DEPARTMENT OF STATE RECORD OF DECISION AND NATIONAL INTEREST DETERMINATION

TransCanada Keystone Pipeline, LP Application for Presidential Permit

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1.0 Summary

On April 19, 2006, TransCanada Keystone Pipeline, LP ("Keystone") filed an application for a Presidential permit for the construction, connection, operation, and maintenance of pipeline facilities at the border of the U.S. and Canada for the transport of crude oil across the U.S.-Canada international boundary. TransCanada Keystone Pipeline, LP, is a limited partnership, organized under the laws of the State of Delaware. Keystone is equally owned by TransCanada Corporation, a Canadian public company organized under the laws of Canada, including the Canada Business Corporation Act, and ConocoPhillips Company, a Delaware corporation. Keystone has requested authorization to construct and operate the border crossing facilities in connection with its proposed international pipeline project (the "Keystone Pipeline Project"), which is designed to transport incremental Canadian crude oil production from the Western Canadian Sedimentary Basin ("WCSB") to existing terminals in Missouri, Illinois, and potentially to Oklahoma.

Executive Order 13337, as amended, delegates to the Secretary of State the President's authority to receive applications for permits for the construction, connection, operation, or maintenance of facilities for the exportation or importation of petroleum, petroleum products, coal, or other fuels at the border of the United States and to issue or deny such Presidential permits upon a national interest determination. The functions assigned to the Secretary have been further delegated within the Department of State to the Deputy Secretary of State, the Under Secretary of State for Political Affairs and the Under Secretary of State for Economic, Energy and Agricultural Affairs.

The United States portion of the pipeline will be approximately 1,378 miles long, including both the Mainline Pipeline and the Cushing Extension. The Keystone Pipeline will initially deliver approximately 435,000 barrels of crude oil per day (bpd) originating in the oil producing region of western Canada known as the Western Canadian Sedimentary Basin (WCSB) to U.S oil terminals and refineries in the mid-west and gulf regions. The addition of supplemental pumping capacity can increase the daily throughput in the pipeline to approximately 591,000 bpd.

Review of the Keystone Pipeline application by the U.S. Department of State (DOS) has determined that the Keystone Pipeline Project serves the national interest by providing additional access to a proximate and newly available supply of crude oil with minimum transportation requirements from a reliable trading partner of the United States.

In accordance with the National Environmental Policy Act of 1969 (NEPA), DOS conducted an environmental analysis of the project and prepared and submitted a Final Environmental Impact Statement (FEIS) to the EPA on January 11, 2008. After review of Keystone's application, the FEIS, and the suitability of TransCanada Keystone Pipeline LP to hold a Presidential permit for the Keystone Pipeline Project, the Under Secretary, acting under delegated authority, finds that construction, maintenance and

operation of the Project in accordance with the DOS preferred alternative would have limited adverse impact to the environment.

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, DOS as the lead federal agency of a federal undertaking (issuance of a Presidential Permit) conducted consultation with consulting parties, including Indian tribes, to consider potential impacts to historic properties that would result from construction of the Keystone Project. DOS has determined that, after review of the information provided by Keystone, consultation with the consulting parties, and the conclusion of a Programmatic Agreement (PA) to address the continuing roles and obligations of the consulting parties during the construction of the Keystone Project, the requirements of Section 106 are satisfied.

In accordance with Section 7 of the Endangered Species Act (ESA), DOS consulted with and obtained the concurrence of the U.S. Fish and Wildlife Service (USFWS) with a final Biological Assessment (BA) on the Keystone Pipeline Project. The BA concludes that the construction of the Keystone Pipeline Project may affect, but is not likely to adversely affect, species protected under the ESA. Additionally, the DOS, the USFWS, the applicant, the Rural Utilities Service (RUS), and the Western Area Power Authority (WAPA) have signed a Letter of Intent to address effects on protected species that might result from the construction of transmission lines that will be installed at a later date by local utilities to provide power to pump stations and related facilities along the pipeline alignment.

In light of these findings, the Under Secretary has decided to issue a Presidential Permit to TransCanada Keystone Pipeline, LP to construct, connect, operate, and maintain at the border of the United States facilities for the transport of crude oil between the United States and Canada as described in the Presidential Permit application received from Keystone by DOS on April 19, 2006, and in accordance with the measures described in the Construction Mitigation and Reclamation Plan (CMR) contained in the FEIS.

2.0 Introduction

2.1 Action

On April 19, 2006 TransCanada Keystone Pipeline, LP (Keystone)¹ applied to DOS for a Presidential Permit for construction, connection, operation, and maintenance of facilities at the border of the United States for the importation of petroleum from a foreign country. Executive Order 13337, as amended, delegates to the Secretary of State the President's authority to receive applications for permits for the construction, connection, operation, or maintenance of facilities for the exportation or importation of petroleum, petroleum products, coal, or other fuels at the border of the United States and to issue or deny such

¹ The original application to the DOS was filed by TransCanada Keystone Pipeline, LLC. Subsequently, TransCanada's counsel advised that the name of the applicant entity for the Presidential permit was TransCanada Keystone Pipeline LP, a Delaware limited partnership owned equally by TransCanada and ConocoPhillips.

Presidential permits upon a national interest determination. As noted above, the functions assigned to the Secretary have been further delegated within the Department of State to the Deputy Secretary of State, the Under Secretary of State for Political Affairs and the Under Secretary of State for Economic, Energy and Agricultural Affairs.

The issuance of the Presidential Permit constitutes a Federal action that may have a significant impact upon the environment and is therefore subject to the requirements of NEPA. The DOS therefore engaged in an environmental review of the project under NEPA and prepared and issued a Final Environmental Impact Statement (FEIS) on January 11, 2008. This FEIS addresses the portion of the Keystone Pipeline project within the United States to inform the Department's decision on issuance of a Presidential Permit in response to Keystone's application and to support the decisions of other federal agencies whose actions are necessary to allow the project to proceed.

Issuance of a Presidential Permit permit to Keystone would allow it to construct, connect, operate and maintain pipeline facilities at the border between the United States and Canada within a right-of-way adjacent to the point at which pipeline facilities cross the border.

2.2 Keystone Project

The oil that will be shipped in the Keystone pipeline system originates in the WCSB in Alberta. The entire Keystone Pipeline Project will consist of approximately 2,045 miles of pipeline, including 767 miles in Canada and 1,382 miles within the U.S. The Canadian portion of the pipeline system extends from Hardisty, Alberta into Saskatchewan and Manitoba prior to crossing the international border in North Dakota. In Canada, the project will involve the transfer of an existing 537 mile, 34-inch-diameter pipeline currently owned by TransCanada to Keystone and conversion of that line to crude oil service; construction of a new 230-mile pipeline extension from Hardisty to the existing pipeline; and construction of a pipeline extension from the existing pipeline to the U.S.-Canada border. In September, 2007, the Canadian National Energy Board, as authorized under Section 52 of the National Energy Board Act (Canada), issued a Certification of Public Convenience and Necessity to Keystone for the Canadian portion of the project.

In the United States, TransCanada Keystone Pipeline, LP (Keystone) will construct and operate an interstate crude oil pipeline and related facilities from the international border in North Dakota to an existing crude oil refinery at Wood River (Madison County), Illinois, and to an existing crude oil terminal in Patoka (Marion County), Illinois. This pipeline route is designated as the Mainline Pipeline. Keystone may also construct and operate a connected crude oil pipeline and related facilities from southern Nebraska to an existing terminal in Cushing (Payne County), Oklahoma that is designated as the Cushing Extension. The overall project will be known as the Keystone Pipeline Project and will have the initial nominal capacity to deliver 435,000 bpd of crude oil to the United States. Additional pumping capacity could be added to increase the average throughput in the pipeline to 591,000 bpd.

The U.S. portion of the pipeline system was evaluated in the DOS FEIS issued on January 11, 2008. It traverses either all or portions of the states of North Dakota, South Dakota, Nebraska, Missouri, Kansas, Illinois, and Oklahoma. The project will be located primarily in rural areas, but will be routed through or near populated areas occurring around Troy and St. Louis, Missouri and Wood River and Edwardsville, Illinois. The U.S. counties that will be affected by construction of the pipeline are:

North Dakota: Pembina, Cavalier, Walsh, Nelson, Steele, Barnes, Ransom, and Sargent.
South Dakota: Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, and Yankton;
Nebraska: Cedar, Wayne, Stanton, Platte, Colfax, Butler, Seward, Saline, Jefferson, and Gage;
Kansas: Marshall, Nemaha, Brown, Washington, Clay, Dickinson, Marion, Butler, Cowley and Doniphan;
Missouri: Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Audrain, Montgomery, Lincoln, and St. Charles;
Illinois: Madison, Bond, Fayette, Marion; and.
Oklahoma: Kay, Noble and Payne

Within the United States, the Keystone Pipeline will comprise:

- 1,082 miles of 30-inch pipeline (Mainline Pipeline) and associated facilities that will be constructed from the international border in Cavalier County, North Dakota, to both Wood River and Patoka, Illinois, and
- 296 miles of 36-inch pipeline (Cushing Extension), and associated facilities commencing in Platte County near the Nebraska-Kansas border and terminating at existing crude oil terminals in Cushing (Payne County), Oklahoma.

Keystone proposes to construct the 30- and 36-inch pipelines within a 110-foot-wide corridor, consisting of both a temporary 60 foot-wide construction right-of-way (ROW) and a 50 foot permanent ROW. The corridor width would, however, be reduced to 95 feet in portions of Illinois and 85 feet in certain wetlands, shelter beds, other forested areas, and in residential, commercial and industrial areas.

Above ground facilities for the Mainline Pipeline will include 23 pump stations (with associated electric transmission interconnection facilities), 57 mainline valves, and delivery metering facilities. Delivery metering and other facilities will be located at Wood River, Patoka, and Cushing. Electrical power and interconnection facilities will be supplied to the pump stations and remotely activated mainline valves by local power providers located along the pipeline route.

Above ground facilities for the Cushing Extension will include 3 pump stations, 15 mainline valves and a delivery metering facility to be constructed within the existing terminal in Cushing, Oklahoma. Electrical power and interconnection facilities will also be supplied to the pump stations and remotely activated mainline valves along the route of the Cushing Extension by local power providers located along the pipeline route.

Keystone plans to begin construction of the Mainline Pipeline in April 2008 and complete the project over an 18-month construction schedule. Construction of the Cushing Extension is planned to commence in late 2009, or early 2010, and will require approximately 12 months to complete.

The Mainline Pipeline will cross approximately 213 perennial water bodies and the Cushing Extension will cross approximately 58 perennial water bodies. Major river crossings are planned for the Missouri, Platte, Chariton, Cuivre and Mississippi Rivers. Wetlands will be crossed by both the Mainline Pipeline and the Cushing Extension.

Construction of the Mainline Pipeline will disturb approximately 17,608 acres of land for use as temporary construction workspace. Land disturbed for temporary workspace will be restored following construction. Approximately 6,667 acres of land would be required for permanent ROW. Of that total, approximately 6,558 acres would be restored and returned to its previous use after construction. Approximately 109 acres of permanent ROW would be used for above-ground facilities.

Construction of the Cushing Extension would disturb approximately 4,666 acres of additional land for use as temporary construction workspace. This land will be restored after construction is complete. Approximately 1,801 acres of land would be required as permanent ROW. Of that total, approximately 1,783 acres would be restored and returned to their previous use after construction.

3.0 Statutory Authority and Requirements

The Secretary of State has the authority under Executive Order 13337, as amended, to approve or deny applications for Presidential Permits and to issue such permits on such terms and conditions that the Secretary determines are appropriate, if the Secretary finds that issuance of the permit would serve the national interest. The President has delegated this authority to the Secretary based on his authority under the Constitution and laws of the United States, including Section 301 of Title 3 of the United States Code. The functions assigned to the Secretary have been further delegated within the Department of State to the Deputy Secretary of State, the Under Secretary of State for Political Affairs and the Under Secretary of State for Economic, Energy and Agricultural Affairs. Executive Order 13337 specifically authorizes the issuance of Presidential Permits for the "construction, connection, operation, or maintenance at the borders of the United States of facilities for the exportation or importation of petroleum, petroleum products, coal or other fuels to or from a foreign country." Because the Keystone Pipeline Project seeks to transport crude oil between Canada and the United States across the international border. the Keystone Pipeline Project is within the scope of Executive Order 13337 and within the authority of the Secretary of State under that Executive Order. Once the Secretary's decision has been made, selected agency officials may indicate their disagreement with the decision and request that the Secretary refer the application to the President under Executive Order 13337. In the event no such request is made within 15 days of

notification of the Secretary's decision, the Secretary's decision is final and the Presidential Permit is issued.

As noted above, when reviewing an application for a Presidential Permit, the Secretary is required to determine if issuance of the permit is in the national interest. As a non-exempt federal action under NEPA, the Secretary must also consider the environmental impacts of the proposed action under NEPA and under any other statutory requirements that may apply. These have been determined to include:

- a) Section 404 of the Clean Water Act The Keystone Pipeline will affect jurisdictional wetlands and require crossing of navigable waters of the United States. These actions will require Keystone to obtain permits from the U. S. Army Corps of Engineers (COE).
- b) Section 7 of the Endangered Species Act (ESA) The Keystone pipeline project will be constructed and operated in areas where federally listed species or their critical habitat are known to occur. DOS has prepared a Biological Assessment, in consultation with the U.S. Fish and Wildlife Service (USFWS) and state agencies, concerning effects of the Keystone Pipeline on species listed for protection.
- c) Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended – The DOS, as the lead federal agency on a federal undertaking (issuance of a Presidential Permit), is required to consider the impacts to historic properties before that undertaking occurs and take appropriate actions.

4.0 Purpose and Need for the Keystone Pipeline Project

Construction and operation of the Keystone Pipeline will provide additional pipeline capacity to import heavy crude oil from supplies in Canada's WCSB into the United States.

The province of Alberta is now widely accepted as having the largest recoverable crude oil reserves in the world after Saudi Arabia. Crude oil production from the WCSB, including conventional production and extraction from oil sands, is currently 2.3 million bpd; approximately 1.9 million bpd is shipped to the United States. Conventional crude oil production in the WCSB is expected to decline, but the decline is expected to be offset by rapidly growing oil sands production. Total WCSB production is forecasted to rise by 2015 to 3.9 million bpd. To the extent that adverse factors affect other major U.S. suppliers, an ever larger share of U.S. oil imports will likely be sourced from this stable and proximate supplier. Even if national energy policy were to slow crude oil demand growth in coming years, heavy oil imports from the WCSB are expected to increase.

The U.S. Energy Information Administration (EIA) projects that U.S. consumption of liquid fuels (crude oil and refined products) will total 26.9 million bpd in 2030, an increase of 6.2 million bpd over the 2005 consumption. Most of this increased demand is expected to be met with crude oil imports. Canada has traditionally been the United

States' largest single supplier due to its reliability and proximity to U.S. markets. Canada's share of total U.S. oil imports has risen from 15 to 16 percent over the last 10 years and is a significant share of the imports from Western Hemisphere supply sources which now accounts for 41 percent of U.S. oil imports.

Demand for heavy crude by U.S. refiners has increased over the last 20 years as world supplies of light crude have diminished in proportion to supplies of heavy and extraheavy crude. Many U.S. refiners have completed or are in the process of completing retrofits to process heavier crude in response to this change in the world supply. The heavy crude oil that Keystone will deliver to U.S. refiners is suited to replace the loss of these types of light crude and meet the expected increase in demand.

Nearly all of the 1.9 million bpd of crude oil imported from Canada in 2006 came from the WCSB, and was transported through three major pipeline systems: Enbridge Lakehead System, Kinder Morgan Express, and Kinder Morgan Trans Mountain. Total crude oil importation from the WCSB to U.S. markets is currently 2.4 million bpd. The majority of WCSB crude is delivered into the U.S. Midwest (where a large proportion of U.S. refining capacity is located) with the remainder forwarded to refiners in the U.S. Gulf Coast to offset declines in offshore production. Imports from the WCSB are expected to increase by 1.1 million bpd by 2015 requiring a 1.1 million bpd increase in pipeline capacity need. Keystone represents that it has binding contracts with shippers to deliver 340,000 bpd of crude oil to its terminals. Keystone also represents that the remaining pipeline capacity will be utilized by non-contract shippers at the tariff rate approved by the Federal Energy Regulatory Commission (FERC).

5.0 Description of Environmental Impacts and Alternatives Considered

In compliance with NEPA, the DOS has prepared a Draft and Final Environmental Impact Statement (EIS) to inform the DOS, and allow the DOS to consider the potential environmental, social, and economic impacts of Keystone's proposed pipeline when making the decision to approve or deny Keystone's Application for a Presidential Permit. The EIS was prepared under the Council for Environmental Quality (CEQ) implementing regulations on NEPA's Procedural requirements (40 CFR Parts 1500-1508, as amended), Executive Order 11514 on Protection and Enhancement of Environmental Quality (35 Fed. Reg. 4247, as amended (March 5, 1970), and the Department of State's own regulations, 22 C.F.R. Part 161, as amended. The EIS for the pipeline project was prepared by Entrix, Inc., on behalf of the Department of State.

The EIS examined the impacts of the United States portion of the Keystone project, including connected actions. The scope of the EIS, including alternatives considered, was determined after consideration of input from the public, Indian tribes, and federal, state and local agencies. Short-term and long-term construction and operations impacts were analyzed as were the cumulative impacts of construction and operation of the Keystone project as well as other past, present, and reasonably foreseeable future projects.

The EIS included an analysis of reasonable project alternatives to determine whether any would be environmentally preferable to Keystone's proposed action. Alternatives considered included: system alternatives (use of other existing or proposed pipelines), route alternatives, route variations, and alternative sites for aboveground facilities. The No Action alternative was also evaluated.

The EIS analysis found that none of the system alternatives could meet the project objectives presented by Keystone. Keystone's proposed pipeline route was found to be preferred to the other route alternatives considered, either because the other route alternatives did not meet project objectives or because they had greater impacts as a result of greater length or increased effects on sensitive resources.

A summary of the potential direct, indirect and cumulative impacts of construction and operation of the Keystone Pipeline, including the Cushing Extension, is provided in Table 1 below.

Table 1 - Summary of Potential Impacts of the Keystone Pipeline		
Resource	Direct and Indirect Impacts	Cumulative Impacts
Geology	No substantial topographical alteration and no disturbance of any geological features protected by federal or state laws, or tribal practice. Seismic activity is not expected to pose an unacceptable risk to the project. Access to deposits of sand, gravel, clay, and stone would not be greatly restricted. The proposed route does cross areas of high landslide potential, as described by the National Pipeline Mapping System at the Yankton and Mississippi River crossings. A minimal risk of localized subsidence or collapse exists where the pipeline crosses karst formations or passes above historic coal mines.	In Kansas, Missouri, and Illinois, the proposed route lies adjacent to an existing pipeline, limiting impacts to potentially exploitable geologic resources.
Soils	<u>Construction.</u> Temporary or short term increases in soil erosion. Short- or long-term decreases in agricultural productivity. Tile drainage systems would be disturbed. Boulders and rocks would be concentrated near the surface at completion. Spills or leakage from equipment could contaminate soils. <u>Operations.</u> Soil temperature impacts would be limited to within 3 feet of the pipeline and would not result in serious soil moisture loss. Differential settling around the proposed pipeline likely would be minor and would be addressed by mitigation measures	Cumulative erosion effects could occur along the sections of Keystone pipeline that are collocated with the Rockies Express Western Phase Project (REX Project).
Water Resources	Surface water or groundwater quality would not be significantly affected by normal disposal activities (such as disposal of hydrostatic test water), non-catastrophic spills, or leaks during pipeline construction and operation.	If collocated with the REX Project on a similar schedule, there could be a cumulative contribution to incremental sedimentation in adjacent surface waters. Both the Keystone Project and other portions of the REX Project plan to use surface water for hydrostatic testing. However, the timing for withdrawals

Table 1 - Summary of Potential Impacts of the Keystone Pipeline		
		planned for the REX Project would not overlap with withdrawals planned for Keystone.
Wetlands	Wetlands that would be affected within the ROW include emergent wetlands (403 acres), forested wetlands (80 acres), perennial riverine wetlands (37 acres), intermittent riverine wetlands (107 acres), and scrub-shrub wetlands (32 acres).	Cumulative impacts on wetlands would occur where the Keystone Project and REX pipelines or other construction projects would be collocated while crossing wetlands. Total wetland impacts within the collocated area could be about 156 acres of wetlands.
		Other construction projects, such as town expansions, new roads and highways, and other industrial facilities could affect additional wetlands.
Terrestrial Vegetation	Grassland impacts are expected to be minimal, and affected vegetative communities generally are expected to reestablish within 2 years. Construction through previously untilled prairie could produce irreversible impacts. Impacts on upland forest and shrubland would be longer term	The total amount of vegetation affected by all of the reasonably foreseeable projects is relatively small compared to the abundance of similar habitat in the Project area. Impacts would result in the long-term and permanent loss of non-herbaceous vegetation and would cause a small increase in fragmentation of forested areas
Wildlife	Pipeline construction would result in short-term disturbance and long- term modification to wildlife habitats. However, the total habitat loss is expected to be small in the context of total available habitat. See also below on Threatened and Endangered Species.	Construction and operation of the Keystone Project, along with the reasonably foreseeable projects, would result in short- term disturbance to wildlife and long-term wildlife habitat modification. Keystone would incrementally add to the area of habitat disrupted and to the disturbance of resident and migrating species, causing associated impacts as they adjust to the changes. Increased movement or displacement of species dependent on the disturbed habitats could reduce carrying capacities, reproductive effort, or survival. This potential is greater for species for which suitable habitat is limited in the Project area or that are otherwise sensitive to disturbance. See also below on Threatened and Endangered Species.
Fisheries	Impacts could occur through siltation and disturbance of streams crossed by the proposed pipeline. Any short-term disturbance caused by instream activities likely would resemble natural high-flow events in the stream. Keystone has proposed to undertake hydrostatic testing during spring, summer, and autumn, overlapping with key spawning months of April to July. This overlap could affect some sensitive species during breeding.	Cumulative impacts on fisheries would not occur due to differing schedules for co- located projects. However, if schedules were to change, and occur simultaneous, the Keystone Project would contribute to cumulative sedimentation impacts on fisheries. The impacts would be short term and minor due to implementation of mitigation measures and the requirements of any individual state permits to minimize impacts while crossing water bodies.
Threatened and Endangered Species	Preliminary data identified 55 federally or state-listed threatened, endangered, or candidate species potentially occurring in or near the Keystone Project ROW. Potential impacts on individual species include habitat loss, alteration, and fragmentation; decreased breeding; direct mortality; and reduced survival or reproduction.	Because the Keystone pipeline would parallel the REX Project pipeline across Kansas and Missouri, many of the state- and federally listed threatened and endangered species could potentially be

Table 1 - Summary of Potential Impacts of the Keystone Pipeline		
		affected by construction and operation of these projects. Both the Keystone and REX pipeline projects are required to consult with federal, state, and local agencies to determine which species may occur within each individual project area; to evaluate potential impacts on those species during construction and operation; and to implement measures to avoid, minimize, or mitigate impacts on special-status species and their habitats.
Land Use	Construction activities are anticipated to cause only temporary impacts. Agricultural, rangeland, forestland, recreational/special use, commercial, and residential land use classes would be affected in areas intersected by the proposed ROW. Agricultural land would be the most impacted, followed by rangeland. After construction, nearly all agricultural land along the ROW would be returned to production. Approximately 140 acres would be necessary for construction of aboveground facilities; these acres would be permanently removed from farming production. Recreational lands potentially affected include bike trails, sightseeing areas, hiking trails, and wildlife viewing areas; public lands are limited along the ROW.	Land use changes associated with the portion of the REX Project pipeline that is collocated with Keystone would add to the acreage of aboveground oil and gas facilities in the Project area. In addition, the ethanol and coal-fired power plants that would be constructed in Audrain County and Carroll County, Missouri, respectively, would further increase the amount of land in those counties that would be converted to industrial use
Socioeconomics	<u>Construction</u> would generate substantial direct and indirect economic benefits. Potentially negative impacts include agricultural losses, and increased demands on local highways and emergency services. Potentially adverse socioeconomic effects including increased demand for public services and inexpensive housing; this could disproportionately affect lower income areas. Other environmental justice concerns, such as disproportionate air and water quality impacts to communities, would not be expected. <u>Operations</u> . The economic impacts of operating the pipeline are expected to be positive, due to generation of permanent jobs and increased property tax revenue.	Construction periods and locations for the Keystone Project and the REX Project could overlap due to delays or other issues. These projects, together with any other linear and non-linear projects in the Project area, would require additional workers, potentially inducing housing shortages at certain locations during certain periods of time. The increased tax revenue for state and local governments over the life of the projects also may result in a beneficial long-term cumulative impact. Operation of the proposed facilities would require relatively few permanent employees; thus, there would be no long-term cumulative or additive impacts on population, housing, or municipal services in the Project area.
Cultural Resources	To limit impacts on cultural resources, the Keystone Project is avoiding all cultural resources that are listed in or potentially eligible for listing in the National Register of Historic Places (NRHP). Short term construction-related impacts will be minimized through implementation of Keystone's Mitigation Plan (Appendix B). Inadvertent discoveries of buried cultural resources may occur and will be handled as discussed in the Programmatic Agreement.	No cumulative impacts to cultural resources are anticipated.
Air	Since <u>Construction</u> would move through an area relatively quickly, air emissions typically would be localized, intermittent, and short term. Keystone will be required to comply with applicable regulations; emissions from construction-related activities would not significantly affect local or regional air quality. <u>Operations</u> would not produce significant air quality impacts, and only minor emissions from the backup gasoline generator and fugitive emissions from valves, tanks, and pumping equipment would occur.	Should construction periods overlap, the proposed Keystone Project would incrementally add to dust generation and combustion emissions from heavy equipment that also would be produced by the other reasonably foreseeable future projects. Cumulative impacts due to operations are not expected because

Table 1 - Summary of Potential Impacts of the Keystone Pipeline		
		emissions due to operation of the Keystone Pipeline Project are expected to be nil.
Noise	<u>Construction</u> . Residential, agricultural, and commercial areas within 500 feet of the project would experience short-term inconvenience from construction equipment noise. <u>Operations</u> . Noise associated with the electric pump stations would be limited to the immediate vicinity of the facilities, and are projected to be minor.	The Keystone Project, along with the other reasonably foreseeable projects, would contribute to ambient noise levels during construction. Noise impacts would be temporary. Because construction proceeds in sections along the pipelines and linear projects, the duration noise impacts at a given location and time would be limited and short term. Cumulative effects on ambient noise levels would occur only if construction on congruent sections of occurred simultaneously.
Reliability and Safety	The reliability and safety of the Keystone Project can be expected to be well within industry standards. Further, the low probability of large, catastrophic spill events and the routing of the pipeline to avoid most sensitive areas suggest a low probability of impacts to human and natural resources. Nevertheless, some potential for construction- and operation-related spills can be expected	Keystone and similar crude oil pipeline projects are required to comply with USDOT and state and local regulations regarding pipeline safety, leak detection, and spill response. The Platte pipeline (which is collocated with both the REX and Keystone Projects from the Nebraska/ Kansas border to Troy, Missouri and collocated with Keystone to Wood River, Illinois) could contribute to cumulative effects should an incident occur in relatively the same timeframe from each pipeline or facility.

6.0 Environmental Commitments and Mitigation

In its Presidential Permit application, Keystone committed to certain construction mitigation and reclamation measures which were considered in the analysis of direct, indirect, and cumulative environmental impacts. These measures are described in the Construction Mitigation and Reclamation Plan (CMR) that has been included as Appendix B to the FEIS. Measures described in the CMR Plan apply to work on all project lands including:

- Uplands including agricultural (cultivated or capable of being cultivated) lands, pasture lands; range lands; grass lands; forested lands; lands in residential, commercial, or industrial areas; lands in public rights of way; and lands in private rights of way;
- Wetlands;

• Water bodies and riparian lands.

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Keystone has committed to implementing the construction mitigation and reclamation measures in the CMR Plan, except where they conflict with the requirements of any applicable federal, state and local rules, regulations, or with other permits and approvals obtained by Keystone for the construction and operation of the project. Keystone may deviate from specific requirements of the CMR Plan on specific private lands as determined through negotiations with the owners of those private lands. All work must be conducted in compliance with federal, state, and local permits.

Keystone has also committed to amending the CMR Plan prior to construction to include certain additional mitigation measures suggested by agencies and stakeholders in review of the DEIS, and any additional specific mitigation measures that are adopted as part of individual permits or approvals received by Keystone as the result of actions by federal, state or local agencies during the permitting process. A summary of the measures presently included in the CMR Plan and those to be included as a result of consultation with federal and state agencies during the NEPA process is provided in Table 2 below.

TABLE	TABLE 2 – Summary of Measures to be included Keystones Construction Mitigation andReclamation Plan.	
Resource	Measure	
Geology	(1) Keystone will prepare a blasting plan that is applicable to any locations where blasting would be necessary. Prior to construction, Keystone will file its blasting plan with applicable state or local jurisdictions, where required.	
	(2) Excavation and blasting along the ROW may uncover paleontological resources that may be of scientific value. Keystone will consult with the appropriate regulatory agencies in each state on the applicability and requirements for Paleontological Resource Protection Plans. Keystone will prepare and file plans addressing vertebrate fossils with any respective states, as may be required.	
	(3) Keystone has considered landslide potential in its routing work and has selected crossings of these areas where the landslide potential is reduced. Because the proposed route does cross areas of high landslide potential, Keystone will follow TransCanada's Integrated Public Awareness (IPA) Plan. TransCanada's IPA Plan is consistent with the recommendations of API RP-1162; it includes distribution of educational materials to inform landowners of potential threats and information on how to identify threats to the pipeline. In addition, there is a potential for rock slope instability in the vicinity of the Whitewater River crossing in Kansas. Keystone will complete site-specific crossing plans for this water body if required by the applicable regulatory agencies during federal or state permitting processes.	
	(4) Because national-scale karst maps may not be sufficiently detailed to identify all karst terrains along the pipeline corridor, Keystone will consult with the respective state geological survey departments to identify the most up-to-date sources of data on karst-related subsidence hazards along the proposed route.	
Soils	(1) Keystone has proposed to avoid, replace, and/or repair any tile drainage system within the ROW.	
	(2) In cultivated agricultural lands, the actual depth of the topsoil shall be stripped from the area to be excavated above the pipeline to a maximum of 12 inches. When grading is required, the topsoil shall be removed from the entire area to be graded and stored. Stripped topsoil is to be stockpiled in a windrow along the edge of the ROW to minimize the potential for subsoil and topsoil to be mixed.	
	(3) Procedures to alleviate soil compaction as described in the CMR Plan may result in relatively excessive soil aeration and subsequent settling of soils within the ROW. Therefore, in the first year after construction, Keystone will inspect the ROW to identify areas of erosion or settling. Subsequently, Keystone will monitor erosion and settling through aerial patrols, which are part of Keystone's Integrity Management Plan, and through landowner reporting. Landowner reporting will be facilitated through use of Keystone's toll-free telephone number, which will	

TABLE 2 – Summary of Measures to be included Keystones Construction Mitigation and		
	Reclamation Plan.	
	be made available to all landowners on the ROW. Landowner reporting also may be facilitated through contact with Keystone's regional offices.	
	(4) As a result of discussions with DOS and agency personnel during environmental analysis, Keystone has agreed to designate at least one Environmental Inspector (EI) per construction spread, who will have the authority to stop work and/or order corrective action in the event that construction activities violate the provisions of the CMR Plan, landowner requirements, or any applicable permit.	
	(5) Keystone plans to minimize impacts on soil productivity that may result from construction activities, but recognizes that some short- to long-term decreases in agricultural productivity are possible. Keystone recognizes its responsibility to restore agricultural productivity on the pipeline ROW and to compensate landowners for demonstrated decreases in productivity that may result from any degradation of agricultural soils along the ROW. Keystone has contacted each of the affected states' Departments of Agriculture. Only Illinois has requested that such a plan be prepared. An Agricultural Mitigation Plan has been developed and approved by the Illinois Department of Agriculture.	
	(6) Hydric and otherwise compaction-prone soils are particularly sensitive to the impact of construction activities during wet weather. Section 2.18 of the CMR Plan addresses the methodology to be utilized to determine when to restrict or stop work for wet weather and the methods to mitigate impacts of construction activities in wet conditions. Section 2.18 takes into account the depth of rutting by reference to whether rutting may cause mixing of topsoil and subsoil, on a location-specific basis. "Stop work" authority will be designated to the Chief Inspector but will be implemented when recommended by the EI. Section 2.18 also addresses construction procedures and mitigative measures to minimize compaction in wet conditions.	
Water Resources	(1) Temporary erosion and sediment control measures shall be installed immediately after initial disturbance of the soil and maintained throughout construction (on a daily basis) and reinstalled as necessary until replaced by permanent erosion control structures or restoration of the construction ROW is complete. These measures include sediment barriers, trench plugs, temporary slope breakers, drainage channels or ditches, temporary mulching, and use of a tackifier.	
	(2) All extra work areas (such as staging areas and additional spoil storage areas) at least 10 feet from the water's edge. Flagging shall be installed at all water body crossings, across the construction ROW at least 10 feet from the banks prior to clearing and to ensure that riparian cover is maintained where practicable during construction.	
	(3) To ensure that groundwater resources are not negatively affected due to necessary blasting activities, Keystone's blasting plan will include provisions to avoid impacts to groundwater and to incorporate post-blasting testing for water wells within 150 feet of the centerline, to ensure that water wells are not negatively affected by blasting activities.	
	(4) To reduce impacts at crossings of larger water bodies where the Horizontal Directional Drilling (HDD) method is not proposed, Keystone will submit a site-specific Construction Mitigation and Restoration Plan.	
	(5) Because the open-cut wet crossing method necessarily involves substantial disturbance and transport of sediments, these methods may not be appropriate to cross impaired or contaminated water bodies, water bodies upstream of High Consequence Areas (HCAs), or sensitive or protected water bodies. Keystone will develop specific construction and crossing methods for open cuts in conjunction with COE permitting and USFWS consultation.	
	(6) All water body crossings will be assessed by qualified personnel in the design phase of the Project with respect to the potential for bank erosion, vertical channel degradation and lateral channel migration. The level of assessment for each crossing will vary based on the professional judgment of the qualified design personnel. The pipeline will be installed as determined to be necessary to address any hazards identified by the assessment. The pipeline will be installed at the design crossing depth for at least 15 feet beyond the lateral migration zone, as determined by qualified personnel. The design of the crossings also will include the specification of appropriate stabilization and restoration measures.	
Wetlands	(1) Wetland boundaries shall be clearly marked in the field with signs and/or highly visible flagging during construction. Aboveground facilities shall not be located in a wetland, except where the location of such facilities outside of wetlands will preclude compliance with USDOT pipeline safety regulations.	
	(2) The width of the construction ROW shall be reduced to 85 feet or less in standard wetlands unless non-cohesive soil conditions require utilization of a greater width.	
	(3) All extra work areas (such as staging areas and additional spoil storage areas) shall be located at least 10 feet away from wetland boundaries.	
	(4) Sediment barriers shall be installed across the entire construction ROW immediately upslope of the wetland to	

TABLE 2	2 – Summary of Measures to be included Keystones Construction Mitigation and Reclamation Plan.
	prevent sediment flow into the wetland.
	(5) All wetland areas within conservation lands or easements will be restored to a level consistent with any additional criteria established by the relevant managing agency.
	(6) The requirements for compensatory mitigation will depend on final COE decisions on jurisdictional delineations. The appropriate level of authorization and mitigation ultimately will be determined by COE regulatory offices, with input from USFWS Environmental Services field offices and state fish and wildlife agencies.
Terrestrial Vegetation	(1) Clearing, grubbing and grading of trees, brush and stumps shall be performed in accordance with: ROW boundaries including temporary workspaces shall be clearly staked to prevent disturbance to unauthorized areas; timber shall be salvaged as per landowner request; tree stumps shall be grubbed only 5 feet either side of the trench line and where necessary for grading a level surface; timber salvage operations shall use cut off-type saw equipment; trees shall be felled in such a way that they fall toward the center line of the ROW; there will be no disposal of woody debris in wooded areas along the pipeline ROW; pruning of branches hanging over the ROW shall be done only when necessary for construction; and stump removal and brush clearing shall be done with bulldozers equipped with brush rakes to preserve organic matter.
	(2) Keystone will consult with pertinent local, state, and federal regulatory agencies to evaluate terrestrial vegetation impacts and habitat fragmentation impacts to COE lands in the Riverlands Management Area in St. Charles County, Missouri, and in the Carlyle Lake Wildlife Management Area (WMA) in Fayette County, Illinois; and to determine with COE the required level of compensatory mitigation for impacts to these specific habitats.
	(3) Prior to construction, Keystone will develop a Project-wide general Noxious Weed Management Plan, which will address pre-construction noxious weed infestation surveys, control methods, herbicide application, equipment washing, and post-construction monitoring. The Plan will provide for cleaning or washing of clear and grade equipment at an appropriate location to avoid transfer of noxious weeds across the Kansas/Oklahoma state line.
	(4) Keystone will implement Best Management Practices (BMPs) for conducting vegetation control. Typical agricultural herbicides, developed in consultation with county or state regulatory agencies, will be used. Herbicides types will be determined based on the weed species requiring control.
Wildlife	(1) Spoil and topsoil wind rows shall not be located such that obvious wildlife trails are blocked.
	(2) Keystone will implement BMPs in the use of pesticides and herbicides along the pipeline corridor to reduce potential impacts to avian and wildlife species.
Fisheries	(1) Construction will involve dry-ditch techniques at crossings where the timing of construction does not adequately protect environmentally sensitive water bodies, as determined by the appropriate regulatory authority. Horizontal directional drilling (HDD) will be used at designated major and sensitive water bodies.
	(2) Keystone will develop specific crossing plans for water bodies that contain recreationally or commercially important fisheries, or are classified as special use, in conjunction with the appropriate jurisdictional agency
	(3) To avoid breeding periods when fish and invertebrate larvae are present, Keystone will consult with state fisheries agencies with respect to applicable construction windows for each crossing.
	(4) For hydrostatic testing, the intake hose shall be screened to prevent the entrainment of fish or debris. The hose shall be kept off the bottom of the water body. Pumps used for hydrostatic testing within 100 feet of any water body or wetland shall be operated and refueled in accordance with Section 3.0 of the CMR. Adequate flow rates in the water body shall be maintained to protect aquatic life, provide for all water body uses, and provide for downstream withdrawals of water by existing users. Withdrawals for hydrostatic testing from sensitive water bodies will generally be avoided until after August 1, unless permission is granted from the proper agencies. Chemicals shall not be used in the test water. Water containing oil or other substances in sufficient amounts to create a visible color film or sheen on the surface of the receiving water shall not be discharged. Any water obtained or discharged shall comply with permit requirements. To avoid impacts from introduced species, no inter-basin transfers (discharge) of hydrostatic test water will occur.
Threatened and Endangered Species	(1) If necessary prior to construction, Keystone will contract a qualified biologist to conduct surveys of sensitive species associated with particular habitats along the pipeline corridor. Details regarding mitigation measures for potential encounters with threatened and endangered species are provided in Section 2.9 of the CMR Plan.
	(2) To avoid impacts on nesting or winter roosting bald eagles, Keystone will conduct aerial and/or ground surveys prior to construction to locate any newly constructed nests and to determine the status of nests from February 1 through August 15. For the active nests, no construction (i.e., ground-disturbing activities) will occur within 1.0 mile of the nest between February 1 and August 15 (January 1 and July 15 for Missouri), unless permitted by USFWS. The 1-mile restriction will end when the young have fledged or the nest is not being used. The protection

TABLE 2 – Summary of Measures to be included Keystones Construction Mitigation and		
	Reclamation Plan.	
	zones will not preclude travel through an area; a travel lane will be established that protects nests from direct short- term impact. Keystone will train construction personnel to minimize disturbance to eagles. For identified communal winter bald eagle roosts within 1 mile of the construction ROW, Keystone will include avoidance of construction activities from 3 p.m. to 10 a.m. between November 1 and April 1, unless otherwise permitted.	
	(3) Keystone will conduct a search for gray bats prior to any activity that will affect caves in Madison County, Illinois or in Lincoln County, Missouri.	
	(4) If cutting of identified potential roost trees in woodlands with a habitat suitability index of more than 0.6 for Indiana bats is necessary, Keystone will schedule this cutting prior to April 1. Also Keystone will not clear trees from April 1 to September 30 in woodlands that have not been surveyed to determine habitat suitability for this species. If any Indiana bat maternity roost trees are located, applicable mitigation measures for these trees will be developed in consultation with USFWS and state wildlife agency personnel. Keystone will implement conservation measures to address the loss of Indiana bat summer habitat by working with USFWS, MDC, Missouri Department of Natural Resources, IDNR, and other potential cooperating parties in the development of conservation measures. Mitigation ratios will be determined by USFWS giving consideration to actual habitat assessment and loss.	
	(5) Keystone is currently developing an Incidental Take Permit (ITA) for the Massasauga and Kirtland's snake. Also, Keystone will place biological monitors in areas of appropriate native prairie/wet prairie habitats to locate and remove snakes ahead of construction.	
	(6) To avoid impacts on pallid sturgeon, Keystone will consult with individual states concerning potential water withdrawal from the Platte River drainage.	
	(7) For Topeka shiner streams, Keystone will prohibit in-stream construction activities during the spawning period (May 15 through July 31) at specific stream crossings identified in consultation with USFWS, unless HDD methods are used. Outside of the spawning season, if construction will disturb streams with pool depths of 3 feet or greater, those pools will be seined at least 1 week prior to construction, and fish will be relocated upstream to a pool or location of similar depth.	
Land Use	(1) Keystone also has developed mitigation plans for limiting impacts on soil drainage mechanisms (tiles), compaction, irrigation systems, farm access areas, windbreaks and living fences. Keystone has further sought to minimize impacts on rangelands by developing range-specific mitigation measures. Keystone will coordinate with agency and land use managers to reduce conflicts between construction activities and recreational uses. Details on these measures are provided in the CMR Plan.	
	(2) For all verified enrolled acreage in CRP and other FSA conservation program areas intersected by the ROW, Keystone will assist all appropriate landowners with this effort. Keystone will confer with all appropriate FSA offices to ensure that these consultations meet FSA requirements. Keystone will comply with remediation and restoration requirements required by FSA.	
	(3) Keystone will utilize the state-specific NRCS Field Office Technical Guide (Appendix M) for mitigation and revegetation of areas damaged by construction. Keystone will consult with the local NRCS representatives to determine the adequacy of Keystone's CMR Plan and will supplement the plan as needed during construction and reclamation.	
	(4) Keystone will address mitigation, reclamation, and remediation measures, including the possible use of non- vegetative remediation pertaining to impacts to windbreaks, shelterbelts, and living snow fences, with individual landowners and will comply with any applicable state requirements.	
	(5) Keystone will consult with land managers on state and federal lands regarding any necessary construction and maintenance restrictions consistent with management and use of such lands. Damages from disruption of recreational uses of private lands will be the subject of compensation negotiations with individual landowners. Where the pipeline follows an existing ROW in forested areas, Keystone will attempt to route the pipeline as close as practical to the existing ROW.	
	(6) To mitigate potential impacts on recreational resources in privately owned conservation areas, Keystone will consult with the owners of private conservation areas regarding any concerns related to disruption of recreational uses of such areas. Damages from disruption of recreational uses of private lands will be the subject of compensation negotiations with individual landowners. Where the pipeline follows an existing ROW in privately owned conservation areas, Keystone will attempt to route the pipeline as close as practical to the existing ROW.	
	(7) To decrease possible conflicts with hunting and other recreational activities in wildlife management and public conservation areas, Keystone will negotiate with individual land managers. Where the pipeline follows an existing ROW in privately owned conservation areas, Keystone will attempt to route the pipeline as close as practical to the existing ROW.	
	(8) To further reduce visual impacts from aboveground pipeline facilities and structures, Keystone will comply with	

TABLE 2	2 – Summary of Measures to be included Keystones Construction Mitigation and Reclamation Plan.
	standard industry painting practices with respect to aboveground facilities. Keystone will address any visual aesthetics issues with landowners in individual consultations.
	(9) For the Milford Wildlife Area, the primary concerns are limited access and conflicts with hunters during construction. Therefore, Keystone will develop a site-specific crossing plan for the Milford Wildlife Area.
Socio-	(1) Agricultural losses will be compensated by Keystone during the easement procurement process.
economics	(2) Keystone will maintain access and traffic flow on local roads during construction activities, particularly for emergency vehicles. Any impacts on local roads will be repaired by Keystone.
Cultural Resources	(1) Keystone intends to avoid all cultural resources by rerouting the pipeline corridor and/or related appurtenances, avoiding construction activities on properties listed in or eligible for listing in the National Register of Historic Places (NRHP), as well as boring and using HDD through culturally sterile soils.
	(2) The Department of State, along with Keystone, the Advisory Council on Historic Preservation, various other federal agencies, State Historic Preservation Officers and Native Indian tribes, signed a Programmatic Agreement to address the protocols for dealing with inadvertent discoveries, future cultural resources identification and avoidance commitments, and the process for future consultation on historic preservation issues.
	(3) If any adverse effects do occur, they will be resolved through consultation with the Advisory Council on Historic Preservation, as well as any applicable Native American tribes, agencies, and the State Historic Preservation Officers, in accord with the Programmatic Agreement.
	(4) All material filed with DOS that contains location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering:
	"CONTAINS PRIVILEGED INFORMATION- DO NOT RELEASE."
Air	(1) Keystone's contractor shall at all times control airborne dust levels during construction using water trucks, sprinklers or calcium chloride as necessary to reduce dust to acceptable levels. Dust shall be strictly controlled where the work approaches dwellings, farm buildings, and other areas occupied by people and when the pipeline parallels an existing road or highway. Additional measures may be required by state or local ordinances. Keystone will comply with all applicable state and local regulations with respect to truck transportation and fugitive dust emissions
	(2) Emissions from construction equipment combustion, open burning, and temporary fuel transfer systems and associated tanks will be controlled to the extent required by state and local agencies, through the permit process.
Noise	(1) To limit disturbance of residential and commercial areas within 500 feet of construction activities, Keystone will give advanced notice to landowners prior to construction, will limit the hours during which construction activities with high-decibel noise levels are conducted, and will ensure that construction proceeds quickly through such areas.
	(2) Keystone will perform a noise assessment survey during operations to confirm the level of noise at each listed noise-sensitive area.
	(3) Keystone will set up a toll-free telephone line for landowners to report any construction noise-related issues.
Reliability and Safety	(1) The Keystone pipeline system will be designed, constructed, and maintained in a manner that meets or exceeds industry standards and regulatory requirements. Details regarding Keystone's Spill Prevention and Containment Plan are provided in Section 3.0 of the CMR Plan.
	(2) Keystone's preventative maintenance, inspection, and repair program will monitor the integrity of the pipeline and make repairs if necessary. In compliance with applicable regulations governing the operation of pipelines, periodic inline inspections will be conducted to collect information on the status of pipe for the entire length of the system. In addition, line patrol, leak detection systems, SCADA, fusion-bond epoxy coating, and construction techniques with associated quality control will be implemented.
	(3) Fuel and storage tanks will be placed only at contractor yards. No fuel and storage tanks will be placed on the construction ROW.
	(4) For all locations subject to Clean Water Act (CWA) Section 311, Keystone will prepare a site-specific oil SPCC Plan that contains all requirements of 40 CFR Part 112 for every location used for staging fuel or oil storage tanks and for every location used for fuel or oil transfer. Each SPCC Plan will be prepared and submitted prior to introducing the subject fuel, oil, or hazardous material to the subject location.
	(5) Refueling of construction equipment shall be conducted a minimum distance of 100 feet from streams or wetlands. Environmental inspectors will place signs a minimum of 100 feet from the boundaries of all wetlands and water bodies prior to construction. The construction contractor will not be allowed to place a fuel or oil storage tank

TABLE 2 - Summary of Measures to be included Keystones Construction Mitigation and
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without first getting the EI to inspect the tank site for compliance with the 100-foot setback requirement and receiving approval of the tank site from the EI.
(6) During construction, no fuel or storage tank will be allowed to be relocated within or to a new construction yard by the contractor without first getting the EI to inspect the tank site for compliance with the 100-foot setback requirement and receiving approval of the tank site from the EI.
(7) Prior to construction, all project personnel will be trained on all environmental permit requirements and environmental specifications, including fuel handling and storage.
(8) Any fuel truck that transports and dispenses fuel to construction equipment or project vehicles along the construction ROW or within equipment staging and material areas will carry an oil spill response kit and spill response equipment onboard at all times. In the event that response materials are depleted through use, or their condition is deteriorated through age, the materials will be replenished prior to placing the fueling vehicle back into service.
(9) Oil and other hazardous materials stored in 350-gallon totes, 55-gallon drums, 5-gallon pails, smaller retail-sized containers or other portable containers will be staged or stored in areas with a secondary means of containment. No oil or hazardous material storage, staging, or transfer other than refueling will occur within 50 feet of any surface water body, surface drainage, storm drain drop inlet, or HCA.
(10) Fixed-fuel dispensing locations will be provided, with a means of secondary containment to capture fuel from leaks, drips, and overfills.

7.0 Public and Agency Review and Comment

During its consideration of Keystone's application for a Presidential Permit and in compliance with federal requirements for informing and involving the public, Indian tribes and other public agencies (both federal and state) with jurisdiction concerning aspects of this project, the DOS conducted extensive public outreach and consultation programs. The purpose of these programs was to solicit public and agency input on issues and alternatives to be considered during preparation of the EIS and to receive comments on the completeness of the EIS. These programs also served to provide government-to-government consultation with Indian tribes relative to historic properties under guidance of the NHPA and to consult with relevant natural resource management agencies under the Clean Water Act (CWA) and the ESA. The actions and programs conducted during consideration of Keystone's application included:

- a) Publication in the Federal Register of a Notice of Intent To Prepare an EIS and To Conduct Scoping Meetings as well as the conduct of a series of public meetings to receive input on the project from the public, other agencies, Indian tribes and non-governmental organizations;
- b) Public Review and Comment on a Draft EIS;
- c) Public Review of a Final EIS (See FEIS, Appendix A for a scoping summary and response to DEIS comments),
- d) Consultation with Indian tribes; and
- e) Consultation with other Federal and State Agencies (USFWS, COE, State Historic Preservation Officers, etc.).

The result of these outreach and consultation programs is summarized in the following sections.

7.1 Notice of Intent and Scoping

On October 4, 2006, DOS issued a Notice of Intent (NOI) to prepare an EIS. The NOI informed the public about the proposed action, announced plans for scoping meetings, invited public participation in the scoping process, and solicited public comments for consideration in establishing the scope and content of the EIS. The NOI was published in the Federal Register (71 Fed. Reg. 59849), and distributed to approximately 6,000 recipients including affected landowners, Federal agencies, Indian tribes, State agencies, Municipalities and counties, elected officials, non-governmental organizations, the media, and other interested individuals. From October 24, 2006 through November 16, 2006 DOS held 13 separate scoping meetings in the vicinity of the proposed route to provide opportunity for public comment on the scope of the EIS.

The official scoping period ended on November 30, 2006; however, additional comments received after this date were considered in the Draft EIS. A summary of the comments received and a matrix with responses from DOS was posted on the project website in December 2006.

7.2 Review and Comment on DEIS

The 2007 Keystone Oil Pipeline Project Draft EIS was released for public review on August 10, 2007. The public comment period ended on September 24, 2007; however, additional comments were accepted into November 2007. Comments were sent to DOS by email, website link (e-comments), phone, and U.S. mail. From September 4 through September 20, 2007, 13 public meetings were held to solicit oral testimony and written comments on the Draft EIS. These meetings were held at or near the same locations as the scoping meetings in 2006.

Oral testimony was provided by 67 individuals at these meetings, contributing 230 individual comments on the Draft EIS. In addition to the oral testimony, 110 letters, cards, emails, e-comments, or telephone conversation records totaling 1,009 comments were received from the public, agencies, the Applicant (Keystone), and other interested groups and stakeholders. All comments received and the responses from DOS to comments were summarized and distributed to the cooperating agencies on December 12, 2007 and included in Appendix A of the Final EIS.

7.3 Review and Comment on FEIS

The Environmental Protection Agency published the Notice of Availability (NOA) for the Final EIS for the Keystone Oil Pipeline Project in the Federal Register on January 11, 2008, (73 Fed. Reg. 2027). At the same time, the document was released to the public and posted on the project website. DOS accepted comments on the FEIS for 30 days after the NOA. DOS considered any substantive comments received during the 30 day period prior to the issuance of the ROD.

7.4 Consultation under Section 106 of the NHPA

After receipt of the Presidential Permit application, DOS as lead agency assumed responsibility for compliance with section 106 of the National Historic Preservation Act (NHPA). DOS consulted with seven State Historical Preservation Officers (SHPOs), 87 Indian tribes, other relevant federal agencies (including the Advisory Council on Historic Preservation (ACHP)), local governments, and members of the public.

To coordinate compliance with NEPA and Section 106, DOS consulted with federal agencies whose participation in the Project was considered an undertaking under 36 CFR 800.16(y). These agencies included the ACHP, United States Department of Agriculture (Farm Service Agency (FSA), Rural Utilities Services (RUS), and National Resources Conservation Service (NRCS)), COE, and USFWS. On October 25, 2006, the ACHP entered a consultation finding that Criteria 3 and 4 of Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of the regulations (36 CFR Part 800) implementing Section 106 of the NHPA, had the potential to be met.

DOS consulted with the SHPO offices of the seven states crossed by the pipeline alignment on the Area of Potential Effect (APE), the National Register of Historic Places (NRHP) eligibility of historic properties, the Project effects, and Unanticipated Discoveries Plans. DOS also recognized that, to ensure the protection of historic properties during ongoing pipeline design activities and future construction activities, a Programmatic Agreement (PA) among the applicant, ACHP, and consulting parties defining roles and requirements for the parties during these activities was required. DOS provided opportunities for consulting parties to comment on the PA prior to finalization of that document.

In recognition of the United States Government's trust responsibilities and consistent with the intent of Executive Order 13175 on Consultation and Coordination with Indian Tribal Governments, DOS communicated with Indian tribes throughout the Section 106 process through e-mails, phone calls, letters, document submittals, and face-to-face individual and group consultations. Government-to-government consultations with Indian tribes were held in May, August, October, and December 2007. DOS has also provided opportunity for ongoing consultation meetings with Indian tribes and other consulting parties.

7.5 Consultation under Section 7 of the ESA

Pursuant to Section 7 of the Endangered Species Act, the DOS, in consultation with the U.S. Fish and Wildlife Service, took appropriate action to ensure that the granting of the Presidential Permit is not likely to jeopardize the continued existence of any federally listed species or results in the destruction or adverse modification of critical habitat. Biological assessments are prepared if listed species or critical habitat may be present in the area affected by any major construction activity.

The DOS designated Keystone to act as its non-federal representative for Section 7 purposes in a letter dated January 5, 2007. Keystone, on behalf of the DOS, consulted with the USFWS and state natural heritage programs and wildlife agencies to identify

species and habitats of concern. The USFWS Denver office served as the lead office for DOS consultation with assistance from the Grand Island Nebraska Field Office. State wildlife agencies consulted included:

- North Dakota Game and Fish Department (NDGFD);
- South Dakota Game, Fish and Parks (SDGFP);
- Nebraska Game and Parks Commission (NGPC);
- Kansas Department of Wildlife and Parks (KDWP);
- Missouri Department of Conservation (MDC);
- Illinois Department of Natural Resources (IDNR); and
- Oklahoma Department of Wildlife Conservation (OKDWC).

In consultation with federal and state agencies Keystone developed field survey protocols, target survey areas, and survey schedules. Agency coordination documentation and survey protocols were filed by Keystone with the DOS in September and November 2006, and in January, March, and September 2007.

Based on input from these state and federal agencies, state natural heritage programs, agency web sites and other applicable web sites (e.g., NaturServe.org), biological packages summarizing potential habitat for special-status species were sent to applicable federal and state agencies for review and input in June 2006. Keystone held meetings with federal and state resource agencies in February and July 2006 and in February and November 2007. Work plans were developed for surveys of protected species in each state. These plans included the species to be surveyed; survey locations (mileposts and maps); survey periods; and requirements for proposed surveys in 2006, 2007, and preconstruction surveys in 2008. All survey locations and plans were reviewed and approved by the appropriate federal and state resource agencies.

Wetland types in the Keystone Project area were identified based on photo interpretation of 1:6,000-scale aerial photography dated 2006. Some wetlands have been verified by ground surveys, in accordance with direction provided by COE staff in the Omaha, Kansas City, St. Louis, and Tulsa districts, during 2005 to 2007 for the pipeline routes, contractor yards, pipe storage yards, and access roads. Due to the various surveying and permitting requirements within each district, Keystone will continue consultations with the COE district offices and state resource agencies to develop the specific information that will be required under the permit prior to construction.

A final Biological Assessment (BA) was prepared in February 2008, which incorporates the comments of the USFWS, with the exception of the USFWS's recommended conservation measure for the whooping crane. Keystone identified an alternative conservation measure that was incorporated into the final BA. Additionally, DOS, USFWS, Keystone, RUS, and WAPA have signed a Letter of Intent that makes clear that RUS and WAPA and USFWS will continue to consult to address any ESA concerns related to the siting of transmission lines to be constructed by local utilities providing electrical power to certain pump stations along the pipeline corridor at a future date.

8.0 Decision and Basis for Decision

The Under Secretary for Economics, Energy, and Agricultural Affairs has determined that a Presidential Permit will be issued to TransCanada Keystone Pipeline, LP to construct, connect, operate, and maintain facilities at the border for the transport of crude oil between the United States and Canada across the international boundary, as described in the Application for a Presidential Permit dated April 19, 2006 and as further amended by the subsequent filings of TransCanada Keystone Pipeline, LP with the DOS and by information incorporated into the Final EIS issued January 11, 2008. The Under Secretary also finds that:

<u>Construction and Operation of the Keystone Pipeline Serves the National Interest</u> -The addition of crude oil pipeline capacity between the WCSB and the United States serves the strategic interests of the United States for the following reasons:

- It increases the diversity of available supplies among the United States' worldwide crude oil sources. Increased output from the WCSB can be utilized by a growing number of refineries in the United States that have access and means of transport for these increased supplies.
- It shortens the transportation pathway for a portion of United States crude oil imports. Crude oil supplies in Western Canada represent the largest and closest foreign supply source to domestic refineries that do not require marine transportation.
- It increases crude oil supplies from a source region that has been a stable and reliable trading partner of the United States and does not require exposure of crude oil in high seas transport and railway routes that may be affected by heightened security and environmental concerns.
- It provides additional supplies of crude oil to make up for the continued decline in imports from several other major U.S. suppliers.

<u>Construction and Operation of the Keystone Pipeline Meets Environmental Protection</u> <u>Policies</u> - DOS concludes that the proposed Keystone Mainline Pipeline and Cushing Extension, if designed, constructed, and operated in accordance with the Project Description in Section 2.0 of the Final EIS, as amended by additional approaches and mitigation measures agreed to by Keystone as a result of the DOS environmental analyses and as further amended by specific permit conditions to be assigned by the state and federal agencies with jurisdiction over aspects of the project along the pipeline corridor, would result in limited adverse environmental impacts.

<u>The Scope of the Permit Issued to Keystone should extend only up to and including the</u> <u>first mainline shut-off value or pumping station in the United States</u> – DOS's authority to issue Presidential permits derives, in large part, from its authority over the conduct of the foreign relations of the United States. Executive Order 11423, initially delegating the President's authority to the DOS, specifically notes that "the proper conduct of the

foreign relations of the United States requires that Executive permission be obtained for the construction and maintenance at the borders of the United States of facilities connecting the United States with a foreign country." Similarly, Section 1 of Executive Order 13337, further delegating the President's authority, states that DOS has authority for issuance of Presidential permits for the "construction, connection, operation, and maintenance at the borders of the United States of facilities ... to or from a foreign country." Hence, in reviewing an application for a Presidential permit, the DOS, in addition to taking into consideration the various environmental and other domestic requirements noted above, also takes into account the impact the proposed cross-border facility (i.e., pipeline, bridge, road, etc.) will have upon U.S. relations with the country in question, whether Canada or Mexico. DOS does not have, and has never had, authority over facilities, including pipeline, bridges, roads, etc., located entirely within the United States that do not cross the international border with either Canada or Mexico. For these reasons, the Department does not believe that the scope of the permit it issues in this case should extend any further than necessary to protect that foreign relations interest. The permits the DOS issues under Executive Orders 11423 and 13337 routinely include provisions permitting DOS to take possession of the facilities at the border for national security reasons or to direct the permittee to remove the facilities in the immediate vicinity of the international border if so directed by the DOS. Since that is the case, the DOS has concluded that a limitation of the scope of the permit in this case to those pipeline facilities within the United States up to and including the first mainline shut-off valve or pumping station would adequately protect the DOS' foreign relations interest in implementing Executive Orders 11423 and 13337.

9.0 National Interest Determination

Pursuant to the authority vested in me under Executive Order 13337 of April 30, 2004, as amended, and Department of State Delegation of Authority No. 118-2 of January 23, 2006, and subject to satisfaction of the requirements of sections 1(g) and 1(i) of Executive Order 13337, I hereby determine that issuance of a permit to TransCanada Keystone Pipeline LP, a limited partnership organized under the laws of the State of Delaware, owned equally by TransCanada Corporation, a Canadian public company organized under the laws of Canada, and ConocoPhillips Company, a Delaware corporation, to construct, connect, operate and maintain facilities at the border of the United States and Canada for the transport of crude oil between the United States and Canada across the international boundary at Cavalier County, North Dakota, would serve the national interest. The Presidential Permit issued to Keystone shall include authorization to construct, connect, operate, and maintain at the border of the United States facilities for the transport of crude oil between the United States and Canada across the international boundary as described in the Presidential Permit application received from Keystone by DOS on April 19, 2006, as amended, and in accordance with the mitigation measures described in the Construction Mitigation and Reclamation Plan (CMR) of the FEIS, as amended. No construction or other actions shall be taken by Keystone prior to Keystone's acquisition of all other necessary federal, state, and local permits and approvals from agencies of competent jurisdiction. Keystone shall provide written notice to the Department at such time as the construction authorized by this permit is begun, and again at such time as construction is completed, interrupted or discontinued.

This determination shall become final fifteen days after the Secretaries of Defense, Interior, Commerce, Energy, Homeland Security and Transportation, the Attorney General, and the Administrator of the Environmental Protection Agency have been notified of this determination, unless the matter must be referred to the President for consideration and final decision pursuant to section 1(i) of said Executive Order.

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Under Secretary of State for Economic, Energy, and Agricultural Affairs