



United States Department of Agriculture

Oil and Gas Leasing in Portions of the Wyoming Range in the Bridger-Teton National Forest

Draft Supplemental Environmental Impact Statement Summary

Sublette County, Wyoming



Forest Service

Bridger-Teton National Forest, Big Piney Ranger District

April 2016

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**Oil and Gas Leasing in Portions of the Wyoming Range in the Bridger-Teton National Forest
Draft Supplemental Environmental Impact Statement
Sublette County, Wyoming**

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Abstract: The Bridger-Teton National Forest has analyzed and disclosed the effects of authorizing the Bureau of Land Management (BLM) to offer oil and gas leasing on portions of the Wyoming Range, previously identified as suitable and available for oil and gas leasing in the Bridger-Teton National Forest Land and Resource Management Plan (forest plan). Four alternatives are considered: alternative 1, no action/no leasing (withdraw consent to leasing); alternative 2, implement forest plan leasing availability decision (the proposed action); alternative 3, implement forest plan leasing availability decision with enhanced resource protection; and alternative 4, implement forest plan leasing availability decision with no surface occupancy. In alternatives 2, 3, and 4, the Forest Service would authorize, or consent to, the offering of specific parcels for competitive lease with varying levels of resource protection in the form of lease stipulations. The BLM may add additional stipulations in accordance with their applicable Resource Management Plan or decide to not offer the parcels, or cancel leases. This draft supplemental environmental impact statement discloses potential effects of a reasonably foreseeable development scenario on a variety of social, biological, and physical resources. Alternative 1 is the preferred alternative at this time.

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(Select "Comment on Project" on right side of Web page)

Date Comments Must Be Received: 45 days after publication of the notice of availability in the Federal Register

Preface

This document provides a summary of the Draft Supplemental Environmental Impact Statement for Oil and Gas Leasing in Portions of the Wyoming Range in the Bridger-Teton National Forest. Below is the structure of the full draft document. Copies of the entire document are available online at the Bridger-Teton National Forest Web site (<http://www.fs.usda.gov/project/?project=24734>) or from either the Big Piney Ranger District or the Supervisor's Office of the Bridger-Teton National Forest.

Volume 1

- **Chapter 1. Purpose of and Need for Action:** The chapter includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- **Chapter 2. Alternatives, including the Proposed Action:** This chapter provides a more detailed description of the agency's proposed action as well as the no action/no leasing alternative and other alternative methods for achieving the stated purpose. These alternatives were developed based on cause/effect relationships raised by the public and other agencies. This discussion also includes mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- **Chapter 3. Affected Environment and Environmental Consequences:** This chapter describes relevant resource components of the existing environmental conditions and the potential environmental effects of implementing the proposed action and other alternatives. This analysis is organized by the issues identified for this project including components of the ecological, social, and physical environments.
- **Chapter 4. Consultation and Coordination:** This chapter provides a list of preparers and agencies consulted during the development of the environmental impact statement.
- **References:** This section lists the literature and other reference materials cited throughout this document.
- **Index**

Volume 2

- **Appendix:** The appendix provides more detailed information to support the analyses presented in the environmental impact statement. Appendix sections include:
 - ◆ Appendix A: Maps for Terrestrial Wildlife Analysis
 - ◆ Appendix B: Public Involvement
 - ◆ Appendix C: Lease Stipulations
 - ◆ Appendix D: Wyoming Range Leases
 - ◆ Appendix E: Actions Relevant to Cumulative Effects Analysis
 - ◆ Appendix F: Socio-economic Analysis Information

Summary

The Bridger-Teton National Forest proposes to authorize the Bureau of Land Management (BLM) to offer oil and gas leasing on portions of the Wyoming Range, previously identified as suitable and available for oil and gas leasing in the Bridger-Teton National Forest Land and Resource Management Plan (forest plan). The draft supplemental environmental impact statement analyzes and discloses the potential effects of a reasonably foreseeable development scenario on a variety of social, biological, and physical resources. The areas evaluated are excepted from the Wyoming Legacy Act (Omnibus Public Land Management Act of 2009). Four alternatives are considered: alternative 1, no action/no leasing (withdraw consent to leasing); alternative 2, (the proposed action), implement forest plan leasing availability decision; alternative 3, implement forest plan leasing availability decision, with enhanced resource protection; and alternative 4, implement forest plan leasing availability decision with no surface occupancy. In alternatives 2, 3, and 4, the Forest Service would authorize, or consent to, the offering of specific parcels for competitive lease with varying levels of resource protection in the form of lease stipulations. The BLM may add additional stipulations in accordance with their applicable resource management plan or decide to not offer the parcels, or cancel leases.

The area affected by the proposal includes National Forest System land on the eastern slope of the Wyoming Range in the Bridger-Teton National Forest within Sublette County, Wyoming (see figure 1 on page iv).

Background

In the years following the 1990 record of decision for the forest plan, the Bridger-Teton National Forest staff reviewed the plan's supporting environmental analysis, and subsequently refined some of the constraints on oil and gas leasing activities for specific forest plan management areas. These constraints were analyzed and documented in three environmental assessments and decision notices prepared in 1990, 1991 and 1993. Since then, there have been several different attempts to offer parcels of lands for lease with supplemental environmental analysis, resulting in leases being offered, decisions being appealed, and leases being suspended or cancelled upon request (see the "Leasing and Analysis History of the Project Area" section in chapter 1 of the draft supplemental environmental impact statement for a detailed history of events).

There is a need to analyze new information that is relevant to environmental concerns and has a bearing on previous decisions associated with leasing these lands. There is a need to disclose the effects of reasonably foreseeable development and determine necessary stipulations to adequately mitigate potential resource impacts. This analysis is needed to inform the independent decisions of the Forest Service and the BLM regarding whether leases should be issued for the parcels which were previously sold at competitive oil and gas lease sales for the subject lands. The decisions of both agencies must be supported by an environmental analysis that adequately addresses the impacts associated with oil and gas leasing.

The purpose of this analysis is to evaluate new information and to correct deficiencies in previous analyses to ensure the potential effects are fully considered before a final decision is made as to whether issuing leases is appropriate for the project parcels.

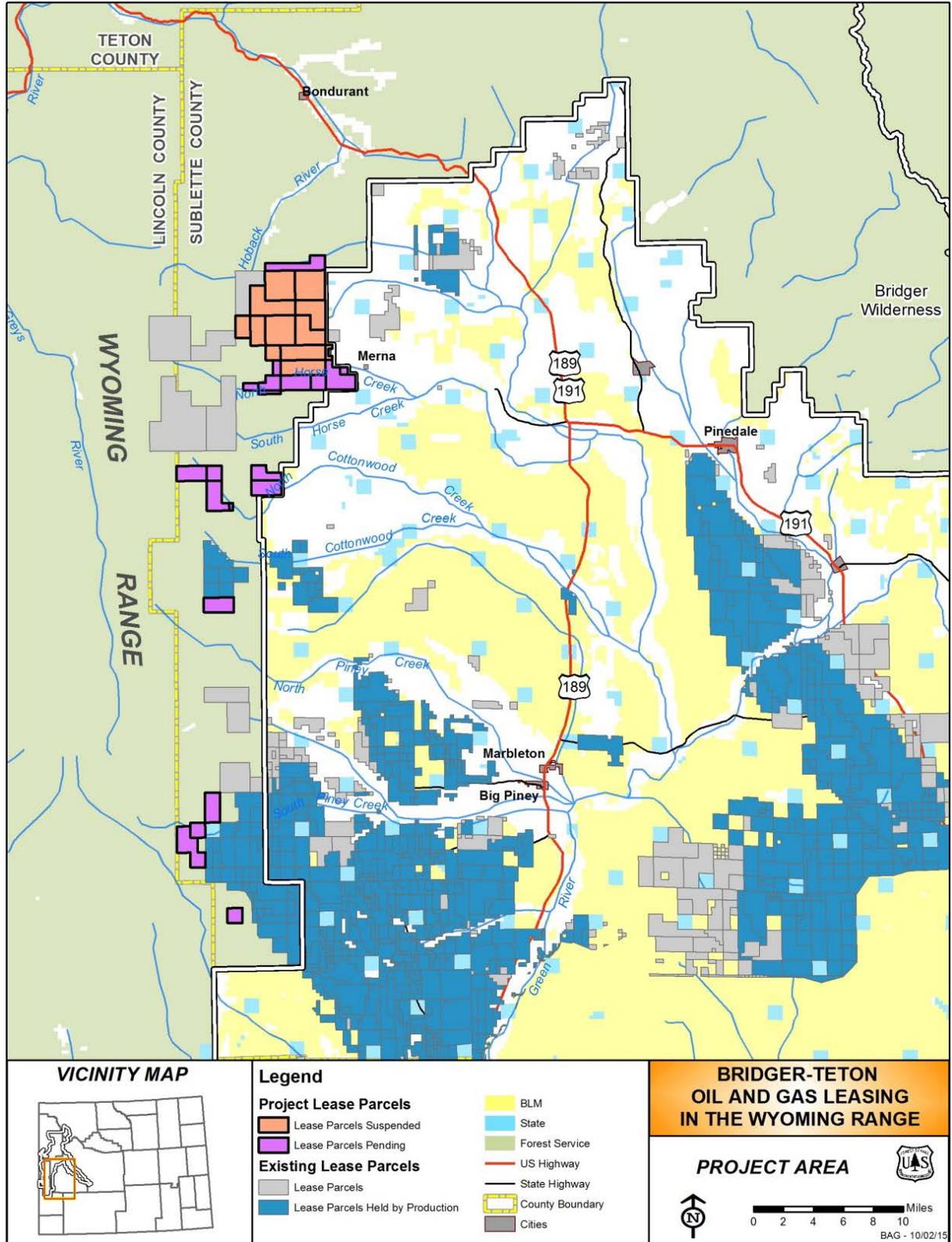


Figure 1. Location of proposed lease parcels under consideration in this project in relation to existing lease parcels

Public Involvement Efforts

Scoping and public involvement for issues related to this supplemental environmental analysis began in 2008 ([73 FR 6453](#)) for a supplemental environmental impact statement that was released with a record of decision in January 2011. In May 2011, the record of decision was withdrawn to allow for further evaluation of several key issues and consideration of new information. On March 21, 2014, a corrected notice of intent was published in the Federal Register ([79 FR 15723](#)) to announce the intent to prepare a supplemental environmental impact statement for this project. Extensive public involvement efforts were conducted with the 2008 scoping period. In addition, public involvement associated with forest plan revision efforts identified public issues and concerns relevant to this project. Because extensive public comments covering the range of relevant issues for the analysis were received in the 2008 scoping period and in the comment period on the 2010 draft supplemental environmental impact statement, an additional scoping period was not conducted. See appendix A of volume 2 in the current draft supplemental environmental impact statement for further details on public involvement.

This issues raised from public involvement efforts include the following:

1. Not authorizing the BLM to issue leases for the 39,490 acres or applying additional constraints to leases could prevent effective recovery of energy resources in the area.
2. Potential impacts from post-leasing exploration and/or development could have cumulative effects on the social and economic well-being of the local communities and quality of life for residents.
3. Post-leasing exploration or development activities and disturbance could change the backcountry recreation setting, detracting from the quality of recreation opportunities in the area.
4. Post-leasing exploration or development activities could result in physical impacts to wildlife habitat or individuals, or behavioral disturbance impacts from increased human presence. Terrestrial wildlife that could be affected includes threatened, endangered, sensitive, and management indicator species' habitats and populations, and large game and trophy game species.
5. Post-leasing exploration or development activities could result in increased sedimentation, chemical contaminants, and dewatering that could adversely impact surface water quality, stream channels, and habitat for fish and other special status aquatic species.
6. Post-leasing exploration or development could adversely affect groundwater resources, especially those in the recharge area through removal of groundwater from aquifers reducing availability to local water users, increased sedimentation, and contamination of groundwater.
7. Post-leasing surface disturbance from roads, and well pad and pipeline construction related to oil and gas exploration or development activities could result in adverse impacts to rare plants, such as soil displacement or compaction, habitat alteration (material spills) and increased competition from invasive plants.
8. The drilling and production of wells subsequent to leasing could impact air quality and air quality-related values, with emphasis on cumulative effects because of extensive development in the Pinedale area and previously monitored exceedances of National Ambient Air Quality Standards for ozone in Sublette County.

Alternatives Considered

The issues led to development of the following alternatives:

- **Alternative 1: No action/no leasing** – Under this alternative, the Forest Service would withdraw consent to lease and none of the subject lands would be leased for oil and gas. “No action” for purposes of this alternative, would mean no leasing of the project parcels.
- **Alternative 2 – Implement forest plan leasing availability decision (the proposed action):** In alternative 2, leasing is proposed to be authorized for the 30 lease parcels under analysis. Stipulations would be applied to the subject leases to ensure compliance with management direction provided in the Bridger-Teton National Forest plan, as amended. Approximately 22,194 acres would be subject to no-surface-occupancy stipulations. Outside of the no-surface-occupancy areas, controlled-surface-use and timing-limitation stipulations would be applied to approximately 14,914 acres.
- **Alternative 3 – Implement forest plan leasing availability decision, with enhanced resource protection:** In alternative 3, leasing is proposed to be authorized for the same 30 lease parcels and stipulations as alternative 2, but this alternative contains additional stipulations that respond to the issues in chapter 1 to provide enhanced resource protection for resources including but not limited to big game habitat, migratory birds, greater sage-grouse, and aquatic habitats. Watershed resources would also be more protected by including stipulations that incorporate the Wyoming Game and Fish Department’s “Recommendations for Development of Oil and Gas Resources within Important Wildlife Habitats” (Wyoming Game and Fish Department 2010). Approximately 31,917 acres would be subject to no-surface-occupancy stipulations. Outside of the no-surface-occupancy areas, controlled-surface-use and timing-limitation stipulations would be applied to approximately 7,541 acres.
- **Alternative 4 – Implement forest plan leasing availability decision with no surface occupancy:** In alternative 4, leasing would be authorized for the same 30 lease parcels as alternatives 2 and 3, but all parcels would be subject to no-surface-occupancy stipulations for drilling activities. Activities on National Forest System lands would be subject to the management direction provided in the forest plan as amended. This alternative was developed to avoid as many impacts as possible while still allowing oil and gas development. Under this alternative, no surface disturbance would occur on the subject lands. Drilling to develop the leased parcels may occur from a leased parcel on adjacent National Forest System lands or lands of other ownership within approximately 1 mile of the parcels under analysis.

Conclusions

Major conclusions for each resource analyzed are summarized below.

Oil and Gas Resources

Alternative 2 would be the most responsive to making lands available for oil and gas leasing, followed by alternatives 3 and 4, respectively. Alternative 1 would not make lands available for oil and gas leasing.

Social and Economic Conditions

Alternative 2 would have the greatest potential positive effect on jobs, income, and population, and greatest potential positive effect on recreation access. However, alternative 2 would have the

greatest negative effect on primitive recreation experience. Alternative 3 would have less of a positive effect on jobs, income, and population and less positive impact on recreation access than alternative 2, while having less negative impact on recreation experience than alternative 2. Alternative 4 effects were not calculated, however with fewer potential wells, the positive effects on jobs, income and population is anticipated to be less than alternative 3, and the potential negative effect on primitive recreation experience would also be less than alternative 3. Alternative 1 would not contribute effects on jobs, income, population, recreation access or primitive recreation experiences.

Recreation and Related Resources

The incremental effect of the project being considered in this document is relatively minor when compared to all of the effects of past, present, and reasonably foreseeable activities. Leasing and development of the parcels considered here would add to increased vehicle access to the area and some potential shift in the recreation opportunity spectrum settings currently available, and it would place more people on the landscape. The reasonably foreseeable activities of other energy developments in the region will result in more people looking to recreate on public land, which has the potential to trigger displacement of those currently enjoying the quiet, low-use experience currently available. Some displacement of recreation due to exploration activities would be temporary in nature, while the overall increase of recreation use can be expected to continue. The project would also add lights, traffic, and dust to a part of the national forest that is currently lightly traveled. Depending on the extent of winter operations, existing snowmobile trails could be affected and recreationists displaced.

The incremental effect of energy development would be minor for special areas, although significant in some places. Effects on potential wild and scenic rivers would be negligible under any of the alternatives that propose leasing. The sights and sounds of energy activity would be noticeable from the Wyoming Range Trail and other viewpoints in the area. Alternatives 2, 3, and 4 have the potential to add to the total indirect effects on inventoried roadless areas.

Scenic Resources

Alternative 2 has the potential to have the greatest negative impacts to scenic resources. Drill pads and associated equipment installations, road construction and road improvements in the reasonably foreseeable development scenario have the potential to change the natural appearing landscape so that there is less of a sense of remoteness and create pockets of an industrial character. Retention and partial retention requirements may not be met, depending on the degree of change to the valued scenic character. The eligibility of the Big Falls Creek could be impacted for Wild and Scenic River consideration. The historic landscape character that was part of the purpose for which the Lander Cutoff Trail was designated may be negatively impacted in the reasonably foreseeable development scenario.

Alternative 3 has fewer anticipated impacts to scenic character and quality compared to alternative 2 due to the expanded no surface occupancy. Alternative 4 has the fewest impacts among the leasing alternatives since all proposed lease parcels would be no surface occupancy. Given current drilling technology, many of the parcels may not be accessible and may not be developed.

Terrestrial Wildlife Species

Alternative 2 induces the greatest potential for loss or alteration of habitat in total, followed by alternative 3. The most prevalent cover types in the project area are lodgepole pine mix and

subalpine fir/spruce mix. The next most prevalent is mountain big sagebrush. This suggests that these habitats have a greater chance of being impacted by development. For alternative 4, development would occur based on directional drilling from existing leases or lands of other ownerships. Therefore, the habitat that could be affected under alternative 4 may already be impacted in various ways from the existing development, depending on where pads and roads are proposed for future development.

All of the leasing alternatives present some level of potential for disturbance. These effects would result from well pad development, road construction, road reconstruction, and pipeline construction and maintenance of facilities. Alternative 2 poses the greatest potential for disturbance, followed by alternatives 3, then 4. The potential effect of roads varies between alternatives and species and is described specifically under direct, indirect, and cumulative effects. These effects are addressed in detail as they apply to each species. Alternative 2 poses the greatest potential for road-related effects disturbance, followed by alternative 3, then 4.

The migration route indicator is specific mostly to elk and mule deer and the linkage indicator is specific to lynx and therefore discussed in those sections. Alternative 2 poses the greatest potential impact to linkages and migration routes, followed by alternative 3, then 4.

Surface Water Resources

Due to the small acreage of disturbance proposed for this proposed project under each of the leasing alternatives (including disturbance from roads), none of the alternatives, if implemented with the proposed stipulations, mitigation measures and suggested best management practices, would impact the overall good water quality and functioning watersheds and riparian and wetland resources that currently exist within project area watersheds. Alternative 1 would not add to surface water impacts. Alternative 2 has the highest potential for resource effects, albeit minor and localized, followed by alternatives 3 and 4, respectively.

Groundwater Resources

Construction of the drill pad, access road, and temporary pipeline could affect shallow groundwater flow and quantity in several ways. Clearing, grading, excavating, and soil stockpiling activities could temporarily alter overland flow and groundwater recharge patterns. Use of heavy construction equipment could cause compaction of near surface soils, reducing the ability of the soil to absorb water and resulting in increased surface runoff and potential for ponding. Excavation could cause temporary or short-term fluctuations in the elevation of the water table. Depletion of the Wasatch Formation aquifer could decrease local contribution to flow in streams or springs down-gradient of the lease area. Groundwater quality could be impacted by accidental spills during the construction phase or leaky well seals allowing cross-aquifer contamination.

Potential risk to groundwater resources would be greatest under alternative 2, followed by alternatives 3 and 4, respectively. Implementation of best management practices and Operators Spill Prevention Countermeasure and Control procedures and requirements for construction, material containment, and reclamation would reduce potential impacts. Due to the low level of projected development and requirements for construction, material containment and reclamation, no significant impacts are anticipated to groundwater resources including water quality and quantity under any action alternative.

Aquatic Species

Aquatic species and their habitats could be impacted by activities associated with exploration and drilling on lands made available for leasing in this project area. Negative effects to Intermountain Region sensitive species Colorado River cutthroat trout, boreal toad, and Columbia spotted frog could occur under each of the leasing alternatives. The primary concerns for the aquatic environment would be surface disturbance and activities near aquatic habitats, including streams, wetlands, and ponds. Potential activities would follow best management practices, standard operating procedures, and any stipulations associated with the lease parcel. Stipulations and mitigation measures would reduce impacts to aquatic habitats and species.

Alternatives 2, 3 and 4 are anticipated to result in water depletion that may affect Colorado River Endangered fish. Endangered Species Act consultation with the U.S. Fish and Wildlife Service would be required for individual projects that include new water depletions greater than 0.1 acre-foot per year. Alternative 1 would not add to impacts to aquatic species. Overall, alternative 2 has the highest potential for resource effects, followed by alternative 3, then 4.

Botanical Resources

Botanical resources could be impacted from road construction and reconstruction, well pad construction, and drilling related activities. Noxious weeds are present in the project area and their spread through project activities could negatively affect rare plant habitat. The determination for all Forest Service Sensitive and management indicator botanical species for alternative 1 is no impact; and for alternatives 2, 3 and 4 the determination is may adversely impact individuals, but not likely to result in a loss of viability in the planning area, nor cause a trend to Federal listing or a loss of species viability rangewide. Alternative 2 has the greatest amount of potential disturbance, and has the greatest chance to spread noxious weeds, followed by alternatives 3 then 4. However, the total potential disturbed area is small and best management practices and mitigation measures will be undertaken during project-specific planning to reduce the chance of weed spread.

Air Quality

Alternative 1 would not add to impacts to air quality. Alternatives 2, 3 and 4 would have small localized effects, predominantly related to particulate matter and dust. It is not likely that emissions from this project alone, under any alternative, would cause exceedances of National Ambient Air Quality Standards or have a noticeable impact on air quality related values (including noticeable visibility) in nearby sensitive Class I and Class II wilderness areas and national parks. Due to proximity and prevailing winds, the most likely sensitive areas to be affected by development of this alternative would be the Bridger and Gros Ventre wilderness areas.

When combined with other emissions in the basin, dust, emissions, and particulates from alternatives 2, 3 and 4 would likely contribute to ongoing visibility issues in the Bridger, Fitzpatrick, Popo Agie, Washakie, Teton, North Absaroka and Gros Ventre wilderness areas as well as Grand Teton National Park and the Wind River Roadless area. Emissions of volatile organic compounds and nitrogen oxides from this project may contribute to ozone formation in the basin.

Cultural Resources

There is the potential for 301 cultural resource sites to be present within the entire analysis area. To meet the requirements for compliance with section 106 of the National Historic Preservation Act, all areas proposed for future surface-disturbing activities would be surveyed for cultural resources, and those resources would be evaluated for the National Register. The preferred treatment for historic properties is avoidance. If avoidance is imprudent or unfeasible, the Forest Service would consult with the Wyoming State Historic Preservation Office and other consulting parties to develop mitigation measures in accordance with 36 CFR 800.

Alternative 1 would have no impacts on cultural resources. Alternatives 2, 3 and 4 would apply a no-surface-occupancy stipulation to lease parcel WYW173280 for the protection of the Lander Cutoff of the California National Historic Trail. A “Protect Cultural Resource Notice” would be applied to 11 additional lease parcels, thus avoiding effects.

Decision to be Made

Based upon the effects of the alternatives, the responsible official will decide whether to authorize the BLM to lease these specific parcels, and under what terms and conditions. This decision will supersede prior Forest Service decisions regarding oil and gas leasing on these specific parcels. Based upon the Forest Service’s decision, the BLM will make decisions regarding the status of leases and pending leases for the lands in question.