

APPENDIX G
RESPONSE TO COMMENTS

Forest Service Response to Comments Received on the DEIS

Appendix G has been divided into two sections. The first section contains the comments received on the DEIS and the Forest Service responses to those comments. The second section contains all responses received from Federal and State agencies, local government, and elected officials.

Comments and responses have been grouped into the following topics:

1. Pipeline Safety
2. Pipeline Corridor
3. Wetlands, Riparian Areas, and Stream/River Crossings
4. Wildlife and Fisheries
5. Heritage Resources
6. Air Quality
7. Scenic, Visual, and Recreation Values, including Eligibility for Inclusion in the Wild and Scenic Rivers System
8. Coordination with WYDOT Activities and Requirements, including WYDOT Safety Concerns
9. Pipeline Size/Capacity and Link to Oil and Gas Development in Northern Sublette County
10. Other Permits
11. Reclamation
12. Water Quality
13. Gros Ventre Roadless Area
14. Monitoring
15. Energy Conservation and Alternative Energy Options
16. No Action Alternative
17. Property Owners
18. Errata

Each commenter was assigned a number, as shown in **Table G-1**. Each comment made was also assigned a number. For example, in Part 1, comment code 1-1 refers to the first comment in the email from Caroline Haines. All commenters (16) are listed below, with their assigned number, to facilitate matching comments with the associated commenter. Commenters 6 and 9 did not submit comments requiring a response from the Forest Service. All comments submitted are included in the Project File at the Big Piney Ranger District Office in Big Piney, Wyoming.

TABLE G-1 COMMENTERS ON DEIS

Commenter	Letter Number	Date Submitted
Individuals		
Caroline Haines	1	August 2, 2006
Jeanette Lostracco	6	August 8, 2006
Richard Robinson	10	August 15, 2006
Lucy Conley	11	August 15, 2006
Linda J. Cooper	13	August 23, 2006
Organizations		
Sierra Club	12	August 15, 2006
Jackson Hole Conservation Alliance	14	August 25, 2006
WildLaw	15	September 12, 2006
Federal Agencies		
Natural Resource Conservation Service	9	August 11, 2006
Department of Interior	5	August 9, 2006
Environmental Protection Agency	16	September 14, 2006
State Agencies		
District Maintenance Engineer, WYDOT	8	August 11, 2006
Environmental Coordinator, WYDOT	3	August 7, 2006
Director, WDEQ	4	August 4, 2006
Deputy Director, WGFD	7	August 11, 2006
Local Government		
Teton County Planning and Development	2	August 3, 2006

1. PIPELINE SAFETY	
Comments: 8-1, 8-3, 10-1, 13-2, 13-4, 13-5, 14-6, 16-10	
Comment	Response
<p>The FEIS should address pipeline safety concerns in greater detail and require specific measures to be taken to lessen any threats to the public.</p> <p>Supporting Statements:</p> <p>No pipeline safety information is referenced in the DEIS. No data is presented regarding the effectiveness of One Call.</p> <p>The inherent dangers of third party damage should be mitigated wherever possible. The DEIS acknowledges that fatal accidents can and do occur when third party damage takes place.</p> <p>Potential future maintenance issues are corrosion and concern that the pipeline would not be properly maintained.</p> <p>Truck safety and pipeline safety are not compared, especially in areas of highway crossings, landslides, and river crossings. Also, no fire analysis is shown to compare LNG trucking and pipeline risks.</p> <p>The risks associated with a pipeline system should be explained with the same depth and analysis that the risks associated with LNG delivery by truck are explained.</p> <p>LVE has no experience managing pipelines and yet must be relied upon to manage the pipeline. The DEIS provides no LVE protocol or plan for implementation or managing the pipeline, including training employees.</p> <p>Pipeline inspection using helicopter flyover and on-the-</p>	<p>Additional information was used to supplement the analysis and discussion related to pipeline safety. Chapters 1 and 2 were modified to provide additional background information on pipeline safety and clarify the rationale related to pipeline safety that applies to the Proposed Action and all alternatives considered. Chapters 3 and 4 were modified to clearly present the existing and projected conditions for pipeline safety. Appendix D was modified to clarify project design criteria that provide for the safety of the public and the pipeline. References used were added to Appendix A.</p> <p>The following text was added on page 1-6. “Natural gas transmission pipelines are acknowledged to be a safer transportation method for natural gas than tanker trucks carrying LNG, based on Office of Pipeline Safety and Department of Transportation statistics analyzed by the Congressional Research Service (CRS) of the Library of Congress. The safety and security of oil and gas pipeline systems in the U.S. have been summarized by the CRS (2004, 2007).</p> <p>Tanker trucks traveling on mountain or canyon highways in the western U.S. are frequently involved in crashes that cause injury, death, and damage to property and the environment. Some crashes have involved fires, and one crash in Spain in 2002 involving a tanker truck resulted in a serious boiling liquid expanding vapor explosion or BLEVE (CH-IV International 2006). A number of recent crashes of tanker trucks carrying LNG are recounted in various sources (Christian Science Monitor 2006, San Francisco Chronicle 2007, Boston Globe 2006). A 1980’s test of a pool fire involving 10,000 gallons of LNG, the amount of LNG transported in one tanker truck, generated a cone-shaped fire 60 feet in diameter and 250 feet high (Daily Astorian 2007). Continued reliance on transport of LNG along public highways also could leave the Jackson area vulnerable to occasional interruptions in supply when rockfalls, slides, or avalanches make highways impassable. Protection of scenic, recreational, fisheries or wildlife values that make the Hoback River eligible for designation as a Recreation River would be enhanced by reducing the need for commercial hauling of LNG along public highways. In addition, the potential for sabotage of various LNG transportation and storage facilities by terrorists is being increasingly considered (GAO 2007, Christian Science Monitor 2006).”</p>

<p>ground inspection is not likely to be effective from October through May.</p> <p>It should be clearly stated that the risk of tanker truck accidents, spills, or fires applies to the Proposed Action and No Action. The risk of pipeline accidents (spills or explosions/fires) applies to the Proposed Action.</p>	<p>The following text was added on page 1-7. “The maximum allowable operating pressure (MAOP) of the pipeline would be 1,440 pound-force per square inch gauge (psig), a unit of measure to indicate the pressure on a surface. The design of the pipeline is based on using higher standard materials to increase the safety factor for the pipeline, because it would be installed near a community (Bondurant), two Forest Service campgrounds, and a highway. Because of the design materials selected to enhance public safety, the pipeline would have the technical capability of operating under pressures higher than needed to deliver the anticipated volumes of natural gas to Jackson (currently estimated to be up to 3 million standard cubic feet per day).”</p> <p>The following text was added on pages 3-97 to 3-98. “According to the Transportation Research Board (TRB), transportation of energy fuels via transmission pipelines is safer than transportation via other modes, but a significant failure can result in loss of life, personal injury, property damage, and environmental damage (TRB 2004). In the U.S. from 2000 through 2002 natural gas transmission pipeline incidents resulted in an annual average of 6 deaths, 10 injuries, and \$20 million in property damage (TRB 2004). Only a small fraction of natural gas operators experienced safety incidents. No more than 6.5 percent of operators have had reportable incidents in any year (TRB 2004).</p> <p>There are many causes and contributors to pipeline failures, including construction errors, material defects, internal and external corrosion, operational errors, malfunctions of control systems or relief equipment, and outside force damage, e.g., by third parties during excavation (TRB 2004). Vandalism accounts for fewer than 1 percent of incidents (TRB 2004). Excavation and construction-related damage to pipelines remain the leading causes of pipeline failure. Such failures were estimated by DOT in 2003 to contribute to 24 percent of natural gas transmission pipeline incidents. With the growth in population, urbanization, and land development activity near transmission pipelines and the addition of new facilities, the likelihood of pipeline damage due to human activity and the exposure of people and property to pipeline failures may increase (TRB 2004).</p> <p>The main risks associated with a natural gas transmission pipeline incident are a fireball or flash fire caused by the flow of flammable gas when pipe rupture occurs; and an explosion or the delayed ignition of a gas and air cloud in a semi-confined area. The</p>
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escape of a fire associated with a pipeline incident to start a wildland fire would be an additional risk.

The principal pipeline failure mechanisms are external impact with the pipeline, corrosion of the pipe wall, a metal defect in the pipe wall, operation of the pipeline outside its design limits, and natural events such as floods, landslides, or other earth movements. Older natural gas pipelines (installed in 1950 or earlier) have a significantly higher rate of incidents compared with pipelines installed since 1950 (TRB 2004). This may be partially due to a higher frequency of corrosion, which is a time-dependent process. Since 1971, pipelines have been required to have external protective coating and cathodic protection to reduce corrosion potential (TRB 2004).

External impact with the pipeline is the most likely cause of rupture of most pipelines, and is most likely to occur in populated areas where mechanical diggers are used for installing drains, services etc. Digging and drilling operations can cause large size punctures and ruptures, which can be prevented by frequent surveillance of pipeline routes using helicopters and road patrols, and extensive efforts to introduce “one-call” systems so that utility companies and landowners can easily check routes of pipelines before they start to dig.

Other failure mechanisms include a metal defect in the pipe wall, which includes original defects in the metal used to make the pipe and defects introduced during construction or pipe-laying operations. Metal defects tend to get worse over time, and with pressure cycles, etc. Problems are detected by checks on the pipe wall, and the use of “intelligent pigging”. The affected section of pipe will eventually have to be replaced.

The DOT has developed minimum pipeline safety regulations that are based upon industry best practices. In many cases the design exceeds the regulatory requirements when there is an opportunity to enhance public safety. A partial list of the applicable best management practices includes: increased pipe wall thickness, higher strength material specifications, 100 percent radiographic weld examination, increased pipe depth, increased hydrostatic test pressure and an increased number of valves.”

The following text was added on pages 3-99 to 3-100. “The Common Ground Alliance (CGA) reporting tool, the Damage Information Reporting Tool (DIRT) serves as a

clearinghouse for damage data collection, analysis, and dissemination of information. About 51,000 events (damage, near misses, and excavator down time) were reported confidentially in DIRT by damage prevention stakeholders in 2005, which was double the number of reports for 2004. The DIRT annual report facilitates the understanding and characterization of the state of damage prevention and effectiveness of One Call, as One Call using the 811 national number is implemented. DIRT also can be used for analysis of successes, areas needing improvement, trends, and root causes (CGA 2006). In 2005, the following root causes were associated with events reported in DIRT: notification practices not sufficient (33.7 percent), which included 31.2 percent of all events, where no notification was made to the One Call notification center; locating practices not sufficient (11.1 percent); excavating practices not sufficient (22.2 percent); miscellaneous root causes (6.7 percent); and data not collected (26.3 percent). Additionally, industry best practices designed to mitigate third party damage wherever possible and enhance the effectiveness of One Call have been compiled and updated by CGA (2007).”

The following text was added on pages 3-100 to 3-101. “The safety and security of oil and gas pipeline systems in the U.S. have been summarized by the Congressional Research Service (CRS) of the Library of Congress (CRS 2004, 2007) and is presented below and in the following three paragraphs. According to DOT, there were 124 oil pipeline incidents and 172 gas transmission pipeline incidents in the U.S. in 2005.

The U.S. natural gas pipeline network consists of around 210,000 miles of interstate transmission, plus approximately 75,000 miles of intrastate transmission. Collectively, these gas pipelines transport nearly all of the natural gas in the U.S. Releases from pipelines cause relatively few annual fatalities. Taken as a whole, releases from pipelines cause few annual fatalities compared to other product transportation modes. Oil pipelines reported an average of 1.4 deaths per year from 1997-2004. Gas pipelines reported an average of 18.6 deaths per year during 1997-2001 and 17.0 deaths per year from 2000-2004. Direct safety comparisons between pipelines and other transportation modes are difficult due to data limitations. DOT statistics suggest that pipelines are associated with many fewer fatalities per ton-mile than truck, rail or waterborne transport.

The environmental safety record of oil pipelines is comparable to other transportation modes. According to the oil industry estimates, from 1995-2000 oil pipelines spilled an

average of 0.9 gallons per million barrel-miles of oil transported, compared to 1.5 for trucks, 0.7 for rail and 0.7 for barges. Similar direct comparisons for gas pipelines are not available. Accidental pipeline releases result from a variety of causes, including outside force (e.g., third-party excavation), corrosion, mechanical failure, control system failure and operator error. Natural forces, such as floods and earthquakes, can also damage pipelines. According to DOT, for 183 gas pipeline accidents reported in 2002, outside forces were by far the leading cause, accounting for 46 percent of reported failures.

Although pipeline releases have caused relatively few fatalities in absolute numbers, a single pipeline incident can be catastrophic. For example, a 1999 gasoline pipeline explosion in Bellingham, Washington killed two children and an 18-year-old man, and caused \$45 million in damage to a city water plant and other property. Large incidents generate substantial scrutiny of pipeline regulation and increase state and community activism related to pipeline safety. Incidents also highlight the danger of pipelines as possible terror weapons because of their potential to harm people and damage property in their vicinity. Pipelines are vulnerable to vandalism and terrorist attack that could disrupt flows and cause a release of pipeline contents. Underground pipelines reduce exposure to external threats, but required markings that inform emergency responders and homeowners can also highlight pipeline locations to terrorists.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) of the DOT reports a 10-year average from 1997-2006 for significant incidents involving onshore gas transmission lines in Wyoming. Significant incidents involve injury, fatality, or property damage of \$50,000 or more. The annual average in Wyoming over the last 10 years is 1 incident involving 0 fatalities and 0 injuries, with property damage of \$319,422 for 6,539 miles of gas transmission lines (PHMSA 2007). This would be equivalent to about 1.5 significant incidents per 10,000 miles of gas transmission line.

Restreppo et al. (2006) analyzed OPS records from 2002-2005 and found 2.66 to 3.5 reportable incidents annually per 10,000 miles of gas transmission pipeline in Wyoming. Their analysis of OPS records also showed that Wyoming has the highest concentration of gas transmission lines in the U.S. when relative miles of existing pipeline and total population for Wyoming are compared with the U.S. as a whole.”

The following text was added on page 3-101. “Analysis of historical OPS incident data

for natural gas pipelines suggests that they are operating more safely than in the past. The data indicate that the number of incidents per year has increased slightly from 83 incidents in 1986 to 109 incidents in 2004 (OPS 2005b). However, the fatalities and injuries resulting from these incidents have declined significantly over time.”

The text on page 3-102 has been modified to read as follows. ...“WYDOT and LVE have collaborated on the development of appropriate requirements for a pipeline located along the highway corridor of U.S. 189/191, where a formal right-of-way does not exist through the Hoback Canyon area on NFS lands. An independent engineering design review addressing the location of portions of the pipeline route within the highway corridor was conducted for WYDOT by PB Energy Storage Services, Inc. (2005). The results of this review are being addressed in the final design of the proposed action, in consultation with WYDOT.

In summary, the results of this collaboration are as follows. WYDOT requirements for burial of the pipeline 48 inches (4 feet) below the ground surface wherever the pipeline would be within 50 feet of the edge of the highway pavement would be met. Where there is a likelihood of increased WYDOT maintenance and construction activity with the potential to penetrate to the level of the pipe, WYDOT requirements for burial of the pipeline 72 inches (6 feet) below the ground surface would be met. Where the pipeline crosses beneath the highway, the elevation of the pipe for the crossing will match the elevation of the pipe at either end of the crossing. WYDOT construction monitoring requirements and specifications for identifying the pipeline location and marking the pipeline route will be met. Any deviations from these requirements at specific locations would be determined in consultation with WYDOT and the Forest Service and documented in the Forest Service authorization for the pipeline.

The following text has been added on page 4-21. “Tanker truck incidents involving a fire are more likely to occur than pipeline incidents involving a fire. The use of tanker trucks to deliver gas to Jackson under the No Action alternative is more likely to involve the risk of a wildland fire escaping from the scene of an incident.

While incident accounts of LNG tanker truck crashes indicate the release of LNG is not common (CH-IV International 2006), a 1980’s test of a pool fire involving 10,000 gallons of LNG, the amount of LNG transported in one tanker truck, generated a cone-shaped fire 60 feet in diameter and 250 feet high (Daily Astorian 2007).”

The text on page 4-24 has been modified to read as follows. “Accidental ignitions by construction crews or equipment could result in a wildland fire. A fire prevention program would reduce the risk. Requirements included in Appendix D would reduce the potential risk of a wildland fire caused by project construction activities.

Although pipeline incidents involving a fire are unlikely to occur, it is possible that a pipeline incident involving a fire could occur. A pipeline incident involving a fire could involve the risk of a wildland fire escaping from the scene of the incident.”

The following text has been added on page 4-59. “An independent engineering design review addressing safety issues associated with the location and design of portions of the pipeline route within the highway corridor was conducted for the Wyoming Department of Transportation (WYDOT) by PB Energy Storage Services, Inc. (2005). The results of this review recognized the adequacy of the proposed design and report recommendations were used in the design of the proposed project. Continued coordination between WYDOT and LVE since the final report was issued has resulted in joint agreement to modify some design criteria related to depth of burial that were evaluated in the design review, in an effort to reduce surface disturbance without compromising public safety. All applicable federal regulations regarding pipeline burial depth would still be met under Alternative B. Pipeline burial depths are described in Chapter 2 on pages 2-28 and 2-29.”

The text on page 4-60 to 4-61 has been modified to read as follows. “Pipeline installation would avoid suspension or attachment of the pipeline to bridges at water crossings, including highway bridges along Hoback Canyon. By not suspending the pipeline from highway bridges, vulnerability of the exposed pipeline to traffic accidents or flooding would be reduced. Crash statistics for Wyoming indicate that 283 crashes were associated with bridges in 2006, including 5 fatal crashes (WYDOT 2007a). A large, intense fire from a crash could cause sufficient damage to a bridge to initiate a pipeline incident. A fire resulting from the crash of a gasoline tanker truck into a guard rail on a bridge overpass in California caused steel bridge supports to melt and the bridge to collapse (San Francisco Chronicle 2007).”

... “LVE would prepare and follow a manual of written procedures for the operation and maintenance of the proposed facilities and for emergency response. LVE’s

	<p>application includes information on the utility’s technical and financial ability to construct and operate the pipeline.”</p> <p>The text on page D-1 has been modified to read as follows. “Specific engineering design criteria have been evaluated by a qualified independent engineer to ensure that the proposed design meets or exceeds all applicable safety codes and regulations. An independent engineering design review was conducted for the Wyoming Department of Transportation (WYDOT) by PB Energy Storage Services, Inc. (2005). The results of this review are being addressed in the final engineering designs for the proposed project, in consultation with WYDOT. Engineering specifications for the project will be documented in the special use authorization for the project and other permits and authorizations, as appropriate.” ... “To facilitate safe highway operations along the pipeline route and enhance the responsiveness of LVE to One-Call of Wyoming procedures, as agreed to between LVE and WYDOT, an inspector representing LVE will be onsite when excavation activities associated with WYDOT’s highway operations near the pipeline are in progress, provided LVE receives 24 hours advance notice during normal business hours.”</p>
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2. PIPELINE CORRIDOR	
Comments: 1-1, 8-3, 11-6, 14-5, 15-6	
Comment	Response
<p>The FEIS should evaluate the appropriate alignment and burial depth for the pipeline.</p> <p>Supporting Statements:</p> <p>The pipeline should be located close to the highway within the corridor that already has been disturbed by the highway.</p> <p>Impacts to vegetation and the Hoback River watershed would be minimized by moving the pipeline closer to the highway, entirely within the 50-foot highway corridor that already has been disturbed.</p> <p>Other alternatives that take the pipeline farther than 50 feet</p>	<p>Additional information was used to supplement the analysis and discussion related to the pipeline routes and burial depths evaluated. Chapter 2 was modified to provide additional background information on pipeline routes and clarify the rationale related to feasibility that applies to each alternative considered. Chapters 3 and 4 were modified to clearly present the existing and projected conditions associated with the prospective pipeline route, including anticipated effects. Appendix D was modified to clarify that final project design specifications would be included in the special use authorization for the proposed project.</p> <p>The pipeline is located as close to the highway as feasible, based on consideration of topography, existing facilities, resource concerns, and public safety. The rationale for not locating the pipeline and the reconstructed highway along the same alignment in the Hoback Junction area is provided in Chapter 2 on page 2-6, as follows. “The alignment and design considerations for a highway in a landslide area would not be the</p>

<p>from the travelway should be considered.</p> <p>The pipeline must be close to the highway through a majority of the canyon or a great deal of long-term damage will be done to the beauty of this irreplaceable scenic byway that serves as a tourist corridor to two National Parks.</p> <p>Where feasible and safe, the pipeline should be tied to bridge crossings. A detailed analysis of why the pipeline could not be tied to existing bridges should be included in the FEIS.</p> <p>The FEIS should evaluate whether taking the pipeline out of the highway corridor may result in costlier construction and greater difficulty in patrolling the pipeline corridor without gaining any meaningful safety benefits.</p> <p>The pipeline should be buried at a depth that meets safety standards in all locations. Proposed burial depths of up to 10 feet are arbitrary and unnecessary and would require greater impacts than needed.</p> <p>A decision on the pipeline location should be delayed until a decision on the highway route is made for the landslide area near Hoback Junction. Locating the pipeline and the reconstructed highway along the same alignment could reduce impacts and avoid the Gros Ventre roadless area. The cumulative impacts of constructing two linear routes through this part of the Forest are not considered.</p> <p>The FEIS should examine the appropriate alignment and burial depth for the pipeline that will provide for public safety.</p>	<p>same as the considerations for a pipeline through the same landslide area. The aboveground installation of the pipeline in a landslide area, which is the design selected for the proposed project to minimize the risk of rupture caused by a landslide, would not be feasible for a pressurized gas pipeline located in close proximity to a highway.”</p> <p>The rationale for not attaching the pipeline to highway bridges is provided in Chapter 2 on page 2-11, as follows. “WYDOT’s requirement limits the volume and pressure of additional flammable material (natural gas transported by pipeline attached to a highway bridge) that could contribute to the seriousness of the impacts associated with a crash involving a bridge. A review of crash statistics for Wyoming indicates that 283 crashes were associated with bridges in 2006, including 5 fatal crashes (WYDOT 2007a). A large, intense fire from a crash could cause sufficient damage to a bridge to initiate a pipeline incident. A fire resulting from the crash of a gasoline tanker truck into a guard rail on a bridge overpass in California caused steel bridge supports to melt and the bridge to collapse (San Francisco Chronicle 2007). An incident such as this recent California crash illustrates the potential risk associated with a pipeline attached to a bridge.”</p> <p>The proposed location and depth of burial for the proposed pipeline are summarized in Chapter 2 on page 2-37, as follows. “The pipeline would encroach on the highway corridor in constricted areas along Hoback Canyon and where it must cross the highway. Throughout half of Hoback Canyon, the pipeline would be located more than 28 feet away from the edge of the existing pavement. In the most constricted areas within Hoback Canyon (about half of the canyon), the pipeline would be located 12 to 28 feet away from the edge of the existing pavement. WYDOT requirements for burial of the pipeline 48 inches (4 feet) below the ground surface wherever the pipeline would be within 50 feet of the edge of the highway pavement would be met. Where there is a likelihood of increased WYDOT maintenance and construction activity with the potential to penetrate to the level of the pipe, WYDOT requirements for burial of the pipeline 72 inches (6 feet) below the ground surface would be met. Where the pipeline crosses beneath the highway, the elevation of the pipe for the crossing will match the elevation of the pipe at either end of the crossing. Any deviations from these requirements at specific locations would be determined in consultation with WYDOT and the Forest Service and documented in the Forest Service authorization for the pipeline.”</p>
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	<p>The collaboration and agreements between LVE and WYDOT are summarized in Chapter 3 on page 3-102, where the text has been modified, in part, to read as follows. “WYDOT and LVE have collaborated on the development of appropriate requirements for a pipeline located along the highway corridor of U.S. 189/191, where a formal right-of-way does not exist through the Hoback Canyon area on NFS lands.”</p> <p>The location of the pipeline route in relation to the highway has been clarified in Chapter 4 on page 4-51. “Over most of the proposed pipeline route (about 42 miles), disturbance would be confined to areas within about 125 feet of the existing U.S. highway.” The remaining 8 miles of the proposed pipeline route divert from the highway corridor and passes through the Camp Creek saddle area, as clarified on page 4-51. “The effects would be concentrated along the U.S.189/191 highway corridor through Hoback Canyon and in the Camp Creek saddle area where the pipeline route diverts from the highway corridor for about 8 miles.”</p>
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3. WETLANDS, RIPARIAN AREAS, AND STREAM/RIVER CROSSINGS

Comments: 5-7, 5-10, 5-11, 7-8, 7-9, 7-10, 7-16, 7-17, 7-18, 11-7, 12-2, 12-3, 12-4, 14-7, 15-2, 15-3, 16-1, 16-2, 16-3, 16-4, 16-5, 16-6, 16-7, 16-8

Comment	Response
<p>All design criteria, monitoring, reclamation, and a mitigation plan applicable to wetlands, riparian areas, and stream/river crossings should be consolidated in one location within the FEIS. All practicable means to minimize or avoid impacts to wetlands, riparian areas, and stream/river crossing areas must be considered, as required under the Clean Water Act. Wetland crossings should be accomplished by the least damaging practicable method available, including directional drilling (boring) where appropriate.</p> <p>Supporting Statements:</p> <p>The installation of the pipeline must be designed and monitored to minimize impact within hydrologically and ecologically sensitive areas such as wetlands, riparian areas,</p>	<p>The wetland analysis included the entire pipeline corridor and included all lands. The inclusion of maps in the FEIS at a sufficiently detailed scale for analysis of routing alternatives for a corridor 50 miles long is not realistic.</p> <p>All practical efforts were made to avoid impacts to wetlands, however, consideration of multiple resource concerns and the desire to avoid long-term impacts that would be the most enduring contributed to a complex analysis that considered the following factors very carefully:</p> <ul style="list-style-type: none"> ➤ Scenic beauty and outdoor recreation are the foundation of the economy of Jackson and surrounding areas. ➤ A design based on following the already disturbed highway corridor as much as feasible requires the pipeline corridor to pass through Hoback Canyon. ➤ A canyon pipeline route following the highway corridor would require multiple river crossings, just as the existing highway crosses the river multiple times as it passes through Hoback Canyon. ➤ The multiple river crossings required to fit the pipeline corridor in the canyon

<p>and stream/river crossings.</p> <p>The FEIS should provide a wetlands mitigation plan that identifies wetland mitigation sites and a process for wetlands restoration, creation, enhancement, or other compensation for impacted wetlands. Complete avoidance of any fen wetland should be required.</p> <p>The FEIS should clarify the rationale for not requiring topsoil salvage in saturated or inundated wetlands (page D-7).</p> <p>All affected wetlands should be restored to proper functioning condition or mitigated so no overall loss of wetland habitat results from this project. Since constructed wetlands can be less effective than naturally occurring sites, mitigation might be considered on a two to one (2:1) basis for every acre lost. A descriptive summary and photographic record of affected wetlands should be established prior to disturbance. Loss of willow wetland habitat, in particular, should be documented and mitigated.</p> <p>Hydrologic function and aquatic vegetation diversity should be maintained in oxbow and open water sloughs in the area behind the Elkhorn Lodge and Trading Post in Bondurant.</p> <p>An alternative that considers horizontal directional drilling for pipeline construction to avoid the open-cutting of the river and other sensitive areas should be analyzed.</p> <p>Where practicable, and where it would not cause more impact to aquatic resources than trenching, the use of directional drilling (boring) should be evaluated and considered on a case-by-case basis. The universal rejection of directional drilling in the DEIS may not apply to many of the individual wetlands.</p> <p>If crossing of streams is done by trenching, stream banks</p>	<p>and keep the route close to the highway would affect some wetland areas.</p> <ul style="list-style-type: none"> ➤ Visual quality (scenic beauty) and nearby roadless areas would be greatly affected by a route not along the disturbed highway corridor. ➤ Outside the highway corridor, impacts would be more visible to the public and represent longer-lasting changes to the landscape, which includes roadless areas, a scenic byway, and a river corridor afforded protection of its special values under Wild and Scenic Rivers Act. ➤ River, stream, and wetland crossings generally would be anticipated to recover within a year based on published literature of monitoring studies, and represent transient, short-term effects that could be repaired and restored to a form, function, and appearance close to conditions existing presently. <p>Hoback Canyon is a very constricted area. The canyon is managed as a Wild and Scenic corridor because of its location along a river eligible to be designated as a Recreation River. The stringent visual quality standards in the Forest Plan were established to preserve the intrinsic scenic beauty and recreation experience along the canyon. Watershed and fisheries values are also intrinsic to the recreation values along the Hoback River and Hoback Canyon. There will be impacts that cannot be avoided in order to install a pipeline through Hoback Canyon, but with careful design, these impacts will be minimal and short-term in nature.</p> <p>Where impacts could not be avoided, consideration was given to limiting impacts to short-term disturbance that could be recontoured and revegetated such that existing values, functions, and conditions would be restored. It would not be practical or environmentally responsible to risk a larger, longer-term impact on scenic beauty and the special values of the Hoback River corridor by using design criteria requiring the avoidance of all wetlands, when temporary disturbance of wetlands and the river channel can be restored more easily than many other potential impacts. Alternatives that did not include a pipeline located in Hoback Canyon were evaluated but eliminated from detailed consideration because of the magnitude and nature of long-term impacts to roadless areas, including high country in the Wyoming Range or Grand Teton National Park.</p> <p>All design criteria, monitoring, reclamation, and mitigation applicable to wetlands, riparian areas, and stream/river crossings are consolidated in Appendix D. The organization of Appendix D was not changed because, regardless of the change in</p>
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<p>should be restabilized, as needed, with large angular rock greater than 2 feet in one dimension placed from the channel bottom to the top of the normal high water line on the bank. The top one-foot of stream bottom substrate should be separated from deeper soil layers, and layers should be replaced in the same order that they are removed from the stream.</p> <p>Crushing or shearing streamside woody vegetation is preferable to complete removal.</p> <p>All chemicals, solvents, and fuels should be kept at least 150 feet away from streams and riparian areas.</p> <p>The construction process must incorporate the required measures to ensure the integrity of riparian habitat along the route is maintained.</p> <p>Object to the proposed open-cutting technique for the river crossings and require more information in relation to horizontal directional drilling.</p> <p>The following design criteria could be added on page D-15. To provide bank stability and reduce bank erosion, techniques such as pre-seeded rolls can be used to provide quick colonization. To prevent detrimental impacts on instream ecology, including trout-spawning grounds, appropriate pollution prevention measures should be in place to ensure that suspended solids, spillages, or other material do not enter the watercourse. To reduce the potential for pollution, all materials should be kept in secure areas, away from sensitive areas.</p> <p>Best Management Practices outlined in the EIS should be adopted at all river crossings.</p> <p>The inclusion of maps would facilitate evaluation of whether</p>	<p>organization, design criteria for several sections would have to be reviewed to obtain a complete understanding of project requirements addressing a specific resource concern or operational phase of the project.</p> <p>Appendix D was modified to clarify how effects on water quality, wetlands, habitats, and disturbed areas will be reduced, and improve applicable design criteria, reclamation procedures, and mitigation measures/plans for wetlands, riparian areas, and stream/river crossings. Relevant changes to Appendix D occurred on pages D-7, D-8, D-13, D-14, D-16, D-17, D-19, D-23, and D-24.</p> <p>A requirement in Appendix D under Streams and Watersheds (DEIS, page D-15, #9) that vegetation be maintained at 80 percent of its potential natural conditions is in accordance with BTNF Forest Plan guidance (Forest Plan Guideline, page 126). No change was made to the FEIS.</p> <p>Additional information was used to supplement the analysis and discussion related to wetlands, riparian areas, and stream/river crossings. Chapters 1 and 2 were modified to provide additional background information. Additional information regarding responsibilities and authorizations of other agencies was added on page 1-17 and pages 1-19 to 1-21. Additional clarifications regarding the rationale for not considering in detail the boring of wetlands and stream crossings were added to Chapter 2 on pages 2-2, 2-5, 2-10, 2-13, 2-37, and 2-38. Additional clarifications regarding reclamation were added to Chapter 2 on pages 2-29, 2-30, 2-32, and 2-33.</p> <p>Chapter 4 was modified to clearly describe the existing and projected conditions for wetlands, riparian areas, and stream/river crossings and the effects of potential surface disturbance associated with river/stream crossings on water quality and sedimentation. The following text was added on pages 4-9 to 4-10. “The character of the effects at proposed stream crossings under Alternative B would be similar to the effects described by Reid and Anderson (1998), based on a review of 27 pipeline water crossing effects monitoring studies undertaken by the pipeline industry and resource management agencies over 25 years in North America. Conventional or open-cut water crossings reviewed in the study are those pipeline installations that occur without any isolation or diversion of flow away from the work area. The trench for the pipe is generally excavated and backfilled by backhoe within the active (flowing) channel. Conventional open-cut crossings are often the only feasible construction method. Reid and Anderson</p>
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<p>opportunities for impact avoidance may exist. The alternatives analyzed should demonstrate that wetland disturbance is avoided to the maximum extent practicable.</p> <p>Clarification should be provided as to whether the wetland analysis includes the entire pipeline corridor and applies to all ownerships or is limited to NFS lands. Additional information, mitigation, and monitoring regarding wetlands, upland vegetation, and riparian resources should be included, and additional BMPs that may reduce impacts to wetlands should be incorporated. Information on the functions provided by affected wetlands should be included. Additional information should allow the determination of the amount of functional loss expected from the project.</p> <p>Effects on non-jurisdictional wetlands are not clear. All wetlands should be identified, including number, acreage, and a characterization of existing conditions and functions.</p> <p>No compensation for the wetlands impacts that are unavoidable is included in the DEIS. Some functional loss and plant community alteration will likely last for many years and perhaps never be recovered. Compensatory two to one mitigation should be considered for this project. The FEIS should include a wetlands mitigation plan that identifies available existing wetland mitigation sites and a process for wetlands restoration, creation, enhancement, and/or other compensation for impacted wetlands.</p> <p>It is critical to establish baseline conditions for proposed mitigation sites and to develop quantitative success criteria based on local conditions. Follow-up actions should be planned for future implementation if criteria are not met.</p> <p>In reference to degradation of stream bank stability, any percentage loss should be clarified as to whether the loss</p>	<p>(1998) found that open-cut crossings typically resulted in an elevation of downstream sediment loads during and shortly after the period of construction. Most of these studies reviewed indicated that sediment released during instream construction caused short-term changes to downstream aquatic life and their habitats. Identified effects included alterations to streambed conditions; reductions in the abundance and diversity of benthic invertebrate communities; and reductions in the abundance of fish populations. Effects were typically non-residual, and recovery was usually evident within a year. In addition to sediment related effects, habitat at the crossing site was affected by the excavation and backfilling of the pipeline trench and associated changes to bank conditions and riparian vegetation.</p> <p>Reid and Anderson (1998) found the most visible result of instream pipeline construction to be the generation of a plume of turbid water downstream. Levels of suspended sediment increased rapidly at the onset of instream activity but were not uniform throughout construction. Discrete peaks of high suspended sediment concentration occurred during activities such as blasting, trench excavation, and backfilling. During pipeline trench excavation and backfilling, suspended sediment concentrations were observed to exceed several thousand mg/L. These peaks declined rapidly when the streambed was not disturbed, although some residual increases due to scour of the trench, erosion of exposed surfaces at the crossing site, and the resuspension of settled material occurred. For properly stabilized crossings at the end of construction, sediment loading was found to be restricted to the duration of instream construction. Inputs of sediment into the watercourse persisted in some cases if the approach slopes of the crossing had been inadequately stabilized or revegetated. Crossings of small watercourses (< 10 meters wide) were often completed in less than a day; one to three days were generally required for medium sized crossings (10 - 20 meters wide).</p> <p>Reid and Anderson (1998) also described the deposition and subsequent flushing of sediment downstream of the crossing. As the material excavated is larger and in greater quantity than that transported under normal flow conditions, substantial deposition of released sediments occurs within a short distance downstream. This immediate deposition is generally dominated by the coarser fraction of the excavated sediments. Deposition of finer sediments such as clays and silts will tend to occur further downstream as a light coating on the streambed, or in low energy environments such as backwater areas. Sediment (especially silts and clays) deposited downstream of the crossing site can filter through the interstitial spaces in the streambed and change its</p>
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<p>applies to the stream as a whole or only to the disturbed area.</p> <p>Monitoring of reclaimed areas should include identification of any soil transport to wetlands. Under Streams and Watersheds (page D-15, #9), a requirement that vegetation be maintained at 80 percent of its potential natural conditions does not appear to meet BTNF Desired Conditions for riparian and wetland associations.</p>	<p>porosity and composition. Large depositions in slow velocity areas such as shallow side pools, behind boulders and instream debris have been observed to require longer periods or higher flows for complete removal. Full recovery of affected habitats has been suggested to be dependent on high flow conditions associated with storm events, or spring meltwater conditions flushing deposited sediments downstream. Complete removal of deposited sediments has been reported to occur within 6 weeks to 2 years after construction.</p> <p>Reid and Anderson (1998) also reported that crossings under very low flow conditions resulted in minimal dilution and high suspended sediment concentrations. However, downstream transport was minimized under these flow conditions. At the other extreme, high flows associated with storm events increased background levels and also eroded exposed substrates at the crossing location. High flows increased the width of the water crossing and generally hampered construction operations.”</p>
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4. WILDLIFE AND FISHERIES

Comments: 3-3, 5-1, 5-2, 5-4, 5-5, 5-6, 5-8, 5-9, 7-1, 7-2, 7-3, 7-4, 7-5, 7-7, 7-9, 7-10, 7-11, 7-12, 7-13, 7-14, 7-17, 11-7, 14-7, 15-5

Comment	Response
<p>The effects on habitats should be analyzed based on the habitat avoided as a result of project activities, not just the amount of surface disturbance. Species addressed in the analysis should reflect DOI guidance. Operating constraints, seasonal timing restrictions, and mitigation measures should incorporate WGFD recommendations to the extent practicable and maintain coordination and consistency with WYDOT’s wildlife and fisheries protection measures to the maximum extent possible.</p> <p>Supporting Statements:</p> <p>Although the effect on wildlife habitat along the pipeline corridor may be only 20 feet wide, the effective loss of habitat is likely close to 400 meters. Similarly, elk avoid areas adjacent to open, linear habitats by up to 0.5 miles. The impacts on habitats of</p>	<p>The Forest Service expects to work closely with the WGFD during all project phases to ensure adequate protection of wildlife and fisheries habitats in concert with management of populations by the WGFD. Detailed concerns, such as fencing, raised by the WGFD that are applicable to NFS lands would be addressed in Appendix D and the special use authorization for the proposed project. Preconstruction surveys have not been required for the proposed project. Proposed project disturbance is concentrated within the existing linear disturbance area along the highway corridor.</p> <p>Specific provisions in Appendix D on page D-20 address the protection of migratory birds. Compliance with the Food Storage Order is required on page D-1 of Appendix D. These requirements were included in the DEIS and have been retained.</p> <p>DOI’s requested clarifications on species evaluation have been made in Chapters 3 and 4, and in Appendix F. The FWS provided a listing of species of interest or concern to the Forest Service in an updated Forest-wide listing (ES-61411) for the BTNF in 2007. This information was consulted to determine which species might be present in the Project Area.</p>

<p>large mammals, including elk and moose, should be analyzed with an edge:habitat ratio instead of focusing only on the amount of acres disturbed and ignoring the edge habitat the pipeline corridor will create.</p> <p>Additional resource information on eagle nests is provided by the WGFD. There is an additional eagle nest/territory in the South Park Wildlife Management Area. Also, the eagle nest at Hoback Campground was monitored by WYDOT in 2003, when an eagle appeared to be incubating early on but was driven out by an osprey that nested at the location later in the spring. Observations at the Hoback Campground nest from 2004 to 2006 indicate no eagle nesting activity at this location.</p> <p>DOI recommends that the FEIS clearly state what measures will be implemented to protect migratory birds, especially all known sagebrush obligates, as required under the Migratory Bird Treaty Act (MBTA).</p> <p>Surveys for nesting migratory birds conducted prior to construction activities would reduce the potential for take. If nesting birds are identified, construction activities should be conducted outside the nesting period, which is typically March to June. Mowing of vegetation within the pipeline corridor prior to the nesting season may serve to discourage some species of birds from using the area to nest (page D-19).</p> <p>DOI notes that the DEIS does not discuss whether the mountain plover occurs in the project area.</p> <p>In an August 2004 letter responding to a request for scoping comments, the U.S. Fish and Wildlife Service lists the black-footed ferret as potentially occurring in both Sublette and Teton counties. DOI requests that the</p>	<p>In summary, the effects of the Proposed Action, which is in accordance with the Lynx Conservation Assessment Strategy (LCAS), on federally listed species and experimental populations would be limited to potential effects on individuals. Adverse effects on individuals are unlikely for Canada lynx and gray wolf. Project design criteria in Appendix D would mitigate potential effects.</p> <p>The black-footed ferret is a listed species, but no suitable habitat occurs within the Project Area and none of the sites selected for the reintroduction effort in Wyoming have been near the BTNF. Endangered Colorado River fishes, Humpback chub, Bonytail, Colorado pikeminnow, and Razorback sucker, and their critical habitat downstream of the Project Area are not discussed because no water depletions from the Upper Green River Basin are anticipated. One Candidate species, the yellow-billed cuckoo, is not discussed because riparian habitats containing extensive stands of cottonwoods are limited and the likelihood of yellow-billed cuckoos being present is negligible. No impacts to these species are projected.</p> <p>Forest Service Sensitive species of wildlife and fish selected for analysis based on their habitat and known or potential occurrence in the Project Area include: grizzly bear, bald eagle, northern goshawk, boreal owl, great gray owl, flammulated owl, peregrine falcon, three-toed woodpecker, greater sage grouse, trumpeter swan, Snake River fine-spotted cutthroat trout, and Colorado River cutthroat trout. No impact on the trumpeter swan is anticipated. The Proposed Action may affect individuals of other Forest Service Sensitive Species, but is not likely to result in a loss of viability or cause a trend toward federal listing or a loss of species viability range-wide. Effects are not expected to be measurable. Additional eagle nest information was added to Figures 2-4 and 3-6.</p> <p>Greater sage grouse, if present in the area, could be affected; however, there are no known occurrences of leks. If leks are identified, appropriate buffers and restrictions would be established. No suitable habitat for mountain plover exists within the Project Area.</p> <p>Appendix D was modified on page D-19 to clarify that the need for site-specific mitigation measures for wildlife and fisheries will be addressed in the special use authorization for the project.</p> <p>A restriction on instream construction, applicable to river/stream crossings shown on Figure 2-4, was added on page 2-34. The following text was added. “No instream construction from Mar 15 through Jul 31 to minimize impacts to spawning trout.”The following language was</p>
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<p>Forest Service clarify whether the black-footed ferret is likely to occur in the project area and if any potential effects on the ferret may occur.</p> <p>DOI requests that the FEIS clarify whether the Proposed Action complies with the Lynx Conservation Assessment Strategy (LCAS).</p> <p>DOI requests that the FEIS clarify whether greater sage grouse may be impacted by this project.</p> <p>The DEIS does not include guidelines for reducing encounters with grizzly bears during construction or other associated project activities. DOI strongly encourages the enforcement of food storage and garbage disposal stipulations (page D-18).</p> <p>The WGFD requests that all construction activity adhere to seasonal timing stipulations in designated crucial big game winter ranges and parturition areas. No construction related activity should occur after November 15 or before April 30 to avoid disturbing wintering big game animals. Construction in designated big game parturition areas should not occur between May 1 and June 30.</p> <p>The WGFD requests that no human activity associated with pipeline construction or monitoring occur on or near elk feedgrounds or Wildlife Habitat Management areas (WHMAs) during the winter seasonal timing restriction period (November 15 through April 30). LVE personnel should coordinate all on-the-ground monitoring activities with the Feedground Supervisor.</p> <p>WGFD fences or other facilities affected during construction activities should be replaced in-kind, as needed, and the State of Wyoming should be</p>	<p>added to Appendix D on page D-19. “No instream construction is authorized from March 15 through July 31 to minimize impacts to spawning trout.”</p> <p>The following text has been added in Chapter 4 on page 4-30 to clarify the effects on wildlife. “State of Wyoming wildlife management areas and other wildlife habitats within the BTNF are restricted during designated times of the year when wildlife use these areas. Construction through wildlife habitats would be conducted during periods when use of these areas is not restricted.</p> <p>Construction activities would be constrained to not affect the following species, habitats, and periods of use that are applicable to the Project Area.</p> <ul style="list-style-type: none"> ➤ Crucial big game winter range from Nov 15 through Apr 30 (state feedgrounds) ➤ Crucial big game winter range from Dec 1 through Apr 30 (NFS lands) ➤ Elk calving areas from May15-Jun 30 (NFS lands) ➤ Management zones I or II of active bald eagle nest sites (Feb 1 through Aug 15) ➤ Active peregrine falcon eyries (Mar 1 through Jul 31) or hack sites (Jul 1 through Sep 15) ➤ No instream construction from Mar 15 through Jul 31 to protect spawning trout <p>The following text was also added on page 4-30. “Displacement of big game could be up to 0.5 mile during construction activities, however, most disturbance would be confined to areas within about 125 feet of the existing U.S. highway, in an existing linear disturbance area. Therefore, displacement and avoidance of edge effects or cleared areas would not be expected to vary from existing conditions.”</p> <p>The following text was added on pages 4-31 to 4-32 to clarify the effects on fisheries. “Effects on fisheries anticipated under the Proposed Action would be localized in extent and short-term in duration. Recovery of streambed conditions and fisheries communities to pre-construction conditions would be expected within a year based on monitoring studies of similar projects, as described below.</p> <p>As reported by Reid and Anderson (1998) based on their review of 27 pipeline water crossing effects monitoring studies undertaken by the pipeline industry and resource management agencies over 25 years in North America, few studies have characterized direct effects of sediment released during instream pipeline construction activities on fish. The effects of an open-cut pipeline crossing were studied by Anderson et al. (1998). The results of their</p>
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<p>compensated for any wildlife losses associated with pipeline activities.</p> <p>The WGFD requests that helicopter flight paths be adjusted during aerial pipeline patrols to avoid flying directly over wintering big game.</p> <p>To reduce conflicts between wintering wildlife and human activity, no permanent structures or aboveground facilities should be constructed on or near elk feedgrounds or WHMAs at the request of the WGFD.</p> <p>The WGFD requests that the integrity of big game migration corridors not be compromised.</p> <p>Hydrologic function and aquatic vegetation diversity should be maintained in oxbow and open water sloughs in the area behind the Elkhorn Lodge and Trading Post in Bondurant. These areas have been used consistently by trumpeter swans in the winter season according to the WGFD.</p> <p>Pre-construction surveys should be conducted early in the nesting season by qualified biologists to identify any new bald eagle, peregrine falcon, or other raptor sites in the project corridor. WGFD staff should be consulted for additional locations of nest sites.</p> <p>The FEIS should address restricting helicopter flights within management zones I and II of known bald eagle nest sites along the Hoback River or its tributaries according to the WGFD.</p> <p>The WGFD recommends that osprey platforms/raptor perch poles be constructed in areas of the Hoback Canyon close to the river where a large number of</p>	<p>monitoring study are summarized below and judged to be representative of the character of fisheries effects that would be anticipated under Alternative B. Design criteria in Appendix D would reduce the effects on fisheries by delaying the initiation of instream construction activities until August 1.</p> <p>Anderson et al. studied the effects of a stream crossing involving a 42-inch pipeline on a small coldwater stream, about 6 miles long and draining 6,000 acres in a sensitive area in northern Ontario, beginning in 1992. The stream studied had abundant woody debris, a resident population of brook trout, and several beaver dams. Pipeline activities at the crossing studied also included the removal of a beaver dam and the construction of temporary road access, activities which are not included in Alternative B. Results of the study by Anderson et al. (1998) indicated that the suspended sediment loads of up to 3,000 mg/L caused by pipeline construction were sufficient to cause changes to channel morphology and fish and invertebrate communities; however, impacts were localized in extent and short-term in duration.</p> <p>The results of the study by Anderson et al. found that one week after pipeline installation, brook trout abundance within 1,500 feet of the crossing had decreased from twenty to six trout. Within 12 weeks following construction, partial recovery was apparent. Within a year, full recovery of the brook trout population was evident. The recovery of the fish communities was in concert with the recovery of streambed conditions and benthic invertebrate populations to pre-construction levels. The results of this study are consistent with other research investigating the impacts of pipeline construction (Reid and Anderson 1998), which also found that impacts were localized in extent and short-term in duration.</p> <p>According to Reid and Anderson (1998), potential direct effects on fish from suspended sediment exposure during instream construction include changes to fish behavior (habitat selection), abundance of food sources, survival or development of eggs, and survival of individuals due to increased stress. Sediment deposition can modify the suitability of downstream fish habitats. Adherence to instream construction timing restrictions (to avoid periods of spawning or egg incubation) during water crossing construction, avoided the risk of some of the above mentioned potential effects from occurring.</p> <p>As reported by Reid and Anderson (1998) in the same study, changes in observed benthic invertebrate communities tended not to be long-term. Full recovery of benthic invertebrate communities was identified within six months to a year after construction. The rapid recovery of these invertebrate communities has been attributed to the flushing and downstream</p>
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<p>mature trees are removed permanently from the river/pipeline corridor.</p> <p>The WGFD requests that wildlife protection and mitigation measures for the pipeline be consistent with those being developed for WYDOT’s highway project and coordinated to avoid duplication or overlap.</p> <p>WGFD biologists should be included as partners with the Forest Service and LVE in minimizing impacts to river hydrology, aquatic habitat, and fisheries.</p> <p>Pre-disturbance monitoring should be conducted to document the occurrence of amphibians and identify important breeding, resting, and potential hibernation sites. Concentration areas should be monitored and managed during and after construction to prevent habitat loss and direct mortality.</p> <p>Instream construction should be restricted from March 15 to July 31 to minimize impacts on spawning trout.</p> <p>The Hoback River will not recover to become an adequate fishery again, given all the past and upcoming highway projects and this pipeline project.</p>	<p>transport of deposited sediment during both normal and high flow conditions and invertebrate recolonization from upstream sites.”</p>
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5. HERITAGE RESOURCES	
Comment: 3-2	
Comment	Response
<p>WYDOT is concerned about the potential disturbance of cultural site 48TE1573 in the vicinity of Game Creek. Undisturbed deposits north of the creek may hold a high potential for buried cultural remains.</p>	<p>Monitoring requirements for heritage resources were clarified on page D-24 of Appendix D. The following language was added. “An archaeologist will monitor all construction activities on Holocene and Pleistocene terrace settings near creeks, and in the vicinity of all recorded historic properties.</p> <p>Additional information was used in the heritage resource sections in Chapters 3 and 4. The</p>

first paragraph on page 3-71 of the DEIS was replaced with the following text. “Section 106 of the NHPA and its implementing regulations require inventory and consideration of potential effects of any federal undertaking on historic properties or heritage resources that are listed on or eligible for the NRHP. Pipeline construction can be designed and implemented to avoid direct or indirect impacts to known eligible sites. The entire Area of Potential Effects (APE) for the proposed pipeline has been surveyed at a Class III level. The alignment for the proposed pipeline will avoid all known eligible sites within the APE.

Known sites along portions of the pipeline corridor that have been previously surveyed to current standards were not revisited. Approximately 12.0 miles of the pipeline corridor are completely within previous cultural resource survey areas. These areas were not resurveyed. Wildlife Habitat Management Areas (WHMAs), which have been tilled and seeded, were surveyed as well as conditions allowed.

Potential exists for a small number of unknown heritage resources in buried contexts or in areas of poor surface visibility along some portions of the APE. The potential for buried sites is low along most of the APE. Holocene and Pleistocene terrace settings near creeks, where unanticipated discoveries may occur, should be monitored during surface clearing and trenching activities (**Appendix D**). If potential heritage resources are identified during project implementation, the Forest Service will immediately evaluate those resources, notify the State Historic Preservation Office, and propose actions to resolve adverse effects. These actions may include avoidance and/or data recovery.

The second and third paragraphs in Chapter 4 on page 4-47 of the DEIS were replaced with the following text on pages 4-44 and 4-45 of the FEIS. “The Proposed Action would have no direct adverse impacts on known eligible or potentially eligible sites (prehistoric and historic components). The setting and feeling of three eligible or unevaluated historic sites located close to the proposed construction corridor may be affected indirectly over the short term, however, the proposed project is unlikely to have a permanent impact on these sites. Project design criteria in **Appendix D** would mitigate potential impacts.

Potential exists for a small number of unknown heritage resources in buried contexts or in areas of poor surface visibility along some portions of the APE, which could be affected by project activities. The potential for buried sites is low along most of the APE. Holocene and Pleistocene terrace settings near creeks, where unanticipated discoveries may occur, should be monitored during surface clearing and trenching activities (**Appendix D**). Other areas that

	should be monitored include a site located on a Pleistocene alluvial flat south of Fisherman Creek that yielded a Paleoindian point base, and sites located in the vicinity of Game Creek that have yielded buried cultural resources, including a Late Archaic point fragment. If potential heritage resources are identified during project implementation, the Forest Service would immediately implement practices to avoid and protect them.”
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6. AIR QUALITY

Comments: 12-1, 16-9

Comment	Response
<p>To lessen the impact, additional controls should be required on the air compressor engine at the proposed gas processing facility.</p> <p>Supporting Statements:</p> <p>As highways in the United States become more congested and air quality concerns increase, using pipelines instead of trucks to transport essential products may be beneficial.</p> <p>Projected NO_x and CO emissions are higher for the Proposed Action than under No Action, primarily due to air compressor emissions associated with the new gas processing facility. To lessen the impact, the air compressor engine should at least meet BACT criteria or the use of an electric motor for the compressor should be considered.</p>	<p>The air compressor engine would meet BACT criteria, as specified in Chapter 2. The text in Chapter 2 was modified to read as follows. “A small gas processing facility (Rim Station) would be constructed on private lands in the vicinity of U.S. 189/191 near the southern end of the pipeline route in Section 24, T. 36 N., R. 112 W. This facility would occupy a small site, less than 1 acre in size. It would be designed using best available control technology (BACT) and would include a glycol dehydration unit and a small natural gas-fired air compressor to inject air into the gas stream.” No change was made to Appendix D.</p>

7. SCENIC, VISUAL, AND RECREATION VALUES, INCLUDING ELIGIBILITY FOR INCLUSION IN THE WILD AND SCENIC RIVERS SYSTEM

Comments: 3-4, 8-3, 8-6, 11-6, 11-8, 12-2, 15-3, 15-4

Comment	Response
<p>The recreational and scenic integrity of the Hoback and Snake Rivers must be retained to ensure their eligibility for designation under the Wild and Scenic Rivers Act. Unless the pipeline is close to the highway through a majority of the canyon, the impact on the scenic byway will be considerable. The impacts associated with open-cutting stream/river crossings and maintenance of a linear pipeline corridor, in places within ¼ mile of the Hoback River, will certainly impact the river’s outstanding scenery values. The statement in the DEIS that outstanding scenery values would not be affected by the proposed project is not adequately supported. A more detailed restoration plan must be developed before making a decision as to whether the proposed project will impact outstanding scenery values.</p> <p>Supporting Statements:</p> <p>The impacts associated with open-cutting the Hoback River, including the effects on all river segments found to be eligible for inclusion in the Wild and Scenic Rivers System, will jeopardize their potential inclusion in this system.</p> <p>Additional information on planned highway reconstruction in the Hoback Junction area is provided. WYDOT has considered the continued eligibility of the Hoback River under the Wild and Scenic Rivers Act with the potential build alternatives in the landslide prone Hoback Junction area that include bridging the</p>	<p>Additional information was used to supplement the analysis and discussion of scenic values and recreation resources in Chapters 3 and 4 and clarify how effects on river corridors, scenic values and recreation resources would be reduced and meet retention standards for visual quality. Appendix D, as revised for the FEIS, clarifies how effects on river corridors will be reduced, and improves applicable design criteria for reclamation procedures and mitigation measures/plans. Appendix D contains detailed requirements for restoration of areas disturbed during pipeline installation, and specifies the monitoring activities that will be associated with reclamation.</p> <p>The retention of the scenic integrity of the Hoback River corridor is explained on page 2-14, as follows. “The Forest Plan for the BTNF contains visual quality standards that protect scenic views within the Wild and Scenic Rivers System corridor (W&S corridor) for the Hoback River, which is an eligible Recreation River, and along the Wyoming Centennial Scenic Byway (scenic byway), which includes U.S. 189/191. Foreground viewing areas within ¼ to ½ mile of the viewer must meet a visual quality objective (VQO) of retention along the W&S corridor and the scenic byway. Under a retention VQO, activities may only repeat form, line, color, and texture that are frequently found in the characteristic landscape. Changes should not be visually evident. Within the highway corridor, near the highway, the existing landscape incorporates linear disturbance areas that include the highway surface, shoulder, pullouts, ditches, signage and mile markers, and guard rails. The disturbance associated with the pipeline corridor would repeat existing visual elements (form, line, color, texture) in the highway corridor. If placed in this characteristic landscape, the pipeline corridor would meet a visual standard of retention.”</p> <p>The proposed location for the proposed pipeline is summarized in Chapter 2 on page 2-37, as follows. “The pipeline would encroach on the highway corridor in constricted areas along Hoback Canyon and where it must cross the highway. Throughout half of Hoback Canyon, the pipeline would be located more than 28 feet away from the edge of the existing pavement. In the most constricted areas within Hoback Canyon (about half of the canyon), the pipeline would be located 12 to 28 feet away from the edge of the existing pavement.”</p>

<p>river at two locations or a channel change allowing a toe berm to stabilize the landslide that would be avoided with the pipeline project.</p> <p>Some of the denials of potential reroutes had a legitimate rationale, but most were based on visual impacts. It appears that visual retention has a higher priority than human safety. Other alternatives that take the pipeline farther than 50 feet from the travelway should be considered.</p> <p>Pipeline route markers should be placed where they would not interfere with existing land uses or detract from the scenic value of the Hoback Canyon.</p> <p>The pipeline must be close to the road through a majority of the canyon or a great deal of long term damage will be done to the beauty of this irreplaceable scenic byway.</p> <p>The number of projects under review that have the potential of forever changing this beautiful area provide cause to be concerned about the BTNF, the Hoback River, and the beautiful Hoback basin and canyon.</p> <p>The ecological and recreational integrity of the Hoback and Snake Rivers must be retained to ensure their eligibility for designation under the Wild and Scenic Rivers Act. Object to the proposed open-cutting technique for the river crossings and require more information in relation to horizontal directional drilling.</p> <p>Concerned that the impacts associated with open-cutting the Hoback River, including the effects on all river segments found to be eligible for inclusion in the Wild and Scenic Rivers System, will jeopardize their</p>	<p>The location of the pipeline route in relation to the highway has also been clarified in Chapter 4 on page 4-51. “Over most of the proposed pipeline route (about 42 miles), disturbance would be confined to areas within about 125 feet of the existing U.S. highway.” The remaining 8 miles of the proposed pipeline route divert from the highway corridor and passes through the Camp Creek saddle area, as clarified on page 4-51. “The effects would be concentrated along the U.S.189/191 highway corridor through Hoback Canyon and in the Camp Creek saddle area where the pipeline route diverts from the highway corridor for about 8 miles.”</p> <p>Visual retention was not given a higher priority than human safety in the EIS analysis. Continued collaboration between LVE and WYDOT, which occurred after the release of the DEIS and the submission of WYDOT’s comments on the DEIS, resulted in agreements that were acknowledged in Chapter 2 on page 2-2., as follows. “An independent engineering design review addressing the location and design of portions of the pipeline route within the highway corridor was conducted for the Wyoming Department of Transportation (WYDOT) by PB Energy Storage Services, Inc. (2005). The results of this review were used in the design of the proposed action; however, continued coordination between WYDOT and LVE since the final report was issued has resulted in joint agreement to modify some design criteria in an effort to reduce surface disturbance without compromising public safety.”</p> <p>Chapter 4 was modified on pages 4-9 to 4-10 to clearly describe the effects associated with river/stream crossings, as noted above under Issue 3. Wetlands, Riparian Areas, and Stream/River Crossings.</p>
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<p>potential inclusion in this system.</p> <p>The maintenance of a linear corridor, which will be grassy in areas with vegetation, within ¼ mile of the Hoback River will certainly impact the river’s outstanding scenery values.</p>	
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8. COORDINATION WITH WYDOT ACTIVITIES AND REQUIREMENTS, INCLUDING WYDOT SAFETY CONCERNS

Comments: 1-1, 3-4, 3-5, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 10-1, 11-3, 11-4, 11-5, 14-5, 15-6

Comment	Response
<p>WYDOT should be consulted regarding final design plans for the pipeline. A pipeline within 50 feet of the edge of the travelway does increase the potential hazard to the public and highway workers, and does represent a noticeable effect on the transportation system during operations and maintenance of the pipeline. The potential for third party damage should be mitigated wherever possible.</p> <p>Supporting Statements:</p> <p>The pipeline should be buried to meet safety standards in all locations.</p> <p>WYDOT needs to be consulted regarding final design plans for the pipeline in the area from Game Creek Road to South Park Loop Road, because five lanes, a wildlife underpass, a pathway shift, and use of a retaining wall to avoid new construction at the “Old West Cabins” are being considered for this road segment.</p> <p>The placement of the pipeline within 50 feet of the</p>	<p>Continued collaboration between LVE and WYDOT, which occurred after the release of the DEIS and the submission of WYDOT’s comments on the DEIS, resulted in agreements that were acknowledged in Chapter 2 on page 2-2., as follows. “An independent engineering design review addressing the location and design of portions of the pipeline route within the highway corridor was conducted for the Wyoming Department of Transportation (WYDOT) by PB Energy Storage Services, Inc. (2005). The results of this review were used in the design of the proposed action; however, continued coordination between WYDOT and LVE since the final report was issued has resulted in joint agreement to modify some design criteria in an effort to reduce surface disturbance without compromising public safety.”</p> <p>Chapters 1, 2, 3, and 4, and Appendix D have been modified to reflect the results of coordination that has occurred among the Forest Service, WYDOT, and LVE, and agreements on alignments and specifications that have been reached. Principal changes were changes to the depth of burial of the pipeline. The collaboration and agreements between LVE and WYDOT are summarized in Chapter 3 on page 3-102. “WYDOT and LVE have collaborated on the development of appropriate requirements for a pipeline located along the highway corridor of U.S. 189/191, where a formal right-of-way does not exist through the Hoback Canyon area on NFS lands. ... WYDOT requirements for burial of the pipeline 48 inches (4 feet) below the ground surface wherever the pipeline would be within 50 feet of the edge of the highway pavement would be met. Where there is a likelihood of increased WYDOT maintenance and construction activity with the potential to penetrate to the level of the pipe, WYDOT requirements for burial of the pipeline 72 inches (6 feet) below the ground surface would be met. Where the pipeline crosses beneath the highway, the elevation of the pipe for</p>

<p>edge of the travelway does impair the full use and safety of the highway. Ditch cleaning and the majority of the excavation and drilling associated with delineator post installation, guardrail posts, slide repair, sign posts, reconstruction, etc. by WYDOT occur within 50 feet of the edge of the travelway.</p> <p>Denials of most potential reroutes were based on visual impacts. It appears that visual retention has a higher priority than human safety. The DEIS acknowledges that fatal accidents can and do occur when third party damage takes place. WYDOT has found that you don't hit what isn't there. Other alternatives that take the pipeline farther than 50 feet from the travelway should be considered.</p> <p>Where difficult conditions are encountered at road and highway crossings, open cutting of the highway is not assumed, unless the planned bore cannot be relocated to a viable crossing location.</p> <p>Pipeline route markers should be spaced a minimum of 1,000 feet apart, or along a line of sight, whichever is less, and also where the alignment changes direction within the highway easement, in addition to road crossings, water crossings, property boundaries, and other locations where markers would not interfere with existing lands uses or detract from the scenic values in Hoback Canyon.</p> <p>WYDOT intends to request that LVE relocate the pipeline if the pipeline corridor is needed for highway maintenance or reconstruction work. This request would conflict with the statement on page 4-60, where the DEIS states that the permanent pipeline corridor would be unavailable for uses or highway maintenance</p>	<p>the crossing will match the elevation of the pipe at either end of the crossing. WYDOT construction monitoring requirements and specifications for identifying the pipeline location and marking the pipeline route will be met. Any deviations from these requirements at specific locations would be determined in consultation with WYDOT and the Forest Service and documented in the Forest Service authorization for the pipeline.”</p> <p>Chapter 4 was modified on page 4-59 to include the following language at the end of the Transportation section, “unless the pipeline could be avoided or moved.”</p>
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<p>that would require excavation or vegetation with deep root structures unless the pipeline could be avoided.</p> <p>Pipeline and highway construction efforts should coincide to minimize disruption.</p> <p>The requirement for a 75-foot work corridor and 80 temporary work areas for a 6-inch pipeline appears to be more disturbance than necessary.</p> <p>It seems confusing and contradictory that WYDOT insists the pipeline be 50 feet from the road, but allows the road to be crossed 21 times by the pipeline.</p> <p>A decision on the pipeline should be delayed until a decision on the highway route is made for Hoback Junction. Locating the pipeline and the reconstructed highway along the same alignment could reduce impacts and avoid the Gros Ventre roadless area. The cumulative impacts of constructing two linear routes through this part of the Forest are not considered.</p>	
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9. PIPELINE SIZE/CAPACITY AND LINK TO OIL AND GAS DEVELOPMENT IN NORTHERN SUBLETTE COUNTY

Comments: 11-2, 13-6, 14-1, 14-2, 14-3

Comment	Response
<p>The proposed pipeline should not facilitate additional development of natural gas in northern Sublette County or growth in the Jackson area. A 6-inch pipeline could at most handle the gas produced from 1 or 2 wells, or a fraction of just one good producing well. The LVE pipeline will have little impact on creating an outlet for additional wells to come online. Odorization of the gas before it enters the pipeline will partially alleviate the</p>	<p>Additional information from the independent engineering design review was used in the analysis and discussion related to pipeline size and capacity. The following text was added in Chapter 4 on page 4-75. “The proposed pipeline providing gas to LVE’s customers in the Jackson area would not affect or facilitate oil and gas development in northwestern Wyoming due to the limited capacity of the proposed six-inch pipe with an outside diameter of 6.625 inches and no larger, and its design to provide processed and odorized gas to LVE’s customers. The anticipated operational pressure of the proposed pipeline would range between 60 and 300 pounds per square inch (psi), with an average system pressure of around 200 psi.</p>

concern that raw gas from a potential well along the route could be added to the pipeline. Given the low carrying capacity of the 6-inch pipeline, there is not much room for new wells to tap into the line.

Supporting Statements:

Nothing in the DEIS backs up the statement that this pipeline and processing facility will not facilitate the development of gas wells in northern Sublette County.

The pipeline will create a permanent demand for fossil fuel (natural gas) to supply Jackson, and the associated environmental effects resulting from gas production, over the long term. As a result of this pipeline, the northern Sublette County area would be committed to oil and gas development and its associated environmental impacts over the long term in order to provide an uninterrupted supply of natural gas.

Each day Jackson residents use about 1/15 of the daily production of one decent producing well in the Upper Green River area. A 6 inch pipeline pressurized at 400 psi can at most handle the gas produced from 1 or 2 wells, or a fraction of just one good producing well. Keeping the pipeline at 6 inches alleviates the concern that this proposal will encourage or facilitate more development in the Upper Green River area.

It is important to have a pipeline that is big enough to allow some room for increased demand, but not so big that it really becomes a facilitator of new natural gas fields or growth in the Jackson area. A six inch diameter pipeline seems to properly balance these concerns. The wells in the Jonah and Pinedale Anticline fields are connected to the national grid via

However, the pipeline would be capable of operating under considerable pressures, with the maximum allowable operating pressure (MAOP) of the pipeline at 1,440 pound-force per square inch gauge (psig), a unit of measure to indicate the pressure on a surface. The design of pipeline materials to meet higher standards was selected for public safety. The use of pipeline materials of higher standards than would be required for the anticipated conditions provides a higher safety factor for a pipeline that will be installed near a highway.”

<p>major pipelines 20 inches or more in diameter.</p> <p>The LVE pipeline will have little impact on creating an outlet for additional wells to come online. Odorization of the gas before it enters the pipeline will partially alleviate the concern that raw gas from a potential well along the route could be added to the pipeline. The low carrying capacity of the 6 inch pipeline will not allow much room for new wells to tap into the line.</p> <p>A new EIS should be done if there is any effort to connect new wells to the pipeline and a supplemental EIS should be prepared if there is any change above 400 psi of pressurization, in light of the increased carrying capacity of the pipeline at these higher pressure levels. The carrying capacity of the pipeline at 400 psi should be clarified in the FEIS.</p>	
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10. OTHER PERMITS	
Comments: 2-1, 2-2, 2-3, 4-1, 4-2, 4-3, 7-15, 8-4	
Comment	Response
<p>Other permits, in addition to a special use permit authorization from the Forest Service, would be required for the proposed project.</p> <p>Supporting Statements:</p> <p>A Grading and Erosion Control permit will be required for this project to ensure that work done on private lands minimizes potential impacts and complies with applicable standards in the Teton County Land Development Regulations.</p> <p>Teton County planning regulations must be followed to ensure compatibility of the proposed use at affected</p>	<p>Regulatory information referenced in comments was reviewed. Additional information was used to supplement the analysis and discussion of regulatory requirements in Chapter 1. Appendix D was modified to clearly present the requirements associated with the proposed project.</p>

locations on private lands and adequate conditioning or mitigation of environmental impacts and the effects on public facilities.

An Environmental Analysis will be required in accordance with existing Teton County regulations to assess the impacts and planned mitigation of the proposed development on private lands and protected resources designated on the Teton County Natural Resources Overlay and the Scenic Resource Overlay, as well as protected creeks and wetlands.

Two Water Quality Division permits may apply to the project. Any discharges to waters of the state, including hydrostatic pipeline testing, must be permitted under the Wyoming Pollutant Discharge Elimination System (WYPDES) program. Some sampling will be required and effluent limits will be set for any constituents of concern. A general Notice of Intent (NOI) permit is required for surface disturbances of one or more acres associated with construction activities to provide for the sound management of storm water.

The administrator of the Water Quality Division may authorize temporary increases in turbidity above the numeric criteria in Section 23 (a) of the Standards in response to an individual application for a specific activity. This project has the potential to exceed the 10 NTU limit on the Hoback River and a variance is recommended.

This project may require a Section 404 permit from the U.S. Army Corps of Engineers for work occurring within the waters of the U.S.

A right-of-way easement application will need to be filed with the Lands Branch Supervisor regarding

<p>permission for construction easements on WHMAs.</p> <p>Access to the pipeline across state highways or through state-maintained fences will require approach permits and/or fence modification agreements.</p>	
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11. RECLAMATION	
Comments: 2-1, 3-1, 5-7, 7-2, 7-6, 12-3, 15-4	
Comment	Response
<p>All lands disturbed by the proposed project should be reclaimed. The pipeline corridor should be reclaimed with native vegetation and contoured to the original slope. The prevention of noxious weed establishment along the pipeline corridor must be a priority in all reclamation efforts.</p> <p>Supporting Statements:</p> <p>All lands disturbed should be reclaimed and seeded with Forest Service-recommended native species or species that would not prevent the eventual establishment of native vegetation, including the use of tree and shrub species where appropriate, according to the language in the summary instead of the language in the first paragraph on page 4-16.</p> <p>A reclamation management and monitoring plan (pre/during/post construction) should be implemented to ensure the integrity of habitats and should identify clear and concise objectives.</p> <p>Reclamation of disturbed areas will be required for this project to ensure that work done on private lands minimizes potential impacts and complies with applicable standards in the Teton County Land</p>	<p>Where clarifications or additional project design criteria were needed or inconsistencies existed, Chapter 2 and/or Appendix D were modified to address reclamation concerns. Additional clarifications regarding reclamation were added to Chapter 2 on pages 2-29, 2-30, 2-32, and 2-33.</p> <p>The following text has been added in Chapter 2 on page 2-32. “The overall reclamation objective is to restore the area to the general appearance, including vegetative and hydrologic conditions, existing prior to the installation of the pipeline. However, a 20-foot-wide permanent pipeline corridor would be maintained in an herbaceous state, without shrubs or trees. Roots of trees or shrubs could potentially damage the protective coating of the steel pipe. Best management practices (BMPs) and Forest Plan standards and guidelines provide the basis for the reclamation plan for the project. Extensive project design criteria in Appendix D have been developed to meet reclamation objectives, including recontouring, drainage and erosion control, revegetation, restoration of river and stream channels and banks at crossings, and restoration of wetland function in affected areas.”</p> <p>The text in Chapter 2 was also modified on pages 2-32 to 2-33 to read as follows. “In areas of unstable slopes, steep cuts would be restored to a stable position and protected by applying appropriate sediment and erosion control measures. Protective measures may include installation of waterbars or diversion terraces across the construction corridor to stabilize slopes, prevent channeling along the trench line, and divert surface runoff away from the backfilled trench into stabilized areas.</p> <p>Revegetation would provide long-term sediment and erosion control by establishing a permanent vegetative cover as soon as practicable over disturbed areas. Re-establishment of</p>

<p>Development Regulations.</p> <p>WGFD fences or other facilities affected during construction activities should be replaced in-kind, as needed</p> <p>The following design criteria could be added on page D-15. To provide bank stability and reduce bank erosion, techniques such as pre-seeded rolls can be used to provide quick colonization.</p> <p>The maintenance of a linear corridor, which will be grassy in areas with vegetation, within ¼ mile of the Hoback River will certainly impact the river’s outstanding scenery values. A more detailed restoration plan must be developed before making a decision as to whether the proposed project will impact outstanding scenery values.</p>	<p>vegetation would also reduce the visual impacts of the pipeline corridor. All disturbed areas would be revegetated in accordance with federal and state specifications or as directed by the landowner. The initiation of revegetation activities would depend on seasonal constraints established by the Forest Service or landowners.</p> <p>Revegetation would be initiated within one month after completion of ground disturbing activities, unless otherwise directed by the Forest Service. Design criteria for revegetation are contained in Appendix D and summarized here. Following recontouring and seedbed preparation in accordance with the design criteria, disturbed areas would be seeded using short-term sediment and erosion control measures, as needed. Where the re-establishment of desired species of native vegetation is likely to occur without seeding, this revegetation process is preferred over seeding. Generally, all areas would be mulched with certified weed-free hay at a rate of 2 tons per acre. Hay would be crimped into the soil surface on slopes greater than 20 percent. Woody nursery stock would be used as directed by the Forest Service or landowners, typically where revegetation limitations are severe or the predisturbance community is composed of woody vegetation. Soil erosion would be minimized by surface roughening, mulching, use of erosion control fabric, and installation of surface drainage systems. Sediment barriers and controls such as silt fencing, rock, and straw bale check dams, would be used as needed to keep sediment from entering surface waters.</p> <p>Short-term sediment and erosion control would be provided by surface mulch, with and without tackifying agents and soil binders, and other erosion control materials. Mulch would aid in soil moisture retention and minimize topsoil erosion by wind and water. Mulching or tackifying may be employed in areas exposed to wind, on unstable slopes, or in sensitive soils. Mulch would be anchored to the ground using a crimper or disc. In some cases, an erosion control blanket may be utilized on unstable slopes, along restored streambanks, and in areas where application of mulch and tackifiers would be impractical.”</p> <p>Appendix D, modified for the FEIS, contains detailed requirements for restoration of areas disturbed during pipeline installation, and specifies the monitoring activities that will be associated with reclamation..</p>
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12. WATER QUALITY	
Comments: 4-4, 7-18, 12-3	
Comment	Response
<p>Any potential effects on water quality associated with the proposed pipeline should be mitigated in accordance with other applicable permits for the project.</p> <p>Supporting Statements:</p> <p>Any potential effects on surface water quality associated with the proposed project should be addressed and every effort should be made to prevent erosion, because sediment created by the project can affect the water quality of the receiving water.</p> <p>All chemicals, solvents, and fuels should be kept at least 150 feet away from streams and riparian areas.</p> <p>To prevent detrimental instream impacts, including trout-spawning grounds, appropriate pollution prevention measures should be in place to ensure that suspended solids, spillages, or other materials do not enter the watercourse. To reduce the likelihood of pollution, all materials should be kept off-site within secure areas, away from sensitive areas.</p>	<p>Additional information was used to supplement the discussion related to water quality in Chapter 1. Additional information regarding responsibilities and authorizations of other agencies was added on page 1-17 and pages 1-19 to 1-21.</p> <p>Chapter 4 was modified to clearly present the effects of the proposed project on water resources and the effects of potential surface disturbance associated with river/stream crossings on water quality and sedimentation. The following text was added on pages 4-9 to 4-10. “The character of the effects at proposed stream crossings under Alternative B would be similar to the effects described by Reid and Anderson (1998), based on a review of 27 pipeline water crossing effects monitoring studies undertaken by the pipeline industry and resource management agencies over 25 years in North America. Conventional or open-cut water crossings reviewed in the study are those pipeline installations that occur without any isolation or diversion of flow away from the work area. The trench for the pipe is generally excavated and backfilled by backhoe within the active (flowing) channel. Conventional open-cut crossings are often the only feasible construction method. Reid and Anderson (1998) found that open-cut crossings typically resulted in an elevation of downstream sediment loads during and shortly after the period of construction. Most of these studies reviewed indicated that sediment released during instream construction caused short-term changes to downstream aquatic life and their habitats. Identified effects included alterations to streambed conditions; reductions in the abundance and diversity of benthic invertebrate communities; and reductions in the abundance of fish populations. Effects were typically non-residual, and recovery was usually evident within a year. In addition to sediment related effects, habitat at the crossing site was affected by the excavation and backfilling of the pipeline trench and associated changes to bank conditions and riparian vegetation.</p> <p>Reid and Anderson (1998) found the most visible result of instream pipeline construction to be the generation of a plume of turbid water downstream. Levels of suspended sediment increased rapidly at the onset of instream activity but were not uniform throughout construction. Discrete peaks of high suspended sediment concentration occurred during activities such as blasting, trench excavation, and backfilling. During pipeline trench excavation and backfilling, suspended sediment concentrations were observed to exceed several thousand mg/L. These peaks declined rapidly when the streambed was not disturbed,</p>

although some residual increases due to scour of the trench, erosion of exposed surfaces at the crossing site, and the resuspension of settled material occurred. For properly stabilized crossings at the end of construction, sediment loading was found to be restricted to the duration of instream construction. Inputs of sediment into the watercourse persisted in some cases if the approach slopes of the crossing had been inadequately stabilized or revegetated. Crossings of small watercourses (< 10 meters wide) were often completed in less than a day; one to three days were generally required for medium sized crossings (10 - 20 meters wide).

Reid and Anderson (1998) also described the deposition and subsequent flushing of sediment downstream of the crossing. As the material excavated is larger and in greater quantity than that transported under normal flow conditions, substantial deposition of released sediments occurs within a short distance downstream. This immediate deposition is generally dominated by the coarser fraction of the excavated sediments. Deposition of finer sediments such as clays and silts will tend to occur further downstream as a light coating on the streambed, or in low energy environments such as backwater areas. Sediment (especially silts and clays) deposited downstream of the crossing site can filter through the interstitial spaces in the streambed and change its porosity and composition. Large depositions in slow velocity areas such as shallow side pools, behind boulders and instream debris have been observed to require longer periods or higher flows for complete removal. Full recovery of affected habitats has been suggested to be dependent on high flow conditions associated with storm events, or spring meltwater conditions flushing deposited sediments downstream. Complete removal of deposited sediments has been reported to occur within 6 weeks to 2 years after construction.

Reid and Anderson (1998) also reported that crossings under very low flow conditions resulted in minimal dilution and high suspended sediment concentrations. However, downstream transport was minimized under these flow conditions. At the other extreme, high flows associated with storm events increased background levels and also eroded exposed substrates at the crossing location. High flows increased the width of the water crossing and generally hampered construction operations.”

Appendix D was modified on pages D-7, D-8, D-13, D-14, D-16, D-17, D-19, D-23, and D-24 to clarify how effects on water quality, wetlands, and disturbed areas will be reduced.

13. GROS VENTRE ROADLESS AREA	
Comment: 15-6	
Comment	Response
Locating the pipeline and the reconstructed highway along the same alignment near Hoback Junction could reduce impacts and avoid the Gros Ventre roadless area.	The discussion of alternatives in Chapter 2 has been modified on page 2-6 to clarify the rationale for not locating the pipeline and the reconstructed highway along the same alignment in the Hoback Junction area, as follows. “The alignment and design considerations for a highway in a landslide area would not be the same as the considerations for a pipeline through the same landslide area. The aboveground installation of the pipeline in a landslide area, which is the design selected for the proposed project to minimize the risk of rupture caused by a landslide, would not be feasible for a pressurized gas pipeline located in close proximity to a highway.”

14. MONITORING	
Comments: 5-10, 5-11, 7-2, 7-9, 12-4, 13-5, 16-2, 16-8	
Comment	Response
The FEIS should clarify the monitoring requirements for the proposed project. Monitoring of wetlands, upland vegetation, and riparian resources should be included. Monitoring of reclaimed areas should include identification of any soil transport to wetlands.	Appendix D was modified to clarify how effects on water quality, wetlands, habitats, and disturbed areas will be reduced, and improve applicable design criteria, reclamation procedures, and mitigation measures/plans for wetlands, riparian areas, and stream/river crossings. Relevant changes to Appendix D occurred on pages D-7, D-8, D-13, D-14, D-16, D-17, D-19, D-23, and D-24.
<p>Supporting Statements:</p> <p>A reclamation management and monitoring plan (pre/during/post construction) should be implemented to ensure the integrity of habitats and should identify clear and concise objectives.</p> <p>Monitoring requirements to ensure achievement of 70 percent cover in reclaimed areas, including the frequency and duration of monitoring efforts, and length of time given to determine whether an area needs to be reseeded should be clarified (page D-21).</p>	Appendix D was modified on pages D-23 to D-24 to address monitoring requirements.

<p>The FEIS should clarify the monitoring requirements for stream health in drainages crossed by the project, including the methods, frequency, and duration of monitoring, and the length of time given to determine whether stream health is acceptable or identify actions to be taken to restore the stream (page D-21).</p> <p>No human activity associated with monitoring should occur on or near elk feedgrounds or wildlife habitat management areas (WHMAs) during the winter seasonal timing restriction period (November 15 through April 30). LVE personnel should coordinate all on-the-ground monitoring activities in WHMAs with the feedground supervisor.</p> <p>Pre-disturbance monitoring of affected wetlands should be conducted to document the occurrence of amphibians throughout the project zone and identify important breeding, resting, and potential hibernation sites. Concentration areas should be monitored and managed during and after construction to prevent habitat loss and direct mortality.</p> <p>A reclamation management and monitoring plan (pre/during/post construction) should be implemented to ensure reclamation success, including the integrity of habitats, and identify clear and concise objectives. Monitoring of reclaimed areas for sedimentation and noxious weeds or invasive species should continue for at least five years, as specified by the Forest Service.</p> <p>Monitoring of the success of trench breakers and bottom seals should be incorporated in Appendix D. A specific remedy and responsibility for implementation for any hydrologic alteration should be identified. Disturbed areas should achieve 90 percent cover within</p>	
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<p>a specified timeframe.</p> <p>Recent performance of the BP pipeline in Alaska is a testament to the inadequacy of the process for overseeing and maintaining pipelines. LVE has no experience managing pipelines and yet must be relied upon to manage this pipeline project. The DEIS provides no LVE protocol or plan for managing the pipeline, including training employees. Pipeline inspection using helicopter flyover and on-the-ground inspection is not likely to be effective from October through May. There is no indication of how buzzing of wildlife and people’s homes will be avoided.</p>	
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15. ENERGY CONSERVATION AND ALTERNATIVE ENERGY OPTIONS

Comments: 1-2, 13-7, 13-8, 14-1, 14-4

Comment	Response
<p>The FEIS should provide analysis of other reasonable alternatives to the gas pipeline, such as other energy options, to meet future demand.</p> <p>Supporting Statements:</p> <p>Please demonstrate leadership regarding energy conservation and a decrease in energy consumption and invest in more renewable sources.</p> <p>Moving away from not toward increased use of fossil fuels is the prudent energy strategy.</p> <p>The DEIS provides no complete analysis of other reasonable alternatives to the gas pipeline option, specifically other energy options to meet future demand to offset the projected LNG truck transport to meet future demand. The alternative of trucks vs. pipeline is</p>	<p>The public’s interest in the BTNF and the conservation of energy is appreciated. Public involvement is the foundation of NEPA process. No additional alternatives were developed in response to these opinions expressed by the commenters.</p> <p>Energy conservation and alternative energy sources are addressed in the discussion of the purpose and need for the proposed project on page 1-5, where the text has been modified to read as follows. “In addition to LNG, residences and businesses in the Jackson area also rely on a variety of energy resources. The principal energy source for the Jackson area is hydropower from the Pacific northwest (AllJacksonHole 2007, Jackson Hole News & Guide 2005). Other energy sources include coal-burning power plants near Rock Springs and elsewhere, wind power from the Foote Creek Wind Project between Laramie and Rawlins, hydropower from the Strawberry Creek Reservoir in the Star Valley, liquid propane (LP), fuel oil, wood burning, and solar power. LP and fuel oil are also trucked into the Jackson area from other areas in Wyoming.”</p> <p>Chapter 2 was modified on page 2-2 to make it clear that alternatives based on energy conservation and alternative energy sources are outside the scope of this EIS analysis, which</p>

<p>less than compelling in the DEIS when compared with the disruption that the pipeline would cause during and after construction.</p> <p>Under either system of gas delivery to Jackson (trucks or pipeline), residents are causing a portion of the problems and environmental impacts they are concerned about in the Upper Green River Valley.</p> <p>Even with increased focus on renewable energy providing a part of the energy portfolio for LVE and its customers and increased conservation efforts, there will still be a need for energy supplied by electricity, propane, and natural gas. The current LNG system is not in the best long-term interests of the community given the safety and environmental impacts. Given that Jackson will continue to use natural gas, a natural gas pipeline seems a better delivery system than LNG.</p>	<p>responds to a special use application submitted by LVE, and were not considered further.</p>
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<p>16. NO ACTION ALTERNATIVE</p>	
<p>Comments: 10-1, 11-1, 13-1, 15-1</p>	
<p>Comment</p>	<p>Response</p>
<p>No Action is the preferred alternative. The extent of disruption and risk to construct, maintain, and inspect the pipeline are disproportionate to the benefits, and the demand/need is not justified.</p> <p>Supporting Statements:</p> <p>The No Action alternative will ultimately prove to have the least amount of impacts on the BTNF’s natural resources.</p> <p>It’s hard to believe that a project of this magnitude is warranted or cost justified solely for the purpose of</p>	<p>The public’s interest in the BTNF and the conservation of the Forest’s resources is appreciated. Public involvement is the foundation of NEPA process. No change was made to the DEIS in response to these opinions expressed by the commenters.</p> <p>The following clarifications were made in the FEIS to improve the understanding to the reader of the purpose of and need for the project, the selection of a preferred alternative, and the environmental effects of the No Action alternative.</p> <p>Additional information was used to supplement the analysis and discussion of the purpose and need for the proposed project in Chapter 1. The following text was added on page 1-5. “National Energy Policy to support a 21st century quality of life involves ensuring reliable energy and a clean environment by modernizing conservation and infrastructure, increasing</p>

<p>eliminating 2 to 3 truck trips per day.</p> <p>No Action is the only reasonable choice. The Forest Service responsible officials should deny issuing a special use permit to Lower Valley Energy for the proposed pipeline because of safety concerns, a questionable need for the pipeline, the lack of room in the canyon for the pipeline, potential future maintenance issues such as corrosion, and concern that the pipeline would not be properly maintained.</p>	<p>energy supplies, including renewables, accelerating the protection and improvement of the environment, and increasing energy security (National Energy Policy Development Group 2001). According to the Transportation Research Board (TRB), transportation of energy fuels via transmission pipelines is safer than transportation via other modes, but a significant failure can result in loss of life, personal injury, property damage, and environmental damage (TRB 2004).</p> <p>The importance of fuel diversity in supplying the nation’s long term energy needs has been explained by the Edison Electric Institute, the association of electric companies owned by shareholders. No single fuel is capable of providing enough energy for all of the U.S. needs. Using a variety of fuels, including coal, nuclear energy, hydropower, natural gas, and renewable energy resources, while enhancing efficiency and conservation, helps protect consumers and national security from fuel shortages or disruptions, price fluctuations, and changes in regulatory practices. A diverse fuel mix also takes advantage of regional differences in fuel availability and capitalizes on abundant natural resources in the U.S. By addressing challenges that limit the development and viability of fuel sources, the U.S. can enjoy an affordable and reliable supply of energy in the future (Edison Electric Institute 2005).</p> <p>The purpose of and need for the Lower Valley Energy Natural Gas Pipeline Project is sixfold: 1) enhance the diversity of fuels available in Jackson by providing a steady supply of natural gas to the Jackson area; 2) use an economical supply of natural gas that has been developed nearby, in northern Sublette County, to meet the needs of LVE’s customers in the Jackson area; 3) modernize the energy supply infrastructure in western Wyoming by installing a natural gas pipeline which would eliminate 500 or more round trips per year by tanker trucks along public highways; 4) improve the environment by reducing the effects on air quality from tanker truck emissions; 5) improve the protection of the environment, including scenic, recreational, fisheries, and wildlife values in Hoback Canyon, by using a pipeline which is less likely than a tanker truck to have an incident occur that could cause environmental damage; and 6) potentially reduce the risk of a wildland fire start associated with an incident related to the delivery of natural gas to Jackson.”</p> <p>Chapter 2 was modified to emphasize that all alternatives considered in detail could potentially be identified as the preferred alternative. The following text was added on page 2-41. “The Forest Service has identified the Proposed Action, which fully achieves the purpose and need for the proposed project, as the preferred alternative. All alternatives considered in detail could potentially be identified as the preferred alternative. The No Action alternative</p>
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was considered in detail for selection as the preferred alternative, but was not identified as the preferred alternative because it would not achieve the purpose and need for the proposed project, which encompasses multiple objectives. The No Action alternative would achieve only one of the project objectives, continue to provide LNG to the Jackson area as needed. Both the No Action alternative and the Proposed Action would meet all Forest Plan guidance.”

The environmental effects of the No Action alternative were modified as follows in Chapter 4.

The following text was added on page 4-3. “Continued use of tanker trucks carrying LNG would contribute to the risk of a wildland fire escaping from a highway crash involving a large, intense fire. Emissions from a wildland fire associated with LNG transportation by tanker truck would contribute to air quality impacts. Smoke from wildland fires could potentially produce gases and particulate emissions during the combustion of forest fuels. The emission rates (the amount of emissions produced per unit of time) can vary significantly depending on a variety of factors, including fuel type and amount, condition, and combustion characteristics. Smoke from wildland fires can contain high concentrations of fine particulate matter. (USFS 2003a).”

The following text was added on page 4-21. “Tanker truck incidents involving a fire are more likely to occur than pipeline incidents involving a fire. The use of tanker trucks to deliver gas to Jackson under the No Action alternative is more likely to involve the risk of a wildland fire escaping from the scene of an incident.

While incident accounts of LNG tanker truck crashes indicate the release of LNG is not common (CH-IV International 2006), a 1980’s test of a pool fire involving 10,000 gallons of LNG, the amount of LNG transported in one tanker truck, generated a cone-shaped fire 60 feet in diameter and 250 feet high (Daily Astorian 2007).”

The text on page 4-75 was modified to read as follows. “An increased risk of tanker truck accidents would potentially increase the need for fire and emergency services. Providing fire and emergency services would require expenditures for specialized training and equipment, based on the specialized needs for dealing with LNG (National Association of State Fire Marshals 2005).”

17. PROPERTY OWNERS	
Comment: 13-2	
Comment	Response
Property owners have been ignored for the most part. Property owners who reach their property through access roads that cross the pipeline corridor have not been contacted. There is no analysis of how to protect the area if a fire or explosion occurred and a fire spread to 200 properties in Hoback Ranches.	The analysis and discussion of effects in Chapter 4 was modified on page 4-46 to include local access roads in the analysis of effects on land uses. The analysis of the effects of pipeline construction on access roads is contained on page 4-56, and was not changed. Project design criteria in Appendix D have been developed to reduce potential effects on roads that access private property, therefore, no modification of Appendix D was made under Roads and Highways on page D-8. Project design criteria in Appendix D also have been developed to provide a requirement for a project fire prevention and suppression plan to minimize the risk of fire danger and provide for immediate response in case of fire caused by project operations. Appendix D language under Fire and Fuels on pages D-18 and D-19 was clarified to emphasize project requirements.

18. ERRATA	
Comment: 5-3	
Comment	Response
A correction is offered for data presented on page 3-16 of the DEIS, where flows listed for Flat Creek below the Snake River are actually flows for the Snake River below Flat Creek.	The suggested correction was made in the FEIS on page 3-18. The length of the pipeline segment that will be installed aboveground also was reduced from 3,000 feet to 1,500 feet wherever it was referenced in the FEIS to reflect updated project designs.

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Robert F
Stewart/PEP/OS/DOI@DOI
08/09/2006 02:19 PM

To comments-interntrn-bridger-teton-big-piney@fs.fed.us
cc Greg W Clark/R4/USDAFS@FSNOTES, Nancy
Hall/R4/USDAFS@FSNOTES, Teresa J
Trulock/R4/USDAFS@FSNOTES
bcc
Subject Lower Valley Energy DEIS - DOI Comments

The Department of the Interior's comments on the subject document are attached.

If you require paper-copy or a word-processor version, please so advise.



Lower Valley Energy DEIS - DOI Comments.pdf

Robert F. Stewart
Regional Environmental Officer
Office of Environmental Policy and Compliance
U.S. Department of the Interior
P.O. Box 25007 (D-108)
Denver, CO 80225-0007
Voice: (303) 445-2500
Fax: (303) 445-6320



United States Department of the Interior



OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Denver Federal Center, Building 56, Room 1003
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007

August 10, 2006

9044.1
ER 06/642

Greg Clark, District Ranger
Big Piney Ranger District
USDA-Forest Service, Bridger-Teton National Forest
P.O. Box 218
Big Piney, Wyoming 83113

Dear Mr. Clark:

As requested by USDA Forest Service, Bridger-Teton National Forest, the U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement for the Lower Valley Energy Natural Gas Pipeline Project (DEIS) in portions of Sublette and Teton counties, Wyoming, and offers the following comments.

Migratory Birds

We are concerned that the DEIS does not discuss the Forest Service's obligation to protect migratory birds under the Migratory Bird Treaty Act (MBTA). The Final EIS (FEIS) should state what measures will be implemented to protect migratory birds, especially all known sagebrush obligates. To avoid further decline of sagebrush obligate songbirds, we recommend that the Forest Service identify habitats within the project area important to these sagebrush obligate birds and clearly identify measures that will be implemented to reduce the negative impacts.

Additionally, the DEIS does not discuss whether the mountain plover, as identified in the U.S. Fish and Wildlife Service's (USFWS) August 13, 2004 letter (attached), occurs in the project area. In the event that the mountain plover occurs in the project area, we encourage the Forest Service and their applicants to provide protection for this species, as it is protected under the MBTA. Measures to protect the mountain plover from further decline may include (1) avoidance of suitable habitat during the plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities in prairie dog towns, and (3) prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitat. Suitable habitat for nesting mountain plovers includes grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, agricultural lands, cultivated lands, sod farms, and prairie dog towns. Surveys prior to construction activities in suitable habitat are strongly recommended.

Specific Comments

Page 3-16, Water Quantity: Flows listed for "Flat Creek below the Snake River" are actually flows for the Snake River below Flat Creek. These are available on the internet at http://waterdata.usgs.gov/nwis/nwisman/?site_no=13018750&agency_cd=USGS.

Page 3-16, Water Quantity: Flows for Flat Creek are several orders of magnitude lower than those for the Snake River, ranging from a mean monthly high of 218 cfs in June 1996 to a low of 25.7 cfs in September 2001 (station 13018350, available on the internet at http://waterdata.usgs.gov/nwis/nwisman/?site_no=13018350&agency_cd=USGS).

Page 3-53, Federally Listed Wildlife Species: The DEIS states the threatened and endangered species that occur in Sublette and Teton Counties include the bald eagle, grizzly bear, gray wolf and Canada lynx, and the candidate species that occur include the yellow-billed cuckoo. In response to your scoping notice, the USFWS letter, dated August 13, 2004 (attached), also lists the black-footed ferret as potentially occurring in both Sublette and Teton counties. The Forest Service should clarify whether the black-footed ferret is likely to occur in the project area and if potential effects to the ferret may occur.

Page 4-29, Federally Listed Wildlife Species: The DEIS states that the Forest Service has made a "may affect, not likely to adversely affect" determination for listed species from this project. If it is concluded that any Federal project may affect listed species, the Federal agency should request the USFWS to concur with the determination prior to authorization of the project.

Page 4-31, Federally Listed Wildlife Species: The DEIS states that "portions of six Lynx Analysis Units (LAUs) would be affected by the proposed project. . ." and that "short- and long-term disturbance to suitable habitat would be minimal when compared with the extent of the affected LAUs within the Project Area." Additionally, the DEIS states that "no change in overall percentage of suitable habitat within the affected LAUs would result from implementation of the proposed project." On Federal lands, Federal agencies have agreed to apply the Lynx Conservation Assessment Strategy (LCAS, Ruediger et al., 2000) to project evaluations in order to analyze effects of planned and on-going projects on the lynx and lynx habitat. The LCAS contains the best available information regarding management actions and their effects on lynx and provides standards and guidelines which, when implemented, will provide consistent and effective conservation of lynx on Federal lands. We recommend that the FEIS clarify whether the proposed action complies with the LCAS.

Page 4-35, Greater Sage Grouse: The DEIS states that if greater sage-grouse leks were established along the pipeline corridor, appropriate spatial and seasonal buffers would be established. The document also states that sagebrush habitat modification through surface disturbing activities may indirectly impact the greater sage-grouse by removing potential habitats (potential leks, brood rearing, or wintering habitats). The FEIS should clarify whether the greater sage-grouse may be impacted by this project. If any potential impacts to the greater sage-grouse exist, then surveys should be conducted prior to any surface disturbing activities (see attached August 13, 2004 letter).

Page D-7, Wetland Construction: Item #3 states that topsoil salvage will not be required in saturated or inundated wetlands. We recommend that the final EIS clarify why topsoil salvage will not occur in these areas. The topsoil can be a valuable seed bank for many wetland species of vegetation. If the reasoning is for preventing sedimentation, this should be indicated.

Page D-18, Wildlife and Fisheries: The DEIS does not include guidelines for reducing encounters with grizzly bears during construction or other associated project activities. We strongly encourage the enforcement of food storage and garbage disposal stipulations. Additionally, contractors should be aware of, and provide to their employees and subcontractors, information on the protected status of the grizzly bear and on appropriate personal safety measures and behavior in grizzly bear habitat. Project activities may occur during the denning season (November to March) to avoid disturbance to grizzly bears. We recommend that your actions comply with the Interagency Grizzly Bear Guidelines (1986) and the Final Conservation Strategy for the Grizzly Bear in the Yellowstone Ecosystem (2003).

Page D-19, Wildlife and Fisheries: Item #7 states that "if negative effects on ... migratory birds, nests, or eggs are observed during construction activities, the Forest Service will be notified and specific mitigation measures directed at that species will be implemented under direction of the Forest Service." "Take" is prohibited under the MBTA, 16 U.S.C. 703. Therefore, any negative effect on migratory birds, nests, or eggs during construction is considered take and may result in a violation of the MBTA. To reduce the potential for take, surveys for nesting migratory birds, particularly in important bird habitat areas, should be conducted prior to construction activities. If nesting birds are identified, construction activities should be conducted outside of the nesting period which is typically March to June. Mowing of vegetation within the right-of-way prior to the nesting season may serve to discourage some species of birds from using the right-of-way to nest.

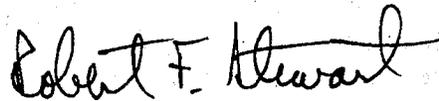
Page D-19, Wildlife and Fisheries: Item #8 states that "if nesting migratory birds are identified during construction activities, the timing of project activities in that area will avoid the nesting period..." We recommend that the FEIS clarify protective measures for migratory birds. Surveys for nesting migratory birds, particularly in important bird habitat areas, should be conducted **prior** to construction activities to identify if nesting birds are in the project area.

Page D-21, Monitoring: Item #3 states that "disturbed areas will be monitored to ensure achievement of 70 percent cover (as compared with nearby undisturbed areas)." The following information should be included for clarification: 1) the length of the monitoring period, e.g. annually, every three years, etc.; 2) whether the area would be reseeded if the disturbed areas do not achieve at least a 70 percent cover; 3) the length of time given to determine if the area needs to be reseeded, e.g. after 1 year, 3 years, etc.; and 4) plans for long-term monitoring of the disturbed area and length of time over which monitoring will occur.

Page D-21, Monitoring: Item #5 states that "stream health will be monitored in drainages crossed by the project." The following information should be added for clarification: 1) what methods or guidelines will be used for monitoring stream health, e.g. bank vegetation recovery success, stream invertebrate density, etc.; 2) how often the stream will be monitored and what period of time will be used to determine if the stream's health is acceptable; and 3) actions to be taken to restore the stream if stream health is poor.

Thank you for the opportunity to review and comment on this DEIS. The Department has a continuing interest in working with the Forest Service to ensure that impacts to resources of concern to the Department are adequately addressed. For matters related to river flows, please contact Lloyd Woosley, Chief of the USGS Environmental Affairs Program, at (703) 648-5028 or at lwoosley@usgs.gov. For all other issues addressed in this letter, please contact Kim Dickerson, Biologist, USFWS Wyoming Ecological Services Field Office, at (307) 772-2374, extension 30 or at kimberly_dickerson@fws.gov.

Sincerely,



Robert F. Stewart
Regional Environmental Officer

Attachment

References

Interagency Grizzly Bear Committee. 1986. Interagency grizzly bear guidelines. Missoula, MT. 100 pp.

Interagency Conservation Strategy Team. 2003. Final Conservation Strategy for the Grizzly Bear in the Yellowstone Ecosystem. Missoula, MT. 86 pp.

Ruediger, B.J., Claar, S. Gniadek, B. Holt, L. Lewis, S. Mighton, B. Naney, G. Patton, T. Rinaldi, J. Trick, A. Vandehey, F. Wahl, N. Warren, D. Wenger, and A. Williamson. 2000. Canada Lynx Conservation Assessment and Strategy. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Forest Service Publication #R1-00-53, Missoula, MT. 142 pp.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

In Reply Refer To:
ES-61411/W.19/WY8629

August 13, 2004

Greg Clark, District Ranger
Big Piney Ranger District
Box 218
Big Piney, Wyoming 83113

Subject: NOI of EIS for the Lower Valley Energy Natural Gas Pipeline, Bridger-Teton National Forest, Sublette and Teton Counties, Wyoming, ER 04/568

Dear Mr. Clark,

Thank you for your Scoping Notice of July 2004, for the Lower Valley Energy Natural Gas Pipeline project, received in our Cheyenne U.S. Fish and Wildlife Service (Service) Office on July 12. The Forest Service has received an application for a special use permit for the construction and operation of a natural gas pipeline from Lower Valley Energy. The proposed pipeline would bring natural gas service to the Jackson, Wyoming area from a location near Merna, Wyoming. The pipeline would cross portions of the following townships and ranges: Township 36 North, Ranges 112 and 113 West; Township 37 North, Ranges 111, 112, and 113 West; Township 38 North, Ranges 113, 114, and 115 West; Township 39 North, Ranges 115 and 116 West; and Township 40 North, Range 116 West, in Sublette and Teton Counties, Wyoming. The proposed action for the subsequent EIS includes a pressurized pipeline that would carry processed natural gas over a distance of 46.5 miles. Project design, final route selection, a proposed gas processing facility, and access needs will also be considered in the EIS.

Federal Agency Responsibilities

The Service has responsibility, under a number of Federal laws, treaties, Executive Orders, and memoranda of agreement, for the conservation and management of fish and wildlife resources. Some of these same authorities also require other Federal agencies to consider, avoid, or prevent adverse impacts to fish, wildlife, and wetland resources. To ensure resources are afforded adequate consideration and protection, Federal agencies are often required to consult with the Service regarding potential impacts their actions may have on fish and wildlife resources.

Interagency participation during the early stages of project planning, including design, determination of effects and preparation of a biological assessment, are crucial to successful section 7 streamlining. We encourage the U.S. Forest Service (Forest Service) to coordinate closely with the Service throughout the NEPA and section 7 process.

In response to your request to review the proposed action, we are providing you with comments

on (1) threatened, endangered and candidate species, (2) migratory birds, and (3) wetlands and riparian areas. The Service provides recommendations for protective measures for threatened and endangered species in accordance with the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Protective measures for migratory birds are provided in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668. Wetlands are afforded protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act and the Fish and Wildlife Act of 1956, as amended, 70 Stat. 1119, 16 U.S.C. 742a-742j.

If the proposed project may affect a listed species, consultation with the Service pursuant to section 7(a)(2) of the Act will be required. Section 7 (a)(1) of the Act directs Federal agencies, or their representatives, to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation and recovery of listed species. Therefore we encourage you to incorporate measures into the project design for the conservation of listed species.

In accordance with section 7 of the Act, we have determined that the following threatened or endangered species may potentially occur within the Wyoming portion of project area. We would appreciate receiving information as to the status of each of these species within the project area.

SPECIES	STATUS	HABITAT
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Threatened	Found throughout state
Black-footed ferret (<i>Mustela nigripes</i>)	Endangered	Prairie dog towns
Canada lynx (<i>Lynx canadensis</i>)	Threatened	Montane forests
Gray wolf (<i>Canis lupus</i>)	Experimental	Greater Yellowstone ecosystem
Grizzly bear (<i>Ursus arctos horribilis</i>)	Threatened	Montane forests
Ute ladies'-tresses (<i>Spiranthes diluvialis</i>)	Threatened	Seasonally moist soils and wet meadows of drainages below 7000 feet

If the proposed action will lead to water depletions (consumption) in the Colorado River system, impacts to threatened and endangered species inhabiting the downstream reaches of this system should be included in the evaluation.

Colorado River fish

Endangered

Downstream riverine habitat of the
Yampa, Green and Colorado River
systems

Bald eagle: While habitat loss still remains a threat to the bald eagle's full recovery, most experts agree that its recovery to date is encouraging. Bald eagles may live up to 30 years in the wild. Adult eagles establish life-long pair bonds and build huge nests in the tops of large trees near rivers, lakes, marshes, or other wetland areas. Bald eagles may use the same nest in consecutive years. Although bald eagles may range over great distances, they usually return to nest within 100 miles of where they were fledged.

In order to reduce potential adverse effects to the bald eagle, a disturbance-free buffer zone of 1 mile should be maintained around eagle nests and winter roost sites. Activity within 1 mile of an eagle nest or roost may disturb the eagles and result in "take." If a disturbance-free buffer zone of 1 mile is not practicable, then the activity should be conducted outside of February 15 to August 15 to protect nesting birds and November 1 to April 15 to protect roosting birds.

The two primary causes of raptor mortality (including bald eagles) are electrocutions and collisions with power lines. If any part of this project will involve construction of new power lines or modification of existing lines, the Service recommends that the project proponent take strong precautionary measures to protect bald eagles and other raptors by raptor-proofing all power lines. Power lines should be built to meet all the requirements of the National Electrical Safety Code and the standards identified in the *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996*, Avian Power Line Interaction Committee (APLIC 1996), to minimize electrocution potential.

Power lines constructed as part of the infrastructure associated with the Lower Valley Energy Natural Gas Pipeline Project should be built to standards identified by the Avian Power Line Interaction Committee (1996) to minimize electrocution potential. The Service has more specific recommendations that reaffirm and compliment those presented in *Suggested Practices*. The Forest Service should ensure that these additional standards to minimize bald eagle mortalities associated with utility transmission lines, be incorporated into the stipulations for all project actions. It should be noted that these measures vary in their effectiveness to minimize mortality and may be modified as they are tested in the field and laboratory. Local habitat conditions should be considered in their use. The following represents areas where bald eagle protection measures should be applied when designing/constructing new distribution lines or modifying existing facilities:

For new distribution lines and facilities:

1. Distribution lines should be buried where feasible.
2. Raptor-safe structures (e.g., with increased conductor-conductor spacing) are to be used that address adequate spacing for bald eagles (i.e., minimum of 60 inches for bald eagles).
3. Equipment installations (e.g., overhead service transformers, capacitors, reclosers, etc.)

should be made bald eagle safe (e.g., by insulating the bushing conductor terminations and by using covered jumper conductors).

4. Jumper conductor installations (e.g. corner, tap structures, etc.) should be made bald eagle safe by using covered jumpers or providing adequate separation.
5. Arrestor and cutout covers should be employed when necessary.
6. Lines should avoid high avian use areas such as wetlands, prairie dog towns, and grouse leks.

For modification of existing facilities:

1. We suggest identifying and rectifying problem structures that include dead ends, tap or junction poles, transformers, reclosers and capacitor banks or other structures with less than 60 inches between conductors or a conductor and ground.
2. Exposed jumpers should be covered.
3. Any pole top ground wires should be capped.
4. Grounded guy wires should be isolated by installing an insulating link.
5. On transformers, install insulated bushing covers, covered jumpers, and cutout covers and arrestor covers, if necessary.
6. When bald eagle mortalities occur on existing lines and structures, bald eagle protection measures should be applied (e.g., modify for raptor-safe construction, install safe perches or perching deterrents, nesting platforms or nest deterrent devices, etc.).
7. In areas where midspan collisions are a problem, install line-marking devices that have been proven effective. All transmission lines that span streams and rivers, should maintain proper spacing and have markers installed.

Black-footed ferret: Black-footed ferrets may be affected if prairie dog towns are impacted. Please be aware that black-footed ferret surveys are no longer recommended in black-tailed prairie dog (*Cynomys ludovicianus*) towns statewide or in white-tailed prairie dog towns except those noted in the attached letter. However, we encourage the Federal agency to protect prairie dog towns for their value to the prairie ecosystem and the myriad of species that rely on them. We further encourage you to analyze potentially disturbed prairie dog towns for their value to future black-footed ferret reintroduction.

If white-tailed prairie dog (*Cynomys leucurus*) towns or complexes greater than 200 acres will be disturbed, surveys for ferrets may be recommended in order to determine if the action will result in an adverse effect to the species. Surveys are recommended even if only a portion of the white-tailed prairie dog town or complex (as identified in our February 2, 2004 letter) will be disturbed. According to the Black-Footed Ferret Survey Guidelines (USFWS 1989), a prairie

dog complex consists of two or more neighboring prairie dog towns less than 7 km (4.3 miles) from each other. If a field check indicates that prairie dog towns may be affected, you should contact this office for guidance on ferret surveys.

Canada lynx: The Service published a Final Rule in the Federal Register on March 24, 2000 (65 FR 16052) listing the Canada lynx (*Lynx canadensis*) in the contiguous United States as threatened. Historically, lynx were observed in every mountain range in the state. Concentrations of observations occur in western Wyoming in the Wyoming and Salt River ranges and continuing north through the Tetons and Absaroka ranges in and around Yellowstone National Park. Numerous records have also come from the west slope of the Wind River Range, with fewer observations in the Bighorn and Uinta mountains (Reeve et al. 1986). In Wyoming, the lynx lives in subalpine/coniferous forests of mixed age and structural classes. Mature forests with downed logs and windfalls provide cover for denning sites, escape, and protection from severe weather. Early successional forest stages provide habitat for the lynx's primary prey, the snowshoe hare. The snowshoe hare, the predominant prey of lynx, require structured and regenerating forests that provide an abundance of cover and food at ground level in the summer and snow level in winter. It is likely that forest structure and composition during the winter period is the limiting factor. Dense, low-hanging conifer branches are essential for thermal cover. To most benefit lynx, such habitats should retain an overstory for concealment and forested connectivity between feeding, security, and denning habitats. On federal lands, federal agencies have agreed to apply the Lynx Conservation Assessment Strategy (LCAS, Ruediger et al., 2000) to project evaluations in order to analyze effects of planned and on-going projects on the lynx and lynx habitat. The LCAS contain the best available information regarding management actions and their effects on lynx and provide standards and guidelines which, when implemented, will provide consistent and effective conservation of lynx on federal lands.

The Service has identified significant threats to the lynx including (1) loss and/or modification of habitat; (2) past commercial harvest (trapping), which is partially responsible for the extremely small lynx population; (3) inadequate regulatory mechanisms to protect lynx and their habitat; and (4) other factors such as increased human access into suitable habitat and human-induced changes in habitat allowing other species (e.g., bobcats and coyotes) to move into lynx habitat and compete with them. Examples of human alteration of forests include loss of and conversion of forested habitats through urbanization, ski area and other developments; fragmentation that leads to isolation of forested habitats by highways or other major construction; and certain timber harvesting practices and fire suppression measures.

Gray wolf: All wolves within Wyoming are now considered part of the nonessential experimental population. Although such wolves remain listed and protected under the Act, additional flexibility is provided for their management under the provisions of the final rule and special regulations promulgated for the nonessential experimental population on November 22, 1994 (59 FR 60252). Requirements for interagency consultation under section 7 of the Act differ based on the land ownership and/or management responsibility where the animals occur. On any unit of National Park System or National Wildlife Refuge System lands, wolves that are part of the experimental population are considered a threatened species and the full provisions of section 7 apply. Thus, the Service and any other action agency is prohibited from authorizing, funding or carrying out an action within a National Park or National Wildlife Refuge that is likely to jeopardize the continued existence of the gray wolf. Formal section 7 consultation is required if a Federal action within these areas "may affect" the gray wolf.

Additional management flexibility is provided for managing wolves existing outside of the National Park or National Wildlife Refuge System (e.g., Forest Service lands). Wolves designated as nonessential experimental in these areas are treated as proposed rather than listed. Two provisions of section 7 apply to Federal actions outside National Parks or National Wildlife Refuges: (1) section 7 (a)(1), which states all Federal agencies shall utilize their authorities to carry out programs for the conservation of listed species; and, (2) section 7 (a)(4), which requires Federal agencies to confer with the Service on actions that are likely to jeopardize the continued existence of the species.

Wolves are dependent on movements of big game populations and may occur in large ungulate migration, wintering, or parturition areas. During project activities wolves may change their use of the project areas based upon changes to big game population numbers and changes in movement of herds. Project planning should consider impacts to big game populations, including wintering grounds and migration corridors.

Grizzly bear: The grizzly bear has a wide range of habitat tolerance. Contiguous, relatively undisturbed mountainous habitat having a high level of topographic and vegetative diversity characterizes most areas where the species remains. Habitat loss and direct and indirect human-caused mortality is related to the decline in numbers. We strongly encourage the enforcement of food storage and garbage disposal stipulations. In addition, contractors should be aware of, and provide to their employees and subcontractors, information on the protected status of the grizzly bear and on appropriate personal safety measures and behavior in grizzly bear habitat. Project activities may occur during the denning season (November to March) to avoid disturbance to grizzly bears. We recommend that your actions comply with the Interagency Grizzly Bear Guidelines (1986) and the Final Conservation Strategy for the Grizzly Bear in the Yellowstone Ecosystem (2003).

Ute ladies'-tresses: Ute ladies'-tresses (*Spiranthes diluvialis*) is a perennial, terrestrial orchid, 8 to 20 inches tall, with white or ivory flowers clustered into a spike arrangement at the top of the stem. *Spiranthes* typically blooms from late July through August, however, depending on location and climatic conditions, it may bloom in early July or still be in flower as late as early October. *Spiranthes* is endemic to moist soils near wetland meadows, springs, lakes, and perennial streams where it colonizes early successional point bars or sandy edges. The elevation range of known occurrences is 4,200 to 7,000 feet in alluvial substrates along riparian edges, gravel bars, old oxbows, and moist to wet meadows. Soils where *Spiranthes* have been found typically range from fine silt/sand, to gravels and cobbles, as well as to highly organic and peaty soil types. *Spiranthes* is not found in heavy or tight clay soils or in extremely saline or alkaline soils. *Spiranthes* seems intolerant of shade and small scattered groups are found primarily in areas where vegetation is relatively open. Surveys should be conducted by knowledgeable botanists trained in conducting rare plant surveys. *Spiranthes* is difficult to survey for primarily due to its unpredictability of emergence of flowering parts and subsequent rapid desiccation of specimens. The Service does not maintain a list of "qualified" surveyors but can refer those wishing to become familiar with the orchid to experts who can provide training or services.

Colorado River Water Depletions

Formal consultation is required for projects that may lead to depletions of water to the Colorado River system. Federal agency actions resulting in water depletions to the Colorado River system

may affect the endangered Bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), and Razorback sucker (*Xyrauchen texanus*) downstream in the Green and Colorado River systems.

In general, depletions include evaporative losses and/or consumptive use of surface or groundwater within the affected basin, often characterized as diversions less return flows. Project elements that could be associated with depletions include, but are not limited to, ponds (detention/recreation/irrigation storage/stock watering), lakes (recreation/irrigation storage/municipal storage/power generation), reservoirs (recreation/irrigation storage/municipal storage/power generation), hydrostatic testing of pipelines, wells, dust abatement, diversion structures, and water treatment facilities. Any actions that may result in water depletion should be identified. The document should also include an estimate of the amount and timing of average annual water depletion (both existing and new depletions), describe methods of arriving at such estimates, describe location of where depletion occurs as specifically as possible, if and when it will be returned to the system and what the depletion is being used for. Note that if the project has peculiarities or oddities, the Service may have more specific questions regarding these particular water depletions.

Candidate Species

Yellow-billed cuckoo: On July 25, 2001, the U.S. Fish and Wildlife Service designated the yellow-billed cuckoo, in a portion of its range, as a candidate species under the Endangered Species Act of 1973, as amended. The yellow-billed cuckoo is a secretive, robin-sized bird that in the western United States breeds in willow and cottonwood forests along rivers and streams. The bird's most notable features are a long, boldly-patterned black-and-white tail, and an elongated and down-curved bill, which is yellow on the bottom. Its plumage is grayish-brown above and white below. Adults have narrow, yellow eye rings. The bird primarily eats large insects including caterpillars and cicadas as well as the occasional small frog or lizard.

The yellow-billed cuckoo historically bred throughout much of North America. West of the Continental Divide, the species historically occurred from southern British Columbia, Canada, to northwestern Mexico. In recent years the species' distribution in the West has shrunk considerably. Biologists estimate that more than 90 percent of the bird's riparian (streamside) habitat in the West has been lost or degraded as a result of conversion to agriculture, dams and river flow management, bank protection, overgrazing, and competition from exotic plants such as tamarisk. Western cuckoos breed in large blocks of riparian habitat, in other words, habitat found along natural waterways. The western cuckoos particularly like woodlands with cottonwoods and willows.

The Service has determined that the yellow-billed cuckoo in the western United States, roughly west of the crest of the Rocky Mountains, meets the criteria to qualify as a Distinct Population Segment (DPS). A DPS is a population that is distinct and important to the species as a whole and is generally described geographically. For the yellow-billed cuckoo, the DPS is based primarily on the marked separation from other populations of yellow-billed cuckoos. Birds within this DPS are located in the states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming. For Wyoming and northern and central Colorado, the boundary coincides with the Continental Divide.

The Service will conduct an annual review of the status of the yellow-billed cuckoo. The

Service encourages State and Federal agencies as well as other parties to give consideration to these species in environmental planning.

Migratory Birds

Please recognize that consultation on listed species may not remove your obligation to protect the many species of migratory birds, including eagles and other raptors protected under the MBTA and BGEPA. Of particular focus is yellow-billed cuckoo and mountain plover. The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations and does not require intent to be proven. Section 703 of the MBTA states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird..." The BGEPA, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

In order to promote the conservation of migratory bird populations and their habitats, the Service recommends the U.S. Forest Service implement those strategies outlined within the Memorandum of Understanding directed by the President of the U.S. under the Executive Order 13186, where possible.

Sensitive Species

Federal agencies are also encouraged to consider sensitive species or species at risk in project review. Your consideration of these species is important in preventing their inclusion on the Endangered Species List. State natural heritage databases maintain current information on sensitive species. We encourage you to utilize this information during project planning.

Sage-Grouse: The Service has received several petitions to list the greater sage-grouse (*Centrocercus urophasianus*) under the Act. The causes for the greater sage-grouse rangewide decline are not completely understood and may be influenced by local conditions. However, habitat loss and degradation, as well as loss of population connectivity are important factors (Braun 1998, Wisdom et al. 2002). Greater sage-grouse are dependent on sagebrush habitats year-round. Therefore, any activities that result in loss or degradation of sagebrush habitats that are important to this species should be closely evaluated for their impacts to sage grouse. If important breeding habitat (leks, nesting or brood rearing habitat) is present in the project area, the Service recommends no project-related disturbance between March 1 and June 30, annually. Minimization of disturbance during lek activity, nesting, and brood rearing is critical to sage grouse survival.

We recommend you contact the Wyoming Game and Fish Department to identify important greater sage-grouse habitats within the Wyoming portion of the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

Information suggests that greater sage-grouse populations are negatively affected by construction

activities, especially those that degrade important sagebrush habitat, even when mitigative measures are implemented (Braun 1998, Lyon 2000). Greater sage-grouse populations can repopulate areas developed for resource extraction after habitat reclamation for the species (Braun 1987). However, there is no evidence that populations attain their previous levels and reestablishment of sage grouse in a reclaimed area may take 20-30 years, or longer (Braun 1998). Therefore, this project should be carefully evaluated for long-term and cumulative effects on the greater sage-grouse, since reclamation may not restore populations to pre-activity levels. The Bureau should ensure this activity does not exacerbate greater sage-grouse declines on either a local or range-wide level.

In 2000, the U.S. Forest Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service signed a Memorandum of Understanding (MOU) with the Western Association of Fish and Wildlife Agencies to conserve the greater sage-grouse and its habitat. This MOU outlined the participation of Federal and State wildlife agencies, including the Wyoming Game and Fish Department, in greater sage-grouse conservation, and these commitments should be considered in project planning in sage-grouse habitat. Additionally, unless site-specific information is available, greater sage-grouse habitat should be managed following the guidelines by Connelly *et al.* 2000.

Mountain Plover

The Service has withdrawn the proposal to list the mountain plover and we will no longer be reviewing project impacts to this species under the Act. We do, however, encourage the Forest Service and their applicants to continue providing protection for this species as it remains protected under the MBTA. Measures to protect the mountain plover from further decline may include (1) avoidance of suitable habitat during the plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities in prairie dog towns, and (3) prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitat. Suitable habitat for nesting mountain plovers includes grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, agricultural lands, cultivated lands, sod farms, and prairie dog towns.

Recommendations

Natural gas development can pose a serious threat to wildlife habitat. Habitat fragmentation, disruption of seasonal migration routes and disruption of breeding activity is caused by access roads, pipelines, power lines, transmission stations, compressors and increased traffic that accompany natural gas development. Therefore, the Service encourages the Forest Service to consider the following recommendations during project planning. We recommend that compressors be fitted with high quality mufflers to keep noise to a minimum. Staging areas (parking and storage) should be outside of riparian areas and should be limited along the route. Additionally, the width of the right of way should be minimized wherever possible, especially in riparian areas, river crossings, and in sensitive habitats. Pipeline right-of-ways should be gated to minimize the possibility of recreational use and further disturbance in sensitive areas and carpooling should be encouraged. The pipeline and looped sections should be fitted with emergency shut-off valves, especially in riparian areas and at water crossings and the project proponent should have an official emergency plan in the event of a pipeline failure.

Fish, wildlife and plant inventories should be conducted in the proposed project area prior to commencement of work and during the appropriate time of year. Adequate protective measures

should be established to protect habitat from degradation associated with pipeline development and the ongoing operating activities associated with pipelines. Disturbed areas should be reclaimed with native plants immediately after the completion of the project.

Wetlands/Riparian Areas

Wetlands perform significant ecological functions which include: (1) providing habitat for numerous aquatic and terrestrial wildlife species, (2) aiding in the dispersal of floods, (3) improving water quality through retention and assimilation of pollutants from storm water runoff, and (4) recharging the aquifer. Wetlands also possess aesthetic and recreational values. The Service recommends measures be taken to avoid and minimize wetland losses in accordance with Section 404 of the Clean Water Act and Executive Order 11988 (floodplain management) as well as the goal of "no net loss of wetlands." If wetlands may be destroyed or degraded by proposed actions, those wetlands should be inventoried and fully described in terms of their functions and values. Acreage of wetlands, by type, should be disclosed and specific actions should be outlined to avoid, minimize, and compensate for all unavoidable wetland impacts.

Riparian or streamside areas are a valuable natural resource and impacts to these areas should be avoided whenever possible. Riparian areas are the single most productive wildlife habitat type in North America. They support a greater variety of wildlife than any other habitat. Riparian vegetation plays an important role in protecting streams, reducing erosion and sedimentation as well as improving water quality, maintaining the water table, controlling flooding, and providing shade and cover. In view of their importance and relative scarcity, impacts to riparian areas should be avoided. Any potential, unavoidable encroachment into these areas should be further avoided and minimized. Unavoidable impacts to streams should be assessed in terms of their functions and values, linear feet and vegetation type lost, potential effects on wildlife, and potential effects on bank stability and water quality. Measures to compensate for unavoidable losses of riparian areas should be developed and implemented as part of the project.

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 mitigation plan should also include a contingency plan to be implemented should the mitigation not be successful. In addition, wetland restoration, creation, enhancement, and/or preservation does not compensate for loss of stream habitat; streams and wetlands have different functions and provide different habitat values for fish and wildlife resources.

Best Management Practices (BMPs) should be implemented within the project area wherever possible. BMPs include, but are not limited to, the following: installation of sediment and erosion control devices (e.g., silt fences, hay bales, temporary sediment control basins, erosion control matting); adequate and continued maintenance of sediment and erosion control devices to insure their effectiveness; minimization of the construction disturbance area to further avoid streams, wetlands, and riparian areas; location of equipment staging, fueling, and maintenance areas outside of wetlands, streams, riparian areas, and floodplains; and re-seeding and re-planting of riparian vegetation native to Wyoming in order to stabilize shorelines and streambanks.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If the scope of the project is changed, or the project is modified, in a manner that you determine may affect a listed species, this office should be contacted to

discuss consultation requirements pursuant to section 7(a)(2) of the Act. If you have further questions regarding our comments or your responsibilities under the Act, please contact Ann Belleman of my staff at (307) 578-5942.

Sincerely,

/s/ Jodi L. Bush *for*

Brian T. Kelly
Field Supervisor
Wyoming Field Office

cc: FWS, Region 6, Federal Activities Coordinator, Denver (B. Dach)
WGFD, Non-Game Coordinator, Lander (B. Oakleaf)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne (V. Stelter)

References

- Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1996. Edison Electric Institute and the Raptor Research Foundation. Washington, D.C.
- Braun, C.E. 1987. Current issues in sage grouse management. Proc. West. Assoc. Fish and Wildlife Agencies 67:134-144
- Braun, C.E. 1998. Sage grouse declines in western North America: What are the problems? Proceedings of the Western Association of Fish and Wildlife Agencies 78:139-156.
- Connelly J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4): 967 - 985.
- Interagency Grizzly Bear Committee. 1986. Interagency grizzly bear guidelines. Missoula, MT. 100 pp.
- Interagency Conservation Strategy Team. 2003. Final Conservation Strategy for the grizzly Bear in the Yellowstone Ecosystem. Missoula, MT. 86 pp.
- Lyon, A.G. 2000. The potential effects of natural gas development on sage grouse (*Centrocercus urophasianus*) near Pinedale, Wyoming. Thesis, University of Wyoming, Laramie, USA.
- Reeve, A., F. Lindzey, and S. Buskirk. 1986. Historic and recent distribution of the lynx in Wyoming. Wyoming Coop. Fish and Wildl. Res. U., Laramie, Wyoming. 55 pp.
- Ruediger, Bill, Jim Claar, Steve Gniadek, Bryon Holt, Lyle Lewis, Steve Mighton, Bob Naney, Gary Patton, Tony Rinaldi, Joel Trick, Anne Vandehey, Fred Wahl, Nancy Warren, Dick Wenger, and Al Williamson. 2000. *Canada Lynx Conservation Assessment and Strategy*. 2USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Forest Service Publication #R1-00-53, Missoula, MT. 14.
- U.S. Fish and Wildlife Service. 1989. Black-footed ferret survey guidelines for compliance with the Endangered Species Act, April 1989. U. S. Fish and Wildlife Service, Denver, Colorado and Albuquerque, New Mexico. 15pp.
- Vanderhost, J. 1997. Conservation assessment of sensitive moonworts (*Botrychium* subgenus *Botrychium*) on the Kootenai National Forest. Montana Natural Heritage Program, Helena, MT. 82 pp. plus appendices.
- Wagner, W.H. and F.S. Wagner. 1994. Another widely disjunct, rare and local North American moonwort (Ophioglossaceae: *Botrychium* subg. *Botrychium*) American Fern Journal 84:5-10.
- Wisdom, M.J., B.C. Wales, M.M. Rowland, M.G. Raphael, R.S. Holthausen, T.D. Rieh, and

V.A. Saab. 2002. Performance of Greater Sage-Grouse models for conservation assessment in the Interior Columbia Basin, USA. *Conservation Biology* 16: 1232-1242.

Zika, P.F., R. Brainerd, and B. Newhouse. 1995. Grapeferns and moonworts (*Botrychium*, Ophioglossaceae) in the Columbia Basin. Report submitted to Eastside Management Project, U.S. Forest Service, Walla Walla, WA. 116 pp.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref: 8EPR-N

SEP 14 2006

Greg Clark
Big Piney District Ranger
P.O. Box 218
Big Piney, WY 83113

Re: Lower Valley Natural Gas Pipeline
Draft EIS CEQ # 20060264

Dear Mr. Clark:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the *Lower Valley Natural Gas Pipeline Project*, located in the Bridger-Teton National Forest (BTNF). With this project the United States Forest Service (USFS) considers approval for a 49.7 mile pipeline that would cross National Forest, State of Wyoming and private lands in Sublette and Teton Counties. The pipeline, operated by Lower Valley Energy, Inc. (LVE) would carry natural gas from an existing pipeline in the Upper Green River Basin to a facility south of Jackson, Wyoming. The pipeline would replace the existing trucks supplying liquid natural gas to this facility. In assessing this project's projected impact to wetlands and the avoidance and mitigation measures available, EPA reviewed the DEIS and the supporting "*Wetlands Report - Draft EIS Version*" dated August 17, 2006. EPA provides the following comments for consideration as this analysis proceeds.

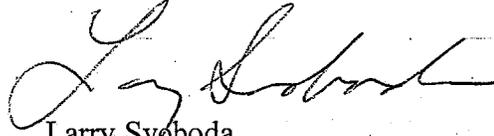
The enclosed "Detailed Comments," document EPA's concerns with potential impacts to wetlands, vegetation, and riparian areas associated with the proposed project. Based on our review, it is not clear that all practicable efforts to avoid impacts to these resources were considered in this analysis as required under the Clean Water Act. We request that additional information, mitigation and monitoring be included in the FEIS and Record of Decision regarding wetlands, upland vegetation, and riparian resources and we suggest additional BMPs that may reduce impacts to wetlands that would be affected. Our Detailed Comments also address air quality, off-road vehicle and invasive plant concerns.



Based on the potential for avoidable impacts to aquatic and terrestrial resources, and on the need for additional information and mitigation to assess whether this project will adequately protect those resources, EPA has issued a rating of **EC-2 (Environmental Concerns - Insufficient Information)**. The "EC" rating indicates that the EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative, or application of mitigation measures or actions that can reduce these impacts. The "2" indicates that EPA has identified additional information, data, analyses or discussion that should be included in the FEIS. A full description of EPA's EIS rating system is enclosed.

We appreciate the opportunity to participate in this project and we will contact you to discuss these comments further. If you have any questions or would like to discuss our comments, please contact me (303-312-6004) or Steven Pratt (303-312-6575) of my staff.

Sincerely,



Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection
and Remediation

Enclosure

cc: Matt B. Bilodeau, US ACOE, Cheyenne, WY
Ronna Simon, Bridger Teton National Forest Hydrologist (Forest Supervisor's Office)

Detailed Comments
Draft Environmental Impact Statement
Proposed Lower Valley Pipeline

Wetland, Aquatic and Riparian Resource Impacts

The DEIS indicates that "53 jurisdictional wetlands covering 30.68 acres were identified within or immediately adjacent to the proposed pipeline disturbance corridor" (p. 3-37). The DEIS does not clearly identify whether the wetland analysis was limited to USFS lands, or if it applies to all land ownerships. Through discussion with the USFS, we understand that the EIS assesses impacts for all land ownerships in the corridor. Please clarify in the Final EIS (FEIS) that the wetland analysis includes the entire project corridor, and please delineate which portions are on federal versus state or private lands.

It would be helpful to include maps specifying wetland locations in the FEIS. The lack of maps including wetlands, soils and topography in both the DEIS and the Wetlands Report make it difficult to determine whether opportunities for impact avoidance may exist. In addition, the FEIS should include information on the functions provided by the wetlands affected by each proposed pipeline crossing. It is important to understand the relationship and significance of these wetlands to the adjacent resources. Executive Order 11990, "Protection of Wetlands," signed in 1978 and amended in 1988, addresses potential long and short-term adverse impacts associated with the destruction or modification of wetlands. The Order requires Federal Agencies to avoid loss of wetland values where possible. Please provide information in the FEIS to allow the determination of the amount of functional loss expected from this project.

The extent to which non-jurisdictional wetlands would be affected by the proposed project is unclear. Non-jurisdictional wetlands would include wetlands which, for various reasons, fall outside regulation of the Clean Water Act. We suggest that all wetlands, including non-jurisdictional, to be crossed or otherwise impacted by the proposal be specifically identified in the FEIS. The analysis may include, but should not be limited to, the number and acreage and a characterization of each wetland's existing conditions and functions.

The Wetlands Executive Order and the Bridger-Teton National Forest (BTNF) Forest Plan indicate that impacts to all wetlands be avoided wherever practicable, and where impacts are unavoidable, best management practices (BMPs), mitigation and monitoring should be applied to all wetlands affected. While it may not be possible to completely avoid wetlands, the alternatives analyzed should demonstrate that wetland disturbance is avoided to the maximum extent practicable. Please include such information or alter the project plan to accomplish this requirement.

Trenching is proposed to accomplish pipeline traverse of all wetlands. The Wetlands Report states (p. 1-1), "Boring of wetlands would require additional surface disturbance for corridor access, extra work space, and staging areas." While boring may require additional upland disturbance, it would negate the need to trench through wetlands. In our opinion, this upland disturbance or the possibility of drilling mud impacts to wetlands (p. 1-1) may not be sufficient to outweigh the direct, and related hydrologic impacts, of trenching. We suggest more low-impact methods be identified and discussed. Where practicable, and where it would not cause more impact to aquatic resources than trenching, we recommend the use of directional drilling (boring) be evaluated and considered on a case by case basis. While some wetlands may have characteristics that would make boring impractical, the reasons provided in the DEIS for universal rejection of directional drilling may not apply to many of the individual wetlands.

Wetland Mitigation

The proposal includes various management practices to minimize construction impacts, but no compensation for the impacts that are unavoidable. The DEIS describes impacts to wetlands from pipeline crossings to be "temporary," but some functional loss and plant community alteration will likely last for many years, and perhaps never be recovered. We encourage the USFS to consider possible compensatory mitigation in this case given the large number of wetland and stream crossings anticipated in this project. The FEIS should provide a wetlands mitigation plan that identifies available existing wetland mitigation sites, and a process for wetlands restoration, creation, enhancement, and/or other compensation for impacted wetlands.

In accordance with the intent of the Wetlands Executive Order, EPA suggests a mitigation commitment that indirect draining of, or direct disturbance of, all wetland areas will be avoided wherever practicable, and a commitment to replace in kind such unavoidably impacted wetlands. Due to the time it can take to adequately reclaim some disturbed wetlands, it is suggested that the USFS require mitigation of wetland disturbance during the project operating time, and that mitigation for any particular wetland or riparian area begin concurrent with the disturbance, or even prior to pipeline construction, if possible. As studies indicate that wetland creation is generally not successful in fully restoring wetland function, it is suggested that the USFS require a two-to-one mitigation of wetland disturbance. EPA also suggests that the USFS require complete avoidance of disturbance to any fen wetland (a Category I resource). Mitigation requirements under 40 CFR Section 230 address the replacement of the wetland functions that are unavoidably lost, and any additional USFS and State mitigation requirements should be adhered to. Any wetland mitigation plan should include, but not be limited to:

- commitments to acquire and start mitigation work prior to project construction;
- detailed schedules of pipeline and wetland creation/restoration work;
- detailed construction plans;
- a detailed mitigation monitoring plan, including a time table;
- detailed performance criteria to measure success;
- detailed specifications and commitments for corrective measures to be taken if performance criteria are not met;

- detailed specifications and commitments to control invasive species; and,
- commitments to the establishment of a protection and management plan in perpetuity (i.e., legal surveys of the specific boundaries with buffers and conservation easements that are given to a land conservancy organization) for all mitigation areas.

We have found that restoring previously disturbed wetlands or straightened stream segments is far more effective than creating wetlands where none previously existed. Regardless of the mitigation option chosen, it is critical to establish baseline conditions for the proposed mitigation site, and to develop quantitative success criteria based on local reference wetland conditions and plan actions to be taken if criteria are not met.

Stream Crossings

All 11 stream crossings are proposed to be accomplished by open cut methods. The DEIS includes some monitoring (4 sites) that indicates boring beneath the stream would be infeasible, however, it is unclear if all 11 of the stream crossings have the same substrate. The FEIS should clarify this issue. Also, we suggest more low-impact methods be identified and discussed. Where practicable, and where it would not cause more impact to aquatic resources than open cut methods, we recommend the use of directional drilling (boring) be evaluated and considered on a case by case basis.

Given the number of stream crossings (11) and the number of wetland crossings (at least 53) we recommend that the Army Corps of Engineers evaluate the possibility of an individual permit, rather than consecutive nationwide, permits. The FEIS should include an accounting of this evaluation and a rationale for the final decision. We make this recommendation on the basis that only one alternative is considered, and that the No Action alternative appears less environmentally damaging.

Monitoring and Adaptive Management

The Design Criteria for wetlands require that wetland hydrology be maintained through the use of trench breakers and bottom seals (p. D-7). If hydrology is inadvertently lost to leakage along the pipeline, the loss of wetland function can extend well beyond the initial disturbance site to down-gradient wetlands. Monitoring of the success of trench breakers and bottom seals should be incorporated into the project. A specific remedy should be required for any hydrologic alteration that is noted through monitoring, and the responsible party should be identified in the FEIS and ROD.

Monitoring Measure #3 (p. D-21) indicates that disturbed areas must achieve "70 percent cover." It is recommended that mitigation efforts achieve cover in wetlands of at least 90 percent, or the original cover percentage, whichever is higher. A timeframe for achieving sufficient cover should be included in the Design Criteria and in the Monitoring Plan.

Monitoring Measure #10 (p. D-22) requires monitoring the condition of reclaimed areas for evidence of soil erosion and transport to stream channels. We recommend the words "and wetlands" be added after the words "stream channels."

Monitoring Measure #13 (p. D-22) should be amended to include the requirements of the Forest Plan, the FEIS (Design Criteria), the Record of Decision and the Wetlands Executive Order (E.O. 11990).

Design Criteria

We recommend that all design criteria applicable to Wetlands and riparian areas be consolidated to one location in the document. The DEIS includes design criteria for “wetland construction” (p. D-7), “drainage crossings” (p. D-8), “streams and watersheds” (p. D15) and “wetland and riparian areas” (p. D-17). Consolidating these items may increase clarity for the reader, decision maker and for those implementing the project. We offer the following comments to the Design Criteria:

Design Criteria for “**Wetland Construction**” (construction in wetlands) (p. D-7):

- We recommend a Criterion be added to indicate “Crossing of wetlands will be accomplished by the least damaging practicable method available.” Site-specific least damaging practicable methods should be identified in the FEIS for each crossing, and if applicable the reasons why boring is not feasible for a specific case.
- Excavation equipment should be operated from outside the wetland (or any environmentally sensitive area) when possible. If equipment must operate in wetlands, then it should operate on mats and where possible, during the non-growing season.
- The duration of operations in wetlands should be minimized, preferably having soil replaced within 24 hours, so vegetation will recover more quickly and effectively.
- We suggest enhancing the Criterion for wetland “topsoil” (#3). A wetland biologist or hydrologist should be on site to identify the depth of topsoil (the O-horizon) for each wetland because the depth will vary between wetlands, or even within a wetland. To enhance plant survival, the topsoil layer should be stored with the green side up until it is replaced. Salvage of the plant layer should be required even in saturated or inundated wetlands.
- The Criteria (#3 and #4) indicate that soil will be “sidecast on top of wetland vegetation.” Wetland disturbance will be minimized if topsoil and subsoil are stored separately outside the wetland. Minimizing wetland disturbance is required by BTNF Desired Conditions (p. 3-36) and as required to reduce “acres disturbed” BTNF Wetland Indicator (p. 3-29).
- Where a wetland is too large, or upland sites are unavailable to stockpile excavated soil outside the wetland, the soil should be segregated and placed on mats on top of wetland vegetation. Again, the time between excavation and trench filling should be minimized to improve recovery.
- Site preparation and construction activities should be timed to avoid disturbing plants and animals during crucial seasons in their life cycle.
- Please consider adding a statement to assure that pipeline bedding material does not act as a drain to the wetland. Perhaps this could be added to Criterion #7.

Design Criteria for “Streams and Watersheds” (p. D-15):

- Criterion #3 indicates that “crossing of streams will be accomplished by open cutting.” It is not clear why this would be a design criteria. We recommend the Criterion be changed to indicate “crossing of streams will be accomplished by the least damaging practicable method available.” The FEIS should identify the least damaging practicable method for each crossing, and if applicable the reasons why boring is not feasible for a specific case.
- The Design Criterion stream bank restoration (#8) should indicate the method by which stream banks will be stabilized.
- In Criterion #9, vegetation will be maintained “at 80 percent of its potential natural condition.” This Criterion does not appear to meet the BTNF “Desired Condition” for riparian and wetland associations including wet meadows: To “maintain and restore the extent, diversity and functionality of this association, avoiding disturbance and overuse...” (p. 3-36). The Criterion should be modified, or the FEIS should specify that the BTNF Desired Condition will not be met. Currently, the DEIS appears to allow up to 20% loss of native vegetation without requiring compensatory mitigation, and without specifically disclosing, in the Environmental Consequences chapter, this potential loss of condition and function. It also appears (Criterion #9) that the project allows for 10% degradation of natural stream bank stability on all streams crossed. It is not clear whether that 10% loss applies to the stream as a whole, or to the disturbed areas. We recommend the Criterion be made more specific on this issue, and that the Environmental Consequences discussion in the FEIS include this potential loss of stream bank stability.

Design Criteria for “Wetland and Riparian Areas” (p. D-17):

- Criterion #1 should be amended to assure that pipeline crossings will comply with COE permit terms and conditions as well as the requirements set forth in the Design Criteria in this EIS, the requirements in the Forest Plan, the Record of Decision and the Wetlands Executive Order.
- Criterion #2 should specify that all Design Criteria will be applied to any wetland with requisite soils, hydrology and plants, regardless to whether the wetland is regulated under the Clean Water Act. This statement is needed to comply with the Wetlands Executive Order which is not limited to “jurisdictional” wetlands.
- It may be appropriate to require sediment barrier installation at some distance outside the wetland rather than, or in addition to, “at the wetland boundary,” or when the barrier is removed, it may leave accumulated sediment piled immediately adjacent to the wetland.

Air Quality Impacts

While PM-10, PM-25, and SO₂ emissions may be less with the proposed action versus the no action (due to the reduction in LNG tanker truck activity), NO_x and CO emissions are about 3.6 and 12.4 times higher, respectively. This is due primarily to the air compressor emissions associated with the new gas processing facility. To lessen this impact, we suggest

additional controls on the AC engine (it should at least meet BACT criteria), or the use of an electric motor for the compressor should be considered.

Recreation and Scenic Impacts

The DEIS indicates that the Upper Hoback River has been found eligible and suitable for designation as a Wild River. The Hoback Canyon section has been found eligible and suitable for designation as a Recreation River (p. 4-53). Further, US Highway 189/191 is designated as a "Wyoming Centennial Scenic Byway" (p. 4-57). The DEIS concludes that under the No Action Alternative, approximately 2 LNG tanker trucks per day "may contribute to a perceived negative effect on scenic and historical experiences for travelers" (p. 4-56) and that these trucks "could also affect the scenic, recreational, fisheries or wildlife values that make the Hoback River eligible for [wild and scenic river] designation (p.4-65). Supporting information should be provided in the FEIS explaining why the truck traffic represents a negative effect on scenic resources, and especially why such use jeopardizes the eligibility of the River for wild and scenic designation. If the conclusion is related to the possibility of accidents and spills or fires, then similar language should be included in the pipeline alternative, as it is also subject to potential spills or fires.

Tree Impacts Reduction

The DEIS discusses that the clearing of trees will occur in many areas, but does not specifically discuss tree restoration. We recommend replacement trees be planted to offset any unavoidable tree loss. Native saplings should be used, if practicable, at a minimum ratio of 1:1. We understand that trees cannot be replaced directly in the pipeline corridor, for access to, and protecting the integrity of, the pipeline. However, in general the replacement trees should be planted close to where the loss occurred as possible. Alternately, mitigation might also include assisting county, state, or federal agencies with any on-going or planned forest or tree reclamation projects in the watersheds affected. We recommend that the proponents commit to voluntary tree mitigation, if applicable, in the EIS and provide, as detailed as possible, a conceptual mitigation plan that compensates for any unavoidable tree and related habitat loss.

It is not clear whether willow communities will be allowed to reestablish in the pipeline corridor or whether the corridor will be maintained shrub- and tree-free. If willows will not be allowed to re-establish, the USFS should require compensatory mitigation for the loss of habitat function. If willows will be allowed, the FEIS should consider whether it is appropriate to speed the recovery process by requiring re-planting with willow cuttings acquired adjacent to the disturbance. The recovery of willow and wetland plant communities should be specifically monitored. If recovery is not proceeding as specified, then a specific remedy should be required, and the responsible party for the restoration should be identified in the FEIS and ROD.

Invasive Plants

Studies show that new roads and pipeline/utility right-of-ways can become a pathway for the spread of invasive plants. These invasive plants can be almost impossible to eradicate once they become established. Therefore, we suggest that a specific vegetation management plan be developed to address control of such plant intrusions. The plan should address such techniques as washing/cleaning equipment before entering more sensitive areas to help prevent importation of seeds, etc. As this project follows many existing corridors, the current trend for weed infestations in the affected project area should be evaluated for mitigation effectiveness and improvements if warranted. We note that LVE has committed to monitoring and treatment for three years after project completion. We suggest that LVE control of such plant intrusions continue after that time yearly until the USFS determines that the recovery has been sufficient to eliminate this concern.

Post-Construction Corridor Access for Maintenance or Public Use

The DEIS does not clearly indicate whether the pipeline corridor would serve as access for pipeline inspection and maintenance. If so, the FEIS and ROD should assure that wetlands and riparian areas would not be crossed (except in case of emergency) by inspection and maintenance vehicles. This implementation measure is necessary to avoid soil and vegetation disturbance and potential permanent changes to wetland hydrology and function.

It is also important that the FEIS assess the likelihood that public or administrative off-road vehicles would travel the pipeline corridor, with similar potential effects to wetlands and riparian areas. If the terrain would allow such access, the EIS and ROD should include measures to physically prevent off-road vehicle access where possible, and should officially close the corridor to such use. Because the impacts from vehicles crossing wetlands and riparian areas can cause permanent impairment to these sensitive resources, the monitoring and adaptive management plan should specifically address this issue.

**U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

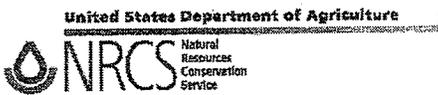
Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.



Natural Resources Conservation Service
Federal Building
100 East B Street, Room 3124
P.O. Box 33124
Casper, WY 82602

Date: August 14, 2006

Greg Clark
District Ranger
P.O. Box 218
Big Piney, Wyoming 83113

Dear Mr. Clark,

The Natural Resources Conservation Service has reviewed the Lower Valley Energy Natural Gas Pipeline Draft Environmental Impact Statement.

We have no comments on the DEIS for this project.

If you have any questions, or need to discuss this comment with us, please contact either myself at 307-233-6750 or please contact Doug Gasseling, Conservation Agronomist, Cheyenne, Wyoming, at 307-772-2320, ext. 101.

Sincerely,

A handwritten signature in cursive script that reads "Adolfo Perez acting Dir." is written over the typed name.

ADOLFO PEREZ
State Conservationist



WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-4600 Fax: (307) 777-4610

Web site: <http://gf.state.wy.us>

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August 11, 2006

WER 10353.01
Bridger-Teton National Forest
Big Piney Ranger District
Draft Environmental Impact Statement
Lower Valley Energy
Natural Gas Pipeline
Sublette and Teton Counties

Greg Clark
District Ranger
Big Piney Ranger District
Bridger-Teton National Forest
P.O. Box 218
Big Piney, WY 83113

Dear Mr. Clark:

The staff of the Wyoming Game and Fish Department has reviewed the Draft Environmental Impact Statement for the Lower Valley Energy natural gas pipeline. We offer the following comments for your consideration.

Terrestrial Considerations:

The proposed pipeline would be constructed in areas designed winter/yearlong and crucial winter range for the Hoback and Fall Creek elk herds, Sublette moose herd, Jackson bighorn sheep herd, and Sublette mule deer herd. Crucial winter ranges for all these species are located between Hoback Rim and Bondurant, and from the mouth of Hoback Canyon at Stinking Springs to Jackson. The areas near and adjacent to the Camp Creek and Horse Creek feedgrounds, and Camp Creek Saddle are considered big game parturition areas. In addition, numerous big game migration crossings occur throughout the entire length of the proposed pipeline route.

All construction activity should adhere to seasonal range timing stipulations that govern human presence in designated crucial big game winter ranges and parturition areas. No construction related activity should occur after November 15 or before April 30 to avoid disturbing wintering big game animals. Construction in designated big game parturition areas should not occur between May 1 and June 30.

The proposed pipeline will cross the Camp Creek elk feedground, Horse Creek Wildlife Habitat Management Area (WHMA), and the eastern-most portion of the South Park WHMA. We provide supplemental winter forage to approximately 2,200 elk on the Camp Creek and Horse Creek feedgrounds each winter. It is important that these elk are not disturbed or displaced once the winter-feeding operation commences. Consequently, no human activity associated with pipeline construction or monitoring should occur on or near these elk feedgrounds and WHMAs during the winter seasonal timing restriction period (November 15-April 30). LVE personnel should coordinate all on-the-ground monitoring activities of the pipeline and right-of-way on Camp Creek, Horse Creek, and South Park Wildlife Habitat Management Units (WHMAs) with our Feedground Supervisor at least five working days in advance of the anticipated site inspection. The Feedground Supervisor should accompany LVE employees during winter pipeline inspections that occur during the elk feeding period on our WHMAs. Any fences or access roads that are disassembled during the construction phase of the pipeline right-of-way on our lands should be replaced in-kind after construction is completed.

The DEIS indicates that aerial pipeline patrols will be conducted once every two weeks; we assume these aerial patrols will be conducted from a helicopter. It is important that the helicopter's flight path avoid flying directly over elk feedgrounds, or any other wintering big game observed on native winter ranges. We recommend that a vertical flight buffer of at least 1,500 meters be maintained during flights over elk feedgrounds and native winter ranges. To avoid any conflicts with elk feeding operations, we recommend the pipeline be buried at least 36 inches below ground surface on all Wyoming Game and Fish Commission (WGFC) owned lands. In addition, we recommend LVE compensate the State of Wyoming for any wildlife losses associated with construction, production, maintenance, and monitoring of this natural gas pipeline.

No ancillary facilities, valve stations, gauges, fences, or any other permanent structure associated with the pipeline should be constructed on any Wyoming Game and Fish Commission-owned lands, or any other designated big game crucial winter ranges. By avoiding facilities in these specific areas, conflicts between wintering wildlife and human activity will be eliminated.

The integrity of the area as a big game migration corridor should not be compromised. It is important that big game animals are capable of unrestricted movement to seasonal ranges. Travel corridors and migration "bottleneck" areas should remain unobstructed by any activity associated with pre- and post-pipeline construction. Any fences constructed should be temporary and of a "wildlife friendly" design. Department personnel are available for design specifications on a site-by-site basis.

The Gas Processing Facility proposed along U.S. Highway 189/191, south of Hoback Rim, should be constructed as close to the highway as possible with a minimum of road construction associated with this facility. Once the pipeline is buried, the right-of-way corridor should be reclaimed with native vegetation and contoured to the original slope. The prevention

of noxious weed establishment along the pipeline right-of-way must be a priority in all reclamation efforts.

The proposed natural gas pipeline lies within occupied mountain lion and black bear habitat. Wolves and grizzly bears currently do not use the area, but could be present in the very near future. During the construction phase, all garbage should be stored in bear-proof containers, vehicles, or buildings to avoid attracting bears into the temporary work areas.

We recommend that all pipeline construction avoid jurisdictional wetlands. The proposed alternative will affect 53 individual wetlands on 30.68 acres (DEIS p. 2-43). The Design Criteria in Alternative D states "wetland surface will be restored as near as practicable to pre-construction elevations." (DEIS p. D-17). Wetland habitat provides important habitat for a wide variety of wildlife species. After project completion, it will be important to ensure that affected wetlands are restored to proper functioning condition or mitigated so no overall loss of wetland habitat results from this project. We request the following measures be included in the FEIS to address wetland concerns:

1. Pre-disturbance monitoring of affected wetlands should be conducted to document the occurrence of amphibians throughout the project zone and identify important breeding, resting and potential hibernation sites. Concentration areas should be monitored and managed during and after construction to prevent habitat loss and direct mortality.
2. A descriptive summary and photographic record should be maintained of affected wetlands prior to disturbance. Any loss of wetlands resulting from this project should be mitigated either on-site or in locations close to the project area. LVE should work with Department and Forest Service biologists to develop mitigation projects as needed. Since constructed wetlands can be less effective than naturally occurring sites, mitigation might be considered on a two to one (2:1) basis for every acre lost.
3. Oxbow and open water sloughs areas have been consistently used by trumpeter swans in the winter season (i.e., November through April) in the area behind the Elkhorn Lodge and Trading Post in Bondurant. Hydrologic function and aquatic vegetation diversity should be maintained in this area to prevent future habitat degradation and loss.
4. Loss of willow wetland habitat, which is highly productive for many avian and mammal species, should be documented and mitigated if such habitat is lost or fails to recover post disturbance.

There is a potential that bald eagle nests could be affected by this construction activity, especially in the lower Hoback River area. All federal laws governing human activity near an occupied bald eagle nest should be adhered to. We recommend coordinating with our Jackson Regional Office's Nongame Biologist, Susan Patla (307 733-2383), to determine the location of potentially affected Bald Eagle nests prior to commencement of pipeline construction.

We recommend qualified biologists conduct thorough surveys in the early nesting season, prior to construction, to identify any new bald eagle, peregrine falcon or other raptor sites in or adjacent to the project corridor. Our staff should also be consulted for additional locations of bald eagle and peregrine falcon nest sites.

Aerial pipeline monitoring should maintain an adequate distance from known peregrine falcon nesting cliffs as well as from bald eagles nests, based on referenced studies. Information of local peregrine sites is not included in the Wyoming Natural Diversity Database (WYNDD) and should be obtained from our nongame biologist, Susan Patla, for determining buffer areas.

We recommend Department and Forest Service biologists establish mitigation recommendations to offset any impacts to wildlife and fisheries habitat as a result pipeline construction. These mitigation measures should be adopted and incorporated into the Final FEIS:

1. Point #10 states that a 0.5-mile (2,650 feet) buffer will be applied to bald eagle nest areas. To avoid disturbance to bald eagles, we recommend a minimum 0.5-mile vertical and horizontal buffer of all over-flights of the Hoback River Canyon around all bald eagle nests and foraging habitats. Specifically, the FEIS should address restricting helicopter flights within management zones I and II of known bald eagle nest sites along the Hoback River or its tributaries.
2. We suggest adding an item to construct osprey platform/raptor perch poles in areas of the Hoback Canyon where a large number of mature trees are removed permanently from the river/pipeline corridor. Along most of the canyon, mature trees are close to the river and loss of these will reduce nesting opportunities for osprey and foraging perches for bald eagles and other raptors.
3. Mitigation and wildlife protection measures for the pipeline project should be consistent with those being developed for the WYDOT Hoback Road project, and cumulative impacts should be clearly identified and mitigated as needed. We recommend project managers for both projects coordinate prior to pipeline construction in 2007 to minimize any duplication or overlap of initiatives between projects.

We suggest LVE contact our Lands Branch Supervisor, Dave Hunt (307 777-4596), about completing a Department right-of-way easement application as soon as possible, regarding permission for construction easements on our feedgrounds and WHMAs. Since these lands were purchased with federal monies, there is a federal nexus on them that requires a survey, appraisal, and additional NEPA clearances (e.g., SHPO) that can be dovetailed into the EIS process. These clearances will take time to complete, as the permit application must be approved by our Commission since our Department technically does not own any land.

We remind LVE that our Jackson/Pinedale Regional staff is available to assist and provide recommendations regarding all aspects of this project proposal, and development of the EIS.

Aquatic Considerations:

To minimize impacts to aquatic resources, we recommend the following guidelines:

- Pipeline crossings of streams should be done by boring underneath the stream, and boring pits should be located far enough back from the channel that stream bank stability is not reduced.
- If boring is not feasible, crossings of streams (perennial or intermittent) should be done by trenching, and stream banks should be restabilized with large angular rock (greater than 2 feet in one dimension). Riprap should be placed from the channel bottom to the top of the normal high water line on the bank.
- We recommend that the applicant utilize double-ditching techniques to separate the top one-foot of stream bottom substrate from deeper soil layers. Substrate layers should be replaced in the same order that they are removed from the stream.
- Instream construction during the spring, March 15 to July 31, should be restricted to minimize impacts to spawning trout.
- Riparian canopy or stabilizing vegetation should not be removed if possible. Crushing or shearing streamside woody vegetation is preferable to complete removal. Any such vegetation that is removed in conjunction with stream crossings should be reestablished immediately following completion of the crossing.
- Riparian areas and floodplains should not be used as staging or refueling areas. All chemicals, solvents and fuels should be kept at least 150 feet away from streams and riparian areas.

Mr. Greg Clark
August 11, 2006
Page 6 - WER 10353.01

Thank you for the opportunity to comment.

Sincerely,

John Emmerich
fm JOHN EMMERICH
DEPUTY DIRECTOR

JE:VS:gfb

cc: Mary Flanderka-Governor's Planning Office
USFWS



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

August 4, 2006

RECEIVED

AUG 08 2006

Greg Clark, District Ranger
Big Piney Ranger District
P.O. Box 218
Big Piney, WY 83113

re: Response to the Draft Environmental Impact Statement for the Lower Valley Energy Natural Gas Pipeline Project

Dear Mr. Clark:

These comments regarding the Draft Environmental Impact Statement for the Lower Valley Energy Natural Gas Pipeline Project are specific to this agency's statutory mission within State government which is protection of public health and the environment. In that regard these comments are meant to, in association with all other agency comments, assist in defining the Official State Position.

There are two Water Quality Division (WQD) permits that may apply to the project. Any or all of them may apply depending on the eventual scope of the project.

- Discharge Permit. Any discharges to "waters of the state" must be permitted under the Wyoming Pollutant Discharge Elimination System (WYPDES) program. This program is part of the federal Clean Water Act, but is administered by the WQD. Coverage is required for discharges from cofferdam dewatering, discharges from hydrostatic pipeline testing, or discharge of other waste waters to waters of the state. For clarification waters of the state include rivers, streams, dry draws, wetlands, lakes, reservoirs and even stock ponds. This permit will require some sampling and will incorporate effluent limits for any constituents of concern. Roland Peterson (307-777-7090) can provide additional information.
- Storm Water Associated with Construction Activities. This permit is required any time a project results in clearing, grading, or otherwise disturbing one or more acres. The disturbed area does not need to be contiguous. The permit is required for surface disturbances associated with construction of the project, access roads, construction of wetland mitigation sites, borrow and stockpiling areas, equipment staging and maintenance areas and any other disturbed areas

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH
(307) 777-7758
FAX 777-2610

ABANDONED MINES
(307) 777-6145
FAX 777-6462

AIR QUALITY
(307) 777-7391
FAX 777-5616

INDUSTRIAL SITING
(307) 777-7369
FAX 777-6937

LAND QUALITY
(307) 777-7756
FAX 777-5864

SOLID & HAZ. WASTE
(307) 777-7752
FAX 777-5973

WATER QUALITY
(307) 777-7781
FAX 777-5973

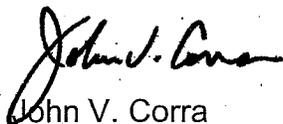


- Associated with construction. A general permit has been established for this purpose and either the project sponsor or general contractor is responsible for filing a Notice of Intent (NOI) and complying with the provisions of the general permit. The NOI should be filed no later than 30 days prior to the start of construction activity. Please contact Barb Sahl at 307-777-7570.
- Temporary Turbidity Variance. In accordance with Section 23(c)(2) of the Chapter 1 Surface Water Standards, the administrator of the Water Quality Division may authorize temporary increases in turbidity above the numeric criteria in Section 23 (a) of the Standards in response to an individual application for a specific activity. An application must be submitted and a variance approved by the administrator before any temporary increase in turbidity above the numeric limits takes place. While it is not required to get this authorization, this project has the potential to exceed the 10 NTU limit on the Hoback River and a variance is recommended. Please contact Jeremy Lyon at 307-777-7588 for more information.
- Section 404. While not a state permit, this project may require a section 404 permit from the US Army Corps of Engineers. Any time work occurs within waters of the US a 404 permit may be required. Please contact the Corps (307-772-2300) for specific information regarding jurisdiction and requirements.

These are the permits most likely to affect the project. The Department of Environmental Quality would like to see the NEPA analysis and resulting project address any potential effects to surface water quality that may occur as a result of existing or proposed construction practices in riparian areas. Also, every effort to prevent erosion of any kind should be taken. Any sediment created by the project can enter and affect the water quality of the receiving water.

We appreciate the opportunity to comment in this process and look forward to working with you in the future. If you have any questions, please feel free to contact Jeremy Lyon at 307-777-7588.

Sincerely,



John V. Corra
Director
Department of Environmental Quality

JVC/JML/rm/6-0706

cc: Governor's Planning Office, Herschler Bldg, 1st Floor, East Wing
Todd Parfitt, Deputy Director, DEQ Cheyenne.

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Dave Freudenthal
Governor

Department of Transportation

State of Wyoming



John F. Cox
Director

August 7, 2006

RECEIVED

AUG 08 2006

Greg Clark
P.O. Box 218
Big Piney, WY 83113

RE: Lower Valley Energy Natural Gas Pipeline Project DEIS

Dear Greg,

Thank you for giving the Wyoming Department of Transportation Environmental Services the opportunity to comment on this DEIS.. Our concerns center on five issues: (1) revegetation of disturbed ground, (2) cultural resources, (3) endangered species, (4) wild and scenic rivers, and (5) consideration for future highway reconstruction along Highway 26, 89, 191 south of Jackson.

In the Summary Soils and Geology section you state all 370 acres would be reclaimed immediately with appropriate Forest Service recommended native species. However, in Chapter 4, page 16, first paragraph, it appears that this might not be the case. WYDOT requests that all land disturbed within the WYDOT easement be reclaimed according to language in the summary.

WYDOT is also concerned about potential disturbance to cultural site 48TE1573. From the maps provided, it is difficult to tell if the pipeline route crosses this eligible site. Although no surface artifacts were noted north of Game Creek, similar deposition may occur on the north side of Game Creek as on the south side at 48TE1573. Undisturbed deposits north of the creek may hold a high potential for buried cultural remains. Previous investigations have shown that, owing to the presence of large gravel and boulders about 2 m below surface, boring is difficult and required surface disturbance to remove large boulders. This could adversely affect any buried cultural remains north of Game Creek.

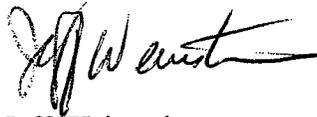
There is another eagle nest/territory in the project corridor. It is on the WYG&F South Park Wildlife Management Area. The eagle nest at the Hoback Campground was monitored by WYDOT in 2003. While an eagle appeared to be incubating early on, an osprey drove the eagles out and nested at this location later in the spring. Observations from 2004-2006 indicate no eagle nesting activity at this location.

5300 Bishop Boulevard
Cheyenne, WY 82009-3340

WYDOT has consulted with the National Park Service concerning the Hoback River eligibility under the Wild and Scenic Rivers Act. Our potential build alternatives include bridging the river at two locations or a channel change that would allow a toe berm to stabilize the landslide you are avoiding with this pipeline project. Granted, these alternatives are probably more dramatic than trenching through the river at nine locations. WYDOT was advised that anything placed in or along the Hoback River that would change the free flow characteristics would influence Wild and Scenic eligibility. Is the NPS aware you may use structural bank stabilization techniques described in D-15 #13?

WYDOT's build alternatives north of Hoback Junction include a five lane from the Game Creek Road to the South Park Loop Road. WYDOT is investigating the need for a wildlife underpass north of the "Old West Cabins". Retaining walls may also be needed to avoid the new construction going on at the "Old West Cabins". The pathway may also need to be shifted to accommodate new highway construction. This area is definitely a place where WYDOT needs to be consulted in the final design plans. Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Weinstein", with a long horizontal flourish extending to the right.

Jeff Weinstein

WYDOT Environmental Coordinator



Department of Transportation

3200 ELK STREET

P.O. BOX 1260

ROCK SPRINGS, WYOMING 82902

(307) 352-3000 FAX (307) 352-3150

*Reviewed
8/14/2006*

August 11, 2006

Greg Clark, District Ranger
USDA Forest Service
P.O. Box 218
Big Piney, WY 83113

Re: Draft EIS for Lower Valley Energy's Proposed Gas Pipeline

Dear Greg Clark:

The following comments by WYDOT are regarding the Draft Environmental Impact Statement of Lower Valley Energy's proposed gas pipeline through the Hoback Canyon.

-Page SUM-8, under PIPELINE SAFETY, states, "There would be minimal public safety risk during pipeline construction, operation, and maintenance under the Proposed Action. Inspections, leak surveys, and cathodic protection that meet the requirements of 49CFR 192 would ensure structural integrity of the pipeline and prevent damage by third parties." We disagree with this statement. No matter how diligent their safety program is, third party damage can, and more than likely will, occur at some point in the future.

-Page 1-17, under section 1.11.6 HIGHWAYS, states, "The right of the Forest Service to use or authorize the use of any portion of the right of way for non-highway purposes shall not be exercised when such use would be inconsistent with the provisions of title 23 of the U.S.C. and the FHWA regulations issued pursuant thereto or would interfere with the free flow of traffic or impair the full use and safety of the highway, and in any case, the Grantee and the FHWA shall be consulted prior to the exercise of such rights." We are not so much concerned with the temporary interference with the free flow of traffic during construction as we are with the placement of the pipeline within 50 feet of the edge of travelway which does impair the full use and safety of the highway. There are alternatives to take the pipeline farther from the roadway in some areas of the canyon.

-Page 2-1, under section 2.1.1, PUBLIC SAFETY, we do not agree with the statement "Construction and operation of the pipeline should not increase hazards to public safety or violate environmental safety." A pipeline within 50 feet of the edge of travelway does increase the hazard to public safety.

-Pages 2-12 to 2-17, Section 2.2.2, EVALUATION OF POTENTIAL REROUTES. This section evaluated six alternatives and denied five of them. Some of the denials had a legitimate rationale, but most were based on visual impacts. In none of the "Rationale for Recommendation" did it mention the increased danger of third party damage to the line.

-Page 2-24, under CONSTRUCTION ACTIVITIES. If access to the pipeline is coming from State highways, and/or through state maintained fences, approach permits and fence modification agreements will be necessary.

-Page 2-27, under ROAD AND HIGHWAY CROSSINGS. In the third paragraph it states, "The depth of the borings at highway crossings would be 10 feet, unless otherwise specified by WYDOT to address bedrock, groundwater, an adjacent structure, or an embankment is encountered that prevents or limits the use of a bore pit." We think it is highly likely that some or all of these conditions will exist. This does not mean that because we have these conditions that we will allow open cutting of the highway. Enough design research needs to be conducted to ensure these crossing locations are viable for a bore, or the bore should be relocated to a location that is compatible for a bore.

-Page 2-31, under RECLAMATION, the second paragraph on this page states, "Pipeline route markers would be installed at road crossings, water crossings, property boundaries and locations where such markers would not interfere with existing land uses or detract from the scenic value of the Hoback Canyon." In addition to the above-mentioned locations for pipeline route markers we want them spaced at a minimum of 1000 feet, or line of sight, whichever is less, and where the line changes direction within the highway easement.

-Page 2-33, under DISCUSSION: in the first paragraph it states, "The Proposed Action is intended to...provide...(for) highway worker safety on the existing highway." This does just the opposite by placing the pipeline in very vulnerable locations where pipeline damage is much more likely.

-Page 2-55, under TRANSPORTATION in the column ALTERNATIVE B PROPOSED ACTION, at the bottom of the page it says, "No noticeable effects on transportation system during operations and maintenance of pipeline." This is not true because of the above reasons.

-Page 2-57, under EFFECTS ON PUBLIC SAFETY... ALTERNATIVE B PROPOSED ACTION, it states there is "Minimal public safety risk during pipeline operation and maintenance." We do not agree. Public safety risks are brushed away. However, the EIS cites examples of fatal accidents that occur, one in Wyoming, by third party damage.

-Page 4-60, at the top of the page it states, "The permanent pipeline corridor would be unavailable for use or highway maintenance that would require excavation or vegetation with deep root structures unless the pipeline could be avoided." In our utility permit, we intend to stipulate that if the area of the pipeline is needed for maintenance or reconstruction work that LVE will relocate the pipeline at their expense.

-Page 4-62, we fully agree with the last sentence on this page, "Movement of the pipeline route more than 50 feet away from the adjacent edge of the traveled way... would facilitate efficient and cost-effective highway operations with no need for One-Call procedures, as the pipeline would not be in close proximity to the highway and would fully comply with the applicable WYDOT rules."

Summary

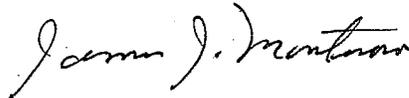
We agree there are safety and environmental benefits to installing a pipeline and eliminating truck traffic. However, the pipeline comes with inherent dangers of third-party damage which should be mitigated wherever possible.

Our primary concern is with the sections that are within 50 feet of the edge of travelway. This is where the majority of the excavation and drilling occurs by WYDOT for items such as ditch cleaning, delineator post installation, guardrail posts, slide repair, sign posts, reconstruction, etc.

There are viable alternatives to some of these sections, but it appears that visual retention has a higher priority than human safety. The report acknowledges that fatal accidents can and do occur when third party damage takes place. We've found that you don't hit what isn't there.

We respectfully request that the other alternatives which can take the pipeline farther than 50 feet from the travel way be reconsidered.

Very truly yours,



James J. Montuoro, P.E.
District Maintenance Engineer

JJM/mej

cc: Delbert A. McOmie, P.E., Chief Engineer, Cheyenne
Pat Collins, P.E., Assistant Chief Engineer, Engineering and Planning, Cheyenne
John Eddins, P.E., District Engineer, Rock Springs
Ken Shultz, P.E., State Maintenance Engineer, Cheyenne
Ken Keel, P.E., Project Development, Cheyenne
Pete Hallsten, P.E., Resident Engineer, Jackson
File



www.tetonwyo.org

August 3, 2006

RECEIVED

AUG 08 2006

Mr. Greg Clark
District Ranger, USFS
P.O. Box 218
Big Piney, WY 83113

Dear Mr. Clark,

PO Box 1727
200 South Willow Street
Jackson, Wyoming 83001

ph: 307.733.3959
fax: 307.733.4451

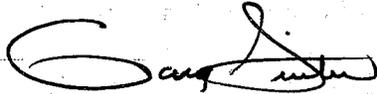
Thank you for providing a copy of the Draft Environmental Impact Statement on the Lower Valley Energy Natural Gas Pipeline Project to the Teton County Planning Department. Given the potential impacts of the proposed pipeline on the health, safety, and welfare of the citizens of Teton County, the Planning Department would like to share the following comments.

- 1) In order to ensure that the work done on private lands complies with the Grading and Erosion Control standards of the Teton County Land Development Regulations, a Grading and Erosion Control permit will be required for this project. The purpose of the Grading and Erosion Control standards are to minimize potential geologic hazards that could result from improper grading practices, and to minimize the amount of sediment and other pollutants carried by runoff to lakes, streams, or wetlands. Reclamation of disturbed areas will be required.
- 2) As noted on p. 1-17 of the DEIS, a Conditional Use Permit (CUP) will be required. Utilities, which are defined by the Teton County Land Development Regulations to include natural gas pipelines, require a CUP in all zones except Business Park. Because the proposed pipeline would cross a number of different zones, a CUP will be required. The purpose of a Conditional Use Permit is to ensure the compatibility of a proposed use at particular locations, and to ensure that impacts on public facilities (such as police or fire resources) and environmental impacts can be conditioned or mitigated. The review process includes public hearings with both the Planning Commission and the Board of County Commissioners.
- 3) Because construction of the proposed pipeline will impact natural resources protected by Article III of the Land Development Regulations, including lands designated as part of the Teton County Natural Resource Overlay and Scenic Resource Overlay,

as well as protected creeks and wetlands, an Environmental Analysis will be required. The purpose of the Environmental Analysis is to assess the impacts of the proposed development on protected resources, including wildlife habitat and migration corridors. Where impacts to protected resources will occur, mitigation may be required.

Thank you again for sharing information with our department on the proposed project. We look forward to working with Lower Valley on the private land portion of the pipeline should your agency decide to allow the overall project to proceed.

Sincerely,



Gary Suiter
Interim Planning Director
Teton County Planning and Development