page 3-1

Added the heading “Ambient Air Quality” following the first paragraph in section 3.2.1 on page 3-1.

Added the following text and figures following the second sentence of the second paragraph in section 3.2.1 on page 3-1.

For ozone (O₃) data have been collected at Grand Canyon National Park from 1999-2007 and Canyonlands National Park from 1996-2007. Figure 3-1 shows the 8 hour average concentrations for Grand Canyon. Annual average ozone concentrations are shown in Figure 3-2 for Canyonlands. The data indicate compliance with the ozone standard. Also, no data trends are noted.

Figure 3-1. Ozone Concentrations in Grand Canyon National Park, Arizona.

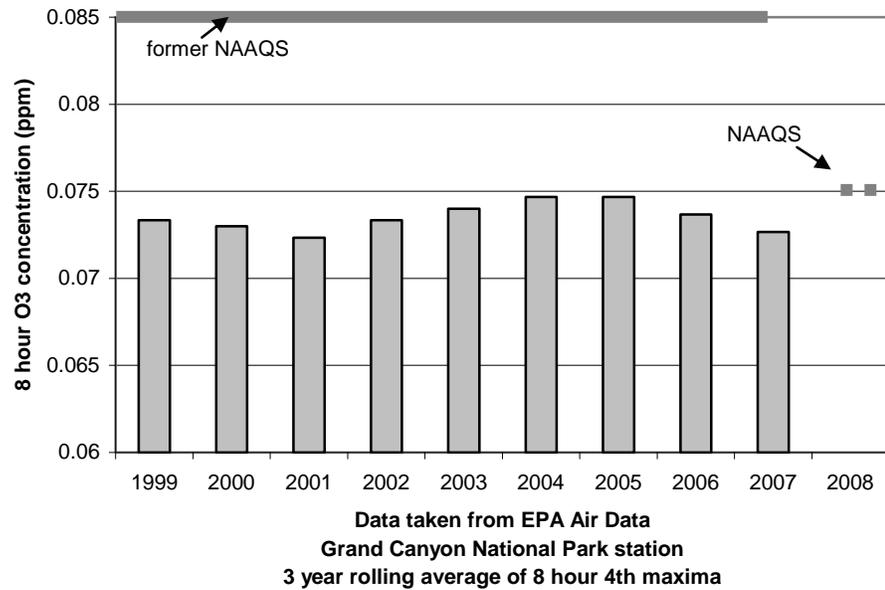
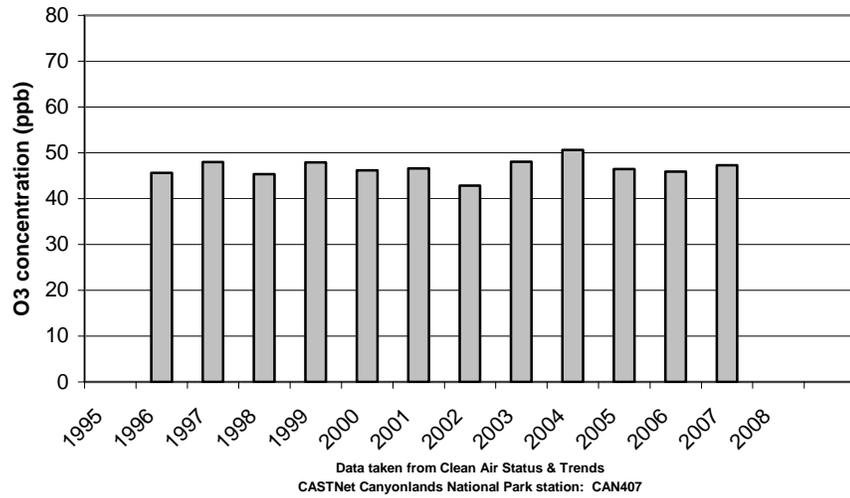


Figure 3-2. Mean Annual Ozone Concentrations near the Kanab Planning Area.



Additionally, nitrogen and sulfur compounds have been measured at Canyonlands National Park from 1995-2006. Figure 3-3 and Figure 3-4 show that the data are typical for rural western US locations. A slight downward trend in the data is noted for sulfur compound.

Figure 3-3. Mean Annual Concentrations of Nitrogen Compounds near the Kanab Planning Area.

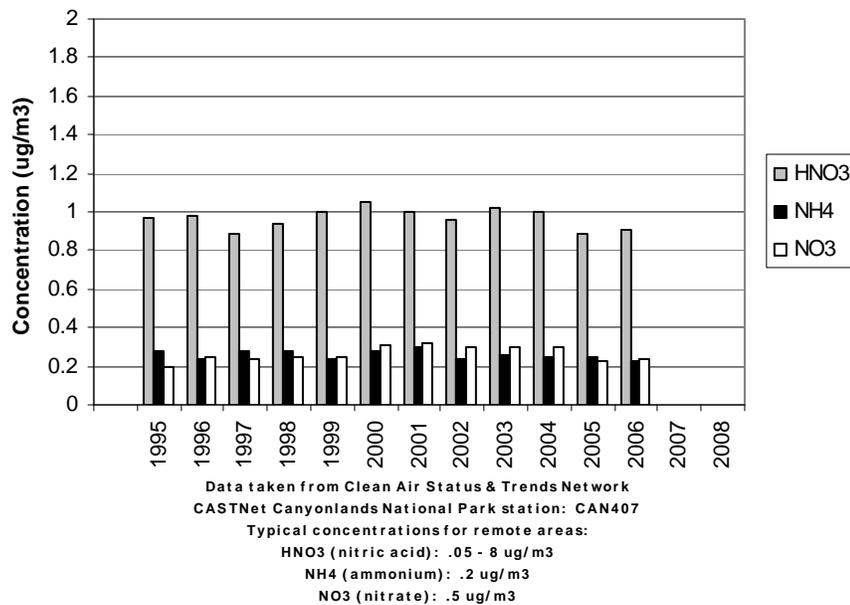
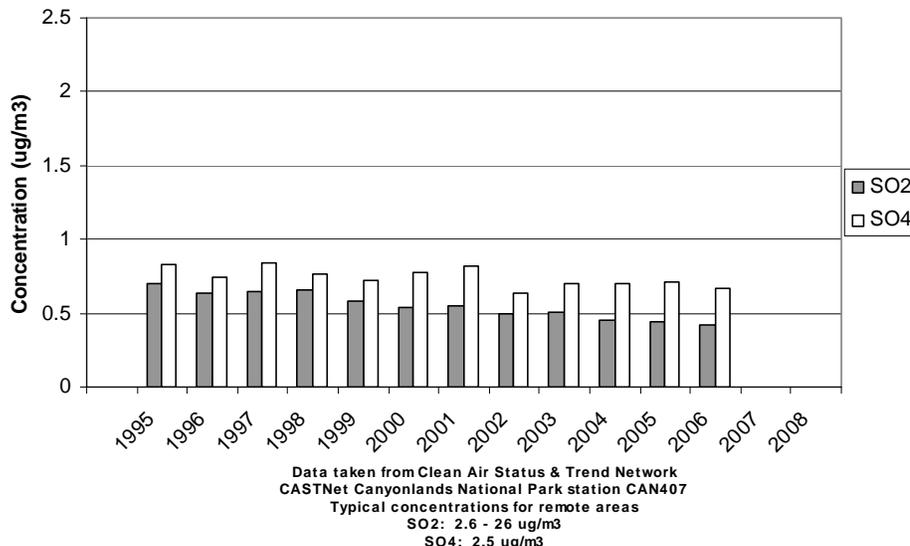


Figure 3-4. Mean Annual Concentrations of Sulfur Compounds near the Kanab Planning Area.



Other ambient air data are not available for the immediate area.

Page 3-2

Replace the definitions for Class I, II and III Prevention of Significant Deterioration (PSD) areas with the following:

- PSD Class I Areas. Areas with pristine air quality, such as wilderness areas, national parks, and some Indian reservations, are accorded the strictest protection. Only very small incremental increases in concentration are allowed to maintain very clean air quality in these areas.
- PSD Class II Areas. Moderate incremental increases in concentration are allowed, although the concentrations are not allowed to reach the concentrations set by NAAQS.
- PSD Class III Areas. No areas have yet been designated Class III. Concentrations would be allowed to increase to established NAAQS concentrations.

Page 3-3

Add the following after the second paragraph of page 3-3:

Visibility

Regional haze is an issue of increasing concern throughout the western United States. Regional haze causes visual impairment by obscuring the clarity, color, texture, and form of what can be seen. As part of the Interagency Monitoring of Protected Visual Environments (IMPROVE) network, visual air quality in Bryce Canyon National Park and Canyonlands National Park has been monitored from 1992–2004. Figure 3-5 and Figure 3-6 indicate that the visibility trend both in

Bryce Canyon National Park and Canyonlands is improving on the clearest days.

Figure 3-5. Visibility Data for Bryce National Park

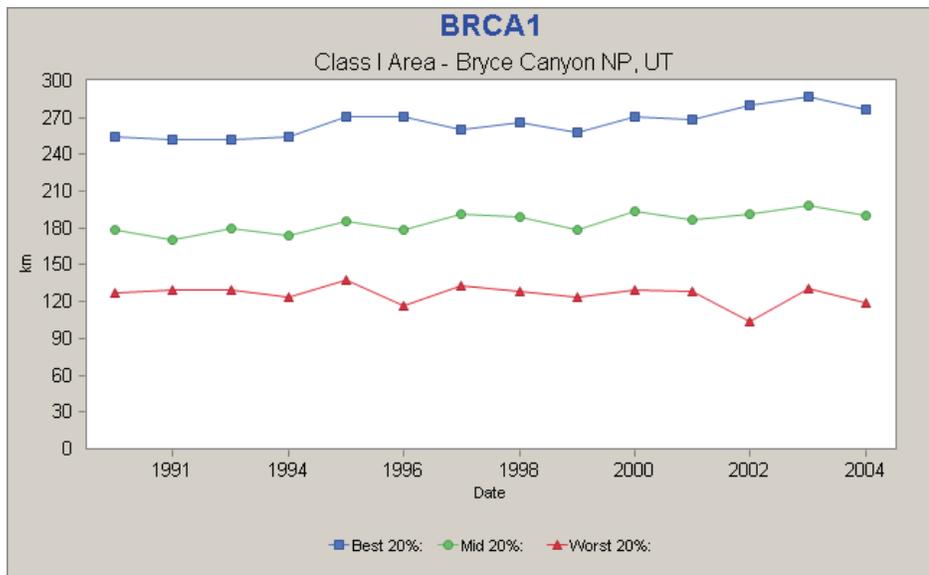
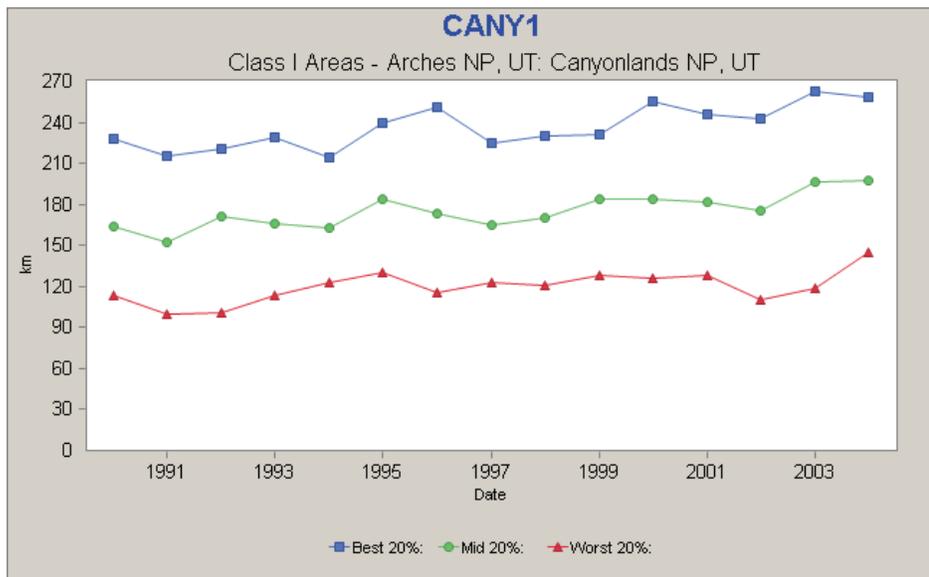


Figure 3-6. Visibility Data for Canyonlands National Park



Atmospheric Deposition

Atmospheric deposition of air pollutants can increase the acidity of soils and water resources. Measurements of atmospheric deposition are currently being taken in Class I areas of Bryce Canyon National Park, and Canyonlands National Park by the National Acid Deposition Program. Figure 3-7 shows precipitation pH data at Bryce national Park from 19985-2006. Recent measurements show

less acidity for the period 1994-2001. Available data indicate that wet deposition of ammonium as measured by the NADP station in Bryce Canyon National Park has indeed increased from .2 to .8 kg/ha-year during the period from 1984 through 2006.

Total nitrogen and sulfur deposition are shown for Canyonlands National Park from 1995-2004 in Figure 3-8 and Figure 3-9. The data indicate the rates of atmospheric deposition of nitrogen and sulfur in rain are relatively low in Canyonlands National Park. Trend analysis shows that nitrogen deposition has remained relatively constant and that sulfur deposition has slightly decreased. Total nitrogen deposition from nitrogen compounds, including ammonium, remains below the nitrogen deposition level-of-concern of 3 - 5 kg/ha-year (Fox, 1989), with deposition ranging from 1.7 to 2.2 kg/ha-year during the period from 1995 through 2004.

Figure 3-7. Mean Annual Precipitation pH near the Kanab Planning Area.

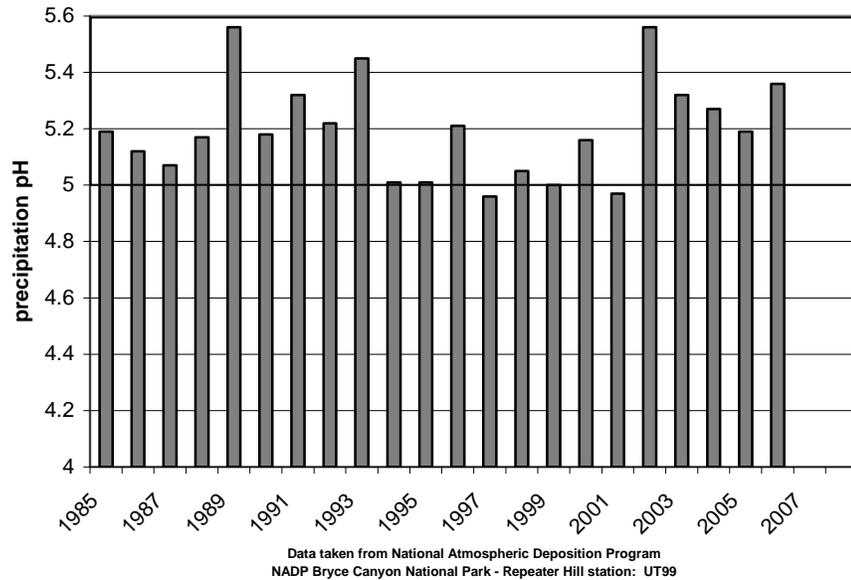


Figure 3-8. Total Nitrogen Deposition for Canyonlands National Park

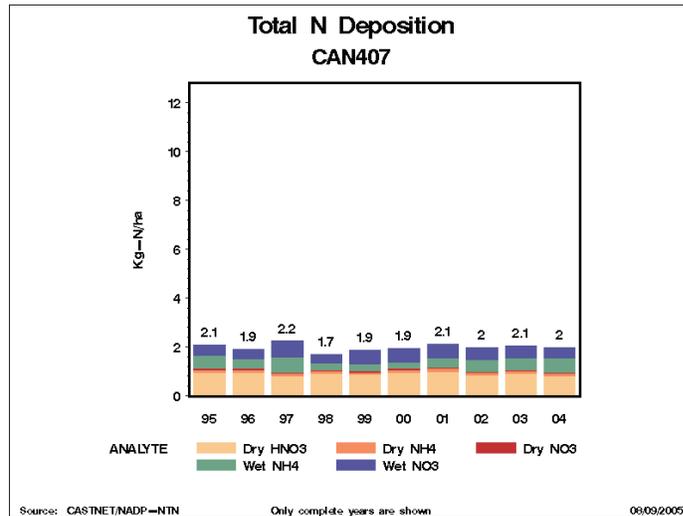
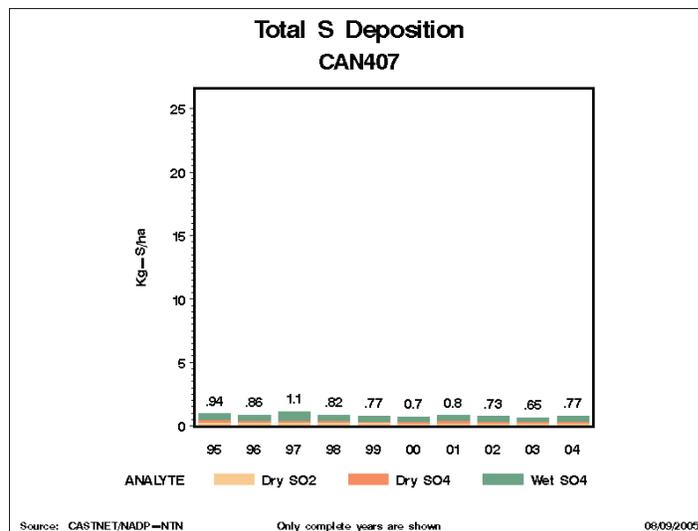


Figure 3-9. Total Sulfur Deposition for Canyonlands National Park



The lack of available data limits the forecasting trends of air quality; however, ambient air quality is not exceeding standards, visibility is typical of clear skies associated with remote areas in the western United States, and atmospheric deposition levels are below federal levels of concern. Future changes to air quality conditions would occur according to the intensity and expansion or reduction of activities that produce air pollutants. However, the use of air pollution mitigation techniques can reduce emissions from sources, and in some cases, also minimize air quality impacts. At this time, future impacts to air quality within the planning area from non-BLM sources (e.g., power plants and fireplaces) are uncertain; however, emissions from these existing sources are not anticipated to increase.

Page 3-3

Add the following to the bottom of page 3-3:

Global Climate Change

On-going scientific research has identified the potential impacts of climate changing pollutants on global climate. These pollutants are commonly called “greenhouse gases” and include carbon dioxide, CO₂; methane; nitrous oxide; water vapor; and several trace gas emissions. Through complex interactions on a regional and global scale, these emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the Earth back into space. Although climate changing pollutant levels have varied for millennia (along with corresponding variations in climatic conditions), recent industrialization and burning of fossil carbon sources have caused CO₂ concentrations to increase dramatically, and are likely to contribute to overall climatic changes, typically referred to as global warming. Increasing CO₂ concentrations also lead to preferential fertilization and growth of specific plant species.

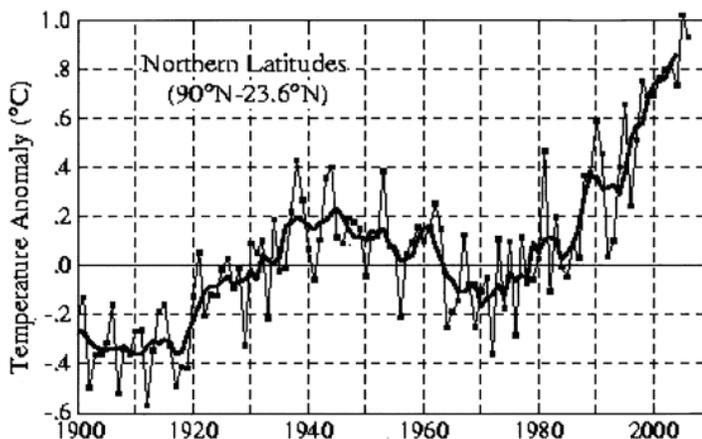
Global mean surface temperatures have increased nearly 1.0°C (1.8°F) from 1890 to 2006 (Goddard Institute for Space Studies, 2007). However, observations and predictive models indicate that average temperature changes are likely to be greater in the Northern Hemisphere. Figure 3-10 demonstrates that northern latitudes (above 24° N) have exhibited temperature increases of nearly 1.2°C (2.1°F) since 1900, with nearly a 1.0°C (1.8°F) increase since 1970. Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of these “greenhouse gases” are likely to accelerate the rate of climate change.

The Intergovernmental Panel on Climate Change (IPCC) has recently completed a comprehensive report assessing the current state of knowledge on climate change, its potential impacts, and options for adaptation and mitigation. At printing of this PRMP/FEIS, this assessment is available on the IPCC web site at <http://www.ipcc.ch/>. According to this report, global climate change may ultimately contribute to a rise in sea level, destruction of estuaries and coastal wetlands, and changes in regional temperature and rainfall patterns, with major implications to agricultural and coastal communities. The IPCC has suggested that the average global surface temperature could rise 1 to 4.5 degrees Fahrenheit (°F) in the next 50 years, with significant regional variation. The National Academy of Sciences (2006) has confirmed these findings, but also indicated that there are uncertainties regarding how climate change may affect different regions. Computer models indicate that such increases in temperature will not be equally distributed globally, but are likely to be accentuated at higher latitudes, such as in the Arctic, where the temperature increase may be more than double the global average (BLM 2007b). Also, warming during the winter months is expected to be greater than during the summer, and increases in daily minimum temperatures is more likely than increases in daily maximum temperatures. Vulnerabilities to climate change depend considerably on specific geographic and social contexts.

BLM recognizes the importance of climate change and the potential effects it may have on the natural environment. Several activities occur within the planning

area that may generate emissions of climate changing pollutants. For example, oil and gas development, large fires, and recreation using combustion engines, can potentially generate CO₂ and methane. Wind erosion from disturbed areas and fugitive dust from roads along with entrained atmospheric dust has the potential to darken glacial surfaces and snow packs resulting in faster snowmelt. Other activities may help sequester carbon, such as managing vegetation to favor perennial grasses and increase vegetative cover, which may help build organic carbon in soils and function as “carbon sinks”.

Figure 3-10. Annual Mean Temperature Change for Northern Latitudes (24 - 90° N)



Source: Goddard Institute for Space Studies (2007)

Page 3-10

Delete the last sentence at the bottom of page 3-10 and replace it with the following:

“It is now generally accepted by the Colorado River Basin Salinity Control Forum that saline ground-water flowing through the soils to the rivers may be contributing as much as 85% of the salt loading from public lands in the Upper Colorado River Basin (Warner et. al. 1985 and Westenburg 1995).”

Page 3-12

Revise Table 3-2:

Hydrologic Code (HUC)	Unit	Watershed	Drainage Basin
14070001		Upper Lake Powell	Colorado River Basin
14070003		Fremont	Colorado River Basin
14070005		Escalante	Colorado River Basin

14070006	Lower Lake Powell	Colorado River Basin
14070007	Paria	Colorado River Basin
15010003	Kanab	Colorado River Basin
15010008	Upper Virgin	Colorado River Basin
15010009	Fort Pierce Wash	Colorado River Basin
16030001	Upper Sevier	Great Basin
16030002	East Fork Sevier	Great Basin
16030006	Escalante Desert	Colorado River Basin

Source: U.S. Geological Survey (USGS) 2005

Page 3-14

The following was added to page 3-14 immediately before the Surface Water Quantity and Quality heading:

“TDS of surface water can be increased from saline ground-water inflow to the streams. In areas such as the Paria River and Kanab Creek watersheds, shallow ground-water flow through eroded sediments from saline rock formations (Tropic Shale for the Paria River and Chinle and Moenkopi formations for Kanab Cr) contributes salt (mainly gypsum) to the surface water naturally.”

Page 3-15

The following was added to the end of the first paragraph on page 3-15:

“The Virgin River Management Plan Coordinating Committee, consisting of local and federal agencies and interested parties, completed the Virgin River Watershed Management Plan in 2006. The plan comprises a suite of activities and management practices to target specific problems in the watershed. The plan addresses issues such as stream flow, dissolved solids, nutrients, stream bank stabilization, native fishes, and recreation. In addition, the U.S. Army Corps of Engineers is conducting the federally funded Virgin River Comprehensive Watershed Analysis. The Corps is working in partnership with local and county governments; tribal, state, and federal agencies; municipalities; landowners; citizen groups; and the public. A goal of the analysis is to produce a watershed plan that assists stakeholders in successful management of the Virgin River and tributaries and related resources.”

Pages 3-30 and 3-31

Remove the bald eagle from Table 3-12 and the narrative discussion. The U.S. Fish and Wildlife Service (USFWS) has delisted this species.

Page 3-34

Delete the third sentence under the Siler Pincushion Cactus section on page 3-34.

Page 3-34 Add the following language after the paragraph on Welsh's Milkweed:

“Colorado River Fish. Four fish species that occur in the Colorado River system have been listed as either threatened or endangered. These are the bonytail chub (*Gila elegans*), humpback chub (*Gila cypha*), pikeminnow (*Ptychocheilus lucius*), and razorback sucker (*Xyrauchen texanus*). No existing or potential habitat for any of these species occurs near or within the Kanab planning area boundaries. No actions that would be authorized by implementation of the new RMP would affect existing or potential habitat for these species; therefore they will not be discussed further in this document.”

Page 3-35 Add the bald eagle to Table 3-13 as a BLM sensitive species and move the narrative discussion from pages 3-30 and 3-31 to page 3-36.

Page 3-39 Add to the pygmy rabbit narrative the following:

“...occurs in isolated patches in the western half of Utah with some colonies present in the decision area.”

Page 3-45 Add the following before the mule deer heading on page 3-45.

In August of 2005, the Utah Division of Wildlife Resources (UDWR) changed its wildlife habitat classification system. Prior to 2005, the UDWR classification system distinguished between “critical” habitat (an area that provides for biological and/or behavioral requisites necessary to sustain the existence and/or perpetuation of a wildlife population) and “high value” (an area that provides for intensive use by the species). The UDWR has been criticized for using the term “critical”, as the same term refers to habitat Federally designated by the U.S. Fish and Wildlife Service as required by the Endangered Species Act (ESA).

In previous BLM planning efforts, mitigation decisions (usually timing stipulations) for impacts to UDWR's “critical” habitats have been integrated into the planning process. BLM rarely incorporated management decisions in its RMPs for “high value” habitats. UDWR changed its classification system to include “critical” habitat with “high value” habitat, in part to accommodate the limitations of having classifications that were of no practical value to land managers. The new term “*crucial*” habitat is defined by UDWR as “habitat on which the local population of a wildlife species depends for survival because there are no alternative ranges or habitats available. Crucial habitat is essential to the life-history requirements of a wildlife species. Degradation or loss of crucial habitat will lead to significant declines in the wildlife population in question.”

Crucial habitat boundaries appear larger on the wildlife maps in this Proposed Plan because they are a combination of UDWR's old “critical” habitat and “high value” habitat, with some minor modifications. Timing stipulations for each of the species now apply to the whole crucial habitat area. It is important to note however, that the application of waivers, exceptions and modifications, as outlined in Appendix C, will be taken into consideration and used where/when applicable for all surface disturbing activities in these areas. Alternative C in the Draft RMP/Draft EIS considered both of UDWR's old classifications of critical and high value habitat. Minor boundary modifications have been made by

UDWR prior to incorporating them into crucial habitat boundaries.

Page 3-46

Revise the first sentence of the second to last paragraph to the following:

The largest areas of identified pronghorn habitat within or adjacent to the decision area are within the Panguitch Valley (Sage Hen Hollow and East Bench populations) and John's Valley.

Page 3-51

Replace the paragraph under the Fish Species heading with the following:

Fisheries habitat includes perennial and intermittent streams that support fish through at least a portion of the year. The condition of fisheries habitat is related to riparian habitat condition and stream channel characteristics. Previous stocking efforts by UDWR have established many non-native fish species in streams to provide for sport fishing opportunities. Aquatic invertebrates and amphibians are integral components of warm and cold fish communities.

Page 3-58

Add the following to the end of the second paragraph on page 3-58:

A Class II inventory of the BLM portion of the Coral Pink Sand Dunes was completed in summer 2008. No cultural sites were identified by the new inventory.

Page 3-65

Add the following to the end of the last paragraph on page 3-65:

In addition, the secretarial decision directs that "under no circumstances should this decision become the only basis for protection of the values for which Bryce Canyon National Park was established and I direct that these park values be taken into account in future decisions by the bureaus of this Department on mining plans and permit applications for other activities on undesignated Federal lands near the park."

Page 3-83

Add the following prior to the Off-Highway Vehicles heading on page 3-83:

"SITLA Lands

Throughout much of the State of Utah, the state owns and manages four isolated sections in each 36-section township. These are generally Sections 2, 16, 32, and 36, and are ordinarily 1 mile square (640 acres). They are primarily administered by the Utah School and Institutional Trust Lands Administration (SITLA) for the purpose of economic support of the state's public schools and institutional trust funds. Activities on state land generally are not substantially different from those on the surrounding land administered by BLM. Many of the SITLA lands generate funds through grazing permits, right-of-way easements and permits, and hydrocarbon or other mineral leases.

Many BLM lands with management restrictions, such as WSAs, have state lands that are adjacent to or within their boundaries. State lands that are completely or almost entirely surrounded by BLM lands with management restrictions, or are in conjunction with administratively endorsed National Park Service lands, are termed state inholdings.

Existing access to inheld state lands varies. Some of the parcels have direct access through cherry-stemmed or boundary roads of WSAs. Inheld parcels may or may not currently have access, depending upon whether or not existing vehicle routes lead to them. BLM policy, as required by the Cotter decision, is that “the state must be allowed access to the state school trust lands so that those lands can be developed in a manner that will provide funds for the common school.” This decision confined the issue of access to situations directly involving economic revenues generated for the school trust. For example, if a holder of a state oil and gas lease on a parcel of state land that is completely surrounded by a WSA requires access to develop that lease, BLM must grant the leaseholder reasonable access with consideration given to minimize impacts on wilderness character.”

Page 3-105

Add the following to the top of page 3-105 before the Economic Characteristics heading:

“A statewide social survey was conducted by Utah State University (USU) in 2007 to assess the ways in which Utah residents use and value public land resources and their views about public lands management. A complete analysis of the results had not been completed as of February 2008. “Public lands,” as described in the study, consist of not only BLM, but all federal and state managed lands. Surveys were mailed to a random sample of residents of all 29 Utah counties. According to the authors, the study and sample sizes are designed to produce results generalizable at the statewide level, with generalization increasingly risky as the sample area diminishes. For example, the data may lose much of its generalizability at the individual county level, but increase as additional counties are aggregated into the sample. The areas sampled do not necessarily coincide with field office planning area boundaries, because that was not the focus of the study. Nonetheless, the study provides current and interesting results not available elsewhere, and shows the dependence of local communities on public lands for a variety of economic and recreational pursuits. Appendix 10 contains initial summary results for Kane and Garfield counties lying within the Kanab Field Office. There is nothing in the preliminary USU results that affect the formulation of alternatives in Chapter 2 or the analysis of impacts in Chapter 4.”

Page 3-112

Add the following prior to the Values and Attitudes heading:

“Although not in the socioeconomic study area of Kane and Garfield counties, Utah, the Kaibab-Paiute Tribe reservation is adjacent to the planning area along the Utah-Arizona border. In July 2005, the Kaibab-Paiute Tribe signed a memorandum of agreement (MOA) formalizing cooperating agency status with the KFO.

The Kaibab-Paiute Tribe reservation is within the Kaibab census-designated place (CDP). According to Census data from 2000, more than half of the population in the Kaibab CDP, 54.9 percent, was American Indian, with 43.6 percent being white. Most whites, 58.2 percent, live in the community of Moccasin, which is not on reservation lands.

The Kaibab-Paiute Tribe also had a very high individual poverty rate at 31.6 percent, a high family poverty rate at 29.7 percent, and a low per capita income at

\$7,951. Family size did not seem to play an important role in the tribe's poverty rates and low per capita income. The tribe's average family size was 3.51, only slightly higher than the national average."

Chapter 4 of the Draft RMP/EIS

Page 4-255

Under the Environmental Justice heading on page 4-255, replace the second sentence with the following:

"Although not in the socioeconomic study area of Kane and Garfield counties, Utah, the Kaibab-Paiute Tribe reservation is adjacent to the planning area along the Utah-Arizona border. While the Kaibab-Paiute Tribe qualifies as an environmental justice population, no disproportionate adverse impacts to this area of higher density minority populations would occur from implementation of any of the management actions, resource programs, or objectives proposed under any of the alternatives. "

Page 4-262

Add the following prior to the Livestock Grazing heading at the top of page 4-262:

"Due to the unknown nature of where future oil and gas development could occur in the Kanab Field Office planning area, an additional potential impact on state revenues is the potential loss to the Utah School and Institutional Trust Lands Administration (SITLA) of not being able to lease or develop lands bordered all or in part by non-WSA lands with wilderness characteristics. The value of these lands for oil and gas leasing and/or development may be reduced if all or portions of public lands bordering these state lands are closed to new oil and gas leasing. This in turn could reduce the monies collected by the state (through SITLA), including royalties and severance taxes. These impacts can be estimated using current data and incorporating several assumptions. If one assumes that SITLA lands whose perimeter is more than 50 percent bounded by BLM acreage that is closed to new oil and gas leasing (as a result of implementing Alternative C) would be unavailable for development, and using the projections of the Reasonably Foreseeable Development (RFD), one can project that less than one well (0.45) would not be drilled over the life of the plan. Using data provided by the State of Utah, royalty payments to wells on SITLA lands averaged \$57,065 as of early 2008. Severance taxes averaged \$9,335 for all wells, regardless of land ownership. Multiplying these figures by the wells assumed to not be drilled, the fiscal loss to the state would total \$25,582 in royalties and \$4,185 in severance taxes in any year in which these wells would have been in operation. This amount could increase over the life of the plan, as it is likely that some fraction of these wells would be in operation in several (or even all) years of the plan.

Similarly, one can compute potential spending on oil and gas activities (including coalbed natural gas) lost to the planning area if these SITLA lands prove undevelopable under Alternative C. Using the assumptions outlined on pages 4-245 and 4-246 of the Draft EIS, the loss in spending in the local area would be approximately \$295,877 in any one year in which the wells were not in operation."

Appendices

- Page AA-2 Add the following to the bulleted list at the top of page AA-2:
- BLM Vegetation Treatments Using Herbicides Final Programmatic Environmental Impact Statement Record of Decision, September 2007. As of April 2008, an electronic version of this document was available at http://www.blm.gov/wo/st/en/prog/more/veg_eis.html.
- Page AB-8 Add the following to the last paragraph on page AB-8:
- If monitoring detects an impact on bird behavior, especially one that might result in "take" the activity could be suspended or modified so that the impacts are avoided or removed.
- Appendix C Remove exception language from oil and gas stipulations for Moquith Mountain, Orderville Canyon, and North Fork Virgin River SRMAs and suitable "wild" river corridors.
- Remove oil and gas leasing stipulations for the Parunuweap SRMA under Alternative B.
- Page AC-20 Add the following VRM Class II stipulation to Alternatives B and C:
- "Surface disturbing activities must meet the objectives of VRM Class II objectives.
- Purpose:** To protect high-quality visual resources.
- Exception:** The level of change to the landscape should be low; management activities may be seen, but should not attract the attention of the casual observer. Any change to the landscape must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Surface disturbing activities that are determined to be compatible and consistent with the protection or enhancement of the resource values are exempted. Also, recognized utility corridors are exempted only for utility projects that would be managed according to VRM Class III objectives.
- Modification: None
- Waiver: None"
- Pages AF-21 and AF-22 Corrected and updated Maps 2 and 3 of the Coal Unsuitability Appendix.
- Page AG-9 Revise Table AG-2 for the North Fork Virgin River segment 46-47 under the wildlife heading to the following:
- "Spotted owl designated critical habitat is present; however, per BLM-M-8351 Section .3(c) ('Contiguous habitat conditions are such that the biological needs of the species are met') the habitat in this corridor is not contiguous and does not meet the needs of the species in this area."