Special requirements (e.g., use authorization stipulations, mitigation measures, conditions of approval, etc.) to alleviate air quality impacts will be identified on a case-by-case basis and included in use authorizations (including mineral leases). Examples of such requirements would include: limiting emissions, spacing of source densities, requiring the collection of meteorological and/or air quality data, covering conveyors at mine sites (to lower dust emissions), and placing restrictions on flaring of natural gas (to reduce sulfur emissions). See Appendix 5-1 for specific guidance for applying air quality protection measures.

Surface disturbing activities will be managed to prevent violation of air quality regulations. BLM will coordinate with state and local agencies, having regulatory authority, to control dust generated from construction and travel on unimproved roads.

BLM will continue to participate with other agencies in the collection of air quality data and air quality pollution analysis.

The State of Wyoming has the authority and responsibility to regulate air quality impacts within the state, including Class I areas. The BLM will continue to cooperate and coordinate with the USDA–Forest Service, U.S. Environmental Protection Agency, and the State of Wyoming in managing and monitoring air resources.

Cooperation to develop and apply visibility standards and guidelines is encouraged. BLM will cooperate with Wyoming DEQ on review of air quality regulations which may impact BLM-managed activities.

3.2 Heritage Resources Management

3.2.1 Management Objective(s) for Heritage Resources Management

The planning area (Map 5) will be managed to expand the opportunities for scientific study and educational and interpretive uses of cultural and paleontological resources, protect and preserve important cultural and paleontological resources and/or their historic record for future generations, resolve conflicts between cultural/paleontological resources and other resource uses, and foster opportunities for Native Americans to use heritage resources.

3.2.2 Rationale

The BLM is required by law, regulations, and Executive Orders to manage cultural resources in such a fashion that they will be preserved and protected from destruction and that the appropriate uses will be made of such resources. Law, regulations, and Executive Orders further require that such management be coordinated with the appropriate Native American tribes and individuals. Specifically, the agency must comply with the National Historic Preservation Act (36 CFR 800.106, .110), the Native American Graves Protection and Repatriation Act (NAGPRA), the American Indian Religious Freedom Act (AIRFA), and Executive Order 13007 (Sacred Sites).

The BLM is required by law to preserve and protect significant paleontological resources (43 CFR 3600, 3622, 8365). Protective measures for paleontological resources and cultural resources may depend on the nature of the resource and will

be determined through site-specific analysis. Making the public aware of these resources and needed management will help these resources be better appreciated and better protected from vandalism.

3.2.3 Management Actions for Heritage Resources Management

Heritage resources will be managed pursuant to the National Historic Preservation Act (NHPA); the Archeological Resources Protection Act (ARPA); and other pertinent laws, regulations, and policies. The Wyoming State Historic Preservation Office must be consulted concerning eligibility of resources for the National Register of Historic Places (NRHP) and concerning any potential effects that could result from BLM supported, authorized, or assisted undertakings. Sites that are not eligible for the NRHP will be managed on a case-by-case basis according to their values. Sites that are listed or eligible for listing on the NRHP will be managed for their local, regional, and national significance in accordance with the NHPA and the ARPA. Sites will be managed to ensure against adverse effects through proper mitigation if disturbance or destruction is not avoidable. Mitigation may include scientific information retrieval as well as other measures such as interpretation and improved public appreciation of the heritage resource.

3.2.3.1 Heritage Resources Protection

Heritage resources in special management areas will remain protected through specific and general management actions (mitigation requirements and site-specific management prescriptions) including those associated with designated ACECs, WSAs, and National Historic Trails.

3.2.3.2 Protection of Scientific Values

Management of heritage resources will include inventories and mitigation as needed for specific projects. An appropriate level of analysis of all surface disturbing activities will be conducted to determine the potential effect of the activity on the resource and its eligibility for listing on the NRHP. Site stewardship and public education aspects of the Heritage Resource Program will continue to be implemented. Sites eligible for inclusion in the NRHP because of their scientific value will be protected. Preservation of the scientific information will be the preferred mitigation method should avoidance of such sites not be possible.

The paleosol deposition area, including the Finley, Krmpotich, and Eden-Farson archaeological sites and geological deposits in the area, has been identified as an important heritage resource area:

- The paleosol deposition area will be designated the West Sand Dunes Archaeological District Special Management Area to be managed for scientific study, education, and interpretation (Map A).
- Site locations will be kept confidential, and surface disturbance will be limited in the vicinity.
- Heritage resource inventories in this area will be required to include analysis of subsurface deposits to ascertain whether they include important archaeological materials.

- Subsurface inventory will be required using remote sensing techniques, hand-dug test excavations, or mechanical testing prior to issuing any surface disturbing authorizations in the West Sand Dunes Archaeological District. The testing strategy should be appropriate to meet the goal of finding buried paleosols and evaluating their potential association with archaeological materials.
- Subsurface testing will require an approved testing plan and BLM-State Historic Preservation Officer (SHPO) consultation. Mitigation may include research-oriented data recovery excavation.

The Finley site will be nominated to the NRHP under the Register's History of American Archaeology context and the Earliest Americans context.

The Krmpotich site will be nominated to the NRHP under the Register's Earliest Americans context.

3.2.3.3 Special Significance Heritage Resources

Sites Eligible Under NRHP Criteria A, B, or C: All National Register-eligible historic sites will be protected through provisions of the NHPA and ARPA. Sites eligible under Criteria A, B, or C will be protected and mitigation measures will be developed on a case-specific basis depending on site values and proposed activity. Scientific data recovery may not be the appropriate mitigation strategy for these sites. See Appendix 7 in the final EIS for a description of Criteria A, B, and C and guidance for potential mitigation. Sites eligible for inclusion in the NRHP under Criterion D because of their scientific information content will be surrounded by a minimum 100-foot avoidance area, pursuant to the Protocol Agreement between BLM and SHPO (Appendix 7 in the final EIS). Eligible sites may be nominated to the NRHP. BLM may work with partners to fund preparation of NRHP nominations on a case-by-case basis.

Native American Sites: When activity is proposed in the vicinity of Traditional Cultural Places (TCP), sacred sites, and/or respected places, management will be developed through consultation with Tribal leaders, SHPO, and the activity proponent based on the characteristics of the site and the proposed activity. Mitigation may include siting activity in such a way as to protect the foreground viewshed of the area of concern, if appropriate. Areas located on Steamboat Mountain, Steamboat Rim, White Mountain Rim, Essex Mountain, Monument Ridge, Joe Hay Rim, and the Indian Gap Trail have been identified as respected places, which may include Native Americans' sacred sites or TCPs.

<u>Indian Gap Trail:</u> The Indian Gap Trail will be researched, and a trail interpretive plan will be developed.

Objectives for management of the Indian Gap Trail (both inside and outside the expanded Steamboat ACEC and the Greater Sand Dunes ACECs): The objective is to continue to investigate and interpret the historical record associated with the Indian Gap Trail and to document, preserve, and protect the physical integrity of extant portions of the Trail.

The Indian Gap will be managed as part of the Steamboat Mountain ACEC. A portion of Indian Gap will be closed to surface disturbing and disruptive activities. The remainder of Indian Gap will be open to consideration of surface disturbing and disruptive activities with mitigation to protect resource values (Table 4 and Map 4).

<u>Early Historic Contact Sites:</u> Historic and archaeological sites within the context of early contact between Native Americans and Euro-American peoples have been identified, but they are understood only in general terms. The historical context of these sites will continue to be developed, and an interpretive program will be developed to improve public appreciation of these locations. Some or all of these sites may be nominated to the NRHP and/or included in the Backcountry Byways program.

Expansion Era Roads and Associated Sites: Expansion Era roads will be managed in a manner similar to that of the historic trails covered in the Oregon/Mormon Pioneer National Historic Trails Management Plan (BLM 1986), with prescriptions from that plan applied, although the ¼-mile protective setback might not always be applicable. Management actions will include development of activity plans with the objective of preserving the historical integrity of significant NRHP contributing segments of the historic roads. Activity plans may include NRHP nomination of those Expansion Era roads that qualify.

Historic Livestock Management Sites: NRHP-eligible historic livestock management sites will be protected from surface disturbing activities within a minimum area of 100 feet. Numerous livestock tending campsites and other pastoral agricultural sites have been identified throughout the JMH CAP planning area. Some of these locations may be eligible for inclusion in the NRHP within the context of the development of pastoral agriculture in Wyoming and the Rocky Mountain region.

<u>Tri-Territory Marker:</u> The Tri-Territory Marker will be an exclusion area for rights-of-way and will continue to be closed to surface disturbing activities. The Tri-Territory Marker will be withdrawn from mineral location and closed to coal and sodium exploration. The Tri-Territory Marker will be open for consideration of activities such as fencing, interpretive signs, or barriers to ensure protection of the area.

3.2.3.4 Paleontological Sites

Documented significant fossil sites will be avoided to protect scientific and educational values. Management guidelines included in BLM Handbook 8270-1 will apply. If impacts are unavoidable, a BLM-approved paleontologist will evaluate the site (a paleontological survey may also be required) and will coordinate with BLM in developing a mitigation plan. The mitigation plan may include activity monitoring, fossil documentation, recovery, and storage in a federally approved repository.

3.2.3.5 Unique Geologic Features

The Boars Tusk area will continue to be closed to surface disturbing activities, mineral material sales, and use of explosives and blasting. The area within a ½-mile radius of Boars Tusk (including Boars Tusk) will be closed to blasting and explosive charges. The Boars Tusk area will be open to consideration of activities such as

fencing, interpretive signs, or transportation barriers to ensure protection of the site; however, facilities will be prohibited from being developed on the geologic feature. The Boars Tusk area will be a right-of-way avoidance area.

The Boars Tusk and approximately 1,400 acres of BLM-administered public lands in the surrounding area will be closed to any surface mining activity, but open to consideration of subsurface mining methods. Activities or ancillary facilities related to subsurface mining will be prohibited (Map 36 in the Green River RMP, USDI 1997).

The Pinnacles Geologic Feature (about 1,345 acres) will be an exclusion area for rights-of-way. Surface use will also be controlled. The use of explosives on and within ½ mile of the Pinnacles Geologic Feature will be prohibited. The visual resource management (VRM) classification for the Pinnacles Geologic Feature will be Class II. Vehicular travel within ½ mile of the Pinnacles Geologic Feature, and including the features, will be limited to designated roads and trails. The Pinnacles proper will be closed to surface disturbance.

Mineral leasing and mineral location actions will be as described in Section 3.10.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Heritage Resources.

3.2.4 Existing Green River RMP Decisions for Heritage Resources Management

Other management objectives and actions for Heritage Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP. Also see the Green River RMP decision for the South Pass Historic Landscape ACEC.

The BLM will cooperate with the National Park Service in implementing the "Oregon/Mormon Pioneer National Historic Trails Management Plan."

Motorized vehicles, such as those used for geophysical exploration, or large heavy vehicles such as buses used in recreational tours, or similar activities, could cross and drive down the trails, provided a site specific analysis determines that no adverse effects will occur.

Geophysical activities such as shotholes, blasting, and vibroseis locations could, generally, be allowed, provided they are at least 300 feet from the trail, do not occur directly on the trail, and a site specific analysis determines that visual intrusions and adverse effects will not occur.

No blading will be allowed on any historic trail unless necessary to protect life or property. Historic trails are not available for use as industrial access roads (e.g., oil and gas drilling access roads, or as haul roads for heavy truck traffic).

Management of historic roads and trails that are eligible for the NRHP but are not Congressionally designated will generally be the same as for designated trails including a ¼-mile protective setback on either side of the trails.

Various Expansion Era (i.e., 1870-1940) roads will be managed according to their historical context.

The Freighter Springs Station will be managed for the preservation of cultural and historical values.

Five significant rock art sites and their surrounding viewshed (within 1/2 mile) will be managed to protect their cultural and historical values.

The Cedar Canyon, LaBarge Bluffs, Sugarloaf, Tolar, and White Mountain rock art sites are exclusion areas, and are closed to surface disturbing activities that could adversely affect rock art resources. These sites are closed to: 1) the location of mining claims and entry under the land laws (withdrawals will be pursued as necessary and the existing Sugarloaf and White Mountain withdrawals will be retained; 2) mineral material sales for sand, gravel, or other types of construction or building materials; 3) the use of explosives and blasting; and 4) the use of fire retardant chemicals containing dyes. Off-road vehicular use, including vehicles used for geophysical exploration activities, are limited to designated roads and trails.

The vistas surrounding these five significant rock art sites (i.e., the actual area that can be seen from the rock art sites, within 1/2 mile) is an avoidance area for surface disturbing activities and visual intrusions. Most surface disturbing and other activities visible within the vista will be prohibited if they would adversely affect rock art site values.

If other significant rock art sites are identified in the future, they will be managed in the same manner as the above five significant sites.

All other rock art sites will be managed on a case-by-case basis according to resource values.

The Tri-Territory Marker is an exclusion area and is closed to: 1) surface disturbing activities that could adversely affect it; and 2) exploration and development of locatable minerals. A withdrawal will be pursued. The site will be open for consideration of activities such as fencing, interpretive signs, or barriers to ensure protection of the area.

The Eden-Farson, Finley, Krmpotich, and Morgan archaeological sites, and similar sites identified in the future, will be managed to protect their important scientific values.

All known human burial sites will be protected regardless of their ethnic affiliation.

Known burial areas will be closed to surface disturbing activities that could adversely affect them.

Exchanges for acquisition and cooperative agreements will be pursued to enhance management of cultural resources.

Management needs for other cultural sites will be determined on a case-by-case basis according to their resource values.

3.3 Land and Water Resources — Common Management

This section contains the resource management direction for fire, livestock grazing, vegetation, water resources, wild horses, and wildlife habitat management. These resource management categories are combined under one heading because of their management interrelationships and to reduce the repetition of text that would occur due to describing similar management actions in each particular section or subcategory.

3.3.1 Management Objectives for Land and Water Resources

The planning area will be managed to maintain or enhance land and water resources using ecological principles and science-based performance criteria.

3.3.2 Rationale

FLPMA Section 102(8) states that "the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use."

The Wyoming Standards for Healthy Rangelands (USDI 1997a) provide direction for overall rangeland health. Specifically, Standard #2 states, "Riparian and wetland vegetation has structural, age, and species diversity characteristic of the stage of channel succession and is resilient and capable of recovering from natural and human disturbance to provide forage and cover, capture sediment, dissipate energy, and provide for groundwater recharge." Standard #3 states, "Upland vegetation on each ecological site consists of plant communities appropriate to the site that is resilient, diverse, and able to recover from natural and human disturbance." Standard #4 states, "Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced."

3.3.3 General Management Actions That Apply to the Entire Land and Water Resources Category

The following general land and water resource management actions apply to this entire section of all land and water resources categories (i.e., fire management, livestock grazing management, vegetation management, water resources management, wild horses management, and wildlife habitat management). They are presented here rather than repeated in all the sections within the Land and Water Resources category to reduce duplication.