ACT/015/032

0136

United States Department of Agriculture
Forest Service
Manti-La Sal National Forest
599 West Price River Dr.
Price, Utah 84501
Phone # (801) 637-2817
Fax # (801) 637-4940

File Code: 2820-4

Attachment

Date: September 23, 1997

ACT/015/032 #2
Copy Cover Letter to Dana & Ken & Steve D.

Dear Participant:

Enclosed for your information is a copy of the Decision Notice/Finding of No Significant Impact (DN/FONSI) for the Mill Fork Coal Lease Tract. This document has been sent to you because you have participated in the public involvement process for evaluation of this coal lease tract by the Bureau of Land Management and Forest Service. You should have already received a copy of the Environmental Assessment for the tract, so we have not enclosed another copy.

As stated in the enclosed DN/FONSI, Janette Kaiser (Forest Supervisor, Manti-La Sal National Forest) has consented to competitive leasing of the tract by BLM as outlined in the Environmental Assessment, Alternative 4. By this alternative, approximately 880 acres of the delineated tract would be excluded in order to protect the culinary water supply at Little Bear Spring under special-use permit to the Castle Valley Special Services District.

This decision is subject to appeal to the Forest Service as stated on the signature page of the DN/FONSI.

We appreciate your participation in the evaluation process. If you would like to discuss the Forest Service decision or would like additional information, please contact Jeff DeFreest at the Forest Supervisor's Office in Price, Utah at the address or phone number shown on the letterhead.

Sincerely,

/s/ Donald L. Fullmer

for
JANETTE S. KAISER
Forest Supervisor

Enclosure

cc:
D-2/3
Bill Lamb, BLM Utah State Office

JOINT BUREAU OF LAND MANAGEMENT/FOREST SERVICE
FINDING OF NO SIGNIFICANT IMPACT/DECISION NOTICE/RATIONALE

COAL LEASE APPLICATION UTU-71307
MILL FORK TRACT, LEASE-BY-APPLICATION 11
EMERY COUNTY, UTAH

USDA-FOREST SERVICE, INTERMOUNTAIN REGION
MANTI-LA SAL NATIONAL FOREST
FERRON-PRICE RANGER DISTRICT

USDI-BUREAU OF LAND MANAGEMENT
UTAH STATE OFFICE

Responsible Officials:

Janette S. Kaiser - Forest Supervisor
Manti-La Sal National Forest
599 W. Price River Drive
Price, UT 84501
(801)637-2817

G. William Lamb - State Director
USDI- Bureau of Land Mangement
Utah State Office
324 South State Street
Salt Lake City, Utah 84145-0155

Cooperating Agency:

USDI-Office of Surface Mining, Reclamation and Enforcement
1999 Broadway, Suite 3320
Denver, CO 80202-5733

For Further Information Contact:

J.Wade DeFreest, District Geologist
Ferron/Price Ranger District
599 W. Price River Drive
Price, UT 84501
(801) 637-2817

I. Introduction

On February 4, 1993, Genwal Resources, Inc. applied to the BLM for leasing of 4,053 acres, under the Lease-on-Application process contained in Federal Regulations 43 CFR 3425, to extend the life of their Crandall Canyon Mine. In response to the application, an interagency team delineated the Mill Fork Tract to be considered for leasing. The delineated tract encompasses 6,440 acres, containing an estimated 68 million minable tons of Federal coal underlying lands administered by the Manti-La Sal National Forest. It lies directly adjacent to the approved permit area for Genwal's Crandall Canyon Mine. If Genwal Resources, Inc. obtains the tract through competitive bid, it would be accessed through underground workings in the adjacent Mine.

The proposed action is subject to the following authorities: Mineral Leasing Act of 1920, as amended; Federal Coal Leasing Amendments Act of 1976 (FCLAA); Multiple-Use Sustained Yield Act of 1960; National Forest Management Act of 1976 (NFMA); National Environmental Policy Act of 1969 (NEPA); and Federal Regulations 43 CFR 3400. Development of the lease, which is a separate permitting action, would be subject to these actions and the following: Federal Land Policy and Management Act of 1976 (FLPMA); Surface Mining Control and Reclamation Act of 1977 (SMCRA); Federal Regulations 30 CFR 700 to End (SMCRA Regulations), and the State of Utah Coal Mining and Reclamation Regulatory Program.

An Environmental Assessment (EA) which discusses the effects of leasing the Mill Fork Tract (Lease Application UTU-71307) was prepared (June, 1997) jointly by the Forest Service and the Bureau of Land Management (BLM). The Office of Surface Mining, Reclamation and Enforcement (OSM) participated as a cooperating agency. The decisions recorded in this document are based on the environmental analyses contained in the Environmental Assessment for the tract; the Final Environmental Impact Statement, Manti-La Sal National Forest (Forest Plan FEIS), 1986; and Final Environmental Impact Statement for the San Rafael Proposed Resource Management Plan, 1989. The Environmental Assessment for Coal Lease Application UTU-71307, Mill Fork Tract, is available through the Forest Supervisor's Office of the Manti-La Sal National Forest in Price, Utah, and the Bureau of Land Management, Utah State Office in Salt Lake City, Utah.

II. Decisions

After careful review of the proposal, public comments and the analysis contained in the environmental assessment and the project file, the Forest Service has decided to consent to, and the Bureau of Land Management has decided to offer the lease tract as described in the EA under Alternative 4. The tract to be offered for leasing and subsequent mining under this alternative is described as follows:

T. 16 S., R. 6 E., SLM,
Section 1, SE1/4
Section 10, E1/2 E1/2 SE1/4,
Section 11, all;
Section 12, all;
Section 13, all;
Section 14, all;
Section 15, E1/2E1/2;
Section 22, lots 1,2, 4-7, E1/2NE1/4, SW1/4NE1/4, N1/2SE1/4;
Section 23, N1/2, N1/2S1/2
Section 24, N1/2.

T. 16 S., R. 7 E., SLM,
Section 6, lots 5-8, S1/2SE1/4;
Section 7, all;
Section 8, NW1/4NW1/4;
Section 18, lots 1-2, NE1/4.

Containing 5,560 acres, more or less, containing an estimated 63 million minable tons of coal.

This alternative would make additional Federal coal reserves available for competitive leasing, provide an opportunity to extend the life of the Crandall Canyon Mine, and be consistent with Forest Service management goals and prescriptions for the area. Any lease issued would include the 18 Forest Service Special Stipulations identified in the Forest Plan, including the Stipulation for Lands of the National Forest System Under Jurisdiction of the Department of Agriculture, and 2 site-specific lease stipulations in addition to standard lease terms (BLM Lease Form 3400-12). The two additional stipulations limit mining within a 22 degree angle of draw off the Joes Valley Fault, and require protecting the Spotted Bat (Euderma maculatum), a Region 4 sensitive species. The Forest Service Special Stipulations pertinent to this lease are included as Appendix A of the EA, some minor wording changes have been made to stipulation 20 for clarification, and is attached to this decision for reference. Stipulation 20 was updated to reflect that the required bat surveys have been done. All of the stipulations are consistent with the Forest Plan.

This alternative would involve offering the delineated tract for lease, with the exception of about 880 acres which encompass the Little Bear Canyon watershed. That portion of the delineated tract which lies within this area was excluded because of potential that mining could alter the recharge area for the Little Bear Spring, a culinary water source for the cities of Huntington, Cleveland and Elmo.

III. Decision Rationale

These decisions provide for recovery of a coal resource needed for energy production and economic benefit. If leasing of these lands for coal mining were not allowed it would shorten the life of the Crandall Canyon mine, likely causing it to close in 5 to 7 years. This would impact existing jobs, revenue, and tax base in Emery County. By consenting to, and offering these lands for lease, the mine life will extend about 17 years, continue to provide jobs, and ensure long-term economic well being of Emery County. It is in the public interest to lease these lands for coal mining. The Multiple Use Sustained Yield Act of 1960 provides for mineral activity on National Forest System Lands. Alternative 4, the modified lease tract, was chosen because it best protects the non-mineral resources in the lease area, especially the water resources. Alternative 4 removes the recharge area for the Little Bear Spring (a culinary water source) from the lease offering, therefore preventing mining within the Little Bear watershed. It is necessary to eliminate mining in the recharge area to ensure protection of the spring flow and water quality. Since the EA was released to the public, additional information has become available regarding the hydrology of the lease tract, and is referenced in Appendix C (Response to Comments) of the EA. This new information further supports the conclusions of the EA and respective leasing decisions. Similarly, new information has been incorporated into the Biological Evaluation/Biological Assessment contained in the project file as noted in Appendix C, a no effect determination for the species considered was still reached.

Alternative 1 was not chosen because it would not have met the purpose and need, and would not have benefitted the local economy by sterilizing (bypassing) usable reserves, causing a mine to close.

Alternative 2 was not a viable or selectable alternative in the EA. It was included for analysis and comparison purposes only.

Alternative 3 was not chosen because as it did not offer adequate environmental protection for the culinary water source in Little Bear Canyon, a water source important to the welfare of local communities.

IV. Alternatives Considered

Based on analyses of issues raised during public scoping and by the interdisciplinary team, three action alternatives were developed. Concerns for water resources were designated as significant issues and drove development of specific alternatives. As a result, the no action alternative and three action alternatives represent a reasonable range of alternatives. The alternatives are discussed on pages II-1 and 2 of the EA.

* Alternative 1 - No Action

  The No Action Alternative is required by NEPA (40 CFR 1502.14).

  The Forest Service would not consent to, and the BLM would not approve leasing the Mill Fork Tract as submitted. Subsequently, Alternative 1 would not allow for mining of the tract, and therefore not provide coal reserves for the mine. No mitigation measures or monitoring would be required as part of this alternative other than meeting Forest Plan direction, standards, and guidelines.

* Alternative 2 - Offer for Lease with Standard BLM Lease Terms, Conditions and Stipulations (stated on Form 3400-12)

  The Forest Service would consent to, and the BLM would offer the tract of 6,440 acres for competetive bid. The lease would only have the standard BLM terms, conditions and stipulations attached. Forest Service stipulations for protection of non-coal resources would not be included. This alternative was included for analysis purposes only, as it is not consistent with the Forest Plan.

* Alternative 3 - Offer for Lease with Application of Special Coal Lease Stipulations for Protection of Non-Coal Resources

  The Forest Service would consent to, and the BLM would approve offering the tract as submitted for competitive bid. The lease would have the 18 Special Coal Lease Stipula-

tions from Appendix B of the Forest Plan attached to protect non-coal resources. This alternative may require a Forest Plan amendment if mining were allowed under Little Bear Canyon watershed since it is designated a Municipal Water Supply (MWS).

* Alternative 4 - Offer a modified tract for lease with application of Special Coal Lease Stipulations for Protection of Non-Coal Resources

The Forest Service would consent to, and the BLM would offer a modified tract for leasing including the 20 stipulations dicussed on page 3. Approximately 880 acres would be removed from the lease to protect the integrity of the Little Bear Canyon watershed and spring. This alternative would be wholly consistent with the Forest Plan.

V. Public Participation

Project scoping was initiated on November 19, 1996 and concluded on December 13, 1996. Scoping included publishing notices in the *Sun Advocate* and *Emery County* Progress newspapers, and mailing letters to interested parties. Thirty-one parties commented.

The EA for the tract and the Proposed Finding of No Significant Impact (PFONSI) were released on June 5, 1997, with the 30-day comment period ending on July 7, 1997. All parties commenting during scoping received copies of the EA and PFONSI. The PFONSI identified Alternative 4 as the Forest Service preferred alternative. Eight comments, six written and 2 verbal, were received. A list of commentors and responses to comments are included in Appendix C of the EA.

VI. Finding of No Significant Impact

The need for an EIS is, in part, based on the potential for significant impacts as revealed by an analysis of impacts disclosed in an environmental assessment (EA). If significant impacts are not disclosed in the EA, then the EA is sufficient documentation upon which to base a finding of no significant impact and decision. Based on the following discussion and the direct, indirect, and cumulative effects disclosed in the EA, a finding regarding "significance" was made. Implementation of Alternative 4 was determined not to be a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination was made based on the following considerations:

Significance, as used in NEPA, defines and requires consideration of both context and intensity. Context means the significance of the action must be analyzed in several contexts such as the affected region, interests, and locality. Intensity refers to the severity of the impacts disclosed in the analysis.

Context:

Coal mining and related activities have been intensive and common on the Wasatch Plateau since the late 1800's; county and city governments, and local residents are accustomed to these activities and their environmental, social, and economic effects. The potential environmental effects to affected surface resources are local in scope, that is the effects are limited to the Huntington drainage. Social and economic effects are also local in scope, primarily

involving Carbon, Emery, and Sanpete counties. Some indirect economic effects may be distributed elsewhere as a function of sale and transport of the coal, or generated power.

Individual coal leases have ranged in size from 40 to 9905 acres. The Mill Fork Tract, as delineated, was 6440 acres, making it an average sized lease tract. Additionally, this lease would not involve any new or unusual developments; it merely provides additional reserves for an existing mine, extending its life.

This decision is local in effect, short-term compared to the 100 plus year history of contemporary human activities in the area, and will not negatively effect city and county governments. Therefore, in context, this decision is not significant.

Intensity:

Intensity is evaluated by comparing and contrasting the following ten criteria (**In bold**) from 40 CFR 1508.27 with the issues and effects disclosed in the EA and project file.

1 **"Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial".**

The action will create an important beneficial impact by maintaining the production of coal from the Crandall Canyon Mine which ensures jobs and economic health to local communities. Under the selected alternative, there will be no significant impacts to non-mineral resources. Neither the beneficial or negative impacts are extraordinary. The impacts and benefits are typical and reasonable for underground coal mining activity on the Wasatch Plateau.

2 **"The degree to which the proposed action affects public health or safety".**

Noted concerns for public health and safety included potential adverse impacts to the culinary water source at Little Bear spring, and safety of Forest users. Under the selected alternative, the area considered to be within the recharge area for the spring was removed from leasing, thereby minimizing potential risk to human health and safety. The analysis indicates only minor hazard to Forest users would result from mining the tract.

3 **"Unique characteristics of the geographic area such as proximity to historical or cultural resources, park lands, or prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas".**

No significant historical or cultural resources will be effected (EA page IV-9 and 10). The entire Forest, including the Mill Fork Coal Lease tract, does not contain prime farmland, rangeland and forest lands (Forest Plan page II-57). Nor does the site contain floodplains, eligible or designated wild or scenic rivers, or ecologically critical areas. Small pothole-type wetlands occur throughout the lease tract, but the analysis determined that mining will not affect them.

4 **"The degree to which the effects on the quality of the human environment are likely to be highly controversial".**

Information received during scoping and the predecisional review period for the EA indicated concern for the impacts to water resources due to mining, most notably for the effects

to the culinary water source at Little Bear spring and the catchment area above Rilda Canyon springs. Evaluation of numerous studies on the Little Bear spring show the commonality of a recharge source from the north-northwest. The selection of the alternative designed to remove the recharge source and the watershed where the spring occurs from the lease tract will respond to any controversy surrounding impacts to the water source. There was no other controvesy identified among resource professionals addressing the anticipated direct, indirect, or cumulative effects, or the effectiveness of the proposed mitigation measures designed to address the resource issues.

5 **"The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks".**

Coal mining has been a common and important element of the local economy and culture since the late 1800s. The impacts of underground coal mining on the Forest have been observed and monitored for many years, and the possible effects and risks are well understood. Enhanced understanding of the local ecosystems and selection of the alternative to maximize environmental protection ensures that the human environment will not be effected by unique or unknown risks.

6 **"The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration".**

The Forest Plan made the area available for further consideration for coal leasing, and made findings relative to unsuitability criteria. Leasing of specific tracts is authorized on a case-by-case basis, and environmental analyses are completed based on site-specific information. Coal leasing has been performed in this area since 1920, therefore leasing this tract is not precedent-setting. This action will not influence future considerations of coal leasing.

7 **"Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts".**

This action, connected actions, and past, present and reasonably foreseeable future actions were determined not to be cumulatively significant (EA IV-17 to 26). The EA addressed the cumulative effects of the existing mining operation (Chapter I. E. History, Background, and Potential Mining Scenarios, pg. I-5), other resource activities proposed in the vicinity of the project area (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6; Tables IV-A, B, C, pg. IV-21 through IV-26), and mining of the new tract under each alternative (Chapter I. E. History, Background, and Potential Mining Scenarios, pg. I-5; Appendix B, Reasonably Foreseeable Development Scenario). Effects of mining the new tract for each alternative were based on a Reasonably Foreseeable Development Scenario presented as Appendix B (conceptual mine plan) that included underground mining and reasonably foreseeable surface disturbance. A surface coal development drill plan was also forecast (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6). The discussions of impacts in Chapter 4 consider all activities. The expected effects are consistent within the limits analyzed in the Forest Plan FEIS. Under the selected alternative, there will be minimal impacts on resources which will not lead to cumulatively significant impacts.

8 **"The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources".**

No known objects on or adjacent to the lease tract are listed or are eligible for the National Register of Historic Places. No significant heritage resources will be affected by the action (EA page III-23; Project File). A Forest Service coal lease stipulation provides a measure to protect heritage resources in case they are unexpectedly encountered.

9 **"The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973".**

The Biological Evaluation/Biological Assessment completed for this project has a no effect determination. The US Fish and Wildlife Service was consulted on application of unsuitability criteria, to which they concurred with the Forest Service finding (EA page IV-8; Project File). Additionally, they concurred with the Forest Service determination in their July 16th response.

10 **"Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment".**

The analysis did not identify any adverse effects that threaten a violation of Federal or State laws designed to protect the environment.

VII. Irreversible and Irretrievable Committment of Resources

Coal is not a renewable resource. Mining will be an irreversible committment of the coal itself and other energy resources used in the mining process. Approximately 5,000,000 minable tons of coal will be left in the ground. Under the current economic environment and mining technologies, benefits from these reserves will be irretrievably lost by excluding the Little Bear Canyon watershed from the lease offering and susequent mining.

The loss of 6.25 acres of vegetation and associated wildlife habitat due to exploratory drilling would be irretrievable but not irreversible. The drilling operations can typically be completed, including reclamation, in one season. It normally takes 3 to 5 years to reestablish vegetation on the sites, and a total of 5 to 10 years for trees to become established and vegetation to blend in with the surrounding areas. Changes in elevation due to subsidence would be irreversible.

VIII. Findings Required by other Laws and Regulations

This analysis tiers to the Forest-wide direction and management area goals and standards of the Forest Plan and incorporates by reference the analysis disclosed in the FEIS and Record of Decision (1986), as amended.

* The unsuitability criteria for coal mining contained in Federal Regulations 43 CFR 3461 were addressed in the Forest Plan, Forest Plan FEIS, and the EA for this tract. No areas within the proposed tract were determined to be unsuitable for mining based on the criteria.

* The potential adverse effects of the proposal are effectively mitigated by the included special lease stipulations and implementation of the SMCRA Regulations (30 CFR 700 to End) and State of Utah Federal Coal Mining and Reclamation Regulatory Program.

* The leasing action and anticipated lease development will have no affect to known paleontological resources, floodplains, prime or unique rangelands, farmlands, or timberlands, or alluvial valley floors.

* Compliance with the terms and conditions of the lease and other administrative actions associated with the lease, in accordance with Federal Regulations 43 CFR 3400, are the responsibility of the Bureau of Land Management. The review, approval, and enforcement of mining operations within the lease are the responsibility of the Department of Interior, Office of Surface Mining Reclamation and Enforcement under Federal Regulations 30 CFR 700 to End. As required under the Federal Coal Leasing Amendments Act of 1975 and the above regulations, future actions related to the lease which could affect surface resources require consultation and consent of the Forest Service.

The decision is consistent with the National Forest Management Act requirements as expressed in 36 CFR 219.27. The decision complies with the Endangered Species Act of 1973 (EA, page IV-8; Project File) and Section 106 of the National Historic Preservation Act of 1966 (EA, page IV-9, Project File).

Issues of consumers, civil rights, minority groups and women are not within the scope of the decision.

IX. Implementation Date

If no appeals of this decision are filed, the decision may be implemented on or after November 17, 1997.

X. Administrative Review or Appeal Opportunities

The Forest Service decision is subject to appeal under 36 CFR Part 215. Permit holders and permit applicants responding to Forest Service issued prospectus who may be affected by this decision have the choice to appeal under 36 CFR 215 or 36 CFR 251. Since this is a joint decision between the Forest Service and BLM, the decision may also be appealed to the Department of Interior Board of Land Appeals.

The Forest Service decision to consent to lease offerings is subject to administrative review by the Regional Forester pursuant to the above regulations. Any written appeal must be postmarked or received by the Appeal Deciding Officer within 45 days from the day after publication of the legal notice in the Price *Sun Advocate* newspaper. Appeals should be sent to Regional Forester - Intermountain Region, 324 25th. Street, Ogden, UT 84401 on or before November 7, 1997. Appeals must meet the content requirements of 36 CFR 215.14.

The Bureau of Land Management decision to offer the lease is subject to appeal to the Interior Board of Land Appeals. Appellants have 30 days from the receipt of this decision to appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR Part 4. If an appeal is taken, the notice of appeal must be filed in the state office within 30 days from receipt 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 pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) for a stay 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. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice or appeal and the petition for a stay must also be submitted to each Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with his office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. Concurrently, send a copy of any Notice of Appeal or petition for a stay to: Janette S. Kaiser, Forest Supervisor, Manti-La Sal National Forest, 599 West Price River Drive, Price, Utah, 84501, and G. William Lamb, Acting State Director, USDI-Bureau of Land Management, Utah State Office, 324 South State Street, Salt Lake City, Utah, 84145-0155.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if a stay is granted or denied;

(2) The likelihood of the appellant's success on the merits;

(3) The likelihood of the immediate and irreparable harm if the stay is not granted, and;

(4) Whether the public interest favors granting the stay.

XI. Contact Person

This decision notice, FONSI, and EA are available for review at the Forest Service office in Price. Any persons with questions related to this decision or project may contact Jeff DeFreest at the Ferron/ Price Ranger District, 599 W. Price River Drive, Price, UT 84501, (801) 637-2817 or Max Nielson at the Bureau of Land Management, Utah State Office, 324 S. State St. Salt Lake City, UT, (801) 539-4038.

Consent by: _____ Date: 9-23-97
JANETTE S. KAISER, Forest Supervisor
USDA Forest Service, Manti-La Sal National Forest

Approved by: _____ Date: _____
G. WILLIAM LAMB, State Director
USDI Bureau of Land Management, Utah

APPENDIX A

SPECIAL COAL LEASE STIPULATIONS

Federal Regulations 43 CFR 3400 pertaining to Coal Management make provisions for the Surface Management Agency, the surface of which is under the jurisdiction of any Federal agency other than the Department of Interior, to consent to leasing and to prescribe conditions to insure the use and protection of the lands. All or part of this lease contain lands the surface of which are managed by the United States Department of Agriculture, Forest Service - Manti-La Sal National Forest.

The following stipulations pertain to the Lessee responsibility for mining operations on the lease area and on adjacent areas as may be specifically designated on National Forest System lands.

Forest Service Stipulation #1.

Before undertaking activities that may disturb the surface of previously undisturbed leased lands, the Lessee may be required to conduct a cultural resource inventory and a paleontological appraisal of the areas to be disturbed. These studies shall be conducted by qualified professional cultural resource specialists or qualified paleontologists, as appropriate, and a report prepared itemizing the findings. A plan will then be submitted making recommendations for the protection of, or measures to be taken to mitigate impacts for identified cultural or paleontological resources.

If cultural resources or paleontological remains (fossils) of significant scientific interest are discovered during operations under this lease, the Lessee prior to disturbance shall immediately bring them to the attention of the appropriate authority. Paleontological remains of significant scientific interest do not include leaves, ferns or dinosaur tracks commonly encountered during underground mining operations.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessee.

Forest Service Stipulation #2.

If there is reason to believe that Threatened or Endangered (T&E) species of plants or animals, or migratory bird species of high Federal interest occur in the area, the Lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist and a report of findings will be prepared. A plan will be prepared making recommendations for the protection of these species or action necessary to mitigate the disturbance.

The cost of conducting the inventory, preparing reports and carrying out mitigating measures shall be borne by the Lessee.

Forest Service Stipulation #3.

The Lessee shall be required to perform a study to secure adequate baseline data to quantify the existing surface resources on and adjacent to the lease area. Existing data may be used if such data are adequate for the intended purposes. The study shall be adequate to locate, quantify, and demonstrate the interrelationship of the geology, topography, surface hydrology, vegetation and wildlife. Baseline data will be established so that future programs of observation can be incorporated at regular intervals for comparison.

Forest Service Stipulation #4.

Powerlines used in conjunction with the mining of coal from this lease shall be constructed so as to provide adequate protection for raptors and other large birds. When feasible, powerlines will be located at least 100 yards from public roads.

Forest Service Stipulation #5.

The limited area available for mine facilities at the coal outcrop, steep topography, adverse winter weather, and physical limitations on the size and design of access roads, are factors which will determine the ultimate size of the surface area utilized for the mine. A site-specific environmental analysis will be prepared for each new mine site development and for major improvements to existing developments to examine alternatives and mitigate conflicts.

Forest Service Stipulation #6.

Consideration will be given to site selection to reduce adverse visual impacts. Where alternative sites are available, and each alternative is technically feasible, the alternative involving the least damage to the scenery and other resources shall be selected. Permanent structures and facilities will be designed, and screening techniques employed to reduce visual impacts and, where possible, achieve a final landscape compatible with the natural surroundings. The creation of unusual, objectionable, or unnatural landforms and vegetative landscape features will be avoided.

Forest Service Stipulation #7.

The Lessee shall be required to establish a monitoring system to locate, measure and quantify the progressive and final effects of underground mining activities on the topographic surface, underground and surface hydrology and vegetation. The monitoring system shall utilize techniques which will provide a continuing record of change over time and an analytical method for location and measurement of a number of points over the lease area. The monitoring shall incorporate and be an extension of the baseline data.

Forest Service Stipulation #8.

The Lessee shall provide for the suppression and control of fugitive dust on haul roads and at coal handling and storage facilities. On Forest Development Roads (FDR), Lessees may perform their share of road maintenance by a commensurate share agreement if a significant degree of traffic is generated that is not related to their activities.

Forest Service Stipulation #9.

Except at specifically approved locations, underground mining operations shall be conducted in such a manner so as to prevent surface subsidence that would: (1) cause the creation of hazardous conditions such as potential escarpment failure and landslides, (2) cause damage to existing surface structures, and (3) damage or alter the flow of perennial streams. The Lessee shall provide specific measures for the protection of escarpments, and determine corrective measures to assure that hazardous conditions are not created.

Forest Service Stipulation #10.

In order to avoid surface disturbance on steep canyon slopes and to preclude the need for surface access, all surface breakouts for ventilation tunnels shall be constructed from inside the mine, except at specific approved locations.

Forest Service Stipulation #11.

If removal of timber is required for clearing of construction sites, etc., such timber shall be removed in accordance with the regulations of the surface management agency.

Forest Service Stipulation #12.

The coal contained within, and authorized for mining under this lease shall be extracted only by underground mining methods.

Forest Service Stipulation #13.

Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replaced to provide for the continuance of current land uses.

Forest Service Stipulation #14.

In order to protect big-game wintering areas, elk calving and deer fawning areas, sagegrouse strutting areas, and other key wildlife habitat and/or activities, specific surface uses outside the mine development area may be curtailed during specified periods of the year.

Forest Service Stipulation #15.

Support facilities, structures, equipment, and similar developments will be removed from the lease area within two years after the final termination of use of such facilities. This provision shall apply unless the requirement of Section 10 of the lease form is applicable. Disturbed areas and those areas previously occupied by such facilities will be stabilized and rehabilitated, drainages re-established, and the areas returned to a premining land use.

Forest Service Stipulation #16.

The Lessee, at the conclusion of the mining operation, or at other times as surface disturbance related to mining may occur, will replace all damaged, disturbed or displaced corner monuments (section corners, 1/4 corners, etc.), their accessories and appendages (witness trees, bearing trees, etc.), or restore them to their original condition and location, or at other locations that meet the requirements of the rectangular surveying system. This work shall be conducted at the expense of the Lessee, by a professional land surveyor registered in the State of Utah, and to the standards and guidelines found in the Manual of Surveying Instructions, United States Department of the Interior.

Forest Service Stipulation #17.

The Lessees, at their expense, will be responsible to replace any surface water identified for protection, that may be lost or adversely affected by mining operations, with water from an alternate source in sufficient quantity and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, or other land uses.

Forest Service Stipulation #18.

STIPULATION FOR LANDS OF THE NATIONAL FOREST SYSTEM UNDER JURISDICTION OF THE DEPARTMENT OF AGRICULTURE

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor
Manti-La Sal National Forest
599 West Price River Drive
Price,Utah 84501

Telephone No.: 801-637-2817

who is the authorized representative of the Secretary of Agriculture.

_____
Signature of Licensee/Permittee/Lessee

Forest Service Stipulation #19.

Except at specifically approved locations, mining that would cause subsidence will not be permitted within a zone along the Joes Valley Fault determined by projecting a 22 degree angle-of-draw (from vertical) eastward from the surface expression of the Joes Valley Fault, down to the top of the coal seam to be mined.

Forest Service Stipulation #20.

If spotted bats (USDA-FS Sensitive Species) are located, then evaluations will be made for mitigation needs. Mitigations could include avoidance during specific times and/or the prevention of bat occupancy during periods of subsidence, such as by netting or screening. Mitigations will be evaluated on a case-by-case basis.

APPENDIX C

September 1997

RESPONSE TO COMMENTS

Mill Fork Federal Coal Lease Tract UTU-71307
Environmental Assessment
Lease-by Application No. 11

Introduction

The following table lists 8 persons, organizations, or agencies who responded to the Forest Supervisor with comments during the predecisional review period. The predecisional review comment period officially ended July 7, 1997, however the list reflects all comments received.

LIST OF RESPONDENTS

RESPONSE DATE/NUMBER	COMPANY/ORGANIZATION	NAME	ADDRESS
06/11/97 #1	North Emery Water Users Association	Jack Stoyanoff	PO Box 129 Cleveland, UT 84518
06/16/97 #2	Energy West Mining	Chuck Semborski	P.O. Box 310 Huntington, Utah 84528
06/27/97 #3	Emery Water Conservancy District	J. Mark Humphrey	P.O. Box 998 Castle Dale, Utah 84513
07/07/97 #4	Appel & Warlaumont, LC	Jeffrey Appel	1100 Boston Bldg 9 Exchange Place Salt Lake City, UT 84111
07/07/97 #4a	Nielsen & Senior	J.Craig Smith	P.O. Box 11808 Salt Lake City, UT 84147
07/07/97 #5	US Fish & Wildlife Svc	Robert Williams	145 E. 1300 S. Suite 404 Salt Lake City, UT 84115
07/07/97 #6	Utah Division of Wildlife Resources	Ben Morris	475 W Price River Drive Suite C Price, Utah 84501
07/07/97 #7	Emery Co. Public Lands Council	Val Payne	PO Box 629 Castle Dale, Utah 84513

COMMENTS AND RESPONSE TO COMMENTS

As comment letters (including phone and personal contacts) were received they were given a number, the content of the letters analyzed, and similar comments grouped by resource issue or topic. Under each issue heading is the "Letter Number" for each comment, the comment, and the Forest Service response. Additonally, all of the comments are numbered sequentially, to permit

referencing between comments. In all, 57 separate comments were extracted from the 7 respondents lised above. These comments are divided among 4 resource or topic categories: Water, Wildlife, General, and Procedural.

Water

Letter #1 North Emery Water Users Association (NEWUA)

Comment 1: "It is still North Emery waters position that mining in this area could have a negative impact on our Rilda Springs."

Response: It is recognized in the EA that the majority of the recharge to NEWUA's spring system in Rilda Canyon originates in the Right fork of Rilda Canyon (p. III-9). The Right Fork drainage originates in the east 1/2, section 14, T 16 S, R 6 E. Rilda Creek in this area is intermittent. As detailed in the Reasonably Forseeable Development Scenario (Appendix B of the EA), mining will occur in both coal seams under section 14. The furthest extent of mining underground will occur under the Right Fork of Rilda more than 3 miles upstream from the NEWUA springs. The overburden separating the surface from the mine level at these locations ranges from 2,000 to 2,400 feet. It has been documented across the Wasatch Plateau that where thick overburden is present, as is the case here, that subsidence does not affect flow or quality of spring flow. As cited in the EA (p. IV-6), a study performed on East Mountain springs over the Deer Creek and Cottonwood Mines showed no discernible impacts after undermining in similar geologic and overburden conditions. There is no loss of spring flows from the headwaters in the Right Fork of Rilda anticipated from mining, and therefore no impacts to downstream flows to the NEWUA springs. Further, mitigation is provided under the Forest Service stipulations in the unlikely case that flow diminishment occurs. Stipulation 17 calls for replacement of all water sources, and Stipulations 3 and 7 require that baseline data and subsequent monitoring data be collected (EA, page IV-4). The Forest Service has indicated that a monitoring plan for the Right Fork of Rilda Creek must be submitted prior to the Forest Service consenting to the mine plan (EA, page IV-4). The Utah Division of Oil Gas and Mining (DOGM) permitting process for the actual mining of the lease tract provides for public input, including parties with special interest, in developing monitoring and mitigation plans under SMCRA (30 CFR Part 773 .13 (3)(i)).

Letter #3 Emery Water Conservancy District

Comment 2: "The Emery Water Conservancy District concurs that surface and subsurface water resources can best be protected by Alternative 4 chosen by the Forest Service" and the letter then states "The District commends the Forest Service for making the mining company commit to a water replacement plan before consenting to the mine plan"

Response: The Forest Service has encouraged the mining company and the Castle Valley Special Services District to work out a water replacement agreement, however, water replacement of culinary sources is required under SMCRA 30 CFR Part 816.41 (h). Utah state law 40-10-18 also requires replacement of state appropriated water interrupted by mining. Additionally water replacement would be required pursuant to the Special Coal Lease Stipulation #17, if it is established that mining has adversely affected the water source in question.

APPENDIX C

Letters #4/4a — Appel & Warlaumont on behalf of Castle Valley Special Services District, and Nielsen & Senior, on behalf of Huntington-Cleveland Irrigation Co, and North Emery Water Users Association. Comments are listed with reference to Letter #4, because Letter #4a states only that "we respectfully join in the comments being filed by Castle Valley Special Services District concerning the above-referenced matter..."

on Page 6, last paragraph.

Comment 3: Furthermore, no exploration license may be issued if the exploration of these holes would:

> Result in disturbance that would cause significant or lasting degradation to the lands or injury to improvements, or in any disturbance other than that necessary to determine the nature of the overlying strata and the depth, thickness, shape, grade, quantity, quality or *hydrologic conditions* of the coal deposits.

Response: Surface disturbance resulting from exploratory drilling is expected to be 6.25 acres (EA, page IV-4). Standard stipulations issued with a drilling permit require revegetation and restoration of the drill site to pre-existing conditions. It is our experience on the Wasatch Plateau that drill sites and associated access roads generally meet revegetation standards within three years of reclamation. Since the coal seams in the area do not contain water, there will be no effects on the hydrologic conditions of the coal deposits. The BLM and the State of Utah require that drill holes be plugged top to bottom with cement or bentonite to prevent any impacts to water-bearing zones. No lasting degradation from exploratory coal drilling is expected or has ever been documented. Impacts associated with ground disturbance and human activity are short-term and insignificant. Our standard drilling stipulations in appendix B (page B-6) of the Forest Plan require the reporting of water encountered during drilling.

on Page 8, second paragraph

Comment 4: The Environmental Assessment failed to adequately recognize and consider the negative impacts on the hydrology of the area. Sufficient specific analysis concerning the extent of possible fracturing overlying the mining area that may result in any of the following is absent:

1. Increased Transmissivity;

2. decreased ground water levels and spring flows;

3. increased water level fluctuations;

4. whether such conditions shall be temporary or permanent;

5. increased subsidence which may result in the migration of water from perched aquifers to deeper strata, and in the deformity or tilting of aquifers causing natural seeps and springs to change locations permanently.

Response: Overburden alteration that occurs as a result of longwall mine subsidence typically occurs in zones above the level of mining. The first zone is the caving zone which typically extends upward into the overburden 6 times the thickness of the extraction height. For example, a 10-foot extraction height would compute to 60 feet of cave. Similarly, the second zone, known as the fracturing zone, can extend up to 30 times the mining height. The third zone is known as the bending zone where strata downwarp, has been observed to extend up to 90 times the mining height. The extent and magnitude of subsurface caving and fracturing is largely dependent on the geologic materials present (Peng, 1992). In response to numbered items above:

1. By definition, transmissivity is the measure of the amount of water that can be transmitted horizontally through a unit width by the full saturated thickness of an aquifer under a hydraulic gradient of one. One of the premises of using transmissivity is assuming saturated ground-water flow. The rock strata above the level of mining is not uniformly saturated, therefore transmissivity is not a useful measure. Alteration due to subsidence will however increase the intrinsic permeability of the strata by introducing secondary permeability through fracturing. The Blackhawk Formation which is 650 to 1,000 feet thick in the lease area, will be the rock unit affected by increased permeability. As was discussed in the EA on page III-9, the Blackhawk is not transmitting large quantities of water, therefore, these alterations will not affect ground-water flow supporting surface water in the area. The more continuous water-bearing zones in the Star Point Sandstone are below the level of the mining, and the transmissivity will not change.

2. The more continuous saturated units are below the level of mining, and are generally separated from the coal seams by a layer of shale. As was presented on page III-10 of the EA, some local seepage from the mine floor has been observed on the westernmost edges of the active mine area, but does not represent large flows and is manifested mainly as wetness. Similar seepage from the mine floor may also occur on the western edge of the lease area, but will likely be the same as what is presently being encountered underground in the active workings. The water currently being encountered has not produced perceptible changes in water levels in observations wells installed in the mine floor. This is also anticipated to be true for the lease tract area. Decreases in spring flows are not anticipated since springs in the lease tract are separated from the mine level by 1,500 to 2,400 feet of overburden. As was referenced in the EA on page IV-6, a study on other East Mountain springs showed no discernible effects on flow from springs emerging from perched water-bearing zones due to mining.

3. No water supply wells exist in the area. The only wells present are monitoring wells installed by the mining company from inside the mine into the Star Point sandstone below the mine level. Based on experience in other mines on the Wasatch Plateau, under normal conditions minor water level fluctuations may occur in in-mine wells, but are short-lived.

4. Elsewhere on the Wasatch Plateau where active mine dewatering was necessary, variations in water levels have been documented. The variations are temporary, as water levels are returning to premining levels at a rate of aproximately 1.5 feet/month. (Cyprus-Plateau Mining Company, Second Quarter Hydrologic Monitoring 1997).

5. As was discussed in the EA (page IV-6), fracturing of perched water-bearing zones is not anticipated, because they occur at elevations above the height of fracturing that is expected to occur due to subsidence. Additionally, the high clay and mud content of the local strata effectively inhibits fracturing due to plasticity of the materials. As was discussed in Appendix B of the EA, the clays and shales of the Blackhawk Formation contain large amounts of montmorillonite clay that has a high expansion rate. Additionally, PacifiCorp performed similar testing on the clays and shales from the North Horn Formation on East Mountain and found that the clays swelled 40 % in the first hour. Springs and seeps can migrate under natural conditions, and surface movements associated with subsidence may cause relocation. We believe this is unlikely, as we have yet to see spring migration occur over the extensively mined areas on the Wasatch Plateau.

Possible adverse effects pertaining to this hydrogeologic environment are discussed on pages IV-6 and IV-12 of the EA for Alternatives 2 and 3.

on Page 8, end of last paragraph.

Comment 5: It is incumbent upon the Agencies to specifically identify, address and fully understand these potential impacts on the hydrologic system prior to proceeding. There are simply too many individuals and entities that depend on these water systems for the long-term uses to "experiment" with mining on such a scale to determine the effects of mining.

Response: While there are no absolutes, we believe we have a thorough understanding of the pertinent impacts to the hydrologic system. We have also developed a reasonable spectrum of alternatives and mitigations for analysis that are needed to address potential impacts; see response in item II above. We are not experimenting with mining because high extraction longwall mining has been used in the Wasatch Plateau coalfield for 25 years, in nine mines on the Forest alone. We have yet to find a situation where mining has been the proven cause of depleted water flow at a spring. Regulatory agencies such as DOGM, Office of Surface Mining (OSM), BLM, and the USFS are continually monitoring effects to detect if depletion occurs.

on Page 9, first full paragraph.

Comment 6: Water protection rather than water replacement is the preferred public policy.

Response: Alternative 4 is identified as the preferred agency alternative, and is designed specifically for water protection. Alternative 4 excludes from leasing 880 acres which includes the entire Little Bear Canyon watershed and prevents mining from occurring in the recharge area to the north and northwest of the spring.

on Page 11, 4th paragraph.

Comment 7: Stipulation #17 is itself inadequate. It requires replacement of water to maintain riparian, fish, livestock, wildlife habitat/use, and "other land use." However, the Stipulation does not specifically mention *human* use. [...]language protecting human use must be

expressly included. Further, the [EA] must specifically address and delineate compliance procedures for Stipulation 17 in each of the alternatives.

Response: We disagree that the stipulation is inadequate. The stipulation is designed to require replacement of all water sources, including those that support the ecosystems of National Forest System lands. Specific mention of human uses is not necessary because any mine permit issued is subject to the regulations under the Surface Mining Control and Reclamation Act (SMCRA). SMCRA, in 30 CFR Ch. VII, ss 816.41 (h), specifically dictates that domestic water sources will be replaced. Additionally, the Utah State Law 40-10-18 also requires replacement of state-appropriated water interrupted by mining. The Forest Service stipulation has gone one step farther in requiring replacement for *all* pre-mining uses. Further, it is not required or intended at the leasing stage that direction is given on how a lesee/operator will comply with stipulations, terms, and/or conditions of the lease. These issues are addressed in the Permit Application Package (PAP) which will be submitted to DOGM, and OSM for review and approval, and is subject to ultimate approval from the Underdsecretary of Interior. See also response to comment IX.

on Page 12, first full paragraph.

Comment 8: Alternative 2 makes no mention of Stipulation #17.

Response: It is true that Alternative 2 does not mention the stipulations; as was explicitly stated on page II-1 of the EA, Alternative 2 was included for analysis purposes only, and was not designed to include special coal lease stipulations to provide a baseline for comparison of the alternatives that had stipulations.

on Page 12, second full paragraph.

Comment 9: "[g]round water at the mine level is *not thought* to be in direct hydraulic communication with springs within the lease tract, or a major contributor to surface flows in the area. " [The] lack of solid factual foundation for this statement is evidenced by the existence of many different and unexplained theories regarding the surface and ground water hydrology throughout this area..."

Response: Recent studies on the hydrologic system in this area have been completed using the most current techniques, providing solid facts on the hydrologic regime, as were referenced in the EA (page III-9 to 12, VI-1 to 3 and project file). All the studies support that ground water in the Blackhawk Formation (the formation where mining will occur) has a residence time of 14,000 years, meaning that the water entered the ground-water system that many years ago. In contrast, surface water in the area has been tested and found to have high tritium contents, indicating that recharge occurred within the last 50 years. Supplemental information from 5 new monitoring wells installed at the Crandall Canyon mine further substantiate that water in the Blackhawk and Star Point Formations have long residence times (13,000 to 20,000 years), and have different chemical compositions than surface water in the area. The expansive difference in residence times demonstrates that the deep ground water and surface waters have dissimilar origins and that "in-mine waters are hydrologically isolated from the shallowly

circulating modern waters in overlying springs and creeks" (Mayo and Associates, July 25, 1997). This is consistent with, and well documented in the literature.

on Page 12, third (indented) paragraph.

Comment 10: Alternative 4 states that: "The same impacts and stipulations would apply as in alternative 3. The exclusion of the northeast portion containing Little Bear Canyon watershed reduces the risk of affecting water resources in that drainage to a *negligible level*." [Such] a conclusory statement is wholly inadequate under the law.

Response: Numerous studies referenced in the EA (page VI-1 to 3, and project file) have been performed on Little Bear spring, all reaching a conclusion that recharge to the spring is coming from the north or northwest. Some of the studies also purport a westerly source of recharge, however new information from aquifer tests supports that the hydraulic conductivity of the Star Point sandstone is so low (Mayo and Associates, September 1997) that it cannot support the flows measured at the spring. This, coupled with the residence time data for ground water in the Star Point eliminates the probability of a westerly recharge source. We believe that by excluding the northeast portion of the lease tract, hence prohibiting mining in that area, that the risk to altering the recharge to Little Bear spring is eliminated. The reference to "negligible levels" was intended to convey that we believe, by protecting the entire watershed and the recharge area, that no discernible impacts beyond those within normal background variations will occur due to mining activities.

on Page 13, middle of first paragraph.

Comment 11: To adequately address Stipulation #17, the EA must specifically detail how the stipulation will be applied--including protection for human populations--to each of the alternatives and whether the stipulation is sufficient under law, which it is not. [The] EA must then identify a replacement source.

Response: The stipulations cited in the EA are conditions of Forest Service consent to leasing of National Forest System lands by the BLM. The stipulations will be applied to the lease which the BLM issues under the Mineral Leasing Act of 1920 as amended. The lease grants exclusive rights to mine the coal reserves, but **does not** authorize mining. No mining may occur until the lessee/operator submits a PAP, obtains approval of the mine plan, and obtains a mine permit under the Mineral Leasing Act and SMCRA. It is not part of the leasing process to identify how the lessee/operator will meet the lease stipulations or the mining regulations. These items are addressed during the mine permitting process that will occur after the lease is issued and will be overseen by DOGM and OSM. The approved Mining and Reclamation Plan (MRP) must meet minimum requirements and performance standards of SMCRA regulations (30 CFR 700 to end). In the MRP, the applicant must describe how the lease stipulations and mine plan standards will be met. The authorizing agencies for the mine permitting are DOGM and OSM, not the Forest Service. Since the Forest Service has consent authority for mine permitting, we would not consent to the mine plan until the mining company had committed to a water replacement plan, as was stated on page IV-12 of the EA. We have required water replacement under our stipulation 17 at the SUFCO mine where water was hauled to fill stock ponds that had drained due to surface cracking. The mining company was also required to repair the damage by sealing the cracks. In the past we

have also supported premining (preventative) agreements such as the sand-filtration plant for North Emery Water Users Association built by PacifiCorp in the event that mining impacts would occur. Additionally, the Utah Division of Oil Gas and Mining (DOGM) permitting process for the actual mining of the lease tract provides for public input, including parties with special interest, in developing monitoring and mitigation plans under SMCRA (30 CFR Part 773 .13 (3)(i)).

on Page 13, end of first paragraph.

Comment 12: This EA does nothing to resolve the unknowns created by the many studies concerning the source of the spring water and future interference therewith.

Response: Though not specifically stated, it is surmised that this refers to the Little Bear spring. After presentation of the theories, it was discussed in the EA on page III-11 that, "it appears that the spring is supported by a system of faults and/or fractures that transmit surface waters from the north." Further, all the studies referenced (page VI-1 to 3 and project file) maintain that there is a recharge source from the north-northwest. The EA goes on to give scientific evidence (page III-12) that the Star Point Sandstone cannot support the flows measured at the spring given the intrinsic properties of the materials, hence ruling out a source from the west. The low hydraulic conductivites of the Star Point were further supported by results of aquifer testing done in wells installed at the mine (Mayo and Associates, September 1997, project file). Further, water chemistry data from the Star Point Sandstone and Little Bear spring support that the waters have different origins and that "water discharging from Little Bear spring is unquestionably of modern origin," whereas the water in the Star Point has an 18,000 to 20,000 year residence time (Mayo and Associates, July 25, 1997, project file). Regarding future interference, potential impacts to the spring if mining were allowed in the area are disclosed on page IV-6 of the EA. The preferred alternative identified by the agency is Alternative 4, which excludes the area north of the spring and the entire Little Bear Canyon watershed from the lease area, therefore no mining will occur north, northwest, or immediately west of Little Bear spring.

on Page 14, first full paragraph.

Comment 13: The area of the proposed Genwal mine constitutes the watershed for one of the primary culinary water sources of approximately 2,650 residents of northern Emery County. Allowing additional coal mining activities to occur within the Manti-La Sal National Forest to the detriment of these water resources would violate Congressional policy under MUSYA [Multiple Use Sustained Yield Act, 1960] to protect this important watershed.

Response: Although the comment does not specifically state so, it is inferred that this concerns the Little Bear Canyon watershed. Alternative 4 is the preferred agency alternative, which specifically excludes the entire Little Bear Canyon watershed from the lease tract. By doing so, mining will not occur beneath the watershed, therefore there will be no discernible effects from mining. The culinary water source is a spring that is recharged primarily from north-northwest of the watershed, with limited, if any, recharge from within the watershed itself. See also response to comment 51.

on Page 14, item 2. Second paragraph.

Comment 14: ...under Section 404 of the CWA, Genwal would be required to obtain a permit for the discharge of material resulting from the proposed construction of the culvert in Crandall Creek.

Response: The State of Utah is the responsible permitting agency for this action and has issued the permits you referenced. See also response to comment 53.

on Page 15, first full paragraph.

Comment 15: Genwal proposes to discharge mine water potentially contaminated with [pollutants] directly into Crandall Creek at a rate of 350,000 gallons/day.

Response: As stated on page III-8 of the EA, Genwal has an approved Utah Pollution Discharge Elimination System (UPDES) permit (administered by the state of Utah) for mine discharge (project file). The terms of the permit require that discharge water must meet beneficial use standards as prescribed by the Utah Department of Environmental Quality. The Clean Water Act (CWA) gives the state primacy for setting water quality standards pursuant to EPA regulations. The Forest Service accepts these standards.

on Page 15, first full paragraph.

Comment 16: Considering that the EA also suggests that Little Bear Spring--the culinary water source for about 2,650 people--may be recharged by Crandall Creek (a conclusion with which CVSSD disagress with based on its information), the EA should also consider the permit requirements of Section 402.

Response: On page III-11 of the EA, it states, "Water from Huntington, Crandall Creeks and maybe Little Bear Creek enters this anomaly..." This misquoted the reference cited, Hansen, Allen, and Luce (1997). The reference actually states, "...the spring is interconnected directly with surface drainage out of Huntington Creek and/or Little Bear Canyon." There should not be a reference to Crandall Creek. Section 402 of the CWA refers to National Pollution Discharge Elimination System permits. The mining company already has this permit in place, as was referenced in the previous response, and a copy is in the project file.

on Page 16, end of first paragraph.

Comment 17: In order to adequately address the affects in a [Probable Hydrologic Consequences] PHC, baseline hydrologic data must be complete, accurate and current. No such baseline exists.

Response: The PHC is prepared in conjunction with submittal of the PAP (page I-5 of the EA), and is not part of the leasing process. The mining company will submit hydrologic information pertaining to the PHC at the time of the permit application. Utah DOGM and OSM are the responsible agencies for assessing the completeness of the

information submitted and preparation of the Cumulative Hydrologic Impact Assessment (CHIA). See also response to comment 55.

on Page 16, first full paragraph.

Comment 18: It is apparent that the EA is not based on accurate baseline data for the proposed mining area and does not adequately address the cumulative impacts of mining throughout the entire area.

Response: The Data Adequacy package (project file) that is required under the Lease-by-Application regulations was deemed adequate under the standards set forth by the Uinta-Southeastern Utah Coal Region (page I-1 of the EA). The information used is current (within the last 5 years) and includes supplemental information requested by the Forest Service that employs the most advanced ground-water evaluation techniques, including isotopic analysis for age dating purposes. Five additional monitoring wells were installed by the mining company to further characterize the hydrologic regime in the area. All this information is contained in the project file.

The information submitted by the company is used in combination with published literature, and data available from other sources. As detailed in Chapter VI, numerous references and data sources were used to develop the conclusions in the EA (chapter VI). Supplemental information has also been provided since the EA was released to the public and is contained in the project file. In addition to current data supplied in Genwal's Data Adequacy Package and Annual Hydrologic monitoring reports which are submitted to the state, seven reports on Little Bear spring, nine reports on the geology of the area (three of which are hydrology-specific), six reports on hydrologic impacts of mining on the Wasatch Plateau (two of which are specific to East Mountain), and mine plans and annual hydrologic reports from two other mines (Deer Creek and Crandall Canyon) operating in the vicinity of the lease tract were used in developing the baseline information used in the analysis. An accurate and extensive data baseline was used in this analysis.

Based on our experience with mining on the Wastach Plateau, we believe that the cumulative impacts are valid as described and adequately addressed. As presented on pages IV-18 and 19 of the EA, cumulative hydrologic impacts are addressed. Given the information available from over 20 years of mining in the PacifiCorp mines on the southern end of East Mountain and thirteen years of information from mining in the Crandall Canyon mine, we can accurately forecast the cumulative impacts with respect to this action. To date, no long-term hydrologic effects have been documented, and the human environment has not been harmed. On a technical basis, one must look at the scale of the problem, in this case evaluating cumulative hydrologic impacts for East Mountain is valid. As was discussed in the EA, East Mountain is isolated topographically from other mountains in the area, and the mountain itself is highly dissected and provides little hydrogeologic continuity.

on Page 16, third paragraph.

Comment 19: The permit application shall be submitted in a manner satisfactory to the regulatory authority and shall contain, among other things - (10) the name of the water shed

and location of the surface stream or tributary onto which surface and pit drainage will be discharged.

Response: This EA addresses an application to lease federal lands for coal mining, and is not a mine permit application. The PAP will be submitted to DOGM and OSM to comply with SMCRA regulations after the lease is granted. DOGM and OSM are the regulatory authorities for mine permitting. The PAP will include the information you referenced above.

on Page 16, last paragraph.

Comment 20: The EA states that: Some stratigraphic units below the elevation of local drainages may be in hydraulic communication with one another, however all these units are much deeper than the level of the proposed mining, and would not be affected by mining in the area.

Because there is a potential that these drainages may be in communication with others that receive mine water discharge, the EA must indicate the name of the watershed and location of the stream or tributary that will receive the discharge.

Response: This statement was taken out of context, as the quote from the EA was in the Cumulative Impacts section. This statement was referring to the Ferron Sandstone, which occurs at depths of 2,000 to 3,000 feet below the level of mining and is overlain by the impermeable Mancos shale. It is not in communication with any local drainages or surface water sources.

As stated in the EA on page III-8, mine water will be discharged at the approved UPDES permit location on Crandall Creek, a tributary in the Huntington watershed.

on Page 19, third paragraph.

Comment 21: The baseline information in the Data Adequacy package created by Genwal is wholly inadequate; it does not address the cumulative impacts of mining on hydrology.

Response: As previously stated (XVI), the agencies (BLM and the USFS) determined that the data adequacy package was complete (EA, page I-1). The Data Adequacy package is not intended to be an analysis, but rather provides data to be used with published information, consultants reports, and other available information to do the environmental analysis. We reviewed the package and determined that with all the other available information, there is sufficient data to process the lease application and perform the analysis.

on Page 19, third paragraph.

Comment 22: In fact, the EA admits the lack of sufficient knowledge regarding the hydrology of the area. For example, the EA states:

1) "Mining activities and associated subsidence-induced ground movements could interrupt or degrade springs within or adjacent to the lease tract."

2) "The exact recharge mechanism for the Star Point sandstone is not known but it has been suggested that recharge reached the sandstone through faults and fractures, and that recharge is coming from the west and northwest."

3) "Hydraulic function of the faults is not well defined."

4) "The mechanism controlling flow to Little Bear spring is not fully understood. EA at III-11 (listing several theories, neither of which can be supported with any certainty)."

Response: We disagree, the EA does have sufficient knowledge and information to make the decision. The referenced statements were meant to identify that there are no absolutes. We believe that the hydrologic system can be accurately evaluated based on the currently available data. Responses to numbered items are as follows:

1) This statement is listed under section I, Issues, starting on page I-8. This section lists the issues identified in scoping and by the Interdisciplinary Team. This statement is not an acknowledgement of lack of information, but rather a statement of the issue to be specifically addressed in the analysis.

2) The most recent isotope chemistry data for water in the Star Point sandstone supports that the water has a residence time of about 18,000-20,000 years, meaning that the water entered the ground-water system that many years ago. The sandstone recharges through a series of mechanisms that includes faults and fractures. Whatever the mechanism is, it is not relevant to the conclusion of the analysis because the data supports that water is supplied to, and transmitted through the unit at very slow rates (Mayo and Associates, July and September 1997, project file).

3) This statement was taken out of context. Also stated on page III-10 of the EA was that "faults in this area, as elsewhere on the Wasatch Plateau, are generally thought to act as barriers to horizontal ground-water flow." The hydraulic function of faults can vary. For example, water from the Joes Valley Fault intersected in the current mine workings shows no component of modern water in the fault (Mayo and Associates, March 1997, project file), indicating that water is moving very slowly along **this** fault plane. On the other hand, it is understood that water is supplied to Little Bear spring through a system of faults and fractures that have the capability to transport water. This understanding, and selection of the alternative to eliminate mining in the area where faults are known to effectively transmit water supports the finding that there will be no effect on the hydraulic function of faults from mining.

4) The theories presented in the EA for the occurrence of Little Bear spring, which includes "Groundwater Flow to Little Bear Spring and Possible Impacts to Groundwater Flow by Expansion of Underground Mining into Mill Fork Coal Lease Tract" by Peter Nielsen (EA, page VI-1), do have a commonality in that the spring is recharged from the north-northwest. Given that the numerous studies all agree on that point, and that it is fracture and fault controlled, supports the Forest Service preferred alternative (Alternative 4) to exclude the area north and northwest of the spring from leasing. All these items together establish that there is sufficient information to ascertain the recharge and primary mechanisms for

the spring occurrence. The presentation of theories was not intended to demonstrate a lack of information, but rather to exhibit commonality and the need to consider Alternative 4 to protect the area and preserve the integrity of the spring.

Letter #7 Emery County Public Lands Council, personal communication

Comment 23: Given the complex nature of the occurrence of Little Bear spring, it is imperative that water replacement be required with sources identified before these lands are leased.

Response: We agree that replacement must be required in the event that mining causes disruption to the water source. Therefore, Alternatives 3 and 4 include a lease stipulation that would require replacement. In addition, water replacement by a mine operator is required under SMCRA (30 CFR VII, ss 816.41 (h)). The stipulaitons will be applied to the lease which the BLM issues under the Mineral Leasing Act of 1920 as amended. A lease grants exclusive rights to mine the resource, but does not authorize mining. No mining may occur until the lessee/operator submits a Permit Application Package, obtains approval of the mine plan, and is issued a mine permit under the Mineral Leasing Act and SMCRA. It is not part of the leasing process to identify how the lessee/operator will meet the lease stipulations or mining regulations. These items are addressed during the mine permitting process that will occur after the lease is issued and will be overseen by DOGM and OSM. The approved Mining and Reclamation Plan must meet minimum requirements and performance standards of SMCRA regulaitons (30 CFR Part 700 to end). The applicant must describe how the lease stipulations and mine plan standards will be met. The authorizing agencies for mine permitting are DOGM and OSM, not the Forest Service. As the Forest Service has consent authority under SMCRA, we have stated in the EA that we will not consent to the mine plan until a replacement agreement is identified (page IV-12). The Utah Division of Oil Gas and Mining (DOGM) permitting process for the actual mining of the lease tract provides for public input, including parties with special interest, in developing monitoring and mitigation plans under SMCRA (30 CFR Part 773 .13 (3)(i)).

Wildlife

Letter #5 US Fish and Wildlife Service

Comment 24: "Clearing vegetation for drill pads fragments contiguous habitat and increases edge habitat which is exposed to highly variable environmental gradients."

Response: The temporary removal of up to 10 drill pad sites from forage production and shelter, each approximately 1/2 acre, totals only 6.25 acres (with the anticipated road disturbance) of the 6,440 acre lease tract. This action is considered to be insignificant in affecting the character and pattern of habitat for the area.

Comment 25: "Genwal Resources would like to expand their surface facilities onto adjacent private lands". "This action will result in a large loss of wetlands, riparian corridors, and fish and wildlife habitat."

Response: Genwal Resource's surface facilities have been primarily on private (fee) ground. The culvert project has caused effects as stated, but Genwal Resources and Utah Division of Oil Gas and Mining have worked closely with Utah Division of Wildlife

Resources and the Forest Service to develop appropriate mitigation measures to offset habitat loss. This surface expansion was deemed necessary by the company regardless of whether they acquire the Mill Fork Lease Tract. There is no additional surface expansion anticipated.

Comment 26: "The cumulative impacts of the 135 acre timber sale, oil, gas, and coal mining within the area, upgrade of SR 31, and livestock grazing all will have major impacts on Huntington and Ferron Canyons and surrounding areas." "These impacts will significantly affect fish and wildlife species and habitat within the area".

Response: These cumulative impacts within Huntington Canyon were addressed in the EA on pages IV-17 through IV-20 and in table IV-C, the findings were found to be insignificant. Additionally the Blaze of Glory Timbersale is no longer likely to occur.

Comment 27: On page I-1, the EA states in FI2 that water withdrawals could trigger consultation requirements with USFWS, if the usage exceeds 75 acre-feet, forestwide, annually. The correct value should be 100 acre-feet.

Response: The Biological Opinion letter from the USFWS dated May 30, 1996, states that the anticipated depletion of approximately 75 acre-feet per year (average) may affect, but is not likely to adversely affect. This is the basis of the USFWS concurrence for 1996-2000, and depletions within this amount will not require further consultation.

Comment 28: No values were given in the EA on the amount of water that will be removed from the Colorado River system. The FWS is concerned about the loss of water from coal mine operations and changes in stream flows resulting from subsidence. An estimate of the amount of depletion should be made and consultation under section 7 of the Endangered Species Act (ESA) be initiated.

Response: There are no surface water losses anticipated due to mining, no perennial streams will be undermined, and impacts to surface springs are unlikely. Any water withdrawal from the Colorado River System would be negligible and would fall under the programmatic consultation granted on May 30, 1996 that allows for forestwide water withdrawals in the Upper Colorado River Basin. The approval is valid through the year 2000.

Comment 29: Additional consultation may be required for the loss of stream flows resulting from subsidence. A new Utah State law and Stipulation #17 state the permittee or lessee will be responsible to replace any surface water that may be lost or adversely affected by mining operations. Subsidence may cause alterations in ground or surface water that may result in significant depletion to the Colorado River system. If replacement water and the lost water from subsidence results in a depletion to the Colorado River system, Section 7 consultation should be initiated. Water lost from surface flow may enter a ground water aquifer. A water budget analysis would be required to determine if the loss of surface water results in increased ground water outflow and therefore no loss to the Colorado River System.

Response: Under the preferred agency alternative (alternative 4), no perennial streams will be undermined or influenced by subsidence, therefore there will be no surface water lost. Water loss from surface springs is not anticipated. Water intercepted underground has been determined to be isolated from surface water systems in the area. Under all

alternatives, mining-induced changes to surface and ground water would be negligible, and any losses to the Colorado River System would fall under the programmatic consultation previously noted. If these assumptions prove to be inadequate through monitoring, then a Section 7 consultation would be initiated.

Comment 30: The FWS is concerned about the potential of subsidence caused by mining. Subsidence could affect stream hydrology by altering the natural slope of the channel. This could cause impacts and losses to riparian habitat, stream flows, wetlands, aquatic species and terrestrial wildlife. The FWS recommends that no mining occur within a 22 degree angle-of-draw to any stream for protection of the river channel, riparian habitat, wetlands, and fish and wildlife species and their habitat.

Response: The longwall mining technique causes subsidence, known as controlled subsidence, to occur. The changes in surface elevation after mining may alter the natural slope of land, Under all alternatives available for selection, including the preferred agency alternative, no perennial streams would be undermined, therefore they would not be subsided. Forest Service Stipulation #9 limits subsiding perennial streams.

Comment 31: "Stipulation #2 states that the lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted if there is reason to believe that T&E species of plants or animals, or migratory birds of high Federal interest occur in the area. The stipulation does not state how often the surveys should be conducted" The letter goes on to say "the EA does not state that a raptor and migratory bird survey was conducted".

Response: Extensive surveys were conducted as part of the Data Adequacy package submitted for the lease application, additional surveys will be required as needed in the mine permitting process. The Utah Division of Wildlife Resources participates in raptor surveys that are conducted as part of the requirements of the mining and reclamation plan, through the Utah Division of Oil Gas and Mining, once the lease is included in the mine permit area.

Prior to subsidence of escarpments, under an approved mine plan or revision, additional surveys could be required to assure adequate protection of raptors. See also comment 37.

Letter #6 Utah Division of Wildlife Resources, personal communication with Ben Morris. He provided the following comments.

Comment 32: Several seeps and springs are of high value to wildife. They oppose any mining that will diminish seeps and springs.

Response: We do not believe that seeps and springs will be diminished due to mining as was presented on page IV-6. Forest Service Stipulation # 17 requires water replacement at the source if there is a loss.

Comment 33: Bald eagles are year-round residents, and there is significant winter migration into the Huntington Canyon area. Two immature eagles were sighted on Skyline Drive.

Response: The text of the biological documents have been modified to reflect the presence of wintering Bald Eagles. Bald Eagles are year-around residents of the eyrie near Castle Dale. Observations made by Nelson Bolshen found that the eagles did not forage that far from their nest, so their presence in the forest is limited to winter. Immature eagle sitings do not change to conclusion of this document.

Comment 34: In May 1997, 1 peregrine falcon was observed in the Right Fork of Rilda Canyon, the nest was not found. DWR suspects that there are 2 pairs of peregrine falcons in the canyon.

Response: The text of the biological documents have been modified to reflect the recent find of peregrine falcons in Rilda Canyon. Additionally, in a September 12 letter from Miles Moretti (UDWR), he clarified that they suspect 2 nesting pairs occupy the general area (Huntington Canyon watershed). The discovery of these peregrines does not change the conclusions of the document.

Comment 35: Pg III-14. The statement "doubtful that falcons forage over the coal lease area." DWR strongly disagrees with. White throat swifts and violet-green swallows are plentiful in the area, and are primary prey for falcons in southeast Utah.

Response: The text of the biological documents have been modified to reflect the recent find of peregrine falcons in Rilda Canyon.

Comment 36: Pg III-16. Adult fish are present in Crandall Creek from the beaver ponds at the portal down to the confluence with Huntington Creek, except for minor separations.

Response: We concur with your observations regarding fish distributions in Crandall Creek. Your information does not disagree with the fisheries discussion in the EA which addressed headwater areas of the affected drainages above the reach that you describe. Also note that the entire the adult fish population in the surface expansion area and upstream was captured by the UDWR and moved to another drainage in mid-July to protect them from construction activities on private lands.

Comment 37: Raptor nests require yearly monitoring in late-May of every year. Ensure that no active nest is subsided during nesting season (April-mid-July). Company must apply for a take permit if *any* nest is subsided.

Response: Raptor surveys are required through the permitting process, and any necessary protection of nests would be included in the mining and reclamation plan. General mining induced subsidence would not threaten a nest site, however, escarpement failure, due to subsidence could threaten nest sites, and might therefore require a "take permit". Escarpment failure is addressed in stipulation 9; where such failure is not permitted, except at specifically approved locations.

Comment 38: Vegetation along Crandall Canyon road is dying. The reason for the mortality needs to be determined and measures taken to eliminate the mortality.

Response: This mortality has been attributed to the diesel emmissions or road salt for traction in the winter months. The road use permit for the mine haul road addresses the road traction materials and constituents. This is outside of the scope of this analysis.

Comment 39: What about the Arizona willow (endangered species). Is it present?

Response: The Arizona Willow, a sensitive species, is not found in the lease tract. Forest Service Botanist Bob Thompson has indicated that it is only found at higher elevations on the Manti Division of the Manti-La Sal National Forest.

Comment 40: Three-toed woodpeckers and flammulated owls were not addressed in the wildlife section. Forest Service sensitive species guidelines need to be followed.

Response: These species were addressed in the Biological Evaluation. There were no impacts identified for these species, so they were not carried forward in the EA.

Comment 41: DWR emphasizes that no roads, breakouts, portals, or surface facilities should be allowed in Mill Fork Canyon, due to value as big game winter range.

Response: The reasonably foreseeable development scenario in Appendix B does not identify any breakouts or other facilities in Mill Fork Canyon; any future proposals would require additional, site-specific, environmental analyses.

General

Letter #2 Energy West Mining Co, personal contact

Comment 42: Chuck Semborski of Energy West Mining commented in the geology section that the Deer Creek mine did not intercept the Mill Canyon graben.

Response: The EA states that faults associated with the Mill Canyon graben were intercepted underground. This was a misinterpretation of a geophysical study performed by PacifiCorp that identified the faults. This error is acknowleged, although it does not influence the conclusions of the analysis.

Letters #4/4a Procedure comments from Appel & Warlaumont on behalf of Castle Valley Special Services District, and Nielsen & Senior, on behalf of Huntington-Cleveland Irrigation Co, and North Emery Water Users Association. Comments are listed with reference to Letter #4, because Letter #4a states only that "we respectfully join in the comments being filed by Castle Valley Special Services District concerning the above-referenced matter..."

on Page 3, first paragraph

Comment 43: In this case, the Environmental Assessment (EA) failed to adequately recognize and consider the full implications and environmental consequences resulting from approval of "Lease-By-Application No. 11" (the "Lease Application"). As a result, further analysis in the form of an Environmental Impact Statement (EIS) is required before an irreversible commitment of resources to further coal development is made.

Response: We disagree. The EA addressed the cumulative effects of the existing mining operation (Chapter I. E. History, Background, and Potential Mining Scenarios, pg. I-5), other resource activities proposed in the vicinity of the project area (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6; Tables IV-A, B, C, pg. IV-21 through IV-26), and mining of the new tract under each alternative (Chapter I. E. History,

Background, and Potential Mining Scenarios, pg. I-5; Appendix B, Reasonably Foreseeable Development Scenario). Effects of mining the new tract for each alternative were based on a Reasonably Foreseeable Development Scenario presented as Appendix B (conceptual mine plan) that included underground mining and reasonably foreseeable surface disturbance. A surface coal development drill plan was also forecast (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6). The discussions of impacts in Chapter 4 consider all activities.

Irreversible commitments of resources were adequately addressed and will be considered in the decision. Irreversible commitments of resources involved with the decision that are reasonably foreseeable would include removal of the coal which is a non-renewable resource, and potential changes in topography that would result from mining-induced subsidence.

As documented in the EA, reasonably foreseeable impacts would not be significant. Therefore, an Environmental Impact Statement is not required. All of the significance criteria in the CEQ regulations have been listed and addressed.

1 **"Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial".**

The action will create an important beneficial impact by maintaining the production of coal from the Crandall Canyon Mine which ensures jobs and economic health to local communities. Under the selected alternative, there will be no significant impacts to non-mineral resources. Neither the beneficial or negative impacts are extraordinary. The impacts and benefits are typical and reasonable for underground coal mining activity on the Wasatch Plateau.

2 **"The degree to which the proposed action affects public health or safety".**

Noted concerns for public health and safety included potential adverse impacts to the culinary water source at Little Bear spring, and safety of Forest users. Under the selected alternative, the area considered to be within the recharge area for the spring was removed from leasing, thereby minimizing potential risk to human health and safety. The analysis indicates only minor hazard to Forest users would result from mining the tract.

3 **"Unique characteristics of the geographic area such as proximity to historical or cultural resources, park lands, or prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas".**

No significant historical or cultural resources will be effected (EA page IV-9 and 10). The entire Forest, including the Mill Fork Coal Lease tract, does not contain prime farmland, rangeland and forest lands (Forest Plan page II-57). Nor does the site contain floodplains, eligible or designated wild or scenic rivers, or ecologically critical areas. Small pothole-type wetlands occur throughout the lease tract, but the analysis determined that mining will not affect them.

4 **"The degree to which the effects on the quality of the human environment are likely to be highly controversial".**

Information received during scoping and the predecisional review period for the EA indicated concern for the impacts to water resources due to mining, most notably for the effects to the culinary water source at Little Bear spring and the catchment area above Rilda Canyon springs. Evaluation of numerous studies on the Little Bear spring show the commonality of a recharge source from the north-northwest. The selection of the alternative designed to remove the recharge source and the watershed where the spring occurs from the lease tract will respond to any controversy surrounding impacts to the water source. There was no other controvesy identified among resource professionals addressing the anticipated direct, indirect, or cumulative effects, or the effectiveness of the proposed mitigation measures designed to address the resource issues.

5 **"The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks".**

Coal mining has been a common and important element of the local economy and culture since the late 1800s. The impacts of underground coal mining on the Forest have been observed and monitored for many years, and the possible effects and risks are well understood. Enhanced understanding of the local ecosystems and selection of the alternative to maximize environmental protection ensures that the human environment will not be effected by unique or unknown risks.

6 **"The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration".**

The Forest Plan made the area available for further consideration for coal leasing, and made findings relative to unsuitability criteria. Leasing of specific tracts is authorized on a case-by-case basis, and environmental analyses are completed based on site-specific information. Coal leasing has been performed in this area since 1920, therefore leasing this tract is not precedent-setting. This action will not influence future considerations of coal leasing.

7 **"Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts".**

This action, connected actions, and past, present and reasonably foreseeable future actions were determined not to be cumulatively significant (EA IV-17 to 26). The EA addressed the cumulative effects of the existing mining operation (Chapter I. E. History, Background, and Potential Mining Scenarios, pg. I-5), other resource activities proposed in the vicinity of the project area (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6; Tables IV-A, B, C, pg. IV-21 through IV-26), and mining of the new tract under each alternative (Chapter I. E. History, Background, and Potential Mining Scenarios, pg. I-5; Appendix B, Reasonably Foreseeable Development Scenario). Effects of mining the new tract for each alternative were based on a Reasonably Foreseeable Development Scenario presented as Appendix B (conceptual mine plan) that included under-

ground mining and reasonably foreseeable surface disturbance. A surface coal development drill plan was also forecast (Chapter I. F. Other Activities Affecting Cumulative Impacts, pg. I-6). The discussions of impacts in Chapter 4 consider all activities. The expected effects are consistent within the limits analyzed in the Forest Plan FEIS. Under the selected alternative, there will be minimal impacts on resources which will not lead to cumulatively significant impacts.

8 **"The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources".**

No known objects on or adjacent to the lease tract are listed or are eligible for the National Register of Historic Places. No significant heritage resources will be affected by the action (EA page III-23; Project File). A Forest Service coal lease stipulation provides a measure to protect heritage resources in case they are unexpectedly encountered.

9 **"The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973".**

The Biological Evaluation/Biological Assessment completed for this project has a no effect determination. The US Fish and Wildlife Service was consulted on application of unsuitability criteria, to which they concurred with the Forest Service finding (EA page IV-8; Project File). Additionally, they concurred with the Forest Service determination in their July 16th response.

10 **"Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment".**

The analysis did not identify any adverse effects that threaten a violation of Federal or State laws designed to protect the environment.

on Page 3, last paragraph

Comment 44: Approval of Lease-By-Application No. 11 would violate NEPA and its implementing regulations. By failing to adequately explore, define, understand and consider significant environmental factors until after approval of the leases, the agency will have irretrievably committed public lands to further coal development absent compliance with NEPA.

Response: As you have implied, the leasing and mine permitting process are separate but connected or staged processes, with leasing proceeding the mine permitting process. In order to base the leasing decision on sound information that considers both the impacts of leasing and mining, a Reasonably Foreseeable Development Scenario (conceptual mine plan) was developed by the BLM in cooperation with the leasing proponent. Impacts of this mining scenario and other reasonably foreseeable lease development, such as drilling, were analyzed. Therefore, the leasing decision will be made based on reasonably foreseeable lease development. Even though not required under the leasing laws and regulation, the lease proponent submitted their proposed

mine plan to the BLM and it was used in developing the Reasonably Foreseeable Development Scenario. This provided us with a very accurate scenario and analysis.

on Page 3, last paragraph

Comment 45: In this instance, the BLM may not justify its failure to comply with NEPA through the EA process by claiming that the required review and analysis has previously been performed and may be found in the previously prepared NEPA documents. The required current information and analysis is not found in those documents.

Response: No other NEPA documents were used as a substitute to completing a comprehensive analysis for the lease tract. The EA is a site-specific analysis of the lease tract upon which the leasing decisions will be made by the respective officials. It is tiered to the Forest Plan and Forest Plan EIS, and Record of Decision that document decisions regarding availability of National Forest System lands for further consideration for coal leasing in specific Coal Multiple-Use Management Areas (Forest Plan, Appendix C, Coal Suitability and Multiple-Use Management Evaluation). The Forest Plan prescribes Forest-wide Direction (Chapter III, pg. III-35 and 36), and management emphasis for specific land areas called management units (Chapter III, pg. III-45 through 97) . The Forest Plan EIS addressed impacts of all project activities and resource uses, as well as coal leasing/mining, as the basis for determining how lands would be managed and what restrictions would be required to meet laws, policy, and goals. Tiering to upper level documents such as the Forest Plan, Forest Plan EIS, and Record of Decision are appropriate under NEPA, the CEQ regulations (40 CFR 1502.2 and 1508.28), and the Mineral Leasing Act of 1920, as amended by the Federal Coal Leasing Amendments Act of 1975.

Information from other environmental documents is incorporated by reference, but these documents were not used as a substitute for any portions of the current analysis.

on Page 4, first paragraph

Comment 46: The EA failed to address the criteria provided by the Council on Environmental Quality ("CEQ") Regulations that implement the National Environmental Policy Act. Specifically, the BLM has failed to adequately locate and define the boundaries of the impacted area, failed to adequately consider all mining related activity in the "actually" impacted area and, instead, has chosen to consider only selective activities in an area that represents only a small portion of the "actual" impacted area.

Response: We disagree. The EA is consistent with the CEQ regulations and cumulative impacts within and adjacent to the tract were addressed.

The spacial extent of impacts are different for almost every resource considered. As example, the economic benefits are local as well as nationwide where the impacts to topography from mining-induced subsidence are confined to mined areas within the tract. In addition, the spacial extent of impacts is not well defined such that a finite boundary can be drawn. The discussions of effects for each resource category in Chapter 4 assume a relative spacial extent without, in many cases, actually defining a strict boundary line. As discussed, the impacts of leasing and mining are expected to be minimal and generally localized (exceptions are transportation and socioeconomic).

required mitigations, and prior experience. The intent of further site-specific analyses is to base NEPA and required decisions on the actual locations not known during the leasing analysis.

on Page 9, subheading after second paragraph

Comment 50: THE FOREST PLAN - SPECIAL COAL LEASE STIPULATIONS ARE INSUFFICIENT AND REQUIRE UPDATING.

Response: The comment is general in nature relative to the Forest Plan, and the letter only specifically identifies "human use" needing to be included in stipulation 17 (see also comment 7).

The Forest Plan, Forest Plan FEIS, and Record of Decision adequately addressed coal development and established Forest Service Special Coal Lease Stipulations that must be considered on a site-specific basis. They have proven to be effective to the present in accomplishing the intended non-mineral resource protection, monitoring, and mitigation. They have been challenged through Forest Service appeals, Interior Board of Land Appeal reviews, as well as informal challenges, but have been upheld and proven effective.

In addition, the Forest Plan requires further site-specific analysis of proposals to provide required site-specificity for NEPA related decisions that could not be singled-out in a Forest-wide analysis such as the Forest Plan FEIS. The management requirements in the Forest Plan and unsuitability criteria must be re-evaluated during site-specific evaluations to address any changed or unforeseen conditions. The Forest Plan and Forest Plan FEIS have proven to be remarkably accurate and effective.

Management decisions regarding coal leasing are documented in the Forest Plan and are not outdated (Forest Plan - Forest-wide direction, pg. III-35 and 36; Management Unit Requirements, pg. III-44 through 97; Appendix B, Mineral Stipulations and Mitigation Statements; Appendix C, Coal Unsuitability and Multiple Use Management Evaluation; and throughout the FEIS).

on Page 14, end of first paragraph

Comment 51: Allowing additional coal mining activities to occur within the Manti-La Sal National forest to the detriment of these water sources would violate Congressional policy under MUSYA to protect this important watershed.

Response: The EA has determined that offering the lease under Alternative 4 would not be to the "detriment of these water sources", therefore, the watersheds and water sources would be adequately protected under all applicable laws and regulations. The Multiple-Use Sustained Yield Act recognizes minerals as legitimate and important uses of National Forest System lands.

on Page 14, second paragraph

Comment 52: Such projects must demonstrate the engineering and economic feasibility to restore affected lands to usefulness for forestry, agriculture, recreation, or other beneficial purpose. Id. The EA is devoid of any discussion of such projects.

on Page 20, second paragraph

Comment 55: In order to address this deficiency in baseline data, the Data Adequacy package must be updated, or the required PHC will be inaccurate, as well as the resulting CHIA. Further, the EA must address this lack of baseline information, and the alternatives must include measures to collect baseline data to insure the accuracy of the mandated PHC and CHIA.

Response: Data has been determined to be more than adequate to meet the requirements of the Uinta-Southwestern Utah Coal Region Data Adequacy Standards and to make the leasing decision.

The PHC and CHIA are not solely dependent on data used in the leasing analysis, even though the data is probably also adequate to make the mine permit decisions. The PHC and CHIA that will be prepared during the mine permitting process will consider all information available at the time and additional data compiled by the operator and Division of Oil, Gas and Mining and any other agency, company, or individual. The lease stipulations (Appendix A of the DN/FONSI/Rationale) and minimum standards for a Mining and Reclamation Plan and Permit (30 CFR 717.17 Protection of the Hydrologic System, 30 CFR 784.14 Hydrologic Information) already require adequate baseline data needed to insure the accuracy of the PHC and CHIA.

on Page 20, third paragraph

Comment 56: The environmental costs of collecting and analyzing this baseline data must be considered in determining whether coal exists in commercial quantities.

Response: The BLM has determined that coal exists in commercial quantities as documented in the Tract Delineation Report, Reasonably Foreseeable Development Scenario, and the EA. Considering the amount, quality, and value of minable coal reserves in the tract (see EA Chapter III.F. Socioeconomics, pg. III-22 and 23 and Chapter IV.F. Socioeconomics, pg. IV-9). There is no question that the coal can be economically mined after all operating costs, including data collection, monitoring, reclamation, etc.

on Page 21, end of page

Comment 57: The Mill Fork EA fails because it does not provide sufficient evidence and analysis in order to determine whether to prepare an environmental impact statement of a finding of no significant impact and to support that decision. 40 C.F.R. 1508.9. As a result, the agencies, as well as the public, are insufficiently informed and a finding of "no significant impact" may not legally be reached. Because it cannot be determined that the action would not have a significant effect on the human environment, and environment impact statement must be prepared. 40 C.F.R. 1508.13.

Response: We disagree. The EA established through thorough analysis of cumulative impacts that significant impacts are not anticipated, therefore an Environmental Impact Statement is not needed. Public involvement has been provided consistent with NEPA, CEQ regulations, and Forest Service regulations and policy. The public has been adequately informed and provided an opportunity to participate in the process consid-

ering the scope of the project and analysis (See Chapter V. Personnel and Public Involvement).