

SECTION 4 ERRATA

Global

At the request of the company, all reference to Western Gas is changed to Mountain Gas Resources, Inc.

Where “should” is used in the mitigation opportunities in Chapter 4, it is replaced with “could”.

Since the DEIS was completed, Canada lynx was listed as threatened under the Endangered Species Act. Analyses and conclusions reached in the DEIS about potential impacts to Canada lynx remain unchanged.

Executive Summary – 3, Column 1, First Full Paragraph

This paragraph was revised as follows to reflect rounding of cancer risk from exposure to benzene in Table 4-29:

According to air quality modeling completed for the EIS and preliminary information regarding emissions from wells, the incremental cancer risk from exposure to benzene at 350 feet is considered significant for the most likely exposure scenario. A significant risk is defined as 1 additional person in one million developing cancer as a result of exposure. At 350 feet, the risk was calculated to be 1 additional person/one million. At 0.25 miles, the significant risk disappears.

Executive Summary – 3, Column 2, Fourth Paragraph

Based on monitoring results from the Wyoming Department of Environmental Quality, the second sentence which states “Sedimentation in the New Fork River may already be a problem” is deleted.

Page 1-1, Column 1, First Paragraph

The last sentence is replaced with the following 2 sentences to add an additional company to the list of gas gatherers.

In addition, Jonah Gas Gathering Company (Jonah Gas), Mountain Gas Resources, Inc. (Mountain Gas) and Questar Gas Management Company (Questar Gas) propose to construct gathering pipelines in the PAPA. Jonah Gas and Mountain Gas propose to construct trunk (sales) pipelines to deliver gas from the project area to existing gas processing plants in southwestern Wyoming.

Page 1-4, Column 2, Last Paragraph

The third sentence is replaced with the following sentence:

However, the RP Alternative recommends a number of additional mitigation measures which are specifically designed to reduce potential and unnecessary and undue impacts that are not covered by the Wyoming BLM Mitigation Guidelines and Standard Practices for Surface Disturbing and Disruptive Activities (Appendix A) or to address potential impacts that are unique to the PAPA.

Page 1-10, End of Section 1.7.1, Federal Permits

The following table is inserted at the end of Section 1.7.1:

**Pinedale Anticline Natural Gas Exploration and Development Project DEIS
Directory to the Biological Assessment**

Biological Assessment Section	Location Within the DEIS
1. Description of the project;	Chapters One and Two
2. Description of the specific area potentially affected by the action;	Chapter Three
3. Current status, habitat use, and behavior of threatened and endangered species in the project area;	Chapter Three, Section 3.19
4. Discussion of the methods used to determine the information in item 3;	Chapter Three, Section 3.19
5. Direct and indirect impacts of the project to threatened and endangered species;	Chapter Four, Section 4.18
6. Analysis of the effects of the action on listed and proposed species and their habitats including cumulative impacts from Federal, state, or private projects in the area;	Chapter Four, Section 4.18 - direct and indirect impacts of the project; Chapter Five, Sections 5.1, 5.2, and 5.17 - cumulative impacts of the project when combined with other past, present and reasonably foreseeable projects
7. Measures that would reduce or eliminate adverse effects to threatened and endangered species;	Chapter Four, Section 4.18; Section 4.18.4 - Additional Mitigation Opportunities; and Appendix A
8. Expected status of threatened and endangered species in the future (short and long term) during and after project completion;	Chapter Four, Section 4.18 - throughout (i.e., 4.18.3.1 Summary of Impacts Common To All Alternatives, 4.18.3.2 Project Wide Exploration/Development Scenario, 4.18.3.3 Anticline Crest Exploration/Development Scenario, and 4.18.3.4 No Action Exploration-Development Scenario)
9. Determination of "is likely to adversely affect" or "is not likely to adversely affect" for listed species;	Chapter Four, Section 4.18 - throughout (i.e., 4.18.3.1 Summary of Impacts Common To All Alternatives, 4.18.3.2 Project Wide Exploration/Development Scenario, 4.18.3.3 Anticline Crest Exploration/Development Scenario, and 4.18.3.4 No Action Exploration-Development Scenario)
10. Determination of "is likely to jeopardize" or "is not likely to jeopardize" for proposed species;	Chapter Four, Section 4.18 - throughout (i.e., 4.18.3.1 Summary of Impacts Common To All Alternatives, 4.18.3.2 Project Wide Exploration/Development Scenario, 4.18.3.3 Anticline Crest Exploration/Development Scenario, and 4.18.3.4 No Action Exploration-Development Scenario)
11. Citation of literature and personal contacts used in the assessment.	Chapter Four, Section 4.18 - citations noted in footnotes, in the text and References Cited Section.

Page 1-11, Table 1-3

The description of the Notice of Intent, Storm Water Discharge Permit and Temporary Discharge Permit is changed as follows:

Issuing Agency/Permit Name	Nature of Permit/Approval	Authority
Wyoming Department of Environmental Quality Water Quality Division Notice of Intent - Storm Water Discharge Permit Temporary Discharge Permit	Controls off-site storm water runoff from construction activities resulting in 5 acres or more of disturbance (minimum disturbance will decrease to 1 acre by 3/7/03). Controls temporary discharges of certain wastewaters from specific types of operations to waters of the state.	Wyoming Environmental Quality Act; Section 402 of the Clean Water Act (40 CFR Parts 122, 123 and 124); WDEQ Water Quality Rules and Regulations, Chapters 1, 2, 7 and 18.

Page 1-12, Section 1.7.3, Paragraph 2

The paragraph has been revised to reflect new Federal regulations as follows:

The Wyoming Department of Environmental Quality (WDEQ), Water Quality Division (WQD) is responsible for enforcing Federal storm water pollution prevention regulations. WDEQ/WQD requires a general permit for storm water discharges associated with industrial facilities and construction activities. According to WDEQ's general construction permit, "the definition of 'construction' discharges includes any clearing, grading or excavation project which will disturb 5 or more (not necessarily contiguous) surface acres". However, under recently released Federal regulations (Federal Register, 12/8/99) the 5 acre minimum for coverage under a construction storm water general permit will decrease to 1 acre by March 7, 2003. As explained in WDEQ storm water guidelines, operators wanting coverage under the permit must prepare a storm water pollution prevention plan as described in the Notice of Intent for Coverage Under WDEQ General Storm Water Permit for Construction Activities. The operator is then obligated to implement the pollution prevention plan and to perform inspections of the pollution control structures and activities weekly and whenever a storm event of 0.5 inches of precipitation or snowmelt occurs. Copies of the plan and inspection reports are to be retained in the field but do not have to be submitted to WDEQ for review and/or approval unless specifically requested to do so.

Page 1-13, Column 2, Last Paragraph

This paragraph describing the regulatory authority of the WDEQ is revised as follows:

Department of Environmental Quality. *The WDEQ/WQD issues permits for and regulates off-site commercial disposal of fluids. If drilling fluids are hauled off-site for disposal at a commercial disposal facility, a permit would be required from WDEQ. Storm water and temporary discharge permits are also issued by WDEQ/WQD. In addition, if produced water has the potential to be discharged to a water of the state, then an NPDES Individual Effluent Discharge Permit is required. Temporary discharge permits and individual NPDES effluent discharge permits for new discharges are not available on Class I portions of the Green River or any of its tributary drainages that are Class 1 by the tributary rule. These Class 1 tributaries may include even ephemeral drainages. This means that wastewater from hydrostatic testing of pipelines, produced water, construction dewatering, or any other wastewater discharge may not be discharged to a water of the state if those waters are Class 1. Other means of disposal are required in these areas.*

2-5, Column 2, Paragraph 1

In the second to last sentence the reference to the Code of Federal Registers is incorrect. The correct reference should be 43 CFR 3101.1-2.

Page 2-13, Column 1, Last Paragraph

The paragraph is revised as follows:

According to the operators, this level of well density could be necessary in places in the PAPA (i.e. on the crest of the anticline or over areas where, because of geologic characteristics, a denser well spacing is necessary to efficiently drain the reservoir). In fact, the operators now propose to develop parts of the Jonah II Field using 40-acre spacing to achieve complete drainage of that field. Jonah is currently being developed with 80-acre spacing (i.e., 8 wells/section). The BLM is preparing an environmental assessment to evaluate the impacts of this increased well density in the Jonah II Field.

Page 2-26, Column 2, Testing Section

The first 2 lines are replaced with the following:

Gathering pipelines would be pressure tested with water or gas. Testing would comply with applicable American Petroleum Institute (API) standards.

Page 2-26, Column 2, Maintenance and Operation Section

The description of pipeline maintenance and operation is replaced with the following:

Testing. Gathering and sales pipelines located within the PAPA will be pressure tested in accordance with industry, state and Federal standards to insure the integrity of the pipelines as a whole. Two of the most common forms of testing the integrity of pipelines are hydrostatic and gas testing. Should hydrostatic testing be used, test water would be disposed of in accordance to state and Federal regulations.

Operation and Maintenance. Construction, testing, operation and maintenance of the sales and gathering pipelines would conform to industry, state and Federal standards to insure the integrity and safety of the pipeline systems in the PAPA. Field personnel will monitor and control the system by inspecting the facilities on a regular basis.

Page 2-27, Column 2, Section 2.5.10 Seismic Surveys.

The first paragraph in this section is replaced with the following:

Recent seismic surveys have been completed in the portion of the PAPA shown on Figure 2-10. The results of these surveys may be useful to the companies in determining where development potential may exist. BLM does not have access to the results of the seismic survey – only the companies that paid for the data collection have access to the data. It is BLM's understanding that the seismic data collected in the PAPA is still being evaluated by the operators.

Page 2-38, Table 2-8, Column 2, Row 1

The fourth sentence in the Deer Winter and Crucial Winter Range mitigation requirement for the Resource Protection Alternative on Federal Lands and Minerals should be revised to state the following:

However, up to 16 well pads/section may be allowed if centralized production facilities are constructed so that only emergency trips would be required to individual wells during the crucial winter period.

Page 2-38, Table 2-8, Column 3, Row 2

The fourth sentence in the Moose Crucial Winter/Yearlong Range mitigation requirement for the Resource Protection Alternative on Federal Lands and Minerals is revised to state the following:

However, up to 16 well pads/section may be allowed if centralized production facilities are constructed so that only emergency trips would be required during the crucial winter period.

Page 2-41, Column 1, First Full Paragraph

The portion of the paragraph starting with "Each rig would be expected to" and ending with the end of the paragraph on page 2-42 is replaced with the following:

If the level of development reaches 700 productive well pads over the next 10 to 15 years, approximately 9,064 acres of short-term (construction-related) and 1,914 acres of long-term (operation-related) disturbance would occur. This would represent short-term disturbance of approximately 5 percent of the PAPA and long-term disturbance of approximately 1 percent. Any disturbance not returned to at least a productive herbaceous vegetative state within 5 years of initial disturbance is considered a long-term impact. Long-term disturbance estimated in the tables would persist for the life of the project (estimated at 40 to 50 years). If the level of development reaches 500 productive well pads, 7,363 acres of short-term

disturbance and 1,382 acres of long-term disturbance would occur. This would represent approximately 4 percent and 1 percent of the PAPA, respectively.

Page 2-48, Column 1, List of Equipment

In the second column it should be noted that individual production and water tanks would be required at each of the centralized production facilities.

Page 2-54

Table 2-15 has been updated to include the environmental receptor class and a summary of air quality impacts in Class I areas.

Page 3-36, Column 2, Paragraph 2

Add the Price Ranch to the list of ranches in the first sentence.

Page 3-50, Column 1, Insert New Paragraph

The following definition of Class 3 waters is added based on a regulatory change currently being considered by WDEQ that would reclassify all Class 4 streams in the PAPA to Class 3.

***Class 3** - Those surface waters, other than those classified as Class 1, which are determined to: (i) be presently supporting nongame fish only; (ii) have the hydrologic and natural water quality potential to support nongame fish only; or (iii) include nursery areas or food sources for nongame fish only.*

Page 4-3, Column 1, First Paragraph

In the fourth sentence, "annually" is removed. The sentence now reads:

It evaluates the benefits of slower paced development by limiting the number of rigs operating in the project area to five.

Page 4-29 Transportation Mitigation Opportunity 3.

The following has been added to the end of Transportation Mitigation Opportunity 3:

This mitigation opportunity would only apply to roads constructed and/or used by the operators.

Page 4-69, Section 4.10.2

The fourth bullet item is replaced with the following:

lifetime incremental increase in cancer risk from the most likely exposure scenario is equal to or greater than one additional person in one million; or

Page 4-71, Column 2, Last Paragraph

This paragraph has been revised to include a discussion on the relevance of the Jonah II compressor HAPs analysis as follows:

**Table 2-15
Comparison of Alternative Impacts**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Multiple	An average of 8 drilling rigs working in the project area year-round.	No more than 5 rigs operating in the project area, only 2 of which would be allowed to work on new locations at any one time north of the New Fork River on Federal lands and minerals.	Same as RP Alternative on Federal Lands and Minerals
Multiple	60 to 90 wells drilled in the project area annually	40 to 60 wells drilled in the project area annually.	Same as RP Alternative on Federal Lands and Minerals
Multiple	At 500 and 700 well pads, between 7,363 and 9,064 acres of short-term disturbance, respectively.	At 500 and 700 well pads, between 6,265 and 7,437 acres of short-term disturbance, respectively, with the Pad Drilling Option; and between 7,483 and 9,234 acres of short-term disturbance, respectively, with the CPF Option.	Same as RP Alternative on Federal Lands and Minerals
Multiple	At 500 and 700 well pads, between 1,382 and 1,914 acres of long-term disturbance, respectively.	At 500 and 700 well pads, between 998 and 1340 acres of long-term disturbance, respectively, with the Pad Drilling Option; between 1,244 and 1,706 acres of long-term disturbance, respectively, with the CPF Option	Same as RP Alternative on Federal Lands and Minerals
Class I Areas (Air Quality)	No significant impacts to visibility in Class I areas are predicted to occur from the project alone based on the results of air quality modeling.	Same as SS Alternative	Same as SS Alternative
Socioeconomic	Significant positive impacts on local, state and Federal government revenues are expected.	Significant positive impacts on local, state and Federal government revenues are expected. However, it would take as much as 50 percent longer to collect those revenues because the number of wells drilled annually would be less.	Same as RP Alternative on Federal Lands and Minerals
Socioeconomic	A peak workforce of approximately 320 workers is expected.	A peak workforce of approximately 186 workers is expected.	Same as RP Alternative on Federal Lands and Minerals.
Socioeconomic	Project revenues are expected to exceed service and facility demands on local governments.	Same as SS Alternative	Same as SS Alternative
Transportation	Peak daily round trip traffic level for heavy vehicles is estimated at 110.	Peak daily round trip traffic level for heavy vehicles is estimated at 60.	Same as RP Alternative on Federal Lands and Minerals
Transportation	Peak daily round trip traffic level for light vehicles is estimated at 190.	Peak daily round trip traffic level for light vehicles is estimated at 80.	Same as RP Alternative on Federal Lands and Minerals
Transportation	30 to 40 percent increase in daily traffic volume on U.S. Highway 191 if all traffic uses this highway.	14 to 24 percent increase in daily traffic volume on U.S. Highway 191 if all traffic uses this highway	Same as RP Alternative on Federal Lands and Minerals
Transportation	Daily traffic volume on State Highway 351 would be tripled if all traffic uses this highway.	Daily traffic volume on State Highway 351 would be doubled if all traffic uses this highway.	Same as RP Alternative on Federal Lands and Minerals.
Transportation	No change in level of service is expected for U.S. Highway 191 or State Highway 351.	Same as SS Alternative	Same as SS Alternative

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Residential	Project Wide Scenario(PWS) - 249 potential well pad locations could be developed in the Residential Area SRMZ in the project area. Anticline Crest Scenario (ACS) - Fewer potential well pad locations are available.	PWS - 196 potential well pad locations could be developed in the Residential Area SRMZ in the project area. ACS - Fewer potential well pad locations are available.	No well pads would be developed in the Residential Area SRMZ.
Residential	PWS - 42 potential well pad locations would be located in subdivisions or subdivided lands in the project area. ACS - Only 10 potential well pad locations would be within subdivisions or subdivided areas.	PWS - On Federal lands and minerals, no well pads would be developed within 0.25 mile of subdivisions or subdivided lands. However, 42 potential well pad locations could be developed in subdivisions or subdivided lands on non-Federal lands and minerals. ACS - Only 10 potential well pad locations would be within subdivisions or subdivided areas.	Potential well pad locations would not be developed within 0.25 mile of subdivisions or subdivided lands throughout the project area.
Residential	PWS - 51 potential well pad locations would be in areas zoned by Sublette County for residential use. ACS - Only 2 potential well pad locations would be within residential zones.	PWS - On Federal lands and minerals, no well pads would be developed within 0.25 mile of areas zoned as residential by Sublette County. However, 51 potential well pad locations could be developed in areas zoned by Sublette County for residential on non-Federal lands and minerals. ACS - Only 2 potential well pad locations would be within residential zones.	Potential well pad locations would not be developed within 0.25 mile of areas zoned for residential use by Sublette County.
Residential	Wells would not be drilled within 0.25 miles of a residence on Federal lands. Wells could be drilled within 350 feet of residence on non-Federal lands and minerals.	Same as SS Alternative	Wells would not be drilled with 0.25 mile of residences.
Recreation	PWS - Significant impact to dispersed recreation use could occur along the Pinedale South Road and Mesa Road. ACS - Impacts to dispersed recreation would be greatly reduced.	Same as SS Alternative	Same as SS Alternative
Recreation	Significant impact could occur to a small portion of the Wind River Front Special Recreation Management Area.	Impacts to the Wind River Front Special Recreation Management Area would be insignificant.	Same as RP Alternative
Visual	VRM Class II - Well pad placement would be limited in VRM Class II areas so that no degradation of the visual integrity of the Class II area occurs. No significant impacts are anticipated in the Class II area. No limitations on non-Federal lands.	Same as SS Alternative	Same as SS Alternative

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Visual	<p>Sensitive Viewshed SRMZ - Up to 16 well pads/section with production facilities could be located in the Sensitive Viewshed SRMZ shown on Figure 3-10 outside VRM II areas. No development activities would be allowed on slopes in excess of 25 percent on Federal lands and minerals. Recreationists on the Mesa would have their viewshed significantly impaired. Development at this level of well pad density would result in a significant impact to the viewshed and impacts would be readily noticeable to casual observers in Pinedale, residential areas, and along U.S. Highway 191. Foreground visual impacts on non-Federal lands and minerals, with development at 16 pads/section, would also be significant and the natural landscape would be converted to an oil and gas development zone/setting.</p> <p>PWS - As many as 936 potential well pad locations could be developed in the Sensitive Viewshed SRMZ outside VRM II;</p> <p>ACS - As many as 311 potential locations could be developed in the Sensitive Viewshed SRMZ outside VRM II.</p>	<p>Sensitive Viewshed SRMZ - Up to 4 well pads/section with production facilities could be located in the Sensitive Viewshed SRMZ shown on Figure 3-10 outside VRM II areas but production facilities would be designed so that they would, for the most part, not be visible. Pad Drilling could be an inherent part of this RP Alternative. Development at this level would significantly reduce impacts to the integrity of the viewshed on Federal lands and minerals but no change in impact on non-Federal lands and minerals. However, recreationists on the Mesa would still have viewsheds impaired, but at a reduced scale. CPFs - Impacts would be further reduced over the long-term under the CPF option where CPFs could be located out of sight in the SRMZ. Impacts on non-federal lands and minerals would still be significant, but would be further reduced over the long-term under the CPF option. No development activities would be allowed on slopes in excess of 15 percent on Federal lands and minerals. Impacts on Federal lands and minerals would be less obvious than impacts in foreground views on non-Federal lands and minerals. Visual impacts on Federal lands and minerals would not be noticeable to casual observers in Pinedale, residential areas, and along U.S. Highway 191 as long as every effort is made to comply with recommendations to reduce visual impairment.</p> <p>ACS - CPFs should reduce visual impacts markedly in the long-term under the ACS.</p>	<p>This alternative would significantly reduce impacts to visual resources. Under this alternative, no more than 4 well pads/section with production facilities would be allowed anywhere in the Sensitive Viewshed SRMZ and production facilities would be designed so that they would, for the most part, not be visible.</p>
Lander Trail	<p>PWS - Direct impacts could occur to the Lander Trail. A significant change in the setting of the trail could occur.</p> <p>ACS - Less change is expected under the ACS.</p>	<p>PWS - Direct impacts could occur to the Lander Trail on non-Federal lands. On Federal lands and minerals, a change in the setting of the trail could occur, but this change would be reduced by screening well pads so no more than 2 are visible/section where possible; with CPFs 2 visible pads allowed if CPFs are not visible eliminating the need for tanks at well pads. The impact to the setting would still be considered significant.</p> <p>ACS - Less change is expected under the ACS.</p>	<p>No direct impact would occur to the Lander Trail. The impact to the setting would still be considered significant.</p>
Cultural	<p>No significant impact should occur to cultural resources on Federal lands and minerals because of requirements for compliance with the NHPA and the ARPA. Unexpected discoveries could be damaged or destroyed. Significant impact could occur on non-Federal lands and minerals because the regulations do not apply.</p>	<p>Same as SS Alternative</p>	<p>Same as SS Alternative on Federal lands and minerals</p>

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Cultural	On Federal lands and minerals, Native American sensitive sites would be either avoided or protected. Traditional elders would be consulted regarding recommendations on appropriate avoidance distances. On non-Federal lands and minerals significant impact could occur.	Same as SS Alternative	Same as SS Alternative on Federal lands and minerals
Geology	No significant impacts are expected from geologic hazards.	Same as SS Alternative	Same as SS Alternative
Slope	PWS - 154 well pad locations could be developed on slopes in excess of 15 percent. ACS - 66 well pads on the anticline crest could be developed on those slopes.	PWS - 13 well pad locations could be developed on slopes in excess of 15 percent. ACS - 3 well pads on the anticline crest could be developed on those slopes.	No well pad locations would be developed on slopes in excess of 15 percent
Paleontology	Scientifically important paleontological resources could be uncovered and/or destroyed by project activities.	Same as SS Alternative	Same as SS Alternative
Groundwater	No significant impacts to ground water are anticipated. Adequate regulatory mechanism are in place to protect groundwater quality and quantity.	Same as SS Alternative	Same as SS Alternative
Groundwater	At 500 and 700 producing well pads, the total annual water used to drill wells is anticipated to be 200 to 300 acre-feet/year, respectively.	At 500 and 700 producing well pads, the total annual water used to drill wells is anticipated to be 130 to 200 acre-feet/year, respectively.	Same as RP Alternative on Federal Lands and Minerals
Groundwater	PWS/ACS - Maximum drawdown of the groundwater aquifers is estimated to be 1 to 1.5 feet/year. The same is expected with the Anticline Crest Scenario.	PWS/ACS - Maximum drawdown of the groundwater aquifers is estimated to be 0.7 to 1.0 feet/year. The same is expected with the Anticline Crest Scenario.	Same as RP Alternative on Federal Lands and Minerals
Surface Water	Significant impacts from non-point source pollutants could occur in area waters if regulatory requirements to control these sources are not being adequately implemented by the operators. BLM and WDEQ/WQD would jointly improve enforcement to ensure that current regulatory requirements regarding non-point source pollutants are adequately applied.	Same as SS Alternative	Same as SS Alternative

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Soils	PWS - 225 potential well pad locations could be developed in the Sensitive Soils SRMZ. ACS - 98 potential locations in the SRMZ could be developed with the Anticline Crest Scenario.	PWS - No potential well pads would be located in the Sensitive Soils SRMZ on Federal lands and minerals. Nine potential well pad locations would remain in the Sensitive Soils SRMZ on non-Federal lands and minerals. ACS - fewer well pads could be developed with the Anticline Crest Scenario.	No well pads would be located on the Sensitive Soils SRMZ.
Soils	Development could occur on saline soils on private lands and minerals in the flood plains of the Green and New Fork rivers.	Same as SS Alternative	No development could occur on saline soils on private lands and minerals in the flood plains of the Green and New Fork rivers.
Soils	Development could occur on seasonally flooded soils on private lands and minerals in the flood plains of the Green and New Fork rivers.	Same as SS Alternative	No development would occur on seasonally flooded soils on private lands and minerals in the flood plains of the Green and New Fork rivers.
Vegetation	At 500 and 700 producing well locations (one straight hole well per pad), this alternative would disturb between 7,363 and 9,064 acres of vegetation in the short-term and between 1,382 and 1,914 acres in the long-term, respectively.	At 500 and 700 producing well locations, under this alternative, pad drilling (multiple wells drilled from a single pad and no more than 4 pads per square mile) would disturb between 1,098 and 1,627 acres less vegetation in the short-term and between 384 and 574 acres less in the long-term than the SS Alternative; using CPF would disturb between 246 and 366 acres less long-term disturbance to vegetation would occur than with the SS Alternative or pad drilling option.	Same as RP Alternative on Federal Lands and Minerals
Noxious Weeds	Noxious weeds may become established at disturbed sites.	Because this alternative would have less surface disturbed at any one time, establishment of noxious weeds would be less likely.	Same as RP Alternative on Federal Lands and Minerals
Grazing	PWS - 16 grazing allotments would be affected with an estimated peak annual loss of 64 AUMs and, at 500 and 700 well pads, 320 and 395 AUMs, respectively, of peak net loss in year five. ACS - 11 grazing allotments would be affected with the same estimated peak annual and net fifth year losses as for PWS.	PWS - With pad drilling, 16 grazing allotments would be affected with an estimated peak annual loss of 36 AUMs and, at 500 and 700 well pads, 180 and 215 AUMs, respectively, of peak net loss in year five. ACS - 11 grazing allotments would be affected with the same estimated peak annual and net fifth year losses as for PWS. PWS/ACS - With CPF, same as SS Alternative.	Same as RP Alternative on Federal Lands and Minerals
Wetlands	PWS - Under the current COE permitting process, this alternative would protect approximately 837 acres of the 11,258 acres of wetlands (7.4 percent) in the project area from disturbance by well pads. ACS - 290 acres out of 1,427 acres (20.3 percent) of the wetlands in the Anticline Crest Scenario could be disturbed.	Same as SS Alternative	This alternative would eliminate placement of all well pad locations in area wetlands.

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Wetlands	PWS - 259 potential well pad locations could be developed in wetlands on private and state lands and minerals. ACS - 25 potential sites could be developed with the Anticline Crest Scenario.	Same as SS Alternative	This alternative would eliminate placement of all well pad locations in project area wetlands.
100-year Floodplains	PWS - 232 potential well pad locations could be developed in 100-year flood plains on private and state lands and minerals. ACS - 32 potential sites could be developed with the Anticline Crest Scenario.	Same as SS Alternative	This alternative would eliminate placement of all well pad locations in 100-year flood plains in the project area.
Bald Eagle	PWS - Private lands surround the bald eagle nest and could be developed to densities of 16 pads/section. If extensive development occurs, it could be a significant impact to nesting bald eagles. ACS - No impact would occur under the Anticline Crest Scenario.	Same as SS Alternative	All lands surrounding the bald eagle nest would be protected from any well field development so that impacts would be insignificant
Bald Eagle	PWS - Potential bald eagle winter habitats are on private lands and minerals and would have no protection from maximum well pad density development which, if it occurs, could be a significant loss of habitat function. ACS - Less potential impact would occur under the Anticline Crest Scenario.	Same as SS Alternative	All potential bald eagle winter habitat would be protected from any well field development so that impacts would be insignificant.
Mountain Plover	PWS - Significant impacts to nesting mountain plovers would occur if extensive development occurs in nesting habitat. ACS - Less potential impact would occur under the Anticline Crest Scenario.	Same as SS Alternative	Same as SS Alternative
Antelope	PWS - Significant impact to antelope crucial winter range would occur if extensive development occurs in this habitat because of overall loss of habitat function. ACS - Less potential impact would occur under the Anticline Crest Scenario.	PWS - Significant impact to antelope crucial winter range would occur if extensive development occurs in this habitat but overall impact levels would be decidedly less than for the SS Alternative. ACS - Even less potential impact would occur under the Anticline Crest Scenario.	Same as RP Alternative on Federal Lands and Minerals
Mule Deer	PWS - Significant impact to mule deer winter range and crucial winter range would occur if extensive development occurs in these habitats because of overall loss of habitat function. ACS - Less potential impact would occur under the Anticline Crest Scenario.	PWS - Significant impacts to mule deer winter range and crucial winter range would occur if extensive development occurs in these habitats but overall impact levels would be decidedly less. No development would occur within the Mesa Breaks. ACS - Even less potential impact would occur under the Anticline Crest Scenario.	Same as RP Alternative on Federal Lands and Minerals

**Table 2-15
Continued**

Impact Receptor Class	Standard Stipulations Alternative	RP Alternative on Federal Lands and Minerals	RP Alternative on All Lands and Minerals
Moose	<p>PWS - The majority of moose crucial winter/yearlong range is on private lands and minerals and would have no protection from maximum well pad density development which, if it occurred, could be a significant impact from loss of habitat function.</p> <p>ACS - Less potential impact would occur under the Anticline Crest Scenario.</p>	Same as SS Alternative	Well field development would be excluded from most moose crucial winter/yearlong range and the remainder would be limited to 4 pads/section, reducing impacts to nearly insignificant levels, especially with the Anticline Crest Scenario.
Sage Grouse	<p>PWS - Well field traffic during operations and maintenance is expected to produce noise impacts to sage grouse attending leks which would occur throughout the life of the project. Decreased lek attendance due to noise would be a significant impact.</p> <p>ACS - Less potential impact would occur with the Anticline Crest Scenario.</p>	<p>PWS - Noise near leks would be managed during periods of lek attendance to reduce impacts and reduced well densities near leks would also reduce impacts. Impacts to leks during development would be less than the SS Alternative but could still be significant once the well field is operational.</p> <p>ACS - Less potential impact would occur with the Anticline Crest Scenario.</p>	Same as RP Alternative on Federal Lands and Minerals
Sage Grouse	<p>PWS - Unless vegetation and habitat characteristics in undisturbed areas can be enhanced to provide more suitable habitat than currently exists, there would be a net loss of habitat function and impacts to sage grouse nesting habitat would be significant.</p> <p>ACS - Less potential impact would occur with the Anticline Crest Scenario.</p>	<p>PWS - Unless vegetation and habitat characteristics in undisturbed areas can be enhanced to provide more suitable habitat than currently exists, there would be a net loss of habitat function and impacts to sage grouse nesting habitat would be significant. However, overall impact levels would be decidedly less.</p> <p>ACS - Less potential impact would occur with the Anticline Crest Scenario.</p>	Same as RP Alternative on Federal Lands and Minerals
Raptors	<p>PWS - A significant impact to nesting raptors would occur under this alternative on non-Federal lands and minerals.</p> <p>ACS -Less potential impact would occur with the Anticline Crest Scenario.</p>	Same as SS Alternative	All raptor nests would be protected by spatial and temporal buffers and impacts would be reduced to insignificant levels, especially with the Anticline Crest Scenario.
Fisheries	<p>PWS -If extensive development occurs in flood plains of the Green or New Fork rivers, potentially significant impacts to cold water fisheries could occur. These impacts would occur on non-Federal lands and minerals. Impacts on Federal lands may include increased erosion, water quality degradation and head cutting.</p> <p>ACS - Impacts would be less under the Anticline Crest Scenario.</p>	Same as SS Alternative	Implementation of this alternative would reduce potential impacts to fisheries to insignificant levels because no well pads would be located within 500 feet of wetlands, riparian areas or perennial streams and no well pads would be within 100-year flood plains

The compressors consist of internal combustion engines fired by natural gas and are expected to be essentially the same in design as the compressor stations proposed for the Jonah II Project. HAPs impacts are judged in relation to distance to a residence. The HAPs impacts predicted from the Jonah II Project compressor stations are representative of the impacts (on an impact per unit of HAPs emissions basis) for the Pinedale Anticline Project. However, the Jonah II analysis assumed the distance from a compressor station to a residence to be 4 miles. Two of the proposed Pinedale Anticline compressor station sites are less than 4 miles from residences. Therefore, additional NEPA analysis would be required prior to construction at either of these sites.

Page 4-72, Column 2, First Full Paragraph

Beginning with the last paragraph in column 2 on page 4-72 through the end of the first full paragraph in column 1 on page 4-73, the following text has been revised to round latent cancer risk to the unit level and to discuss the relevance of the Jonah II Compressor Station HAPs analysis.

Regarding incremental cancer risk from exposure to well field emissions, even at 350 feet from the nearest well, the formaldehyde impacts are well below the designated threshold level of 1 in one million for both the maximum and most likely exposure scenarios (see Table 4-29). However, the incremental risk increase from exposure to benzene at 350 feet from the nearest well is equal to the designated threshold of 1 in one million for both the maximum exposure and most likely exposure scenarios (an additional 6 people and 1 person per million, respectively). Therefore, significant impacts may result based on the significance criteria described above. At a distance of 1,320 feet from a well, only the incremental risk increase from the maximum exposure scenario is over the designated threshold level at an additional 3 people per million, however, significant impacts would not result because it is for the maximum exposure level (not likely to occur). At 1,320 feet, the incremental risk increase for the most likely exposure scenario is below the designated threshold level at less than 1 additional person per million.

For the compressor internal combustion engines, formaldehyde is the only HAP of consequence (see Table 4-29). For the 12,000 horsepower compressors assumed for the Jonah II Project, the estimated formaldehyde emissions (21.1 tons per year) resulted in a predicted impact of 0.34 ug/m³. Therefore, the formaldehyde emissions from the 26,000 horsepower compressor stations proposed for the Pinedale Anticline Project (37.6 tons per year) would result in an impact of 0.61 ug/m³. This impact equates to cancer risks of an additional 3 people per million and less than 1 additional person per million for the maximum exposure and the most likely exposure scenarios, respectively, over the life of the project. The maximum exposure risk of 3 additional people per million is above the designated threshold (1 additional person in one million), however, significant impacts would not result because it is for the maximum exposure scenario which is unlikely to occur. These predicted impacts are based on the Jonah EIS HAPs analysis in which the distance from a compressor station to a residence was assumed to be 4 miles. Two of the proposed compressor station sites identified in Section 2.5.8 of the DEIS (the Jonah Gas site in Section 31, T. 31 N., R. 109 W. and the Ultra site in Section 16, T. 31 N., R. 108 W.) are less than 2 miles from a residence. Therefore, additional NEPA analysis may be required prior to construction at either of these sites.

Page 4-74, Table 4-29

Table 4-29 has been modified to round latent cancer risk to the unit level and to provide a total risk from all hazardous air pollutants.

Table 4-29 Increased Risk from Carcinogenic Emissions for the Pinedale Anticline Project						
Hazardous Air Pollutant	Wells - With Residences at a distance of 350 feet		Wells - With Residences at a distance of 1,320 feet		Compressors - With Residences at a distance of 4 miles (1)	
	Maximum Exposure	Most Likely Exposure	Maximum Exposure	Most Likely Exposure	Maximum Exposure	Most Likely Exposure
Benzene	6	1	3	Less than 1	<0.01	<0.01
Formaldehyde	<0.01	<0.01	<0.01	<0.01	3	Less than 1
Total Risk	6	1	3	Less than 1	3	Less than 1

Units are number of additional people contracting cancer per one million people exposed over life of project.
1 = Estimates from compressors were summarized from the Jonah EIS (BLM, 1997a)

Page 4-77, Column 2, Paragraph 2

The second sentence starting with "Following separation at the wellhead" is replaced with the following:

Well product would be piped from the wellhead to the centralized production facility.

Page 4-85, Column 1, Section 4.13.3.2.1 Summary of Impacts Common to All Alternatives (Except the No Action Exploration/Development Scenario)

The first three paragraphs in this section have been revised to reflect recent changes in storm water regulations.

State of Wyoming Storm Water Requirements. *One of the greatest areas of concern for impacts to surface water is sedimentation resulting from construction-related runoff. Sediment can flow to intermittent drainages and ultimately to perennial streams. In 1972, the Federal Clean Water Act (CWA) was amended to provide that the discharge of any pollutants to surface waters of the United States had to be regulated through the issuance of a NPDES permit. Congress added Section 402 (p) to the CWA in 1987 to establish a comprehensive framework for addressing storm water discharges under the NPDES program and in 1990, the EPA published regulations requiring all storm water discharges associated with industrial facilities, including construction projects where five or more surface acres are disturbed, to obtain NPDES permits. WDEQ/WQD has primacy from EPA to issue a general permit to dischargers of storm water associated with construction activity. "Specifically, this permit will cover any clearing, grading or excavation project which will disturb five or more (not necessarily contiguous) surface acres." Recently promulgated Federal regulations concerning storm water discharges will decrease the minimum size of a covered construction site to 1 acre no later than March 7, 2003. Non-storm water discharges to waters of the state would require an NPDES effluent discharge permit. Some activities, such as construction dewatering and hydrostatic pipeline testing, may be covered under the general permit for temporary discharges. Other discharges, such as produced water, would require an individual effluent discharge permit. Under no circumstances can either of these permits be issued for discharges to Class 1 waters (sub-basins 1 through 5 and 46 as shown on Figure 3-14).*

Under the permit, operators who are required to obtain a NPDES permit to discharge storm water must prepare a Storm Water Pollution Prevention Plan (SWPPP) and submit a Notice of Intent (NOI) to the WDEQ/WQD 30 days before beginning construction activities. The SWPPP outlines the potential pollution sources and the measures which will be used to prevent storm water contamination. The NOI describes the construction project and route(s) that storm water may take from the construction site to area waters. WDEQ/WQD reviews this information to determine if the operator may discharge storm water under the general permit, or if an individual NPDES permit is required. Should any operators be required to obtain industrial storm water permit coverage in sub-basins 1 through 5 or 46, an individual storm water permit would be necessary because the general permit cannot be used on Class 1 waters.

Operators would be required to comply with the NPDES storm water regulation where they propose to disturb five or more acres. The five acres do not necessarily have to be contiguous (i.e., well pads, roads and pipeline disturbance would all be included to calculate the total area disturbed). It is likely that most of the single well pads (and all of the pad drilling wells) and associated roads and pipelines would result in five or more acres of disturbance and would require compliance with the NPDES storm water regulations.

Page 4-88, Column 1, Spill Response Practices Section

The fourth sentence is replaced with the following:

If the operators store more than 660 gallons of condensate on a well pad, and there is a potential for a spill or discharge to occur into a navigable water of the U.S., they would be required to prepare a Spill Prevention Countermeasure and Control (SPCC) Plan⁴.

Page 4-89, Column 1, Standard Stipulations Alternative, Paragraph 1

The section describing impacts from the Standard Stipulations Alternative is replaced with the following:

Standard Stipulations Alternative. *There are certain restrictions on all lands which would reduce impacts to surface water. If the total amount of disturbance (well pad, road and pipeline) is five acres or greater, the operator would be required to apply for coverage under the general NPDES permit for storm water as described above. This requires preparation of an SWPPP which would set forth BMPs to limit construction-related runoff and therefore the potential for increased sediment in area waters, if these plans are properly implemented. Construction on Federal land would also be required to comply with erosion control and reclamation guidelines (see Section 4.13.3.2.1). The SWPPP and ERRP could be combined for activities on Federal lands and minerals. Impacts to surface water would be reduced on Federal lands and minerals because of mitigation guideline restrictions such as avoiding placement of well pads on slopes 25 percent or greater and avoiding placement of wells within 500 feet of perennial streams and 100 feet of intermittent streams. The requirement for reduction of impacts on state and private lands and minerals is limited to those activities which are five or more acres requiring compliance with BMPs through the SWPPP. There are no restrictions that could be enforced regarding sediment control on state and private lands for disturbances which are less than five acres. The operator's are currently not adequately implementing BMPs. Neither BLM nor the State of Wyoming are adequately enforcing these requirements in the PAPA. The continued lack of implementation of adequate sediment controls could result in a significant impact to area perennial waters. Whether or not a construction storm water permit is required, operators should incorporate sufficient BMPs into their site to prevent violations of the state water quality standards (Wyoming Water Quality Rules and Regulations, Chapter 1).*

Page 4-100, Soils Mitigation Opportunity 5

The fourth sentence in Soils Mitigation Opportunity 5 has been revised to change the recommended ditch width for which topsoiling should occur from 36 inches to 18 inches as follows:

On ditches exceeding 18 inches in width, topsoil should be salvaged, where possible, across the entire right-of-way.

Page 4-108, Column 2, Section 4.16.2 Significance Criteria

The two significance criteria have been reversed as follows:

- *project alternatives result in long-term disruption of grazing management, such as changes in livestock use patterns, which result in increased resource conflicts or changes in ranching operations, livestock trailing, watering, fencing, and feeding; or*

- *Animal unit months (AUMs) in any single grazing allotment decline by five percent or more through clearing or disturbance of vegetation.*

Page 4-108, Column 2, Section 4.16.3.1 Summary of Impacts Common to All Alternatives (Except the No Action Exploration/Development Scenario)

The fourth sentence is revised to remove the word "primary". The revised sentence is as follows:

One of the impacts to grazing resources in the PAPA would be the loss of forage associated with construction and production related-disturbance.

Page 4-114, Section 4.16.5, Monitoring Recommendations

The following sentence has been added to the end of the paragraph:

Monitoring would be coordinated with grazing permittees through the AEM planning process.

Page 4-119, Column 2, Following the First Paragraph

The following paragraph has been added following the first paragraph:

Development of private mineral rights under private surface can occur without obtaining any permit or authorization from the BLM. Access to those parcels could occur entirely from public (state, county) or private roads. However, there may be instances where access across BLM land to private or state minerals/surface is requested. In those instances, the non-Federal lands would be considered an interrelated and interdependent part of the Federal action and BLM would evaluate the potential for the action to affect listed species or species proposed for listing. BLM would ensure that surface disturbance and activities on Federal lands, and on the private and state lands, through recommendations to the operator and landowner, will not adversely affect these species or their habitat. Where there is the potential to adversely affect a listed species, formal Section 7 review will be initiated by the BLM with the operator and landowner included, recognizing that the process may take up to 180 days to complete.

Page 4-119 to 120, First Column, End of Page

The following should be added following the quoted passage:

Conditions that must exist to support a conclusion that the project alternatives would "not likely to adversely affect" black-footed ferrets, there would have to be a guarantee that no further ground-disturbing activity would proceed within the affected habitat with assurance that the species was absent. A guarantee of "not likely to adversely affect" would exist where, for example, a ferret or their sign is found during a survey. In that case, BLM would stop all action on the application in hand and initiate Section 7 review with USFWS. The USFWS would then determine when and under what conditions and/or prudent measures the action could proceed or that the action could not proceed. At that point, the USFWS would provide the guarantee of "not likely to adversely affect". No project-related activities would or could continue until the USFWS issued their guidance or instruction. This would occur within the 180-day window for Section 7 formal review (USFWS. 2000. P. Diebert, personal communication with BLM). Given this interpretation, the conclusion would appropriately be that the project alternatives are "not likely to adversely affect" black-footed ferrets or other Federally listed species".

Page 4-124, Column 2, Second Paragraph

Sentences 3 and 4 have been replaced with the following:

In the PAPA, establishment of a zone excluding surface disturbances or occupancy within 2,000 feet of bald eagle nests and exclusion of any construction activities within one mile of the nest during the nesting period would probably provide sufficient protection for nesting eagles but a well visited daily by a maintenance worker may adversely affect nesting success due to this repeated human disturbance at the well site. However, annual monitoring of nest site(s) would provide information on the success of those measures.

Page 4-125, Column 1, Paragraph 3

The paragraph is replaced with the following:

Water used for drilling wells on the PAPA (3.2 acre-foot/well) would be taken from water wells. Any water withdrawal, whether from surface waters or from wells that are considered recharge water to the Green River would jeopardize the Colorado River endangered fish species. Therefore, the operators would be required to pay a one time fee to the conservation fund for depletions of 100 acre-feet or more based on the average annual depletion for the project.

Page 4-142, Threatened/Endangered Species Mitigation Opportunity 5

The following has been added to the end of Threatened/Endangered Species Mitigation Opportunity 5:

and, 4) to reduce the level of repeated human activity at well sites located within 2,000 feet from a bald eagle nest, production facilities should be located off-site or at central production facility locations out of the direct line of sight of the bald eagle nest(s).

Page 4-166, Wildlife Mitigation Opportunity 4

Wildlife Mitigation Opportunity 7 has been revised as follows:

Construct all roads to standards that meet the intended use of the road and minimize vehicle speeds and surface disturbances.

Page 4-166, Wildlife Mitigation Opportunity 7

The following is added to Wildlife Mitigation Opportunity 7:

10. Operators could avoid drilling and construction activities during the sage grouse strutting period (March 1 to May 15) within 1 mile of active leks.

Page 4-167, Wildlife Mitigation Opportunity 13

Wildlife Mitigation Opportunity 13 has been revised as follows:

6. Roads and well pads could be placed to avoid highly suitable sage grouse nesting habitat (high density sagebrush throughout the PAPA). Visual and/or noise screens could be used to reduce impacts to these habitats, where appropriate.

Page 4-167, Wildlife Mitigation Opportunity 16

Wildlife Mitigation Opportunity 16 has been revised as follows:

In situations and at locations to be specified by BLM, reserve pits and produced water pits/containers should be covered by netting if they present a threat to migratory waterfowl or any bird.

Page 4-167, Column 2, Section 4.19.5 Monitoring Requirements

The title for Section 4.19.5 is listed as Monitoring Requirements. This is incorrect. The title should be changed to Monitoring Recommendations to be consistent with other similar sections in the EIS.

Page 5-27, Column 1, Second Paragraph, Line 3

The third sentence has been changed to read:

The only protection provided to many of these species on non-Federal lands and minerals is through state game laws, the Endangered Species Act, the Migratory Bird Treaty Act, and other laws, however, monitoring and enforcement are less frequently applied.

Appendix A, Page A-20, Item 4, Bullet 2, First Sentence

The first sentence of bullet 2 has been changed to the following to except both ferruginous hawk nests and bald eagle nests:

- *All surface-disturbing activity (e.g., road, pipeline, well pad construction, drilling, completion, workover operations) will be seasonally restricted from February 1 through July 31 within a 0.5-mi radius of all active raptor nests, except ferruginous hawk nests and bald eagle nests, for which the seasonal buffer will be 1.0 mi.*

Appendix A, Page A-10, Pipelines and Communication Lines, number 2

The first sentence is changed to read:

2. *On ditches exceeding 18 inches in width, 6 to 12 inches of surface soil will be salvaged where possible on the entire right-of-way.*

Appendix A, Page A-18, Water Resources, number 1

The first sentence is changed to read:

1. *Owners or operators of onshore facilities (any facility of any kind, or drilling or workover rigs) due to their location, could reasonably be expected to discharge oil in harmful quantities (as defined in 40 DFR part 110 & 112.3), into or upon navigable waters of the United States or adjoining shorelines, shall prepare a Spill Prevention Control and Countermeasure Plan (SPCC Plan) in accordance with 40 CFR 112.7.*

Appendix A, Page A-19, Wildlife and Fisheries

The title of this section is changed to:

Wildlife, Fisheries, and Threatened and Endangered Species

Appendix A, Page A-21, Wildlife and Fisheries, number 11

Replace the existing Standard Practice with the following:

11. *Mountain Plover (proposed for listing) - For surface disturbing activities, surveys will be conducted within suitable plover habitat by a qualified biologist in accordance with USFWS 1999 guidelines (A copy of the guidelines may be obtained from the USFWS, BLM, or WGFD). Two types of surveys may*

be conducted. 1) surveys to determine the presence/absence of breeding plovers (i.e., displaying males and foraging adults), or 2) surveys to determine nest density.

- **Surveys to determine presence/absence** of the plover will be conducted between May 1 and June 15 throughout the breeding range.
- **Surveys conducted to determine density of nesting plovers** will be conducted between the last week in June to July 4th.
- Visual observation of the area should be made within 200-meters (656-feet) of the proposed action to detect the presence of plovers.
- A site must be surveyed 3 times during the survey window, with each survey separated by at least 14 days.
- Initiation of the project should occur as near to completion of the survey as possible (within 2 days for seismic exploration; a 14 day period may be appropriate for other projects).
- If active nest is found in the survey area, the planned activity should be delayed 37 days, or one week post-hatching. If a brood of flightless chicks is observed, activities should be delayed at least seven days.

The survey type chosen for a project and the extent of the survey area (i.e., beyond the edge of the construction or operational ROW) will depend on the type of project activity being analyzed (e.g., construction, operation) and the users intent. Some techniques common to each survey method are:

- Surveys will be conducted during early courtship and territorial establishment. Throughout the breeding range, this period extends from approximately mid-April through early July. However, the specific breeding period depends on latitude, elevation, and weather.
- Surveys will be conducted between local sunrise and 10 a.m., and from 5:30 p.m. and sunset (periods of horizontal light to facilitate spotting the white breast of the adult plovers).
- Drive transects within the project area to minimize early flushing. Flushing distances for mountain plovers may be within 3 meters (9 to 10 feet) for vehicles, but plovers often flush at 50 to 100 meters (164 to 328 feet) when approached by humans on foot.
- For all breeding birds observed, additional surveys will be conducted immediately prior to construction activities to search for active nest sites.
- If an active nest is located, an appropriate buffer area will be established to prevent direct loss of the nest or indirect impacts from human-related disturbance. The appropriate buffer distance will vary, depending on topography, type of activity proposed, and duration of disturbance. For disturbances including pedestrian foot traffic and continual equipment operations, a 200-meter (656-foot) buffer is recommended by the USFWS.

Appendix A, Page A-21, Wildlife and Fisheries, number 12

Replace the existing Standard Practice with the following:

12. *Black-Footed Ferret (listed) - Proposed construction sites in the development area not examined for prairie dogs in past surveys will be examined prior to surface-disturbing activities to confirm the presence or absence of prairie dog colonies. Confirmation will be made of white-tailed prairie dog colony/complex size, burrow density, and any other data to indicate whether the criteria for black-footed ferret habitat, established in the USFWS (1989) guidelines, are present. If prairie dog colony/complex meets the USFWS criteria, a qualified biologist will locate all project components to avoid direct, indirect and cumulative impacts to the colony/complex. If this is not practical or possible, black-footed ferret surveys of the prairie dog colony/complex, where required by the USFWS, will be conducted in accordance with USFWS guidelines and requirements. The results of the survey will be provided to the USFWS in accordance with Section 7 of the ESA, as amended, and Interagency Cooperation Regulations. If a black-footed ferret or its sign is found during the survey, the BLM Authorized Officer shall stop all action on the application in hand, and/or action on any future application that may directly,*

indirectly, or cumulatively affect the colony/complex, and initiate Section 7 review with the USFWS. No project-related activities will be allowed to proceed until the USFWS issues their biological opinion. The USFWS biological opinion will specify when and under what conditions and/or prudent measures the action could proceed or whether the action will be allowed to proceed at all.

Appendix A, Page A-21, Wildlife and Fisheries, number 13

Replace the existing Standard Practice with the following:

13. *Endangered Fish - The USFWS has determined that any withdrawal of water from the Colorado River System (surface or ground water) will jeopardize the endangered Colorado pikeminnow, humpback chub, bonytail, and razorback sucker. The USFWS Colorado River Endangered Fish Recovery Program requires a depletion fee be paid by the proponent to help support the recovery program. The fee is required for each acre-foot of water depletion where the depletion of water is in excess of 100 acre-feet from the Colorado Rover system (USFWS July 5, 1994). The current depletion rate (March 2000), which is adjustable based on the Consumer Price Index, is \$14.39 per acre-foot. Payment for any depletion will be by certified check or money order to the National Fish and Wildlife Foundation, 11230 Connecticut Ave., N.W., Suite 900, Washington, D.C., 20036.*

Appendix B, Page 8, Table B-1.1

In Table B-1.1, Design Structural Loading for Collector Roads is "H-20" rather than "H-2".