

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

ES.1.1 Status of Evaluation Process

With publication of this Final Evaluation Report, the Nebraska Department of Environmental Quality (NDEQ) has completed the Final Evaluation Phase of its review (see Figure ES-1) of the Nebraska Reroute proposed by TransCanada Keystone Pipeline, LP (Keystone) (see Figure ES-2). On October 30, 2012, NDEQ published its Draft Evaluation Report based on the alignment set forth in Keystone's September 5, 2012, *Supplemental Environmental Report*. On December 4, 2012, approximately 800 people attended an Information Session and Public Hearing, held in Albion, Nebraska. At the Public Hearing, NDEQ provided the public with an opportunity to provide either spoken or written testimony regarding the Draft Evaluation Report and Keystone's proposed Nebraska Reroute. Throughout its entire review process, NDEQ afforded a continuous opportunity for the public to participate and comment, starting in April 2012. This 7-month comment period concluded at 5:00 p.m. on December 7, 2012, with 3,922 commenters providing comments and testimony. This Final Evaluation Report has been submitted to Governor Heineman for his review and decision.

Figure ES-1. Nebraska's Keystone XL Pipeline Evaluation Process

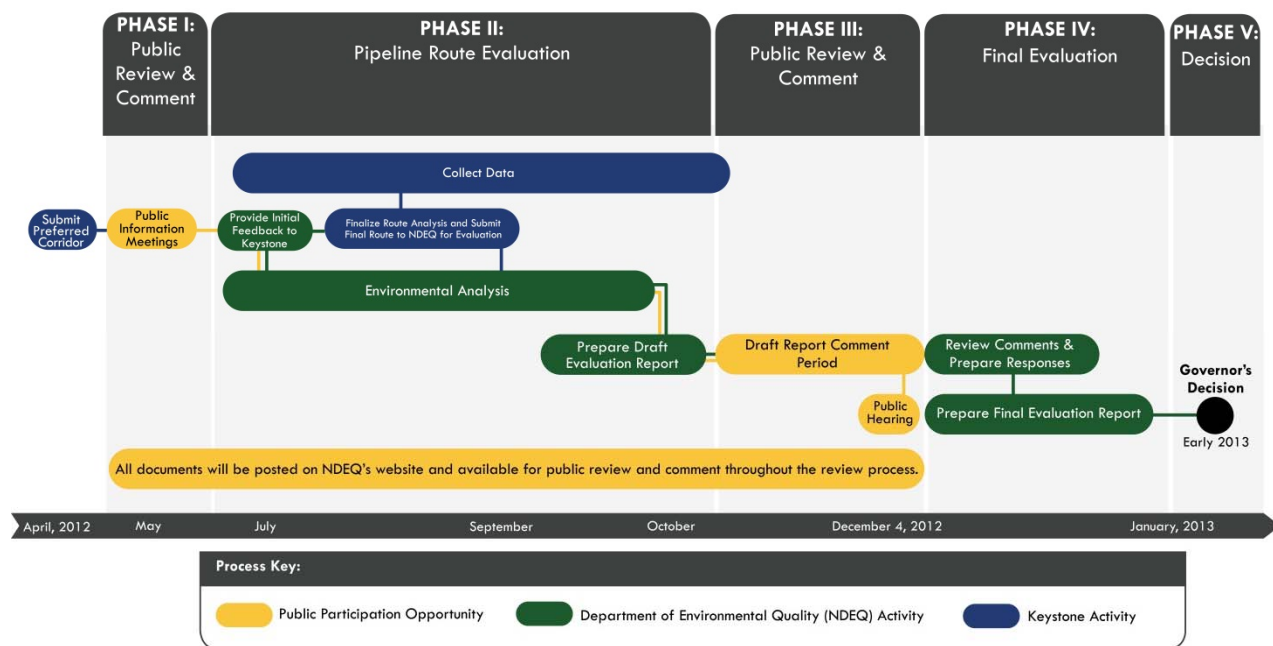


Figure ES-2. Keystone's Proposed Nebraska Reroute



Source: NDEQ 2012

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ES.1.2 Updates since the Publication of the Draft Evaluation Report

The Final Evaluation Report reflects the comments received from the public and agencies during the comment period. Highlighted changes in the Final Evaluation Report since publication of the Draft Evaluation Report are:

- Chapter 3 of this Final Evaluation Report summarizes the numerous issues raised by the public and agencies during the comment period and provides responses to those issues.
- Chapter 4 of this Final Evaluation Report has added a discussion of new economic information specific to Nebraska. This information, which was provided by Keystone, was reviewed and verified by NDEQ and a reanalysis of economic benefits was prepared.
- Chapter 6 of this Final Evaluation Report has been expanded to address numerous additional issues related to the nature of the material in the pipeline, pipeline safety, spill prevention, response, and remediation.
- Chapter 7 of this Final Evaluation Report updates the public involvement process and specific public and agency coordination efforts, including a discussion of the December 4, 2012, Information Session and Public Hearing held on the Draft Evaluation Report.
- Three additional appendices have been added to the Final Evaluation Report. The first, Appendix D.2, provides the details on NDEQ's field observation and verification activities. The second, Appendix F.4, provides the technical memorandum that includes NDEQ's evaluation of the rate and extent of movement of a constituent of crude oil in groundwater in the event of an accidental release from the pipeline. The third, Appendix F.5, provides Material Safety Data Sheets (MSDSs) as examples of the crude oils that could be transported by the pipeline.

ES.1.3 Nebraska Department of Environmental Quality Findings

This Final Evaluation Report evaluates the potential environmental, economic, and social impacts that could result from construction of the proposed Nebraska Reroute of the Keystone XL Pipeline as submitted on September 5, 2012.

General Findings

- The proposed Nebraska Reroute avoids the Sand Hills but would cross the High Plains Aquifer, including the Ogallala Group. Impacts on aquifers from a release should be localized and Keystone would be responsible for any cleanup.
- The proposed Nebraska Reroute avoids many areas of fragile soils in Northern Nebraska.
- The proposed Nebraska Reroute avoids a shallow groundwater area upgradient (west) of the boundary of the Clarks Wellhead Protection Area, where the aquifer is thin, wells are shallow, and bedrock is close to the surface.
- Affected agricultural operations could resume the season after the completion of construction.
- Construction of the pipeline would result in \$418.1 million in economic benefits and would support up to 4,560 new or existing jobs in the state of Nebraska.

- The project would generate \$16.5 million in use taxes from pipeline construction materials.
- Annual local property tax revenues, for the first full year of valuation, would be between \$11 million and \$13 million.
- Construction and operation of the proposed Keystone XL Pipeline, with the mitigation and commitments Keystone has identified in Chapter 5, could have minimal environmental impacts in Nebraska.
- Throughout NDEQ's evaluation process, the concerns of Nebraskans have had a major influence on the pipeline route, the mitigation commitments, and this evaluation.
- Keystone would be responsible for developing an Emergency Response Plan for a product release associated with the operation of the proposed Keystone XL Pipeline and ancillary facilities. In the event of a spill, appropriate authorities would have timely access to product characteristics.
- The 57 Special Conditions to which Keystone has agreed would further ensure pipeline integrity and safety. These conditions would be enforced by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA).
- Commitments from Keystone to the state of Nebraska, such as funding for a public liaison, liability insurance, and private well testing, provide for additional protection of Nebraska's interests.
- Keystone would have financial and regulatory responsibility for any spill associated with the proposed Keystone XL Pipeline.

ES.1.4 Next Steps

NDEQ has submitted this Final Evaluation Report to Governor Heineman. In accordance with the process directed in Legislative Bill 1161, the Governor will indicate to the U.S. Department of State (DOS) whether he approves Keystone's proposed Nebraska Reroute. DOS will complete its Supplemental Environmental Impact Statement and incorporate the Governor's decision.

ES.2 BACKGROUND

Keystone proposes to construct, operate, and maintain a crude oil pipeline and ancillary facilities from the U.S-Canadian border to Steele City, Nebraska, referred to as the Keystone XL Pipeline project. In 2008, Keystone filed an initial Presidential Permit application with the U.S. Department of State (DOS) to construct and operate the original Keystone XL Pipeline. DOS evaluated the original pipeline alignment in an environmental impact statement (EIS) and published a Final EIS in August 2011. The original Keystone XL Pipeline project would have traversed the northeastern portion of the Sand Hills, an environmentally sensitive region in northcentral Nebraska. Based on concerns expressed by Nebraska citizens, the Nebraska Legislature, and the Governor in late fall 2011, Keystone agreed to avoid the Sand Hills by proposing a new route.

In a 2011 special session, the Nebraska Legislature passed Legislative Bill (LB) 4, which authorized NDEQ to review the rerouted portion of the proposed pipeline in Nebraska. LB 4 was approved by the Governor on November 22, 2011. However, President Barack Obama

denied a Presidential Permit for the original Keystone XL Pipeline, without prejudice, in January 2012. Subsequently, NDEQ halted active review of the pipeline. (See Section ES.4 for a discussion of the relationship of this project to DOS and the NEPA process.)

The Nebraska Legislature passed LB 1161, which clarified its direction to NDEQ to evaluate a pipeline in Nebraska and was signed on April 17, 2012, by the Governor. On April 18, 2012, Keystone proposed a new alignment in Nebraska with the goal of avoiding the Sand Hills and on April 19, 2012, the comment period for the project was initiated. On July 17, 2012, after conducting four public information meetings, NDEQ provided Keystone with public and agency feedback on its proposed route. In response, Keystone proposed several modifications to the route in its *Supplemental Environmental Report (SER)*, submitted on September 5, 2012.

NDEQ's Draft Evaluation Report of the rerouted portion of the proposed Keystone XL Pipeline (referred to in this document as the "Nebraska Reroute" [see Figure ES-2]) was circulated for public and agency comment on October 30, 2012. A Public Hearing was held in Albion, Nebraska, on December 4, 2012, with the close of the comment period on December 7, 2012.

This Final Evaluation Report includes a summary of issues raised by the public and agencies and responses to those issues. It also includes information that became available since the Draft Evaluation Report was published.

ES.3 NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY'S EVALUATION PROCESS

In response to public concerns, the Nebraska Legislature passed bills in a special session held in the fall of 2011 and again in regular session in the spring of 2012. LB 4 and LB 1161 directed NDEQ to analyze the environmental, economic, social, and other impacts of a pipeline in Nebraska. The purposes of this Final Evaluation Report are:

- To determine if Keystone's rerouted alignment avoids the Sand Hills as defined by NDEQ in its press release of December 29, 2011
- To evaluate the environmental, economic, social, and other impacts of the proposed Nebraska Reroute pipeline
- To inform the Governor about the impacts of the proposed pipeline and the measures taken to involve the public in the evaluation process

NDEQ describes the evaluation of the impacts of the proposed Nebraska Reroute in this Final Evaluation Report. NDEQ's evaluation of the route considers the major features of the pipeline as well as the existing conditions of the affected environment. NDEQ's evaluation also identifies and evaluates the potential effects of constructing and operating the pipeline, which would carry crude oil produced from oil sands in central Alberta and could also transport crude oil from the Bakken Formation in the Williston Basin in Montana and North Dakota. The evaluation identifies specific measures that are intended to mitigate those impacts. Lastly, NDEQ's evaluation includes an examination of:

- Keystone's emergency planning process
- Effects a spill might have on Nebraska's environmental resources
- Measures Keystone would take to prevent a spill

NDEQ's evaluation considered all public and agency comments received throughout the comment period from April 19, 2012, to December 7, 2012, including comments received during the comment period following the Draft Evaluation Report and as Public Hearing testimony. This Final Evaluation Report has been submitted to the Governor, who will inform DOS of his decision to approve or disapprove the proposed Nebraska Reroute.

ES.4 RELATIONSHIP WITH DEPARTMENT OF STATE

On September 19, 2008, Keystone filed a Presidential Permit application with DOS to construct and operate a new facility, the Keystone XL Pipeline, to transport crude oil from Canada to the Texas Gulf Coast. Facilities that cross the international borders of the United States require a Presidential Permit. DOS is the lead federal agency that receives and considers applications for Presidential Permits for crude oil pipelines pursuant to Executive Order 13337 of April 30, 2004,¹ as amended. To issue a Presidential Permit, DOS must find that a proposed project or action would serve the national interest. DOS consults with other federal and state agencies and invites public comment prior to arriving at its determination.

The Presidential Permit requested in 2008 would have authorized construction and operation of the proposed Keystone XL Pipeline at the U.S.-Canadian border crossing in Montana. At that time, the proposed project consisted of a 2,232-mile-long, 36-inch-diameter pipeline and appurtenant facilities to transport crude oil from Hardisty, Alberta, Canada, to Nederland/Port Arthur, Texas. Upon receipt of Keystone's application, DOS conducted an environmental review of the proposed Keystone XL Pipeline project and published its Final EIS on August 26, 2011.

Nebraska citizens, the Nebraska Legislature, and the Governor expressed concerns regarding the proposed project's potential impact on the environmentally sensitive Sand Hills. On November 10, 2011, DOS announced it was delaying its decision on the Presidential Permit application to allow additional time to gather information regarding potential alternative routing in Nebraska. In a special session, the Nebraska Legislature passed LB 4, which authorized NDEQ to review the Nebraska portion of the pipeline. LB 4 was approved by the Governor on November 22, 2011.

A provision of the Temporary Payroll Tax Cut Continuation Act of 2011 required the President to act on Keystone's application within 60 days. On January 18, 2012, President Obama denied the Presidential Permit without prejudice, stating that 60 days was an insufficient period to obtain and assess the necessary information and that the Keystone XL Pipeline project, as presented and analyzed at that time, would not serve the national interest.² Following the Presidential Permit denial, NDEQ halted active evaluation of the pipeline in Nebraska. To reaffirm the Legislature's intention to have NDEQ continue its evaluation of major oil pipeline projects, the Nebraska Legislature passed LB 1161 in April 2012, which the Governor signed on April 17, 2012.

LB 4 and LB 1161 authorized NDEQ to collaborate with DOS on Keystone's proposed Nebraska Reroute and to enter into a Memorandum of Understanding (MOU) with DOS that sets forth the responsibilities and schedules that will lead to an effective and timely review of the

¹ 69 Federal Register 25299.

² 77 Federal Register 5614.

environmental document consistent with the National Environmental Policy Act (NEPA). NDEQ and DOS finalized an MOU on May 24, 2012 (see Appendix A).

On May 4, 2012, Keystone filed a new application with DOS for a Presidential Permit for the Keystone XL Pipeline project, reconfigured as the portion of the original project extending from the U.S.-Canadian border east of Morgan, Montana, to Steele City, Nebraska. On June 15, 2012, DOS published in the Federal Register a notice of intent to prepare a Supplemental EIS evaluation of the reconfigured Keystone XL Pipeline project consistent with NEPA and other relevant statutes. The subject of the Supplemental EIS will be the proposed Keystone XL Pipeline. The currently proposed Keystone XL Pipeline would consist of an approximately 875-mile-long, 36-inch-diameter steel pipeline to transport crude oil from the U.S.-Canadian border to Steele City, Nebraska. At Steele City, the Keystone XL Pipeline would connect with the existing Keystone Pipeline Cushing Extension. At the terminus of the Cushing Extension, the crude oil would be delivered into a new 36-inch-diameter steel pipeline, being constructed as the Gulf Coast Project, for transportation to refinery markets on the Gulf Coast.

Since executing the MOU, NDEQ has worked closely with DOS to conduct a coordinated environmental analysis. DOS's activities have focused largely on actions in Montana and South Dakota. DOS will consider NDEQ's Final Evaluation Report and the Governor's decision in its Supplemental EIS. DOS is the lead agency in conducting government-to-government consultation with American Indian tribes pursuant to Executive Order 13084.

DOS chose to meet its Section 106 of the National Historic Preservation Act responsibilities by developing a Programmatic Agreement (PA), which was executed in August 2011. DOS is actively consulting with the previous PA signatory agencies and Native American tribes to determine how the PA or a revised version will be implemented for the proposed Project. DOS is responsible for consulting with federal and State agencies (including the Nebraska State Historic Preservation Office) and interested American Indian tribes pursuant to Section 106.

DOS has taken the lead in consulting with the U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act (ESA) and other federal statutes. NDEQ anticipates DOS will publish the Draft Supplemental EIS in early 2013.

ES.5 SUMMARY OF THE NEBRASKA REROUTE

The Nebraska Reroute is a part of the proposed Keystone XL Pipeline. NDEQ provided Keystone with a definition of the Sand Hills on December 29, 2011 (see Figure ES-2). The purpose of the Nebraska Reroute (the subject of this report) is to avoid the Sand Hills of Nebraska. Using information provided by NDEQ, Keystone on April 18, 2012, submitted a revised alignment (the Nebraska Reroute), with the goal of avoiding the Sand Hills. NDEQ sought out public comments on Keystone's new alignment and provided feedback to Keystone on July 17, 2012. Keystone considered this information and further refined its Nebraska Reroute in response to those concerns.

Keystone's September 5, 2012, *Supplemental Environmental Report* proposed three further refinements to the portion of the Keystone XL Pipeline route in Nebraska, and two of these are within the Nebraska Reroute. These refinements, referred to by Keystone as the Northern Alternative and the Clarks Alternative, were made to address environmental concerns raised by the public and NDEQ. The Northern Alternative was developed to avoid an area with fragile soils, although the area is not a part of the defined Sand Hills. The Northern Alternative would

pass through Keya Paha and Boyd Counties, crossing the Niobrara River southwest of Naper, Nebraska. The Clarks Alternative was developed to address NDEQ's concerns regarding the location of Keystone's preferred reroute corridor in an area where the aquifer is thin, wells are shallow, and bedrock is close to the surface. This area was upgradient (west) of the boundary of the Clarks Wellhead Protection Area (WHPA). The Clarks Alternative would route the proposed pipeline downgradient (east) of the WHPA.

A third refinement is also proposed in the *Supplemental Environmental Report*. This adjustment to the Keystone XL Pipeline alignment is south of the proposed Nebraska Reroute, in Saline and Jefferson Counties, and near Western, Nebraska. This route variation was developed by Keystone to avoid crossing the expanded WHPA for the village of Western.

The September 5, 2012, proposed Nebraska Reroute is the subject of this Final Evaluation Report.

ES.5.1 Pipeline Facilities

The proposed 194.5-mile-long Nebraska Reroute would start about 1 mile south of the Nebraska–South Dakota border in Keya Paha County, Nebraska, at milepost 601 of the Keystone XL Pipeline. The proposed Nebraska Reroute would terminate in the northwestern corner of York County, Nebraska, at milepost 796. At that location, the proposed Nebraska Reroute would join the original Keystone XL Pipeline alignment as described in DOS's Final EIS (see Figure ES-2). The 36-inch-diameter pipeline would be made of high-strength steel pipe.

NDEQ understands that Keystone would make minor adjustments to the proposed pipeline alignment prior to construction. These minor route variations could be implemented to address specific landowner concerns, avoid certain features (such as structures, wells, or irrigation systems), minimize impacts to environmental resources, or facilitate construction in such areas as steep terrain or waterbody crossings. NDEQ does not believe that any of these minor adjustments would substantially change NDEQ's findings in this Final Evaluation Report.

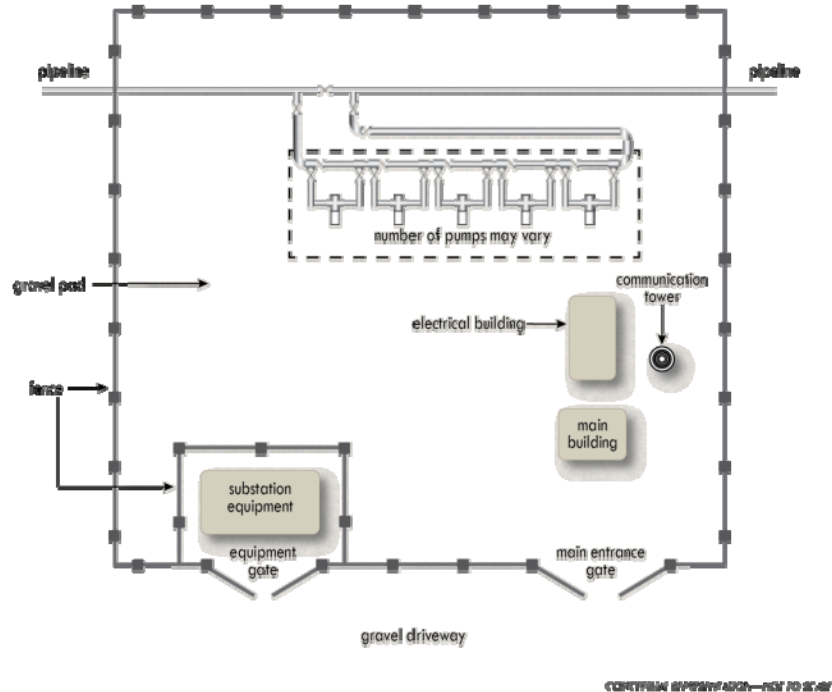
ES.5.2 Aboveground and Ancillary Facilities

The proposed Keystone XL Pipeline Nebraska Reroute, which primarily consists of a buried pipeline, also would include aboveground and ancillary facilities needed for the construction, operation, and maintenance of the pipeline. These components would include pump stations, mainline valves, permanent and temporary access roads, pipe storage sites, contractor yards, railroad sidings, and a construction camp.

Pump Stations

Pump stations are positioned along a liquid pipeline to increase the pressure in order to keep the product (crude oil) moving (see Figure ES-3). Pump stations would be constructed in Holt, Antelope, and Nance Counties and approximate locations are shown in Appendix B.

Figure ES-3. Conceptual Illustration of a Pump Station



Keystone Oil Pipeline pump station, near Hope, Kansas. November 2012.
Photo: NDEQ

Power Lines and Substations

Each of the three proposed pump stations along the proposed Nebraska Reroute would operate using electrical power supplied by a regional power provider. Power lines to the pump stations would be constructed and operated by the power provider. Substations would be incorporated into the pump station layouts during the final project design. Although all of the power supply infrastructure improvements would be owned by the power provider, Keystone would pay for their construction.

Mainline Valves

Mainline valves (MLV) can be manually or remotely closed to isolate a section of pipeline and limit the volume in the event of a leak. Keystone would install MLVs a minimum of every 20 miles, at pump stations, at major river crossings, and upstream of sensitive waterbodies.

Temporary and Permanent Access Roads

Keystone would use existing public and private roads to gain access to most of the construction right-of-way (ROW). Temporary access roads would be built by Keystone where existing roads are lacking or unavailable for use. The typical access road would be 30 feet wide. The approximate locations are identified in Appendix B. Permanent access roads would be used to gain access to pump stations and MLVs. Keystone would be responsible for maintenance of the new access roads.

Pipe Storage Sites, Contractor Yards, and Railroad Sidings

Temporary pipe storage sites, contractor yards, and railroad sidings are needed to store materials and equipment for pipeline construction. Prior to construction, Keystone would determine the numbers and locations of pipe storage sites, contractor yards, and railroad sidings that would be needed for the proposed Nebraska Reroute.



*Keystone XL Pipeline Gulf Coast Segment pipe storage yard, Northeast Texas
September 2012. Photo: HDR Engineering, Inc.*

Construction Camp

A construction camp houses construction workers in areas that do not have adequate temporary housing capacity. Because of the distance of the proposed Nebraska Reroute from larger population centers, Keystone has stated that a temporary construction camp capable of supporting up to 900 construction workers would be needed in northern Holt County.

ES.5.3 Construction Procedures and Schedule

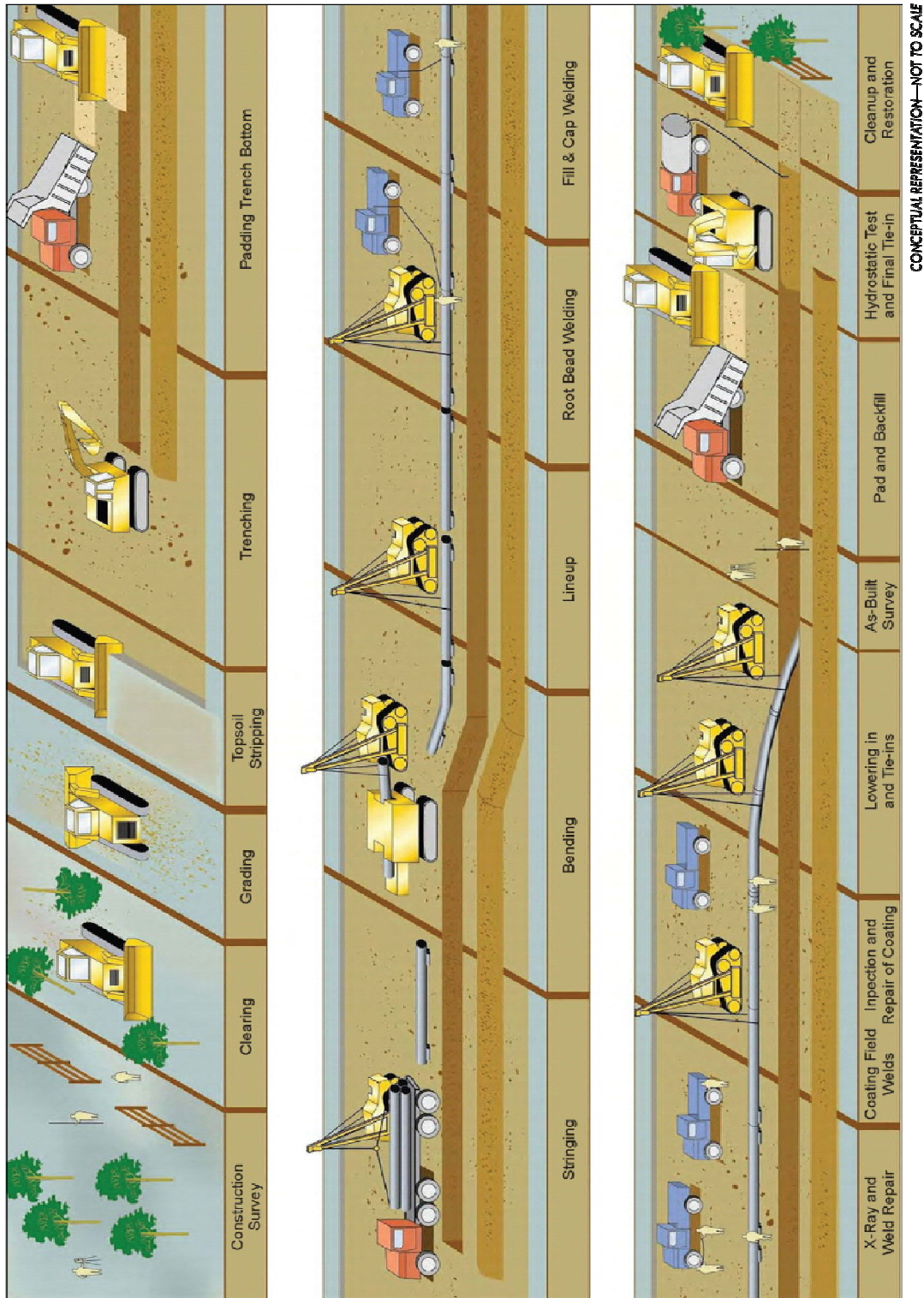
Contingent on obtaining the necessary permits and approvals, construction of the proposed pipeline would involve standard cross-country pipeline construction techniques. Keystone proposes to divide the pipeline in Nebraska into three segments, called “spreads,” on which separate crews could work simultaneously. Each spread would extend approximately 90 miles and take 6 to 8 months to complete. Construction of the new pump stations would take 18 to 24 months.

The typical construction sequence is shown in Figure ES-4. Pipeline construction would generally proceed as a moving assembly line, comprising:

- Surveying and staking the construction ROW
- Clearing and grading
- Trenching
- Stringing and bending
- Welding and coating
- Lowering-in and backfilling
- Hydrostatic testing
- Cleanup and restoration

Special techniques would be used when constructing the pipeline across wetlands; waterbodies; roads and railroads; utilities; agricultural, residential, and commercial areas; steep terrain; and areas of fragile soils. Although the pipeline was rerouted to avoid the designated Sand Hills region, the pipeline would cross some areas with fragile soils. Keystone has proposed that special procedures would be used in those locations, and NDEQ has reviewed those procedures.

Figure ES-4. Typical Construction Sequence





*Keystone XL Pipeline Gulf Coast Segment 2 under construction, Northeast Texas
September 2012. Photo: HDR Engineering, Inc.*

ES.5.4 Operation and Maintenance

The proposed pipeline would be operated, maintained, monitored, and inspected in accordance with 49 CFR Parts 190, 194, 195, 198, and 199 and other applicable federal, State, and local regulations. Keystone would also comply with 57 Special Conditions developed by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) specifically for the proposed Keystone XL Pipeline (see Appendix F.2). NDEQ reviewed the 57 Special Conditions and found that the conditions provide for more rigorous adherence to 49 CFR Part 195 and provide additional safety precautions.

A 50-foot-wide permanent ROW would be maintained along the proposed route during operation of the pipeline. Woody vegetation along the permanent ROW would be cleared periodically to maintain accessibility for pipeline integrity surveys. Mechanical mowing or cutting would be carried out from time to time, as needed, along the permanent ROW for normal vegetation maintenance. Most agricultural crops could be grown within this permanent ROW, but structures and deep-rooted vegetation such as trees would not be allowed. In areas where the pipeline would be installed using horizontal directional drilling, the pipeline would be deeper and trees could remain in the ROW.

ES.5.5 Future Plans and Decommissioning

Keystone expects to operate the proposed Keystone XL Pipeline for approximately 50 years. TransCanada typically does not abandon large-diameter pipelines but generally idles or deactivates pipelines as market conditions dictate. This allows a dormant pipeline to be reactivated or converted to another purpose in the future.

Decommissioning activities would be governed by applicable regulatory requirements that are in place at the time of decommissioning, as well as ROW agreements with affected landowners.

Prior to decommissioning the proposed Nebraska Reroute, Keystone would identify the decommissioning procedures it would use along each portion of the route, identify the regulations it would be required to comply with, and submit applications for the appropriate environmental permits.

ES.6 ENVIRONMENTAL CONSEQUENCES

The Nebraska Legislature's directive to NDEQ was: "Evaluate any route for an oil pipeline within ... the state ... for the stated purposes of being included in a federal agency's or agencies' National Environmental Policy Act review process. Any such evaluation shall include ... an analysis of the environmental, economic, social, and other impacts associated with the proposed route ..."

The proposed Nebraska Reroute would pass through nine Nebraska counties and would cross a variety of environmental conditions. In the northern portion, the soils are fragile and susceptible to erosion. Through the middle portion, the environment consists of rich, irrigated farmlands typified by thousands of acres of corn and soybeans. Through the Platte River valley, the land is used for agricultural purposes although water tables are high (only a few feet below ground surface). Then the land transitions back into rich farmland and deep water tables in Polk and York Counties.

NDEQ assessed impacts on the environment crossed by the proposed Nebraska Reroute—its soils and geology, its water and economy, and other resources in Nebraska. NDEQ also describes how the proposed Nebraska Reroute could affect those resources, from short-term effects during construction to long-term effects associated with reclamation and restoration after construction. Impacts that would result from the construction, maintenance and operation of the proposed Nebraska Reroute are summarized below.

ES.6.1 Environment

NDEQ's evaluation included an assessment of the proposed Nebraska Reroute's impact on geology, soils and sediment, groundwater resources, surface water, wetlands, terrestrial vegetation, wildlife, fisheries, protected species, air quality, noise, and waste management.

Geology

Geological conditions could affect the depth at which the pipeline would be placed and could influence the migration pathways that spilled substances would follow if pipeline releases were to occur. Furthermore, geological hazards and the locations of mineral and paleontological resources are important considerations in routing the pipeline and protecting it from natural hazards. NDEQ found that potential impacts could include disturbance of topography, loss of access to underlying mineral resources, disturbance of paleontological resources, and potential damage to the pipeline due to flooding and landslides.

Soils and Sediment

NDEQ identified potential impacts associated with construction activities include soil erosion, sandy soil loss attributable to cave-ins, topsoil loss or degradation, soil compaction, increased

rock content in near-surface soil, drainage tile system damage, and soil contamination attributable to product releases. NDEQ found that potential impacts associated with operation and maintenance of the proposed pipeline include erosion, compaction, temperature effects, and contamination in the event of a leak or spill.

Groundwater Resources

Groundwater is both an important resource in Nebraska and an important issue to the citizens of Nebraska. Within the alignment of the proposed Nebraska Reroute, aquifers are the principal supply for drinking water and agriculture. NDEQ found the proposed Nebraska Reroute could increase demand for groundwater resources during the construction phase. During construction, contamination of shallow aquifers from releases of fuel or other chemicals from equipment could also occur. NDEQ found that normal operation of the proposed pipeline would have no effect on groundwater quality or use. Impacts could result from a spill of crude oil from the pipeline. Such a release would likely have impacts on groundwater at a local level, rather than a regional level.



Residential water well testing. Photo: NDEQ

Surface Water

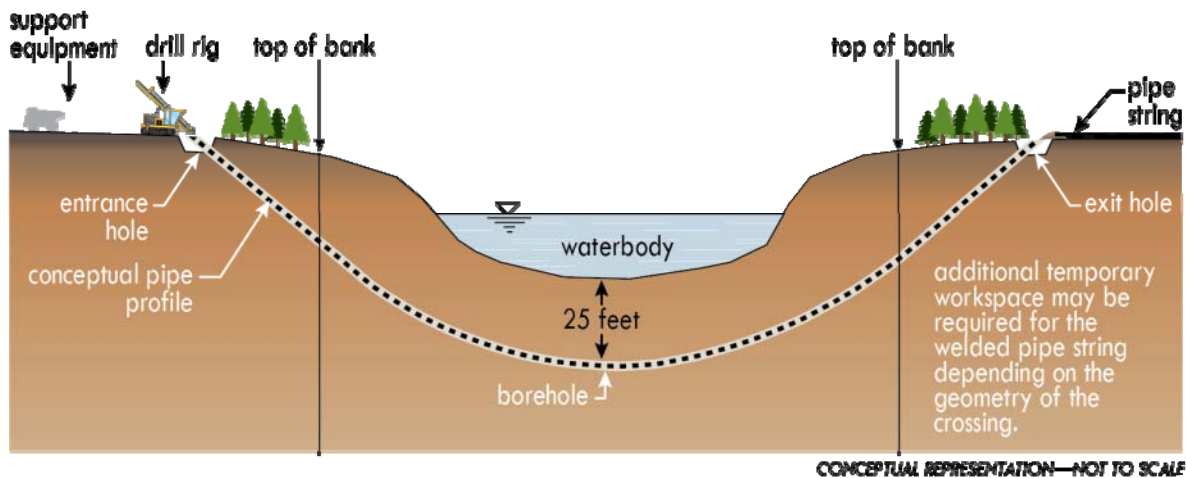
Surface water in Nebraska includes all rivers, streams, lakes, ponds, impounded reservoirs, canal systems, drainage systems, or wetlands. The proposed Nebraska Reroute would cross 163³ waterbodies within the following six major watersheds: Niobrara, Elkhorn, Lower Platte, Loup, Middle Platte, and Big Blue. NDEQ found that potential impacts on surface water during construction activities include:

- Temporary increases in sedimentation during stream crossings
- Short-term degradation of aquatic habitat during stream crossings
- Changes in channel morphology and stability due to channel and bank modifications
- Temporary-to-long-term bank instability before vegetation can be reestablished

³ Based on evaluation of data taken from the National Hydrologic Database (the U.S. Department of the Interior, U.S. Geological Survey, 2011).

Five rivers (Keya Paha, Niobrara, Elkhorn, Loup, and Platte) would be crossed using horizontal directional drilling (see Figure ES-5). Other waterbodies would be crossed by either wet or dry open-cut methods. NDEQ found the proposed Nebraska Reroute would increase demand for surface water during the construction phase because it would use those resources to supply construction-related activities. NDEQ found that normal operation of the proposed pipeline would have no effect on surface water quality or use. Impacts could result from a leak or accidental discharge of crude oil from the pipeline.

Figure ES-5. Conceptual Horizontal Directional Drilling at a Waterbody Crossing



Wetlands

Wetlands are areas that are inundated or saturated by surface water or groundwater and support wetland vegetation that grows in saturated soil conditions. Wetlands support many species of fish and wildlife and provide flood protection and pollution control. NDEQ found that approximately 62 acres of wetlands would be temporarily affected by the following construction actions:

- Removal of vegetation
- Loss and degradation of topsoil
- Soil compaction and rutting from construction equipment
- Introduction and dispersal of invasive weeds
- Alteration of topography and water flow

Permanent impacts on approximately 10 acres of freshwater forested/shrub wetlands would occur within the permanent easement by conversion of forested wetland to emergent wetland. Wetlands in the proposed Nebraska Reroute corridor fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE) Omaha District, the U.S. Environmental Protection Agency (EPA), and NDEQ. Keystone committed to develop compensation through the USACE Clean Water Act Sections 404 and 401 permitting program for impacts on forested wetlands adversely affected by the construction ROW.



*Typical emergent wetland in Nebraska. June 2012.
Photo: HDR Engineering, Inc.*

Terrestrial Vegetation

Terrestrial vegetation is found in prairies, rangeland, agricultural land, riparian corridors, and wetlands. NDEQ found that vegetation cover in the proposed Nebraska Reroute construction corridor would be removed during the initial phases of construction and restored after construction. In some areas, vegetation would be altered in type or permanently displaced after construction because of ROW maintenance and new ancillary facilities (such as roads, mainline valves, and pump stations). NDEQ found that vegetation could also be temporarily or permanently affected in the event of a spill or release from the pipeline.



*Existing Keystone Oil Pipeline (west of Seward, Nebraska), postconstruction restoration. May 2012.
Photo: NDEQ.*

Wildlife

Big-game animals, small-game animals, furbearers, waterfowl, and game birds use habitats in and around the proposed Nebraska Reroute. Nongame wildlife species are also common. Many different types of invertebrates are present. Although much of this area would be revegetated after the pipeline is installed, periodic maintenance activities could alter or fragment the existing habitat. NDEQ found that impacts on wildlife resources include:

- Habitat loss, alteration, and fragmentation
- Wildlife mortality during construction of the pipeline
- Reduced mating and/or reproductive success
- Reduced survival from movement barriers, stress, displacement, and increased human activity

NDEQ found that the impacts from construction and operation of the proposed pipeline would be small on a landscape level because the permanent corridor would be narrow, disturbed habitats would be reclaimed, and the majority of the affected habitats would be rangeland and cropland. Permanent adverse impacts would include a minor loss of forested habitat within the permanent pipeline corridor.

Fisheries

Fisheries occur in the rivers and streams crossed by the proposed Nebraska Reroute. NDEQ found that impacts on fisheries could occur during open-cut stream crossings and in the event of spills or leaks. Open-cut waterbody construction methods, including temporary construction access, could adversely affect fisheries by:

- Disturbing subsurface macroinvertebrates
- Altering the waterbody substrates, stream bed, and bank structure
- Reducing the amount and quality of riparian habitat
- Releasing sediment and degrading downstream habitats
- Increasing water temperature

Changes in flow regime due to water withdrawal and discharge could also affect fisheries.

Protected Species

Protected species are those listed as threatened or endangered or species of concern by the federal government and the State of Nebraska (Nebraska Game and Parks Commission). DOS is the lead federal agency in consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act. DOS and USFWS are consulting agencies, and NDEQ and the Nebraska Game and Parks Commission are participating agencies. Consultation with the Nebraska Game and Parks Commission under Nebraska Revised Statutes § 37-807(3) of the Nongame and Endangered Species Conservation Act would be required for State-issued permits (for example, National Pollutant Discharge Elimination System, surface water appropriation) required during construction.

Keystone has committed to coordination with the Nebraska Game and Parks Commission and USFWS based on future survey results and habitat evaluations. It would continue to discuss and finalize avoidance, minimization, and mitigation measures for impacts on federally and/or State-listed endangered or threatened species or species of concern.



American burying beetle. Photo by D. Backlund.
<www.wildphotophotography.com>



Western prairie fringed orchid
Photo by HDR Engineering, Inc.



Piping plover on nest with eggs

Photo courtesy of the Tern and Plover Conservation Partnership

Air Quality

The proposed Nebraska Reroute has the potential to affect air quality during construction as a result of increased emissions from the operation of vehicles and equipment and from dust. During the operational phase of the proposed pipeline, air quality could be minimally affected by intermittent operation of back up generators at MLV stations. NDEQ found that the proposed Nebraska Reroute would not significantly affect regional or national air quality.

Noise

NDEQ's construction noise assessment indicates that construction noise could vary considerably, depending on the equipment used and the distance between the noise source and the receiver. Typically, the highest noise levels during construction are associated with drilling operations, such as those at an HDD crossing. NDEQ generally found that noise levels from construction of the proposed pipeline would be clearly audible at a distance of 1,000 feet from the construction. During pipeline operation, analysis showed that the estimated noise level experienced at 1,000 feet from a pump station would be equivalent to conversational speech.

Waste Management

Waste materials, hazardous materials, or contamination may exist along the proposed Nebraska Reroute resulting from a variety of current or past activities. Contaminants could also be present that have migrated to a project site from off-site sources through groundwater flow. NDEQ found that hazardous materials (lubricant, fuels, oils and other materials commonly found on a construction site) could cause environmental damage to local surface and groundwater supplies, vegetation, and local wildlife in the event of an accidental release. If contamination were found, it would be managed according to federal, State, and/or local regulations.

ES.6.2 Economic Resources

NDEQ's economic analysis included an assessment of the proposed Nebraska Reroute's impact on agriculture and other land uses, employment and fiscal resources, public services, and energy.

Agriculture and Other Land Uses

The land use within the temporary construction easement for the proposed Nebraska Reroute is primarily (95 percent) agricultural: 59 percent of the land is used for crop cultivation or pasture, and the balance is used primarily for rangeland. Other land uses within or adjacent to the ROW include residential, power generation, and uses supporting agricultural activities. NDEQ found the following:

- Ancillary facilities (such as pump stations) would permanently convert agricultural land to a nonagricultural use.
- Construction of the proposed pipeline would temporarily disrupt agricultural activities on the affected land, diminishing crop yields for one growing season.
- Indirect effects on crop yields and livestock would occur due to the loss of irrigation and stock watering systems during construction. NDEQ estimates lost production at approximately 0.1 percent of the total for all crops in each county. Agricultural producers would be compensated for losses with payments based on crop values, expected yields, and acres of land needed for access.
- There are no farmsteads or residences within the 110-foot-wide construction ROW. There are 22 residences within 500 feet of the pipeline centerline that could experience construction dust, vibration, and noise during the construction period.
- All land uses could also be temporarily or permanently affected in the event of a spill from the proposed pipeline.



Typical center pivot along the proposed Nebraska Reroute. August 2012.

Photo: HDR Engineering, Inc.

Employment and Fiscal Effects

During preparation of the Draft Evaluation Report, Keystone had only provided general economic data for construction-related services. Therefore, in development of the Draft Evaluation Report, NDEQ made conservative assumptions and estimates of economic benefits. Following publication of the Draft Evaluation Report, Keystone provided data specific to Nebraska for employment and expenditures of construction-related services. This information was reviewed and verified by NDEQ and economic benefits were reanalyzed for this Final Evaluation Report. The new analysis resulted in greater economic and fiscal benefits for Nebraska.

Much local, state, national, and international attention has focused on potential employment opportunities that the proposed Keystone XL Pipeline⁴ could provide as well as the general economic benefits and fiscal effects that would accrue with its proposed implementation. Employment and fiscal impacts were assessed by reviewing data on unemployment rates; employment sectors; personal income; personal income per capita; median household income; and property, sales, and lodging tax revenues. Because of the rural and agricultural nature of the area through which the proposed pipeline would be constructed, the economic downturn that began in 2007 was less severe than in other parts of the country where dependency on manufacturing and services is greater and where the collapse in the housing market caused damaging economic and fiscal repercussions.

NDEQ found that construction and operation of the proposed Keystone XL Pipeline are expected to generate economic benefits to counties along the proposed Nebraska Reroute through increases in economic output, employment, and income. Construction-related spending and labor income would cycle through the local and state economies through secondary economic consumption, employment, and income—"the multiplier effect." Direct impacts on the region would be due to the sales of goods and services generated by the project and to labor income. A summary of those impacts follows:

- Spending by construction workers would account for approximately \$67.9 million of new total economic activity during construction, which would multiply through the local economies to generate a total of nearly \$97.7 million of new economic activity attributable to constructing the pipeline.
- Keystone would spend approximately \$475.7 million on construction activities which would have secondary impacts on the Nebraska economy.
- Keystone expects to employ approximately 270 Nebraska workers during construction, or 110 average annual jobs
- Keystone would procure \$34.5 million worth of Nebraska business services, including construction management, inspections, commissioning (pipeline startup), community safety, engineering, environmental services, telecommunications, corporate systems, legal, and real estate.
- Keystone expects to employ approximately 230 Nebraska workers (100 average annual jobs) for indirect construction services such as construction management, inspections, and other activities.

⁴ Economic and fiscal impacts were evaluated for the entire proposed Keystone XL Pipeline in Nebraska, which includes the Nebraska Reroute.

- Construction of the pipeline would result in \$418.1 million in economic benefits and would support up to 4,560 new or existing jobs in the state of Nebraska.
- The project would generate \$16.5 million in use taxes from pipeline construction materials.
- Operation of the pipeline would generate 15 jobs for operational and monitoring activities and an additional 50 new jobs through secondary economic growth.
- Annual local property tax revenues, for the first full year of valuation, would be between \$11 million and \$13 million.

Public Services

Increased demands from proposed Nebraska Reroute work crews and construction traffic could adversely affect public services, including law enforcement (local police and sheriff), fire protection, medical facilities, public roads, railroads and utilities, and school busing. NDEQ found that these effects would be short-term. Keystone has committed to maintain all public roads used for construction in a condition that is safe for both construction traffic and the public.

Energy

Energy would be needed to construct the proposed Nebraska Reroute, its associated facilities (such as pump stations and MLVs), power distribution lines, and substations to supply power to pump stations. NDEQ found that equipment and vehicles needed for construction would use diesel and gasoline fuel as well as electrical power. These would all involve short-term energy expenditures. NDEQ notes that the pump stations would have a continuous demand for energy, purchased from the local power provider.

ES.6.3 Social Issues

NDEQ's social analysis included an assessment of the proposed Nebraska Reroute's impact on recreation and visual resources, population and vulnerable groups (racial and ethnic minorities, low-income populations, and others), and cultural resources.

Recreation and Visual Resources

Recreational areas include waterbodies, State and local parks, national historic trails, wildlife management areas, and wildlife refuges. Areas of visual interest are areas such as residences, recreational areas, rivers, and highways with landscape characteristics and sensitive viewpoints that have an aesthetic value to residents and visitors. NDEQ found the following impacts:

- Short-term impacts on scenic, recreational, and historical trails
- Short-term impacts on hunting, depending on timing and season
- Short-term impacts on visual resources because of land disruption, construction of the pipeline, and installation of the ancillary facilities
- Long-term visual impacts due to pump stations and power lines

Population and Vulnerable Groups

The population analysis evaluated the potential for the proposed Nebraska Reroute to cause disproportionate impacts on vulnerable groups. NDEQ found that there would be no disproportionate impact on vulnerable groups. NDEQ identified the following:

- Construction of the proposed pipeline would bring a temporary influx of construction workers, but this influx would not affect long-term population trends in the counties along the proposed Nebraska Reroute.
- Housing impacts along the proposed Nebraska Reroute would be short-term as temporary workers would lodge in available hotels, motels, inns, campgrounds, and rental homes.
- Air pollutants, noise levels, and traffic congestion would not disproportionately affect any low income populations.
- Low-income populations would benefit from a temporary increase in economic activity.

Cultural Resources

Cultural resources are physical evidence of culturally and historically valued aspects of the human and natural environment on the landscape or are represented by the landscape itself. DOS is the lead agency for Section 106 of the National Historic Preservation Act and chose to meet its Section 106 responsibility by developing a Programmatic Agreement (PA), which was executed in August 2011. DOS is actively consulting with the previous PA signatory agencies and Native American tribes to determine how the PA or a revised version will be implemented for the proposed Project. DOS is responsible for consulting with federal and State agencies (including the Nebraska State Historic Preservation Office) and interested American Indian tribes pursuant to Section 106. Keystone surveyed 40 percent of the proposed Nebraska Reroute corridor as of August 2012 and identified nine sites that are considered potentially eligible for listing in the National Register of Historic Places (NRHP).

ES.7 MITIGATION

ES.7.1 Nebraska Department of Environmental Quality's Approach to Mitigation

This evaluation began with public meetings to collect Nebraskans' concerns regarding the proposed Nebraska Reroute. The concerns set the foundation for this report and focused NDEQ on impacts that needed to be mitigated. In conducting the evaluation of the proposed Nebraska Reroute, NDEQ performed the following:

- Careful and thorough review of all public comments
- Consultations with federal, regional, State, and local agencies
- Site visits
- Review of existing documentation including DOS environmental documents
- Independent review and verification of the proposed Nebraska Reroute information supplied by Keystone

Throughout its evaluation of the proposed Nebraska Reroute, NDEQ's approach to mitigation of impacts was to seek ways to 1) avoid impacts, 2) minimize impacts, and 3) restore resources.

NDEQ identified opportunities to minimize unavoidable impacts on resources. Lastly, when impacts cannot be avoided and are minimized to the extent possible, residual impacts would be mitigated through compensation or restoration by Keystone.

Additionally, Keystone will be required to comply with all terms and conditions of federal, state, and local permits issued by the appropriate agency for the project.

ES.7.2 Mitigation Commitments and Landowner Agreements

NDEQ encourages Keystone to negotiate mutually acceptable agreements with adversely affected landowners to address potential construction and restoration issues. According to Keystone, all landowner agreements would comply with federal, State, and local permits.

ES.7.3 Public Review of Mitigation Measures

NDEQ encouraged the public and agencies to review and comment on the mitigation measures in the Draft Evaluation Report. NDEQ assessed comments received concerning those measures and worked with Keystone to develop additional mitigation measures. Additional mitigation measures developed since the Draft Evaluation Report are discussed in this Final Evaluation Report.

ES.7.4 Commitments Made by Keystone

Keystone's mitigation commitments are detailed in the following documents:

- DOS's Final EIS
- Keystone's *Supplemental Environmental Report*
- Keystone's letter to NDEQ dated October 18, 2012

Additional mitigation commitments may be developed during DOS's Supplemental EIS process.

ES.8 PIPELINE SAFETY AND POTENTIAL SPILLS

Concerns have been expressed regarding potential product releases from the proposed pipeline. In response to those concerns, NDEQ has assessed the safeguards that would be incorporated to prevent a release and actions that Keystone would take if a release were to occur.

ES.8.1 Pipeline Safety Regulations and Special Conditions

To provide consistency across the nation, pipeline safety is regulated by the federal government. U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for safety regulations pertaining to the construction, operation, maintenance, and spill-response planning for pipelines, including the proposed Keystone XL Pipeline. Federal regulations governing pipeline safety are described in 49 CFR Parts 190 through 199.

PHMSA and DOS worked with Keystone to establish a set of 57 Special Conditions that would apply to the construction, operation, and maintenance of the proposed Keystone XL Pipeline, including the Nebraska Reroute (see Appendix F.2). NDEQ reviewed the 57 Special Conditions and compared them with 49 CFR Part 195 and industry design standards. The review concluded that many of the conditions would result in more rigorous adherence to industry standards and

would require specific timelines and management activities. Incorporation of the 57 Special Conditions would result in Keystone having more specific and frequent communication with PHMSA's regulatory personnel. The 57 Special Conditions coupled with the existing regulatory framework should provide a well-defined set of management practices to be followed during pipeline operation.

ES.8.2 Relevant Pipeline Spill Incident History

Recent spills in Nebraska and elsewhere in the United States were frequently mentioned by the public during the public comment period. NDEQ reviewed several relevant historical spills to understand how they occurred and the effectiveness of response. This analysis was used when considering impacts on resources from a potential spill.

NDEQ reviewed these spills and provided a summary of each in Chapter 6 of this Final Environmental Report:

- Enbridge Oil Spill, Kalamazoo River, Marshall, Michigan, July 2010
- Magellan Oil Products Pipeline Spill, Nemaha County, Nebraska, December 2011
- ExxonMobil Crude Oil Pipeline Spill, Yellowstone River, Montana, July 2011
- Enbridge Oil Spill, Grand Marsh, Wisconsin, July 2012
- Keystone Oil Pipeline Spills, 2010–2011
- Recent Nebraska spills

ES.8.3 Characteristics of Crude Oil Transported in Pipeline

The environmental consequence of a product release would depend on the material carried in the pipeline. Concerns have been raised by the public that some of the physical and chemical characteristics of the materials carried by the proposed pipeline could make a release more likely or that the material could be more toxic if spilled.

The bitumen (a soft, tar-like substance) extracted from the Alberta oil sands is too heavy and thick to be transported by pipeline. Therefore, bitumen is treated by blending with diluents or refining in an upgrading facility to form crude oil products with a viscosity and density that makes them suitable to be carried by a pipeline. The method of treatment would depend on various logistic and economic considerations.

Crude Oils Transported Through the Pipeline

According to Keystone, the following are categories of crude oils that could be transported in batches of 100,000 to 200,000 barrels through the proposed pipeline:

- Synthetic crude oil, produced from the Alberta oil sands in Canada
- Dilbit, produced from the Alberta oil sands
- Synbit, produced from the Alberta oil sands
- Dilsynbit, produced from the Alberta oil sands
- Conventional light crude oil, produced from the Bakken Formation in Montana and North Dakota

Synthetic crude oil is refined bitumen. Dilbit is produced by the blending of bitumen with a diluent such as natural gas condensate. Synbit is produced by adding synthetic crude oil to the bitumen. Dilsynbit is produced by blending bitumen with synthetic crude oil and a diluent. These products would not be created by Keystone but by the producers in Western Canada. Keystone is the common carrier of the product and is hired by the producers/shippers to transport their crude oil. The composition of crude oil is determined by the producers or shippers, but must meet Keystone's specifications.

NDEQ found that the physical and chemical properties of synthetic crude oil and Bakken crude oil are similar to those of other light crude oils commonly transported by pipeline. The properties of dilbit, synbit, and dilsynbit are similar in many respects to other heavy sour crude oils.

ES.8.4 Consequences of a Pipeline Spill

An accidental release of crude oil from the proposed pipeline is a concern of Nebraskans. Comments have been voiced about the effect a spill could have on sensitive environments such as shallow groundwater, flowing surface water, and wetlands. Crude oil spills such as the July 25, 2010, Enbridge spill near Marshall, Michigan, have served to reinforce these concerns.

The impacts of a crude oil release depend on many different factors, such as the spill size, terrain, ground cover, soil type, depth to groundwater, weather conditions, and proximity to surface water. In addition, rapid and effective emergency response is paramount to mitigating the impacts of a spill. Keystone is required by 49 CFR Part 194 to prepare an Emergency Response Plan specific to the proposed Keystone XL Pipeline.

In this Final Evaluation Report, NDEQ evaluated:

- Causes, volumes, and locations of recent pipeline incidents
- Movement and fate of spilled oil
- Potential impacts on resources
- Economic impacts of spills

ES.8.5 Spill Prevention and Detection during Pipeline Operation

Keystone has integrated a number of measures intended to prevent or detect releases during pipeline operation. NDEQ has reviewed and evaluated the following proposed measures:

- Prevention of material, weld, and equipment failures through design, manufacture, and construction of the pipeline
- Implementation of a corrosion prevention program to monitor and prevent both internal and external corrosion
- Prevention of excavation damage through provision of adequate depth of cover, pipeline markers, and use of puncture-resistant pipe materials
- Detection of leaks through:
 - A Pipeline Maintenance Program of annual valve maintenance, periodic in-line inspections, and cathodic protection readings

- A Supervisory Control and Data Acquisition (SCADA) system that continuously and remotely monitors the pipeline system in accordance with the requirements of 49 CFR Part 195 and the 57 Special Conditions
- Computational Pipeline Monitoring or mass balance monitoring
- Computer-based, non-realtime, accumulated gain/loss volume trending to assist in identifying low-rate or seepage releases
- Aerial and ground surveillance inspections
- Landowner and public awareness program to encourage and facilitate reporting of oil releases

ES.8.6 Planning for Pipeline Spills

By federal regulation, Keystone would be responsible for emergency spill response plans for a product release associated with the operation of the proposed Keystone XL Pipeline and ancillary facilities. In addition, spill-response planning is conducted by EPA, PHMSA, the National Response Center, and other federal agencies. NDEQ and local emergency responders in communities throughout Nebraska conduct spill response planning and training. Keystone also conducts spill response training exercises which involve federal and state agencies, including NDEQ, as well as local emergency responders.

At the request of NDEQ, Keystone conducted a simulated spill response communications exercise in November 2012 on its existing Keystone Oil Pipeline. NDEQ randomly selected the simulated spill location and provided it at the start of the exercise. Based on the time and location of the simulation, Keystone identified the material and transmitted the Material Safety Data Sheet (MSDS) to first responders within 17 minutes of the simulated pipeline strike. The MSDS provided to NDEQ and other State and local agencies during the exercise is included in Appendix F.5.

ES.8.7 Response to Pipeline Emergencies

In the case of an accidental release from the proposed pipeline or other emergency, primary responsibility for spill containment and cleanup would rest with Keystone. Because local fire departments or other local emergency service responders might be first on the scene, Keystone would invite emergency services agencies to participate in company training and exercises at no expense to the responders.

In the event of a spill, local emergency service agencies would protect themselves and the public by controlling access to the affected area. Keystone personnel are trained to be first and ongoing responders. Keystone would contract with spill-response contractors and would store equipment at various locations along the pipeline route. NDEQ would respond to the spill as needed and would request assistance from EPA if the size of the spill or deficiencies in Keystone's response created a need for additional resources. Depending on the magnitude and location of the spill, NDEQ would cooperate with other local, State, and federal agencies, and would establish an on-site incident command structure. If NDEQ determined that a federal response were required for a spill from the proposed Keystone XL Pipeline, an EPA On-Scene Coordinator would be designated.



*Keystone emergency exercise, Yankton, South Dakota. September, 2012.
Photo: HDR Engineering, Inc.*

NDEQ has requested that Keystone provide a timely and detailed accounting of any material spilled from the pipe. Keystone would make regulatory notifications immediately upon recognition of the spill as required by federal and State regulations. In the event of a spill, Keystone would provide the applicable MSDSs to NDEQ and other authorities at the same time it makes regulatory notifications.

After a spill had been contained and the emergency phase of the spill response had been completed, NDEQ's Petroleum Remediation Program would oversee the investigation and cleanup of petroleum-contaminated sites. Cleanup and remediation methods could include hauling excavated soils to a landfill, land farming, soil vapor extraction, or air sparging.

The Nebraska Environmental Protection Act (Nebraska Reissue Revised Statutes Section 81-1501, et seq.); the Nebraska Administrative Code, Title 126, Chapter 18; and Title 118, Chapter 10 place liability on the operator if a pipeline were to release oil or other hazardous substance in or on land or waters of the state. The federal Oil Pollution Act of 1990 places the same liabilities on a pipeline operator for a release into waters of the United States.

In response to public concerns, Keystone has committed to provide NDEQ evidence that it is carrying a minimum of \$200 million in third party liability insurance, which would help cover "sudden and accidental pollution incidents from Keystone XL Pipeline in Nebraska." This insurance would not represent a limit to Keystone's liability.

ES.9 OUTREACH AND AGENCY COORDINATION

ES.9.1 Public Involvement

Public outreach was conducted by NDEQ to inform and educate the public and to solicit public input. NDEQ's public involvement and outreach efforts included:

- press releases to multiple media outlets, a public notice placed in local newspapers regarding the availability of the Draft Evaluation Report and announcing the Information Session and Public Hearing
- a radio announcement aired on multiple stations
- a Nebraska Reroute website and online meetings
- a telephone information line
- a community poster
- email and direct mail notices

NDEQ held four Public Information Meetings in O'Neill, Neligh, Albion, and Central City, Nebraska over the course of two weeks in May 2012 and held an Information Session and Public Hearing in Albion, Nebraska on December 4, 2012.

Public Comment Period and Public Hearing

The Draft Evaluation Report was made available for public review and comments on October 30, 2012. The Draft Evaluation Report was made available electronically, with hardcopies and accompanying map books placed in several libraries along the route, in NDEQ's main office in Lincoln and in each NDEQ regional field office in the state (Omaha, Norfolk, Holdrege, North Platte, Scottsbluff and Chadron). Direct mail notice and/or email notice of the document's availability on the website and local libraries was sent to all participants who provided a mailing address or email address. CDs containing the Draft Evaluation Report were distributed to individuals who requested them through NDEQ. Key resource agencies were provided a full printed document or the Executive Summary accompanied by the full report on CD.

Multiple formats, media, and locations for commenting on the Draft Evaluation Report were made available, including an online comment form on the proposed Nebraska Reroute website, email, and direct mail. The public had opportunities to provide spoken and written testimony at the Public Hearing. The Public Hearing was held on December 4, 2012, in Albion, Nebraska. Approximately 800 persons attended the Public Hearing. The comment period concluded on December 7, 2012. NDEQ received 3,922 comments during the 7-month comment period.

ES.9.2 Agency Coordination

NDEQ invited agencies with jurisdiction, expertise, or interest in the proposed Nebraska Reroute to participate in the environmental review process. The agencies were asked to help identify potential environmental issues and concerns.

Throughout the process, NDEQ coordinated with State and federal agencies. In May 2012, coordination letters were sent to key resource agencies: six federal agencies, six State agencies, and nine local Natural Resources Districts (NRDs). To help facilitate coordination with NRDs,

NDEQ also invited comments from the Nebraska Association of Resources Districts, the professional association for Nebraska's 23 NRDs. NDEQ met with 7 NRDs located along the proposed Nebraska Reroute.

Following the May 2012 public information meetings, NDEQ met with representatives from other agencies:

- Nebraska Department of Health and Human Services
- Nebraska Department of Natural Resources
- Nebraska Department of Revenue
- Nebraska Department of Roads
- Nebraska Game and Parks Commission
- Nebraska State Historic Preservation Office
- U.S. Department of Agriculture Natural Resources Conservation Service

NDEQ coordinated with USFWS and NGPC under the Nebraska Nongame and Endangered Species Conservation Act. NDEQ met with EPA regarding EPA's role in the DOS environmental and Presidential Permit review process. NDEQ also met with PHMSA to discuss PHMSA's role in pipeline safety.

ES.9.3 Comments Received

NDEQ has had a continuous comment period which began April 19, 2012. NDEQ sought out public comments on Keystone's new alignment and provided feedback to Keystone on July 17, 2012. Keystone responded on September 5, 2012, with its *Supplemental Environmental Report* which proposed three further refinements to the proposed Nebraska Reroute. NDEQ sought public comments on Keystone's *Supplemental Environmental Report* which it considered in developing its Draft Evaluation Report. NDEQ also sought comments on the Draft Evaluation Report published on October 30, 2012. Comments were accepted through December 7, 2012. The Final Evaluation Report includes a summary of comments received during the 7-month comment period and responses to issues raised in those comments.

ES.10 COMPLETION OF THE NEBRASKA EVALUATION

This Final Evaluation Report has been submitted to Governor Heineman for review and decision. In accordance with the process directed in LB 1161, the Governor will indicate to DOS "whether he or she approves any of the routes reviewed in the supplemental environmental impact statement" [LB 1161, Sec. 3. (4)] regarding Keystone's proposed Nebraska Reroute. DOS will complete its Supplemental EIS and incorporate the Governor's decision.

The full Final Evaluation Report has been made available through:

- Electronic placement on the Nebraska Reroute website, <<https://ecmp.nebraska.gov/deq-seis/>>
- Printed copy placement in 11 local libraries
- Printed copy placement at the NDEQ's main office in Lincoln and in each NDEQ regional field office in the state: Omaha, Norfolk, Holdrege, North Platte, Scottsbluff, and Chadron