

1.1 INTRODUCTION

In many parts of the United States, National Forest System (NFS) lands overlie geological formations that contain oil and/or natural gas. "Leases" are offered under the mineral leasing laws for many of the lands for the purpose of drilling exploratory wells and extracting oil and/or gas. The mission of the Forest Service in relation to minerals management is to support, facilitate, and administer the orderly exploration, development, and production of mineral and energy resources on NFS lands to help meet the present and future needs of the nation (Mining and Minerals Policy Act [1970] and Forest Service Manual [FSM] 2802).

The United States Department of Agriculture, Forest Service, Uinta and Ashley National Forests (Forest Service) and United States Department of the Interior, Bureau of Land Management (BLM) are conducting an environmental analysis with the intent of identifying NFS lands with federal mineral rights that should or should not be made available for oil and gas exploration, development, and production in the Western Uinta Basin (Figure 1-1), in accordance with the Mineral Leasing Acts. The Forest Service is the custodian of surface uses on NFS lands, while the BLM serves as manager of federal subsurface minerals (including oil and gas lease operations). Under the National Environmental Policy Act (NEPA) of 1969, the Forest Service, in cooperation with the BLM, is responsible for identifying and assessing potentially significant environmental impacts and addressing issues associated with oil and gas leasing.

This Environmental Impact Statement (EIS) describes and explains various leasing alternatives, describes the existing affected environment, and discloses the possible environmental consequences of each alternative. Environmental issues and concerns expressed by the public and various government agencies during public scoping have been incorporated into the analysis.

This EIS is not a decision document. It is a document disclosing the environmental consequences of implementing various leasing alternatives. The decision will be documented in a Record of Decision (ROD) signed by the responsible official. Although the issuance of a lease grants rights that could result in surface disturbing activities (except in the case of 100 percent no surface occupancy), further project specific analysis is required prior to final approval of surface-

disturbance activities per 36 CFR 228.107. Site-specific ground disturbing activities are identified at the time an Application for Permit to Drill (APD) and Surface Use Plan of Operations (SUPO) have been provided to the Forest Service. At that time, the Forest Service will analyze the proposal and issue a decision document.

1.2 LANDS INVOLVED

The area involved is the Western Uinta Basin, which includes portions of both the Ashley and Uinta National Forests (NF), in northeastern Utah (Figure 1-1). It includes the counties of Duchesne, Wasatch, and Utah. The study area encompasses lands with high and moderate potential for oil and gas occurrence located on the south unit of the Duchesne Ranger District of the Ashley NF and the area south and west of Strawberry Reservoir on the Uinta NF. Total acreage for the study area is approximately 400,940 acres of NFS lands, of which approximately 203,670 acres are within the Ashley NF and 197,270 acres on the Uinta NF.

Nearby rural communities include Duchesne, Fruitland, Soldier Summit, and Wallsburg. Other communities and approximate distances are Heber City 15 miles northwest, Provo 30 miles west, Salt Lake City 80 miles northwest, and Vernal 80 miles northeast. Strawberry Reservoir is adjacent to the study area and Starvation Reservoir is approximately 20 miles north. The Uintah and Ouray Indian Reservation lies to the north and east of the study area.

There are approximately 57,140 acres of lands in the Strawberry Basin, referred to in this document as the Strawberry Lands, that were purchased by the Bureau of Reclamation and are administered by the Uinta NF. The leasing authority resides with private entities, so no leasing decision will be made for them. These lands, however, are included in the cumulative effects analysis.

1.3 PURPOSE OF AND NEED FOR ACTION

The Federal Onshore Oil and Gas Reform Act of 1987 (Leasing Reform Act) requires the Forest Service to analyze lands under its jurisdiction that are available for leasing in accordance with the National Environmental Policy Act of 1969. The purpose and need for this EIS is to comply with these regulations (36 CFR 228.102).

Since the Land and Resource Management Plans (Forest Plans) for the Ashley and Uinta NFs were completed prior to the passage of the Leasing Reform Act, current Forest Plans did not determine

the availability of NFS lands for oil and gas leasing. It was determined further that the decision to lease, not to lease, or to lease with stipulations on specific lands was not made in the Forest Plans. Such a decision was to be based on site-specific analysis.

In addition, the Forest Supervisors and BLM State Director have several reasons to make these decisions at this time. These are described below.

Outstanding Requests For Leases: Since the passage of the Leasing Reform Act, companies have applied for or expressed interest in acquiring leases within the Western Uinta Basin. Upon completion of this document, these lease proposals will be acted upon. The Forest Service could not properly act upon these "Requests For Lease" prior to the regulations. The Forest Service needs to determine which lands are available for leasing and which of the outstanding lease requests to authorize.

Decisions For Lands Currently Leased: Currently, there are 7,273 acres of existing leases in the Western Uinta Basin. Approximately 2,073 acres of these existing leases are expected to expire by the year 1997 and thus become available for issuance as new leases if allowed by the leasing decision. The other 5,200 acres of leases are classified as producing oil or gas (i.e., held by production), and therefore have been extended. Included in the analysis are those lands currently leased so that when the leases expire, the decision has been made whether or not

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to offer them for lease and the required stipulations are known. It is possible that currently leased lands would not be available for lease or would be available with stipulations applied that are not in the current lease.

Anticipated Requests for Leases: Based on past experience and because most of the Western Uinta Basin is considered an area of high potential for the occurrence of oil and gas, the Forest Supervisors can expect to receive additional Requests for Leases in the Western Uinta Basin each year. In order to plan for the orderly management of NFS lands, resolve potential conflicts in land or resource use in a meaningful way, and study the aggregate and cumulative effects of oil and gas leasing, the Forest Service is conducting this analysis leading to decisions related to the availability of lands for leasing and consent for the BLM to lease on an area-wide basis.

1.4 DECISIONS TO BE MADE

This EIS summarizes oil and gas leasing alternatives in the Western Uinta Basin. The Forest Service and BLM, federal agencies that have separate responsibilities for lands within the Western Uinta Basin boundary, propose the following specific actions.

1. The Forest Supervisors of the Ashley and Uinta NFs will decide, within the Western Uinta Basin study area, which NFS lands and non-federal lands with federal mineral ownership (split estate lands) are administratively available for oil and gas leasing and under what conditions (lease stipulations - Appendix A) (36 CFR 228.102 (d)).
2. The Forest Supervisors will decide what specific NFS lands the BLM will be authorized to offer for lease, subject to the Forest Service ensuring that correct stipulations will be attached to leases issued by the BLM (36 CFR 228.102 (e)).
3. The Forest Service proposes to amend the Ashley and Uinta Forest Plans to incorporate the leasing decision.
4. Subsequently, the BLM will decide whether or not to offer for lease the specific lands authorized by the Forest Service.

1.4.1 What The EIS Can and Cannot Do

The first decision will address whether lands are "available" or "not available" to lease, and if so with what stipulations. Once the decision is made regarding availability, then a decision is made whether to lease or not to lease those lands that were determined to be available. The application of these decisions is limited by the legal authority of the Forest Service and the BLM. These limits determine what the final decisions can and cannot do in several circumstances.

The decisions can determine the management of federal lands. These decisions cannot be applied to non-federal surface and mineral estates where the surface and/or mineral estates are owned by private, state, and/or local government entities (Figure 1-2). For example, the federal government owns the surface of the area known as the "Strawberry Lands" (see Section 1.2), but the leasing authority resides with private entities so no leasing decisions will be made for this area. The Western Uinta Basin study area also includes inholdings of private surface ownership. Consequently, oil and gas operations could continue in the Western Uinta Basin on private minerals, even if the federal government were to never issue another lease.

The decision can result in new controls on new federal leases. However, approximately 2 percent (7,273 acres) of federal lands in the Western Uinta Basin study area (400,940 acres) are already leased and any new requirements cannot be imposed on the contractual terms of the existing leases, nor can existing leases be revoked if a decision is made not to lease. Although many operators are willing to voluntarily make changes, the lease they hold may not require them to do so.

The decision can provide surface resource protection on federal lands. It cannot preserve federal or non-federal oil and gas deposits for the future. Regardless of any decision made in this document, oil and gas operators will be able to access non-federal deposits. In doing so, they may theoretically drain federal deposits; however, in the Western Uinta Basin study area, this is unlikely because of limited private mineral ownership. Preservation of oil and gas reserves in the Western Uinta Basin study area is beyond the scope of the EIS.

The leasing decision for specific lands shall remain in effect until significant new information or circumstances cause the existing environmental analysis to be out of date, at which time the BLM will be notified and the lands will be scheduled for a new leasing analysis.

A series of statutes including the Leasing Reform Act establishes and defines the authority of the Forest Supervisors to make these decisions. These are described below in Section 1.5.1 and more fully in Appendix B.

Issuance of a lease has been determined to constitute the point of "irreversible and irretrievable commitment of resources" that requires NEPA analysis and disclosure. This EIS is intended to provide that analysis for the lands within the study area. Any stipulations intended to mitigate effects on surface resources beyond that required by the standard lease terms must be attached to the lease at the time it is issued. Consequently, the identification of stipulations in the determination of administratively available lands is of utmost importance in this EIS.

1.4.2 Forest Plan Context

Management of each administrative unit of the NFS (one or more National Forest(s) or National Grassland(s)) is governed by a Land and Resource Management Plan (Forest Plan). The existing Forest Plans include general decisions, as part of management prescriptions, to provide for oil and gas leasing, but do not include decisions for leasing specific lands. Prior to the passage of the Leasing Reform Act and except for acquired lands, the Forest Service had no authority to make decisions related to issuing or not issuing oil and gas leases on NFS lands. The Forest Plan EIS's, which predate the Leasing Reform Act, do not fully meet the intent of the regulations to make site-specific leasing decisions. Decisions the Forest Supervisors will make, including availability, will be used to develop an amendment to the Forest Plans (refer to Forest Manuals and Handbooks for Plan Amendment Process).

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Slipsheet for Figure 1-2 (concluded)

1.5 GENERAL BACKGROUND

The leasing of public domain minerals, including oil and gas, is a complex process often involving multiple agencies and governed by numerous laws and regulations. The following sections summarize the relevant legislation and policy and the federal leasing process.

1.5.1 Legislation and Policy

Leasable public domain minerals (those which have never passed out of federal ownership) are leased under authority of the Mineral Leasing Act of 1920, as amended. Acquired minerals (those which were reacquired by the federal government) are leased under the authority of the 1947 Mineral Leasing Act for Acquired Lands, as amended.

The Mineral Leasing Act of 1920 (as amended) provides that all public lands are open to oil and gas leasing, unless a specific land order has been issued to close an area. Prior to 1987, a request was submitted to the BLM to lease a parcel of land administered by the Forest Service. The Forest Service was asked for a recommendation regarding the sale of a lease and appropriate stipulations to protect the resources; however, the primary authority and responsibility for determinations regarding leasing remained with the Secretary of the Interior and BLM.

In 1987, Congress passed the Federal Onshore Oil and Gas Leasing Reform Act (Leasing Reform Act). This resulted in modifying the authorities of the Secretary of the Interior and Secretary of Agriculture by increasing the role of the Forest Service in the leasing process. The authority to issue all leases for the production of federally owned oil and gas continues to reside with the BLM. However, under the Leasing Reform Act, the Forest Service's decision to lease with certain stipulations is binding on the BLM for all federal minerals on NFS lands, if the BLM decision is to offer the leases for sale.

In March 1990, the Forest Service developed new regulations (36 CFR Parts 228 and 261) to be consistent with the Leasing Reform Act, and to provide guidance for oil and gas leasing and surface-use management on NFS lands. The regulations prescribe methods by which the Forest Service will make decisions with regard to oil and gas leases and subsequent management of oil and gas operations on NFS lands. These regulations lay out the process for determining lands

administratively available for leasing, including the designation of stipulations and the projection and analysis of post-leasing activity.

A result was the establishment of a "staged" decision process designed to accommodate the tentative nature of oil and gas exploration and development, which is very speculative and costly. The stages include: (1) the determination by the Forest Service of NFS lands available for leasing, (2) the decision by the Forest Service to lease specific lands, (3) an APD, and (4) an application for field development if oil or gas is discovered. Each decision is based on environmental analysis and disclosure of the probable effects in accordance with NEPA.

In the case of this EIS, the Forest Service is exercising discretion in combining and addressing the first two of the four decision stages for NFS lands in the Western Uinta Basin study area identified as having a high priority. These decisions must be consistent with Forest-wide goals and objectives provided in the Forest Plans. This EIS tiers to the direction provided in the Forest Plans. The Forest Plan for the Ashley National Forest (NF) was approved in 1986. The Forest Plan for the Uinta NF was approved in 1984. These long-range, integrated land and resource management plans provide for integrated guidance for all natural resource management activities as required by the National Forest Management Act of 1976 (NFMA).

The decisions must also be consistent with the Resource Planning Act (RPA) Long Term Strategic Plan. The RPA program provides general policy guidance at the national level based on a five-decade projection into the future. The Forest Service has defined nine roles in its basic national strategic plan. Multiple-use management, contributions to rural development, and management in situations of mixed ownership situations are three of those roles. The issue of minerals development is described in the 1990 RPA document as:

The mineral resources within the NFS significantly affect the economic well being of local communities and the strategic defense of the nation. The public is concerned about the effects on minerals development on other resource values and on the environment.

In the RPA document, the long-term strategy for minerals is to meet most demands for access to explore and develop mineral resources, except when doing so would pose unacceptably high risks to other resources.

1.5.2 Federal Leasing Process

The BLM is responsible for issuing oil and gas leases on federal lands and on private lands where the federal government retains mineral rights. The BLM cannot issue leases for lands administered by the Forest Service over the objections of the Secretary of Agriculture. The Mineral Leasing Act of 1920, as amended, and the Mineral Leasing Act of 1947 for acquired lands provide the legislative authority for federal oil and gas leasing. Title 43 of the CFR provides the regulatory basis for administering federal leases.

In areas where exploration and development of oil and gas resources would conflict with the protection or management of other resources or public land uses, the NEPA process identifies measures to mitigate impacts. Such mitigation measures may be applied as lease stipulations, which restrict how operations are conducted or where they can be located.

Competitive and noncompetitive leases may be obtained for oil and gas exploration and development on lands owned or controlled by the federal government. The Leasing Reform Act of 1987 requires all public lands available for oil and gas leasing must first be offered through a competitive leasing process. This is done by oral auction. Noncompetitive oil and gas leases may be issued only after no competitive bids have been received and for a period of two years following the competitive sale. After the two year period, the lands would again be offered competitively. Competitive and noncompetitive leases are issued for a period of ten years. Leases of both types that produce paying quantities of oil and gas continue for the period of oil and gas production. The maximum competitive lease sizes are 2,560 acres in the lower 48 states and 5,760 acres in Alaska. The maximum noncompetitive lease size is 10,240 acres in all states. See Appendix C for a more detailed discussion of the competitive and noncompetitive leasing process.

1.5.2.1 Standard Lease Terms and Stipulations

The Standard Lease Terms, contained on BLM Form 3100-11 (June 1988), Offer to Lease, and Lease for Oil and Gas (see Appendix A), provide the lessee the right to use the leased land as needed to explore for, drill for, extract, remove and dispose of oil and gas deposits, including tar sands, located under the leased lands. The lessee must conduct operations in a manner that minimizes adverse impacts to the land, air, water, cultural, biological, visual, and other resources, as well as other land uses or users. Federal environmental protection laws such as the Clean Water Act, Endangered Species Act, and Historic Preservation Act, will be applied to all lands and are

included in the Standard Lease Terms. The Standard Lease Terms require that if threatened or endangered species, objects of historic, cultural, or scientific value, or substantial unanticipated environmental effects are encountered during operations, all work affecting the resource will stop and the land management agency will be contacted. Operations which would destroy or harm these species or objects are prohibited.

Standard Lease Terms provide for reasonable measures to minimize adverse impacts to surface resources. Standard Lease Terms include, but are not limited to, modifications to the siting or design of facilities, timing of operations, and specifications of interim and final reclamation measures. Well sites may be moved up to 200 meters and operations delayed for up to 60 days without interfering with the lease rights (43 CFR 3101.1-2). These allowances cannot be used to increase existing stipulated restrictions attached to a lease.

A lease does not convey an unlimited right to explore, or an unlimited right to develop, any oil or gas resources found under the land. Leases are subject to terms and conditions. These restrictive terms and conditions, derived from legal statutes and measures to minimize adverse impacts to other resources, are defined in a lease as stipulations. Stipulations modify the rights the government grants to a lessee. The stipulations are known by potential lessees prior to any lease sale. Standard Lease Terms can be modified by special or supplemental stipulations, which are attached to the lease. Special stipulations are designed to address specific resource concerns or potential impacts, and allow the government to retain sufficient authority to require protection or mitigation beyond that provided by Standard Lease Terms. These stipulations include No Surface Occupancy, Timing Limitations, and Controlled Surface Use.

The Rocky Mountain Regional Coordinating Committee published "Uniform Format for Oil and Gas Stipulations" in March 1989. A uniform format for stipulations was developed for No Surface Occupancy, Timing (or seasonal) Limitations, and Controlled Surface Use. This guidance also includes the use of Lease Notices. There is provision for special administration or unique stipulations, such as those required by prior agreements between agencies or other instances when standardized forms are not appropriate. These formats have been adopted for nationwide use (2820 letter; 5/31/89).

No Surface Occupancy: The No Surface Occupancy (NSO) stipulation is intended for use only when other stipulations are determined insufficient to adequately protect the public interest. NSO means that no well sites, central tank batteries, or similar facilities could be constructed on the

lands covered by the stipulation. The suitability and acceptability of constructing a road, pipeline, or similar linear facility that typically extends beyond the boundaries of the lease would be evaluated using Forest Plan standards and guidelines, the same as roads related to other resource uses would be.

Timing Limitations: The Timing Limitation stipulation prohibits oil and gas mineral exploration and development activities for time periods longer than 60 days but less than yearlong. This stipulation does not apply to the operation and maintenance of production facilities unless the analysis findings demonstrate the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient.

For example, a Timing Limitation might be used to protect an elk calving area during the elk calving period, or to prevent excessive soil erosion and stream sedimentation resulting from construction activities during periods when soils are saturated. The Timing Limitation would not allow surface use during a prescribed period of time on all or a portion of the lease. The Timing Limitation may also specify that the restrictions apply when certain surface conditions exist, such as water saturated soils or during spring thaws when road beds are too soft to allow traffic without unacceptable damage to the road.

Controlled Surface Use: The Controlled Surface Use (CSU) stipulation is intended for use when oil and gas development is generally allowed on all or portions of the lease area year-round, but because of special values, or resource concerns, lease activities must be strictly controlled. The CSU stipulation is used to identify constraints on surface use or operations which may otherwise exceed the mitigation provided by Section 6 of the Standard Lease Terms (see BLM form 3100-11 [June 1988], in Appendix A), existing regulations, and Onshore Oil and Gas Orders.

The use of CSU stipulations should be limited to areas where restrictions and controls are necessary for specific types of activities within the specific affected environments, rather than all activity on the lease. The stipulation should clearly describe the activity to be controlled or what operational constraints are required and must identify the applicable area and the reason for the requirement.

For example, a CSU stipulation might be used to protect the Visual Quality Objective (VQO) of an area. To do so, the CSU stipulation would require that operations be located and designed to meet the specific VQO, normally within a specified time period (i.e., within one year). If at the APD

stage, the analysis indicates that the VQO would not be met, the proposal would have to be modified to do so, or it would not be approved.

Lease Notice: A Lease Notice is attached to leases to transmit information at the time of lease issuance to assist the lessee in submitting acceptable plans of operation, or to assist in administration of leases. Lease Notices do not involve new restrictions or requirements; they identify specific concern(s) that may impact lease operations on a given lease. Any requirements contained in a Lease Notice must be fully supported in either a law, regulation, standard lease terms, or Onshore Oil and Gas Orders.

1.5.2.2 Mitigation Measures

Mitigation measures are actions taken to avoid, minimize, reduce, eliminate, replace, or rectify the impact of a project or management practice. Forest Plan standards and guides (which can be considered basic mitigation measures) will be adhered to during implementation of any of the alternatives. Under Standard Lease Terms of BLM Lease Form 3100-11 (Appendix A), 43 CFR 3100, and 36 CFR 228E, basic mitigation measures are included to protect the environment. Special stipulations, as described above, may be attached to a lease to protect more specific resource values. At the APD stage additional, site-specific mitigation measures, called Conditions of Approval (COA's) may be developed to protect site-specific resources or mitigate impacts.

These mitigation measures are identified through on-the-ground examination and the NEPA analysis. These COA's can be required if they are within the terms of the lease and negotiated with the applicant if they are outside the terms of the lease. Any post-lease mitigation applied must not change the intent of the lease or impose undue constraint upon the operator.

1.5.2.3 Bonding

The operator must furnish a lease bond of at least \$10,000 before beginning any surface-disturbing activities related to drilling. In lieu of individual lease bonds, operators may furnish a bond in an amount of not less than \$25,000 covering all leases and operations in any one state; or a bond in the amount not less than \$150,000 covering all leases and operations nationwide.

The bond is intended to ensure compliance with all lease terms, including protection of the environment. The BLM may increase the bond amount any time conditions warrant such an increase, or the Forest Service can require additional bonding under 36 CFR 228.109.

1.5.2.4 Rentals and Royalties

In the first five years of the lease, annual rental rates for competitive and noncompetitive leases are \$1.50 per acre or fraction of the acre. After the first five years, annual rental rates increase to \$2.00 per acre. The royalty rate on production is 12.5 percent for competitive and noncompetitive leases.

1.5.2.5 Expiration or Termination of a Lease

Oil and gas leases expire at the end of their primary term. The primary term is ten years for competitive and noncompetitive leases. Leases that produce paying quantities of oil or gas do not expire until production ends.

Leases without producible wells automatically terminate if the lessee fails to make full and timely payment of the annual rental. The rental must be received by the federal government on or before the anniversary date of the lease.

The owner of a lease also may relinquish the lease in whole or in part by filing a written relinquishment with the BLM State Office having jurisdiction over the leased federal lands. A relinquishment takes effect on the date it is filed. The lessee is responsible for plugging any abandoned well. The lessee or operator also is responsible for other work required by the BLM to place the leasehold in proper condition for abandonment and bring the lease account into good standing. If the lessee or operator fails to perform the required abandonment work, the bond will be used to pay for the costs of abandonment, and the lessee will be prohibited from leasing any additional federal lands.

1.6 SCOPE OF THIS EIS

It is not anticipated that any lands currently leased and held by production will become available for leasing by the year 2000. Some of the wells forecast in the reasonably foreseeable development scenario (RFDS), discussed later in this chapter (Section 1.7), will occur on lands currently leased or leases held by production. Producing wells will continue to hold these leases in place until

production ceases. Administrative changes, such as Forest Plan amendments needed to implement an alternative, are within the scope of this document.

The scope of this EIS includes, in addition to the proposed action, the effects of connected actions and cumulative actions. Connected actions are those actions that (1) are closely related to the proposed action and are automatically triggered by the proposed action, (2) cannot or will not proceed unless other actions are taken previously or simultaneously, or (3) are interdependent parts of a larger action and depend on the larger action for their justification (40 CFR 1508.25). Cumulative actions are actions that, when viewed with other proposed actions, such as timber sales, wildlife improvements, etc., may have cumulatively significant impacts and should be discussed in the same EIS (40 CFR 1508.6).

The authorization of a lease grants rights to explore for and develop oil and gas, or tar sands within the terms and stipulations of the lease. The exercise of these rights results in implementation of connected actions. However, authorization implies that oil and gas development may take place at a future time with identified restrictions. The regulations, 36 CFR 228.102 (c)(4), direct the Forest Service to consider the subsequent actions that would be authorized by a lease, as connected actions. This includes the activities described below as connected actions and in Appendix D. These actions also meet the definition of connected actions in the procedural requirements for the NEPA (40 CFR 1502).

These expected actions are the basis of the environmental analysis from which the leasing decisions will be made. The decision on the lands that will be administratively available, and the subsequent decision authorizing leases, are based upon analysis of the likely environmental effects of the connected actions.

Connected actions are being considered under each alternative in the EIS. In this context, connected actions that are considered include: exploratory drilling, development, production, and abandonment activities, and associated development such as the building or upgrading of roads, pipelines, or other ancillary facilities (Appendix D), based on the RFDS. As discussed in the section on legislation and policy of oil and gas activities (Section 1.5.1), there are three stages in the process that require additional permitting for actions related to oil and gas leasing. These include the issuance of permits for geophysical exploration and for drilling. The process for issuance of these site-specific permits will implement and require completion of an additional NEPA analysis. The NEPA analysis that may be required would complement the analysis

completed in this document. The analysis summarized in this EIS is key to determining which lands would be administratively available and under which stipulations, including determining those specific parcels that would be designated with a stipulation for No Surface Occupancy.

Scope of Analysis

Through the public scoping process and through Forest Service management analysis, specific environments or resources within the study area were identified as being areas of concern (or sensitive resource components). A description of these resources is given in Chapter 3, Affected Environment. For each of the resources, or sensitive components of the resource, this EIS is deciding whether that particular resource is available and authorized for use, and what stipulations (lease options) are necessary to sufficiently protect resource values to an acceptable standard.

Once a lease option has been chosen for each resource to reflect a theme or intent of an alternative (i.e., Forest Plan intent), the overall combination of these options makes up a potential program for leasing within the study area. Alternative programs for leasing have been developed which represent various combinations of lease options. See Chapter 2 for a description of alternatives considered in this EIS. The alternatives range from No Lease for all federal minerals (except existing leases), to leasing all federal minerals with Standard Lease Terms only.

This approach results in a two stage analysis process. The first stage of analysis considers which of the lease options would be viable for each of the various affected environments, the second stage considers the overall effects of the alternative leasing programs. Our direction for making these decisions is the encouragement of oil and gas resource exploration, development and production, while imposing those restrictions necessary to ensure that the activities are environmentally sound and consistent with Forest Plan multiple use objectives.

1.7 REASONABLY FORESEEABLE DEVELOPMENT SCENARIO

In order to analyze the environmental effects that could occur as a result of a leasing decision, a projection of the kind and amount of activity that could be reasonably anticipated was made. The RFDS for this analysis was developed using historical oil and gas development information, geologic information and interpretation, and projected market trends. It must be recognized that future exploration and development may not occur as predicted in the RFDS presented and only provides a reasonable basis for analyzing potential subsequent activities and their effects.

The projected level of oil and gas industry activity in the Western Uinta Basin over the next 10 to 15 year period is 6 exploratory wells and 30 development wells. This projection is based on Oil and Gas Potential Reports for the Uinta and Ashley National Forests (Kaldenback 1991a,b) and comments received during the public scoping process.

Development activity is projected to occur in the Sowers Canyon area in the Ashley NF. This area has proven gas production from the Green River Formation with estimated gas reserves of 100 billion cubic feet. Nearly all of the lands are currently held under active oil and gas leases. Five existing shut-in wells are located in this area (Figure 1-2) and a pipeline has been installed in association with activities occurring north of the study area. Five exploration wells are predicted to be located in the Ashley NF (outside of the Sowers Canyon area), and one exploration well is predicted to be located in the Uinta NF portion of the study area.

The reader is referred to Appendix D for a detailed description of the RFDS.