APPENDIX C — SCOPING ISSUES AND CONCERNS

GENERAL ISSUES

- Consider Greater Yellowstone Coalition for guidance on future development.
- Oil and gas companies do not pay fair market value for leases: government should not subsidize this industry.
- Increase local awareness of the role of local government in the federal planning process.
- Directionally drilled wells should not be addressed in the NEPA analysis.
- Adhere to FLPMA.
- Ensure adherence with international principals and law using current ecological data.
- BLM will be open to lawsuits if the project proceeds.
- No pressing need for the development at this time.
- The project undercuts wildlife protection measures in the original EIS.
- Do not renew expired leases.
- Existing oil and gas leases in the area should be bought out and/or traded for leases in areas of less-sensitive natural resources.
- Do not waste taxpayer dollars on an EIS for this detrimental project.
- Do not permit drilling on private lands without surface landowner approval.
- BLM is taking a pro-oil-and-gas stance, as evidenced in the Heritage Brief of 2003.
- Include environmental protection as a purpose and need.
- BLM is not considering the Jonah Field for multiple use.
- BLM must abide by requirements to manage public lands for multiple use and sustained yield.
- The current average of 90 days to process and approve an APD is unacceptable and must be addressed to avoid interruption of development.

- Improve communication and include proponents in the NEPA process (including range of alternatives development) whenever possible, and facilitate and improve information exchange as recommended by the Green River Basin Advisory Council to reduce time frames and ensure analyses are objective, factual, and complete.
- BLM must remain on the sideline with respect to down-hole spacing issues, and take the
 forefront in encouraging efficient and rapid development of the resource to prevent
 waste.
- BLM must recognize their role as lead agency, must not be swayed by public pressure from "conflict industries," and must base their decisions on sound science and fact.
- Consider the April 3, 2003, Instruction Memorandum issued by the BLM regarding the need to protect surface owners on split estate properties.
- If the BLM has insufficient resources to engage in inspection and enforcement, the backlog of inspection, enforcement, and other related issues must be dealt with satisfactorily prior to allowing further development.
- BLM must inspect operations and enforce policy.
- Violations by oil and gas companies should be addressed and may be resolved by canceling the lease, as well as imposing civil and/or criminal penalties.
- The EIS should identify which stipulations cannot be relaxed and the specific conditions that must be met before a request to exempt, except, or relax a stipulation is allowed. Exemptions and exceptions should never be granted as a matter of convenience.
- The differences in stipulations between environmental documents in the same region should be justified considering the input by experts; any variability in stipulations should be recognized as legitimate by both BLM and WGFD before being implemented.
- Provide the public the opportunity to receive notice of individual APDs and participate in site-specific actions. The notice should be sent to groups/individuals requesting such notice within 3 business days of the day the application is received.
- Sufficient bonds must be provided as a part of each complete APD.
- BLM retains the authority to condition oil and gas development despite issuance of a lease, and they should exercise this mandate to avoid unnecessary and undue degradation of public lands.
- The EIS and ROD must ensure that the policies and goals set forth in the NEPA are met.
- The EIS and ROD should consider, analyze, and, where appropriate, facilitate international efforts to prevent environmental decline, as stated in 42 U.S.C. Section 4332, 40 C.F.R. Section 1507.2, and BLM Handbook H-1790-1.V.B.2.a(3).
- BLM must disclose how it has, since 1988, inventoried its lands and monitored natural resources and must reveal the data gathered.

- Address the adequacy of the NEPA process, in consideration of authorizations for the Jonah II Project without securing adequate information on environmental impacts of Jonah I.
- In accordance with Memorandum No. 99-149, issued to relevant BLM officials on July 1, 1999, assess whether existing NEPA documents can be relied upon for a current Proposed Action and, if so, assist personnel in recording the rationale for that conclusion.
- NEPA and the *Endangered Species Act* (ESA) prohibit drilling of additional wells in the JIDPA while this EIS is being prepared.
- The aggregate nature of BLM development reviews could adversely affect the State of Wyoming's ability to develop its mineral interests to avoid drainage.
- Interested parties should have available to them any data collected on air quality, habitat impacts, water quality, etc.
- The USFS should be a cooperator on the Jonah Infill project.
- BLM has the responsibility to ensure that local media report the issues from all perspectives. If media reporting is biased toward one or the other point of view, the BLM should write a letter to the editor to ensure the other side is heard.
- Incorporate EnCana advertisements in the public record and hold them responsible for the promises made in these ads.
- Follow EO 13212 in development of project-level NEPA analyses; current programs, policies, and rules must be evaluated to reduce barriers to America's energy selfsufficiency.
- Communicate with cooperating agencies to prevent unforeseen delays, acknowledge the responsibilities of the various agencies, and work with them during preparation of the NEPA document.
- Allow continued development of the Jonah Field under the existing NEPA analysis during the preparation of the new EIS at the same pace as has been realized for the past 3-5 years.

RMP ISSUES

- Postpone the environmental analysis of the Jonah Project until the PFO RMP has been revised and an ROD signed.
- Disclose to the public that this analysis will go forward independent from the PFO RMP.
- The existing RMP predates the latest technological advances in natural gas recovery.
- The existing RMP does not address the impacts from coalbed methane development, accelerated gas drilling, the increase in disturbance due to subdivisions, etc., over the past 10+ years and the concomitant decrease in wildlife habitat.

- Preparation of the PFO RMP must not take precedence or hinder the progress of the Jonah EIS.
- The PFO RMP should set forth strict inspection and enforcement guidelines, should require quarterly inspection of well sites, and should require at least one unannounced wellsite visit annually.
- Evaluating additional major oil and gas development projects while revising the RMP will limit the choice of the reasonable alternatives the agency might otherwise have available in the RMP, thus violating 40 C.F.R. Section 1506.1(a)(1)-(2) and 40 C.F.R. Section 1502.2(f).
- The existing RMP and Jonah NEPA documents are outdated and analyses are, for the most part, inadequate to allow tiering by the new Jonah EIS (e.g., the RMP-projected RFD has been exceeded to the point of nullifying its cumulative impacts analysis).
- Writing the EIS prior to completing the RMP predetermines the final outcome of the RMP, undermining the RMP process.
- The inadequacy of BLM's outdated and aging RMPs has opened the BLM up for litigation and has left the BLM ill-prepared to address areas with vulnerable, sensitive, or at-risk resources.

SCOPING ISSUES

- The scoping notice does not define time frames (e.g., initial disturbance, life of project).
- Explain and define the rules for public comment and the extent of the public's ability to affect the decision-making process.
- There is erroneous information in the scoping statement regarding the time span for exploring and developing the Jonah Field and the number of wells approved.
- A sufficient number of scoping meetings should be held at times and places that facilitate and encourage public participation and information. The meeting place and time should not be changed at the last minute, nor should the scoping meetings ever be held at an industry-sponsored location or event.
- Hold more public meetings before implementing the project.
- Some public concerns were not expressed at the scoping meeting because of intimidation due to the rally environment.
- Form letters and post card scoping comments should carry equal weight with other more detailed comments.

FIELD DEVELOPMENT ISSUES

- Directional drill from existing pads.
- Upgrade existing non-producing or low-quantity producing wells rather than drill new wells.
- Consider the use of alternative and innovative technologies.
- Wait until existing leases are finished, and return pads and roads to wilderness habitat before allowing new drilling.
- Restrict the pace of energy development and keep reserves for future use.
- Leave gas reserves in place if they cannot be accessed by directional drilling from existing pads.
- Maximize natural gas recovery.
- Maintain a lower density of wells and extend the expected 25-year life of the field.
- Use renewable energy sources whenever possible.
- Provide full NEPA disclosure and review of all industry practices in the EIS, designating a list of best practices for oil and gas development.
- Increased well productivity and the decreased need for roads, pipelines, etc., often
 compensates for increased directional drilling costs, resulting in more profitable
 operations.
- Well pad construction areas should be adequate for safe operations but be as small as possible.
- Incorporate suggested practices taken from *Drilling Smarter*.
- Consider removing the limit of 400 multiple well locations.
- Centralized condensate stabilization, storage/treatment, and produced water storage facilities should be promoted to help minimize disturbance acreage, traffic, and well site visits.
- Directional drilling should not be required as a primary reducer of disturbance.
- Require underground flaring.
- The complex area geology requires the denser well spacing pattern to ensure recovery of available gas reserves.
- The pipeline system should be located in road ROWs.

• The use of pit liners during the drilling of the wells may be unnecessary. The liner material may exist in a buried pit for 50 years or more.

ALTERNATIVES ISSUES

- Analyze the following alternatives: 1) no action; 2) no additional development until full reclamation of existing structures is achieved; 3) no new road construction (wells could be built along existing improved roads); and 4) directionally drill all new wells from existing well pads. If these alternatives are not considered, provide scientifically sound reasons why not.
- Evaluate a full development alternative and disclose how that will facilitate future Proposed Actions or necessary deviations from the approved alternative.
- A full development alternative should be developed to avoid re-analysis and project analysis piecemealing.
- A full development alternative should be included (i.e., nearly 3,000 additional wells on as little as 5-acre surface spacing).
- The EIS should contain objective analyses of feasible alternatives, not just mitigation techniques proposed on the presumption of significant impacts.
- Provide a broader range of alternatives to cover all possible levels of development.
- Include a resource protection alternative that includes mitigation measures (with clear and concise BLM and public enforcement capabilities) similar to but more stringent than the alternative adopted in the ROD for the Pinedale Anticline Natural Gas Project.
- Incorporate an alternative that withdraws any split estate lands from leasing if they have not yet been leased.
- BLM must not foreclose certain alternatives at the outset of the analysis; all reasonable alternatives must be rigorously explored and objectively evaluated.
- Use the scoping process to develop alternatives that emphasize the need for environmental protection (even if they limit or strongly regulate oil and gas development), rather than just accepting the highest level of industrialization as proposed by industry.
- Evaluate an alternative that requires use of best available technologies (e.g., recapturing gases rather than flaring) and directional drilling.
- Evaluate alternatives that propose development at several different total well numbers (i.e., include alternatives with lower levels of industrialization).
- Consider a conservation/community alternative with fewer wells (<1,250), a slower development pace (<75 wells/year), and no new well pads.

- Evaluate alternatives that propose several different configurations and well spacing scenarios; BLM has the discretion to depart from the industry-preferred configurations and well spacing.
- Consider alternatives that require off-site mitigation and require such mitigation in the ROD.
- Do not treat non-preferred alternatives as "straw men" whose only function is to provide "extremes" against which to contrast "moderate" alternatives.

IMPACT/CUMULATIVE IMPACT ISSUES

- There is not enough current information on the long-term and cumulative impacts of existing wells in the Jonah Field and throughout the Green River Valley.
- The Jonah Field has already been negatively impacted to an unreasonable degree by existing and ongoing development.
- The Proposed Action constitutes unnecessary and undue degradation under FLPMA.
- BLM lacks knowledge on the level of existing development (i.e., number of wells existing in the PFO and their impacts); thus, they are unable to provide this information to concerned citizens.
- Address only the germane concerns and identify and eliminate from further analysis/discussion issues that are not significant and/or that have been covered by prior environmental review.
- In the context of oil and gas development, "incremental step" consultation is of concern, and the EIS must address this issue. BLM must assist the USFWS in developing a fully informed understanding of the effects of the *entire* action, even if incremental step consultation is used.
- An ecosystem-wide impacts study should be completed before allowing any further development to proceed.
- Provide maps and/or tables depicting the extent of oil and gas leases, seismic exploration projects, etc., in the PFO and on adjacent lands as part of the evaluation of RFD.
- Disclose baseline data and conditions for important resources (e.g., air and water quality; wildlife populations, migrations, and habitat assessments) present in the area prior to development, and disclose the current ecological conditions of all resources to evaluate environmental conditions and impacts in an informed manner.
- Given the rate of development in the area, 1.2 million acres of the public lands that link the Greater Yellowstone Ecosystem could be converted to a single, continuous industrial sacrifice zone.
- Consider information in the report *Fragmenting Our Lands, the Ecological Footprint from Oil and Gas Development* (Weller et al. 2002).

- The cumulative effects analysis in the Jonah II documents are outdated (e.g., the Pinedale Anticline and numerous other oil and gas projects have occurred in the area since the analysis was conducted).
- Explicitly address unquantifiable environmental values (e.g., open space, quiet landscapes), defining the impacts of the various alternatives, as well as ways to mitigate for impacts on those values.
- Ground-truth and/or analyze with satellite imagery the true amount of surface disturbance
 associated with existing well pads, roads, compressor stations, pipelines, and other
 facilities and use those data (rather than the commonly used acreage assumptions) to
 estimate surface disturbance associated with the project.
- Gather information and disclose where information is lacking, and use credible, scientific evidence to present reasonably foreseeable adverse impacts (including low-likelihood but catastrophic events) so that impacts can be assessed based on approaches that are generally accepted in the scientific community.
- Disclose how actions on private lands (e.g., subdivisions, urban sprawl, roads, fences, and grazing), in combination with the project, would impact natural resources such as air, water, and wildlife.
- Consider connected actions, cumulative actions, and similar actions (40 C.F.R. Section 1508.25).
- Clarify how significant adverse impacts could be identified for the Pinedale Anticline Project, yet a FONSI could be reached in the adjacent Jonah II area in 2000.

MITIGATION/MONITORING ISSUES

- Exempt surrounding wilderness from any future drilling.
- Withdraw other areas from oil and gas leasing.
- Set aside or construct a mitigation project of equivalent benefit to resources other than oil and gas.
- Require strong monitoring programs for air and water quality, wildlife, etc.
- Industry should be compensated for mitigation costs above and beyond those required by current law (e.g., directional drilling); provide a cost/benefit analysis of all required mitigation measures.
- NEPA does not require mitigation for a FONSI.
- Take actions to prevent unnecessary or undue degradation of lands as required by FLPMA.
- Consider incorporating principles of adaptive management into the project, including 1) accurate delineation of critical habitats and corridors; 2) development of a relatively

low number of wells, followed by an assessment of their effects through monitoring and research; and 3) based on these assessments, modify development and implement new mitigation measures.

- Mitigation discussions must have a prominent place and be a major part of the impact
 assessment process. BLM must consider a wide array of mitigation measures, including
 off-site measures, that lessen, and potentially eliminate, the adverse impacts of
 development on natural resources (e.g., water and air quality, wildlife).
- Provide a follow-up procedure to allow for the adoption of new best management practices, as they become available.
- BLM and Operators are legally mandated to monitor a number of species, but current monitoring has been inadequate to nonexistent, particularly for pronghorn antelope populations, distribution, and response to oil and gas development on the Pinedale Anticline project.
- Currently, the extent of the "reduced levels of development" outside the down-spacing area is not well defined, nor have the Operators relinquished the rights to explore/develop the area outside this area at a later date. The EIS should define a firmer commitment of what will occur outside of the proposed down-spacing area, so that more appropriate mitigation can be planned. At present, no further development is proposed for areas outside the JIDPA but within the formerly defined Jonah Field. In the event new development is proposed in this area, additional NEPA analysis would be conducted.
- The management problem of extending mitigation/protection measures to lands adjacent to the Jonah Project area that are within the Anticline Project area must be addressed.
- Off-site mitigation should not be analyzed since the JIDPA is within an Energy Policy and Conservation Act (EPCA) focus area.

LAND MANAGEMENT/USE ISSUES

- Density of disturbance may negatively impact recreation.
- The lands are more valuable for nonconsumptive (scenery, hunting, photography, camping, hiking, tourism) use than for the ultimately limited oil and gas reserves.
- The area of the project is remote, with a low population, little to no recreational value, and little to no agricultural value; thus, it is a desirable area to develop oil and gas reserves.
- Density of disturbance may negatively impact livestock grazing.
- The BLM is right in including disruption of livestock operations, loss of forage availability (short-term) and increased forage availability (long-term), and potential increased livestock productivity from increased water availability in scoping issues.
- Take a proactive approach to managing travel, roads, and off-road vehicle use within the project area.

- The approach at the Burma Road and Highway 351 junction is substandard and requires rebuilding to include widening, paving, and a new culvert and cattleguard.
- Limit habitat fragmentation, protect current roadless areas, provide for aggressively closing unnecessary or ecologically destructive roads, and provide for maintaining needed roads to reduce negative environmental impacts.
- The transportation plan must require adequate design considerations to minimize impacts (number and miles of roads) and provide orderly and safe traffic movement. The plan should include dust mitigation measures and siltation barriers, and the county should use tax revenues obtained from gas production to pave primary field access roads, similar to the policy of paving roads for energy development in Campbell County.
- If the project is approved, BLM should withdraw the South Piney Front from oil and gas leasing, present leases should be allowed to expire, and mitigation projects of equivalent benefit to other resources (e.g., wildlife habitat) should be constructed and implemented.
- Desired future conditions of the landscape must be addressed.

RECLAMATION/VEGETATION ISSUES

- Publicize locations that have been "successfully reclaimed" so that the public can see what the restored lands may look like.
- Reclaimed lands are often not blended into existing landscapes and, as a result, they are often used by all terrain vehicles (ATVs), resulting in lands that are not truly reclaimed back to an undisturbed state.
- It is a difficult and long-term prospect to reclaim desert lands after disturbance.
- The spread of non-native species as a result of the project must be addressed.
- The potential to remove 20% of the vegetation for the life-of-project (LOP) is a very significant vegetation impact, and noxious weed control, among other issues, must be addressed.
- Land may be damaged beyond its ability to be reclaimed.
- Provide for compliance and enforcement of *Executive Order* 13112, which establishes federal agency requirements and procedures relative to invasive species and requires agencies to not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species, unless it is determined that the benefits of such actions clearly outweigh the potential harm caused by invasive species.
- To protect native vegetation: 1) prohibit surface disturbance and ROWs in threatened, endangered, or sensitive plant species habitat; 2) ensure no cross-country vehicular travel is allowed in known habitat for sensitive plant species; 3) address how Operators will be trained with respect to noxious weed identification; 4) augment law enforcement personnel and field staff to curb noncompliance activities and to protect sensitive species from irreversible impacts; 5) survey the project area to document all relict or undisturbed

plant communities and ensure that those areas are protected; 6) protect and reestablish, where degraded, riparian plant communities; 7) address how all equipment will be properly cleaned prior to arrival in the area; and 8) make every APD contingent on the prevention of weed infestation and include plans to monitor weed infestation over the LOP.

- Ensure that ecosystems are fully protected so as to enhance biological diversity.
- Sufficient bonds (as opposed to the unreasonably low bond amounts currently used) should be required to ensure adequate monies for cleanup/reclamation; this will protect the federal government, as well as landowners on split estates.
- Each APD should fully describe and detail reclamation requirements.
- Develop and implement practices to replace the grass resources lost to field development.
- Reclamation should proceed, as applicable, throughout the LOF so that final reclamation is more easily and quickly accomplished (e.g., controlling noxious weeds from the outset, rather than allowing them to propagate).
- Invite all interested parties to participate in final bond release inspections, and on split estate properties the landowners should be notified of the opportunity to participate at least 15 days prior to final inspection.

GENERAL WILDLIFE ISSUES

- Obtain better baseline wildlife data and monitoring (animals and habitat).
- The Jonah area is critical winter habitat for wildlife in the Yellowstone Ecosystem.
- Long-term impacts to pronghorn, greater sage-grouse, mountain plover, pygmy rabbit, and other high-profile or sensitive species are unknown and may be unacceptable.
- Prohibit development in environmentally sensitive areas such as big game migration corridors and winter and transitional ranges, greater sage-grouse strutting and nesting habitats, the Green and New Fork River corridors, and the scenic Wind River Front.
- Assess the impact on wildlife that are displaced and may move to less desirable or marginal habitat.
- The project will contribute to increased wildlife habitat fragmentation.
- Address impacts on wildlife deaths due to increased traffic and animal/vehicle collisions.
- Identify negative impacts of the road network on wildlife habitat, increased poaching, diminished enjoyment for hunters, visual impacts, and undue stress on wildlife during critical times of the year.
- Study and disclose the increase in poaching from increased human population size, access, and presence.

- Provide a list of species within and outside the PFO that will be impacted; disclose monitoring, population, and habitat data in regard to each species; and adopt mitigation measures to protect each species from negative impacts caused by the project.
- Discuss the impacts of the human population growth that accompanies oil and gas development on the wildlife species in and near the project area.
- The WGFD Strategic Habitat Plan should be closely followed and included within the project EIS and subsequent ROD.
- Indirect impacts of energy development on wildlife should be more extensively studied and incorporated into a long-term cumulative effects analysis, which also takes into account the subdivision of private lands in the Upper Green River Valley.
- Address the impact of power lines on birds and bats (e.g., strike hazard, electrocution, alteration of the structure of the habitat such as the provision of perches for raptors to the detriment of other species).
- Royalty revenues from natural gas and oil development underwrite the conservation of
 wildlife and habitat, national parks, refuges, and recreation areas and often fund research
 and monitoring efforts that assist land managers with managing the many resources found
 on public lands.
- Carefully analyze the potential impacts to migratory birds and require mitigations or avoidance accordingly.
- WGFD requests an opportunity to review existing wildlife monitoring data and to provide mitigation measures in coordination with BLM personnel.
- Water developments that provide year-round water sources for antelope and other wildlife species should be considered as mitigation--WGFD would provide on-theground consultation with Operators and BLM personnel to help implement this mitigation measure.
- Consider as mitigation the rejuvenation of the "wildlife wells" program in the Yellowpoint area.
- The disturbance of an additional 11,000 acres could pose a serious threat to wildlife habitat, causing habitat fragmentation and disruption of migration routes and breeding activity. Give serious thought and attention to cumulative impacts of this and other projects in the Green River Valley, with the importance of this area to many wildlife species, as well as tourism and recreation, weighing in heavily on the ultimate decision.
- Impacts to migratory birds must be addressed, actions that may result in a take of a bird or nest must be coordinated with USFWS, and the appropriate permits must be obtained prior to the actions.
- The field provides wildlife habitat, with facilities providing cover for small mammals, tanks and elevated structures providing nesting areas for birds, and new grass on

reclaimed areas providing forage for ungulates. The short-term impact on wildlife should be weighed against the long-term improvement in their habitat.

BIG GAME ISSUES

- Assess wildlife impacts of winter drilling exceptions.
- Assess the impacts of the project on migration corridors of elk, deer, moose, and pronghorn.
- Impacts to deer and pronghorn may be subtle and not easily quantified but may include negative and incremental physiological responses, resulting in cumulative stress and less resistance to natural stressors (e.g., poor forage, climatic extremes).
- Consider the findings presented in *Potential Effects of Oil and Gas Development on Mule Deer and Pronghorn Populations in Western Wyoming* (Sawyer et al. 2001).
- The project may result in impacts on habitat use by deer and pronghorn, as well as the potential for alteration of use patterns resulting in degradation of winter, crucial, or transition ranges and use of marginal habitat.
- To protect migratory mammals: 1) no surface occupancy should be allowed in severe winter relief ranges for mule deer and pronghorn; 2) a minimum buffer zone of 200 meters should be used for wells and roads until ongoing studies are completed and recommendations based on study results can be made; 3) where possible, directional drilling should be required; and 4) pads should be placed to minimize disturbance to big game.
- Sufficient data should be collected so as to define the ecological and landscape conditions necessary for maintaining big game populations at WGFD target levels.
- Ensure that migration corridors and other ecological linkages are maintained and that management actions protect the ecological integrity of these corridors.
- Require no net loss of big game transitional and winter ranges.
- The Modified Jonah EA states that approximately 49% of the original Jonah II area would have reduced levels of development, and some areas may have no development. However, there were no assurances that these areas would not be further developed in the future. Desirable exploration and development areas may be identified as development proceeds in the area. If this is still true, the upper limit for impacts to migrating wildlife is unknown and cannot be adequately addressed. Impact levels should be identified that would trigger a re-analysis of impacts/alternatives in the future if further development occurs.
- The area provides wintering habitat for pronghorn, and the area west of the proposed down-spacing serves as a migration corridor for the Jackson Hole (and, presumably, other) antelope. Studies show that pronghorn appear to be wintering in areas not classified as winter range. Note that results of research to refine seasonal range boundaries will be provided as it becomes available.

- The reason for the mule deer population decline in the area may be that the deer are in a "down cycle," as has been described for deer in northwestern Wyoming.
- Consider the Western EcoSystems Technology Inc. (WEST) Evaluation of the PFO RMP and the Anticline Final EIS, including all materials referenced within (WEST 2003).

GREATER SAGE-GROUSE ISSUES

- Potential impacts to greater sage-grouse include 1) male and/or female lek attendance and the potential decrease in reproductive success; 2) disturbance of nesting and brooding greater sage-grouse and the resulting potential for decreased reproductive success; and 3) disturbance of wintering greater sage-grouse and the potential of forcing grouse onto less desirable wintering grounds, resulting in the potential for decreased survival and/or spring fitness.
- Thoroughly evaluate project impacts on greater sage-grouse and commit to the following:

 1) adopt a policy of no surface disturbance within 3 miles of occupied leks; 2) locate and give special designation as Areas of Critical Environmental Concern (ACECs) to all areas used by greater sage-grouse during both average and severe winters; 3) require standard surveys as soon as possible to estimate changes in numbers of greater sage-grouse in identified winter use areas, to locate active leks, and to map mid- to late-summer brood-rearing areas based on moisture and green forage availability; 4) immediately initiate replicated, long-term studies to understand the effects of habitat fragmentation on predator numbers and greater sage-grouse predation rates; 5) incorporate the habitat guidelines/desired future conditions published by Connelly et al. (2000) into the project EIS/ROD so that greater sage-grouse nest success and chick survival improve; and 6) require road closures (permanent or seasonal), the burial of power lines, modifications of fences and other structures, and elimination of livestock grazing in areas where oil and gas production is permitted.
- The Western Association of Fish and Wildlife Agencies and the Wyoming BLM Statewide Greater Sage-grouse Team management guidelines should be utilized.
- Determine whether the grouse in the JIDPA are migratory.
- The distinction between active and historic greater sage-grouse leks should be addressed, and scientifically based rationale should be provided and other agency personnel (i.e., WGFD) input sought if protective stipulations are removed from historic leks.
- Avoidance of greater sage-grouse wintering areas should be addressed with specific details provided so that a disclosure of the benefits can be identified.
- Allowing down-spacing within the area and creating lower-density areas in the remainder of the Jonah Project Area would not benefit greater sage-grouse leks, as there are no longer any active leks outside of the proposed down-spacing area. To assure adequate protection for at least the nesting and brood-rearing habitat near project area lek sites, a 0.5-mi buffer around the 4-2, 4-6, and Sand Draw Reservoir leks should be provided for any new drilling sites. Additionally, a 0.5-mi buffer from new drilling should be afforded the Rocks, Buckhorn #1, Alkali Draw, and Shelter Cabin leks outside but adjacent to the JIDPA.

- The Jonah and Anticline areas provide fall and wintering range for greater sage-grouse that breed as far as 20-30 miles away. Alkali Draw and Granite Wash areas could be used as mitigation locations for potential impacts to winter range. Suggested mitigation/protection measures could be lower well densities, larger buffer zones for no surface disturbance, or both.
- No project activities that may exacerbate habitat loss or degradation for greater sage-grouse should be permitted in important habitats.
- Long-term monitoring efforts (20-30 years) and research studies to determine and separately quantify impacts of energy development and other multiple use activities are needed. It would also be desirable to establish concurrent long-term monitoring within the Wind River Front area, which is currently prohibited from new leasing.
- Unless site-specific information is available, greater sage-grouse habitat should be managed following the guidelines of Connelly et al. (2000), including 1) before initiating vegetative treatments, quantitatively evaluate the area proposed for treatment to ensure that it is not suitable breeding habitat (Generally, fire should not be used in greater sagegrouse breeding habitats dominated by Wyoming big sagebrush. Fire should also be avoided in areas prone to invasion by cheatgrass or other invasive weedy species.); 2) include sagebrush, native forbs (especially legumes), and native grasses in reseeding efforts; 3) when restoring habitats dominated by Wyoming big sagebrush, do not treat >20% of the breeding habitat within a 30-year period (Similarly, in areas dominated by mountain big sage, no more than 20% of the breeding habitat should be treated in a 20year period.); 4) avoid land use practices that reduce soil moisture effectiveness, increase erosion, cause invasion of exotic plants, and reduce abundance and diversity of forbs; 5) avoid removing sagebrush within 300 m of greater sage-grouse foraging areas along riparian zones, meadow, lakebeds, and farmland, unless such removal is necessary to achieve management objectives; 6) avoid use of organophosphorus and carbamate insecticides in greater sage-grouse brood-rearing habitats; 7) avoid developing springs for livestock water, but if water from a spring will be used in a pipeline or trough, design the project to maintain free water and wet meadows in the spring; 8) maintain sagebrush communities on a landscape scale, allowing greater sage-grouse access to sagebrush stands with canopy cover or 10-30% and heights of 25-35 cm regardless of snow cover; 9) re-seed former winter ranges with the appropriate subspecies of sagebrush and herbaceous species unless the species are recolonizing the area in a density that would allow recovery within 15 years; 10) identify breeding and winter ranges in Wyoming big sagebrush habitats and establish these areas as high priority for wildfire suppression; and 11) greater sage-grouse populations that have thus far survived extensive habitat loss may still face extinction because of a time lag between habitat loss and population collapse.
- Incorporate recommendations in the report A Review of Sage-Grouse Habitat Needs and Sage-Grouse Management Issues for the Revision of the BLM's Pinedale District Resource Management Plan (Braun 2002) including 1) adopt a policy of no surface disturbance within 3 miles of occupied leks, as data clearly show negative impacts to greater sage-grouse at the present distance of 0.25 mile or 0.50 mile; 2) all areas used by greater sage-grouse during both average or "normal" and severe winters should be located, mapped, and given special protection from wildfire, manipulation of sagebrush, and human-induced disturbance (At least 90% of the newly mapped areas should be designated as a network of ACECs as part of the RMP revision process.); 3) adherence to

time of use restrictions for project activities from 6:00 p.m. to 9:00 a.m. during the breeding and nesting periods should be strictly monitored and enforced; 4) management of mid- to late-summer brood-rearing areas should encourage forb regrowth while maintaining at least a 6-inch residual grass height with taller live sagebrush of >15% canopy cover in close proximity (<200 yards) for use as escape cover; and 5) mitigation should be emphasized for all activities known to negatively impact greater sage-grouse, including but not limited to a) burial or modification of power lines; b) offset drilling; c) road closures and time restrictions; d) removal of livestock grazing; e) nitrogen fertilization of winter and nesting areas; and f) removal or modification of existing fences. Full mitigation would be to replace the exact number of project-impacted grouse by increasing the number of grouse per area that unaffected areas can support.

RAPTOR ISSUES

- Examine existing stipulations and protections to determine their effectiveness and whether they should be modified to protect raptors.
- Evaluate whether habitat that could potentially be occupied by raptors (e.g., previously utilized nests) should receive protection to ensure the continued viability of raptors in the JIDPA.
- Consider all biological needs of raptors and develop suitable protections for all significant life stages of the birds.
- Address BLM means of compliance and enforcement with the *Bald Eagle Protection Act* and *Migratory Bird Treaty Act*.

THREATENED, ENDANGERED, PROPOSED, CANDIDATE AND BLM WYOMING SENSITIVE SPECIES

- Address threatened, endangered, proposed, and candidate (TEP&C) and BLM Wyoming sensitive (BWS) species.
- Work toward prairie dog conservation and recovery, and disclose whether any prairie dog towns are found in the JIDPA.
- Require and ensure full compliance with BLM Manual MS-6840, including the following: 1) ensure candidate and BWS species are appropriately considered; 2) develop and implement range-wide or site-specific management plans, conservation strategies, and assessments for TEP&C and BWS species that include specific habitat and population management strategies and objectives; 3) ensure activities affecting the habitat of TEP&C and BWS species are carried out in a manner consistent with management objectives; and 4) monitor populations and habitats of TEP&C and BWS species to determine whether management objectives are being met.
- Ensure full compliance with requirements to engage in early consultation with the USFWS relative to the effects of this action on listed species.

- Identify and provide for the protection of keystone species (e.g., prairie dogs), and recognize and protect keystone resources (e.g., springs, deep pools in streams, salt or mineral licks).
- Comply with the *Endangered Species Act* (ESA), and proactively implement programs for the conservation of listed species.
- Prepare a Biological Assessment (BA) and involve only credible and reputable scientists to conduct BA and other ESA-related analyses.
- It is inappropriate to merge BAs with EISs, mixing ESA compliance with NEPA compliance.
- Information on the existence of pygmy rabbits in the project area must be collected prior to activity associated with this proposed project, and pygmy rabbit habitat should be considered in APD decisions. BLM should immediately begin collecting pygmy rabbit data for the project, as well as assessing if Jonah Field management requires adjustment.
- Protection of potential TEP&C species habitat should not be given the same protection as that for TEP&C species.
- If the project is approved, BLM and their non-federal representatives must work with the USFWS to develop survey, impact minimization, and conservation measures for all listed species. Consultation with USFWS pursuant to Section 7(a)(2) of the ESA must be undertaken if the proposed project may affect a listed species.
- Species listed by USFWS that may be present in the project area or affected by the project include bald eagle, black-footed ferret, Ute ladies'-tresses, mountain plover, and Colorado River fish.
- Implement a 1.0-mi disturbance-free buffer around bald eagle nests and winter roosts, or, if not practical, activity must be conducted outside of February 15-August 15 to protect nesting birds and November 1-April 15 to protect roosting birds.
- If white-tailed prairie dog towns or complexes of greater than 200 acres will be disturbed, surveys for ferrets are recommended. These surveys should be conducted even if only a portion of the town or complex will be disturbed.
- Surveys for Ute ladies'-tresses should be conducted by a knowledgeable botanist trained in conducting rare plant surveys.
- Surveys for mountain plover should be conducted in all suitable nesting habitat, and nesting areas should be avoided from April 10 through July 10. The *Mountain Plover Survey Guidelines* provide the necessary information regarding surveys and protection measures. Changes in habitat suitability and/or direct habitat loss should also be addressed.
- Develop protective measures, with an assurance of implementation should mountain plover be found in the JIDPA.

- Formal consultation is required for any project that may lead to depletions of water to the Colorado River System. Depletions include evaporative losses and/or consumptive use of surface water or ground water within the affected basin. Should depletions be anticipated as a result of the project, include an estimate of the amount and timing (by month) of average annual water depletion (both existing and new depletions) and describe the methods of arriving at such estimates.
- The impacts to TEP&C species on non-federal lands must be considered an interrelated and interdependent effect and must be evaluated and addressed. Notify all lessees of their responsibilities to comply with federal and other applicable regulations, regardless of land or mineral ownership.

AIR QUALITY ISSUES

- Obtain better baseline air quality monitoring data before developing new wells.
- Air quality impacts may result in acidification of lakes, soil damage, and negative impacts to wildlife and human safety.
- The project is likely to result in significant air quality impacts not only in the JIDPA but also in the Class I Bridger and Fitzpatrick Wilderness Areas.
- The project is likely to result in the production and deposition of considerable volumes of oxides of sulfur (SOx), oxides of nitrogen (NOx), and other toxic aerosols; however, this deposition is extremely difficult to monitor due to the narrowness and shifting direction of the plumes.
- Address all reasonably foreseeable direct, indirect, and cumulative impacts on air quality, including global warming as a result of burning the produced gas.
- Air quality analysis for far-field effects should not be necessary, given the analysis completed for the Pinedale Anticline EIS.
- The air quality discussion should include a thorough analysis of the adverse impacts to air quality associated with burning substitute fuel sources, if development is limited, made more costly, or delayed.
- Include a complete increment consumption analysis to identify areas where Prevention of Significant Deterioration (PSD) increments have previously been fully consumed by prior development and/or will be fully consumed by the additional emissions from proposed oil and gas developments.
- Analyze control strategies to identify mitigation measures sufficient to prevent expected exceedances of air quality standards.
- Modeling should include emissions from drilling of 250 wells per year with emissions from the maximum number of producing wells.

- Analyze the recent evidence of adverse health effects associated with exposure to particulate matter less than 10 microns in size (PM10) and less than 2.5 microns in size (PM2.5).
- Address releases of hazardous air pollutants (HAPs) during produced water disposal operations.
- Implement cumulative impacts analysis including all completed, ongoing, and proposed oil and gas projects and other existing activities in the Greater Yellowstone Ecosystem.
- Quantify impacts state-wide.
- Consider mitigation measures sufficient to provide for compliance with state and federal standards and to prevent adverse effects: 1) on public health resulting from large increases in exposure to daily concentrations of fine particles and 2) on acid-sensitive watersheds as a result of emissions.
- Conduct a regulatory analysis to identify the minor source baseline dates for pollutants.
 If the EIS fails to include a comprehensive increment consumption analysis, the EIS will be rendered inadequate because without such analysis, it is impossible to determine whether increments have been consumed by prior development or whether the project will cause the increments to be exceeded.
- Before proceeding with the project, the RMP EIS must describe the full magnitude of the
 exceedances of increments that will result from adding emissions from the completed,
 ongoing, and proposed projects and then identify mitigation measures that will prevent
 the adverse impacts.
- Expressly address how the BLM will carry out responsibilities to protect visibility in the Class I areas.
- Include provisions to implement EPA's "No Degradations" policy under the *Clean Air Act*. The information needed to identify the least-impaired days and to provide a meaningful assessment of the extent to which visibility will be degraded on the least-impaired days should be developed and submitted to the public in the EIS. The results of the analysis should be considered for the purpose of identifying the kinds of mitigation measures necessary to achieve the No Degradation standard.
- Identify and mitigate acid rain impacts.
- Identify and mitigate the impacts on public health from fine particle exposures.
- Address the problem of global warming and the steps BLM can take in considering this project to reduce the problem.
- It is contended that 1) the Upper Green River Region has suffered measurable degradation from human-caused visual haze and nonvisible greenhouse gases (air transparency and possible regional microclimate/heating effects) from the trona plants west of Green River and drilling activities in the Jonah field; 2) distinct decreases in

average peak ultraviolet radiation have resulted from the Jonah field; 3) haze events now occur in the region; and 4) there is increased traffic dust and engine emissions.

- Conduct investigations to assess microclimate heating prior to further development.
- Development and utilization of natural gas reserves assists in attainment of clean air objectives in conformance with presidential and congressional directives.
- Utilize NOx emissions data collected in recent years to determine whether visibility
 impacts are occurring or predicted to occur and use this information to make
 recommendations to EPA regarding air quality and to WDEQ regarding permitting for
 existing leases and in making decisions regarding future leases on BLM-administered
 lands.
- In light of the April 24, 2000, letter agreement between BLM, EPA, WDEQ, and the USFS to discontinue the Jonah II ROD levels of concern, the BLM should review the agreement, along with new monitoring information; should review emission sources that WDEQ has been tracking; and should assess current impacts and mitigation for future projects.
- Do not make the assumption that mitigation measures used in 40-, 80-, or 160-acre spacing are appropriate for the project. The proposed spacing will require additional analysis and mitigation practices that have not previously been required.
- EPA requests a meeting be set up as soon as possible, involving WDEQ, USFS, National Park Service (NPS), EPA, and BLM, to determine what has been accomplished (in the area of air and water quality) per past agreements for southwestern Wyoming and what future impact analysis and mitigation might be needed.
- Consider potential increased gas processing emissions associated with increased gas production from the field.
- Investigate options for off-site mitigation that may improve the overall air quality in southwest Wyoming while allowing development to continue (e.g., as when Ultra Petroleum and the Naughton Power Plant added emission reduction equipment to the Naughton Power Plant, reducing levels of NOx emissions).
- Cumulative impacts on air quality from the project combined with ongoing development and RFD, including the Powder River Basin Coalbed Methane Project, should be analyzed. Analysis should include potential impacts to visibility and deposition in the Bridger, Fitzpatrick, Teton, Washakie, and North Absaroka Wilderness Areas (Class I), as well as impacts to the Gros Ventre and Popo Agie Wilderness Areas (Class II).
- Air quality modeling domains should be expanded to incorporate the Powder River Basin study to determine cumulative impacts.
- The installation of vapor-burning stacks and other emissions control equipment in the field has increased the clarity of the air, which previously created a haze at the base of the Wind River Mountains east of the field.

WATER ISSUES

- Obtain better baseline water quality monitoring data before developing new wells.
- Assess present and future water quality, quantity, direction, and flow conditions.
- Pumping water from the Green and New Fork Rivers and their tributaries would magnify drought effects on these waters.
- Comply with WDEQ water quality permits/permitting requirements.
- The project will increase pollution and draining of water resources.
- Assess downstream effects on the Colorado River system.
- Two stock ponds have dried up and six cattle have been poisoned from drinking contaminated water as a result of oil and gas activities in the area.
- Concern over negative effects of aquifer depletion on stock ponds.
- Ensure compliance with the *Clean Water Act* and 1) manage natural resources on a watershed basis; 2) emphasize assessment of the function and condition of watersheds, incorporating watershed goals in planning, enhancing pollution prevention, monitoring and restoring watersheds, recognizing waters of exceptional value, and expanding collaboration with other agencies, states, tribes, and communities; 3) increase maintenance of roads and trails and aggressively relocate problem roads and trails; and 4) enhance the quality of streams and riparian zones and accelerate restoration.
- The proposed well density may cause problems with sediment in runoff from storm events, thus impacting water quality in the Green River.
- Water quality data should be logged and continually registered at the Sublette County Courthouse Register of Deeds and Documents prior to and during oil and gas development.
- Riparian or streamside habitats should be avoided whenever possible. Plans for mitigating unavoidable impacts to wetland and riparian areas should include mitigation goals and objectives, methodologies, time frames for implementation, success criteria, and monitoring to determine if the mitigation is successful. The plan should also include a contingency plan to be implemented should the mitigation be unsuccessful.
- It may be advantageous for all parties to find a use for the produced water before it is evaporated or injected.
- Water handling equipment is currently being tested to investigate the viability of reusing produced water for base fluid in fracture simulations.

CULTURAL/ARCHAEOLOGICAL/HISTORIC RESOURCE ISSUES

- Assess impacts to Native American issues and cultural/religious sites.
- Assess impacts to National Historical Trails in light of recent legislation protecting those sites.
- Density of disturbance may negatively impact archaeological resources.
- Consider more intensive data collection on archaeological sites of high value in exchange for disturbance of areas with less unique archaeological value.
- Address the implication of the recent Instruction Memorandum authorizing the BLM to do away with the traditional linear approach to surveying for cultural resources on the Jonah area.
- Identify areas where cultural sites are at risk, and employ available administrative measures to protect those resources.
- Provide specific management intent and practices for cultural resources.
- Consult with Native American tribes during the planning process.
- Ensure that cultural resource inventories are prepared and maintained and that historic properties are identified, evaluated, and protected, and if appropriate nominated to the National Register of Historic Places (NRHP).
- The effects of the project on the Lander Trail should be addressed.
- Address the cumulative effects of the proposed development on cultural resources.
- BLM has not honored an agreement (Programmatic Agreement between the BLM and SHPO regarding the Jonah II and Pinedale Anticline) to develop a historic context planning document that would synthesize previous ethnohistorical, historical, geophysical, soils, biological, and cultural-historical studies conducted within the fields. This synthesis was to have been used to form the basis for development of a cultural resource research design/management plan, which was to have been completed within one year of ratification of the agreement.
- Given past failures to consult in good faith and to fulfill previous obligations, the BLM
 has not met its commitment to managing and protecting the important and nationally
 significant historic properties under their charge. BLM must provide specific
 management intent and practices with regard to cultural resource considerations and
 concerns identified by SHPO.

OTHER NATURAL RESOURCE ISSUES

- Soil surveys are needed in the area.
- Given the past several years of drought, recognize and address the potential for soil erosion from all proposed surface disturbance.
- The use of soils analysis is potentially beneficial, but the costs should not be born by Operators alone--tax revenues in the county should be used to finance the expenditure.
- Concern over effects on livestock and wildlife food sources.
- Address impacts to visual resources; density of disturbance may negatively impact visual resources.
- Address impacts from noise, including requirements to minimize noise and plans for monitoring.

HEALTH AND SAFETY ISSUES

- The oil and gas industry leaves behind equipment and contaminated soil and water.
- Address public health issues.
- Require the containment of litter and industrial waste.
- Include provisions to notify the public of health and safety threats.
- Address the use of hydraulic fracturing and the impacts of drilling fluids and chemicals on the environment.
- Drilling operations must be required to comply with any applicable stormwater discharge requirements, including acquiring National Pollutant Discharge Elimination System (NPDES) permits, as required.
- Work with the EPA relative to regulation of hazardous and toxic wastes generated from gas development activities.

SOCIOECONOMIC ISSUES

- Continue drilling at the present or accelerated rate to prevent expensive start up and shut down costs and continue current economic momentum.
- Retain current Operators who have experience in the Jonah Field.
- Provide a thorough socioeconomic analysis for each alternative considered.
- Avoid boom-bust cycles, which create pricing instability.

- The project would generate a large amount of taxes and royalties, much of which would be returned to state and county governments for use in education and other tax-funded programs.
- Consider not only Sublette County but also neighboring counties and communities.
- The amount of tax and royalty revenue generated from the project should be made public and consider distributions to schools, hospitals, roads, convalescent homes, and other infrastructures.
- Present the negative impacts associated with not developing the natural gas resources (e.g., loss of jobs, royalties, taxes, etc.).
- Natural and physical resources should not be given more credence and analysis than human (social and economic) factors.
- Models historically used for socioeconomic analysis do not adequately account for longterm trends associated with community stability.
- The project would help mitigate long-term trends of decreasing school enrollment and aging demographics.
- Development of the project would increase Wyoming's share of new and existing natural gas markets.
- The input-output models historically used in determining socioeconomics must take into account long-term trends associated with education.
- In considering economic factors, include loss of revenue to the WGFD and local outfitters because of declines in wildlife.
- Private industries should not profit from public lands.
- Concerns regarding a foreign (Canadian) company coming in and profiting from our mineral wealth and then leaving after destroying public lands.
- Consider the economic impacts (e.g., loss of tourism, hunting, fishing income) to the state as public lands of high recreational value are developed.
- Consider school enrollment declines/school closures (consolidations) in Sweetwater County.
- Consider long-term trends.
- Implementing the project as described would contribute to boom and bust economic conditions, rather than economic stability, as opposed to a phased approach requiring closure and reclamation prior to granting new permits, which would allow production on a sustainable level.
- In the long run, tourism dollars are more sustainable than oil and gas industry dollars.

- The oil and gas industry has caused skyrocketing property values and property taxes in the area.
- The high pay of transient oil and gas workers has raised the per capita and median income levels to the point where government grants previously available to fund community projects are no longer available.
- Natural gas prices have skyrocketed since local production of the resource was initiated.

MISCELLANEOUS ISSUES

- Work harder to develop alternative energy sources.
- Include provisions that ensure that industry is held accountable for the full liability of conducting business in the Upper Green River Valley.
- Cut demand and use less natural gas.
- Pursue alternate energy sources (e.g., wind power) instead of implementing the project.
- The project is necessary for National Security to develop the gas and keep Operators from moving to foreign countries.
- The project sets the precedent for similar high levels of energy development throughout the Green River Valley.
- Rapid destruction of wild places throughout Wyoming is undesirable
- Use previously generated data to expedite document preparation.
- Establish a time line and a project deadline if so requested by the Operator.
- The BLM should recognize its increased demand for manpower, and must act accordingly to adequately staff the PFO.
- The ROD should be issued by March of 2005.
- The BLM is already 5 months behind the schedule contained in the Memorandum of Understanding (MOU) and must strive to issue the ROD as soon as possible.
- An increase in demand is anticipated for natural gas as a clean, low-cost fuel.
- The BLM Reservoir Management Group (RMG) must provide analysis of the waste of reserves that will occur if all wells are required to be directionally drilled.
- The BLM must not use pace of development assumptions in its NEPA analysis as absolute ceilings on development.
- The WOGCC must be involved as a cooperating agent in the preparation of the EIS.

- Allow the development, but with more input from conservation groups and other federal agencies.
- The project provides a clean, environmentally desirable energy source.
- Regarding areas where the BLM lacks baseline data, describe how BLM intends to deal
 with this lack of data and how such data will be collected in the future.
- Further exploration prior to preparation of the EIS, as proposed by BLM in the Scoping Notice, would violate NEPA, further exceed the RFD scenario, and potentially violate the ESA; this exploration must not be allowed.
- BLM must not define the purpose and need solely as to allow natural gas production and cater to the oil and gas industry's desire to develop and produce resources; it must also include strong environmental protections as at least a co-equal purpose and need.
- Existing NEPA documents are outdated and must be supplemented before they can be used for tiering purposes and before any further drilling can occur.
- The Pinedale Anticline NEPA documents are outdated and must be supplemented before they can be used for tiering.
- Information should be presented in a manner that the public can easily understand.
- Consider oil and gas projects as long-term that pay over years (not boom and bust).
- The EIS should be based on new and current resource data.
- Provide a map showing the location of the JIDPA relative to other ongoing and proposed oil, gas, and coalbed methane projects. The status and extent of each development should be identified.
- Natural gas is the cleanest, most efficient fossil fuel and is used in many alternative energy sources such as fuel cells.
- Development over such a short time frame has very little environmental consequence in the greater scheme.
- The denser well spacing provides new jobs and creates less impact on the environment than development outside an existing gas field.
- The scope of the EIS should be limited and simple.
- Approximately 90% of the PFO is currently under lease and, including the Jonah Field, six major natural gas fields are in operation in the area.