

Big Cypress Questions and Answers



Nobles Grade 3-D Seismic Survey

The National Park Service (NPS) has developed an Environmental Assessment (EA) analyzing the environmental impacts of a proposed oil and gas seismic survey (survey) by Burnett Oil Company in Big Cypress National Preserve (the preserve). The EA is a follow-up document to the Nobles 3-D Plan of Operations (POP) and analyzes the impacts of three alternatives:

Alternative 1 – No Action – Continue Current Management

Under alternative 1 no survey would be conducted.

Alternative 2 – Proposed Action – Seismic Survey Using Vibroseis Buggies

Under alternative 2 a 110-square-mile area would be surveyed using special off-road vehicles with attached mobile plates which would be placed against the ground, vibrated, and then moved on to the next location. The vibrations, or seismic acoustical signals, would be detected by an array of receivers to allow mapping of the subsurface geology.

Alternative 3 – Seismic Survey Using Explosive Charges

Under alternative 3 the same 110-square-mile area would be surveyed as in Alternative 2, but the acoustic signals would be produced by underground explosive charges instead of Vibroseis buggies

The NPS may approve operations associated with nonfederal oil and gas interests under the standards and procedures in 36 CFR Part 9, Subpart B. The NPS must determine that operations associated with these mineral interests would not result in significant adverse impacts to “public health and safety, environmental or scenic values, natural or cultural resources, scientific research, implementation or management responsibilities, proper allocation and use of facilities, or the avoidance of conflict among visitor use activities” The NPS can impose reasonable regulation of the activity to ensure these values are not significantly impacted.

Can the NPS merely deny, or say “no”, to this request? No, the NPS is responsible for providing reasonable access to private property holders within the preserve. The NPS’ role in providing this access is to review the POP, identify potential impacts, analyze those impacts through the National Environmental Policy Act (NEPA) process and identify how those potential impacts can be avoided, minimized or mitigated for.

Why doesn’t the NPS own the sub-surface rights to the land within the national preserve? The enabling legislation of the national preserve [P.L. 93-440, amended by P.L. 100-301] states that, “No improved property, as defined by this Act, nor oil and gas rights, shall be acquired without the consent of the owner unless the Secretary, in his judgment, determines that such property is subject to, or threatened with, uses which are, or would be, detrimental to the purposes of the preserve.” The NPS was expressly directed by Congress, through the enabling legislation, to provide reasonable use and enjoyment of privately owned oil and gas interests.

What if the exploration generates a desire to do further drilling in the preserve to develop the potential oil and gas resource? If there is an interest from the private property owner or a lessee to develop the potential oil and gas resource, a new POP defining how the activity would occur would be submitted to the NPS. The NPS would develop an EA identifying potential impacts related to that POP and both documents would be made available for public review and comment.

Is this a plan to conduct “fracking” type of production within the national preserve? No. The POP before the NPS at this time is associated with exploration only.

What are the options available to the NPS at the conclusion of the NEPA analysis process? The NPS will either determine that there are no significant impacts, identify that more information is needed to make a final determination or reject the POP.

What does “reject the POP” mean? It means that the applicant would need to provide an alternative method to complete the work they would like to conduct.

What is the NPS’ role in this process? The NPS’ role in this process is to identify potential impacts associated with the POP and advise the applicant on how those impacts can be avoided, minimized or mitigated for.

At the conclusion of this project will Burnett drill and fracture (frack) an oil well? No. The POP currently being analyzed deals with exploration only. If the applicant, or other entity, seeks to develop the potential resource they would have to submit a new POP that defines how they might conduct that activity. That POP would require another public review and comment period and that the NPS conduct a NEPA analysis specific to the proposed activity. That NEPA analysis would have a required review and comment period as well.

A portion of this POP proposes conducting the vibroseis activity within areas that the NPS has identified as eligible or proposed Wilderness. How can the activity take place in such areas?

Wilderness designation does not extinguish valid existing private rights (i.e. subsurface private ownership). The validity of private rights within wilderness must be determined on a case-by-case basis. Valid private rights in wilderness must be administered in keeping with the specific conditions and requirements of the valid private property right.

Will vibroseis buggies fracture caprock? There is no evidence that the vibroseis vehicles will damage caprock within the study area.

Will the proposed activity cause changes in surface hydrology? The potential impact to surface hydrology will be minimized by requiring the vehicles operate only during dry conditions. Soils will be minimally impacted in dry conditions.

Why was the vibroseis technique selected as the preferred alternative rather than an explosives survey? The vibroseis technique will reduce potential impacts related to acquisition of seismic data because no shot hole drilling will occur and no explosives will be detonated.

What surface impacts can we expect from use of the applicant’s equipment? Surface impacts from equipment will be limited and infrequent due to seismic crews being trained prior to commencement of work in the preserve and active monitoring by NPS staff and hired consultants.

Will NPS personnel have a field presence for the duration of this project to insure regulatory compliance? Yes.

How will sensitive resources be avoided? Sensitive resources, such as endangered/threatened species nesting sites or archeological sites, will be protected by routing personnel and equipment away from areas that must be protected.

How will Burnett reclaim identified surface impacts? Burnett reclamation crews will shadow the vibroseis equipment to mitigate any surface impacts that may be present. Hand tools will be used to rake and level any ruts that may occur from equipment crossing water-saturated soils.

Will equipment remain in the field each night or driven to staging areas at the end of each work day? Some equipment (e.g. vibroseis buggies, mules) may remain in the field while others will be used to transport personnel out of the field each day.

How long will it take for Burnett to conduct their seismic survey? Burnett anticipates 18 weeks will be needed to complete their seismic survey.

Will the preserve be closed to the public in Burnett's area of operations during their survey? No.

Will ground vibrations damage surficial aquifers? We are unaware of any surficial aquifer damage that would result from conducting a vibroseis seismic survey.

How will Burnett Oil Company equipment navigate the BICY landscape, particularly where vegetation density or substrate conditions prohibit further travel? A precision GPS track log will be created by Dawson Geophysical personnel while shadowed by NPS personnel or hired consultants as a quality control measure to make certain that the vibroseis equipment is capable of traversing the landscape from one source point to the next. Track logs created during this process must be approved by the NPS before the vehicles are allowed to use these pathways through the preserve.

Why are there five staging areas identified for this project? Can't they use fewer staging areas to achieve project goals? A project of this size requires use of multiple staging areas to store and distribute over a large area. In addition, regulations prohibit helicopters ferrying supplies and equipment from flying across highways.

How will vibroseis buggies refuel each day? Vibroseis buggies will be refueled by a swamp buggy fitted with a fuel tank and hose. Refueling will occur at locations carefully selected to easily permit refueling of equipment and deployment of resource protection ground barriers to capture any spills that may occur.