

**Proposed Keystone XL Tar Sands Pipeline:
Final Environmental Impact Statement Backgrounder
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Contact: Danielle Droitsch, NRDC, energy@droitsch.com

On August 26, the State Department issued the Final Environmental Impact Statement (FEIS) for the Keystone XL tar sands pipeline (Keystone XL).¹ There is ample evidence that Keystone XL will cause an increase in tar sands oil extraction and significant harm to climate, wildlife, water and health that come from tar sands strip mining and drilling. The pipeline project will also risk health and safety in the United States through oil spills and water and air pollution. Despite this, the State Department incorrectly found “no significant impact” in their environmental review.² The environmental assessment makes several fundamental flaws in their analysis that has led to the illogical conclusion that Keystone XL would not cause new air, land, and water pollution.

The FEIS is still lacking in key areas:

- An expert study of the safety impacts of a raw tar sands oil pipeline including the likelihood of spills and difficulties of clean up.
- A thorough analysis of the clean energy alternatives to this pipeline.
- The proposal of a serious alternative path to the Nebraska Sandhills and the Ogallala Aquifer.
- Consideration of the impact on climate change of extracting and ultimately burning tar sands oil.
- Despite a commitment by this Administration to focus on environmental justice, an on-the-ground study of the refinery pollution impacts in Port Arthur and Houston.

Keystone XL is not needed, yet the FEIS fails to sufficiently consider clean energy and “no action” alternatives

The State Department has confined itself to a narrow purpose and need statement leading to narrow range of alternatives. The FEIS defines the purpose of the pipeline to transport Western Canadian Sedimentary Basin heavy crude oil from the U.S. border to the Texas Gulf coast. The emphasis is on meeting the needs of oil refineries instead of on meeting the energy needs of the United States. The FEIS does not seriously consider a “no action” alternative, claiming that if the Keystone XL is not built, other projects to transport tar sands to the Gulf will be developed. However, the potential for other similar projects in the future is not sufficient justification for ignoring the “no action” alternative in an environmental review.

¹ U.S. Department of State, Final Environmental Impact Statement for the Keystone XL Project. August 26, 2011. <http://www.keystonepipeline-xl.state.gov/clientsite/keystonexl.nsf?Open> (hereinafter FEIS)

² FEIS, Summary of Findings, Section 3.15.

The FEIS fails to take a serious look at options that help meet national energy and climate objectives as requested by the Environmental Protection Agency (EPA).³ The FEIS makes only a cursory evaluation of policies to reduce oil demand for transportation⁴ and then concludes that even assuming a substantial reduction in the consumption of crude oil, market demand for tar sands would remain. In fact, not building Keystone XL would result in decreased tar sands production.⁵ Canada is heavily reliant on U.S. markets⁶ and this pipeline will be a signal for tar sands production to increase. The Obama administration has asked for an energy security strategy that reduces the reliance on oil⁷ and building Keystone XL is not in keeping with this strategy.

The State Department needs to provide an alternative route to the Ogallala Aquifer and the Nebraska Sandhills

While the FEIS contains a more detailed look at alternative route options, it unreasonably comes to the conclusion that these routes would not be environmentally or economically preferable to the current proposal. The FEIS arbitrarily ignores the option of limiting Keystone XL to a southern pipeline between Cushing, Oklahoma and the Gulf, citing the need for infrastructure to move crude from the Canadian border. The FEIS acknowledges that while there is sufficient pipeline capacity from Canada to the American Midwest, there is limit capacity to move tar sands to Gulf Coast refineries.⁸

The FEIS analysis also dismisses an alternative route that both avoids Nebraska's Sandhills and is shorter than the proposed route. Its reasons for dismissing this route are that it costs more and that groundwater aquifers exist elsewhere. The FEIS did not establish that the extra cost would make the project economically infeasible. Moreover, the FEIS's assumes that because groundwater is also present along the alternative route, it presents the same groundwater impact. No thorough on-the-ground analysis was done to compare the project's risks to the Sandhills, comprising the deepest portion of the largest freshwater aquifer in the U.S., and those to other groundwater sources along the shorter alternative route.

Pipeline no safer with "special" conditions and environmental assessment lacks expert analysis by the Department of Transportation

The State Department appears to base its finding of no significant impact on 57 "project-specific special conditions" voluntarily agreed to by TransCanada.⁹ In fact, the majority of the conditions repeat existing safety standards, ensure TransCanada isn't operating below legal safety standards, or require record keeping to comply with the conditions. The remaining 12 conditions that actually differ with minimum standards do not rise to the level of being extraordinary and

³ Environmental Protection Agency, comments on Draft Environmental Impact Statement for Keystone XL project, July 16, 2010. [http://yosemite.epa.gov/oeca/webeis.nsf/\(PDFView\)/20100126/\\$file/20100126.PDF](http://yosemite.epa.gov/oeca/webeis.nsf/(PDFView)/20100126/$file/20100126.PDF).

⁴ FEIS, Section 4.1.3.1.

⁵ Danielle Droitsch, "The link between Keystone XL and Canadian oilsands production," The Pembina Institute, 2011. <http://www.pembina.org/pub/2194>.

⁶ EnSys Energy, Keystone XL Assessment, Dec. 23, 2010 (Ensys Assessment), pp. Section 5.2.3.2, pp. 7,93.

⁷ President Obama, Remarks by the President on America's Energy Security, March 30, 2011, <http://www.whitehouse.gov/the-press-office/2011/03/30/remarks-president-americas-energy-security>.

⁸ FEIS, Executive Summary, p. ES-5.

⁹ FEIS, Summary of Findings, Section 3.15.

certainly should not result in a finding of “no significant impact” when it comes to safety.¹⁰ One only need look at TransCanada’s first Keystone pipeline which began operation in 2010 and has already had 14 leaks¹¹ while operating under similar conditions and being described as meeting or exceeding “world-class safety and environmental standards.”¹²

The FEIS is missing an expert safety review by the U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration. The State Department acknowledges that a study on the impact of diluted bitumen on pipeline safety has not been done.¹³ The FEIS notes that TransCanada must complete a risk assessment in part to look at valve replacements and leak detection systems,¹⁴ acknowledging that the current measures are not properly protective. This shows that even the State Department acknowledges that additional studies are needed.

Failure to consider climate and greenhouse gas emissions

The FEIS incorrectly finds that Keystone XL would not increase global greenhouse gas emissions.¹⁵ In fact, Keystone XL would not only cause additional upgrading and refining emissions in the United States, it will cause an expansion of tar sands extraction in Canada and the resulting impacts to air, land, and water resources.¹⁶ The environmental assessment’s conclusion that greenhouse gas intensity for tar sands may decrease over time fails to recognize how the increasing dependence on in situ and lower grade resources will counter any technological and efficiency improvements. Emerging technologies noted in the FEIS are either not commercially available, in the pilot phase, or theoretical. While carbon capture and storage could be applied, the industry has not yet moved down this path and even if it did, only a relatively small percentage of emissions would be captured.

The review lacks an on-the-ground study of environmental justice impacts and is flawed assuming the pipeline would not add new pollution in refinery communities

The FEIS found there are no environmental justice concerns without doing a detailed study and dismissed the likelihood that the addition of 830,000 barrels per day in pipeline capacity to the Gulf Coast would bring a host of environmental and human health impacts. The environmental assessment also failed to look at site-specific impacts that would occur in the 45-mile area around Houston and Port Arthur, Texas, communities that are already heavily impacted by air and water pollution.¹⁷

¹⁰ Anthony Swift, “Clinton’s tar sands pipeline ‘safety conditions’ are smoke and mirrors,” August 19, 2011. http://switchboard.nrdc.org/blogs/aswift/ntons_tar_sands_pipeline_safet.html.

¹¹ FEIS, Section 3.01-103. See also U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration. Corrective Action Order, CPF No. 3-2011-5006H. June 3, 2011. http://blog.nwf.org/wildlifepromise/files/2011/06/320115006H_CAO_06032011.pdf

¹² Think Progress, “After 12 Oil Spills in One Year, TransCanada Says Proposed Keystone XL Pipeline will be Safest in US,” August 17, 2011 citing <http://thinkprogress.org/romm/2011/08/17/297576/oil-spills-transcanada-keystone-xl-pipeline/>

¹³ FEIS, Section 3.13-43.

¹⁴ FEIS, Exec. Summary, p. 10.

¹⁵ FEIS, Sections 3.14-44; 3.14-52

¹⁶ Danielle Droitsch, “The link between Keystone XL and Canadian oilsands production,” The Pembina Institute, 2011. <http://www.pembina.org/pub/2194>.

¹⁷ FEIS, at 3.14-34.

The State Department makes a fundamental flaw in its logic saying that they do not need to consider increased air pollution. On the one hand, the FEIS acknowledges that heavy crude oil supplies from Venezuela and Mexico are in decline¹⁸ yet it simultaneously argues that, in the absence of Canadian crude brought to the Gulf Coast by the Keystone XL, Venezuelan and Mexican heavy crude would fill the gap, such that heavy crude refining levels would be the same with or without the Keystone XL. This self-contradictory conclusion makes no sense and yet it is the State Department's entire basis for refusing to take a hard look at how increased refining of heavier crude – which can create more pollution than conventional crude refining – would impact the already heavily-impacted communities in the Gulf Coast region.

The State Department also argues that refinery emissions would be the same because tar sands would be delivered through another pipeline or infrastructure project. While there are major questions about whether these alternative projects would move ahead at least in the short-term, an agency cannot avoid its National Environmental Policy Act obligations by arguing that a speculative future project would have the same results. The State Department is not relieved from considering all direct, indirect, and cumulative impacts associated with *this* project.

The State Department issued the FEIS without the biological opinion being completed

The State Department issued the FEIS prematurely before it completed formal consultation and the inclusion of the Biological Opinion under the Endangered Species Act on the American burying beetle.¹⁹ Thus, we do not know the full extent of impacts to this species or whether alternatives are needed to ensure its protection.²⁰ The State Department also failed to formally consult on impacts to the Whooping Crane and other threatened or endangered species despite previous calls by the US Fish and Wildlife Service to do so²¹ and has so far failed to consult on impacts to species in Canada.²² Expanded tar sands development that will result from Keystone XL would have particularly devastating consequences for the Whooping Crane and Woodland caribou.²³

The FEIS acknowledges there could be long-term and permanent impacts to Texas bottomland hardwood wetlands but failed to evaluate how the loss of these forested wetlands would be addressed. The State Department has not finalized identifying mitigation measures indicating this issue will be handled in the future by the U.S. Army Corps of Engineers.²⁴

¹⁸ FEIS, at 3.14-37

¹⁹ FEIS, Exec. Summary at p. 20.

²⁰ FEIS, Exec. Summary, p. 20.

²¹ U.S. Department of the Interior, Fish and Wildlife Service, "Comments on the Keystone XL Pipeline Project Draft Biological Assessment," June 1, 2010.

²² FEIS, Exec. Summary, p. 20.

²³ FEIS, Exec. Summary, p. 20

²⁴ FEIS, Exec. Summary 13.