

# CHAPTER 5 CONSULTATION AND COORDINATION

### INTRODUCTION

The planning process for this Oil and Gas Management Plan/Environmental Impact Statement included formal and informal efforts to involve the public and local, state, and federal agencies. All applicable public participation has been documented and analyzed and is on file.

The interdisciplinary team consulted with the U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department about threatened and endangered species that occur or could occur in the Preserve; with the State Historic Preservation Office about cultural resources; and with the Alabama-Coushatta Tribe of Texas and the Coushatta Tribe of Louisiana to inform them of the planning process and issues that could affect lands and waters that may be culturally significant, and to determine if there were any resource issues with which the Tribes had ethnographic affiliation.

The planning process was officially initiated through publication of a notice of intent to prepare a Draft Oil and Gas Management Plan/Environmental Impact Statement in the *Federal Register* on November 16, 1998. The NPS mailed a public scoping newsletter to over 350 individuals, organizations, and government agencies. The newsletter announced the beginning of the EIS scoping period and the location, date, and time of the scoping open house. The Notice of Intent provided the public an opportunity to request additional scoping meetings; however, none were requested.

The scoping newsletter also provided information on the planning process and schedule, and described how agencies and the public could be involved in the planning process. The newsletter identified oil and gas management plan goals and planning objectives, criteria for defining special management areas, resources and values potentially at stake, and a preliminary range of management strategies. The NPS developed the preliminary planning framework to inform agencies and the public of what the NPS was considering, but more important, to provide agencies and the public with enough information with which they could bring other ideas, comments, suggestions, and management strategies to the decision-making process.

The NPS hosted an open house in Beaumont, Texas, on December 3, 1998, to encourage early and open public participation on the oil and gas management planning effort. Thirty-five members of the public attended. Three participants represented state and federal agencies; ten participants represented environmental groups; six participants were adjacent landowners and residents; and 16 participants represented various oil and gas companies, mineral interests, and consulting firms.

In response to publishing the Notice of Intent, hosting the scoping open house, and distributing the Public Scoping Newsletter, 16 comment letters were received, and 8 individuals asked to be added to the mailing list.

## **Scoping Analysis**

The following table lists, by category, the issues and questions raised in the comment letters received by the NPS during formal public scoping.

## Table 5.1. Scoping Analysis, Big Thicket National Preserve Oil and Gas Management Plan/Environmental Impact Statement

#### **TOPICS**

#### **Criteria for Defining Special Management Areas**

Add to criteria: Areas that contain significant amounts of mineral resources.

Define the special management areas carefully and tightly, be exclusive rather than inclusive.

Cumulative impacts should be mentioned as a criterion.

In addition to the sensitive areas mentioned in the newsletter, oil and gas operators should avoid impacts to sensitive areas including wetlands, riparian corridors, and unique features and ecosystems.

All of the resource must be protected--not just areas identified as "sensitive."

#### **Impact Analysis**

Concern is lack of a comprehensive, cumulative impact assessment of not only oil and gas activities in Big Thicket but also all other activities that have taken place in the past, present, and foreseeable future. That analysis would include, from historical information as well as information collected since Big Thicket was created, all the seismic lines, wells, tank farms, roads, recreational activities, trails, boat launches, air pollution, logging or cutting of trees, water pollution, noise, airplane overflights, research, and other activities that have occurred.

Cumulative impacts need exhaustive assessment, including impacts from areas adjoining the preserve.

NPS must also look at what impacts oil and gas activities are having outside Big Thicket and how what happens in or outside the preserve affects the preserve.

EIS must look at fragmentation effects on plants, animals, and ecosystems. The use of these pipeline rights-of-way as roads also impacts the native biodiversity and needs to be assessed in the EIS.

Identify all resources, since all will be impacted in some way by oil and gas activities and will need specific mitigation measures taken to minimize impacts.

The possibility of poaching and vandalism increases due to access by these rights-of-way is an important issue to discuss in the EIS.

Another issue to discuss is incompatible uses and how they degrade Big Thicket.

The natural environment is going to be significantly impacted by mineral exploitation.

## Law, Policy, Regulations, and Mandates

How does Congress have the authority to control access, dictate operational procedures and require permits on property rights which the mineral owners own the dominant estate?

New requirements should not impede, impact or diminish the efforts of a mineral owner to encourage exploration and production during the development of the oil and gas management plan/EIS.

NPS must demonstrate that oil and gas operations are "detrimental to the purpose and objectives of the Preserve" to justify condemnation (including partial condemnation), or the NPS must not unjustifiably prevent, prohibit or delay mineral estate owners access to their property.

Rights granted under pre-existing easements should not be precluded or restricted in any way as to areas affecting the preserve.

- -Efforts should be made to acquire mineral rights to prevent oil and gas development.
- -Long-range consideration should be given to purchase of mineral rights, and, if opportunities arise for purchase of mineral rights, NPS should seek funding.
- -Push Congress to appropriate funds to acquire mineral rights from willing sellers (and in the most sensitive areas by eminent domain, if necessary).
- -NPS must focus on acquiring mineral rights and protecting the water table levels and water inflows to Big Thicket. More land acquisition is required.
- -Make it policy that NPS will, wherever the opportunity arises, buy mineral rights in Big Thicket and retire these so that oil and gas activity impacts will never occur again.

Clearly defined regulations and operation requirements, rather than building each plan of operation from the ground up, will greatly ease the burden of the small operator. A standard plan that could then be customized would be of great use to the small operator.

Plan should require that operators submit and have approved an amendment to 36 CFR 9B or equivalent, to address operations on non-federal owned minerals. Operations should be conducted in accordance with the management plan, which would provide for general guidelines for drilling, production and exploration activities and be administered at the sole discretion of Big Thicket. The plan should have a statement of NPS goals and objectives in preserve management as well as a statement of cooperation with the dominant mineral estate owners.

Make it a policy that any further oil or gas drilling proposals in Big Thicket require an EIS to fully explore issues, environmental impacts, and the maximum mitigation that will be required.

NPS must make it a policy to make all information about oil and gas activities easily available to the public and to make proposals known widely so that people can participate and give their input.

Promote the environmentally friendly development of minerals in this area, and be very mindful of the cost/benefits involved.

#### **TOPICS**

- -There should be a "No use of ATV's" policy for seismic drilling in Big Thicket.
- -No ATV use can be permitted for exploration or other reasons.
- -There should be a no all terrain vehicles policy.

#### **Need for the Project**

Federal administrative procedures require notice of proposed rule making in the Federal Register, publishing draft/proposed rules, public comment and participation. NPS cannot develop new or revise its existing management plan under NEPA and circumvent federal administrative procedures. NPS needs to demonstrate a need for revision of existing or development of oil and gas management plans and adhere to the requirements of the Federal Administrative Procedures Act.

No need to proceed with development of an EIS at this time. NPS should provide justification and demonstrate the need to develop a new oil and gas management plan and EIS.

#### Other Issues

How will existing pipeline rights-of-way be managed?

Want better understanding of how pipelines are constructed and maintained.

Want better understanding of how leaks and spills can be monitored and avoided.

Want better understanding of general safety issues.

Mineral owner wants to be kept informed by lessees.

Current delays to seismic surveillance have already caused impairment (partial condemnation) to mineral owners' rights and the proposed new oil and gas management plan and environmental impact statement will further impair rights.

It is very disturbing that while scoping is being done for this oil and gas management plan that NPS is allowing huge 3-D seismic survey projects to go forward.

#### **Planning Goals and Objectives**

Question to be answered should be: How can exploration and development of the mineral estate of the Big Thicket be undertaken while *minimizing* loss of natural and ecological integrity? The natural and ecological integrity cannot be "maintained while allowing exploration and development."

Perhaps priorities were not considered in listing of goals, but readers may believe they are implied. Consequently, the first priority should be "preserve, conserve, protect, and interpret resources and values."

"Preserve, conserve, protect, and interpret resources and values," should be placed as first priority, not second.

Delete the term "interpret" from the 2<sup>nd</sup> goal.

Add as item 3, and move current item 3 to 4: Preserve, conserve and protect the rights and value of the mineral interest owners.

Add as item 4: Coordinate with Texas RRC and other state and federal agencies to coordinate and integrate NPS oil and gas regulations with other state and federal regulations, to ease and simplify regulatory burden on operators.

Add as item 5: Coordinate with state and federal agencies to identify, develop, and promote best practices to allow development of mineral resources within park while mitigating environmental disruption.

Planning objective #2 implies that performance standards will be developed. This is not necessary. There are numerous existing state and federal performance standards that are more than adequate for preservation and protection of the preserve. Development of new performance standards would be unwarranted, redundant, and wasteful and beyond the realm of the authority granted to NPS.

Remove "reasonable" from the second objective.

Revise objective #2 to state: "Identify from existing regulatory programs reasonable oil and gas exploration and development performance standards to protect park resources and values."

#### **Planning Process**

NPS currently has an oil and gas management plan in existence. No reference to that existing management plan is made in the scoping newsletter.

No proposed action(s) by either the NPS or external applicant were noted in the newsletter. No statement of need or purpose was stated in the newsletter either.

#### **Potential Elements of the Alternatives**

As performance standards: Best available practices and technologies to minimize 1) extent of area disturbed, 2) noise, 3) leakage, and 4) air pollution.

There is an opportunity to develop and promote "best practices" in operating in an environmentally sensitive area. There are many private and government organizations that you could involve in this effort, including the Texas RRC, the Texas Bureau of Economic Geology, the Petroleum Technology Transfer Council, among others. These best practices could be promoted and transferred to the local operators, and promoted throughout the country to other areas, showing how oil and gas exploration and development can be done in an environmentally sensitive area.

#### **TOPICS**

The avoidance of sensitive areas may be achieved through various means, including

- creating seismic grids with the largest possible bin size (i.e., greatest distance between shot lines) to reduce the total number of shot lines;
- 2) offsetting seismic shot lines to avoid sensitive sites completely;
- 3) declining requests to re-shoot an area already shot;
- 4) require the use of 4-D seismic technology to reduce the likelihood of an operator requesting a re-shoot to acquire better seismic data in the future:
- 5) requiring operators to shoot the largest possible acreage in the same effort to reduce the acreage of "overlap" involved in a seismic shoot of an adjoining area;
- 6) require directional drilling to avoid specific surface features and drill from the least sensitive surface area; and
- 7) require the use of third party monitors for seismic operations, selected at the approval of NPS, and funded by the operator. Such monitors must have transportation and communication provided by the operator

## General guidelines for wells should include:

- a. Prior approval of entrance location to the preserve and limitation on what roads can be used.
- b. Environmental and safety meetings should be co-sponsored with Big Thicket and the operator on the site with all personnel actually supervising operations on the ground and with all vendors supplying services.
- c. Drilling should be restricted where possible to those times of year less likely to conflict with hunting or the time period where visitor access is the greatest.
- d. Large signs should be placed at all entrances requesting vehicle operators to check and repair any leaky or unsecured equipment prior to entry.
- e. Signs should also be placed at the drill site with emergency phone numbers.
- f. The information listed in Appendix III Plan of Operation Information Requirements (where applicable) should be provided.
- g. EPA emergency spill response plan to be on file prior to drilling.
- h. Drilling and plugging requirements to follow those set forth by the Texas Railroad Commission, Texas Water Board, Corp of Engineers, and other agencies responsible for all other wells drilled in the State of Texas.
- i. All wells to be drilled with a closed loop mud system where practical.
- j. Plastic liner (need to decide on minimum mil thickness) to be placed under board matting.
- k. Drip pans placed under equipment connections.
- I. Minimize surface area of drill sites and production facilities.
- m. Multiple wells drilled from a single location if possible.
- n. Air quality control equipment installed on production facilities.

Other alternatives include putting all wetland and streamside areas off limits, putting entire units off limits, putting areas with sensitive plant species, animals species, and ecosystems off limits, allowing drilling only on existing roads or cleared areas used for other resource management, no ATV use, use of only rickshaw and backpack seismic survey drills, no oil and gas activities in the small units like Loblolly and Hickory Creek Savannah Units, no drilling along river corridors.

No destruction of habitat when alternatives are exercised.

NPS must have as a basic policy to maximize the reduction of any oil and gas activity's footprint.

Provide procedures that allow mineral estate owners timely access to their property if not already a part of the existing oil and gas management plan.

Existing pipelines and power lines should be consolidated in a few corridors.

Activity should be confined to existing roads and areas previously disturbed by oil activity.

NPS regulations should allow simplified and less costly plans-of-operations and expedited approval processes. Waivers for plans-of-operations, where feasible, should be allowed. These could be similar to the waivers currently allowed for production from the Big Thicket resulting from directional drilling from outside the preserve. Simplified plans-of-operation and waivers would substantially reduce economic losses to mineral owners due to burdensome and costly NPS requirements.

Management plan should include the requirements for a specific use fee dedicated to restoring minor impacts and rehabilitating areas already impacted by oil and gas work at the discretion of the preserve superintendent. Both seismic and exploratory/ production work can have impacts that may not be detected until long after operators have vacated the site. This fee would not permit or authorize damages; i.e., it would not be damage waiver fee. Damages from oil and gas work would be taken care of by the operator according to management plan requirements.

NPS should have the capability to receive direct or indirect compensation, either in the form of payment, services, or equipment, to mitigate for impacts the natural resources of national significance they administer and protect in trust for the American public.

#### **TOPICS**

Suggest: For each acre damaged on the preserve, 100 contiguous acres of the same community type outside the preserve will be located, restored (if needed), and given to Big Thicket (or some management-minded conservation organization such as the Nature Conservancy). This acreage would include mineral rights. For each hole drilled in the ground, an additional acre will be added to the holdings off the preserve. All lands will be acquired in Hardin, Tyler, or surrounding counties and in all cases large tracts that can be managed will be obtained, not single scattered acres. A botanist and an ecologist (operating independently of both the oil companies and the preserve) will help decide what land to acquire and develop management guidelines that will be followed. Money to manage the land will be put in a fund by the company and used by the managers when necessary, for example, for burning, hand clearing, etc. When the company leaves the Big Thicket site, it will restore the damage done to the satisfaction of an ecologist/botanist who specializes in that community, hired independently of the company and the preserve. If the company does not restore the site, it will forfeit bond. The bond will be used to purchase more land offsite because "restoration" to original condition is a myth.

#### Resources and Values Potentially at Stake

Ninety-nine percent of Texas is privately owned. Much of the tiny fraction of land in public ownership is heavily exploited for resources: petroleum, gas, minerals, and timber. Public lands are virtually the only areas where natural and ecological integrity can even be hoped to remain "unimpaired for future generations."

The vast majority of the natural landscape has been destroyed or is on the verge of destruction. Wetland pine savannas (which are jurisdictional wetlands) have been virtually destroyed in the West Gulf Coastal Plain. The community is considered endangered.

Need to recognize that the mineral interest owners have a stake in this too, not just the operators. If you prohibit the drilling in an area, you are effectively taking the rights of the mineral interest owner to realize the mineral value in the property he/she owns.

The mineral estate is the superior estate in Texas. Be aware of this and do not impose restrictions that would result in a taking of the mineral rights.

The proposed oil and gas management plan/EIS and NPS regulations must recognize, provide for, and protect the distinct and extraordinary property rights of mineral owners.

Under "Resources and Values Potentially at Stake," add solitude to natural quiet.

Also add wilderness like and wild lands character as an important resource that Big Thicket has.

## LIST OF DOCUMENT RECIPIENTS

In December 2004, the NPS released the Draft Oil and Gas Management Plan/EIS to the "List of Document Recipients" shown below, for a 60-day public review period which was subsequently extended 30 days ending on March 10, 2005. Notices of Availability of the Draft Plan/EIS were published in the *Federal Register* by the U.S. Environmental Protection Agency (December 10, 2004), and the NPS (December 13, 2004). The NPS received 71 comment letters on the Draft Plan/EIS: 2 from Federal agencies; 2 from State agencies (one was a no comment response); 7 from mineral interest holders and operators; 1 from a group of environmental interests; and 59 form letters. They are reprinted at the end of this chapter. The National Park Service's responses to substantive comments are also provided. This Final Plan/EIS includes corrections and additions based upon the substantive comments received.

### Federal Government

## **Congressional Delegation**

United States Senator Kay Bailey Hutchison

United States Senator John Cornyn

United States Representative Ted Poe – 2<sup>nd</sup> District

United States Representative Al Green – 9th District

#### Agencies

Department of the Army

U.S. Army Corps of Engineers, Galveston District

## U.S. Department of Agriculture

Natural Resources Conservation Service

**USDA Hardin County Office** 

**USDA Jasper County Office** 

**USDA Liberty County Committee** 

**USDA Polk County Office** 

USDA Service Center, Beaumont, TX

USDA Service Center, Jefferson / Orange County

#### U.S. Forest Service

**Angelina National Forest** 

Caddo-LBJ National Grasslands

**Davy Crockett National Forest** 

Sabine National Forest

Sam Houston National Forest

Southern Research Station

## U.S. Department of Energy

Federal Energy Regulatory Commission, Washington, D.C.

## U.S. Department of the Interior

Bureau of Reclamation - Area Planning Office, Austin, Texas

U.S. Fish and Wildlife Service

Anahuac National Wildlife Refuge

Clear Lake Ecological Services Field Office

McFaddin National Wildlife Refuge

Texas Point National Wildlife Refuge

Trinity River National Wildlife Refuge

#### U.S. Geological Survey

National Wetlands Research Center, Lafayette, Louisiana

Water Resources Division, Fort Worth Subdistrict

Water Resources Division, Houston Subdistrict

Water Resources Division, Texas District

#### National Park Service

Big Cypress National Preserve

Big South Fork National River and Recreation Area/Obed Wild and Scenic River

Jean Lafitte National Historical Park and Preserve

Lake Meredith National Recreation Area/Alibates Flint Quarries National Monument

New River Gorge National River

Padre Island National Seashore

## U.S. Department of Justice

U.S. Attorney General

## U.S. Department of Transportation

U.S. Coast Guard

Port Arthur Safety Office

Sabine Pass Station

Federal Emergency Management Agency – Insurance and Mitigation Division, Region VI

## TRIBAL GOVERNMENT

Alabama-Coushatta Tribe of Texas Coushatta Tribe of Louisiana

## STATE GOVERNMENT

Texas State Governor Rick Perry

Texas State Lt. Governor David Dewhurst

Texas State Senator Kyle Janek

Texas State Senator Todd Staples

Texas State Senator Tommy Williams

Texas State Congressman Joe Deshotel

Texas State Congressman John C. Otto

Texas State Congressman Roy Blake

Texas State Congressman Mike "Tuffy" Hamilton

Texas State Congressman Jim McReynolds

Texas State Congressman Allan Ritter

Texas Attorney General Greg Abbott

Texas Department of Agriculture

Texas Department of Agriculture Gulf Coast Regional Office

Texas Department of Economic Development

Texas Department of Health

Texas Department of Public Safety

Texas Department of Transportation

**Texas Forest Service** 

Texas General Land Office

**Texas Historical Commission** 

Texas Natural Resources Conservation Commission

Office of Air Quality

Water Resource Management

Texas Parks and Wildlife Department

**Texas Railroad Commission** 

**Texas Water Development Board** 

## REGIONAL, COUNTY AND CITY GOVERNMENT AGENCIES AND COMMISSIONS

## **Regional Agencies**

Angelina and Neches River Authority

Deep East Texas Council of Governments

Lower Neches Valley Authority

Sabine River Authority

South East Texas Regional Planning Commission

Trinity River Authority of Texas

Upper Neches River Municipal Water Authority

## **County Government**

Hardin County Judge

Hardin County Commissioner Precinct 1

Hardin County Commissioner Precinct 3

Hardin County Commissioner Precinct 4

Jefferson County Judge

Jefferson County Commissioner Precinct 1

Jefferson County Commissioner Precinct 2

Jefferson County Commissioner Precinct 3

## Liberty County Judge

## **City Government**

City of Beaumont

City of Bevil Oaks

City of Bridge City

City of China

City of Groves

City of Kountze

City of Lumberton

City of Nederland

City of Nome

City of Orange

City of Pine Forest

City of Port Arthur

City of Port Neches

City of Rose City

City of Silsbee

City of Sour Lake

City of Vidor

City of West Orange

## **OIL AND GAS INDUSTRY**

Ballard Exploration Company, Inc.

Basil Oilfield Service, Inc.

Black Hills Operating Company, LLC

Black Lake Pipeline

Buford Curtis, Inc.

Caskids Operating Company

Centana Intrastate Pipeline Company

Century Resources Land, LLC

Chevron Pipe Line Company

Citgo Pipeline Company

CMS Trunkline Gas Company

Coastal States Gas Transmission Company

Cobra Exploration Company

Colonial Pipeline Company - Gulf Coast District

Comstock Oil and Gas, Inc.

Clark Port Arthur Pipeline Company

Crown Petroleum Company

**Cypress Pipeline Operations** 

Davis Bros. Oil Producers, Inc.

**Duncan Energy Company** 

Dynegy Midstream Services - Hackberry Storage Facility

El Paso Field Services

Enron Gas and Pipeline Group

Entergy

Enterprise Products Operating L.P.

Explorer Pipeline Company

Exxon Pipeline Company-Mt. Belvieu Operations

Fina Pipeline Systems

**Grant Geophysical Corporation** 

Gulf State Pipe Line Company

Houston Pipeline Company

**Huntsman Petrochemical Corporation** 

Inland Geophysical Services

Kinder Morgan Energy Partners, L.P.

Koch Gateway Pipeline Company

Koch Pipeline Company, L.P.

Lion Oil Company

Litchfield Production Company

Merit Energy Company

Milestone Operating, Inc.

Minerals Search, Inc.

Mobil Pipe Line Company

Murphy Exploration and Production Co.

Natural Gas Pipeline Co. of America/Mid-Con Texas Pipeline Corporation

North Central Oil Corporation

Omega Energy Corporation

Oxy Petroleum, Inc.

Penwell Energy, Inc.

Petronomics. Inc.

PPG Industries, Inc.

Praxair, Inc.

**Premium Exploration Company** 

Quail Creek Oil. Inc.

**Reid Production Company** 

Richman Petroleum Corporation

Sanchez Oil and Gas Corporation

Seagull Products Pipeline Corporation

Seismic Exchange, Inc.

Seminole Pipeline Company

Smith Production, Inc.

Spirit Energy 76

Star Enterprise

Sun Pipe Line Company

Swelco Inc.

Tennessee Gas Pipeline Company

Tennessee Gas Pipeline Company - Pipeline Services

Texaco Pipelines LLC

**Texas Eastern Transmission Corporation** 

Torch Energy TM, Inc.

Transcontinental Gas Pipe Line Corporation

Tri-C Resources, Inc.

Ultramar Diamond Shamrock

Union Pacific Resources Company

**Unocal Corporation** 

Weems Geophysical

WesternGeophysical

Westport Oil and Gas

## **ORGANIZATIONS AND BUSINESSES**

America's Wetland

Armand Bayou Nature Center

**Bat Conservation International** 

Bayou Preservation Association

Beaumont BASS Anglers/Texas BASS

Berg-Oliver Associates, Inc.

**Big Thicket Association** 

Big Thicket Institute

Big Thicket Natural Heritage Trust

Blanton & Associates, Inc.

Bog Research

**Champion International Corporation** 

Clean Air & Water, Inc.

Coalition Advocating a Safe Environment

Coastal Conservation Association of Texas

Coastal Environments, Inc.

**Ekistics Corporation** 

Fulbright & Jaworski L.L.P.

Garner Environmental Services, Inc.

**Gulf Coast Prairies Foundation** 

Hogan and Hartson

**Houston Audubon Society** 

League of Women Voters of Texas

Louisiana Pacific Corporation

Moore Archeological Consulting

National Association of Conservation Districts

National Audubon Society

National Fish and Wildlife Foundation

National Parks and Conservation Association

Native Plant Society

Nature Conservancy of Texas

Northrup Associates, Inc.

Parks and Wildlife Foundation of Texas

Preservation Planning & Consulting

Roy E. Larson Sandyland Sanctuary

Sabine - Neches Conservation Club

Safari Club International of Texas, Pineywoods Chapter

Sierra Club - Houston Chapter

State Resource Strategies

Temple-Inland Forest Products Corp.

Temple-Inland Industries

Texas Committee on Natural Resources

Texas Folklore Society

**Texas Logging Council** 

Texas Parks and Recreation Foundation

Texas Rural Development Council

Texas Wildlife Association

Texas Wildlife Society

**Timber Ridge Tours** 

**United Conservation Alliance** 

## **UNIVERSITIES AND COLLEGES**

Baylor University
Houston Community College
Lamar University at Beaumont
Rice University
Sam Houston State University
Stephen F. Austin State University – College of Forestry
Texas A&M University – Department of Soil and Crop Sciences
Texas A&M University – Department of Wildlife and Fisheries
University of North Texas – Department of Biological Sciences

## **NEWSPAPERS AND MAGAZINES**

Beaumont Enterprise
The Examiner
Hardin County News
Houston Chronicle
Jasper News-Boy
Jefferson County Court News
Journal of Conservation Biology
Orange Leader
Port Arthur News

## RADIO AND TELEVISION

KBMT-TV KFDM-TV KITU-TV KLVI KVHP-TV

## **COMMENTS**

**RESPONSES** 



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

MAR 0 7 2005

Art Hutchinson Superintendent United States Department of the Interior National Park Service Big Thicket National Preserve 3785 Milam Beaumount, TX 77701

Dear Mr. Hutchinson:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Oil and Gas Management Plan and Environmental Impact Statement (DEIS) for the Big Thicket National Preserve.

EPA rates the DEIS as "EC-2," i.e., EPA has "Environmental Concerns and Requests Additional Information in the Final EIS (FEIS)." EPA has identified environmental concerns and informational needs to be included in the FEIS to complement and to more fully insure compliance with the requirements of NEPA and the CEQ regulations. Areas requiring additional information or clarification include: jurisdictional wetlands delineation and more information supporting preferred alternative selection.

Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act to inform the public of our views on proposed Federal actions. Detailed comments are enclosed with this letter, which more clearly identify our concerns and the informational needs requested for incorporation into the FEIS. If you have any questions, please contact Mike Jansky of my staff at 214-665-7451 or e-mail him at <a href="mailto:jansky.nuiciaei@epa.gov">jansky.nuiciaei@epa.gov</a> for assistance.

EPA appreciates the opportunity to review the DEIS. Please send our office five copies of the FEIS when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20460.

Sincerely yours,

Nonnie Braganza, Acting Chief 703/7/05
Office of Planning and
Coordination (6EN-XP)

Enclosure

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COMME	NTS	RESPONSES
permits requires that the least environmentally damaging I Thus our recommendation is consistent with these regulati	racticable alternative be selected.	
Finally, if we receive permit applications for Section proposed individual projects on the Preserve, EPA may must that time. If you have any questions regarding these con 214-665-8336.	on 404 permits in the future for ke additional, site specific comments aments, please contact Norm Sears at	
	-	

**COMMENTS RESPONSES** United States Forest Southern Research Wildlife Habitat and Department of Silviculture Lab P.O. Box 7600 SFA Service Station Agriculture Nacogdoches, TX 75962 936/569-7981 Phone 936/569-9681 Fax File Code: Date: 20 January 2005 Linda Dansby EIS Project Manager Office of Minerals/ Oil and Gas Support Intermountain Region Santa Fe, NM 87504-0728 Dear Ms Dansby: I appreciate the opportunity to comment on the Draft Oil and Gas Management Plan for the Big Thicket National Preserve. Achieving a balance between resource protection and oil and gas extraction is an important management issue on the Big Thicket National Preserve. I have attached my comments to this letter. I have also enclosed a number of publications that are relevant to impacts on the Big Thicket National Preserve, especially in relation to roads, that could be cited in the Plan. I hope that these comments are helpful in preparing the Final Oil and Gas Management Plan. Best Regards, D. Crany fueloft D. Craig Rudolph Research Ecologist Southern Research Station 506 Hayter Street Nacogdoches, TX 759655 Ph.: 936-569-7981 E-mail: crudolph01@fs.fed.us Enc. (US) Caring for the Land and Serving People

COMMENTS	RESPONSES
COMMENTS ON "OIL AND GAS MANAGEMENT PLAN – ENVIRONMENTAL IMPACT STATEMENT BIG THICKET NATIONAL PRESERVE"  As a U. S. Forest Service Research Ecologist working in eastern Texas I have some familiarity with impact issues in the region. My research has primarily involved Red-cockaded Woodpeckers (*Picuides boredis*), Louisiana pine snakes (*Pituophis ruthvent), timber rattlesnakes (*Crotalus horridus*), topics involving fire-maintained ecosystems, threatened/endangered/sensitive species (TES), and road impacts on vertebrate species.  I have briefly scanned the draft plan and have identified several points that I comment on below. I did not thoroughly read the entire draft. Comments below apply primarily to the Fish and Wildlife Sections. Some general comments are listed first, followed by specific comments referenced by page.  1. The environmental impacts of geophysical exploration seem to be minimal and short term if heavy equipment is not used. ATVs and hand lines would be preferred. However, if multiple surveys occur, cumulative effects could be an issue.  2. Drilling and production raise some issues. It is very difficult to assess the impact of surface disturbances, especially roads and pipelines on species of concern. Since proposed exploration has not yet occurred, the extent and location of the road system that will be developed and levels of use are unknown. Given these unknowns, I do not see how it is possible to accurately evaluate impacts. Consideration of the maps provided, indicate that roads could be constructed in most areas of the preserve, and greatly compromise the current extent of roadless areas. This is of concern hecause the impacts of road-related mortality can extent many hundreds of meters from the actual road corridor. My research on timber rattesmakes (see attachments), a state listed threatened species in Texas, suggests that road-related mortality can extent many hundreds of meters from the actual road corridor. My research on timber rattesmakes (see attachments), a state listed threat	3. This programmatic management plan is not intended to analyze project-level impacts. Roads are quantified in Chapter 2 as part of the reasonably foreseeable development scenario, and Chapter 3 to describe current operations. The quantification of roads is included in Chapter 4, Environmental Consequences, to assess impacts from geophysical exploration, drilling and production, and plugging/abandonment/reclamation, in addition to assessing cumulative effects. Scoping will be carried out for each project to identify important issues for consideration in a project-specific analysis. Similarly, the NPS will carry out its Section 7 responsibilities under the Endangered Species Act on a case-by-case basis.

COMMENTS	RESPONSES
Limitations on surface impacts appeared to be based on withdrawal of sensitive areas. This is a necessary first step. However, consideration of additional withdrawals to preserve large blocks of un-fragmented habitat would also be desirable. These may be the only refuge for area sensitive species on the BTNP. There may be substantial benefits in the design of these areas, in conjunction with directional drilling, that could greatly limit adverse ecological impacts.  3. Prescribed fire is a critical ecological process required to maintain habitat for many species in the BTNP. Current levels of prescribed fire are low compared to what is needed to maintain habitat. I saw no discussion of how development of oil and gas infrastructure might further impact the efficiency of the prescribed fire program. It is important for management of many species within the BTNP that development not compromise the current, and hopefully increasing, use of prescribed fire on the preserve. Impacts of the fire program are cumulative and need to be assessed in conjunction with all other limitations on use of prescribed fire. Species are undoubtedly being extirpated on the BTNP due to insufficient fire-maintained habitat and additional impediments to the prescribed fire program will be detrimental.  4. Clearly, Alternatives B and C, with greater extent of surface use withdrawal, are to be preferred. However, without the information needed to project the actual level and location of infrastructure development, it is not possible to assess the impacts of either alternative with any accuracy. However, even under Alternatives B and C impacts, especially of roads, could be severe.  5. I would have liked to have seen the inclusion of an alternative that relied on more extensive use of directional drilling from adjacent lands and within the preserve. I suspect that most oil and gas resources could be extracted using directional drilling. Such an alternative could preserve what will, within a very short timeframe, be the only sizable blocks of	<ul> <li>4. Refer to the discussion of "Park Operations for Fire and Facility Management" on pages 1-23 and 1-24 of the Draft Plan/EIS.</li> <li>5. Due to the programmatic nature of the Draft Plan/EIS, the analysis describes impacts "on up to 153 acres of the Preserve." To quantify impacts as much as reasonably possible, the NPS uses the "on up to 153 acres in the Preserve" to correlate with the RFD scenario that projects that approximately 29 wells could be drilled on up to 153 acres or 0.2 percent of the Preserve.</li> <li>6. Directional drilling is a prominent feature of all three alternatives, particularly where the nosurface-use stipulation is applied in Protected Areas or Special Management Areas during specified times or year-round.</li> </ul>
the more extensive blocks of habitat. These blocks should be stipulated in such an alternative.  6. Point # 5 raises an additional issue. It is difficult to formulate an overall opinion on the proposed development given only one side of the issue. There is no information provided on the impacts of various constraints on the oil and gas operators. Is restriction of surface access and use of directional drilling a major issue? How would increasing restrictions on road construction impact oil and gas interests? How much education and oversight would be given to personnel, and how effective would it be, in relation to reducing road mortality? Answers to these and other questions would be required to adequately evaluate impacts and devise strategies to mitigate impacts. This document should be an attempt to balance resource protection and extraction of oil and gas. It is not possible to do so without knowing the tradeoffs involved.	<b>7.</b> The cost and complexity for an operator to develop its mineral interests depends on site-specific environmental conditions and the specific type of operation proposed; therefore, developing strategies to satisfy project-specific issues is beyond the scope of this programmatic management plan. The analysis of impacts in Chapter 4, Environmental Consequences, describes how the restriction of surface access and directional drilling would increase the cost and complexity of an oil and gas proposal. In some cases, the additional costs and complexity may be balanced by avoiding additional costs and complexity associated with permitting requirements such as avoiding Section 404 permitting by avoiding wetlands impacts.

	COMMENTS	RESPONSES
8.	7. The overall tenor of the draft seems to be one of minimizing impacts (Pg. 4-112: "no adverse impacts of species of special concern"), and maximizing supposed benefits (Pg. 4-111: "Designation of SMAs would improve habitat"). The former is unlikely to be true and the latter is misleading as designating SMAs is, at best, maintaining the status quo.	<b>8.</b> The NPS currently protects resources and values within the areas described in this plan a SMAs on a case-by-case basis. The formal designation of SMAs proposed under Alternative E along with the application of timing restrictions and the no surface use stipulation, is expected to provide more consistent protection of species of special concern.
9.	Specific comments referenced by page.  1. Pg. 3-49: The Bordelon and Knutsen (1999) reference is limited to	9. This was changed in the Final Plan/EIS.
٥.	lepidoptera, it is not a "comprehensive inventory of invertebrates."	10. The Draft Plan/EIS provides an overview of the Louisiana pine snake and occurrence in the
10.	<ol> <li>Pg. 3-55: Louisiana pine snake. Published literature is available (enclosures) that further define ecology, habitat, threats, and status of this species and should be cited.</li> </ol>	Preserve. The commenter's published literature will be applied in project-specific analyses, as appropriate.
11.	Pg. 3-55: Timber rattlesnake. Published literature (enclosures) documenting the threats due to road related mortality are available and should be cited.	11. The Draft Plan/EIS provides an overview of the Timber rattlesnake and occurrence in the Preserve. The commenter's published literature will be applied in project-specific analyses, as appropriate.
12.	4. Several statements in the draft (Pg. 4-89, "localized, short-term, negligible to minor, adverse impacts"; Pg. 4-90, "up to 153 acres of the Preserve", Pg. 4-92, "no impact to indirect, localized to widespread, short- to long-term, moderate, adverse impacts"; Pg. 4-93, "376 acres inside the Preserve"; Pg. 4-95, "short- to long-term, moderate, adverse impacts"; Pg. 4-97, "short- to long-term, moderate, adverse impacts"; Pg. 4-97, "short- to long-term, moderate, adverse impacts"; Pg. 4-97, "short- to long-term, moderate, adverse impacts"; and similar statements in the Alternative C section understate the area and extent of potential impacts due to road construction. Many species, snakes in particular, are vulnerable to road related mortality that can result in population reduction or extirpation (see enclosures) with impacts extending far beyond actual road corridors. These impacts apply to two of the listed species (timber rattlesnake, Louisiana pine snake) that occur, or potentially occur, on the preserve. Data indicate that measurable impacts can extend for several hundred meters, perhaps 0.5 miles, from roads.	<b>12.</b> Site-specific analysis will be undertaken on a project-by-project basis, in consultation with th U.S. Fish and Wildlife Service, as appropriate. The NPS believes that the application of mitigation measures to plans of operations, on a project-specific basis, which may include training the operate and contractor in species identification, reduced speed limits, employing road monitors on ATV i advance of large vehicles that have reduced visibility of the road, among others, would result in the impacts described.
13.	5. Pg. 4-91: The statement that "Superintendent can close or restrict motorized public access on roads" gives no indication as to the probability of this actually occurring. Wildlife mortality, inadvertent or purposeful, always occurs on roads. Are "oil and gas" roads viewed by BTNP as eventually increasing public access?	13. When a nonfederal oil and gas operator is permitted by the NPS to construct an access road the road is accessible only by the operator, its contractors and subcontractors, and the NPS Access to the roads is controlled by locked gates. On occasion, when an operator ceases at operation, the Preserve may opt to retain an access road or portion of an operations area for conversion to park and/or visitor use. In this event, the Preserve assumes responsibility for the
14.	6. Pg. 4-97: The "Cumulative Impacts" statement at the bottom of the page, and similar statements elsewhere (Pg. 4-111: "SMAs that would improve habitat for Red-cockaded Woodpeckers"), is misleading. These statements indicate that improvements would result from designation of SMAs. A more straightforward statement would indicate that designation of SMAs would	maintenance and eventual reclamation of the developments.  14. The analysis is focused on where operations could occur. The formal designation of SMA under Alternatives B and C would improve habitat for Red-cockaded Woodpeckers by closing these areas either seasonally or year-round to geophysical and/or drilling and production operations, as described on pages 4-110 through 4-116 of the Draft Plan/EIS.

	COMMENTS	RESPONSES
14. Cont.	partially maintain the status quo. Partially, because development closely adjacent to SMAs would have impacts on the SMAs. The focus of impact assessment should be on the non-SMA areas.	<b>15.</b> Taken in context with the remainder of the sentence, the statement on page 4-97 is accurate. In the paragraph preceding the one cited, prescribed fire management practices are noted to result in improving fish and wildlife habitat. These statements are found in the brief conclusion statements which summarize the preceding analysis. We refer the reader to the cumulative impact analysis
15.	7. Pg. 4-97: "natural events, such as fire, flood and drought," and similar statements elsewhere (Pg. 4-108: fire management program could contribute to short-term habitat loss"), tend to place a negative connotation on these ecological processes required to maintain ecosystem function and sustain many of the species specifically listed in the draft. A much more positive emphasis on these processes would be preferable. This is especially the case since ongoing impacts, fire suppression and reduction in flood events due to	under Alternative A, on pages 4-93 and 4-94, particularly, the last sentence in the 2 <sup>nd</sup> paragraph on page 4-94 of the Draft Plan/EIS that states, "The Preserve's prescribed fire management program could contribute to short-term habitat loss and result in adverse effects to wildlife including increased stress and mortality, and decreased productivity, but would provide long-term cumulative beneficial impacts on Preserve vegetation by restoring and maintaining wildlife habitats and biodiversity."  16. The analysis of impacts on Fish and Wildlife under Alternative A, on page 4-90 of the Draft
	reservoir construction, have resulted in major detrimental impacts to essentially all of the BTNP.	Plan/EIS, states: "Increased mortality could result from vehicles, construction activities, and increased access into previously inaccessible areas Many of the impacts on fish and wildlife from
16.	8. Pg. 4-105: "Low speed roads are not expected to appreciably increase mortality." I assume this means in relation to absence of roads. However, species that are intentionally targeted or slow-moving will suffer increased mortality. Snakes are an obvious group that will likely experience significantly increased mortality rates.	drilling and production are associated with construction activities. Fish and wildlife, particularly small mammals, invertebrates, and herpetofauna (reptiles and amphibians) that cannot escape an area during construction could be killed, and increased mortality for small mammals is also likely to occur along access roads."
17.	<ol> <li>Pg. 4-107: "two federally-listed species are expected to improve." Not, however, as a result of oil and gas activities!</li> </ol>	17. Comment noted.
18.	10. Pg. 4-108: "remote possibility for the incidental take a species of special concern." Incidental take is almost a certainty. Development of a road network with substantial vehicle use will almost certainly result in mortality of most, if not all, snake species found on the preserve. Timber rattlesnakes, in particular, will be vulnerable to substantial population level impacts.	<b>18.</b> During the development of a plan of operations, if the NPS identifies the potential for an incidental take, the NPS is responsible for carrying out Section 7 responsibilities under the Endangered Species Act which would entail formal consultation in order to receive an incidental take permit if mitigation measures could not be applied to negate the need for one. Appropriate mitigation measures would be developed, to avoid or reduce the potential for incidental take.
	In summary, the draft protocol does not adequately assess the impacts of oil and gas development on the BTNP, especially in relation to TES species. Given the vague estimates of levels and distribution of development, perhaps all that is available, it is not possible to accurately forecast impacts. However, detrimental population level impacts on some TES species are almost certain to occur.	
	/s/ D. Craig Rudolph Research Ecologist USDA Southern Research Station 506 Hayter St. Nacogdoches, TX 75965	

## **COMMENTS**

RESPONSES

Kathleen Hartnett White, Chairman R. B. "Ralph" Marquez, Commissioner Larry R. Soward, Commissioner Glenn Shankle. Executive Director



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 8, 2005

Linda Danshy
EIS Project Manager
Office of Minerals/ Oil and Gas Support
Intermountain Region
P.O. Box 728
Santa Fe, New Mexico 87504-0728

Re: TCEQ GEARS #6382, Draft Oil and Gas Management Plan/EIS for Big Thicket National Preserve

Dear Ms. Dansby:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers the following comments:

We have no comments. The environmental assessment addresses issues related to surface and groundwater quality.

Thank you for the opportunity to review this project. If you have any questions, please call Mr. Forrest Brooks at (512) 239-4900.

Thomas W. When

Thomas W. Weber Manager, Water Section Chief Engineer's Office

P.O. Box 13087 • Austin, Texas 78711-3087 • 512/239-1000 • Internet address: www.tceq.state.tx.us



## GENERAL LAND OFFICE JERRY PATTERSON, COMMISSIONER

March 9, 2005

Linda Danby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Support Office 1100 Old Santa Fe Trail Santa Fe. New Mexico 87504-0728

RE: Comments on Draft Oil and Gas Management Plan September 2004 Environmental Impact Statement ("Plan") Big Thicket National Preserve, Texas

Dear Ms. Danby:

The Texas General Land Office (GLO) owns the oil and gas rights under numerous river tracts located within the current boundaries of the Big Thicket National Preserve, as well as additional areas sought to be included in the Preserve.

As you know, the GLO is charged with the responsibility of protecting state lands and generating revenue for the Permanent School Fund (PSF) in an environmentally and economically prudent manner. Royalties from oil and gas produced on state lands are deposited into the PSF, which generates revenue for Texas public school students from kindergarten through the 12<sup>th</sup> grade. Of the more than 13 million acres held by the PSF, approximately 1 million acres are estimated to be within riverbeds in the State of Texas.

19.

While this office appreciates the extensive volume of research that went into drafting the Plan, the GLO has objections to Alternatives B and C of the Plan. In particular, these alternatives restrict or prohibit the mineral owners' rights of ingress and egress by virtue of designating a significant percentage of the acreage within the boundaries as no surface access and no surface occupancy areas. The imposition of these alternatives would essentially result in a partial condemnation of the mineral estate. The GLO believes that consideration should be given to creating designated surface drilling site locations at reasonable intervals, such that all mineral interest owners' rights of ingress and egress can be accomplished using currently available drilling technology.

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**19.** One of the objectives of this Plan/EIS, listed on page 1-16 of the Draft Plan/EIS, is to "Provide holders of oil and gas rights reasonable access for exploration and development." The alternatives described and evaluated in this Plan/EIS are designed to meet this objective, in addition to the other planning objectives necessary to protect park resources and values, visitor use and enjoyment, and human health and safety; and to prevent an impairment to park resources and values. This Plan/EIS is intended to provide information to facilitate nonfederal oil and gas owners' and operators' exploration and development of their mineral interests.

The NPS's application of its regulatory authority to nonfederal oil and gas activities under 36 CFR Part 9, Subpart B, is not intended to result in the taking of a property interest, but rather is designed to impose reasonable regulations on activities that involve or affect federally-owned lands. See 36 CFR § 9.30(a). Since the 9B regulations were promulgated in 1979, the NPS has never denied a plan of operations. Furthermore, the NPS has complied fully, and will continue to comply fully, with Exec. Order No. 12,630, 3 C.F.R. 554 (1989), "Governmental Actions and Interference with Constitutionally Protected Property Rights." Under each of the alternatives analyzed in this document the NPS considers an operator's proposal on a case-by-case and site-specific basis. The 9B regulations were designed to encourage technological innovation, see § 9.37(a)(1). If an operator can demonstrate that a particular technology would reduce the potential for impact on resources in the parks, the operator may be exempt from specific operating stipulations described in this plan as noted on page 2-3 of the Draft Plan/EIS. The NPS anticipates that the Oil and Gas Management Plan/EIS will be a useful tool to facilitate planning and conducting nonfederal oil and gas operations in the Preserve.

The following 2 sentences on Page 2-62 of the Draft Plan/EIS were deleted:

"The NPS's position to not contravene the Fifth Amendment is further underscored by Executive Order 12630, "Governmental Actions and Interference with Constitutionally Protected Property Rights." The alternatives selected and evaluated in this document comply with this executive order."

The following sentence was inserted in their place:

Furthermore, the NPS has complied fully, and will continue to comply fully, with Exec. Order No. 12630, 3 C.F.R. 554 (1989), "Governmental Actions and Interference with Constitutionally Protected Property Rights."

The GLO leases its minerals to third-party oil and gas companies who seek to drill wells, after using methods such as 3-D seismic to evaluate property. Under this process, the GLO is paid bonus money for awarding the leases, and receives a percentage of production as a royally. As stated, these funds are deposited into the PSF. The costs to industry associated with the 9(B) regulations and implementation of the Plan may discourage companies from acquiring such leases in the area due to the added costs.

There will also be impacts to the Southeast Texas economy, including local entities that depend on ad valorem taxes for revenue. For example, entities such as school and hospital districts are adversely impacted by lost ad valorem tax revenues caused by premature abandonment of a well or from wells that are not drilled due to the additional cost of compliance with these regulations. Additionally, many service and supply companies, such as drilling contractors and service companies are affected by regulations that substantially limit oil and gas exploration and development.

The GLO respectfully requests that the Park Service reconsider its options and consider the rights of the mineral owners within the Preserve before implementing the Plan, or further regulating mineral development in the Preserve. I appreciate the opportunity to comment on the Plan. I look forward to a continued cooperative working relationship with the National Parks Service.

Sincerely

Deputy Commissioner Energy Resources **20.** Implementation of any of the alternatives presented in the Draft Plan/EIS is not expected to measurably affect future oil and gas activities or production volumes in the Preserve and southeast Texas. No additional regulatory requirements will be imposed as a result of implementation of this plan. Thus, ad valorem tax revenue and economic activity in the oil and gas community are not expected to be affected by the alternatives presented in the EIS.

To be of interest to the petroleum industry, petroleum deposits must be commercially valuable. There must be a reasonable chance of making a profit on the eventual sale of the oil and gas. Factors such as the market price of oil and gas, the amount of recoverable petroleum, the expected production rates, and the cost of drilling wells, producing, and transporting the product to market all determine the economic viability of developing a deposit once it is discovered. The cost of regulatory compliance is only one component in a myriad of factors (geological promise, timing and logistics, costs) that industry considers when deciding whether to pursue an oil and gas prospect.

There is an additional cost to conduct operations in units of the NPS. However, these costs are normally a small percentage of an operator's total expenses. Costs specific to conducting oil and gas operations under an NPS-approved plan include the following:

- 1. plan preparation (including any biological surveys, cultural surveys, etc.),
- generally higher standards placed on operators to meet NPS resource and visitor use protection objectives,
- 3. generally higher reclamation standards, and
- 4. yearly premiums to surety companies for performance bonding.

It is important to note that some up-front expenditures can result in future savings for operators. For example, the NPS requires dikes or berms around oil storage tanks to provide secondary containment in the event of an accidental discharge or release of oil or hazardous/contaminating substances. An unconfined oil spill from a tank can cover large areas, flow into nearby surface waters, and seep into ground waters. Federal laws, such as the Clean Water Act; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and the Park System Resource Protection Act, will require cleanup and restoration of the damaged area and disposal of contaminated materials at a cost to the operator that may reach hundreds of thousands of dollars. A typical \$2,000 investment to install berms at a wellsite has the potential to save the operator 100 times that amount. In other words, many of the measures that the park requires of an operator to protect resources and visitor values also provide inexpensive insurance to the operator against potential future liability.

The timeline for the NPS to process a plan of operations is a minimum 3 to 4 months, as shown in Table 2.18, NPS Processing Time for a 36 CFR 9B Plan of Operations. The table does not reflect the operator's timeline to complete surveys and prepare a plan of operations.

	COMMENTS	RESPONSES
	Robert W. Ramsey 3103 Ivy Falls Drive Houston, Texas 77068 281-537-8701	
	Linda Dansby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Support Office - Santa Fe 1100 Old Santa Fe Trail Santa Fe, NM 87504-0728  RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement ("Plan") September 2004 Big Thicket National Preserve, Texas  Dear Ms. Dansby:  I am an individual in the oil and gas exploration and production business. I am familiar with oil and gas operations in the Big Thicket National Preserve and in adjacent areas. I write in opposition to the Plan referenced above and to give my views on the impact of federal regulation on the production of oil and gas in this part of Texas.	
21.	First, oil and gas exploration is a unique business in which new technologies and prices significantly drive exploration. Prices are now getting to the point that new exploration will occur and any reference to reserves based on past production is wildly inaccurate. Exploration concepts and trends are continually changing. There are potentially new trends deeper under the subsurface that can significantly increase the reserve estimates lost under the Plan. These potentially new sources of energy will never be developed with the proposed Plan in place. I believe the remaining reserves will greatly exceed the	21. The RFD scenario prepared by the NPS used the USGS assessment of undiscovered oil and gas underlying the Preserve to estimate the types and extent of oil and gas exploration and production operations that would be necessary to discover and develop the undiscovered oil and gas underlying the Preserve. All currently producing or potentially productive oil and gas reservoirs in the vicinity of Big Thicket National Preserve were used in both the preparation of the USGS assessment and the NPS's RFD scenario. The USGS assessment included the prospective Eocene through Cretaceous-aged Wilcox, Yegua (Claiborne Group), Vicksburg, Frio, Tuscaloosa, Austin Chalk, and Eagle Ford oil and gas reservoirs. Based on USGS analysis of existing data, they concluded that there are no potential Jurassic-aged rock reservoirs. For the Plan/EIS, these reservoirs were grouped into the Tertiary oil and gas and Upper Cretaceous gas plays.  The purpose of the RFD scenario is to provide a reasonable basis for the NPS to analyze the potential effects of oil and gas related operations within and outside of the Preserve for the alternatives presented in the Plan/EIS. Development of oil and gas resources underlying the Preserve could occur regardless of whether the specific geologic formation was included in the USGS assessment and RFD scenario.

COMMENTS	RESPONSES
estimates set out in the Plan.  Second, the National Park Service only owns the surface estate in the Big Thicket. The Park Service's right to control the mineral estate by their ownership of the surface seriously undermines the fundamental rights of the mineral estate by their ownership of the surface seriously undermines the fundamental rights of the mineral owner to explore for oil and gas by using a reasonable amount of the surface. The Plan basically devalues the mineral estate to zero. Is there a Plan to reimburse the mineral, and royalty owners for these lost reserves??? Companies and individuals alike have spent a tremendous amount of time and money to develop exploration ideas within the area in which you now wish to arbitrarily disallow any exploration activities to occur. I think they too should be compensated. Owners of pipelines, owners of seismic data, owners of leases, owners of structure maps with ideas you have now rendered valueless should be compensated.  Third, the Plan's attempts to regulate lands outside the Big Thicket are ludierous. I do not think this part of the Plan even warrants a comment. Why should the Park Service be able to dictate what takes place on lands it does not own? Again, compensate the offset owners for the rights that you are taking away from them.  In summary, I request that the Park Service reconsider its position as stated in the Plan. It adversely affects many sectors while benefiting only a small group. It seems that both industry and the Park Service have been able to compromise and coexist in areas much more environmentally sensitive than this. I would further suspect that both parties benefit from a cohabitant relationship.  Sincerely,  **Robert W. Ramsey**	22. As described in the Draft Plan/EIS on pages 1-4 and 1-7 to 1-10, the NPS has unambiguous authority to regulate nonfederal oil and gas development in units of the National Park System, including Big Thicket National Preserve. In addition to the cases cited therein, please also see <u>Dunn McCampbell v. National Park Service</u> , 964 F.Supp. 1125, aff'd 112 F.3d 1283 (5 <sup>th</sup> Cir. 1997), reh'g, en banc, denied, 124 F.3d 195 (5 <sup>th</sup> Cir. 1997). See also Response 19. The application of 36 CFR 9B regulations stop short of a taking.  23. Please fully review the language in the Draft Plan/EIS on pages 1-8 through 1-9, 2-62, 2-66, and 2-68 regarding the NPS's authority over directional drilling operations occurring from a surface location outside the boundary of the park. The language in the Plan/EIS clearly describes the limitation on NPS's authority over activities occurring outside the park boundary.

COMMENTS	RESPONSES
District Stone Minerals Company, L.P.  101 Famin, Suite 2020 Houston, TX 77002 Phone No: (713) 658-0647 Fan No: (713) 658-0643 www.bamc.ce  March 9, 2005  Linda Dansby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Region 1100 Oild Santa Fe Trail Santa Fe, NM 87504-0728  RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement ("Plan") September 2004 Big Thicket National Preserve, Texas  Dear Ms. Dansby:  Black Stone Minerals Company, L.P. ("Black Stone") owns the oil, gas and other minerals under numerous tracts located within the current boundaries of the Big Thicket National Preserve.  Prior to commenting on the Draft Oil and Gas Management Plan, it is first necessary to address the question of whether or not the National Park Service, or any other Federal agency is authorized to regulate oil, gas and mineral development under the language contained in current legislation. It is submitted that despite previous attempts at regulation by the Federal Government, its jurisdictional authority with respect to mineral development at Big Thicket National Preserve is questionable.  The Federal Government ultimately acquired the lands now included within the Preserve by virtue of the Federal Enabling Act. At the time the Federal Government acquired the surface estate of the lands which now constitutes the Big Thicket National Preserve, is intentionally declined to acquire the underlying mineral estate, probably due to the prohibitive cost of such acquired the surface state of the lands which now constitutes the Big Thicket National Preserve, is intentionally declined to acquire the underlying mineral estate, probably due to the prohibitive cost of such acquired the surface state under Texas law, and this dominant status prevails even when the United States acquires the surface estate under Texas law, and this dominant mineral estate actually includes the ownership of a part of the surface estate, in that it includes an easement to use the surface for mineral developme	RESPONSES  24. See Response 22.

		RESPONSES	
	Linda Dansby, EIS Project Manager March 9, 2005 Page 2		
24 Cont.	codified at Title 36 of the Code of Federal Regulations, Part 9, Sub-part B. We have assumed for purposes of these comments, that the Draft Plan has been promulgated under the auspices of these regulations.		
25.	With the above historical and legal framework in mind, Black Stone generally objects to the Draft Plan as a whole due to the fact that the regulations and restrictions proposed under such plan have not been authorized by a valid governmental authority having jurisdiction. More specifically, the implementation of Alternatives A, B or C, as set out in the Plan may very well give rise to a new cause of action for a taking in that they constitute an outright prohibition of mineral development on certain lands, in violation of the rights of mineral owners. In particular, the Alternatives, particularly B and C both clearly prohibit the mineral owners' rights of ingress and egress by virtue of designating a significant percentage of the acreage within the boundaries as no surface access and/or no surface occupancy areas. Indeed, the imposition of the Alternatives would likely give rise to additional Constitutional claims based upon the taking of private property without just compensation due to the fact that such alternatives will essentially result in a partial condemnation of the mineral estate.	25. See Response 19.	
	Beyond the objections noted above which pertain to regulation of mineral development within the boundaries of the Big Thicket National Preserve, both the existing and proposed regulations and Plan attempt to regulate oil and gas development activity which occurs on land outside of the Preserves boundaries. This is a clear case of overreaching. Both the current and proposed regulations require operators to obtain an approved Plan of Operations even when a proposed surface location occurs outside of the Preserve boundaries in the event such operation involves directional drilling in order to access minerals underneath the Preserve boundaries. Directional drilling from outside the Preserve boundaries in order to access minerals underneath the Preserve boundaries in no way involves access through or interference with the surface estate owned by the Federal Government. Therefore, the National Park Service has no right to regulate in any manner the conduct of directional drilling activities from surface locations outside the Preserve boundaries.	26. See Response 23.	
	In particular, Black Stone objects to the Plan in that its implementation greatly restricts the transportation infrastructure that is necessary for the production of oil and gas. Specifically, because of the sprawling configuration of the Big Thicket National Preserve, production on tracts outside of its boundaries necessarily will require right-of-ways for pipelines to cross lands lying within its boundaries. Under the Plan, both regulation, and in some instances, outright prohibition prevents these vital pipelines to cross lands where most desirable both from an economic, engineering, and environmental standpoint. As a result, the energy industry as a whole will be increasingly discouraged from operating in this entire portion of Southeast Texas.	<b>27.</b> Use of federal surface inside the park boundary is premised upon the operator demonstrating to the NPS that it holds a right to operate in a unit of the National Park System. If an operator of a well outside the park can demonstrate the right to use of the federal surface inside the park, the park will consider the proposal for approval under the NPS's 9B regulations. Regarding the limitation on NPS's authority to issue new rights of way, please see the Draft Plan/EIS, page 1-9.	
1	Black Stone primarily leases its minerals to third-party oil companies who seek to explore, after using methods such as 3-D seismic, and who also wish to drill wells when warranted. Under this process, Black Stone is paid bonus money for signing the leases, and receives as royalty a percentage of production. Both enforcement of the 9(B) regulations and implementation of the Plan generally discourage companies from acquiring such leases from Black Stone, both as to lands in the Big Thicket National Preserve, as well as to lands nearby.	28. See Response 20.	

#### **COMMENTS RESPONSES** Linda Dansby, EIS Project Manager March 9, 2005 Page 3 28 In this respect, you should note the general effect of the Plan on the Southeast Texas economy, as well as on local entities in that area that depend on ad valorem taxes for revenue. For example, many Cont. service and supply companies, such as drilling contractors, service companies, etc. are affected by the restrictive uncertainty caused by these regulations and the Plan, which generally discourages oil and gas exploration and development within a broad area of Southeast Texas. Additionally, local entities such as school and hospital districts are adversely affected in that oil and gas reserves undoubtedly will not be explored for, discovered, and produced because of these overreaching regulations. When this happens, 29. The NPS acknowledges that the USGS assessment of undiscovered hydrocarbon resources these entities are deprived of a significant source of ad valorem tax revenue, which is based on the value may differ from those of oil and gas operators and mineral owners. The intent of the oil and gas of such production. management plan is not to estimate resource volumes but to develop a management strategy to 29. With respect to its specific economic projections surrounding future oil and gas development, the protect Preserve resources and values and to analyze the potential impacts of oil and gas Plan grossly underestimates the future oil and gas reserve potential. The estimates of 1.25 million barrels exploration and development. The number of wells and the acres of disturbance projected in the of oil, 70.16 BCF of gas and 1.02 MMB of condensate are apparently based on historical production data RFD scenario do not represent a benchmark or decision point for acceptable level of activity that from known plays and do not account for the potential for discovery of additional production as a result of new ideas or plays. Almost certainly these estimates are wrong. 3-D seismic has never been acquired could occur to develop the oil and gas underlying the Preserve. The USGS Monte Carlo simulation over many areas of the Preserve, and historically the acquisition and utilization of first-time 3-D data has shown on Table 1 in Appendix E of the Plan/EIS includes a probability range of oil and gas resulted in greatly enhanced reserves. In summary, Black Stone believes the remaining discoverable resources ranging from a low case (95% probability) of that amount occurring, to a high case (5% reserves in all likelihood will greatly exceed the estimates set out in the Plan. probability) of having of that amount occurring. The NPS used the mean estimate when preparing its RFD scenario for the Draft Plan/EIS, but due to public comments received on the Draft Plan/EIS Black Stone respectfully requests that the Park Service reconsider its position, and properly consider the vested private property rights of the mineral owners before implementing the Plan, or further and the current increase in drilling activity, the NPS has decided to develop a revised RFD scenario regulating mineral development in the Preserve. for the Final Plan/EIS. Since it is unlikely that USGS's upper estimate (5% probability) would be discovered over the life of this Plan/EIS, the NPS has decided to use the 25% probability estimate in the revised RFD scenario. Sincerely, Black Stone Minerals Company, L.P. The USGS oil and gas assessment, not the NPS's RFD scenario, estimates the undiscovered oil and gas underlying the Preserve. The USGS assessment for this OGMP is based on an unbiased,

michael Mr. Elles

Michael M. Ellis Director - Special Projects

ce: United States Senator Kay Bailey Hutchison
United States Senator John Cornyn
United States Senator Pete V. Domenici
United States Representative Ted Poe – 2<sup>nd</sup> District
United States Representative Kevin Brady – 8<sup>th</sup> District

United States Representative Joe Barton United States Representative Richard W. Pombo To prepare an assessment of the remaining undiscovered oil and gas in the province, the USGS looked at all of the components of each oil and gas play including reservoir, source rocks, trap, seal, and hydrocarbon migration. (A play is a set of discovered or undiscovered oil and gas accumulations or prospects that are geologically related.) Based on the regional oil and gas assessment, the USGS then estimated the undiscovered hydrocarbons underlying the Preserve.

thorough geological and statistical analysis of relevant scientific literature, available drilling and

production data from 227,000 dry holes, 235,000 oil wells, and 105,000 gas wells in the Western

Gulf Oil and Gas Province, and discussions with colleagues in the oil and gas industry and state and federal agencies. When completed, the USGS assessment underwent rigorous peer reviews within the USGS by geologists with expertise in evaluating hydrocarbon potential worldwide. Proprietary

data such as 3-D seismic is not available to the USGS and was not used in their oil and gas

USGS assessments are redone on a periodic basis using the most currently available data. The Western Gulf Oil and Gas Province assessment will be redone by the USGS in the next several years and will be updated based on the data available to them at that time.

assessment.

	COMMENTS	RESPONSES
	COMMENTS  SCOBRA OL & GAS CORPORATION  March 9, 2005  Linda Dansby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Support Office - Santa Fe 1100 Old Santa Fe Trail Santa Fe, NM 87504-0728  RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement ("Plan") September 2004 Big Thicket National Preserve, Texas  Dear Ms. Dansby:	RESPONSES
	Cohra Oil & Gas Corporation ("Cobra") is active in the exploration and development of oil and gas. We operate in southeast Texas, and are familiar with oil and gas operations both in the Big Thicket National Preserve, and in adjacent areas. Cobra has undertaken both a 3-D Seismic Project and drilled a deviated well under the BTNP. Both projects were located in the Lance Rosier Unit of the BTNP. We write in opposition to the Plan referenced above, and to give our views on the impact of federal regulation on the production of oil and gas in this part of Texas.	
30.	First, in reading the Plan, the economic projections surrounding future oil and gas development do not seem accurate. The estimates of 1.25 million barrels of oil, 70.16 BCF of gas and 1.02 MMB of condensate are apparently based on historical production data from existing wells, and do not account for the potential for discovery of additional reserves as a result of new exploration and new technology.  Almost certainly these estimates are greatly understated. For example, 3-D seismic has never been	30. See Response 29.

	COMMENTS	RESPONSES
30.	Linda Dansby, EIS Project Manager March 9, 2005 Page 2  acquired over many areas of the Preserve, and historically the acquisition and utilization of 3-D data	
Cont.	results in greatly enhanced reserve estimates. In summary, we believe the remaining discoverable reserves in all likelihood will greatly exceed the estimates set out in the Plan, and this fact emphasizes the importance of our comments that follow.	
31.	It is noted that in our review of the Plan, Cobra's Quinn #2-84 Well that was deviated under the BTNP and permitted by the BTNP, is not shown in the wells drilled in or under the BTNP. If this well, permitted by the BTNP, was not considered during development of the Plan, we wonder how much other data may have also been overlooked or not included for consideration.	<b>31.</b> Table 3.2, Nonfederal Oil and Gas Operations, was updated in the Final Plan/EIS. It now includes Cobra's Quinn #2-84 Well; removes the Comstock Ogletree #1 Well that did not proceed to development of a plan of operations; and reflects the current status of each well. Throughout the Final Plan/EIS, references to the number of wells under the Preserve are changed to reflect the updated table. The analysis in the Draft Plan/EIS did not change as a result of updating the table.
32.	Please note, the National Park Service only owns the surface estate in the Big Thicket, and therefore we have serious concerns about the ability of the federal government to regulate a mineral estate that it does not own. In addition, provisions in the Plan clearly seem to ignore established Texas law attendant to mineral ownership, and prohibit oil and gas operators' rights of ingress and egress by designating a significant percentage of the acreage within certain boundaries as areas that allow no surface access and/or no surface occupancy.	32. See Response 24.
33.	Beyond these objections regarding mineral development within the boundaries of the Big Thicket Preserve, both the existing regulations and the Plan attempt to regulate oil and gas development activity which occurs on land outside of the Preserves boundaries. For example, the National Park Service has no right to regulate directional drilling activities from surface locations that it does not own located outside the Preserve boundaries. Cobra drilled its' Quinn #2-84 in the R. Miller Survey, A-398 completing a	33. See Response 23.

**COMMENTS RESPONSES** Linda Dansby, EIS Project Manager March 9, 2005 Page 3 deviated hole that reached total depth under the P. Brewster Survey, A-84. We elected to deviate rather than try to permit a well to be drilled in the BTNP based on the parameters placed on obtaining such a permit by the BTNP. As a result of drilling the deviated hole, we encountered extreme drilling problems due to the deviated hole that caused the well to cost well over 200% of the original cost estimates. A straight hole would not have encountered most of these problems. However, the potential delay of an additional year or more to get a permit to drill inside the BTNP ("this was based on the timing to do the necessary work to get a permit to drill in the BTNP") was not an option due to lease expirations and other operations planned in our drilling program in this area. 34. See Response 27. 34. We particularly ask you to consider the impact of your proposals that affect acreage outside the Preserve, for example, on the transportation infrastructure in southeast Texas necessary for the production of oil and gas. Specifically, production on tracts outside the boundaries of the Preserve will necessarily require right-of-ways for pipelines to cross lands lying within its boundaries. Under the Plan, either regulation or outright prohibition prevents these vital pipelines from crossing lands at the most desirable point based on economic, engineering, and environmental considerations. As a result, not only will oil and gas not be discovered and produced, but the energy industry as a whole will be increasingly discouraged from operating in this area. Having worked in the largest unit of the BTNP, we believe there could be instances where utilizing existing pipelines would be preferable to building new lines not associated with existing corridors. No owner of an existing line would let their line come under the control of the BTNP only to allow a producer to tie into their line inside the BTNP. Why should they give up an existing right to accommodate new production? Under your Plan, almost all new lines would require crossing areas where no pipelines currently exist. It seems that building new lines where alternatives exist would actually

	COMMENTS	RESPONSES
34. Cont. 35.	Linda Dansby, EIS Project Manager March 9, 2005 Page 4  increase potential pollution rather then limit same as proposed in the Plan.  All of the proposed regulation discourages oil and gas development by increasing both its cost and risk. For example, directional wells are more expensive and involve much more risk. Further, compliance with regulations, and the resulting delay in permitting, add greatly to the cost of operations, and the Plan does not appear to attach much importance to such matters. Please consider my above comments regarding Cobra's Quinn #2-84 Well.  The Plan also appears to ignore the effect of regulation on the southeast Texas economy, as well as on local entities in the area dependent on ad valorem taxes for revenue. For example, many service and supply companies, such as drilling contractors, dirt contractors, service companies, etc. are affected by the restrictive uncertainty caused by these regulations and the Plan, which generally discourages oil and gas	35. See Response 20.  36. See Response 20.

**COMMENTS RESPONSES** Linda Dansby, EIS Project Manager March 9, 2005 Page 5 We respectfully request that the Park Service reconsider its position, and properly consider three factors before implementing a revised Plan, or further regulating mineral development either in the Preserve or on adjacent lands: (1) the economic impact on this area of Texas, (2) the ever increasing energy needs of the United States, and (3) the vested private property rights of mineral owners and oil companies. We are confident that all three of these considerations can be accommodated without adversely affecting the environment in the Big Thicket National Preserve. Sincerely, Cobra Oil & Gas Corporation Jerry L. Ritter, CPL Land Consultant George W. Bush, President of the United State of America Rick Perry, Governor of the State of Texas 2201 Kell Blvd., Wichita Falls, Texas 76308-1000 Main Phone Number: 940-716-5100 Direct Phone Number: 940-716-5106 Fax Number: 940-716-5210

**COMMENTS RESPONSES** DAVIS BROS. ONE HOUSTON CENTER 1221 MCKINNEY, SUITE 3100 HOUSTON, TEXAS 77010 PHONE (713) 659-3131 FAX (713) 659-8070 March 9, 2005 Linda Dansby EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Region Santa Fe, New Mexico 87504-0728 Dear Sirs, Before I comment on the Oil & Gas Management Plan for the BTNP dated September, 2004 "the Plan," I want to express my appreciation to the BTNP for their prior efforts in resolving issues regarding directional drilling for oil and gas under the BTNP from surface locations outside the BTNP. Many of these issues were raised in my letter dated 31st October 2001 to Mr. David Smith, the Counselor to the Assistant Secretary for Fish, Wildlife and Park. This letter is attached and is also relevant to a discussion concerning the Plan. Before getting into my specific criticisms of the Plan, my general comments will be directed primarily to the protection of private property rights. In my letter, I referenced the enabling legislation and the final judgment from the courts which created the BTNP. The terms and conditions under which the Park was created was subject to the following provision, "... excluding and exempting from this the taking of all gas and other minerals in and under said lands with all appurtenant rights for the exploration, development, production and removal of said oil, gas, and other minerals." In some cases the rights of the mineral owner as these rights relate to the National Preserve appear to be clearly stated in the Plan. If the National Park Service determines that the proposed oil and gas operation within a park unit would conflict with preservation, management, or use of the parks, or would impair park resources or values, the 36 CFR 9B regulations and NEPA process would result in identifying measures to mitigate impacts. Mitigation measures may be applied to the Plan of Operations as conditions of approval, subject to the operator's acceptance of specific provisions and operating stipulations (36 CFR 9.37 (b)(2)). However, if a proposed operation cannot be sufficiently modified to prevent the derogation of park values and purposes, then the NPS may seek to extinguish the associated mineral right through acquisition, unless otherwise directed by Congress. In applying the NPS's Nonfederal Oil and Gas Rights Regulations, the NPS respects the constitutionally guaranteed property rights of mineral owners. As set forth in the Fifth Amendment to the Constitution, "...no person shall be deprived of property without due process of law; nor shall private property be taken for public use without just compensation." In two places, § 9.30(a) and 9.37(a)(3), the 9B regulations emphasize that they are not intended to I:\BTNP 18th February 2005.doc

### **COMMENTS**

result in the taking of a property interest, but rather are designed to impose reasonable regulations on activities that involve and affect federally-owned lands. The NPS's position to not contravene the Fifth Amendment is further underscored by Executive Order 1263, "Governmental Actions and Interference with Constitutionally Protected Property Rights." The alternatives presented and evaluated in this document comply with this executive order. Any alternative selected and applied to oil and gas activities in the park as a result of this planning would be subject to the NPS's statutory mandates, regulatory provisions, policies, and Executive Orders, including the above described limitations regarding the taking of private interests.

However, in other cases, the elimination of surface rights for oil and gas exploration in SMA's is clearly a violation of the conditions under which the Park was created.

Under all three alternatives, the impacts are generally the same because the level of development projected under each alternative would be the same as theorized under the RFD scenario. The key difference between the alternatives and their potential impacts is where impacts could occur. Under Alternative A, Current Legal and Policy Requirements would preclude operations in Protected Areas and additional resource areas with objects are formally designated as Special Management Areas where the No Surface Use stipulation would preclude operations from occurring in an increasingly larger acreage of the Preserve. Alternative C would preclude operations in the greatest area of the Preserve, and is likely that most wells would be directionally drilled from outside the Preserve to develop hydrocarbous underlying the Preserve.

## 37.

38.

Since a major portion of the Plan is devoted to creating the SMA's in the Plan, at best, the interpretation of the language in the Plan is unclear as to whether the rights of the mineral owner to use of the surface for exploitation of oil and gas is allowed (as is the law) or whether these rights have been confiscated by the federal government

Assuming the latter is true, any attempt by the BTNP to unduly restrict or otherwise prevent drilling as proposed in the SMA's or in some other way is illegal and represents inverse condemnation by the federal government, assuming that, of course, the operator adheres to prevailing federal and state laws as it applies to oil and gas drilling (i.e. all Texas Railroad Commission rules and regulations, the Endangered Species Act, the Clean Water Act, the EPA Spill Prevention Control and Countermeasures (SPCC) regulations, the Clean Air Act, Floodplain Management Regulation, wetland regulations and other applicable acts). While the creation of SMAs may involve laudable efforts to protect, "... park resources and values..." not currently protected under state or federal law, it is inimical to the interests of the affected owner of the mineral rights in fee or their lessees. These private property rights must be protected even if the exercise of these rights will derogate park values and purposes as contemplated in the Organic Act (Mantell & Metzger, 1190). This statement is especially cogent to a discussion of the planning objections in the Plan. Some objectives clearly carry much greater weight over others.

Namely, in the planning objectives reprinted below, planning objective #4 is generally superior to planning objective #2 by law, as long as the impairment which results from oil and gas activities was originally contemplated in the enabling legislation and takes place in the normal course of operations.

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### RESPONSES

**37.** In developing the Plan, the National Park Service had no intention of causing any take of private property, as defined by the last two paragraphs under the heading "NPS Nonfederal Oil and Gas Rights Regulations," on page 2-62 of the Draft Plan/EIS, and the 9B regulations found in Appendix B of the Plan/EIS, and referenced in the comment. The section titled "Exemptions from this Plan" on page 2-3 of the Draft Plan/EIS describes how the NPS would grant exemptions from specific operating stipulations described in the Plan. However, because some commenters did not clearly understand the text in the "Exemptions from this Plan" section of the Plan, the section was revised to read as follows:

The designation of Protected Areas, which is a component of all three alternatives, and the proposal in Alternatives B and C to designate Special Management Areas and apply operating stipulations are not intended to result in a taking of private property rights. Regulations at 36 CFR Part 9. Subpart B (9B regulations), were written to encourage technological innovation (§ 9.37(a)(1)). If an operator can demonstrate that a particular technology could reduce the potential for impact on resources in the Preserve, the operator may be exempted from specific operating stipulations described in this plan. All requests for an exemption must be presented in a Plan of Operations and must describe how replacing the plan requirements with a technological innovation would protect park resources and values. Approval of an exemption would be documented in the accompanying NEPA document (Environmental Assessment/Finding of No Significant Impact or Environmental Impact Statement/Record of Decision) for a proposed Plan of Operations. Therefore, in the event that an operator cannot explore for or develop nonfederal oil and gas from a surface location outside of an SMA with the "No Surface Use" stipulation, the National Park Service will work with the operator, and in consultation with other state and federal agencies as required under applicable laws and regulations, to develop reasonable mitigation measures so as to allow the proposed operations surface use within the SMA. However, as noted on page 2-62, if the Service determines that the proposed mineral development would impair park resources, values, or purposes, or does not meet approval standards under applicable NPS regulations and cannot be sufficiently modified to meet those standards, the Service will seek to extinguish the associated mineral right through acquisition, unless otherwise directed by Congress.

Also, the last sentence of the 1<sup>st</sup> paragraph on page 2-62, was replaced with the last sentence from above. Also see Responses 24 and 27.

**38.** See Responses 19, 24, 27, and 37.

COMMENTS		RESPONSES
Planning Objectives:		
<ol> <li>Identify Preserve resources and values susceptible to adverse impacts from oil and gas operations.</li> </ol>	as	
<ol> <li>Establish performance standards and impact mitigation measures for oil and gas ope to protect and prevent impairment to Preserve resources and values form adverse impacts and gas operations.</li> </ol>		
<ol> <li>Establish performance standards and impact mitigation measures for oil and gas ope- to avoid or minimize impacts from oil and gas operations on visitor use and enjoyment, a human health and safety.</li> </ol>		
4) Provide holders of oil and gas rights reasonable access for exploration and developmen	ent.	
<ol> <li>Provide pertinent information to oil and gas operators to facilitate planning and complewith NPS and other applicable regulations.</li> </ol>	bliance	
In order to fully appreciate the "taking" which is occurring by the federal government to understand that the exploitation of oil and gas is inextricably connect ingress and egress and surface use. To restrict or eliminate this right is to absolute rights and abilities of these owners to derive income from the sale of oil and gas, commercial environment, it is not unusual at all for persons who wish to develop purchase the underlying mineral estate or surface access rights to assure good title, in the state of Texas because the mineral estate is dominant over the surface estate regulation which reduces the ability of a private party to access his minerals to sucl is either unduly time consuming or onerous represents a "taking" by the federal go.  An attorney, Joe Williams of Williams and Lindahl was hired to examine the exact applies to this type of inverse condensation by the federal government. His commare below:	cted to rights of tely diminish the . In the private oreal estate to e. This is necessary te. Also, any ch an extent that it government. t case law which	
Under Texas law, when a mineral severance has occurred, the right to minerals is accord enter upon and extract them and all such incidents thereto as are necessary to be used for getting towan v. Hardeman 26 Tex.217 (1862). This doctrine is applicable "because a grant or revould be wholly worthless if the grantee or reservor would not enter upon the land in order to exheminerals granted and reserved." Harris v. Currie 142 Tex.93 (1944). Therefore, the mittendant right to use the surface for developing minerals is the dominate estate which means that ommon law right to use the surface has superiority and priority over any purposes to which the surface even when the surface owner is a public entity keeping the property for public use County Navigation Dist. v. Banta 453 S.W.2d 134 (Tex.Doc. 1970).	ing and enjoying them." reservation of minerals explore for and extract mineral estate and the nat the mineral owner's surface owner desires to	
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	COMMENTS		RESPONSES
38. ont.	Private property cannot be taken from an owner without just compensation and due process of law. U.S. Const. amended V and Texas Constitution, Article I, Section 17. Any attempt by a governmental entity which results in conditions which either limit or totally preclude mineral exploration rise to the level of a taking of private property rights for public use when such taking is without consent and without payment of just compensation.  A primary cause of action by a mineral owner or its lessee against a governmental entity which attempts to divest such parties of their private property rights without just compensation is a claim for inverse condemnation. The ten (10) year statute of limitations to acquire land by adverse possession governs inverse condemnation claims. Adverse possession is an actual and visible appropriation of real property, commenced and continued under a claim of right that is inconsistent with and is hostile to the claim of another person. Tex. Civ. Prac. & Rem. Code Ann. Sec. 16.021(a)(2002) Brazos River Auth. V. City of Graham, 354 S.W.2d 99 (Tex. 1961). The statute of limitations is that there is a constitutional prohibition on the taking of property without compensation whereby a governmental entity can eliminate the need to compensate the plaintiff only by actually acquiring title by adverse possession, and an inverse condemnation claim may be brought at any time before the defendant acquires title.		
	Ackerman v. Port of Seattle 348 P.2d 664 (Wash. 1960).  I have limited my discussion above regarding the statute of limitations to a claim for inverse condemnation. Of course additional causes of action may be applicable which may be subject to different statutes of limitations.  Having articulated my general position on creation of SMA's, I will now comment on the	J	<b>39.</b> The NPS has the authority via a plan of operations under the 36 CFR 9B regulations and v NEPA, to apply mitigation measures, including a surface use restriction, to avoid or minimize the potential impacts of a project-specific proposal. Through its approval of a plan of operations und the regulations found at 36 C.F.R. Part 9, Subpart B (9B regulations), the NPS has the authority
39.	Pg. S-7 under Alternatives A, B, and C  Unless specifically protected by state or federal law, I am unaware of any acreage that is, by Definition, precluded for use by operators. Even access or destruction of wetlands are allowed with mitigation. I would like some clarification of legal justification for declaring certain areas off limits.		impose on an operator specific "mitigation measures," including surface use restrictions, to avoid minimize the operation's potential impacts to the Preserve's resources and values. Similar through the development of the programmatic Oil and Gas Management Plan, the NPS has the authority to designate Special Management Areas (SMAs) within the Preserve and to adopt gener "operating stipulations," based on applicable law, which the NPS will impose on all operators with the Preserve unless the NPS approves a project- or site-specific exception.
40.	Pg. S-8, S-9  Under environmental consequences, the mitigation of adverse consequences to the Park is favorable result as long as private property rights are protected. It appears that hunting and birding rights have preferential treatment over oil and gas rights even though the opposite should be true by law. "While up to 29 new wells could be drilled in the Park ;" is mentioned in the Plan, I assume no limitation on the number of wells actually drilled is intended.	÷.	<b>40.</b> The NPS believes that the exercise of rights associated with nonfederal oil and gas estates are the privilege of hunting can co-exist in the park. If, however, there are irreconcilable difference between the use of federal surface estate by an oil and gas operator and hunters, the mineral rig will take precedence over the privilege. The following text was added in the Final Plan/EIS und the heading "Special Management Areas," at the end of the 3rd paragraph on page 2-9 to reflect the principle: "If, however, an operator can demonstrate a compelling reason why it must conductive the principle of the state of the stat
41.	Pg. 1-1, pg. 1-7, pg. 1-9  The discussion of the Organic Act and the Enabling Act, fails to mention that the Park owns no rights to oil and gas and is therefore <i>subject</i> to these rights even if those oil and gas activities serve to derogate Park values. I believe there is a limit to the ability of the NPS to regulate property (oil and gas rights) which is <i>not</i> owned by them. Therefore, I find this discussion somewhat misleading.		geophysical operations in a hunting area when the timing stipulations are in effect, the right of the cand gas operator to access the federally owned surface will take precedence over the hunting privilege."  41. See Response 24.
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	COMMENTS	RESPONSES
<b>42</b> .	To the extent pipelines and gathering lines are referenced, the statement that there is no statutory authority for granting new rights of way for oil and gas pipelines (1-9) is not exactly correct. To the extent flow lines or pipelines are necessary for the extraction of oil and gas by an operation producing oil and gas from under the Park then this right is specifically granted to the operator under the enabling legislation.	<b>42.</b> Establishment of new gathering lines for an operation producing oil and gas from beneath th Preserve will not require the issuance of a new right-of-way. The right to lay gathering lines direct tied to production from an operation producing oil and gas from beneath the Preserve is a right associated with the mineral estate being developed. However, the NPS does not have the legal authority to grant any entity a new right-of-way for an oil or gas pipeline across federally owned lan
43.	Under Alternative Plan B and C (2-9), certain lands would be prohibited from surface use. It should be noted that oil and gas occurs in this area as shallow as 3,800' or so. Depending upon the area excluded from surface use and the depth of the target, certain drilling may effectively be impossible using current directional drilling technology. No attempt has been made by the NPS to ascertain the area and rights which would be rendered inaccessible and therefore valueless. The rationale for creation of SMA's may be consistent with Park values but are subordinate to private property rights. Certain park values mentioned including the ability, " to determine the nature and extent of global climate change," appears to represent a political position rather than a scientific one.	within the Preserve. Also see Response 27.  43. See Response 37.
	Under 2-12, I assume the below paragraph is meant as a criticism to Alternate Plan A:  "Currently there is no formal protection provided for sand mounds and rare vegetation community (including Sandhill Pine Forest, Upland Pine Forest, American Beech-Southern Magnolia-Loblolly Pine Forest, and old growth trees) during non federal oil and gas development in the Preserve. Variations for protection of these resources may occur under Alternative A, resulting in different interpretations and applications of policy. In addition, the interpretation and application of Current Legal and Political Requirements to protect floodplains, wetlands, riparian corridors, fish and wildlife, and cultural resources could also result in variations in how, where and to what extent resource protection is applied."	<b>44.</b> See Response 39. Based on public comment received on the Draft Plan/EIS and a reevaluation by the NPS, it is not necessary to designate sand mounds as a SMA because they would be provided adequate protection under current legal and policy requirements, including the National Historic Preservation Act. Therefore, sand mounds were removed as a SMA throughout the Final Plan/EIS and may be available for oil and gas operations in the Preserve. In the future, the protection of sand mounds and any resources associated with the mounds will be evaluated on a case-by-case, site-specific basis and applicable operating stipulations will be applied to protect

**45.** "No measurable effect" is used by the NPS in determining the appropriate level of NEPA

compliance documentation. The NPS describes the severity of impacts using four intensity levels:

negligible, minor, moderate, and major. The NPS defines "measurable" as moderate or greater

**46.** Under the 9B regulations the NPS has authority only over activities within the park boundary. and exemption determinations under 36 CFR § 9.32(e) are based on the impacts of downhole

For purposes of public disclosure and education, NPS prepares NEPA documents on all directional

drilling proposals submitted to the NPS. Through its NEPA analysis, the NPS assesses impacts

both in and outside of the park associated with the downhole operations in addition to the connected

actions outside of the park. The downhole activities occurring in the park are analyzed to determine

whether there is a significant threat to park resources and if a § 9.32(e) exemption should be

granted. As required by NEPA, the analysis of the impacts from the connected actions occurring

outside of the park are presented in addition to the downhole operations both inside and outside of the park to disclose to the public all of the potential impacts on the human environment. Cumulative

impacts are presented for the analysis area which includes areas inside and outside of the park.

effects. "No measurable effects" equates to minor or less effects.

activities occurring in the Preserve. Also see Response 24.

promulgated by the Interior Department). I find no problem with operators cooperating with the BTNP on a case by case basis. The treatment of these concerns may in fact vary by definition.

> On page 2-66, if the NPS determines that, "... impacts to subsurface resources cannot be adequately mitigated to yield no measurable effects then a Plan of Operations is required." It is uncertain that such a standard if adopted is the correct one. I believe the standard should be less stringent. A less stringent standard would not allow a special interest group to block drilling based on a literal interpretation of, "... no measurable effect."

> On page 2-67, I have always contested the applicability of NEPA to directional drilling on surface outside the Park to bottom under the Park. This is clearly a position which is indefensible in terms of the law but which has been adopted to mollify certain special interest groups. I especially object to language regarding the, "... potential impacts that occur... outside of the Park." This NEPA trigger sets a dangerous precedent, and depending upon how NEPA is interpreted and satisfied, it may materially interfere with oil and gas rights.

> Obtaining a waiver for the federal government on directional drilling for outside the Park to bottom within the Park is not a federal action. In addition, the 9B regulations were originally meant as an informational requirement to be met not by an operator. It was never intended to control or regulate that activity unless it represented a clear danger to Park resources. Existing case law

5

45.

46.

See also Response 24.

COMMENTS RESPONSES

## 46. Cont.

supports this conclusion. Again, NPS jurisdictional authority is extremely limited to practically nonexistent. In fact, it can be argued that the 9B regulations (as it relates to directional drilling) is misplaced because it is not within the power of the NPS to regulate that which it neither owns nor controls according to the law.

On page 2-67, the statement that the, "... NPS may require biological surveys inside and outside the park," is not correct. A private party is responsible for obeying the law, but a survey is not a requirement which must be met in order to abide by the law (especially outside the Park).

Table 2-21

The following paragraph is included at the top of page 2-92

"Operating Stipulations and Mitigation Measures for Nonfederal Oil and Gas Drilling and Production Operations. This table lists required stipulations and recommended mitigation measures for constructing roads and wellpads, drilling operations, production operations and flowlines and pipelines. The 36 CFR 9B operating stipulations shown in the following table are required for all nonfederal oil and gas operations under a plan of Operations and are recommended for directional drilling operations originating outside of the Preserve. Mitigation measures are recommended for all oil and gas operations regardless of whether the surface operation is situated within or outside of the Preserve."

This language must be a mistake unless it is the intent of the NPS to change current practices regulating directional drilling outside the Park. The only lawful requirement to drilling outside the preserve for wells bottoming underneath the preserve is to abide by all existing federal and state laws including Texas Railroad Commission rules. To the extent that these NPS rules go beyond this statement, they are invalid and unlawful. For example, the requirement of an archaeological and/or endangered species report is not part of current law. For drilling on surface within the BTNP, the following comments apply:

47.

Requirement - Use an inside-diameter wiping tool for drillpipe to reduce loss of drilling fluids.

This item is not a standard, currently used oil industry practice. The material which drips out of the drill pipes when stacked is negligible and that which escapes is captured with pollution pans underneath the rig floor.

48.

Requirement — For drilling of workover operations, use a multi-layered or specialized impermeable liner system beneath the rig and associated equipment (including fuel and transfer areas). Use cellar as collection point for drilling fluid waste, rigwash, other fluids, etc.

This is not standard. Areas which are prone to leaking toxic material have pans underneath them (fuel station, etc.). On operations using lignosulfate mud, this material is non-toxic and is further contained by ring levees.

Using a liner system may be appropriate if using a different, more toxic mud system.

49.

Requirement — Collect and reuse rigwash for subsequent rig maintenance, for initial washing of equipment, or as make-up water in drilling and completion operations.

Rigwash is collected by floor drains and sent to a catch tank and disposed of offsite. The requirement to reuse rigwash is not an accepted practice.

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6

**47.** Use of an inside diameter wiping tool is not a specific requirement, but one of many available techniques for minimizing environmental impacts. The primary benefit for using an inside diameter wiping tool for drillpipe is waste reduction, which has both environmental and economical benefits. Operators do use the tool when appropriate as it can prevent waste of up to 0.4 barrels per 1000 feet of drill pipe. We note that the State of Texas endorses this waste reduction technique in its "Waste Minimization in the Oil Field" manual.

The mitigation measures shown in Table 2.21 provide operators a list of possible techniques that could be selected when designing their operations to meet the NPS requirement at 36 CFR § 9.37 that "...operations will be conducted in a manner which utilizes technologically feasible methods least damaging to the federally-owned or controlled lands, waters and resources of the unit while assuring the protection of public health and safety."

**48.** Use of a properly designed liner system is not a specific requirement, but one of many available techniques for minimizing environmental impacts. An impermeable liner beneath equipment prone to leaks is a widely used practice to prevent contaminants from reaching the ground. While secondary containment may be designed into some equipment, in many cases it is not. Even relatively benign water-based lignosulfate mud systems can accumulate heavy metals (from pipe dope and some mud additives), oil and grease, and other toxins. Ring levees do provide containment if the location is managed as a zero-discharge operation through remediation and reclamation. Liners can be an appropriate component of all drilling location designs, and become more important as the toxicity of materials on location increases.

The mitigation measures shown in Table 2.21 provide operators a list of possible techniques that could be selected when designing their operations to meet the NPS requirement at 36 CFR § 9.37 that "...operations will be conducted in a manner which utilizes technologically feasible methods least damaging to the federally-owned or controlled lands, waters and resources of the unit while assuring the protection of public health and safety."

**49.** Collection and reuse of rig wash is not a specific requirement, but one of many available techniques for minimizing environmental impacts. Judicious management of rig wash is perhaps one of the most basic components of any waste minimization program used in drilling operations. We note that the State of Texas endorses this waste reduction technique in its "Waste Minimization in the Oil Field" manual.

The mitigation measures shown in Table 2.21 provide operators a list of possible techniques that could be selected when designing their operations to meet the NPS requirement at 36 CFR § 9.37 that "...operations will be conducted in a manner which utilizes technologically feasible methods least damaging to the federally-owned or controlled lands, waters and resources of the unit while assuring the protection of public health and safety."

COMMENTS RESPONSES

50.

Requirement — Place impermeable plugs in soils where pipelines intersect waterways. Also place impermeable plugs in soils approximately every 1000 feet across long, straight segments of pipelines to prevent water flow along pipeline route.

Clarification is necessary for the placement of impermeable plugs in soils along pipeline

51.

Pg. 3-22

I note the rationale for classifying sand mounds as SMA's. "Sand mounds" is not a commonly used term in the literature and is rather general. Temple mounds are sand rich mounds created by Native Americans and contain artifacts. Other mounds are known as "pimple mounds." Pimple mounds are associated with fluvial processes. From a paper, "Origin of Pimple Mounds," by E.L. Krinitzsey, pimple mounds are described as follows:

B. Meander Belt Pimple Mounds

In plate 1 there is shown the appearance of typical pimples situated on Recent alluvial deposits in the Advance lowland near Cape Giradeau, MO. It can be seen from the still distinct river scars that this entire surface has been reworked by a meandering stream which has since migrated away from the area. Typical Meander bends, swales and accretion topography on point bars are easily distinguished, And, associated with these features, are pimples oriented in patterns which are entirely conformable to the accretion ridges developed on point bars of the meandering stream.

The above conformity of pimples to meander belt topography is by no means unique. Similar situations are found in many areas. Typical examples occur in the Red River valley in Oklahoma and Texas, and in flood plain areas of Arkansas and Tennessee.

Accretion ridges on growing point pars along much of the lower Mississippi River are typically sandy, as are many towheads. These are sculptured by river currents during high water, built up as a result of accretion during falling water and left exposed when lower water levels are reached. Since these accretions are periodic and occur generally after intervals during which the river bends have been migrating, most sandy accretion ridges are separate and distinct. Between these accretion ridges are the so-called swales which develop lucuriant growths of willows and trap fine sediments when flooded during times of high water. Thus the topography contains very gentle swells of ocarse sediments protruding from areas filled with finer alluvium. In very short order, mantles of vegetation creep onto these sediments and develop soil profiles into them. To a great extent, vegetation aids in preserving certain of the topographic configurations. With removal of this covering by agriculture, many meander belt features such as are exhibited by soil fertility and topographic variations come into prominence again . . .

Thus it becomes apparent that meandering behavior of rivers tend to develop silty and sandy concentrations of sediment in individual strips which eventually over much of the total surface area within a meander belt. As these coarse deposits are forming, their surfaces are sculptured with water carved mounds. Vegetation quickly moves in to for a protecting cover and, with the formation of a soil profile, these mounds become our familiar pimples.

All sand mounds are neither temple mounds nor pimple mounds. Pimple mounds, while somewhat mysterious in their formation, are not rare. Temple mounds which evidence the presence of Native Americans, are already covered by federal acts including but not limited to <a href="https://doi.org/10.1007/jhb/10.20

**50.** The mitigation measure shown in Table 2.21 to place impermeable plugs along pipelines is an available mitigation technique for nonfederal oil and gas operations in the Preserve. The placement of impermeable plugs where pipelines intersect waterways would help reduce erosion and exposure of pipelines in waterways in the Preserve. Similarly, impermeable plugs placed along straight pipeline segments would reduce waterflow and erosion along pipelines.

The mitigation measures shown in the Table 2.21 are presented to provide operators a list of available techniques that could be selected when designing their operations to meet the NPS requirement at 35 CFR § 9.37 that "...operations will be conducted in a manner which utilizes technologically feasible methods least damaging to the federally-owned or controlled lands, waters and resources of the unit while assuring the protection of public health and safety."

**51.** The intent in formally designating sand mounds as SMAs was to protect archeological resources. As noted in the comment, protection will be provided under Current Legal and Policy Requirements, most notably the National Historic Preservation Act of 1966, as amended. The description of sand mounds wais corrected on pages 3-22 and 3-23 of the Final Plan/EIS; and "sand mounds" were removed as a proposed SMA under Alternatives B and C throughout the Final Plan/EIS. Also see Responses 39 and 44.

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7

	COMMENTS	RESPONSES
51. Cont.	As a geologist, the presence of a sand mound is no more <i>geologically</i> significant than a clay rich area. Obviously the flora and fauna varies according to the type of soil, etc. The case to protect sand mounds in a geomorphilogical or geological context as an SMA is not appropriate. Sand mounds per se are not protected by federal laws. Furthermore, the sand mounds or ridges or sand rich areas generally represent higher ground and are the <i>exact</i> places where oil and gas operations need to occur within the Park. An exceedingly high percentage of the Big Thicket is wetland. Therefore, according to the NPS, oil companies can't drill on the high areas (sand rich areas) and according to the United States Army Corps of Engineers, oil companies are to avoid drilling in wetlands. Aside from environmental concerns, oil companies do not want to drill in wetlands for a variety of practical reasons. The net effect of all this is to effectively ban drilling within the Park. The definition of a sand mound is sufficiently vague in order to effect this result if NPS employees wish it.	
52.	The designation of riparian corridors as SMA's is too all-inclusive as to constitute an SMA. Riparian corridors are not protected by federal law. In fact, practically the entire BTNP could be classified as a riparian corridor. Of course, within this riparian corridor of the Big Thicket, existing law protects endangered species which may live there, wetlands which constitute a large part of the area, and the floodplains which are necessary for proper drainage within the Neches River system. Another layer of regulation is unnecessary and overlaps statutes already in place.	<b>52.</b> As required by the National Environmental Policy Act (NEPA), the EIS must include a reasonable range of alternatives. The alternatives presented in the Plan/EIS provide a reasonable range of alternatives to protect resources in riparian corridors and other resource areas of the Preserve. Alternative A (current conditions) does not include a Riparian Corridors SMA. The Riparian Corridors SMA is a component of Alternatives B and C. These alternatives include additional operating stipulations that are not specifically a part of current legal and policy requirements.
53.	While the Plan, if enacted as written, could pose significant legal challenges to the rights of the mineral owners and their lessees, covering affected lands, I believe that the Plan may be modified by the NPS to achieve the major objectives of the NPS while preserving private property rights.  A possible solution might be to create SMA's, as limited by my comments above, where use of certain surface lands is discouraged but not altogether prohibited. Identifying sensitive areas within the Preserve allows the Preserve to develop a Management Plan for the Preserve and informs operators of the areas within the Preserve that might require greater security and/or regulation if surface drilling occurs within these areas. I am sure that there are other solutions which would be equally acceptable to the oil industry which would maintain flexibility on the part of the Preserve and Operators to develop acceptable solutions based on facts on the ground and existing law. Such a solution or solutions would preclude costly litigation over the adoption of a Plan initiated by mineral owners whose rights would be adversely affected. Such litigation would not be in the interests of the Preserve or the affected owners. Further, it is highly likely that the surface of the lands within the SMA's will never be drilled based on practical considerations such as access, susceptibility to flooding, etc. Yet mineral owners and others will be forced to litigate in order to prevent confiscation of surface rights on affected lands that may or may not prevent the development of oil and gas underneath the affected lands.	The NPS believes that including a Riparian Corridor SMA in the Plan/EIS will help guide the overall protection of sensitive riparian and water resources within the Preserve by providing the operator a "roadmap" to use when selecting drilling locations within the Preserve. Since exceptions to SMA and other operating stipulations identified in the plan may be permitted on a case-by-case basis during planning review and approval, an operator may still be permitted to drill in a riparian corridor if he/she can demonstrate the NPS least damaging approval standard at 35 CFR § 9.37 (see page 2-3 of the Draft Plan/EIS).  53. See Response 37.
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COMMENTS	RESPONSES
I respectfully request that the NPS review and amend the elements of the Plan which have been addressed in my comments above in order to provide a lawful, workable framework for the afe and orderly exploitation of oil and gas within (or underneath) the Preserve.	
loss Davis loss Davis Bros. Oil Producers Inc. and Davis Southern Operating Company	
c: Art Hutchinson ig Thicket	

COMMENTS	RESPONSES
Linda Darnby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Region 1100 Old Santa Fe Trail Santa Fe, NM 87504-0728  RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement September 2004 Big Thicket National Preserve, Texas  Dear Ms. Dansby:  The Independent Petroleum Association of America (IPAA), which represents thousands of independent oil and natural gas producers and service companies across the United States, endorses the views submitted by Black Stone Minerals Company in opposition to the Draft Oil and Gas Management Plan for the Big Thicket National Preserve in Texas.  Oil and natural gas production play a vital role in the economy of Southeast Texas. We are greatly concerned that the proposed Oil and Gas Management Plan for the Big Thicket National Preserve would hamper oil and natural gas development by increasing costs and risk to petroleum producers. At a time when the energy needs of our nation continue to increase, we do not believe it is wise to implement a new oil and gas management plan for this area which could result in delays in permitting, add significant costs to operations and create further regulatory challenges for producers.	<b>54.</b> See Response 20.  Also note that the development of the Draft Plan/EIS is "memorializing" the Preserve's current application of the 9B regulations to oil and gas operators. No new statutory or regulatory requirements are being (nor could they be) created under this Plan/EIS. The NPS anticipates that the Final Plan/EIS will be a useful tool to facilitate operators' planning to conduct nonfederal oil and gas operations in the parks.
	Linda Darnby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Region 1100 Old Santa Fe Trail Santa Fe, NM 87504-0728 RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement September 2004 Big Thicket National Preserve, Texas  Dear Ms. Dansby:  The Independent Petroleum Association of America (IPAA), which represents thousands of independent oil and natural gas producers and service companies across the United States, endorses the views submitted by Black Stone Minerals Company in opposition to the Draft Oil and Gas Management Plan for the Big Thicket National Preserve in Texas.  Oil and natural gas production play a vital role in the economy of Southeast Texas. We are greatly concerned that the proposed Oil and Gas Management Plan for the Big Thicket National Preserve would hamper oil and natural gas development by increasing costs and risk to petroleum producers. At a time when the energy needs of our nation continue to increase, we do not believe it is wise to implement a new oil and gas management plan for this area which could result in delays in permitting, add significant costs to operations and create further regulatory challenges for producers.  Thanks you for your attention to this request.  Sincerely,  Daniel Naatz Director, Federal Resources

	COMMENTS	RESPONSES
	Samson Samson Plaza Two West Second Sirret Tulsa, Oklahoma 74103-3103 USA 918/591-1791 Fax 918/591-1796	
	March 10, 2005	
	Linda Dansby, EIS Project Manager Office of Minerals/Oil and Gas Support Intermountain Region 1100 Old Santa Fe Trail Santa Fe, NM 87504-0728  RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement ("Plan") September 2004 Big Thicket National Preserve, Texas	
55. 56.	Dear Ms. Dansby:  Samson Lone Star Limited Partnership (Samson) is a company active in the exploration and development of oil and gas. We operate in Southeast Texas and have oil and gas operations in the area of the Big Thicket National Preserve (Preserve). We write in opposition to the Plan referenced above, and to give our views on the impact of federal regulations on exploration and production of oil and gas in this part of Texas.  Samson has reviewed the three alternatives presented in the Plan and has several concerns. The following provides an overview of our concerns.  Alternatives B and C presented in the Plan create "Special Management Areas" (SMAs) that restrict and/or preclude the exploration, drilling and production of underlying privately held minerals. Alternate B, which is described as the "Preferred Alternative" would apply "no surface use" stipulations to 46,273 acres (i.e. 52.5%) of the Preserve. Additionally, setback requirements appear to further restrict lands available for surface occupation in the Preserve and adjacent private lands. Alternative C presents even greater restrictions.] We believe prudent operators are capable of operating in most areas of the Preserve while protecting the environment using advanced technology designed to extract mineral resources with very minimal surface footprints. For this reason most all areas of the Preserve should be available for consideration for drilling.  The broad use of SMAs will restrict the development of privately held minerals underlying the Preserve. Oil companies that have taken mineral leases in these areas have a responsibility to develop them. The interests of all parties including private ownership of minerals must be	<ul><li>55. The purpose of this planning effort is to develop a programmatic plan to guide oil and gas activities within the Preserve so there is a common understanding of the special resource values in the Preserve, and how to protect them.</li><li>56. See Response 37.</li></ul>

	COMMENTS	RESPONSES
57. 58.	protected and developed with proper regard for the surface estate. Restricting the use of the surface in areas where the estate is split does not support that ideology.  The restriction of surface use for pipeline routes will adversely impact the ability to effectively transport the recovered oil and gas resources underlying the Preserve and surrounding areas. The lack of access to lay pipelines would result in waste of our natural resources.  Please be assured that Samson is committed to recovery of oil and gas minerals in a safe manner which emphasizes environmental stewardship. Samson would support any effort within industry and the National Park Service to streamline the current permitting process to allow for environmental protection of the Preserve while maximizing the recovery of natural resources.  We respectfully request that the Park Service reconsider its position, and properly consider four factors before implementing the Plan, or further regulating mineral development either in the Preserve or on adjacent lands. (1) the economic impact on this area of Texas, (2) the responsibility of all stakeholders to prudently support the development of the mineral resources of the areas affected by this plan, (3) the vested private property rights of oil companies and royalty owners, and (4) the oil and gas industry's proven ability to utilize advanced technology to recover the mineral resources with minimal impact to the environment. We are confident that all four of these considerations can be accommodated without adversely affecting the environment in the Big Thicket National Preserve.  Sincerely,  SAMSON LONE STAR LIMITED PARTNERSHIP By: Samson Resources Company, General Partner	57. See Response 27.  58. See Responses 20 and 24.
	Grant E. Black Director of Governmental Affairs	

COMMENTS	RESPONSES
11 05 12:34p KB Cronin Company,LLC 409 833 8895	p.2
Linda Dansby, EIS Project Manager Office of Mimerals/Oil and Gas Support Intermountain Region 1100 OId Santa Fe Trail Santa Fe, NNR 87504-0728 RE: Comments on Draft Oil and Gas Management Plan Environmental Impact Statement Big Thicket National Preserve, Texas  Dear Ms. Dansby:  I manage several thousand acres of mineral and royalty property under and adjacent to the B.T.N.P. I monitor all oil and gas activity in the several counties that contain Big Thicket Units. I did not become aware of the proposed plan to regulate oil and gas activity in the Big Thicket National Preserve until January 26, 2005.  I serve on the Advisory Council of the National Association of Royalty Owners and the Board of Directors of N.A.R.O-Texas. The National Association of Royalty Owners is a known and respected non-profit organization. The purpose and mission of N.A.R.O. is to inform, educate and protect the rights of mineral and royalty owners. N.A.R.O. is the largest national association dedicated to this purpose.  According to the draft, the general public was initially notified in 1998 and included in the scoping process. No additional scoping meetings were requested by the public. The plan was scoped, drafted and published over a six year period between December 1998 and September 2004. The public comment period was published in the Federal Register in December 2004. The public comment period was published in the Federal Register in December 2004. The public comment period was published in the Federal Register in December 2004. The public comment period was published in the Federal Register in December 2004. The public comment period was published in the Federal Register in December 2004. The public comments and many other individuals, institutions and associations.  To the best of my knowledge the National Association of Royalty Owners and N.A.R.O. Texas were not notified or provided a draft of the proposed O&GMP/EIS. The mineral and royalty properties underlying the Big Thicket are owned by "private entities" as stated in the	<ul> <li>59. The mailing list to distribute the Draft Plan/EIS was prepared through the public scopir process as described in Chapter 5. The notice of intent to prepare a draft oil and ge management plan/environmental impact statement, and the subsequent notice of availability of the draft plan/EIS, were both published in the <i>Federal Register</i> and local newspaper. The NPS followed guidance provided in 40 CFR 1506.6 and NPS NEPA policy in Director Order 12. We regret that your organization and many owners of the minerals and royaltic underlying the Preserve did not see either the notice of intent or the notice of availability the <i>Federal Register</i> or local newspapers. However, the National Park Service believes provided sufficient notice for public participation in this planning process and will not re-ope the public review and comment period.</li> <li>60. See Response 24.</li> <li>61. See Response 23.</li> </ul>

	COMMENTS	RESPONSES
ır	11 05 12:34p KB Cronin Company,LLC 409 833 8895 p.3	
	Specific Comments	
	Appendix B, page 1	
62.	The plan references 36 CFR 9B. Section 9.30 of the code says," These regulations are not intended to result in the taking of a property interest, but rather to impose reasonable regulations on activities which involve and affect federally-owned lands"	<b>62.</b> See Response 19.
	The proposed plan limits or prohibits the mineral estates right of ingress and egress. This raises serious takings questions that should be considered and discussed in detail. A prudent mineral or royalty owner would likely seek compensation for the condemnation of their property.	
	Chapter 1, page 2, paragraph 2 and S-4	
63.	The N.P.S. clearly has no authority to regulate operations outside the surface estate of the B.T.N.P. The inclusion of lands outside the B.T.N.P. in the analysis raises questions about the intended purpose of the plan. It is also in conflict with the stated planning objectives. Specifically, the fourth objective which says, "Provide holders of oil and gas rights reasonable access for exploration and development"	63. See Response 23.
	Chapter 1, page 21 -22	
64.	The interdisciplinary team concluded that under the required Current Legal and Policy Requirements that anticipated impacts to the local and regional economy would be negligible, and were dropped from further analysis. Therefore, the plan does not consider a detailed analysis of potentially negative impacts on the local and regional economies.	<b>64.</b> The impact on the local and regional economy from exploration and development of nonfederal oil and gas underlying the Preserve would be negligible, compared to the overall effect from such exploration and development in District 3 or the 7-county area in which the Preserve is located. Also see Response 20.
	Alternatives B and C, if adopted, could possibly have negative impacts on the local and regional economies. The possible negative impacts include lost or diminished bonus, rental and royalty income, lost or diminished severance tax, lost or diminished ad valorem taxes, lost or diminished tax revenue for school districts, counties, cities and municipal utility districts, lost or diminished oil and gas industry jobs, lost or diminished service jobs, lost or diminished pipeline access and negative impacts on planned L.N.G. facilities. A detailed analysis should be performed to qualify and quantify the potential negative affects of the O&GMP/EIS.	Troserve to todated. Allow see the sported 25.
	Chapter 1, page 22, 2 <sup>nd</sup> paragraph from bottom	
65.	I suspect that the natural gas totals were erroneously reported in millions instead of billions.	<b>65.</b> This error was corrected; and the production of oil and condensate, and natural gas was updated in the Final Plan/EIS.

	COMMENTS		RESPONSES
ır	11 05 12:35p KB Cronin Company,LLC 409 833 8895 p.	. 4	
<b>5.</b>	In closing, I respectively ask that the N.P.S. reconsider submitting the O&GMP/EIS until such time that the owners of the mineral and royalties underlying the B.T.N.P. have been properly notified and have had a reasonable opportunity to comment on the plan. Additionally, private entities and individuals have acquired mineral and royalty property under the B.T.N.P. subsequent to the public scoping process in 1998. These stakeholders in particular, should be notified and given the opportunity to comment.		<b>66.</b> See Response 59.
	Sincerety,  Rent Crairies  Kevin B. Cronin		
	479 Pine St. Beaumont, Texas 77701		

The environmental assessment (EA) for the Famcor Oil, In. Roberts/Duke #1 Flowline, states on page 7 that "During the scoping and development of the Plan of Operations for the Famcor Roberts/Duke #1 Flowline and the EA, the planning framework provided in the Preserve's GMP and Draft OGMP/EIS, have been followed." The scoping letter for this EA is dated August 23, 2004 and the Sierra Club's comments are dated August 29, 2004. It appears that NPS had already completed the DOGMP/EIS at these dates and could have released it at any time between late August and the time the document was actually released, about December 3, 2004.

This lost three month period is both puzzling and frustrating with regard to the inadequate time that the public and the Sierra Club initially had to review the 550 page EIS. It appeared that NPS delayed the release of the DOGMP/DEIS for over three months. The NPS released the DOGMP/DEIS during the Christmas and New Year's holiday periods when the public is most likely to be busy and not notice the document's availability.

By beginning the comment period during the Christmas and New Year's holiday periods the NPS may have violated the spirit and substance of NEPA and the Council on Environmental Quality's (CEQ) NEPA implementing regulations. The CEQ regulations stress numerous times how important public participation is for the NEPA process. The CEQ regulations also stress the need for concerted efforts by federal agencies to ensure that the public is informed and participates in the process.

The Sierra Club appreciates that the NPS granted its request for a 30 day extension of the comment period to March 10, 2005.

The Sierra Club requests a hard copy of the Final OGMP/FEIS/Record of Decision (ROD) and associated documents when the ROD is approved and the documents are released to the public.

#### 69.

### **DOGMP/DEIS Poorly Defined Words and Phrases**

For an EIS, dictionary usage of words or phrases will not suffice to provide the public with a clear picture of what the intensity, significance, and context of environmental impacts are. In other words, an all qualitative assessment, analysis, and evaluation of environmental impacts is not sufficient to deal with the clearly articulated CEQ requirements in Section 1502.14, that the EIS "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public".

Quantitative assessment, analysis, and evaluation are necessary to ensure that alternatives and environmental impacts are clearly defined and shown in the EIS.

**69.** The NPS has written the Draft Plan/EIS in plain language the general public can understand (40 CFR § 1502.8). Only jargon, technical terms, and acronyms are defined in the Draft Plan/EIS. Words used to define impact intensity thresholds for "negligible, minor, moderate, and major" impacts are intended to be understandable using standard dictionary definitions.

The NPS included both quantitative and qualitative analysis of impacts. The NPS performed a quantitative analysis where it had the specific information to do so. A few examples of the quantitative analysis performed include: 1) measurements of the direct area of disturbance resulting from existing operations, and reasonably foreseeable surface impacts under the RFD were provided in all impact analyses, 2) the size of SMAs in acres were provided and used in the impact analyses, and 3) decibel levels were used to describe impacts from drilling and production operations on visitor use and experience. The NPS did not use a quantitative change in decibels to define impact intensity levels because impacts are not simply determined by a quantifiable change but also by the particular uses that would be affected.

### COMMENTS

# **RESPONSES**

# 69 Cont.

As stated in the CEQ NEPA implementing regulations, Section 1500.1(b), Purpose, "NEPA procedures must insure that environmental information is available to public officials and citizens ... The information must be of high quality. Accurate scientific analysis ... are essential to implementing NEPA".

As stated in Section 1501.2(b), "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."

As stated in Section 1502.8, "which will be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts."

As stated in Section 1502.18(b), about the Appendix, "Normally consist of material which substantiates any analysis fundamental to the impact statement".

As stated in Section 1502.24, "Agencies shall insure the professional integrity, of the discussions and analyses ... They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."

The only analysis that NPS has conducted for this EIS is "best professional judgment". "Best professional judgment" is where a group of people, using their experience, decide what is important. This is akin to the BOGSAT method used by federal and state resource agencies. BOGSAT means, "Bunch of guys sitting around talking". This level of assessment, analyses, and evaluation for environmental impacts and alternatives is an insufficient foundation upon which to base an EIS.

1) The word, "localized" is used to describe context or extent of the impact on page 4-3. On pages S-11 through S-14, 2-55 through 2-60, 4-3, 4-12 through 4-15, 4-17 through 4-24, 4-26 through 4-37, 4-39, 4-40, 4-42 through 4-65, 4-67 through 4-72, 4-74, 4-75, 4-78 through 4-87, 4-89, 4-90, 4-92, 4-93, 4-95 through 4-100, 4-105, 4-106, 4-109, 4-110, 4-113, 4-114, 4-116, 4-120 through 4-126, 4-129 through 4-131, 4-133, 4-135 through 4-140, 4-142 through 4-144, 4-146 through 4-150, the term "localized" is not defined. This term is not found in the Glossary.

NPS must define "localized" in its proper context for each impact issue and for each instance elsewhere in the DOGMP/EIS where the definition is different. The public has a right to review, comment on, and understand what is in the DOGMP/EIS. Decision-makers also need to know this information. Without a clear and specific definition for "localized" in each instance it is used this is not possible. By not defining the word "localized" the Sierra Club cannot determine whether it agrees with NPS's definition of the word and the way it is used.

Where specific information was lacking to perform a quantitative analysis, the NPS believes that its qualitative analysis is adequate to satisfy NEPA.

The assessment of impacts using "best professional judgment" is an acceptable methodology and is based on the judgment of the writers of the EA and NPS technical specialists consulted during the preparation of the Plan/EIS, who possess the knowledge and skill to make an assessment of effects of the proposal.

The definition of "localized" impacts is included on page 4-2 of the Final Plan/EIS and would "affect the operations area but would not extend beyond 1,500 feet from a well/production pad or 100 feet from an access road or flowline." "Widespread or regional impacts" would extend beyond the area of localized effects. These definitions apply to all impact topics evaluated.

"Mitigation" is defined in the Glossary on page Glossary-5. We have included in the Glossary definition, that the term "mitigation" is used interchangeably with other terms used in this Final Plan/EIS, including "mitigation measure," "mitigation techniques," and "mitigation strategies." The NPS uses the term "mitigation" as it is defined in NPS Director's Order 12, as "a modification of the proposal or alternative that lessens the intensity of its impact on a particular resource." The definition references 40 CFR § 1508.20 which is the definition provided in the Glossary.

When the terms "voluntary resource protection methods" cited from page 2-1 is taken in context with the text from which it is excerpted, it distinguishes between required operating stipulations and voluntary mitigation measures. 'Voluntary' implies that the mitigation measures are designed by the operator to meet NPS-defined resource protection objectives. The NPS reviews and determines whether an operator's "voluntary" mitigation measures would meet those objectives. "Operating standards," synonymous with operating stipulations in the Draft OGMP/EIS, are required by specific laws and regulations. An example would be the operating standards listed in 36 CFR § 9.41.

Short-term, and long-term duration of impacts is defined at the top of page 4-3.

The definition for a "qualified biologist" is provided in the next sentence.

The definition for a "qualified archeologist" is one that meets the Secretary of Interior Standards and Guidelines for Archeology and Historic Preservation, as described in the last bullet on page 2-77.

COMMENTS	RESPONSES
The Sierra Club assumes that "localized" has a different context for the different impact issues of nonfederal oil and gas development, air quality, geologic resources, water resources, floodplains, vegetation, wetlands, fish and wildlife, species of special concern, cultural resources, and visitor use and experience, and adjacent land uses. Each of these resources affects the environment in a different way and to a different extent. It would be logical that "localized" would not mean the same thing for each impact issue.	
2) The phrase "mitigation measures" is used on pages S-4, S-6, S-8, 1-2, 2-1, 2-8, 2-11, 2-13, 2-14, 2-18 through 2-20, 2-22, 2-24, 2-61, 2-62, 2-64, 2-67, 2-69, 2-70, 2-85 through 2-103, 4-2, 4-4, 4-5, 4-12, 4-23, 4-35, 4-40, 4-44, 4-45, 4-49 through 4-54, 4-56, 4-58, 4-59, 4-62, 4-64 through 4-66, 4-72 through 4-77, 4-86 through 4-88, 4-90 through 4-93, 4-96, 4-97, 4-99, 4-100, 4-102 through 4-104, 4-106, 4-110, 4-112 through 4-115, 4-119, 4-128 through 4-138, 4-140 through 4-142, 4-144, 4-146, 4-148, and 4-150 through 4-153.	
On page 2-1, the NPS states that "mitigation measures" "are not required by law but are voluntary resource protection methods that an oil and gas operator may use while conducting oil and gas operations the specific methods are up to the discretion of the operator".	
It is of great concern to the Sierra Club that the foundation for protection of BTNP by the NPS consists of "voluntary measures" that the operator "may use". The NPS must make "mitigation measures" mandatory and not at the discretion of the operator. NPS does not define "mitigation measures" in the Glossary. NPS must define what "mitigation measures" are so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information.	
On page 1-2, NPS talks about "mitigation techniques" and page 2-65, NPS talks about "mitigation strategies". How are these different than "mitigation measures"? These terms need to be defined in the Glossary. In addition NPS also uses the term "mitigation" when referring to implementation of protective measures. NPS must be consistent in the use of terminology. If NPS is not consistent then the public will not understand what NPS refers to when it uses the term "mitigation measures".	
3) On pages S-10 through S-14 and pages 2-55 through 2-59, the phrase "better protected" is used to describe how Alternative B or Alternative C protects resources better than Alternative A. This phrase is not found in the Glossary. NPS must define what "better protected" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ's mandatory NEPA implementing regulations. These regulations state,	

COMMENTS	RESPONSES
in Section 1502.14, Alternatives including the proposed action, that, "This section is the heart of the EIS it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public Devote substantial treatment to each alternative in detail so that reviewers may evaluate their comparative merits."  The CEQ also states, in Section 1502.16 and (d), Environmental consequences, that, "This section forms the scientific and analytic basis for the comparisons The environmental effects of alternatives including the proposed action the comparisons under Section 1502.14 will be based on this discussion."  It is key for NPS to clearly compare and make apparent the distinctiveness of each alternative and its impacts or protected" are used instead of quantitative information or more detailed and clear descriptions of qualitative information. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  4) On pages 2-1, 4-5, 4-13, 4-23, 4-25, 4-51, 4-52, 4-56, 4-57, 4-66, 4-75, 4-82, 4-85, 4-93, the phrase "least damaging methods" and "least damaging to Preserve resources and values" is not defined in the Glossary. NPS must define what "least damaging methods, etc." means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  5) On page 2-21, the phrase "with exceptions" is not defined in th	RESPONSES

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69. Cont.	to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. NPS does not tell how many acres are included in this "adjacent to existing roadways" so the public knows just how extensive this area is compared to the "no surface use" requirement in Alternative C. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  7) On pages 2-55 through 2-59, 4-28, 4-28, 4-31, 4-34, 4-39, 4-40, 4-42, 4-43, 4-44, 4-45, 4-46, 4-47, 4-48, 4-49, 4-70, 4-71, 4-72, 4-78, 4-79, 4-74, 4-74, 4-82, 4-83, 4-85, 4-86, 4-92, 4-93, 4-95, 4-96, 4-97, 4-99, 4-100, 4-106, 4-109, 4-113, 4-114, 4-116, 4-120, 4-121, 4-122, 4-123, 4-124, 4-125, 4-126, 4-131, 4-133, 4-135, 4-137, 4-138, 4-139, 4-140, 4-147, 4-149, the phrase "widespread protection or widespread" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used to describe environmental impacts or the protectiveness of an alternative and define clearly what the words or phrases used to describe environmental impacts or the protectiveness of an alternative and define clearly what the words or phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests tha	RESPONSES	
	used mean.  9) On pages 2-55 through 2-60, the phrase "similar to" is not defined in the Glossary. NPS must define what "similar to" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define		
	outlined above in 3. The Sterra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.		

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The use of "best professional judgment" is not a substitute when quantitative information is available to show what impacts are or could be. This is the concern that the Sierra Club has when NPS develops and uses the "Methodology for Assessing Impacts". This methodology is based on "best professional judgment" but the public is not told what this phrase means. The interaction of the "Methodology for Assessing Impacts" with the requirement in Section 1502.22 of the CEQ's NEPA implementing regulations must be discussed in detail in this EIS.	
Section 1502.22, requires that when evaluating reasonably foreseeable significant adverse effects on the human environment in an EIS that incomplete or unavailable information be plainly stated as lacking in the EIS. This section requires that if the costs of obtaining this information are "not exorbitant" then the agency must include the information in the EIS. Finally, this section requires that if the information cannot be obtained due to exorbitant costs that the agency must state the information is incomplete or unavailable; state the relevance of this information to evaluating the significant adverse impacts; summarize the credible scientific evidence; and then provide the agency's evaluation of impacts based upon theoretical approaches or research methods generally accepted in the scientific community.	
In the DOGMP/DEIS the use of "best professional judgment" is the theoretical approach or research method that is generally accepted in the scientific community that NPS uses to assess the environmental impacts of oil/gas activities in, on, or through BTNP. Therefore NPS must give a thorough discussion of the use of this evaluation method in place of using quantitative data for the impact issue that is being discussed.	
NPS cannot substitute "best professional judgment" for gathering existing quantitative data that it does have or gathering quantitative data that does not cost an exorbitant amount to collect for this EIS. The Sierra Club opposes the use of "best professional judgment" in lieu of using existing or not exorbitantly costly acquired quantitative data. For instance, the impact issue, "nonfederal oil and gas development", NPS should have data concerning the time it took to file information and get approval under Alternative A. This can be compared to the estimated approval times that Alternatives B and or C might provide if implemented. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.	
14) On page 4-5, the phrase "barely measurable" is not defined in the Glossary or in the definition for "Negligible" under "Impact Intensity Thresholds". NPS must define what "barely measurable" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an	

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bottween cach alternative and define clearly what the words or phrases used mean.  19 On pages 4-12, 4-35, 4-50, 4-82, 4-73, 4-87, 4-101, the phrase "would be so slight that it would not be of any measurable or perceptible consequence" means so that the public can review comment on and understand what NTS is under "impact Intensity Thresholds". NTS must define what "would be so slight that it would not be always measurable or perceptible consequence" means so that the public can review comment on and understand what NTS is referring to the productiveness of an alternative and consecute environment impacts or the productiveness of an alternative does not provide the public with the degree of productiveness of an alternative does not provide the public with the degree of requests that NTS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used or mean.  20) On page 4-12, 4-36, 4-50, 4-42, 4-73, 4-101, the phrase "small and of little consequence" is not defined in the Glossary or in the definition for "Minor" under "impact intensity Thresholds". NTS must define what "mail and of understand what NTS is referring to Decision-nakers also need to know this information. The qualitative description of phrases used to describe environmental impacts or he productiveness of an alternative does not provide the environmental impacts or he productiveness of an alternative does not provide what "mail and of the comparative differences between each alternative and define clearly what the words or phrases used mean.  21) On page 4-12, 4-35, 4-50, 4-82, 4-73, 4-77, 4-102, 4-142, the phrase "would be simple and successful" means to that the public can review comment on, and understand what NTS is referring to. Decision-nakers also need to know the simple and successful" means to that the public can review comment on, and understand what NTS is referring to. Decision-nakers also need to know this information.  22) On page 4-12, 4-35, 4-50, 4-62, 4-73, 4-74, 4	COMMENTS		RESPONSES	
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24) On pages 4-12 and 4-128, the phrase "severely adverse" is not defined in the Glossary or in the definition for "Major" under "Impact Intensity Thresholds". NPS must define what "severely adverse" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.	
25) On pages 4-12 and 4-102, the phrase "Extensive mitigation measures" is not defined in the Glossary or in the definition for "Major" under "Impact Intensity Thresholds". NPS must define what "Extensive mitigation measures" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.	
26) On pages 4-12, 4-35, 4-50, 4-62, 4-73, 4-88, 4-102, 4-142, the phrase "success would not be guaranteed" is not defined in the Glossary or in the definition for "Major" under "Impact Intensity Thresholds". NPS must define what "success would not be guaranteed" means so that the public can review,	
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30) On pages 4-35, 4-50, 4-62, 4-73, 4-102, the phrase "substantial consequences" is not defined in the Glossary or in the definition for "Major" under "Impact Intensity Thresholds". NPS must define what "substantial consequences" means so that the public can review, comment on, and information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEO as outlined above in 3. The Sierra Club requests that NPS clarity and defaul clearly the comparative differences between each alternative and define clearly what the vertice or phrases used mean.  31) On page 4-54, the phrase "do not substantially after" is not defined in the Glossary. NPS must define what "do not substantially after" means so that the public can review, comment on, and understand what NPS is referring to a substantially after or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEO as outlined above in 3. The Sierra Club requests that NPS clarity and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used the above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEO as outlined advisor understantly "means so that the public can review, comment on, and understand what NPS is referring to the comparative defined in the Glossary. NPS must define what "With greater cartainty" means so that the public can review, comment on, and understand what NPS is referring to the comparative differences between each alternative and define clearly that the words or phrases used do does not provide the public with the degree of comparative dif	COMMENTS	RESPONSES
alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  33) On page 4-87, the phrase "within the range of natural fluctuations" is not defined in the Glossary or in the definition for "Negligible" under "Impact Intensity Thresholds". NPS must define what "within the range of natural fluctuations" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.	1. 30) On pages 4-35, 4-50, 4-62, 4-73, 4-102, the phrase "substantial consequences" is not defined in the Glossary or in the definition for "Major" under "Impact Intensity Thresholds". NPS must define what "substantial consequences" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  31) On page 4-54, the phrase "do not substantially alter" is not defined in the Glossary. NPS must define what "do not substantially alter" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  32) On page 4-71, the phrase "with greater certainty" is not defined in the Glossary. NPS must define what "with greater certainty" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description	RESPONSES
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COMMENTS	RESPONSES
under "Impact Intensity Thresholds". NPS must define what "natural range of variability" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.  35) On page 4-87, the phrase "short-term disruptions that would be within natural variation" is not defined in the Glossary or in the definition for "Minor" under "Impact Intensity Thresholds". NPS must define what "short-term disruptions that would be within natural variation" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify	
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the words or phrases used mean.  37) On page 4-87, the phrase "critical reproductive periods" is not defined in the Glossary or in the definition for "Minor" under "Impact Intensity Thresholds". NPS must define what "critical reproductive periods" means so that the public can review, comment on, and understand what NPS is referring to. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ as outlined above in 3. The Sierra Club requests that NPS clarify and detail clearly the comparative differences between each alternative and	