Decision Record and Finding of No Significant Impact for Sodium Leasing in the Green River Basin of Southwestern Wyoming

United States Department of the Interior Bureau of Land Management

Follow this and additional works at: https://digitalcommons.usu.edu/wyoming_recdecisions

Part of the Environmental Sciences Commons

Recommended Citation

This Report is brought to you for free and open access by the Wyoming at DigitalCommons@USU. It has been accepted for inclusion in Record of Decisions (WY) by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
Decision Record and Finding of No Significant Impact for Sodium Leasing in the Green River Basin of Southwestern Wyoming

The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield: a combination of uses that take into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

BLM/WY/PL-96/008-1330
Dear Reader:

The enclosed Decision Record (DR) and Finding of No Significant Impact (FONSI) allows BLM to proceed with a competitive sale for leasing specific tracts of the federal sodium resource. This decision is based upon the environmental assessment (EA) released in July 1995, public scoping for issues, and review of the EA by individuals, interest groups, industry, and governmental entities.

The EA, prepared by BLM, fulfills the requirements of the National Environmental Policy Act of 1969, as amended. In addition, leasing of the federal sodium resource is in conformance with the Kemmerer Resource Management Plan and the Salt Wells Management Framework Plan. In addition, sodium leasing consideration is a valid use of public resources under all alternatives addressed in the Green River Resource Management Plan Draft Environmental Impact Statement.

The BLM wishes to thank those who participated during the analysis process. Your involvement has enhanced BLM's ability to make an informed decision.

Appeal procedures are described in the decision. If you require more information or want additional copies of the DR/FONSI, please contact Ted Murphy at 307-382-5350.

Sincerely,

[Signature]
Acting Manager

Enclosure

DECISION RECORD
AND
FINDING OF NO SIGNIFICANT IMPACT
FOR
SODIUM LEASING
IN THE GREEN RIVER BASIN OF SOUTHWESTERN WYOMING

SUMMARY OF SODIUM LEASING PROPOSAL

The BLM is charged with leasing federal mineral resources. BLM is proposing to hold a sodium lease sale of seven tracts incorporating a total of 9,893.91 acres as shown on Map 1.

Federal sodium leases are issued based upon a system of closed competitive bids. The highest bidder may receive the lease provided the bid meets or exceeds fair market value. Leases have a 20-year primary term with discretionary 10-year renewal periods thereafter. A federal sodium lease is not automatically renewed but may be renewed upon the lessee's timely request for renewal. All leases adjudicated for renewal are reviewed and the lease terms, conditions, and special stipulations may be changed or modified to conform with current policy and regulations.

Leasing of federal sodium tracts does not authorize physical development of the leased mineral. Further environmental analysis would be required upon receipt of a development proposal. However, leasing does convey a right to recover the leased mineral.

ALTERNATIVES CONSIDERED

The Environmental Assessment for Sodium Leasing in the Green River Basin of Southwestern Wyoming (Sodium EA) analyzed the Proposed Action (leasing of identified sodium tracts as described on page 7 of the Sodium EA) and the No Action Alternative (no leasing of identified sodium tracts). Several other alternatives were considered but dropped from further analysis: reduced acres/tracts offered, holding a lease sale for a different area within the Known Sodium Leasing Area (KSLA), and a no leasing alternative that would amend existing land use plans. These three alternatives were dropped from consideration because they were shown to be either unwarranted (via economic analysis), industry showed no interest in other areas within the KSLA, or contrary to existing land use plans.

DECISION

Based upon the analysis of the potential environmental consequences described in the Sodium EA, and in consideration of public, industry, and governmental agency comments received, it is my decision to allow the following tracts of the sodium resource to be offered for lease:
FINDING OF NO SIGNIFICANT IMPACT

Based upon my review of the analysis in the Sodium EA, I have determined that the Proposed Action (leasing of sodium tracts) is in conformance with the approved land use plans (Kemmerer Resource Management Plan (1986), Salt Wells Management Framework Plan (1983), and Green River Resource Management Plan Draft Environmental Impact Statement - No Action Alternative (1992)) and the programmatic Sodium Mineral Development Environmental Assessment (1983). Leasing of federal sodium tracts will not have a significant impact on the human environment. Therefore, an environmental impact statement is not required at the leasing stage.

However, as stated in the environmental assessment, potentially significant impacts to air quality, wildlife, and to the social/economic situation could occur should surface development be proposed in the future. Therefore, additional environmental analysis would be required at the development stage to address these concerns.
MANAGEMENT CONSIDERATIONS/RATIONALE FOR DECISION

My decision to approve leasing of sodium tracts is based upon the following:

1. Consistency with Land Use Plans -- This decision is in conformance with the overall planning direction for the area. The programmatic Sodium Mineral Development EA, Salt Wells Management Framework Plan, and the Kemmerer Resource Management Plan allow for issuance of competitive leases within the KSLA to meet certain objectives: to make sodium minerals available in an orderly and timely manner to meet national and export needs, to promote healthy competition within the industry, and to assure a fair return to the public. In addition, this decision is in conformance with the No Action Alternative (current management practices) found in the Green River RMP, DEIS.

2. Public Involvement, Scoping Issues, and EA Comments -- Opportunity for public involvement was provided throughout the environmental process. Scoping for issues and alternatives was initiated on September 12, 1994 with the mailing of a scoping notice and issuing of a news release. Twenty response letters were received. A summary of the scoping issues brought forth by the public can be found on pages 97-105 (Chapter V) of the associated EA. Approximately 240 copies of the EA were distributed to the public for review and comment on July 14, 1995. In response to the EA, 13 comment letters were received. See Appendix C for BLM response to these comment letters. Additionally, several letter-identified errors in the text of the EA. Those errors have been identified and corrected in the Errata Section, Appendix B.

3. Agency Statutory Requirements -- All pertinent statutory requirements applicable to this proposal were considered. This includes consultation with the U.S. Fish and Wildlife Service regarding potential threatened, endangered, and candidate species. No listed species were found to be compromised by the leasing action. The impacts of development on threatened and endangered species will be analyzed in the site-specific environmental document(s).

4. National Policy -- Federal sodium mineral deposits are leased under the authority of the Mineral Leasing Act of 1920 and the Federal Land Policy and Management Act of 1976, as amended. Under the Mining and Minerals Policy Act of 1970, it is in the national interest of the United States to foster and encourage private enterprise for development of an economically sound and stable domestic mining program and that an adequate and stable supply of materials necessary to maintain national security, economic well-being, and industrial production in balance with a healthy environment be maintained (PL 96-479).

5. Measures to Avoid or Minimize Environmental Harm -- The adoption of the mitigation measures identified in the EA, as modified per responses to comment letters in Appendix C, and contained in this Decision Record as Appendix A represent all practicable means to avoid or minimize environmental harm.

6. Finding of No Significant Impact -- The Proposed Action, authorizing competitive leasing of the sodium tracts, will not result in impacts that exceed the significance criteria defined for each resource.

The EA will guide implementation of the Proposed Action, leasing of sodium tracts with appropriate mitigation measures. Depending upon the circumstances, additional site-specific analysis will be required if surface facilities for mine development are proposed in the future.

COMPLIANCE AND MONITORING

The mitigation measures identified in Appendix A will be attached to each lease. These measures are meant to avoid or minimize undue or unnecessary impacts during development of the lease. Additional measures may be applied at the development stage to further reduce or avoid adverse impacts.

ROYALTY RATE

As noted on page nine of the Sodium EA, "In 1993, an analysis of the royalty rate for new and renewed sodium leases within the Green River Basin was completed...The Assistant Secretary and the Director are reviewing the analysis and evaluating the recommended options and alternatives...all existing and future leases will be subject to the final royalty rate decision. As of the release date of this Decision Record, the situation has not changed relative to a "final royalty rate decision." Therefore, the subject sodium leases will not be offered for competitive bid until the Secretary of the Interior has established a final royalty rate.

COINCIDENTAL DEVELOPMENT

The Joint Industry Committee (JIC) made up of representatives from the oil and gas industry, sodium industry, the Wyoming Mining Association, the Petroleum association of Wyoming, the State of Wyoming, Union Pacific Resources, and the BLM are presently studying the effects associated with coincidental trona and oil and gas development. Through a test program, the JIC will collect technical information about the interaction of trona mining and oil and gas production to help industry participants, mineral owners, and regulatory agencies resolve conflicts that may arise from development of both mineral resources.

APPEAL

This decision is subject to appeal. This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR 4. If an appeal is filed, your notice of appeal must be filed in the Rock Springs District Office (280 Highway 191 North, Rock Springs, Wyoming 82901) within 30 days from the date of this decision. The appellant has the burden of showing that the decision appealed from is in error.
If you wish to file a petition (request) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted (pursuant to 43 CFR 4.21(b)).

APPENDIX A
MITIGATION MEASURES

LEASE PROVISIONS

Lease Stipulations

All leases issued will be subject to the following special stipulations in addition to the standard lease terms and conditions:

A. SURFACE OCCUPANCY CRITERIA

BIOCLOGICAL RESOURCE PROTECTION

1. Under the terms of the Endangered Species Act of 1973, the lessee shall conduct surveys to determine if special status species or their habitats are present in proposed areas, and alternative areas, for surface disturbance regardless of land ownership. If it is determined that special status species could be affected, appropriate consultations shall be conducted between the BLM, USFWS, WGFD, and the proponent. No activities shall be authorized until the consultation is complete as specified by Section 7(c) of the Endangered Species Act. The Biological Opinion issued by the USFWS as a result of the consultation process shall specify mitigation measures to be carried out by the proponent.

2. No above ground facilities (power lines, storage tanks, fences, etc.) will be allowed on or within a 1/4 mile radius of active sage grouse strutting grounds. Linear disturbances such as pipelines, seismic activity, etc., could be granted exceptions. Construction activities will avoid the area within 1/4 mile radius of active strutting grounds from sunset to 9 a.m. daily from February 1 through May 15. Seasonal restrictions will be applied within an additional 1.75 mile radius from leks to protect sage grouse nesting habitat. Exceptions to seasonal restrictions may be granted.

3. Nesting raptors will be protected by restricting surface disturbing activities within 1/2 mile to 1 mile radius of active or historic raptor nesting sites (depends on species). Active or historic raptor nesting sites will be protected and managed for continued nesting activities.

4. Construction activities of short-term duration (i.e., six months or less) shall be subject to season-of-use restrictions to protect big game crucial winter habitat. No surface occupancy for such short-term duration construction activities shall be allowed from November 15 to April 30 unless approved by the authorized officer (AO - either the area manager, district manager, or state director).
5. No surface occupancy within certain lambing and high-value livestock grazing areas unless authorized by the AO. In cases where loss of such habitat is unavoidable, off-site enhancement projects may be required by the AO.

6. Surface uses such as processing plants and tailings ponds which result in long-term loss of wildlife habitat may require the enhancement of habitat and habitat manipulation off-site (but within the lease boundary) as determined by the BLM AO. Types of improvements will include, but are not limited to, seeding, prescribed burning, guzzler/water development, plantings, and fencing.

7. Clearance for Special Status Plants (SSPs) must be done by an authorized botanist prior to any surface disturbing activities. If SSPs species are found during surveys, the AO may require:
   - Reasonable relocation of the surface facility to where the plants are less abundant;
   - above-ground placement to avoid surface disturbance;
   - restrict construction traffic to existing roads;
   - on-site monitoring of construction activities by a qualified botanist to avoid impacts to existing off-site locations;
   - fencing, flagging, or other means of identifying avoidance areas;
   - transplantation of impacted SSPs; and/or
   - timing of disturbance for after seed set.

8. All areas that pose hazards to livestock and wildlife species will be fenced. Such areas include plant sites, tailing ponds, containment ponds, primary and secondary sewage lagoons, etc. Fencing standards will be approved by the AO.

9. Tailings ponds and associated facilities will comply with the Migratory Bird Act.

HISTORICAL/PALEONTOLOGICAL RESOURCE PROTECTION

10. No surface occupancy within 1/4 mile, or visual horizon, of either side of significant portions of historic trails and associated sites for the purpose of protecting these historical values (actual distance varies with topography) unless authorized by the AO.

11. Prior to undertaking any surface-disturbing activities on the lands covered by a lease or permit, the lessee or permittee, unless notified to the contrary by the AO, shall:
   a. Contact the appropriate BLM office or the appropriate surface management agency where the surface of the lands are administered by such agency, through the BLM, to determine if a site-specific cultural resource/survey/inventory is required.
   b. If a survey is required the lessee or permittee shall fund and engage the services of a qualified cultural resource specialist acceptable to the federal surface management agency to conduct an intensive inventory for evidence of cultural resource values. A report of such survey shall be approved by the AO of the surface management agency and the BLM.
   c. Fund and implement mitigation measures required by the surface management agency to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, and salvage or other protective measures. Where impacts cannot be mitigated to the satisfaction of the surface management agency, surface occupancy on areas with significant cultural resource values could be prohibited.
   d. The lessee or permittee shall immediately bring to the attention of the AO of the federal surface management agency or BLM any cultural resource or any other object of scientific interest discovered as a result of surface operations under this lease. No disturbance of such discoveries will be allowed until the lessee or permittee is directed to proceed by the BLM.

12. Prior to construction the lessee or permittee shall contact the appropriate BLM office or appropriate surface management agency to determine if a site-specific paleontological resource/survey/inventory is required. If a survey is needed, the lessee or permittee will provide a qualified individual approved by the BLM to conduct the survey. If paleontological resources are discovered in the course of construction or excavation, the activity will cease and the BLM AO notified. The company will provide a qualified individual approved by the BLM to collect and remove the fossils.

FLAMING GORGE NATIONAL RECREATION AREA PROTECTION

13. No surface occupancy shall be permitted on the areas within the Flaming Gorge National Recreation Area (NRA) which are classified as retention by the Forest Service’s visual management system. These areas are shown on the Forest Service’s Visual Planning Map, available at the Manila, Utah office.

14. Limit surface occupancy within the areas of Flaming Gorge National Recreation Area which are classified as partial retention areas by the Forest Service’s visual management system. Mineral leases may be allowed in these areas provided the visual, environmental, and recreational values can be protected and mineral activities remain subordinate to the characteristic landscape. The lessee will be
required to coordinate development proposals with personnel from Flaming Gorge National Recreation Area in order to assure potential impacts to the recreation area are mitigated to an acceptable level.

15. Locate plant facilities where they will not significantly degrade air quality over the Flaming Gorge NRA; or cause heavy fog conditions that would be significant hazards to public health, such as black icing of major highways, or such as extreme and continual fog that could inhibit transportation or recreation activities.

16. Consultation with the Bureau of Reclamation and Forest Service will be conducted prior to any development within or adjacent to their administered lands.

PLANS/PERMITS REQUIRED

17. Five days prior to any construction/drilling activities on a lease or permit area, a preconstruction conference will be held with the AO or the AO’s representative. Those attending will be the lessee or permittee and all his contractors or agents involved with construction/drilling activities on the lease or permit.

18. Prior to holding of the work conference, the permittee or lessee shall submit a construction/exploration plan 15 working days prior to preconstruction conference and shall contain, but not limited to, the following:
   a. A hydro-geologic study addressing the hydrologic characteristics of aquifers (especially those high in sodium content) that may be affected by drilling/construction activities.
   b. Quantity and quality of ground water.
   c. A detailed plan of access to all proposed drill sites.
   d. A detailed schedule of drilling, showing the sequence of drilling and approximate dates.
   e. A reclamation plan of disturbed areas and sites.
   f. A wildlife mitigation plan.

19. A soil conservation plan tailored to each mine site shall be developed and approved by the BLM AO prior to construction. The AO may accept the WDEQ/LQD approved application for Permit to Mine.

20. Access other than casual use across public lands to the lease area will require authorization through either the issuance of a right-of-way (ROW) or an on-lease authorization.

21. Borrow areas or gravel pits on public land will require a permit from the BLM.

22. Discharge of water on public lands will not be allowed without permits from DEQ and authorization from the BLM.

23. All proposed water sources will be reviewed and approved by the State Engineer’s office and BLM as appropriate.

24. Prior to road construction, centerline surveys and construction designs will be submitted to and approved by the AO.

SURFACE WATER RESOURCE PROTECTION

25. No surface occupancy within one-half mile of either side of the Flaming Gorge Reservoir and the Green, Blacks Fork, and Hams Fork rivers for the purpose of protecting water quality. Exceptions for ancillary facilities may be authorized by the AO.

26. Plant, mill, tailings pond, and sewage lagoon will be located at least one mile from existing perennial waters, unless otherwise authorized by the AO.

SURFACE/BELOW SURFACE RESOURCE PROTECTION

27. The permittee or lessee shall avoid any operation when the ground is muddy and/or wet. The BLM AO may prohibit exploration, drilling, or other activities during wet or heavy snow periods where compliance with Wyoming DEQ-Water Quality Division storm water discharge permit requirements are not met. Any damages will immediately be reported to the AO for reclamation procedures.

28. Surface disturbing activity will not be allowed on slopes greater than 25% unless an engineering plan is submitted and approved by the AO.

29. Waterbars will be constructed on rehabilitated linear rights-of-way to prevent erosion. General guidelines for installation of waterbreaks are: less than 2% grade, 200-foot interval; 2-4% grade, 100-foot interval; 4-5% grade, 75-foot interval; greater than 5% grade, 50-foot interval. A certain degree of latitude is allowed in the waterbreak interval spacing. Unstable soils may require a closer interval spacing, whereas the interval spacing may be greater on very stable soils or rock outcroppings. A conservative (close) interval spacing is the general recommendation. Waterbreaks are generally constructed on the contour and empty on the downhill side of the cleared area. They are to be constructed to begin in vegetation on the uphill side and feather out into vegetation on the downhill side.

30. Clearing of vegetation within pipeline, powerline, and communication line rights-of-way will be limited to that area necessary for safe operation of equipment and to permit construction activities.
31. Construction of facilities (i.e., plant buildings, roads, pipelines, powerlines, communication lines, etc.) on or with frozen soils will be prohibited.

32. Visible structures will be painted with natural colors to blend with the landscape (pump houses on water lines, storage tanks, etc.). Appropriate colors will be selected by the AO.

33. Developments will be designed to meet the VRM Class standards.

34. Ancillary facilities such as roads, powerlines, and pipelines should be located adjacent to existing linear facilities wherever possible.

35. The BLM and State Engineer's Office shall be notified in writing if black water or flowing artesian wells are encountered during exploration/drilling operations.

36. During shaft excavation, high ground water inflows will be grouted and sealed if technically feasible.

37. The lessee will be responsible for reseeding disturbed areas (native species only) no longer needed for operational purposes. Success of reseeding will be evaluated using the following criteria: attainment of 50% of predisturbance cover in three years and 80% of predisturbance cover in five years.

38. All embankment fill material for reservoir dams should come from within the reservoir areas. Borrow pits will not be required unless special materials are necessary, such as clay for backfilling a core trench. If a separate fill area is utilized, after the fill is removed the area will be stabilized.

39. The lessee will demonstrate that the proposed tailings pond area will be made impervious to seepage.

40. Tailings ponds will be designed to withstand two consecutive 100-year floods. This includes the use of diversion canals or ditches to intercept natural runoff and divert drainages below tailings ponds area.

41. A contingency plan for tailings pond failure will be prepared for BLM and DEQ approval.

42. The lessee shall comply with all applicable federal, state, and local laws or regulations that currently exist or are hereafter enacted or promulgated regarding hazardous materials/substances and oil materials. Hazardous materials/substances and oil materials shall be handled, located, stored, treated, and disposed of in an environmentally safe manner. The lessee shall ensure that contamination of soil, water, or other sensitive resources by hazardous materials/substances and oil materials does not occur.

The lessee shall review EPA's Consolidated List of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (as amended) to determine whether materials proposed for construction/mining activities qualify as hazardous substances. The lessee shall also identify extremely hazardous substances (EHSs) within the list of hazardous substances by referring to the List of Extremely Hazardous Substances and Their Threshold Planning Quantities defined in 40 CFR 355, as amended. Identified hazardous substances/EHSs shall be quantified as to amount (given in pounds whether in solid, liquid, or gaseous form) that will be present during construction, mining, or soda ash processing activities. The complied list of hazardous substances/EHSs used on the project (including projected quantities) must be included in the environmental analysis.

Any release (e.g., leaks, spills, etc.) of hazardous substances in excess of the reportable quantity as established by 40 CFR 117 shall be reported to the National Response Center in Washington D.C., as required by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. A copy of the release report shall be furnished to appropriate federal (including BLM), state, and local agencies.

Release of hazardous substances or oil materials (including but limited to petroleum, fuel, oil, crude oil, crude condensate, oil refuse, and oil mixed with wastes) shall be reported to the Wyoming Department of Environmental Quality (WDEQ) if the release exceeds WDEQ's standards in Regulations for Releases of Oil and Hazardous Substances into Water of the State of Wyoming, Chapter IV (W.S. 35-11-305 and 35-11-302). Oil materials must be handled, located, stored, treated, and disposed of in accordance with the lessee's Spill Prevention, Control, and Countermeasure Plan as determined by 40 CFR 112.

43. All trash and garbage must be stored in an appropriate container/cage, and hauled to an authorized sanitary landfill.

44. All drainages will be kept open to allow free water movement. Road crossings shall be designed so they minimize erosion.

45. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the road bed. Whenever possible, streambank crossings on major drainages should be constructed with the bank feathered back on a 45 degree horizontal angle or less to avoid siltation.
46. Existing roads to streams, rivers, or reservoirs will be used whenever possible to minimize disturbance, channelization, or runoff.

47. Culverts shall be designed with necessary energy dissipation devices, that will handle at least a 25-year flood event, and/or that comply with WDEQ flood standards. Proper size culverts or bridge structures will be installed at each drainage crossing. Design plans will assure that the culvert installed will be capable of handling the volume of flow without being washed out. The lessee will submit for BLM's approval the type of structure and dissipation device design prior to installation.

48. The company or its operator will indicate in their development plans locations of drainage crossings along with the type of structure (culvert, arch bridge, etc.) proposed to be approved by the AO.

49. Temporary streambank stability structures may be required on a case-by-case basis where access roads cross stream channels or parallel steep cutbanks and fill slopes. Cribbing or retaining structures on constructed slopes in unstable soil steeper than 2 to 1 may also be required.

50. Permanent access roads to plant sites, mine shafts, parking lots, etc., will be paved (asphalt) to eliminate dust generated by vehicular movement and designed to acceptable safety standards.

51. Temporary or unpaved road surfaces will be water sprayed or covered with a dust binding agent to reduce dust and visual impacts during the heavy vehicular use periods.

52. Watering or other approved dust control methods will be required during the construction of plant sites, rights-of-way, tailings ponds, and during rehabilitation operations when dust and resulting air pollution exceeds standards set by the Wyoming DEQ.

53. Plant sites will be designed for "zero discharge concept" through the use of containment ponds.

54. Soil stockpiles from tailings ponds and plant sites with wind erodibility potential should be graded on all sides to a maximum slope of 4:1 before being revegetated. Stockpiles shall be no more than four feet high. These stockpiles will be seeded if soil will be stockpiled more than one growing season. Other wind erosion precautions such as snow fences, mulching, mixing of topsoils, or covering stockpiles with soils of low wind erosion properties will be done where deemed necessary.

55. Stockpiles of trona and coal shall be covered.

56. Whenever possible, a portable mud pit shall be used when drilling with fluids. Where this is not possible, the pit shall be rehabilitated immediately following the drilling operation.

57. If drilling platforms or mud pits are constructed, at least six inches of topsoil or available soil material will be removed and saved and spread over disturbed areas after completion of operations, unless otherwise specified by the AO.

58. All prospecting activities including, but not limited to, drilling operations, water hauling, various vehicular traffic, etc., shall be restricted to the permitted area and/or the area authorized in the ROW.

59. All drill holes will be plugged in accordance with the State of Wyoming Land Quality Rules and Regulations, and in particular W.S. 35-11-404.

60. Pipelines will be buried to a sufficient depth to allow at least 30 inches of backfill above the top of the pipe and the backfill shall not extend above the original ground surface after the fill has settled. Where the underground facility crosses solid rock or extremely rocky terrain, the facility will be buried to sufficient depth to allow at least 18 inches of backfill over the top of the pipe and the backfill shall not extend above the original ground level after the fill has settled.

61. All disturbed areas no longer utilized will be rehabilitated to the satisfaction and specifications of the AO.

62. Revegetation must be done using seed from native species to replace the native vegetation that was there prior to disturbance (especially in critical wildlife areas). Executive Order No. 11987 restricts the use of exotic (non-native) species.

B. OTHER MITIGATION MEASURES

63. The lessee shall be responsible for all costs of relocating valid rights-of-way (i.e., pipelines, powerlines, roads, range improvements) which exist on the day the lease is issued. Relocating these types of facilities approved after this date shall be borne by the holder of said right or grant.

64. The lessee shall be required to pay the value of the royalty due on salable sodium products which would have been produced from any trona left unmined, without approval of the AO, which should have been recovered under the approved mine plan and which is otherwise lost or left economically inaccessible by mechanical techniques.
65. Operations will not be approved which have been determined by the AO to unreasonably interfere with the orderly development and/or production from a valid existing mineral lease issued prior to this lease for the same lands.

C. ADDITIONAL MITIGATION MEASURES

66. Material crushers and processing facilities will have air pollution control measures as required by the State of Wyoming.

67. If the public is likely to be exposed to continuous particulate and/or gaseous pollutants, then BACT (Best Available Control Technology) will be required to contain the pollutants within prescribed standards and may include monitoring.

68. BLM will not authorize any activity that would violate federal or state air quality standards as mandated by the Clean Air Act, Federal Land Policy and Management Act, and the Environmental Quality Act of Wyoming. The proponent of any future development proposal would be required to complete a detailed analysis of air quality issues, including potential direct, indirect, and cumulative effects, in conjunction with the environmental analysis. Cumulative impacts, at a minimum, will include impacts from existing mineral development and any foreseeable development.

69. To ensure protection of waterfowl, shorebirds, migratory birds, other wildlife, and domestic animal species, and to aid in successful reclamation of tailings ponds, the lessee shall be required to design protective measures in consultation with the BLM, FWS, WGF, WDEQ, and other federal, state, and local agencies having administrative jurisdiction.

70. BLM may require some 2-track trails within the area to be reclaimed in order to compensate for lost AUMs, if construction of surface facilities occurs.

71. USFWS has determined that all depletions of water from the Colorado River System are likely to adversely affect threatened and endangered fish species of the Colorado River. Section 7 formal consultation with the USFWS is required. To offset project depletion impacts to the listed fish species of the Colorado River System, the lessee will be required to make a one-time contribution to the Colorado River Endangered Fish Recovery Program. The one-time contribution will be based upon the average annual depletion anticipated by the lessee or operator and the lessee or operator and the USFWS specified per acre foot of depletion.

APPENDIX B
ERRATA SECTION
FOR ENVIRONMENTAL ASSESSMENT FOR SODIUM LEASING IN THE GREEN RIVER BASIN OF SOUTHWESTERN WYOMING

<table>
<thead>
<tr>
<th>PAGE</th>
<th>PARAGRAPH/ITEM</th>
<th>CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>25.</td>
<td>Stipulation modified: During shaft excavation, high ground water inflows will be grouted and sealed if technically feasible.</td>
</tr>
<tr>
<td>16</td>
<td>36.</td>
<td>Stipulation modified: A soil conservation plan tailored to each mine site shall be developed and approved by the BLM AO prior to construction. The AO may accept the WDEQ/LQD approved application for Permit to Mine.</td>
</tr>
<tr>
<td>18</td>
<td>53.</td>
<td>Stipulation modified: The lessee shall be responsible for all costs of relocating valid rights-of-way (i.e., pipelines, powerlines, roads, range improvements) which exist on the day the lease is issued. Relocating these types of facilities approved after this date shall be borne by the holder of said right or grant.</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>Second sentence is modified to read: The Wilkins Peak contains approximately 42 beds of trona, or trona and halite, some of which are currently being mined by five companies in the area.</td>
</tr>
<tr>
<td>41</td>
<td></td>
<td>Section entitled Black-Footed Ferret. The text has been changed as follows: Existing survey and field inspections have not documented any prairie dog towns within the analysis area that exceed the eight active burrows per acre which is the density requiring a black-footed ferret search or that would likely support a ferret population.</td>
</tr>
<tr>
<td>PAGE</td>
<td>ITEM</td>
<td>CORRECTION</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>45</td>
<td>3</td>
<td>Section entitled Oil and Gas Reserves. Add the following sentence to the end of the paragraph: Using $1.65/MCF, the potential revenues generated from the Frontier Formation would be $16.4 million and just over two million in royalty payments. A similar well in the Dakota Formation could generate $14.4 million in revenue and $1.8 million in royalty payments.</td>
</tr>
<tr>
<td>83</td>
<td></td>
<td>CHAPTER IV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DECISION RECORD - MITIGATION MEASURES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Based upon agency comments, BLM has clarified certain mitigation measures and has restructured them into categories. BLM feels this will help the reader and potential lessee better understand the protective measures being applied to the lease.</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>Deleted mitigation measures shown as 47 and 48 in the Sodium EA and replaced them with the measure identified as number nine. It states: Tailings ponds and associated facilities will comply with the Migratory Bird Act.</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>In response to agency and public concerns raised during review of the Sodium Leasing EA in regard to air quality issues, BLM has added the following mitigation measure: BLM will not authorize any activity that would violate federal or state air quality standards as mandated by the Clean Air Act, Federal Land Policy and Management Act, and the Environmental Quality Act of Wyoming. The proponent of any future development proposal would be required to complete a detailed analysis of air quality issues, including potential direct, indirect, and cumulative effects, in conjunction with the environmental analysis. Cumulative impacts, at a minimum, will include impacts from existing mineral development and any foreseeable development.</td>
</tr>
</tbody>
</table>

APPENDIX C

BLM RESPONSES TO PUBLIC COMMENTS

BLM received 13 comment letters during the comment period ending August 15, 1995. One comment letter arrived after the closure date but BLM has decided to also include those comments. BLM’s responses to the comments are provided below.

EUGENE SIMONS

1. Please refer to my letters of July 8, 1993, October 10, 1994, and May 22, 1995. I submit the same comments and objections to the above referenced EA, specifically to the offer of Tract “G” for competitive bid. (T15N, R108W, Sections 6 and 8 - 1269.52 acres).

As previously stated, this tract should not be included for the following reasons:

The land does not form the basis for a "logical mining unit" and therefore, would not conform to the BLM policy to promote that objective.

When BLM designed the tracts for leasing, only lands nominated by interested parties were used to develop tracts A-G. The tracts were designed to promote healthy competition within the soda ash industry and ensure a fair market value return to the public while ensuring environmentally sound development.

The lands within Tract G were nominated and appear to play an important part in the development of the Wold Trona Company Mine, as Wold Trona is the lessee of record of the State of Wyoming sections to the north and south of the Tract G. Wold Minerals Company has proposed development of the trona within Tract G, providing they are the successful bidder. It is felt that Tract G does form the basis for a logical mining unit, due to the lands leased around the proposed tract, and the approval of the Wold Trona Company’s mine permit.

The lands within Tract G were nominated and appear to play an important part in the development of the Wold Trona Company Mine, as Wold Trona is the lessee of record of the State of Wyoming sections to the north and south of the Tract G. Wold Minerals Company has proposed development of the trona within Tract G, providing they are the successful bidder. It is felt that Tract G does form the basis for a logical mining unit, due to the lands leased around the proposed tract, and the approval of the Wold Trona Company’s mine permit.

2. The simultaneous development of our environmentally sensitive leases on the east side of the reservoir with those on the west would probably not promote the public interest. However, the LMU formed by the proposed exchange would be in the public interest. The acquisition of Tract “G” by a separate entity would disrupt this plan resulting in fractured ownerships that could prevent the orderly development of the valuable trona reserves in this area.

BLM does not presently recognize Mr. Simons as a lessee on the east side of the Flaming Gorge Reservoir, as a Preference Right Lease has not been issued. The reference to a "proposed exchange" is beyond the scope of this document and therefore, not addressed.
3. Tract "G" does not adjoin any active trona mining operation and its reserves are not required for any development.

See response to comment 1.

4. The BLM has established a long record promising to consider an exchange when the lease rights are acquired. (Letter of May 22, 1995). The agency is bound to be consistent in its dealings with affected persons and must adhere to an established pattern of conduct (IBLA 89-259). This pattern has been decisively established by correspondence from government officials and conforms to the published laws and regulations.

Again, the reference to a proposed exchange is beyond the scope of this document. The respondent should refer to 43 CFR 3508, Mineral Lease Exchange. Prior to initiating an exchange, a public interest determination must be made which indicates that development of the preference right lease applications W-9026 and W-9027 would not be in the public interest. Until the BLM receives the document stating lease development is not compatible to the Flaming Gorge NRA, BLM is not inclined to discuss any proposal developed by the holder of the PRLAs.

5. The EA states that an existing exchange proposal is outside of its scope (Page 5). By letter of May 15, 1995, the BLM stated that the agency would concentrate on lease issuance rather than on the exchange. On or about July 6, 1995, the BLM transmitted a letter from the Forest Service stating that they disagreed with the IBLA decisions. Nothing more has been heard from either agency. Therefore, it is logical to assume that the BLM intends to proceed with the bid and withhold both the leases and the exchange. On that assumption we will take all legal actions required to prevent that from happening.

This issue is outside the scope of this document. BLM in conjunction with the Forest Service are actively pursuing the issuance of PRLAs (W-9026 and W-9027). We will not be withdrawing Tract G form the lease sale (see response to comment 1).

HOLLAND AND HART

6. These comments are submitted on behalf of Eugene V. Simons and Simons International Trona Co. (together, "Simons"), as an addition and clarification of the comments submitted by Mr. Simons on his own behalf. Simons objects to the inclusion of Lease Tract G (Sections 6 and 8, T. 15 N., R. 108 W.) in the proposal for competitive sodium leasing. The captioned environmental assessment ("EA") states on page 5 that resolution of an existing exchange proposal is outside the scope of the EA. This failure to consider the exchange proposal is an obvious gap in the analysis. The Bureau of Land Management ("BLM") thus has not considered fully how its leasing proposal may affect orderly development of federal trona reserves in the public interest.

7. Simons is the holder of Preference Right Lease Applications W-9026 and W-9027 (the "PRLAs"), covering lands in proximity to Lease Tract G. By Order dated January 17, 1995 in Bureau of Land Management v. Eugene V. Simons, IBLA 91-149, the Interior Board of Land Appeals affirmed that Simons had established his entitlement to issuance of the PRLAs. Notwithstanding that order, the PRLAs still have not been issued. A letter from the BLM to Tom Suesonetti dated July 13, 1995 indicates that BLM does not expect to issue the PRLAs for several more months, due to analysis by the U.S. Forest Service.

See response to comment 4.

8. Section 8, in Lease Tract G, constitutes part of the selected lands in a long pending proposal for the exchange of certain lands in the PRLAs for lands outside the Flaming Gorge National Recreation Area made by Simons and his predecessors in interest. The land exchange proposal first was made in a letter dated December 4, 1972 To Daniel B. Baker, BLM Wyoming State Director. The proposal was modified to include Section 8 in a letter dated March 5, 1991 from Simons to Ray Brubaker, BLM Wyoming State Director. The inclusion of Section 8 as part of the selected lands was affirmed in a meeting at the BLM State Office on March 7, 1995 between BLM personnel, Lowell Madson of the Office of Regional Solicitor, and attorneys for Simons. As indicated in a recent letter from Dennis R. Stenger, Chief, Mineral Policy Group, BLM, to Eugene V. Simons (sent in response to a letter from Simons dated May 22, 1995) BLM has delayed consideration of Simons' exchange proposal until the PRLAs are issued. For the BLM to delay issuance of the PRLAs and delay consideration of the exchange proposal, then go ahead with competitive sale of Lease Tract G would cause irreparable harm to Simons.

See response to comment 4.

CHURCH & DWIGHT

9. Church & Dwight Co., Inc. supports the proposed public sale of the tracts proposed in the Proposed Action and Alternatives, including both the Lease Tracts through G) inclusive, and the tracts included in Lease Tracts 1, 2, and 3, and suggests that the timing involved may now be such that the tracts could be included in the same sale.

Thank you for your comment.

10. Noting, on page 9, the reference to a final royalty rate decision, it is submitted that the present royalty rate provides an adequate return to the government and that the present
royalty rate is, in effect substantial in comparison with royalty rates for other minerals. Comment on this issue has been submitted earlier and is incorporated herein by reference.

The issue of the appropriate royalty rate for sodium leases within the Green River Basin has not yet been resolved. Until that time, BLM will not be leasing the proposed tracts. The royalty rate is beyond the scope of this document.

11. In reference to comment, on page 9, that "reasonable diligence was not being exercised on the majority of the federal leases," it is submitted that the development of sodium leases is a long-term process, and that the same time factors which might be applicable to other minerals do not apply in development of sodium. It is submitted that present provisions for diligence are adequate. Comment on this issue has been submitted earlier and is incorporated herein by reference.

As with the royalty rate, the issue of diligence is beyond the scope of this document.

12. In reference to coincidental development on page 9, relating to rights of oil and gas development and trona development, reference is made to the comparative value of trona and oil and gas, on page 45 of the report. It is submitted that the comparative values of the two types of development are factors to be considered in a decision on such development. And, the general world-wide availability of natural gas resources, as compared with the limited availability of trona ore, should also be considered. Comment on this issue has been submitted earlier and is incorporated herein by reference.

BLM, in conjunction with the five soda ash producers, the State of Wyoming, Union Pacific Resources (UPR), the Petroleum Association of Wyoming, and Gas Research Institute are actively pursuing ways to coincidentally develop the sodium and oil and gas reserves. When the project is concluded, a policy will be developed from which all future development within the KSLA will be administered.

13. On page 12, Item No. 12, Under Other Stipulations, provides for payment of royalty on trona left unmined, which should have been recovered under the approved mine plan. The intent of this provision is, of course, laudable, but it is so far-reaching as to leave an uncertainty as to what is meant by "trona left unmined". It is suggested that this provision should be elaborated upon to define more clearly the rights of the lessee as to just what is considered "trona left unmined". Such a provision could, if not clarified, become a major problem.

When an operator/lessee submits a mine plan to the BLM for review and approval, several items are evaluated, one of which is the recovery of the resource. Prior to approving a mine plan, BLM must make a determination if Ultimate Maximum Recovery (43 CFR 3590.0-5) will be achieved. Following approval of any mine plan, changes may occur: some due to operational constraints, some due to geologic conditions, and some due to planning and coordination. BLM feels that the language is necessary to ensure that all recoverable trona is mined using standard industry operating practices.

14. On page 18, as part of "other mitigation", Item No 53 provides: "All costs associated with relocating public utility or pipeline facilities to accommodate sodium production will be borne by the lessee". While this seems to be an innocuous requirement, it represents a distinct change in long-established mining law principles, and a matter which is the province of the courts and the legislative bodies, rather than for imposition by an administrative body.

Under long-established principles of mining law, the mineral estate is dominant and the surface estate is servient. That rule was established by the U.S. Supreme Court, in Kinney-Coastal Oil Co. v. Kieffer, 227 U.S. 488, 48 S.Ct. 580, 72 L. Ed. 951 (1928). It has been applied in Wyoming, in Holbrook v. Cont. Oil Co., 278 P.2d. 798, 73 Wyo. 321 (1954), and in Belt-Europe Pipeline Co. and Eighty-Eight Co. v. State of Wyoming (DEQ) and Thunder Basin Coal Company, 766 P.2nd 537 (Wyo. 1988); and has also been applied in various factual situations in a substantial number of other court decisions.

Another factor involved is the current status of other mining areas within the trona sector. The major private owner of trona lands includes in its leases a specific provision allowing surface subsidence through mining of trona and placing the burden of costs of re-locating such surface facilities as pipelines, etc., on the surface holder. Application of a rule as suggested above would result in a divided application of costs involved in re-location of facilities in order to accommodate the mining of trona. On federal lands the cost would be imposed on the mining company, while on other lands this cost would be borne by the easement holder of the surface facilities as agreed upon by the parties.

We suggest that this is an area which is best left to be handled by the courts and the legislative process. To be handled administratively could only result in possible extensive litigation to determine the validity of the rule. At present, the law is well established by both the U.S. Supreme Court and the Wyoming Supreme Court.

BLM agrees with the respondent that the stipulation needs modification. BLM has consulted with the regional solicitor. It is agreed that the "first in time, first in right" principle should apply to all surface facilities. Therefore, the stipulation is modified as follows: The lessee shall be responsible for all costs of relocating valid rights-of-way (i.e., pipelines, powerlines, roads, range improvements) which exist on the day the lease is issued. Relocating these types of facilities approved after this date shall be borne by the holder of said right or grant.
15. The surface occupancy criteria, on pages 10-11, are so inclusive as to make it difficult to ascertain whether any permanent facility could be located within the area. The various limitations of construction, restricting activity to within one mile of various specific areas and limiting other activity within a 1/4 mile or up, of various sites not specifically located, indicate a wide range of restricted areas. Locations in areas not restricted could be difficult to ascertain.

BLM feels the stipulations outlined on page 10 (page 11 shows a diagram) are self-explanatory and are necessary to prevent undue or unnecessary degradation of important resources. These measures have evolved over time based upon NEPA analysis and reflect the State Director's guidance for protection of important resource values. BLM has allowed for some flexibility in locating surface facilities within these identified areas. Any proposal would have to be analyzed on a case-by-case basis.

16. In general, Church & Dwight concurs with the comment on Page B-2 that "there is a need to make more federal sodium leases available".

Thank you for your comment.

ROTHGERBER, APPEL, POWERS & JOHNSON - GENERAL CHEMICAL CORPORATION

17. Inadequate Treatment of Effects of Royalty Decision on Soda Ash Demand - First of all, we believe that the EA does not adequately address the potential impact of a soda ash royalty increase on the world-wide demand for soda ash and on the U.S. industry's demand for new trona leases. Our basic argument on this matter is as follows. In our opinion, the most important decision referenced in the EA is BLM's decision to reject "Alternative A," a far more modest leasing program than the one the agency now proposes. The BLM has based that decision entirely on its "Trona Situation Analysis," Appendix B of the EA. That analysis includes as major factors (i.e., factors thereby treated as critical to the agency's decision to reject the more modest leasing alternative (i) the anticipated world demand for soda ash, and (ii) the industry's anticipated demand for new leases and new mines.

As the Bureau is well aware, there is now pending before the Interior Department the related question of whether to raise royalty rates for the production of soda ash. Many commenters on that decision from industry, the Congress, and various federal and state agencies have argued repeatedly that the decision on royalty rates will have profound effects on the factors just mentioned. If they are correct, and we strongly believe they are, any decision on leasing alternatives ought to be explicit as to what royalty rate is assumed in arriving at that decision. If the decisions that are now included in the EA have been based on a five percent royalty rate, as it appears they have, that ought to be clearly stated. The EA should then go on to determine what these decisions should be in the case of increased royalty rates the agency may adopt in the future.

Far from accepting this view, the BLM has given no indication that it believes there is any relationship between its leasing decision and the pending royalty rate determination. In Appendix B, the analysis that serves as the basis for the rejection of Alternative A, there is not so much as one reference to the royalty rate decision. Nowhere is there a suggestion that an increase in royalty rates could reduce projected consumer demand. Nowhere is there an indication that any such increase could dampen projected investment in new mines. The agency implicitly has adopted the position that the royalty rate that is ultimately chosen will have no effect whatever on these factors. In so doing, it has completely disregarded all of the comments it has received over the past few years to the effect that the impact of a rate increase on demand will be substantial.

We believe this constitutes a serious deficiency in the EA and that significant additional analysis and remedial action is necessary.

To review the background on this question, for the past two and a half years, General Chemical Corporation and others in the soda ash industry have been involved in an intensive dialogue with the Interior Department and the BLM with regard to the question of whether the current royalty rate for soda ash produced from public lands should be increased. A very major part of that dialogue has concerned the projected effect of a royalty rate increase on the demand for U.S.-produced soda ash. The industry has taken the position that a significant increase in the applicable rate will produce adverse trade consequences, both immediately and over the long term. The United States Trade Representative and the United States Department of Commerce have both supported the industry's position on these matters. Thus, the agencies most familiar with the nation's trade picture have accepted the argument that a royalty increase can have a significant effect on the U.S. industry's ability to market soda ash abroad.

As a related matter, it is also likely that a royalty increase will directly affect the demand of the industry for new leases. Some in the industry have strongly urged the BLM to initiate a new lease sale. As will be discussed, however, those requests appear to have been premised on an assumption that any sale would take place at the current royalty rate. If that rate is increased, it is possible that bidders will change their plans and that leases will not be aggressively developed. It is also possible if that pattern of development were understood, a different leasing alternative would be considered more desirable.

It is thus remarkable that the agency proposes to base its decision regarding the extent of its leasing program entirely on demand projections that do not take into account the possibility of a royalty increase. The EA, in fact, never even refers to that possibility. The many arguments already received by the agency that a royalty increase will reduce demand are not simply rejected, they are totally ignored. As noted, we regard this as a serious deficiency in the agency's decisions to reject alternative leasing programs. It is sufficiently serious, we submit, to indicate that the decisions to reject those
alternatives have been made in an irrational manner or, worse, that the option of adopting any of those alternatives has never been truly considered.

Several specific aspects of the Appendix B analysis are illustrative of the point. Throughout the EA Appendix B analysis, statements are made that disregard the view that a royalty increase will significantly affect demand. For example, the Appendix states:

The above factors, specifically European competition and European antidumping actions, will lessen the soda ash exports to the EU for the short-term. However, because of the higher cost structure of producing synthetic soda ash, it is doubtful that the European price can remain low for very long before it has an adverse financial effect on the producers. The European economy is now rebounding and a gradual reduction of import duties assigned to imports to the EU promulgated by the General Agreement on Trade and Tariffs, now the World Trade Commission, negotiations should assist US exporters by the end of the century. United States Department of the Interior, Bureau of Land Management, Environmental Assessment for Sodium Leasing in the Green River Basin of southwestern Wyoming at B-4 (July 1995).

The problem with this statement is that it fails to reflect the intensive debate between U.S. Cabinet-level agencies on the effects of a royalty increase on U.S. soda ash exports to Europe. The U.S. industry, with the support of the Commerce Department and the USTR, has consistently argued that a royalty increase could well prevent the resurgence in exports that is anticipated in the statement. The issue has been vigorously debated in May 1993 Congressional hearings in which the Interior Department testified. It was also a principal subject of a Commerce Department study on the effects of soda ash royalty increases on U.S. exports. That study was officially submitted to the BLM at the end of last year and was frequently referred to at the Congressional hearings just mentioned. The European soda ash market, and the effects of a royalty increase on U.S. participation in that market, have also been discussed in numerous submissions by General Chemical Corporation and others to the Interior Department in the course of the royalty rate debate.

Notwithstanding the strongly held views of many in that debate that a royalty increase could prevent a reestablishment of the U.S. industry in Europe, in its EA the agency treats the subject as if those views had never been presented to it. No reference is made, for instance, to the argument that a royalty increase would undo the beneficial effects of the tariff reductions referred to. No mention is made of the exponential increases in U.S. prices that will result from a royalty increase under the European anti-dumping regime. Each of these matters is highly relevant to projected demand for U.S. soda ash which the EA in turn has treated as highly relevant to the decision on the agency's leasing program. Yet, none of these matters is in the EA.

Much the same can be said of Appendix B's treatment of exports outside Europe. The Appendix states with regard to those exports: Opportunities for export growth are most favorable in areas with modest population growth rates such as Indonesia, Mexico, the Philippines, Thailand, and Venezuela. Southeast Asian markets are growing as a result of economic and technical outreach initiatives launched by changes in the social and political institutions in those countries. The curtailing of the Botswana operation should open up the South African market to US marketers. These countries represent significant export potential in the future for US soda ash exports. Id. at B-4.

Again, there is no discussion of the effect of a royalty increase on those projections. No mention is made of the recent testimony of the American Natural Soda Ash Corporation in the Congressional hearings referred to, in which the ANSAC witness noted the potential adverse effects of a royalty increase on U.S. exports throughout the world. According to that testimony, a rate increase could stunt the growth of ANSAC's entire export program. Yet, once again, the EA reads as if the testimony was never presented.

There is also no discussion of a royalty increase as it pertains to the willingness of potential new entrants in the industry to bid on and develop new leases. For example, Appendix B makes the following statement as a justification for the new lease program: It is evident that world supplies of both natural and synthetic soda ash are being maintained or enhanced. This is true in the US also where new mines are being developed and existing facilities expanded. Accordingly, there is need to make more federal sodium leases available. The major private trona lessor continues to lease sodium tracts to meet these needs. Id. at B-2.

One clear implication of this statement is that if new leases are made available, it can be anticipated that a reasonable number of new mines will be developed in connection with those leases. The possibility of a royalty increase, however, casts considerable doubt on that conclusion.

This can be seen in the positions taken by two of the most prominent of the new entrants. Wold Minerals recently indicated, at a meeting of producers with the Governor of Wyoming, that all of the analysis on which the company's development program is based has assumed a five percent royalty rate and that the company would have to reevaluate its entire program if the royalty rate were increased substantially. Similarly, the U.S. Borax witness at the Congressional hearings on soda ash royalties stated that he was unsure how his company would proceed in the face of a royalty increase. It follows that the royalty rate decision could have a substantial impact on the likely development of new mines and the resulting need for new leases to accommodate such mines.

The excerpt from Appendix B quoted above that "if the major private lessor continues to lease sodium tracts to meet these needs" could be read as suggesting that new mines
were already being developed on lease tracts for which an eight percent royalty is charged. The fact, however, is that the new leases sold by Union Pacific Resources, the "major private lessor," have gone only to existing producers for the purpose of expanding existing facilities. In sum, notwithstanding the potentially major impact of a royalty increase on new mines and on the need for new leases to allow for them, there is no discussion of that impact in Appendix B or elsewhere in the EA. Once again, it appears the decision on Alternative A is intended to be made without the benefit of that discussion.

Defects Relating to Characterization of Industry's Prospects - Quite apart from its failure to take in to account the impact of a royalty rate increase, Appendix B is deficient in another important respect. It makes a number of statements that are more positive than is justified about the recent performance and overall condition of the industry. Such statements inevitably convey the impression that the need for an expansive leasing program is stronger than it actually is and that an alternative program such as Alternative A would not be in keeping with the current had predicted expansion of a thriving industry.

For example, the Appendix observes that "[In 1992, Wyoming soda ash production increased to the highest level yet achieved]" and that "Wyoming production in 1994 was nearly the same as 1992." Id. at B-1. Following, as they do, a description of the industry’s problems with excess capacity, those observations strongly suggest that such problems have been resolved. They also suggest that in the past few years, developments within the industry have been consistently favorable. The true state of affairs, however, paints a significantly different picture. Over the past five years, U.S. industry revenues have actually declined. Domestic consumption of soda ash has declined in terms of both volume and revenue. The problem of excess capacity, far from being resolved, has been exacerbated in recent years. While developments over the past few months have indeed been favorable, it is not at all accurate to suggest, as the Appendix does, that all has been well in the industry since 1992.

Nor can other upbeat statements and implications about the industry's prospects be justified. Appendix B begins with the following characterization of the industry: "Production of natural soda ash in the United States (US) and the world is dominated by sodium mined from southwest Wyoming. The extensive size and high quality of the Wyoming trona resource base has a well established mining, processing, and transportation infrastructure. This situation has created an industry with little risk for production quantity, quality, and deliverability as exists for any major mineral commodity in the world. The trona industry is characterized by a small number of producers selling an interchangeable commodity to consumers. Most consumers could use any producer’s product in their manufacturing since there is no appreciable product identification in this industry." Id. at B-1.

While each of these sentences is technically accurate, the overall impression that is conveyed by the paragraph runs counter to any reasonable perception of the industry and its prospects.

The impression conveyed is that of a small number of U.S. producers functioning in an essentially risk-free environment in which U.S. production is unquestionably the dominant force in world markets. The market place portrays quite a different picture. While it is true that "[production of natural soda ash in the ... world is dominated by sodium mined from Southwest Wyoming]," it is, of course, also the case that this natural soda ash is in constant and intense competition with soda ash that is produced synthetically outside the United States. While it is true that the U.S. industry is one "[with as little risk for production quantity, quality, and deliverability as exists for any major mineral commodity in the world]," the market risk to which the industry is exposed is nonetheless substantial. While it is true that "[the trona industry is characterized by a small number of producers]," that small number competes at every turn with very large numbers of producers all over the world. Id. at B-1.

This is not to suggest that the existence of synthetic production or of international competition is not mentioned in the analysis. The point is that the upbeat tone of the analysis is unwarranted by a thorough review of the available data. At the failure to discuss the implications of the royalty increase, this deficiency skews the analysis in favor of the proposed lease sale. Again, it is reasonable to infer that alternatives to that sale may not have been given adequate consideration.

Absence of Complete Discussion of Objectives - The final significant problem we have with the EA is its failure to discuss one of the major objectives that has prompted the proposed lease sale. If part of the purpose of the EA process is to consider the major costs and benefits associated with the proposed action, those costs and benefits must be specifically discussed in the document itself. It is important to note in this regard that unnecessary environmental damage can most readily be avoided if the agency lists not only the possible damage that concerns the agency, but also the benefits it believes justify that damage. If those benefits are set out in the EA and found wanting, a decision to avoid the damage may more readily result.

In this case, one of the benefits of a lease sale that is most strongly motivating the agency, i.e., the perceived need for a test of fair market value, is not mentioned. This supposed benefit again relates to the pending royalty decision. For some time, General Chemical Corporation and others have objected to a royalty rate increase in large part because the BLM has offered no analytical support for its view that an increase in the rate from five to eight percent is necessary to obtain "fair market value" for the government. The agency has simply noted that Union Pacific Resources ("UPR") is charging the higher rate on private lands and has assumed accordingly that the rate presents fair value. The problem with that analysis is that UPR, as the agency has acknowledged, is in a monopoly position with regard to trona leases, and it is therefore
possible, we would say likely, that its rate reflects monopoly power, not fair value. Since the agency recognizes that possibility, it wishes to use the current lease sale as a "market test." It believes that if the leases in question are offered at a rate higher than the current five percent rate and sales are in fact made at the higher rate, that will establish that the rate reflects fair market value.

We believe this objective to be ill-conceived for two basic reasons. First, we do not believe that the applicable statutes contemplate the adoption by the BLM of a royalty rate before that rate is determined to be "reasonable," or to constitute "fair market value," as the statutes use those terms. Under the logic of the agency's proposal, it might be possible to test rates that are significantly higher than eight percent in the market place in the hopes that sales may just turn out to be possible at that rate. The logic appears to be that so long as there is some indication that sales can be conducted at a given rate, it is appropriate to test that rate in the lease market on a trial-and-error basis. There is, however, no suggestion of this approach in the relevant statutes, which assume that proposed federal royalty rates will be supported by an adequate analysis before they are adopted by the government.

Our more fundamental concern, however, is that the proposed test is highly unlikely to disclose any information of value. Assuming that the rate chosen by the agency results in actual lease sales, which we understand the agency expects, the occurrence of those sales will tell us nothing about fair value. That sales on new leases can be negotiated at a higher rate will not in any way establish that the rate does not reflect monopoly power. Monopolists make sales all the time at above fair value rates precisely because buyers have nowhere to turn to obtain more favorable rates. In fact, the most successful monopolists attempt to set their prices at levels that produce extensive sales. The successful monopolist can be expected to seek optimal profit maximization, which will not occur if products are priced so high that most sales are discouraged. The existence of a large sales volume, accordingly, is in no way inconsistent with monopoly pricing. It follows that the proposed test is ill suited to answer the question it is apparently designed to address.

Since the agency has already indicated its interest in a market test, we urge the agency to present its position on the matter in the EA. There is no doubt that the "market test" objective is a major motivating factor in the proposed lease sale, and therefore ought to be fully discussed and openly examined. Once it is, the weaknesses in the objective will be appreciated. The objective then can be removed from the list of legitimate cost-benefit considerations that relate to the proposed action.

Conclusion - To summarize, we believe that three kinds of revisions to the EA are necessary. First, we believe it is essential for the agency to indicate that its decision to reject alternatives to its proposed lease sale is predicated on a five percent royalty rate to analyze the implications for that decision of a significant royalty rate increase, and to determine whether a different decision would be called for in the case of any such increase. Second, the agency needs to revise its characterization of the industry so that the industry's long-term condition, and the long-term demand for its product, are not portrayed in unrealistically favorable terms. The rejection of other leasing alternatives should then be revisited in light of this revised characterization. Finally, the agency should thoroughly examine and discuss its concept of a "market test" of an increased royalty rate. If the agency ultimately rejects that concept, as we strongly believe it should, it should then determine whether the remaining benefits of the proposed lease sale can justify the environmental and other costs that are expected to result from the sale.

BLM finds it more productive to answer this comment letter in its entirety instead of by paragraph. The following updated analysis reflects BLM's position.

Market Demand

The impact of exports, considering the American Natural Soda Ash Corporation (ANSAC) countries and the European Union (EU) along with impacts on domestic demand is referenced in paragraphs 1-4, 6-12, 17, 18, 20, and 27.

The total U.S. exports for 1994 were 15 percent higher than in 1993. Likewise, the cumulative results for the year to the end of July 1995 compared with the like period in 1994 were: production 9 percent higher, exports 23 percent higher, and domestic uses up 4 percent. Recent information from the EU indicates that it has finalized its decision on the antidumping allegations and the penalties imposed are 33 percent less than previously indicated. This is in addition to the 6.6 percent reduction in duties effective July 1, 1995 as part of tariff negotiations.

We have reviewed and considered the comments by the U.S. Commerce Department, the U.S. Trade Representative, and ANSAC prior to preparing the EA. Referring to the text of the respondent's letter, pages 1 and 3, BLM notes the statement "Nowhere is there a suggestion that an increase in royalty rate could reduce consumer demand." (emphasis added). On page 3, paragraph 2, BLM observes "a royalty increase could well prevent the resurgence in exports". Page 4, paragraph 1, states "the ANSAC witness noted the potential adverse effects of a royalty increase on U.S. exports". Our analysis is based on an increased demand for soda ash, and for soda ash leases. It is BLM's opinion that the impact on exports to the EU and to other exporting markets due to a potential royalty rate increase is within the limits of the data provided to us.

BLM has reviewed the potential impact of various royalty rates and concluded that the potential difference in demand for leases based on differing royalty rates is probably less than the variances in the available data. This statement has to be considered in context with the one on page 3.
Domestic producers in the Green River Basin (GRB) continue to recognize and execute ways of expanding production capacity through upgrades and additions to existing mines and plants. FMC in January, 1995, announced a 700,000 ton per year expansion of its soda ash production facility, bringing their capacity to about 3.55 million tons per year. The Bold Trona Company has permitted a new mine and plant facility. TOSOH of Japan announced in July 1995 that they were closing their synthetic facility in Japan which had been producing 200,000 metric tons/year. Therefore exports by U.S. producers are expected to increase by a like amount. In addition, ANSAC, the exporting company for most U.S. produced soda ash, stated that Japan’s remaining 900,000 tons of synthetic production facilities are under pressure and cannot compete cost-wise with U.S. producers. Other companies have expressed an interest in leasing reserves in the KSLA. Therefore, BLM can only conclude that these firms see opportunity for a higher level of output and are willing to invest their capital to assure meeting this higher level of demand.

Health of the Industry

The health of the industry discussion includes rates of return on investment and the industry’s capability to fund the development of new mines. These considerations are presented in paragraphs 1-3, 12-21, and 27.

The current study of royalty rates and affiliated issues has been in progress for nearly three years. During this time, and based on the data provided, we have analyzed the soda ash industry achievements for the last two decades. During this time the price of soda ash has varied down and up, the latest episode being the price increase announced by all companies across the industry effective July 1, 1995. The total effect of this price increase has probably not been reflected in sales to date, however there are indications that price increases have been effected.

The BLM has recognized the potential for short-term impacts on the soda ash industry caused by an increase in the royalty rate. Rather than attempt to debate the extent of the impacts caused by a $1 or $2 per ton increase in the royalty rate, the BLM has elected to rely on the U.S. soda ash industry itself to give an indication of what is expected in the future. In this way, the BLM can follow the market established by private lessors and lessees which are negotiating to their own mutually acceptable benefit rather than attempt to lead the market solely through analysis and argument.

The soda ash industry in the GRB may not be as risky as the comments indicate, especially in light of the uncertainties associated with other mineral commodities. The trona deposits are bedded and are generally well defined with years of mining and processing experience to minimize production cost uncertainties. The most significant risk is the delivered price, which is established by market demand and transportation costs. This risk is inherent in any finished product and is, in fact, moderated in this industry by the lack of product diversity among the suppliers. The five producers in the GRB hold a implied monopoly on the 66 percent of their total production going into the domestic market. Only about 10 percent of domestic consumption is furnished outside of the GRB and that is concentrated on the west coast. This domestic market is well diversified. Stability within the domestic market spawns a relatively low risk economic attraction and is evident in the demand for existing companies from foreign investors and the prices they are willing to pay to acquire even a minority interest.

Leasing of private reserves has continued at a uniform royalty rate for 20 years with three additional leases covering 11 sections being issued in 1994 and 1995 to two companies.

Fair Market Value

The fair market value issue is reviewed in conjunction with the contention of monopolistic actions as mentioned in paragraphs 15, and 23-27.

The Department and BLM have always attempted to follow market transactions to safeguard the receipt of a reasonable return for the public resources and fair market value. The basic consideration in this effort is to model what a knowledgeable lessor and a knowledgeable lessee would agree upon with neither being obligated to lease. The courts have long held that the best indication of fair market value is from comparable transactions found in the market.

BLM recognized and considered in its analysis the reference to the Commission on Fair Market Value Policy for Federal Coal Leasing cited (at 620) requiring the Secretary to ensure that actual market prices paid reflect fair market value. In that regard, there are two determinants: (1) does a UPR monopoly actually exist in the GRB and, (2) have the lessees been “obligated” to lease making the transactions invalid for estimating fair market value.

For the first determinant, UPR does control significant trona reserves in the GRB and is a major participant in the market there. However, it controls less than half of the reserves with the BLM and the State of Wyoming being the other primary owners. Clearly, the UPR is not a monopoly owner since it does not control the leasing activity of the other owners.

However, trona mining is less efficient and cost effective if reserves must be bypassed. Since the UPR controls roughly every other section in the mining area, it would be difficult (though not impossible) to operate a successful mine without UPR reserves. This does give the UPR considerable bargaining power but it does not create a monopoly situation. In actuality, the existing producers, both in the past and at present, represent as much or more of a monopoly situation than the UPR. Five companies currently control 100 percent of the trona mining in the GRB and 90 percent of the soda ash production in the United States. The BLM or the UPR must presently negotiate with these five companies if they want their trona reserves developed.
The second determinant can be employed whether a monopoly actually exists or not. Even in monopoly situations, such as the Federal coal reserve monopoly in the Powder River Basin, fair market value can be derived from market transactions if neither party is "obligated" to lease. The five trona companies in the GRB have been negotiating leases with the UPR at a higher rate royalty rate than paid to the Federal government since 1976.

All five companies began their operations with 16 to 20 sections of UPR, BLM and State leases. These companies have leased additional reserves based on negotiations with UPR. The additional reserves were useful to provide a larger reserve base and spread the capital costs of the mine and processing plant over a greater tonnage but the companies were not forced to acquire additional reserves at the time of these new leases to maintain continued operations. All had sufficient reserves to continue operations for decades even without the additional leases. Consequently, none of these companies was "obligated" to lease at the time of the negotiations and so these transactions represent valid testimony of fair market value whether a monopoly exists or not.

As further evidence that lessees are not "obligated" to lease but are choosing to do so voluntarily, a non-producer in the area has also leased from the UPR at the higher prevailing rate. Also, a proposed trona mine recently received permit approval and other companies have expressed interest in leasing reserves for potential new mine starts in spite of the higher fixed rate for UPR leases.

Accordingly, BLM believe it has provided adequate analytical support for this action.

The BLM invited comments from industry and the public in general on the proposed rate increase. These comments were analyzed and addressed in a document that has not been released for public inspection at this point. This document provides the necessary support for the recommendations made concerning new and renewal leasing in the GRB.

It should be clarified here that the BLM has not acknowledged that UPR holds a monopoly position in the GRB. On the contrary, as reported under the response to determinant 1 above, a true monopoly is not considered to exist. What market power the UPR does possess has not been sufficient to "obligate" companies to lease in the GRB and so these transactions represent a valid and stable indication of fair market value.

Also, any decision to change the royalty rate based on the UPR transactions would not represent monopolistic behavior on the part of the Department of the Interior, but would rather continue the tradition of following the market in assuring a reasonable return and fair market value for public resources.

BLM has not proposed using the leasing process as a substitute for required analysis. BLM has always taken the position that it cannot test a royalty rate in this fashion. BLM's analysis has, however, indicated that there is a valid market for new leasing; and

that neither UPR nor the United States government hold a monopoly position with regard to leasing.

Conclusion

For nearly three years the BLM has been studying the trona royalty rate situation in the GRB. During this time it has provided reviews of the soda ash industry as it has gone through the normal cycles of changing quantities, prices, and costs. Three significant events stand out. There has been an increase in interest by more firms to either acquire all or a fraction of the ownership of trona mines. Non-owners are seeking to acquire interests in leases and develop new mines. And owners of existing mines are expanding their capability to produce new products in response to new demands and to increase their capacity to process ever-increasing quantities of produced ore. All of these actions dictate ever increasing quantities of capital, which is made available as substantiated by the expenditures made.

Market demand, reflecting the health of the industry, along with the fair market value issues are valid considerations - but only to the extent that they would impact the overall development of the resource. The prevailing consideration is the active and consistent leasing market in the GRB which shows that the industry not only can survive but is actually prospering. This is illustrated by the number of leases offered which have been identified by operators and others who have expressed interest in these tracts.

All of these considerations would seem to indicate a robust and profitable industry trying to capitalize on future opportunities rather than a marginal industry trying to maintain its existence. The BLM has acknowledged what industry has frequently requested. BLM has done this by proposing to make new trona leases available. The questions that now remain are that of deciding the royalty rate and the appropriate bonus bid at that rate.

The domestic soda ash industry has increased its output for the past two years. As domestic consumption remains flat, the increased quantities are consumed in the export market. In 1994 more than 34 percent of the production was exported to an ever expanding world market. Apparently recognizing this increase in demand, the five producing companies announced a price increase effective July 1, 1995 of $15/ton off list and $7/ton list which appears to be sustained.

Given this economic summary of increased demand, higher price/ton and hence higher total revenues, the soda ash business appears to be a robust industry. While we hear contrary claims, we have not been provided with adequate financial information that supports an alternative premise.

How the cost increase of a potential royalty rate increase would affect demand is not clear, because the royalty rate increase is a cost increase and does not become a price element until/unless it is passed along in the form of a price increase. The industry has
already passed along a price increase of several times that of a potential royalty rate increase. Therefore, as BLM has maintained in the EA, it is not apparent that passing along the royalty rate increase should have major, if any consequences, on demand.

SIERRA CLUB LEGAL DEFENSE FUND

Thank you for this opportunity to comment on the Environmental Assessment for Sodium Leasing in the Green River Basin of Southwestern Wyoming (EA), issued July 14, 1995. These comments are submitted on behalf of the Wyoming Outdoor Council and the Sierra Club Legal Defense Fund. In the interest of brevity, I endorse and incorporate by reference the comments of the National Wildlife Federation. My comments will focus on the EA's mitigation requirements and the analysis of the cumulative impacts of trona leasing and other mineral development and processing, especially oil & gas development, in southwestern Wyoming, northwestern Colorado, and northeast Utah ("southwestern Wyoming").

18. The EA fails to comply with the standards established in the National Environmental Policy Act, 42 U.S.C. 4332 ("NEPA"), and the Council for Environmental Quality regulations implementing NEPA. Under current law, the Bureau of Land Management ("BLM") must prepare a cumulative or programmatic environmental impact statement ("PEIS") before leasing and authorizing continued mineral development in southwestern Wyoming, 40 C.F.R. 1502.4(e); 1508.7; 1508.25(a). A PEIS is needed to analyze the cumulative effects of the already significant impacts of current mineral development and the impact of reasonably foreseeable future mineral development on the region's wildlife, water, and other resources. Any leasing of trona or other similar activity before completion of a PEIS would violate NEPA.

Land use plans, with extensive public involvement, made the initial determination as to which lands are available for sodium leasing. Although the respondent may disagree, BLM feels it has met the aforementioned requirements. A programmatic environmental analysis (Sodium Mineral Development EA) which included full public participation was completed in 1983, shortly after completion of the Salt Wells MFP (1983). Leasing of the sodium resource is also allowed for under the No Action Alternative, or current management actions, of the Green River RMP DEIS. Although the decision has not been issued, this action is in conformance with all management scenarios described in the RMP DEIS. In February 1995, BLM initiated the Southwest Wyoming Resource Evaluation to evaluate mineral development in southwest Wyoming.

19. There are three instances in which courts have required PEISs: (1) when there is a formal federal "program" or plan for the development of a region; (2) when several projects are connected actions; i.e., when several projects are dependent, and therefore have no "independent utility;" and (3) when various federal actions in a region have "cumulative" or synergistic environmental impacts on a region. Peshlakai v. Duncan, 476 F Supp. 1247, (D.D.C. 1979). The current rapid development of mineral resources in southwestern Wyoming falls within the third category, "cumulative" impacts on a region.

NEPA 102(2) (C) requires cumulative impact statements "in certain situations where several proposed actions are pending at the same time... Thus, when several proposals for [mineral development] actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together. " Kleppe v. Sierra Club, 427 U.S. 390, 409-410 (1976). Factors to be considered when determining whether proposed actions are related enough to require a PEIS include the number of agencies involved, proximity of the proposed actions in place and time, and similarity of environmental effects. See Sierra Club v. Penfold, 664 F. Supp. 1299 (D. Alaska 1987), aff'd, 857 F.2d 1307 (9th Cir. 1988).

The determination threshold for whether an EIS is required under NEPA for a particular project lies with the federal agency Peshlakai v. Duncan. Trona leasing was analyzed in the Land Use Plans (LUP, LUPs), Kemmerer RMP and the Salt Wells MFP, and is further analyzed in the Green River RMP DEIS (under all alternatives). Leasing of the sodium resource is a valid use of public lands. Additionally, leasing was addressed in the Sodium Mineral Development EA (1983) and appropriate environmental protection measures were developed and applied to future sodium leases within the KSLA. The latest sodium leasing EA (1995) addresses whether these mitigation measures are still applicable and whether additional protection measures are warranted.

BLM has addressed the cumulative impacts (past, present, and foreseeable sodium development) based upon the latest information available. Because a lease is issued does not necessarily mean that the lease will be developed.

20. Penfold is directly applicable to the situation in southwestern Wyoming. In Penfold, sixty placer mines, concentrated in certain watersheds in Alaska, were causing water quality degradation in several rivers. Only one agency, the BLM, was involved, the mines were all in close proximity geographically, all operated during the same season, and the environmental impacts of the proposed actions were identical. The court observed:

While the operations are not functionally or economically interdependent and their impacts are interdependent and require common analysis... At the risk of belaboring the obvious, the court holds that transformation of the entire 126-mile length of such a river from a clearwater stream to a silt-laden one is significant environmental event.

The current leasing and development of various minerals in southwestern Wyoming is identical to the situation in Penfold and falls well within the parameters of Kleppe. Many large mineral leases and associated mineral and energy developments fall in or
Development of sodium leases occurs below the surface. Associated surface facilities impact a small number of acres when compared to the area leased (in this case, up to 1,100 acres per mine site or a total of 2,200 acres regardless of surface ownership). Sodium leasing is proposed to take place in the southeastern corner of the KSLA, 18 to 25 miles away from the expanded Moxa Arch oil and gas development area. BLM does not anticipate oil and gas development occurring in the Moxa Arch area as having any direct or indirect resource (i.e., biological, geological, etc.) impact on sodium leasing in the southeast corner of the KSLA. For example, most of the development occurring in the Moxa Arch area is north of Interstate 80 (I-80) on the west-side of the KSLA and any future development of these sodium leases would happen on the south-side of I-80 on the southeast corner of the KSLA. BLM would have serious concerns if oil and gas development were to occur in the area where existing or potential mining activities (leases) could occur. Should coincidental development be proposed at some future time, those issues will need to be resolved per mitigation item 13 prior to any development.

Development of the Stagecoach Oil and Gas Field is outside the cumulative impact boundary encompassing the KSLA and therefore, consideration of the impacts is not required to be addressed in this document. However, the BLM recognizes the need to address cumulative impacts occurring throughout southwest Wyoming and has initiated the Southwest Wyoming Resource Evaluation to address those concerns.

21. The failure to perform a PEIS in this situation is incomprehensible. Only one agency, the BLM, is involved, in fact, only one district office is involved. Only one type of agency action, leasing of minerals and permission to develop those leases, is being taken. Numerous applications for this identical activity are pending in the same BLM office at the same time. These energy mineral projects and other proposed projects are in close proximity geographically; plotting leases and potential development sites on a map, as BLM has done through its GIS system, clarifies the geographical relationship between the separate leases and development fields. The expected environmental impacts of the various developments are very similar. The same resources will be impacted, including antelope, deer and elk herds, air quality, water systems, roads, cultural resources, wilderness study areas and vistas. To paraphrase Penfold, transformation of the entire southwestern corner of Wyoming from open nearly wild land to an industrial park is a significant environmental event deserving comprehensive decisionmaking. See NWF v. Benn, 491 F. Supp. 1234 (S.D.N.Y. 1980) (ocean dump site creates a steady stream of activity in a well defined area, requiring PEIS). A PEIS analyzing this transformation should be completed before any new leases are issued.

With completion of the Green River RMP, an up-to-date programmatic leasing EIS covering all federal mineral leasing within the Green River Resource Area (GRRA) will have been accomplished. In the meantime, existing LUPs and programmatic EAs are sufficient and the proposed leasing of federal sodium tracts is in full conformance with those plans and falls well within the scope of the analysis. Additionally, the Southwestern Wyoming Resource Evaluation will evaluate the cumulative impacts of mineral development for both the Rock Springs and Rawlins Districts.

22. Anyone who drives through this portion of Sweetwater County realizes that BLM's lands are devoted to massive mineral development. Grazing is a distant second purpose, and wildlife and recreational uses afterthoughts if thought of at all. Long dirt roads wide enough for two large rigs to pass each other crosscut the area that lead only to drill pads; dead animals decay by the roadsides, and birds covered with waste sit beside pits with roped lining and fallen netting; service trucks steadily raise dust clouds; compressors clang through the night; smoke plumes, visible for thirty miles and more, rise from the stacks of processing and power plants; chemical odors fill the air; numerous pipeline rights-of-way covered with varying vegetation form haphazard but distinct patterns miles long through the sage. These are single purpose lands becoming more and more industrialized.

Thank you for your comment.

23. Under FLPMA and NEPA, it is patently illegal for BLM to manage these lands for single-purpose use without any serious analysis of cumulative impacts on other public resources and mandated multiple uses. BLM bears the statutory responsibility of foreseeing and preventing degradation of public resources, and using good data to plan for the conservation of non-mineral public values prior to development of mineral resources, not after development is authorized.

BLM disagrees with the respondent that these lands are being managed for a single purpose. Mineral leasing and development is a valid use of public lands. In issuing leases or approving development, the BLM closely reviews resource issues and applies applicable mitigation measures to prevent undue and unnecessary degradation of public resources including multiple use of the said lands.

24. Several important resources are mentioned in the EA, but the cumulative impacts on these resources is minimized or ignored. For example, the EA minimizes the impact of these leases on game animals, even after acknowledging that the leases are in the middle of crucial winter range for antelope (Map 8); and cuts off a narrow area used by mule deer (Map 9). The EA also minimizes the affect on raptors and sage grouse,
even though Map 10 shows the leases are surrounded by leks, and occur in a heavy concentration of golden eagle nests.

The respondent is correct that crucial winter range for antelope, mule deer, and golden eagle habitat could be affected if surface development occurs on those sections. The respondent is reminded that sodium development mostly occurs below the surface. If surface development occurs, an EIS would most likely be required to address wildlife concerns along with other issues such as air and water quality, and economic and social impacts. BLM disagrees with the suggestion that these possible impacts have been minimized. On page 80, BLM acknowledges the potential significance of development on wildlife occurring in the area and the need for an EIS should development ever be proposed. Additional mitigation would be addressed at that time since more site-specific information would be available.

25. According to the EA, these and other environmental protection issues, such as air quality (EA at 78) and the nearby Wilderness Study Areas, can be better addressed at the site-specific stage. Yet BLM has, at least in the oil & gas context, consistently taken the position that once a lease is issued, it is a takings to require off-site mitigation or require new protections for non-mineral resources. These issues must be addressed now, not later, or stronger stipulations should be added to the leases at this stage.

Mitigation Measure 1 (Other Mitigation) specifically states that the AO may require off-site (but within the lease boundary) wildlife habitat enhancement. Proposed air quality stipulations are found on page 57 and incorporated into this decision. BLM can not foresee any accuracy site-specific information (i.e., size, exact location, processing method, etc.) on which to base a site-specific environmental analysis. The mitigation measures identified in this document were analyzed for appropriateness and whether other mitigation is warranted at the leasing stage. Should development be proposed sometime in the future, and based upon that specific proposal, additional environmental analysis will be conducted and additional mitigation measures could be applied.

26. The EA mentions several times that mitigation measures will reduce impacts, and outlines lease provisions for protection of non-mineral resources at pages 9-18. While it is legally permissible for an agency to use mitigation measures to support a FONSI, see, e.g., Friends of the Earth v. Jantzen, 760 F.2d 976, 987 (9th Cir. 1985), those measures must be "more than mere vague statements of good intentions." Audubon Soc'y of Cent. Ark v. Dailey, 977 P.2d 428; 435-6 (8th Cir. 1992). As stated by Justice Breyer, before his appointment to the Supreme Court, a FONSI should depend on "a plan that effectively assures" that negative impacts will be avoided. City of Waltham v. U.S. Postal Service, 11 F.3d 235, 241 (1st Cir. 1993).

Many of the stipulations are vague, and the EA does not show how those measures "effectively ensure" negative impacts will be avoided; in fact, many can be ignored completely at the discretion of the AO. See EA at 10 and 12. An example of the worst language is the section on reclamation of tailings ponds. BLM acknowledges that it does not know if reclamation will work, and then Candide-like [sic] "assumes technology will be available to reclaim these areas when necessary," EA at 60. Because of BLM's past interpretation of restriction on leases as a takings, mitigation for adverse impacts on non-mineral resources must be addressed now, before the lease, or stronger and clearer stipulations placed into the leases. The stipulated mitigation measures are no "more than mere vague statements of good intentions," and the EA is therefore legally deficient.

The mitigation measures described in Chapter II, pages 9-18, are incorporated into the proposed action. These measures are designed to reduce unnecessary and undue degradation to important resource values. BLM disagrees that these measures are no more than mere vague statements of good intentions. Most of these measures were developed in and carried forth from the Sodium Mineral Development EA, a programmatic analysis in which the decision provides direction for sodium leasing and development in the Rock Springs District. The others were in response to public and internal scoping. In addition, other measures were developed during the impact analysis to further reduce impacts. Based upon public and internal comments to the Sodium EA, some mitigation measures were modified for clarity and to reflect current policy. All mitigation measures have been incorporated into the decision and all leases issued will be subject to these measures.

Should development be proposed in the future, further site-specific environmental analysis will be conducted and additional measures, based upon the analysis, could be required.

27. All BLM action granting leases or authorizing lease development in southwestern Wyoming should be postponed until a programmatic or comprehensive EIS covering all such mineral development is completed. The Rock Springs office expects large scale development in the region in the near future as evidenced by the many EAs and EISs for mineral development issued by the office in 1995 alone. As stated above, transformation of southwestern Wyoming from open, nearly wild land to an industrial energy development area is a significant environmental event deserving comprehensive decisionmaking. BLM should serve the interests of both the public and energy industry by completing a comprehensive EIS for development in southwestern Wyoming to guide the important decisions that will be made in the next few years. Only informed decisionmaking will permit development of needed energy resources without sacrificing other resources that are the property and the heritage of the American people.

See responses to comments 18, 19, 28, and 29.

NATIONAL WILDLIFE FEDERATION

28. This document squarely poses a problem which is at the heart of current controversy over mineral development in southwest Wyoming, where there is a considerable amount of oil and gas activity, as well as the mining of minerals such as trona and uranium:
That is, what are the analysis and disclosure requirements under the National Environmental Policy Act (NEPA) for the act of mineral leasing? NEPA requires that all major federal actions are analyzed and impacts disclosed to the extent that the authorized officer can make an informed decision. Leasing of mineral resources are analyzed through LUP efforts. In the case of leasing sodium resources, the Salt Wells MFP and Kemmerer RMP allows for leasing of federal minerals and the Sodium Mineral Development EA further analyzed sodium development in the Green River Basin and provides protective measures to prevent undue and unnecessary degradation of other important resources. Leasing of these tracts is well within the scope of and in conformance with existing LUPs. Currently, the GRRRA is updating their LUP. Mineral leasing, including sodium leasing within the KSLA, is a valid use of federal lands under all alternatives.

29. We are encouraged that here, oddly contrary to its approach to oil and gas leasing, BLM recognizes that leasing does indeed cause indirect impacts because BLM operates under the belief that once the lease is issued the lessee holds a right to develop, with which BLM can interfere only on a very limited basis. Yet BLM still fails to follow the explicit directive of the federal courts and the Interior Board of Land Appeals concerning proper analysis and disclosure of those impacts.

The BLM disagrees with the respondent’s comment that BLM has failed to properly analyze and disclose impacts for sodium leasing. Leasing is a valid use of public lands and was thoroughly analyzed during development of the Salt Wells MFP and Kemmerer RMP. Likewise, the BLM specifically analyzed sodium development in a programmatic EA. Probable impacts of reasonable foreseeable levels of development were addressed and appropriate mitigation measures identified to eliminate or minimize to the extent possible, undue and unnecessary degradation of natural resources while allowing for ultimate maximum recovery of the federal mineral deposit (43 CFR 3590.0-5). The same principle applies to oil and gas recovery (43 CFR 3162.1(a)). Once a federal mineral lease is issued, the lessee has a right to develop the leased mineral.

This EA specifically addresses leasing seven tracts of the sodium resource encompassing 9,893.91 acres. If these tracts are leased, there is potential for future development but whether development will actually occur is dependent upon many factors. Thus, the discussion of potential impacts is based upon a reasonable generic development scenario. Mitigation measures, whether incorporated into the Proposed Action or developed during the impact analysis, are designed to minimize adverse impacts to the environment. If a development proposal is submitted sometime in the future, BLM will then analyze that proposal, alternatives, and may develop further mitigation based upon that analysis.

30. The leasing of vast areas of publicly owned lands for private mineral development is not, as stated in the EA, a mere administrative action. The Federal and Ninth Circuit Courts of Appeals and the IBIA have all held that unless the leases are offered with no surface occupancy stipulations — meaning the lease conveys no right to develop — they are an irretrievable commitment of resources requiring an Environmental Impact Statement, In Sierra Club v. Peterson, 717 F.2d 1409, 1415 (D.C. Cir. 1983), a case which BLM continually misconstrues and misquotes, the court held that in order to comply with NEPA, BLM "must either prepare an EIS... or retain the authority to preclude surface disturbing activities until an appropriate environmental analysis is completed." See also Conner v. Burford, 836 F.2d 1521, 1531 (9th Cir. 1988) (the government violates NEPA when it sells non-NSO leases without preparing an EIS.)

Contrary to the respondent’s opinion, sodium leasing is an administrative action that does not impact the physical environment. No surface disturbance occurs at the leasing stage. Impacts may happen if there is development of the lease. In order for the lessee to develop the lease, they must submit site-specific mining proposals to the BLM for analysis. Modifications may be made and additional stipulations attached to prevent undue and unnecessary degradation of resource values. For BLM to write an EIS to address possible site-specific development scenarios on public lands, within the "checkerboard" area would be premature. Development, if any, could be years away (using advanced technology not yet invented), or the leased mineral could be mined underground without additional surface facilities, or any surface facilities proposed could be located on private lands only. Thus, BLM would be wasting much time, effort, and taxpayer money on analyzing scenarios that very well may not occur.

31. The fact that development may be speculative or uncertain at the leasing stage is not a reason for waiving NEPA: "If...the Department is in fact concerned that it cannot foresee and evaluate the environmental consequences of leasing without site-specific proposals, then it may delay preparation of an EIS provided that it reserves both the authority to preclude all activities pending submission of site-specific proposals and the authority to prevent proposed activities if the environmental consequences are unacceptable." Sierra Club, 717 F.2d at 514.

The BLM has not waived NEPA requirements. On the contrary, BLM has analyzed sodium leasing and development in several LUPs (Salt Wells MFP, Kemmerer RMP, and Green River RMP DEIS) and a programmatic EA (Sodium Mineral Development EA) covering different levels of development. Leasing of these tracts is well within the scope of these LUPs and has been subject to public review and comment. If development is proposed, preparation of the appropriate level of NEPA analysis (an EIS most likely) would be conducted based upon a site-specific and method-specific proposal.

32. The IBIA has fully adopted the holdings of Sierra Club and Conner. In Union Oil Company of California, 102 IBIA 187, 191 (1988) the Board stated that under Sierra Club and Conner, the sale of a non-NSO lease constitutes the "point of commitment;" after the lease is sold the government no longer has the ability to prohibit potentially significant intrusions on the environment. Accordingly, "unless surface disturbing activities may be absolutely precluded, the government must complete an EIS before it
makes an irretrievable commitment of resources by selling non-NSO leases." (Citing Conner v. Burford, SSE F.2d at 1532.)

The discussion regarding hazardous substances (EA at 17 and Firsl, provides proposals entirely in 30 "unless
Similarly, Conner v. Burford, 10 easo nal re striction date becomes effective if climatic conditions are not adverse and not
inpul . This renders effort between wildlife groups, wildlife agencies, and BlM.

excep t ions to wildlife seasonal restrictions are coordinated with the WGFD. BlM must
eXpected to become so within the time needed to complete the task.

analysis or public participalion .

avoided conclusion,
must be done comprehensively at

It makes an irretrievable conclusion, has held that while comprehensive NEPA analysis sometimes may be

avoided at the leasing stage if the development is too remote or speculative, it can and

must be done comprehensively at the development stage. Park County Resource Council v United States, 817 F.2d 609 (10th Cir. 1987).

See response to comments 30, 31, and 56.

33. Unfortunately, the Sodium Leasing EA now under consideration complies with neither approach. It does not give comprehensive analysis to the full range of impacts from
the leasing proposal, but defers most of the important analysis and decision-making until specific proposals are presented. Yet it leaves the decision-making on site-specific
proposals entirely in the discretion of the authorizing officer, without further NEPA analysis or public participation.

There are many examples of this, several concerning impacts to wildlife. The EA provides that there will be no surface disturbing activities from November 15 to April 30 "unless approved by the AO." EA at 12. The authorizing officer therefore has the ability to make all determinations on this critical issue without any public disclosure or input. This renders the stipulation meaningless and in violation of Federal law discussed above, which requires that surface occupancy stipulations only be waived where there has been compliance with NEPA.

Similarly, the EA states at 12 that surface uses which result in long term loss of wildlife habitat may require enhancement of habitat, including off-site mitigation measures. Yet here again, this critical matter of mitigation for wildlife impacts, which is crucial to a finding of no significant impact, is left wholly in the judgment of the AO.

BLM may not waive any lease stipulation or mitigation measure without NEPA review. However, an exception may be granted if conditions warrant. For example, a company may be permitted to complete surfacing of the main access road into a plant site after the seasonal restriction date becomes effective if climatic conditions are not adverse and not expected to become so within the time needed to complete the task. In most cases, exceptions to wildlife seasonal restrictions are coordinated with the WGFD. BLM must be able to maintain flexibility in addressing resource concerns as they arise depending upon the circumstances found at the time. Any off-site wildlife enhancement projects would likely be addressed during subsequent NEPA analysis and would incorporate full public participation. All previous habitat enhancement projects have been a cooperative effort between wildlife groups, wildlife agencies, and BLM.

The absence of meaningful analysis in compliance with court and IBLA directive, and the inability of BLM to conclude that the sodium leases will cause no significant impacts is discussed in greater detail below:

34. Hazardous Materials - The discussion regarding hazardous substances (EA at 17 and 71) is troubling and will fall far short of NEPA requirements in the event BLM determines (as we expect) there is no significant impact from this proposal. The EA goes no further than stating the obvious that the developer of the leases must comply with federal law in setting forth all hazardous substances which might be associated with the mining activity. Nowhere does the EA disclose the possible substances to be used in the mining process, the toxicity of those of those substances, and information, it has not provided it to the reader to allow accurate assessment and comment on the risks to the environment.

The level at which hazardous materials are addressed in the EA is adequate for assessing impacts of leasing and likely impacts of development. BLM acknowledges that hazardous materials will be used. However, BLM assumes that all materials will be used in accordance with appropriate law. The respondent is correct that lists of specific hazardous materials are not in the EA. BLM will assess the impacts of specific hazardous materials during NEPA review of a site-specific proposal.

35. There is no information in the EA upon which either BLM or the reader can accurately evaluate the impacts of the proposal on air quality, either from a likely mining activity under a specific lease or from the cumulative impacts of the activity combined with existing sodium production and other industrial activity in the vicinity.

Air Quality - First, there is no monitoring station in the area, the nearest one being 40 miles away (and which apparently only monitors visibility.) Yet the EA states "levels are estimated to be low and within standards" (EA at 21). But on what data is this estimate based? There have been significant increases in industrial activity in this area in recent years and BLM cannot engage in guess work on the current air quality. Nor do estimations of pollutants from the Wold EA of several years ago, which are equally unreliable and also have no hard data behind them, satisfy the "hard look" requirements of NEPA.

The statement "levels are estimated to be low and within standards" comes from pg 337, Green River RMP DEIS. According to our latest available data (GRRA RMP/DEIS), pollutant levels in the Green River Basin are within national and state standards. The State of Wyoming has jurisdiction over air quality issues and may require the operator to monitor air for baseline information for pollutants as part of the permitting process. BLM can not authorize any facility that would not meet state or federal air quality standards.

36. Indeed, the EA states that "no quantification of potential impacts is possible at this time" (EA at 56), here again postponing any meaningful consideration of the issue
until a specific proposal is made. Yet when that proposal is made, will BLM still have any ability to control the problem (based on its belief regarding existing lease rights), and will the public be allowed any participation in the decision-making?

"Given the preliminary nature of this EA, no quantification of potential direct air quality impacts is possible at this time." The EA (page 56) points out that at the leasing stage, BLM can not analyze air quality issues without a site- and project-specific proposal. BLM does not know what type of processing method would be employed or whether sodium would even be processed on-site (for analysis purposes, BLM assumed a wet-processing method would be employed). Technological advances 10 to 15 years from now would most likely make any predictions meaningless at this point. On page 78, BLM acknowledges the possibility that up to two new trona mines may significantly impact air quality. However, leasing of sodium tracts does not result in a significant impact to air quality. Air quality issues, among others, would likely result in the completion of an EIS if surface development is proposed.

37. Second, even if BLM is to base its conclusions on estimations from the Wold proposal, set forth at 21, it appears the impacts could come very close to exceeding federal and state air quality standards. For example, the probable addition of two new mines having roughly the same quantity of emissions as Wold, comes uncomfortably close to federal and state standards for particulate emissions (24 hour: 135 [standard: 150]; annual 48 [standard: 501]). And this does not take into account the cumulative impacts from substantial oil and gas operations in the vicinity, and also the Jim Bridger Power Plant, a significant source of air pollutants in this area. Accordingly, BLM is obligated to give much greater scrutiny to background levels of pollutants and the likely effect of two additional mines, before it authorizes this proposal.

See response to comments 36, 67 through 69. Oil and gas production, along with auto/truck emissions, housing/business/industry emissions, and all other sources of emissions cumulatively adds to pollutant levels which degrades air quality. However, the Jim Bridger Power Plant sits to the east-northeast of the analysis area and has little effect on air quality within the analysis area due to prevailing winds.

38. Finally, if this EA results in a FONSI rather than a determination that an EIS is needed, BLM cannot base that finding on mitigation measures which are merely recommended, or on proposals to monitor pollutants, as it proposes to do at 57. It must provide specific and enforceable mitigation measures for potentially significant impacts. The federal courts and the IBLA have been quite exacting in this regard. Both have held that where an EA discloses potentially significant impacts an EIS must be prepared, unless the record supports a finding that mitigation measures have reduced the potential impact to insignificance. Cabinet Mountains Wilderness v Peterson, 685 F.2d 678, 681-682 (D.C. Cir 1982); U.S. Postal Service, 487 F.2d 1029 (D.C. Cir. 1973); Powder River Basin Resource Council, 120 IBLA 47, 66 (1991). Likewise, these tribunals hold that where a FONSI is predicated on a finding that restrictions on a project will eliminate any significant environmental impact, NEPA requires an analysis of the proposed mitigation measures and how effective they would be in reducing the impact to insignificance. Nez Perce Tribal Executive Committee, 120 IBLA; Idaho Natural Resources Legal Foundation, Inc. 115 IBLA 88, 981 (1990). The mere monitoring of impacts does not meet these standards. Powder River Basin Resource Council, at 60.

BLM has already made the determination, through LUP efforts and the programmatic EA, that these lands are available for sodium leasing. The purpose of this EA was to determine whether all tracts should be leased and whether the mitigation measures or stipulations should be attached to the leases. In addition, BLM wanted to assess the most likely impacts if development were to occur (an indirect impact of leasing) based upon a preliminary and generic development scenario, and to determine if additional mitigation measures would be warranted. In some cases, such as air quality concerns, additional mitigation was created. All mitigation measures are warranted although some have been modified slightly for clarification. Therefore, all will become part of the lease agreement.

BLM is well aware that significant impacts could occur especially if surface processing facilities are proposed and will most likely write an EIS if a proposal is submitted. To write an EIS at this point in time without a site-specific proposal would be a waste of time and taxpayer money.

39. BLM's persistent failure to give attention to the deteriorating air quality in this region is very disturbing. The entire area, particularly north and east of the Green River/Rock Springs area is perpetually shrouded in a grayish pall from the region's industrial activity. There have been significant documented increases in respiratory problems by residents of the area. There has also been substantial and worrisome deterioration of air quality and increase in acidification in the Wind River range, and other downwind Class I airsheds. While we do not yet know the full cause of these problems, they are real and they are significant and worthy of considerable study before this kind of development can be authorized. BLM cannot justify a FONSI based on nonexistent data and where it has failed to consider the cumulative impacts of mineral and industrial activity in this area. Trona production is well known to have a significant deleterious effect on air quality, and this issue must be dealt with thoroughly.

BLM agrees with your assertion that visibility has become an issue in southwest Wyoming and is participating with the state steering committee to carry out the Green River Basin Visibility Study. However, BLM is unaware of significant documented respiratory problems among residents. BLM invites the respondent to provide evidence of such an occurrence. BLM has also initiated the Southwest Wyoming Resource Evaluation to address the cumulative impacts of mineral development in southwest Wyoming. BLM can not, however, stop all activity in southwestern Wyoming while it studies this issue.
The U.S. Forest Service has been monitoring certain air quality values within Bridger and Popo Agie Wilderness Areas (Class I and II airsheds) including precipitation chemistry, lake chemistry, vegetation, soils, geology, and visibility since 1984. Monitoring has indicated that these sub-alpine and granite features may be sensitive to polluted deposition but no statistical conclusions have been reached yet.

BLM is not authorizing any development at this point. BLM has added the following mitigation measure: BLM will not authorize any activity that would violate federal or state air quality standards as mandated by the Clean Air Act, Federal Land Policy and Management Act, and the Environmental Quality Act of Wyoming. The proponent of any future development proposal would be required to complete a detailed analysis of air quality issues, including potential direct, indirect, and cumulative effects, in conjunction with the environmental analysis. Cumulative impacts, at a minimum, will include impacts from existing mineral development and any foreseeable development.

40. Historic Trails - BLM admits it is without information to know whether impacts to historic trails would be significant (EA at 50), but claims the stipulations in Chapter II provide sufficient protection. Yet the stipulations provides that no surface occupancy will be allowed within 1/4 mile, or visual horizon, of either side of significant portions of historic trails "unless authorized by the AO." Here again, BLM "punts" this important issue, leaving the decision-making in the authorized officer without any public input on the actual location of the site. This does not satisfy NEPA and is insufficient to support a FONSI.

The stipulations employed are standard stipulations in effect throughout the area. The 1/4 mile exclusion zone (minus areas which meet certain exceptions) is taken from the National Park Service's National Trails Management Plan for the Oregon, Mormon, Pioneer, and Pony Express Trails. The Overland Trail, being in large part a variant of the California Trail, does not have a national management plan. BLM understands one is being prepared and is quite similar to the Oregon, Mormon, Pioneer, and Pony Express Trails in terms of management objectives. Accordingly, BLM is applying the only known standards for such resources in this instance. These standards are in compliance with LUPs and previous NEPA documents. A FONSI for historic trails would be dependent upon the actual location of surface facilities.

41. Vegetation - Here also, BLM admits that it cannot predict how much of the area would be disturbed over the life of the likely projects. EA at 62. It also acknowledges that a permanent reduction in vegetation would be a significant impact. Id. It claims appropriate measures will be required at the development stage, but never states whether these impacts could be reduced to a level of insignificance. Such an approach is only legitimate if, as required under the Conner, Sierra Club, and Union Oil cases cited above, BLM retains the right and ability in the leasing process to fully control and even prevent the development down the road if it appears that such impacts cannot be successfully minimized, and if the public is allowed to participate in a full NEPA analysis at the time of the specific proposal.

When the likely reasonable foreseeable development scenario was determined, 1,100 acres per mine, or a total 2,200 acres maximum, could be disturbed if a wet processing method is employed. Of that acreage, BLM made the assumption that those areas not needed for specific surface facilities would be reclaimed shortly after construction (a standard operating procedure) making the actual long-term disturbance much less than what was analyzed. Mitigation measure 40 (page 16) specifically states that all revegetation will be done using native species (no non-native species allowed). If development is eventually proposed, BLM will analyze the proposal on a site-specific basis and incorporate additional mitigation measures based upon site-specific concerns. This would most likely include seed mixes, habitat enhancement, etc., and would be subject to public review during the NEPA process. BLM would not authorize a major industrial project without full public participation.

42. Ground Water - It is apparent from the EA that ground water may be at risk from the trona mining activities. There is inadequate discussion of those risks and we see nothing in the stipulations in Chapter II that will actually prevent contamination of groundwater. Therefore the EA cannot be used to justify a FONSI in this regard.

Chapter II does contain stipulations that pertain to ground water protection. Items 15, 16, 23, 25, and 29 provide precautions and requirements that would aid in preventing contamination of ground water. As stated in Item 29 (a): A hydro-geologic study addressing the hydrologic characteristics of aquifers that may be affected by drilling/construction activities would be required prior to development. This study would dictate how such items as wells and shafts would be designed and engineered to protect aquifers containing good quality waters from contamination. Full discussion of risks to ground water and additional protective measures is beyond the scope of this document but will be fully explored at the mine plan review stage and associated NEPA review.

43. Wildlife - Special Status Species. In accordance with Sec. 7(a)(2) of the ESA, 16 U.S.C. 1536 (a)(2), BLM is required to assure that any action authorized by it is not likely to jeopardize the continued existence of any threatened or endangered species or to result in an adverse modification of the critical habitat of such species, and to use the best scientific and commercial data available to fulfill this requirement. Sierra Club, 104 IBLA 76 (1988).

Significance criteria for special status species is addressed in Chapter IV (pp 69). As of July 1995, the U.S. Fish and Wildlife Service (USFWS) changed its policy on special status species, eliminating Category 2 and 3 species from listing. The EA covers these species. If listed species are directly or indirectly affected by development, BLM must initiate formal consultation with the USFWS to determine further action. Until a site-
commitment of resources, represented by the leasing of lands for mineral development. If BLM is to use this approach it must retain in the lease the authority to prevent development of the leases. Without this BLM loses its ability to prevent harm to these species. See Conner v Burford, Sierra Club v Peterson, supra.

BLM has conducted surveys to gather baseline data for certain special status species and their potential habitat. For example, prairie dog surveys were conducted with emphasis on their potential to support black-footed ferret populations in 1986 and 1987, and raptor surveys were conducted in 1986. Crucial winter range information on big game species is determined on an annual basis by the WGFD in collaboration with BLM. Information on other species may be lacking thereby necessitating the need to conduct surveys to determine their status if development is eventually proposed.

The purpose of stipulations is to inform the lessee that sensitive species may exist within the lease area and special requirements apply in order to protect those species.

Finally, the project proponent is not sufficiently disinterested to be relied upon to give accurate accounts of such populations, when the report of a population may have direct bearing on the proponent’s ability to develop.

Any survey work must be done to BLM requirements regardless of what entity conducts the surveys.

Big Game - The issues relating to impacts on big game are perhaps of even greater concern because we know that the proposed activity will have an impact, and most likely a significant impact, on these species.

Crucial winter antelope range is found in a majority of the project area. EA at 36. The displacement of animals from crucial habitats during vital use periods is significant. EA at 67. Yet the sum total of analysis of such displacement is the following “feel-good” statement at 67: “With similar habitat available adjacent to the project area and the minimal activity throughout the general area, potential impacts would not be considered significant on a long-term basis provided that additional major surface disturbing activities do not occur in this area.” This statement is so chock full of qualifiers, generalities and unsubstantiated statements as to be rendered meaningless. What is similar habitat? Can BLM demonstrate to the public that equivalent crucial winter range is readily available? The EA is silent on this issue. What is meant by “minimal activity throughout the general area?” Surely BLM cannot be suggesting that with five other existing trona mines, an additional mine which has not yet begun operations, and extensive oil and gas development existing and/or likely in virtually every direction, constitutes “minimal activity.” What is meant by long-term? The development of a trona mine is a commitment of as much as 100 years. Is BLM suggesting this is a short term commitment? What is the meaning of “provided that additional major surface disturbing activities do not occur in this area?” Major surface
disturbances are occurring in this area faster than anyone (including BLM) can keep up with them, and a significant portion of this EA is addressed to resolving the disputes between the trona industry and the oil and gas industry as to who is going to be allowed to get there first.

Crucial antelope winter range exists in the majority of the analysis area but if development is proposed, most of the development would occur underground. Should surface development also be proposed, impacts to antelope winter range would be addressed. The EA mentions several times that if surface disturbance occurs, antelope will be displaced. To what extent can not be determined until a site-specific proposal is submitted. Mitigation measures (see Item 9, page 12) protect big game crucial winter habitat for short-term surface occupancy disturbances.

Antelope habitat within the analysis area is homogeneous, human development is limited, and oil and gas potential is considered low. The addition of up to two new mines, in addition to the Wold Mine, will add to the level of human development within the analysis area (and southwest Wyoming). Exactly how this development will impact antelope, or any other resource concern, can not be determined until a site-specific proposal is submitted.

The respondent is correct that development is occurring in southwest Wyoming but BLM disagrees that development is occurring faster than anyone can keep up with. Except for the proposed Wold Mine, development has occurred outside of the analysis area with most of it north of I-80. The respondent is correct in that development of a trona mine and processing facility is a long-term commitment in excess of 100 years.

49. BLM addresses "mitigation" in a similar offhand manner, deferring analysis and decision-making until sometime down the road, when it no longer has the power to require anything, and the public no longer has any participation:

The implementation of stipulations addressed in Chapters II and IV should help reduce the impact to wildlife and additional, site-specific measures could be developed during the environmental analysis of any future proposal...[N]o one at this time can say for sure how significant [the] impact would be. EA at 80. (emphasis added).

Yet there is not a single concession to the loss of big game habitat anywhere in those supposed stipulations, other than the meager and vague provision that surface uses resulting in long-term loss of wildlife habitat "may require the enhancement of habitat and habitat manipulation off-site as determined by the BLM AO." EA at 12. Thus, when such habitat losses occur, it again will be entirely in the discretion of the BLM officer whether to require any mitigation.

The mitigation measures outlined in the EA are designed to protect important resources. BLM can not prescribe site-specific measures until a site-specific proposal is submitted. Any future proposal will be subjected to full NEPA compliance including public review. BLM disagrees with the respondent's assertion that BLM is not acknowledging loss of big game habitat (EA, page 67). Page 80 states "[a]ll current and reasonably foreseeable development will lead to some level of impact on wildlife; however, no one at this time can say for sure how significant that impact will be."

50. We also question BLM's sincerity when it suggests it may require off-site mitigation. It is now well known that the Wyoming BLM operates under the assumption it cannot require off-site mitigation of environmental impacts, believing such requirements to be unconstitutional, or worse, blackmail. Accordingly, the statement in the EA that the AO will consider such measures is disingenuous at best.

The off-site habitat enhancement mitigation will be attached to the lease.

51. BLM's chicanery and general refusal to confront these issues in a responsible manner is becoming exceedingly tiresome, not to mention insulting to public's intelligence, and it will not withstand scrutiny in form of either the IBLA or the federal courts. It would be greatly appreciated if BLM would stop playing this sell game with respect to impacts and mitigation of impacts to wildlife. If these herds are going to be sacrificed to the mineral development industries, BLM has a moral as well as a legal obligation to confront the issue head on and let the citizens of Wyoming who care about these populations know what is going on.

BLM does not believe that leasing or development of the sodium resource will sacrifice wildlife herds. Development will likely displace some members of the herd but to what level, no one knows. Assessing the impact can only be done at the time of proposed development when site-specific protective measures will then be developed.

52. The EA tiers to a 12 year old Sodium Mineral Development EA and ROD. This is unacceptable, give the substantial changes in resource use over the past decade.

There have been no substantial changes with regard to sodium development. Oil and gas activity within southwest Wyoming has increased but not nearly to the level of activity found in the early 1980s. This leasing proposal is well within the scope of the Sodium Mineral Development EA.

53. The EA claims no leasing alternative would be inconsistent with the land use plan and therefore not authorized. In fact, there is no valid land use plan in existence. The MFP for the Green River Basin is almost 15 years old and is obsolete. The Green River RMP only exists in draft form and cannot be utilized to form the basis for any land use decision. And as far as we are able to ascertain from the materials in the EA,
the nine-year old Kemmerer RMP would not cover any of the lease tracts in question and would cover only a small part of the KSLA.

To cease leasing of the sodium resource within the KSLA would be contrary to the management direction found in the existing LUPs. Both the Kemmerer RMP, the Salt Wells MFP, and the Sodium Mineral Development EA authorize and provide direction for leasing public sodium reserves. Additionally, the No Action Alternative (existing management actions) in the Green River RMP DEIS also allows for leasing of the sodium resource. Approximately half of the analysis area is in the Kemmerer Resource Area (KRA) and public lands in tracts A, B, C, and a portion of tract D are also located in the KRA. The remaining tracts (D-G) are in the GRRA.

Moreover, the mere fact that land may be "made available" for mineral leasing in a land use plan does not eliminate BLM's ability to make subsequent decisions regarding suitability. BLM always retains its ability to consider and choose a "no action" alternative.

The EA does consider a No Action Alternative which was to not lease these specific tracts. The State Director is responsible to determine where and under what conditions sodium leasing will be permitted. These determinations are made during LUP efforts. A full No Action Alternative for no sodium leasing was analyzed during LUP stage and subject to full public review and participation. Compliance with NEPA was integrated into the planning process either by writing a programmatic EA for sodium development as was done and more recently under the Kemmerer RMP and now under the Green River RMP process. Leasing of the sodium resource is a valid use of public lands.

In light of the above, BLM cannot reasonably conclude that this project will have no significant environmental consequences. It has neither acquired the requisite data, engaged in thorough analysis, nor made assurances regarding the mitigation of likely impacts. There remain substantial questions regarding whether this activity will have a significant effect on the human environment, and therefore a decision not to prepare an EIS would be unreasonable. Foundation for North American Wild Sheep v. United States, 615 F.2d 498, 500 (9th Cir. 1980); Foundation for North American Wild Sheep v. United States Department of Agriculture, 681 F.2d 1172 (9th Cir 1982); Save the Yaak Committee v Block, 840 F.2d 714 (9th Cir. 1988). While an agency need not necessarily choose the least environmentally destructive route to take, it..."is critical that the Government officials determining whether these actions should go forward have a full and complete grasp of the possible consequences of the activity in order that they may take steps to ameliorate adverse impacts to the extent possible, and, if certain impacts cannot be avoided, decide the advisability of proceeding and thereby accept such impacts." State of Wyoming Game & Fish Commission, 91 IBLA 364 (1986).

BLM is not suggesting that development of the sodium resource will not have a significant impact. On the contrary, BLM acknowledges that development very may cause significant impacts to air quality, social/economic issues, and wildlife. However, leasing of these particular tracts will not have a significant impact upon the human environment; it is an administrative action that causes no surface disturbance. Any future development will be subject to NEPA compliance and most likely, an EIS would be prepared to address these and other concerns to the fullest extent possible.

56. Consequently, we believe BLM must approach the leasing of these lands and the authorization of these projects under on of the following methods. It must either:

- Issue a full environmental impacts statement for the likely development scenario resulting from the leasing of these lands, which will include the gathering of adequate data on wildlife, air quality and other critical issues which are so startlingly absent from the EA, as well as specific and enforceable mitigation measures. In short, BLM must go out and get the data it needs in order to at least make an informed decision.

- Postpone the completion of the NEPA analysis and the issuance of leases until BLM is presented with specific proposals for development. This approach also must provide for the collection of complete data and specific and enforceable mitigation measures, as above. In this regard, we agree with PAW's comments that there is no apparent reason why the leasing needs to be done at this stage.

- Issue the leases now, but issue them with full no surface occupancy stipulations, and reserve full ability to limit or prevent development if environmental concerns cannot be remedied (as required by Sierra Club v. Peterson, Conner v. Barford and others).

BLM has completed NEPA analysis on leasing of the specific tracts. Should development be proposed, BLM will further analyze the impacts based upon a site-specific proposal. Analysis will incorporate full public disclosure and opportunity for full public participation.

WOLD TRONA COMPANY, INC.

57. Chapter II Other Mitigation Item 25 page 14. "During shaft construction, any ground water encountered will be grouted off and sealed." Even though this item is taken directly from the WTC EA and DR, WTC still believes that this item should be modified to read "During shaft construction, ground water flows will be dealt with in a manner approved by the WDEQ/LQD and the BLM Mine Plan." To require that "any" ground water be grouted and sealed is excessive and unnecessary. If flows of significance are encountered, grouting and sealing will be required and will be to the operator's advantage.
BLM agrees the stipulation should be modified to reflect the concerns expressed by both Wold Minerals Company and Solvay Minerals. Therefore, the stipulation is modified as follows: During shaft excavation, high ground water inflows will be grouted and sealed if technically feasible.

58. Chapter II Other Mitigation Item 36 Page 16. "A soil conservation plan tailored to each mine site shall be developed and approved by the BLM AO prior to construction. The soil conservation plan will include: a, b, and c." This subject is covered in incredible detail by the WDEQ/LQD in the Application for Permit to Mine. Is the BLM also requiring a new plan or would the AO accept the plan approved by WDEQ? Part a. lists "soil test sites for monitoring." What does one monitor soil for? WTC recommends that this item be modified as follows: "A soil conservation plan tailored to each mine site shall be developed and approved by the BLM AO prior to construction. As an alternative, the AO may accept the WDEQ/LQD approved Application for Permit to Mine which covers the leasehold area. If such a plan is not available, the soil conservation plan will include: a."

The soil conservation plan submitted to WDEQ/LQD should be sufficient for BLM. Upon further review of mitigation item 36 (page 16), BLM feels this limits the lessee's actions to current technology. Therefore, this mitigation measure is modified to read: A soil conservation plan tailored to each mine site shall be developed and approved by the BLM AO prior to construction. The AO may accept the WDEQ/LQD approved application for Permit to Mine.

59. Chapter II Other Mitigation Item 44 Page 17. This is directly from the WTC EA but does this prelude a landfill or other underground disposal approved by WDEQ/LQD and MSHA? It should read "at the AO's option".

Alternative methods of disposal will be addressed during the mine plan review and approval process.

60. Chapter II Other Mitigation Item 47 Page 18. "The most recognized method(s) of hazing, harassing, or distracting the birds will be employed to diminish the possibility of migratory waterfowl use of tailings ponds. Records will be kept on the disposition of all wildlife involved in tailings ponds incidents and submitted to the Fish and Wildlife Service." WTC is not aware of anything short of netting tailings ponds that would prevent both migratory waterfowl as well as many other migratory bird species and the animals that they often seek as food from using the ponds. Ponds of large size cannot be patrolled well enough to prevent deaths associated with the waters of the tailings ponds. In the oil and gas fields, netting is the only means found capable of essentially preventing bird deaths and deaths of animals that the birds may feed upon. Although netting would be expensive and difficult, WTC recommends that this item be modified to encourage more stringent methods of bird and animal protection. Bald and Golden Eagles, Burrowing Owls, Plovers, Strikies and other birds of high national

interest are likely to inhabit the area. Thus, to assure the maximum safety of these birds and associated animals, netting with a sufficient density to exclude the smaller birds and animals may be the only "recognized method" known to be effective. Since these would be new ponds, perhaps they could be designed to accommodate netting.

Designing new ponds with consideration to netting would benefit bird species but actions should not be limited to netting.

61. Chapter III Page 41 paragraph labeled Black-Footed Ferret. The last line states that "Existing surveys and field inspections have not documented any prairie dog towns within the analysis area." The WTC WDEQ/LQD Application for Permit to Mine Appendix D-19 identifies prairie dog towns within the analysis area. The statements should read "Existing surveys and field inspections have not documented any prairie dog towns within the analysis area that exceed the eight active burrows per acre which is the density requiring a ferret search or that would likely support a ferret population." See Clark, T.W., T. M. Campbell III, M.H. Schroeder, and L. Richardson, 1984. Handbook of methods for locating black-footed ferrets. BLM Wildl. Tech. Bull. No. 1, Bar. Land Mgmt., Cheyenne. 55pp.

The respondent is correct. The text has been changed as follows: Existing survey and field inspections have not documented any prairie dog towns within the analysis area that exceed the eight active burrows per acre which is the density requiring a black-footed ferret search or that would likely support a ferret population.

62. Chapter III Page 42 paragraph labeled Utah Ladies' Tresses. None of the analysis area is below 6000 feet in elevation except for a small portion lying below the water level in Flaming Gorge Reservoir.

This statement may be true, but the possibility still exists for Utah Ladies' Tresses (Spiranthes di/uvia/is) to exist along waterways in the area, regardless of the elevation. This plant species is listed as threatened. Therefore, the Endangered Species Act, via USFWS, require that BLM look for it in all potential habitat.

63. Chapter IV page 54 paragraph labeled Subsidence and Tailings Pond Reclamation. The relationship between tailings pond water injection into the mined-out areas and subsidence has not been mentioned. There is evidence that the injection of these fluids may increase the subsidence amount by softening of the floor and "pillar punching". Recently, one of the mines had a breakthrough into the active mining area by injected tailings waters. With increased floor failure and/or flooding of active areas, this practice could render some of the trona unminable. See item 12 page 12 Chapter II.

If water injection into mined-out areas is eventually proposed, the impact upon subsidence would be addressed during review of the mine plan and NEPA compliance.
64. One major concern seen in this document and in the documents required by other agencies is the increased number of "stand alone" plans. BLM now requires a soil conservation plan and a Wildlife Mitigation, Monitoring and Protection Plan in addition to the NEPA document and the Mine Plan. WDEQ/LQD through the Wyoming Game and Fish Department, also requires the Wildlife Mitigation, Monitoring and Protection Plan in addition to Appendix 9 of the Application for Permit To Mine. US Fish and Wildlife Service requires a stand alone Raptor Management Plan separate from the Wildlife Mitigation, Monitoring and Protection Plan required by BLM and WDEQ/LQD and WGFD. This increasing duplication for a natural resource developer is with no predictable improvement in environmental protection.

BLM believes that all required plans could be combined into one comprehensive plan and submitted to all agencies having jurisdiction.

SOLVAY MINERALS

65. The proposed stipulation on page 14, #25, "During shaft excavation, any ground water encountered will be grouted off and sealed." is too restrictive. Solvay attempted to grout low ground water flows in the Tower Sandstone during original shaft sinking. The exhaust shaft was grouted, the larger production shaft was not. There is no appreciable difference in water inflow into each shaft. Some formations may contain ground water but have rock which is very tight and grouting accomplishes nothing. Solvay suggests stipulation 25 be modified to read as follows: During shaft excavation, high ground water inflows will be grouted and sealed if technically feasible.

See response to comment 57.

66. Under Additional Mitigation Measures on pg. 71 a recommendation is made that as a mitigation measure for removing water from the Colorado River System a one-time payment to the FWS Colorado River Endangered Fish Recovery Program be made. This stipulation, if implemented, should only be applicable if actual soda ash capacity is constructed requiring additional water withdrawal beyond presently permitted levels from the Green River. We would question the justification of this mitigation measure for two reasons: (1) it is probably contrary to Wyoming Water Law, and (2) the candidate fish species of concern occur in the Green River below Flaming Gorge Dam and are primarily affected by water discharge decisions made by the Bureau of Reclamation.

The Governors of the states involved signed-off on the mitigation described as part of the Recovery and Implementation Plan (RIP) for endangered Colorado River fishes. This applies to all new projects for the amount of water that is depleted. Under the RIP, "any depletion" that reduces the surface flow in the Green River (including tributaries) is a "may effect" situation and the mitigation fee is imposed. The only exception is that the payment may be waived if the average annual depletion is less than 125 acre-feet. The decision is with U.S. Fish and Wildlife Service (USFWS). This stipulation would be part of any Section 7 consultation with the USFWS and its acceptance and payment would be required for concurrence with the Biological Assessment. Without concurrence, the project would not go forward.

EPA

The Region VIII Office of the Environmental Protection Agency (EPA) has reviewed the subject environmental assessment. We offer the following comments for your consideration in finalizing the document.

67. EPA has concerns about the cumulative impact of additional trona development on regional air quality. As the EA notes on page 78, "The potential for development of up to two new trona mines in addition to the existing and proposed industrial activity could cause significant degradation to the overall air quality in the region, and particularly to the visual quality at Flaming Gorge NRA and the WSAs located south and southeast of the lease analysis area." During a site visit last month with your District office, we witnessed an example of the visibility impairment in the vicinity of the operating trona mines.

Given the preliminary nature of this EA, no quantification of potential direct air quality impacts is possible at this time. Once a proposed plan of operation is submitted indicating production rates, mining and development processes, transportation methods, employment levels, etc., a detailed assessment of potential impacts and specific control technologies will be prepared. In all cases, applicable local, state, and federal air quality laws, regulations, and statutes will apply and be strictly enforced.

Enforcement of air quality laws, including visibility regulations, for existing trona mines is the responsibility of the Wyoming Department of Environmental Quality, Air Quality Division, under federal oversight by EPA.

68. The document indicates on page 21 that air quality monitoring is not being conducted in the area, but that pollutant levels are expected to be "low and within standards." Without sufficient baseline Monitoring data, regional air quality impacts can not be adequately determined EPA believes that the leasing stage is the appropriate time to determine existing air quality conditions and potential monitoring requirements necessary to meet air quality standards.

Assumed background air pollutant concentration and visibility monitoring results are presented on Table 1, Representative Air Pollutant Background Concentrations (page 21). The EA also identified additional mitigation measures (page 57) that state: "If the
exposure to the public is reasonably likely, additional requirements for continuous particulate and/or gaseous pollutant monitoring is recommended."

69. For the purpose of this analysis, EPA recommends the following:

1. At a minimum, all emissions associated with the project should be quantified and displayed within the EA. These emissions might include the following: construction, traffic, material hauling, and operation of the mine. These emissions should then be input to a screening dispersion model (SCREEN2) to estimate the potential impacts on the National Ambient Air Quality Standards (NAAQS).

2. If the baseline date for the modeled pollutants has been triggered within the project area, a Prevention of Significant Deterioration (PSD) Class I, II increment analysis should be performed to address the potential air impacts.

3. Also, a screening visibility analysis (VISCREEN) should be conducted to estimate the potential visibility impairment expected within nearby Class I areas.

As stated on page 56: "Given the preliminary nature of this EA, no quantification of potential direct air quality impacts is possible at this time." Once a proposed plan of operation is submitted, BLM will conduct a detailed assessment of potential impacts. Based on the types and amounts of potential air pollutant emissions, a comparison to applicable ambient air quality standards will be made.

Based upon the types and amounts of potential emissions, a comparison to applicable PSD increments will be made. However, tracking of cumulative increment consumption is the responsibility of the Wyoming Department of Environmental Quality, Air Quality Division.

Based upon the types and amounts of emissions, an assessment of potential visibility impacts to Class I areas will be made.

The following letters were submitted through State of Wyoming, Office of the Governor.

OFFICE OF THE GOVERNOR

On behalf of the State of Wyoming, please be advised that we have reviewed the Environmental Assessment for Sodium Leasing in the Green River Basin of Southwestern Wyoming and we encourage the work to move forward. In accordance with our own comment period given to all affected state agencies, I have attached their comments for your review. I trust that you will give them every consideration.

WYOMING GAME & FISH DEPARTMENT

Terrestrial Considerations - The BLM is proposing to offer three tracts in Sweetwater County, near Flaming Gorge Reservoir, for sodium leasing. Leasing of these tracts is to accommodate expansion of existing underground mining activities. The Wyoming Game and Fish Department has previously identified wildlife concerns associated with this proposed leasing in a letter dated Oct. 12, 1994. Most of these concerns were addressed in the EA. Additional terrestrial concerns follow.

70. Wildlife baseline information 40 CFR 1500.1 requires that environmental information be available to public officials and citizens before decisions are made and before actions are taken. In our previous letter, WGFD encouraged the BLM to conduct surveys to adequately describe the wildlife resource, and facilitate determination of potential impacts of development of these leases. The BLM included general wildlife information in the EA, but has not conducted specific surveys. Without this data, the EA does not provide adequate wildlife information to describe the resource and identify potential impacts.

As with the USFWs, BLM is dependent upon the WGFD for the most recent summer, winter, and crucial winter ranges for big game species to assist in identifying wildlife resources and issues. Ground surveys have been conducted for certain species (see response to comment 74). To conduct site-specific surveys for all species potentially existing in the analysis area would be premature at this point. Leasing is an administrative action which does not authorize surface disturbance. Should surface development be proposed in the future (10-15 years plus) then ground surveys for affected species would be warranted and appropriate mitigation measures would then be applied. It makes little sense to survey an area when the exact location, time frames, or type of facility is unknown.

71. Mitigation. BLM should include measures to mitigate adverse impacts to important wildlife resources as stipulations to the leases. Mitigation should consider direct impacts to wildlife and wildlife habitat, and impacts to habitat effectiveness or suitability. Measures to protect specific wildlife habitats necessary for one part of a species survival (i.e., sage grouse leks) are important, but do not provide mitigation for loss of other important habitats (i.e., brood rearing, winter).

Mitigating potential adverse impacts to wildlife resources was one objective of this EA. Protecting biological functions of individual species during vulnerable periods is the primary purpose of mitigation measures. Other important habitat factors are not considered less important by any means, but are much more difficult to assess. Sage grouse leks and nesting habitat are mapped and an attempt has been made in conjunction with the WGFD to update the data on an annual basis. Brood rearing and winter range are more difficult to monitor. BLM would be willing to discuss limiting factors affecting individual species and develop mitigation to improve conditions with the Wyoming Game and Fish Department.
Mitigation for Crucial Winter Range. The proposed lease area provides crucial winter range for pronghorn antelope. Wyoming Game and Fish Commission mitigation policy categorizes crucial winter range as "vital," meaning habitat in this category directly limits a community, population, or subpopulation, and restoration or replacement may not be possible. The Department is directed by the Commission to recommend no loss of habitat function. Pursuant to Commission policy, the Department recommends avoidance of direct surface disturbance within this habitat. If surface disturbance is unavoidable, the Department recommends replacement of the affected habitat or enhancement of similar habitat within the same crucial winter range complex. BLM should require mitigation for pronghorn antelope crucial winter range as a lease stipulation should surface disturbance become unavoidable.

BLM also considers crucial winter range as vital to antelope populations and if surface disturbance is unavoidable, mitigation could require off-site habitat enhancement. It is entirely possible that potential surface disturbance could occur on private lands. However, should surface facilities be eventually constructed on public lands, all areas not needed for operational purposes would be reseeded with native species. BLM acknowledges the problems with replacement or enhancement of crucial winter range in that it is a long-term rehabilitation process. Vegetation in antelope crucial winter range, such as sagebrush and bitter brush, take up to 30 years to develop into a mature state. Revegetation of any disturbed site or enhancement of similar habitat within the same crucial winter range complex encounters the same dilemma.

Criteria for Construction Activity on Winter Range. BLM should identify what criteria the AO will use to determine if construction will be permitted on crucial pronghorn antelope winter range during the seasonal restriction period.

Criteria used to determine if a one time exception to seasonal restriction for construction activities in crucial winter range is based upon multiple factors including weather and precipitation conditions, presence of animals, type and duration of construction, equipment needed, location, longevity, traffic, and personnel needed to complete construction.

Bald Eagles. Impacts to bald eagles only consider nesting (pg. 70). However, relatively few bald eagles nest in Wyoming, but they are common winter residents. BLM should identify if any bald eagle roosts or foraging sites occur on the proposed leasing area, and should provide monitoring and mitigation plans, if necessary.

Raptor surveys conducted by BLM have been directed with primary emphasis on nesting sites and winter roost areas. Bald eagles are extremely euryphagous and foraging sites are extremely difficult to monitor. Literature shows that birds finding an abundant food source will not restrict their feeding to one area but may continue to sample new areas. Eagles roost in similar habitat that they nest in and would not be very difficult to monitor during the winter months if necessary. Suitable roost sites within the analysis area have been flown several times to determine whether active roost sites exist. Some were found for golden eagles but not for bald eagles. Bald eagles nest in cottonwoods, habitat not found within the analysis area.

Cumulative Impacts. Cumulative impacts to wildlife resources are poorly identified (p. 80). 40 CFR 1508.7 identifies cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." BLM should identify other activities proposed for this lease and surrounding areas (I.e., oil and gas, mineral development, etc.), and provide an assessment of cumulative impacts to wildlife resources, particularly pronghorn antelope.

Construction of the Wold Mine, and expansion of existing trona facilities and construction of a methanol plant (both outside the analysis area) are the only industrial development that BLM is aware of within and adjacent to the analysis area. Oil and gas development is occurring in the western portion of the KSLA and northeast of the KSLA boundary. No oil and gas leasing is proposed within the analysis area and the potential for oil and gas development is considered low. Reasonable foreseeable development of up to two new mines was addressed in the EA with a maximum disturbance of 2,200 acres. This disturbance would displace antelope but its extent can not be analyzed until a site-specific proposal is submitted.

WYOMING STATE GEOLOGICAL SURVEY
We have reviewed this document and have the following comments:

While we support the Bureau of Land Management's decision to lease additional trona in this portion of the Green River Basin, we are concerned about the effect that the 53 stipulations and mitigation listed on pages 10-18 of the environmental assessment will likely have on leasing interest and values. The sheer number is unbelievable. Are they all necessary? The only positive aspect to listing all these things is that potential bidders may have a better idea of what they are getting into. They may also choose not to bid. BLM is mandated to protect all resource values while allowing for mineral development. One of the objectives of this EA is to assess the need for these mitigation measures. BLM has modified several measures based upon public comment but found that these measures are necessary to protect other resources. Refer to the decision for mitigation measures.

In the second paragraph on page 26, is there a reference that can be cited to document the 33 trona beds mentioned in this paragraph?

The text has been modified to read 42 trona beds.
80. A review of the subject report revealed no areas of specific concern to this agency. If, however, leasing and subsequent sodium mining were to occur, the operators would be required to obtain the proper water use related permits from this agency.

Thank you for your comment.

FOREST SERVICE - BRIDGER-TETON NATIONAL FOREST

Thank you for providing our office with the EA for Sodium Leasing in the Green River Basin of Southwestern Wyoming. My staff has reviewed the document and public comments and have the following suggestions.

81. Trona leasing proposal is located about 70 miles SSW of one Class I area, the Bridger Wilderness area, a Class II area, is also at the southern end of the Wind River mountain range; Fitzpatrick Class I Wilderness area is also located within the Wind River Range, but further north. We believe that trona development within the proposed lease area has the potential for significant impacts to the Bridger Wilderness and Popo Agie Wilderness and should be addressed within the EA. Potential impacts should be addressed with the context of direct, indirect and cumulative effects. At a minimum, cumulative impacts should include impacts from existing mineral development, such as trona mining and processing, coal fired generation plants, oil and gas development and processing, proposed oil and gas leasing or development (i.e., Moxa Arch and Fontenelle EIS's), and any foreseeable future oil and gas or sodium leases. Without this information, it is impossible to determine the significance of impacts.

We realize that the EA is not a development proposal, therefore making it difficult to accurately quantify impacts. We also agree that the proponents of any future development would be required to complete detailed analysis of air quality issues. However, a range of development could be displayed in the leasing EA to show the relative significance of air quality impacts.

BLM is aware of the location of Class I and II wilderness areas managed by the U.S. Forest Service, Bridger-Teton National Forest. BLM has acknowledged the potential for significant impacts to air quality (EA at page 78). However, BLM's position that, given the fact that it does not have a specific development proposal, the tiered approach to environmental review, generally condoned in the regulations (40 CFR 1502.20 and 1508.28), is calculated to provide the most informed decision-making possible in relation to sodium leasing. Detailed analysis of the potential environmental consequences of development on air quality will be conducted when BLM receives a concrete, site-specific proposal.

There are several reasons why a detailed analysis of potential air quality impacts is not appropriate at the leasing stage:

1. No one knows if or when a development proposal may be submitted (e.g., in 5, 10, 15, or 20 years plus) to provide a basis for a meaningful and useful environmental appraisal.
2. There are many different development scenarios possible that would require considerable time to analyze, when in fact something different may ultimately be proposed constituting a mis-allocation of resources (e.g., the leased mineral could be processed at an existing facility, the mineral could be moved out of the area for processing, the lessee could use a dry-processing method rather than a wet-processing method, etc.).
3. The potential exists for changes and improvements in technology to occur that could greatly reduce emission concerns before a development proposal is submitted (e.g., switching from coal to natural gas for drying the soda ash).
4. The mitigating lease restrictions contained in the Decision Record require further detailed environmental analysis before authorization to construct or mine can be considered, thus assuring that the environmental consequences of development on air quality will enter the decision-making process.
5. BLM has added the following mitigation measure (see Decision Record, Appendix A, #68): BLM will not authorize any activity that would violate federal or state air quality standards as mandated by the Clean Air Act, Federal Land Policy and Management Act, and the Environmental Quality Act of Wyoming. The proponent of any future development proposal would be required to complete a detailed analysis of air quality issues, including potential direct, indirect, and cumulative effects, in conjunction with the environmental analysis. Cumulative impacts, at a minimum, will include impacts from existing mineral development and any foreseeable development.
82. Our air quality related values (AQRV's) monitored since 1984 within the Bridger and Popo Agie Wilderness areas include precipitation chemistry, lake chemistry, vegetation, soils, geology, and visibility. Monitoring results indicate that these sub-alpine and granitic based features are sensitive to polluted deposition. We have documented increased levels of deposition pollutants above background levels within these wilderness areas. The data suggests decreasing AQRV's, particularly visibility and precipitation chemistry. We are pursuing further analysis to determine statistical significance of these apparent trends.

This portion of the comment letter provided part of BLM’s response to comment 39.