Record of Decision

LOWER VALLEY ENERGY NATURAL GAS PIPELINE PROJECT
USDA Forest Service
BIG PINEY RANGER DISTRICT
JACKSON RANGER DISTICT
BRIDGER-TETON NATIONAL FOREST
Sublette and Teton Counties, Wyoming

The legal description includes portions of: T36N R112W, T37N R111W, T37N R112W, T37N R113W, T38N R113W, T38N R114W, T38N R115W, T39N R115W, T39N R116W, and T40N R116W, Sixth Principal Meridian.

Decision and Reasons for the Decision

Background

The Forest Service has received an application from Lower Valley Energy (LVE) for a special use authorization to construct and operate a pressurized natural gas pipeline on lands administered by the Big Piney and Jackson Ranger Districts of the Bridger-Teton National Forest (BTNF). This application includes information on LVE's technical and financial ability to construct and operate the pipeline. This proposed pipeline would bring natural gas service (processed and odorized gas) to the Jackson, Wyoming area from a location near Merna, Wyoming. Long-term supplies of natural gas to meet the needs of LVE's customers in the Jackson area are available in northern Sublette County.

The current gas supply for LVE's distribution system is a liquid natural gas (LNG) facility located adjacent to its Jackson, Wyoming office. Tanker trucks currently transport LNG from the Shute Creek facility, located south of La Barge, Wyoming, to LVE's facility. Delivery of LNG to the Jackson area requires that trucks travel approximately 120 miles (one way) on public highways (U.S. Highways 287/191/26 and 89/191) on a daily basis. From 2000 to 2003, the number of round trips by tanker trucks steadily increased from 392 to 492 round trips per year. Approximately 665 round trips per year by tanker trucks are projected by 2010. Each tanker truck carries approximately 10,000 gallons of LNG, which is equivalent to approximately 830,000 standard cubic feet (cf) of natural gas.

Most of the proposed pipeline route is located along public highways that serve as a regional transportation corridor and have been designated as a national scenic byway. Primary uses of adjacent lands are recreation, wildlife habitat, agriculture, including irrigated hay fields, livestock grazing, and scattered ranch and residential structures. Important wildlife habitat, including two State-owned elk feedgrounds, Forest Service campground facilities, and the small community of Bondurant are located along the proposed pipeline route. A portion of the proposed route parallels the Hoback River. The scenic and natural characteristics of the Hoback River have been recognized as eligible for inclusion in the Wild and Scenic Rivers System as a Recreation River. A portion of the proposed route through the Hoback Canyon is just outside the Gros Ventre Wilderness.

The Project Area encompasses lands within one mile of the proposed pipeline route and contains 63,767 acres, including 40,184 acres of NFS lands, 1,534 acres of lands managed by the Bureau of Land Management (BLM), 1,364 acres of State-owned lands, and 20,685 acres of privately owned lands. Although BLM lands are included in the Project Area, no lands managed by BLM would be crossed by the pipeline. Decisions related to the proposed project are limited to NFS lands. The major portion of the Project Area is within Sublette County, with the remainder in Teton County.

The 63,767-acre Project Area includes 48,018 acres within the National Forest boundary and 15,749 acres outside the National Forest boundary. NFS lands (40,184 acres) are included within the boundaries of the following Management Areas (MAs):

- MA 21 Hoback Basin (21,000 acres)
- MA 22 Cliff Creek (1,097 acres)
- MA 23 Upper Hoback (94 acres)
- MA 41 Jackson Hole South (6,065 acres)
- MA 47 Granite Creek (890 acres)
- MA 49 Willow Creek (7,832 acres)
- MA 72 Upper Green River (438 acres)
- Gros Ventre Wilderness (2,769 acres)

The Project Area contains the following DFCs:

- DFC 2A – unroaded areas managed for quiet, almost primitive recreation experience.
- DFC 2B – areas managed for motorized recreation experience.
- DFC 3 – areas managed for river and scenic recreation experiences, with little evidence of development and protection from activities that could diminish or change the free-flowing characteristics, water quality, or scenic, recreational, fish and wildlife, and other values that make the river eligible for designation.
- DFC 9A – areas managed for campgrounds, other non-commercial uses, and Forest Service administrative sites, including related roads and sites.
- DFC 10 – areas managed for some resource development while having no adverse and some beneficial effects on wildlife.
- DFC 12 – areas managed for high quality wildlife habitat, escape cover, and dispersed recreation.

The proposed pipeline would parallel existing roadways managed by the Wyoming Department of Transportation (WYDOT) and utility corridors for most of its proposed route. The pipeline would traverse Camp Creek Saddle, Hoback Canyon, the Hoback Basin area along and near the Hoback River, and Fisherman Creek. It would cross portions of the following townships: Township 36 North, Range 112 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; Sixth Principal Meridian.

In most places, the proposed pipeline would be located along, but just outside, the narrow highway corridor managed by WYDOT. The pipeline route would encroach on the highway corridor in many locations along Hoback Canyon and would be outside the highway corridor as it crosses Camp Creek Saddle east of Hoback Junction. Although the Project Area contains Gros Ventre Wilderness lands within one mile of the proposed pipeline, the proposed pipeline route does not cross any designated wilderness.

The Environmental Impact Statement (EIS) documents the analysis of two alternatives, no action and the proposed action, to meet the purpose and need for action.

Purpose and Need for Action

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 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).

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).

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.

The closest location to Jackson where long-term supplies of natural gas are available to meet the needs of LVE's customers is in northern Sublette County. Use of gas that is being produced in nearby Sublette County to supply Jackson would support the local economy, require a shorter pipeline to deliver the gas to Jackson, and take advantage of fuels available nearby. A connection to an existing gas pipeline in the SW1/4NW1/4 of Section 34, T.36N. R.112W. would give LVE the ability to provide gas directly to the Jackson area from producing fields near Merna or farther south in Sublette County.

The proposed pipeline would eliminate the need for 500 or more round trips per year by tanker trucks across more than 10 miles of NFS lands in Hoback Canyon that are managed to emphasize river and scenic recreation experiences and wildlife values. Commercial hauling of LNG across NFS lands managed for recreation experiences and wildlife values is not supportive of the Forest Plan management emphasis on protection from activities that could diminish or change any scenic, recreational, fisheries or wildlife values that make the river eligible for designation as a Recreation River under the Wild and Scenic Rivers Act.

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).

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).

The goals and objectives of the Forest Plan approved in 1990 guide all management on the BTNF. The purpose and need for the proposed pipeline responds to Forest Plan Goal 1.1 - Communities continue or gain greater prosperity, and directly supports Goal 1.1 (i) Help utilities provide services. Forest Plan Goal 1.1 supports Forest Challenge: Support Community Prosperity, which is associated with Problem Topic 1: Community Economics and Jobs from the Bridger-Teton National Forest – Competition for Resources.

Proposed Action

A pressurized natural gas pipeline would be constructed, operated, and maintained by LVE to bring natural gas service (processed and odorized gas) to the Jackson, Wyoming area from a tie-in to an existing pipeline near Merna, Wyoming. The outside diameter of the new steel pipeline would be 6.625 inches and no larger. The anticipated operational pressure of the pipeline would range between 60 and 300 pounds per square inch (psi), with an average system pressure of around 200 psi. The pipeline would be designed, constructed, and operated in accordance with federal and state regulations that assure safety in design, construction, inspection, testing, operation, and maintenance of natural gas pipeline facilities and would be implemented in accordance with the specific project design criteria in Appendix D of the Final Environmental Impact Statement (FEIS).

The proposed project would deliver processed and odorized natural gas to the Jackson area for distribution. 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). The proposed pipeline would tie directly into LVE's facility in Jackson. The existing LNG facility located adjacent to LVE's Jackson, Wyoming office would be maintained as a backup gas supply system, requiring fewer than 50 round trips per year by tanker trucks to maintain LNG storage bullets.

The proposed pipeline would be located on NFS lands, State of Wyoming lands, and private lands. About half of the 49.7-mile pipeline route (25.4 miles) would be located on NFS lands. A 75-foot wide corridor and additional work areas would be disturbed during construction activities and then reclaimed. About 370 acres potentially could be affected over the short-term during construction activities. A 20-foot-wide corridor directly overlying the pipeline and containing an estimated 120 acres would be revegetated without trees or shrubs and used over the long-term as a monitoring and maintenance corridor during pipeline operations.

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. The gas would be odorized at this location so that LVE customers along the pipeline route can receive gas that is ready for use. Once the gas is odorized and ready for delivery to customers, raw, unprocessed gas could not be added to the pipeline directly from a well tie-in.

Existing public roads and private roads would provide access to the pipeline construction corridor. No temporary or permanent roads would be constructed in association with the proposed pipeline. Improvements, upgrades, or modifications to existing roads would not be required for construction of the project. In locations where the pipeline route deviates from existing road corridors, personnel, equipment, and materials would be transported along the pipeline construction corridor.

About 4 acre-feet would be withdrawn from the Hoback River or obtained from another source within the Hoback River watershed for dust abatement, and 2 acre-feet would be withdrawn from the Hoback River or obtained from another source within the Hoback River watershed for hydrostatic testing. An estimated 150 to 200 workers would be needed to install the pipeline and ancillary facilities over six months.

The Proposed Action would be implemented during the spring, summer, and fall of one construction season. Pipeline construction is anticipated to begin during the spring. Based on a normal construction schedule, installation of the pipeline and gas processing facility would be completed in about 180 days, and the pipeline should be fully operational by the beginning of the winter season. The anticipated timeline for construction, including schedule constraints, is shown in the table below.

Normal expected progress for mainline construction would be ½ mile per day. Progress of the Hoback Canyon crew and the crossing crew would vary. Pipeline construction within Hoback Canyon, a distance of 10.5 miles or about 55,000 feet, would progress at an average rate of about 800 feet per day, requiring a 70-day construction schedule. Each highway crossing would be completed in 2 to 3 days, on average. Each river crossing would be completed in about a week, on average, with instream construction activities typically completed within 24 to 48 hours. Instream construction would not occur before August 1.

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, as shown in the table below.

TABLE OF CONSTRAINTS
FOR PROPOSED ACTION (ALTERNATIVE B)

Construction Activity	Days Required	Constraints	Schedule
Mainline (39.2 miles)	80	• No activity in crucial big game winter range from Nov 15 through Apr 30 (state feedgrounds) or Dec 1 through Apr 30 (NFS lands).	May-Oct
Hoback Canyon (10.5 miles)	70	• No activity in crucial big game winter range from Nov 15 through Apr 30 (state feedgrounds) or in crucial big game winter range and elk calving areas from Dec 1 through Jun 30 (NFS lands). • No activity in management zones I or II of active bald eagle nest sites (Feb 1 through Aug 15). • No activity near active peregrine falcon eyries (Mar 1 through Jul 31) or hack sites (Jul 1 through Sept 15).	Aug-Oct
Highway crossings, U.S. 189/191 (19) and U.S. 89/191 (2)	60	Refer to Mainline or Hoback Canyon sections, as appropriate, for constraints.	May-Oct
Hoback River crossings (9), Upper Hoback River crossing (1), and Cliff Creek crossing (1)	60	• No instream construction from Mar 15 through Jul 31 to minimize impacts to spawning trout.	Aug-Oct

Other Alternatives Considered

In addition to the selected alternative (Alternative B), I considered one other alternative in detail which is discussed below: Alternative A (No Action). The table below contains a comparison of activities included in the alternatives considered. A more detailed comparison of the alternatives can be found in the FEIS – Chapter 2 – Alternatives, Including the Proposed Action, Comparison of Alternatives, Section 2.5, beginning on page 2-39.

COMPARISON TABLE OF NO ACTION (ALTERNATIVE A) AND PROPOSED ACTION (ALTERNATIVE B)

Proposed Activities	Alternative A	Alternative B
Pipeline Corridor (total miles, all types of surface ownership)	0	49.7
Pipeline Corridor (total miles, National Forest lands)	0	25.4
Crossings of Hoback River	0	9
Crossing of Upper Hoback River	0	1
Crossing of Cliff Creek	0	1
Crossings of U.S. 189/191 (Hoback Canyon Highway)	0	19
Crossings of U.S. 89/191 Near Jackson	0	2
Construction Areas (potential short-term disturbance for construction corridor and temporary work areas, total acres)	0	370
Pipeline Maintenance Corridor (20-foot-wide area affected over the long term; no shrubs or trees would be restored, total acres)	0	120
Gas Processing Facility (potential long-term disturbance, total acres)	0	<1
Transport of LNG to Jackson by Tanker Trucks on Public Highways (estimated round trips per year – range represents current estimate of round trips per year and anticipated round trips per year within 5 years)	500 to 600	<50

Alternative A – No Action Alternative

Under the No Action alternative, a natural gas pipeline would not be constructed to bring natural gas service to the Jackson, Wyoming area. Forest Plan Goal 1.1 (i) Help utilities provide services- would not be accomplished under Alternative A. The application for a special use authorization for the construction, operation, and maintenance of a natural gas pipeline submitted to the Forest Service by Lower Valley Energy (LVE) would not be approved. Long-term supplies of natural gas to meet the needs of LVE's customers in the Jackson area would not be acquired by a connection to an existing gas pipeline in the Merna area. The Jackson area would continue to be supplied with liquid natural gas (LNG) by tanker trucks traveling on public highways.

The No Action alternative would involve no change to the current gas supply for Jackson, Wyoming. The current gas supply for LVE's distribution system is an LNG facility located adjacent to its Jackson, Wyoming office. Tanker trucks currently transport LNG from the Shute Creek facility, located south of La Barge, Wyoming, to LVE's facility.

Delivery of LNG to the Jackson area requires that trucks travel approximately 120 miles (one way) on public highways (U.S. highways 287/191/26 and 89/191) on a daily basis. From 2000 to 2003, the number of round trips by tanker trucks steadily increased from 392 to 492 round trips per year. Approximately 665 round trips per year by tanker trucks are projected by 2010. Each tanker truck carries approximately 10,000 gallons of LNG, which is equivalent to approximately 830,000 standard cubic feet (cf) of natural gas.

The No Action alternative is analyzed as a baseline against which the effects of any action alternatives can be measured or compared.

Alternative B – The Proposed Action

The Proposed Action is described above. The Proposed Action was modified based on project issues and public comments to develop a final proposed pipeline route.

Decision Summary

I have decided to approve a pressurized natural gas pipeline to be constructed, operated, and maintained by Lower Valley Energy (LVE) to bring natural gas service (processed and odorized gas) to the Jackson, Wyoming area from a tie-in to an existing pipeline near Merna, Wyoming.

This decision selects Alternative B in the LVE Natural Gas Pipeline Project FEIS.

Decision

My decision to select and implement Alternative B because this alternative balances the need for ensuring reliable energy and a clean environment while meeting desired conditions with public issues and resource concerns to protect critical resource values.

- 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.

- The proposed pipeline would tie directly into LVE's facility in Jackson. The existing LNG facility located adjacent to LVE's Jackson, Wyoming office would be maintained as a backup gas supply system, requiring fewer than 50 round trips per year by tanker trucks to maintain LNG storage bullets.

- About 370 acres potentially could be affected over the short-term during construction activities. A 20-foot-wide corridor directly overlying the pipeline and containing an estimated 120 acres would be revegetated without trees or shrubs and used over the long-term as a monitoring and maintenance corridor during pipeline operations.

- Existing public roads and private roads would provide access to the pipeline construction corridor. No temporary or permanent roads would be constructed in association with the proposed pipeline. Improvements, upgrades, or modifications to existing roads would not be required for construction of the project. In locations where the pipeline route deviates from existing road corridors, personnel, equipment, and materials would be transported along the pipeline construction corridor.

- About 4 acre-feet would be withdrawn from the Hoback River or obtained from another source within the Hoback River watershed for dust abatement, and 2 acre-feet would be withdrawn from the Hoback River or obtained from another source within the Hoback River watershed for hydrostatic testing.

- All mitigation measures (FEIS – Appendix D, pages D1-D23) will be implemented.

- Monitoring of the project will follow the Monitoring Plan (FEIS – Appendix D, pages D23-D24.).

Public Involvement

Public scoping for the Lower Valley Energy Natural Gas Pipeline Project was conducted during July and August 2004. A public scoping notice for the proposed project was mailed to a list of interested and affected parties on July 9, 2004. A Notice of Intent to Prepare an Environmental Impact Statement (NOI)

was published in the Federal Register on July 16, 2004. A legal notice that described the proposed project was published in the Casper Star Tribune on July 16, 2004.

An advertisement that contained information about the proposed project and the public open houses was published in the following local newspapers: Jackson Hole News and Guide on July 14, 2004; Kemmerer Gazette on July 15, 2004; Pinedale Roundup on July 15, 2004; Rock Springs Rocket Miner on July 15, 2004; Star Valley Independent on July 15, 2004; Sublette Examiner on July 15, 2004; and Planet Jackson Hole on July 16, 2004. An informational flyer was posted at post offices in Bondurant, Wyoming (82922) and Hoback Junction and Jackson, Wyoming (83001).

Public open houses were held on July 19, 2004 at the Teton County Library auditorium in Jackson and July 20, 2004 at the Bondurant elementary school. The purpose of the open houses was to explain the project and solicit comments from the public. Representatives from the Forest Service and LVE attended both open houses and visited with 20 people who signed in at the Jackson meeting and 13 people who signed in at the Bondurant meeting. Four public comment forms were submitted at the open house in Jackson. No written comments were submitted at the open house in Bondurant.

After the open houses were held, a total of 17 written comments, including letters, public comment forms, and emails were received from 16 different parties before the Draft Environmental Impact Statement (DEIS) was issued, offering comments and potential issues for the proposed project. One individual submitted two separate public comment forms. Two parties provided their comments by telephone.

The DEIS was released for public review in June 2006. A Notice of Availability was published in the Federal Register on July 3, 2006 and an amended notice was published in the Federal Register on July 14, 2006, extending the end of the comment period to August 25, 2006. A total of 16 written comments were received on the DEIS, 3 from federal agencies, 4 from state agencies, 1 from local government, 3 from organizations, and 5 from individuals.

Issues

Issues were identified using two sources: internal Forest Service review and the comments received during external scoping. Not all comments led directly to issue development. For example, comments expressing general support for the project were not used to develop issue statements. Issues identified were addressed in the following ways: formulation of alternatives; design criteria for the project; mitigation measures applied to alternatives; and analysis of alternatives. No issues were found to be beyond the scope of the analysis or not relevant to the project.

Issues were separated into two groups: significant and non-significant. Significant issues were defined as a point of discussion, debate, or dispute about environmental effects that are directly or indirectly caused by implementing the Proposed Action. Non-significant issues were defined as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality National Environmental Policy Act regulations explains this delineation in Sec. 1501.7: "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

Significant issues are issues used to formulate alternatives to the Proposed Action, whether or not the alternative is considered in detail. Non-significant issues represent substantial concerns; however, these issues are usually not used to formulate alternatives. Both significant and non-significant issues are used to establish design criteria for the project, prescribe mitigation measures, and analyze environmental effects.

Indicators are measures used to track the effects of the Proposed Action on the issues. The significant and non-significant issues and indicators are summarized below. Following each issue are indicators that were used to measure whether that issue was remedied by implementing the selected alternative with mitigation measures.

The following **significant issues** were used in the formulation of alternatives.

1) Effects of Pipeline Route on Wildlife and Wildlife Habitat - The proposed pipeline route should be designed to minimize impacts to wildlife, especially elk feedgrounds, big game seasonal use habitats, and migration routes.

Indicators:

- Effects on species and habitat diversity and habitat components.
- Effects on big game populations and important habitat components.
- Effects on existing elk feedgrounds.
- Effects on Federally Listed Species.
- Effects on Forest Service Sensitive Species.
- Effects on Management Indicator Species (MIS).
- Effects on migratory birds.

2) Coordination of Pipeline Route, Specifications, and River Crossings with Other Agencies - The use of the Hoback Canyon highway corridor on NFS lands for the proposed pipeline route and specifications for pipeline construction, operation, and maintenance, including river crossings, should be coordinated with other agencies. Alternative routes that avoid the Hoback Canyon highway corridor should be explored.

Indicators:

- Effects of pipeline construction, operation, and maintenance on road corridors, existing road facilities and structures, and public travel.

3) Disturbance of the Hoback River and Hoback Canyon – The proposed pipeline route and specifications for pipeline construction, operation, and maintenance, including river crossings should minimize disturbance, prevent pollution of the Hoback River, and should not impact the scenic qualities of Hoback Canyon.

Indicators:

- Effects on stream channel conditions and stability, including compliance with Natural Drainage Channel Standard for the protection and restoration of natural drainage channels (Forest Plan, page 133).
- Effects on natural flow characteristics, water quality, and quantity, including compliance with Clear-Water-Diversion Standard for pipeline trenches that pass through a stream channel (Forest Plan, page 133) and Wyoming rules and regulations for surface and groundwater quality (Forest Plan, page 136).
- Effects on streambank stability, including compliance with Streambank Stability Guideline for maintaining natural streambank stability (Forest Plan, page 126).
- Potential sedimentation (by watershed).
- Effects on natural potential of fish habitat that is providing a fishery.
- Effects on existing scenic integrity and scenic attractiveness.
- Visibility from Gros Ventre Wilderness and the Shoal Creek Wilderness Study Area (WSA).
- Visibility from existing recreation facilities.
- Effects of pipeline construction, operation, and maintenance on the scenic byway corridor (a sensitive travel route), including compliance with the Scenic Byway and Wild and Scenic Rivers

Visual Standard (Forest Plan, p. 123, as added by Attachment One to the Forest Plan Record of Decision).

- Effects on recreation values along segments and corridors of the Hoback River and its tributaries (Shoal, Cliff, Granite, and Willow Creeks) within the Nationwide Rivers Inventory (NRI) that are eligible for designation as Wild, Scenic, or Recreation Rivers.
- Effects on visual quality along segments and corridors of the Hoback River and its tributaries (Shoal, Cliff, Granite, and Willow Creeks) within the Nationwide Rivers Inventory (NRI) that are eligible for designation as Wild, Scenic, or Recreation Rivers, including compliance with the Wild and Scenic Rivers Standard and Visual Quality Standard (Forest Plan, p. 142, as added by Attachment One to the Forest Plan Record of Decision).
- Visual quality objectives (VQOs) of preservation or retention met or not met in the foreground viewing zone along the Hoback River and the scenic byway.

4) Public Safety – Construction and operation of the proposed pipeline should not increase hazards to public safety or violate environmental safety. Public safety concerns regarding the pipeline route and its construction and operation should be evaluated. The pipeline would reduce hazards associated with tanker trucks on highways, however, fire danger may increase during construction of the pipeline.

Indicators:

- Effects on public safety during pipeline construction.
- Effects on public safety related to pipeline operation and maintenance.
- Compliance with Soil Management Standard for special geotechnical/slope stability design to control risks (Forest Plan, page 136).
- Effects on wildland fire hazards.
- Effects on public safety related to delivery of LNG by truck.
- Effects on road corridors, existing road facilities and structures, and public travel.

The following **non-significant issues** are addressed within the design criteria or mitigation measures of the proposed project or tracked through the effects analyses.

5) Slope Stability and Pipeline Integrity in Steep or Unstable Areas – The proposed pipeline could increase the potential for slope failures in steep or unstable areas, potentially affecting pipeline integrity and public safety unless potential effects can be mitigated by pipeline design specifications or route adjustments.

Indicators:

- Soil disturbance (acres).
- Disturbance in areas physically unsuited to surface-disturbing activities, including fine-textured soils, active landslides, and steep slopes.
- On-site erosion (tons per acre – year 1).
- On-site erosion (tons per acre – year 5).
- Compliance with Soil Management Standard for special geotechnical/slope stability design to control risk of mass wasting and sedimentation (Forest Plan, page 136).

6) Roadless Areas and Roadless Characteristics – Pipeline construction should not occur in roadless areas in order to preserve their roadless characteristics.

Indicator:

- Effects on the undeveloped character of roadless areas.

7) Effects of Pipeline Activities on Wildlife and Wildlife Habitats – The proposed pipeline construction, operation, and maintenance activities should be designed to minimize impacts to wildlife

that reside or travel through the area and wildlife habitats, especially elk feedgrounds, big game seasonal use habitats, and migration routes.

Indicators:

- Effects on species and habitat diversity and habitat components.
- Effects on big game populations and important habitat components.
- Effects on existing elk feedgrounds.
- Effects on Federally Listed Species.
- Effects on Forest Service Sensitive Species.
- Effects on MIS.
- Effects on migratory birds.

8) Eligibility of Hoback River Segments for Inclusion in the Wild and Scenic Rivers System – Construction of the proposed pipeline should not jeopardize the eligibility of Hoback River segments in the Nationwide Rivers Inventory (NRI) for Wild, Scenic, or Recreational status.

Indicators:

- Effects on recreation values along segments and corridors of the Hoback River and its tributaries (Shoal, Cliff, Granite, and Willow Creeks) within the Nationwide Rivers Inventory (NRI) that are eligible for designation as Wild, Scenic, or Recreation Rivers.
- Effects on visual quality along segments and corridors of the Hoback River and its tributaries (Shoal, Cliff, Granite, and Willow Creeks) within the Nationwide Rivers Inventory (NRI) that are eligible for designation as Wild, Scenic, or Recreation Rivers, including compliance with the Wild and Scenic Rivers Standard and Visual Quality Standard (Forest Plan, p. 142, as added by Attachment One to the Forest Plan Record of Decision).
- Effects on natural flow characteristics; water quality and quantity, including compliance with Clear-Water-Diversion Standard for pipeline trenches that pass through a stream channel (Forest Plan, page 133); and Wyoming rules and regulations for surface and groundwater quality (Forest Plan, page 136).

9) Wetlands and Riparian Areas – Pipeline construction should be designed to minimize impacts in or near wetlands and riparian areas.

Indicators:

- Wetland and riparian disturbance (acres), including compliance with the Construction and Staging-Area Guideline for location of construction staging and equipment service areas outside riparian areas (Forest Plan, page 133).
- Effects on streambank vegetation, including compliance with the Streambank Vegetation Standard for maintenance of grass and shrub vegetation adjacent to streams (Forest Plan, page 133).

10) Mitigation and Monitoring – The impacts associated with pipeline construction, operation, and maintenance activities should be reduced or eliminated through project design, mitigation measures, reclamation, and monitoring. Funding for effective implementation of mitigation and monitoring plans should be addressed. Reclamation measures following pipeline construction should be adequate to restore the affected area to as natural a state as possible. The proposed project should comply with all applicable Forest Plan guidance and requirements for Forest Service special use permits.

Indicators:

- Effects on vegetation, by vegetation type.
- New disturbed areas susceptible to noxious weed infestation (acres).
- New corridors for seed transport (miles).

- Effects on livestock grazing.
- Effects on Federally Listed Species.
- Effects on Forest Service Sensitive Species.
- Effects on MIS.
- Effects on the Gros Ventre Wilderness and the Shoal Creek WSA.
- Effects on recreation opportunities and Recreation Opportunity Spectrum (ROS) Class.
- Effects on recreation use, including displacement of recreation activities.
- Effects on existing recreation facilities (campgrounds, trailheads, other facilities).
- Potential effects on heritage resources, including eligible sites and unknown sites.

11) Cumulative Impacts – The cumulative effects of all projects occurring or proposed in the area and reasonably foreseeable activities, including leasing or development of oil and gas resources, should be evaluated.

12) Private Interests and Conservation Easements – The impact of Forest Service actions regarding the proposed pipeline on private interests and federally recognized conservation easements should be considered.

Indicators:

- Effects of pipeline construction, operation, and maintenance on lands and minerals activities (non-recreation special uses, unpatented mining claims, mineral leases, or mineral material sale permits).
- Effects on recreation special uses.
- Effects of pipeline on landlines, private property, conservation easements, designated wilderness, roadless areas, and special uses.
- Visibility from residential areas.

13) Purpose and Need – The purpose of and need for the proposed pipeline should be framed broadly enough to support objective evaluation of all alternatives, including No Action.

14) Project Schedule – The feasibility and effects of the anticipated project schedule should be evaluated, considering the limited periods when activities in these areas are not restricted.

15) Economic Factors – Economic factors affecting the proposed pipeline should be addressed in the analysis.

Indicators:

- Effects of pipeline on employment, wages, housing, and community infrastructure in the Jackson Human Resource Unit (HRU), including Bondurant.
- Effects of pipeline on employment, wages, housing, and community infrastructure in the Big Piney HRU.
- Effects of pipeline on employment, wages, housing, and community infrastructure in the Pinedale HRU.
- Socioeconomic effects of LNG delivery by truck.
- Socioeconomic effects on communities, recreation, and tourism from closures and displaced activities during construction, changes in wildlife viewing or hunting, and scenery changes.

16) Air Quality and Noise – Air quality and noise impacts related to the proposed pipeline and reasonably foreseeable activities should be analyzed in detail.

Indicators:

- Emissions related to truck transport of LNG to Jackson, including nitrogen oxides (NO_x,), carbon

monoxide (CO), and volatile organic compounds (VOCs).

- Emissions related to treatment of natural gas by glycol dehydration and injection of air before gas enters pipeline (NO_x, CO, and VOCs).
- Effects related to noise and odor.
- Effects from fugitive dust and vehicle exhaust during pipeline construction.
- Effects related to operation and maintenance of pipeline.
- Effects on air quality-related values and regional haze at Class I and sensitive Class II areas.
- Compliance with Wyoming and National Ambient Air Quality Standards.

Rationale for the Decision

I believe Alternative B provides the best action to meet the Purpose and Need (FEIS - Chapter 1 - Purpose of and Need for Action, pages 1-5 to 1-6), respond to the issues (FEIS - Chapter 1 - Issues, pages 1-12 to 1-16), as well as respond to other issues raised by the public during the review of the DEIS (Appendix G). The alternative best responds to the resource objectives and desired future conditions identified in the Bridger-Teton National Forest Land and Resource Management Plan (FLRMP) and the LVE Natural Gas Pipeline Project FEIS to ensure reliable energy and a clean environment.

In making my decision, I relied upon an interdisciplinary team to analyze all the alternatives, as documented in the Lower Valley Energy Natural Gas Pipeline Project FEIS.

I have organized my rationale for the decision on how the selected alternative meets the purpose and need and select significant issues. Issues responded to in this section along with those listed in the issues section above are also addressed in detail in Appendix D (Design Criteria) and Appendix G (Response to Comments) of the FEIS.

Purpose and Need:

The purpose and need of the proposed project is stated above. Implementation of Alternative B provides for safe transportation of natural gas to Jackson and achieves the following:

1. Enhances the diversity of fuels available in Jackson by providing a steady supply of natural gas to the Jackson area.

2. Uses 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. Modernizes 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. Improves the environment by reducing the effects on air quality from tanker truck emissions.

5. Improves 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.

6. Potentially reduces the risk of a wildland fire start associated with an incident related to the delivery of natural gas to Jackson.

Response to Select Issues:

Wildlife and Fisheries (Issues 1, 7)

Concerns were raised regarding the effects of the project on wildlife habitat along the pipeline corridor, eagle nest/territory, migratory birds, the black-footed ferret, designated crucial big game winter ranges and parturition areas, pipeline construction or monitoring activities near elk feedgrounds or Wildlife Habitat Management areas (WHMAs), hydrologic function and aquatic vegetation diversity, and instream construction.

My decision addresses these concerns by having the Forest Service work closely with the Wyoming Game and Fish Department (WGFD) during all project phases to ensure adequate protection of wildlife and fisheries habitats in concert with management of populations by the WGFD. Concerns raised by the WGFD that are applicable to NFS lands will be implemented as detailed in Appendix D of the FEIS and the special use authorization for the proposed project.

A Letter of Concurrence from the Fish and Wildlife Service dated November 21, 2007 has been received on Threatened and Endangered species.

A timing restriction for instream construction, applicable to river/stream crossings, was added. Access to State of Wyoming wildlife management areas and other wildlife habitats within the BTNF is 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.

Construction activities would be constrained so as not to affect the following species, habitats, and periods of use that are applicable to the Project Area.

- 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 May 15-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

Effects on the Hoback River and Corridor (Issues 2, 3, 5, 6, 8, 9)

Concerns were raised regarding the installation and location of the pipeline, wetlands mitigation, hydrologic function and aquatic vegetation diversity, stream crossing methods, the scenic, visual and recreational values including eligibility for inclusion in the Wild and Scenic rivers system, and reclamation effects on soils.

My decision addresses these concerns by having all design criteria, monitoring, reclamation, and mitigation applicable to wetlands, riparian areas, and stream/river crossings implemented as detailed in Appendix D of the FEIS, which had additions and clarifications made to address wetlands and reclamation activities.

The pipeline will be located as close to the highway as feasible, based on consideration of topography, existing facilities, resource concerns, and public safety. The Wyoming Department of Transportation (WYDOT) and LVE collaborated on the development of appropriate requirements for a pipeline located along the highway corridor of U.S. 189/191.

The Forest Plan 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, will be implemented. 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. The location of 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. Over most of the pipeline route (about 42 miles), disturbance would be confined to areas within about 125 feet of the existing U.S. highway.

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. A 20-foot-wide permanent pipeline corridor would be maintained in an herbaceous state, without shrubs or trees. Best management practices (BMPs) and Forest Plan standards and guidelines will provide the basis for the reclamation plan for the project. 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 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. Revegetation would be initiated within one month after completion of ground disturbing activities, unless otherwise directed by the Forest Service. 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.

Public Safety (Issue 4)

Concerns were raised regarding lack of safety information in the DEIS, inherent dangers of third party damage, potential future maintenance issues, truck and pipeline safety, and the risk of tanker truck accidents, spills, or fires.

My decision addresses these concerns by providing additional background information on pipeline safety and clarifying the rationale related to pipeline safety. It recognizes that 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. 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. 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). It also acknowledges that 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).

To further provide for pipeline safety, WYDOT and LVE have collaborated on the development of appropriate requirements for a pipeline located along the highway corridor of U.S. 189/191. 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.

Between the DEIS and FEIS, an independent engineering design review was conducted to identify safety issues associated with the location and design of the pipeline. The results of this review recognized the adequacy of the proposed design but also suggested further recommendations which were incorporated into the design of the project. Continued coordination between WYDOT and LVE has resulted in a joint agreement to modify some design criteria related to depth of burial in an effort to reduce surface disturbance without compromising public safety. All applicable federal regulations regarding pipeline burial depth will be met.

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.

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.

Findings Required by Other Laws and Regulations

The Forest Plan was approved in 1990. It provides broad-scale management policy and long-term direction and guidance for managing the BTNF. It contains management emphases and actions needed to move toward the desired future state of the Forest. The goals and objectives are described on pages 112-121 of the Forest Plan. Each Forest Plan goal is supported by a set of objectives. Although all the goals in the Forest Plan are attainable at the Forest-wide scale, all objectives across goals may not necessarily be met within any given area of the Forest. Consequently, some objectives may not be met on all areas of the BTNF.

This decision to implement Alternative B was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines for implementing for issuing a special use authorization for the installation and maintenance of a buried gas pipeline.

The selected alternative meets requirements under the National Environmental Policy Act, Federal Land Policy Management Act, National Forest Management Act, Forest Restoration Act, Public Law 109-19, National Historic Preservation Act, Endangered Species Act and Forest Service Sensitive Species, Migratory Bird Treaty Act, Clean Water Act, Clean Air Act, Federal Water Pollution Control Act, Executive Order on Floodplain Management, Executive Order on Protection of Wetlands, Executive Order on Invasive Species, and Executive Order on Migratory Birds and Environmental Justice. (FEIS - Chapter 4 Environmental Consequences, Other Required Disclosures (FEIS - Chapter 4, pages 4-79– 4-80)

A Biological Assessment with findings was submitted to the United States Fish and Wildlife Service in October 2007, which started the consultation process for Endangered Species. Concurrence with the proposed activities was received from the United States Fish and Wildlife Service in a letter dated November 21, 2007.

Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215.11. Only those entities that provided substantive comments during the comment period specified at 215.6 may appeal the decision in the Record of Decision (ROD). A Notice of Appeal, including attachments, must be submitted within 45 days after publication of the notice of decision in the Casper Star Tribune, the newspaper of record. Attachments received after the 45 day appeal period will not be considered. The publication date in the Casper Star Tribune is the exclusive means for calculating the time to file an appeal. Those wishing to appeal the decision should not rely upon dates or timeframe information provided by any other source. Appeals must meet the appeal content requirements of 36 CFR 215.14. Appeals may be filed by regular mail, facsimile, e-mail with Microsoft Word (.doc) or rich text format (.rtf) attachments, hand delivery, express delivery, or messenger service. In cases where no identifiable name is attached to an e-mail, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals must be submitted to:

USDA-Forest Service, Bridger-Teton National Forest
Attn: Carole "Kniffy" Hamilton, Forest Supervisor, Appeals Deciding Officer
340 N. Cache (P.O. Box 1888), Jackson, Wyoming 83001
Facsimile: (307) 739-5010
E-mail: appeals-intermtn-bridger-teton@fs.fed.us
Office Hours: Monday through Friday 8:00 a.m. through 4:30 pm.

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Greg Clark, Big Piney Ranger District, 315 South Front Street, (P.O. Box 218), Big Piney, Wyoming 83113 (307) 276-3375.

JAN 04 2008

GREGORY W. CLARK
District Forest Ranger
Big Piney Ranger District

DATE

JAN 04 2008

DALE DEITER
District Forest Ranger
Jackson Ranger District

DATE