

Timelines

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Pipeline industry

Table 1: General events

2009 Jan	•	Barack Obama inaugurated.
2010 April	•	Deepwater Horizon Spill begin.
July	•	In Michigan Enbridge spills more than 20,000 barrels of diluted bitumen into the Kalamazoo River.
2011 Jan	•	Republicans take control of House of Representatives.
2013 July	•	42 people die in Québec when a freight train carrying crude oil catches fire and explodes in downtown Lac-Mégantic.
2017 Jan	•	Donald Trump inaugurated.
	•	Trump nominates Rex Tillerson, CEO of ExxonMobil, for Secretary of State.
2019 Jan	•	Democrats take control of the Congress.
2021 Jan	•	Joe Biden inaugurated.

Keystone XL

Table 2: Keystone Pipeline¹

2005 Feb	•	TransCanada proposes the Keystone Pipeline.
2008 Mar	•	The Bush administration issues the presidential permit for the Keystone Pipeline. ²
2010 June	•	Phase 1 enter operation.
2011 Feb	•	Phase 2 enters operation.
May	•	Keystone spills 400 barrels of oil in North Dakota, discovered by an adjacent land owner after about 30 minutes. ³
2014 Jan	•	Keystone begins delivering oil to Texas following the completion of Phase 3a.
2016 April	•	Keystone spills 400 barrels in South Dakota. ⁴
2017 Nov	•	Keystone spills 6,592 barrels in South Dakota.
2019 Oct	•	Keystone spills 4,515 barrels into a wetland in North Dakota. ⁵
2020 May	•	During a routine inspection, an employee discovers a 442 barrel spill in progress at the Lucas terminal in Jefferson county, Texas, caused by internal corrosion. ⁶

¹ Only includes significant spills of 50 or more barrels. All spill volumes according to <https://www.phmsa.dot.gov/data-and-statistics/pipeline/distribution-transmission-gathering-lng-and-liquid-incident-and-incident-data>

² <https://2001-2009.state.gov/r/pa/prs/ps/2008/mar/102254.htm>

³ <https://www.thedickinsonpress.com/business/energy-and-mining/4004561-5-years-after-spill-rancher-and-pipeline-junkie-still-has>

⁴ <https://www.usnews.com/news/articles/2016-04-08/keystone-pipeline-leak-worse-than-thought>

⁵ <https://www.nytimes.com/2019/10/31/us/keystone-pipeline-leak.html>

⁶ <https://www.jbarg.net/posts/2021-04-02-keystone-spill-without-media-coverage/>

Table 3: Permit application process

2008 June	•	TransCanada proposes the Keystone XL Pipeline. ⁷
Sep	•	TransCanada submits application for Presidential permit to US Department of State(Vann et al., 2012).
Dec	•	TransCanada submits application to Montana Department of Environmental Quality (TransCanada Keystone, 2008).
2009 Mar	•	TransCanada submits application to South Dakota Public Utilities Commision (TransCanada Keystone, 2009).
2011 Feb	•	Barack Obama vetoes a bill by the the Congress that would have approved the construction of Keystone XL. ⁸
Nov	•	Nebraska passes state laws LB1 and LB4, for the first time creating a formal application process for new pipelines, and providing funding to the Department of Environmental Quality (DEQ) to conduct impact studies on new pipelines. ⁹
Dec	•	Congress passes legislation to force the Department of State (DOS) to conclude its national interest determination for Keystone XL within 60 days (US DOS, 2012).
2012 Jan	•	The DOS rejects TransCanada’s application on the grounds that it cannot determine whether the project is of national interest within the provided timeframe (US DOS, 2012).
May	•	TransCanada reapplies for a Presidential permit for the construction of Keystone XL (DoS, 2015).
2015 Nov	•	The DoS and President Obama reject the application for a Presidential permit on the grounds that it would undermine US foreign policy with regard to climate change (DoS, 2015; White House, 2015).
2017 Mar	•	The Trump DoS issues a Presidential permit, based on an unchanged analysis that now states in the Basis for Decision section that since 2015 ”there have been numerous developments related to global action to address climate change, including announcements by many countries of their plans to do so” (DoS, 2017, p. 29).

⁷ https://www.rigzone.com/news/oil_gas/a/149226/TransCanada_Proposes_Second_Oil_Pipeline/

⁸ <https://www.nbcnews.com/politics/white-house/obama-vetoes-keystone-xl-pipeline-bill-n311671>

⁹ <http://update.legislature.ne.gov/?p=5458>

Table 4: Representative Quotes on Permit Application Process

TransCanada	"Analysis of the current PHMSA dataset (2002 to present) indicates that the vast majority of actual pipeline spills are relatively small, with 50 percent of the spills consisting of 3.0 barrels or less. In 85 percent of the cases, the spill volume was 100 barrels or less, and less than 1,000 barrels in over 95 percent of the time. Oil spills of 10,000 barrels or greater only occurred in 0.5 percent of cases. These data demonstrate that most pipeline spills are small and very large releases of 10,000 barrels or more are extremely uncommon" (TransCanada Keystone, 2008, p. 1-34).
TransCanada	"Pipeline incidents are infrequent and if a spill occurred, the volume would likely be 3 barrels or less. Keystone would initiate its ERP and emergency response teams would contain and clean up the spill. Appropriate remedial measures would be implemented to meet federal and state standards, which are protective of soils and their associated land uses"—part of TransCanada response regarding potential impact on soils, water, vegetation, wildlife, cultural resources, and public health and safety (TransCanada Keystone, 2009, pp. 30, 31, 32, 33, 34, and 35).
Montana Department of Environmental Quality (DEQ)	"[A]dverse effects to [an animal species] are unlikely due to: 1) the low probability of a spill, 2) the low probability of a spill in a river reach where pallid sturgeon are present, and 3) the low probability of the spill reaching a river with pallid sturgeon in sufficient amounts to cause toxic effects" (Montana DEQ, 2012).
Obama administration	"The potential impacts from a large spill would be similar to the impacts from the medium-sized spill, but on a much larger scale" (DoS, 2014, ES-18)
Industry-affiliated think tank	"[For the current] boom to continue, and for energy security to become a reality, the pipeline infrastructure to support North American oil and gas production must be expanded" (Weinstein et al., 2014)

Safety discourse

Table 5: Keystone XL safety discourse

2006 May	•	DNV consulting issues a confidential environmental impact report for TransCanada stating that Keystone can detect a large spill (50% leak rate) within 9 minutes, and spill as small as 1.5% leak rate within 138 minutes (DNV Consulting, 2006).
2011 July	•	Dr. John Stansbury of the University of Nebraska Omaha publishes an analysis that challenges the 2006 Keystone environmental impact report. For Keystone XL, Stansbury predicts 91 significant spills over 50 years, compared to 11 predicted by the DNV calculations (Stansbury, 2011).

Table 6: Representative quotes on safety discourse

DNV Consulting	”Overall, the likelihood of a leak greater than 50 barrels anywhere along the pipeline is estimated to be about 0.14 per year, or once every 7 years”—DNV Consulting on the expected safety performance of phase 1 and 2 of Keystone (2006, p. 23).
Dr. John Stansbury, University of Nebraska Omaha	”TransCanada made several assumptions that are highly questionable[...]. All of these factors tend to increase spill frequency; therefore, a more realistic assessment of expected frequency of significant spills is 0.00109 spills per year per mile [...] resulting in 91 major spills over a 50 year design life of the pipeline” (Stansbury, 2011).

Opposition

Table 7: Opposition to Keystone XL

2010	•	Opposition to Keystone XL emerges and finds a platform with dedicated communities such as Bold Nebraska, Inside Climate News, and Sierra Club. The main concerns are TransCanada's use of eminent domain, and the protection of Ogallala Aquifer.
July	•	TransCanada sends letters to landowners in Nebraska, threatening to use eminent domain if they do not grant an easement(TransCanada, 2010). ¹⁰
2011 August	•	Protesters stage a two-week sit-in in front of the White House. On day 10, the arrest of Dr. James Hansen, head of the NASA Goddard Institute for Space Studies, garners much media attention. ¹¹
November	•	Over 10,000 gather outside the White House to protest Keystone XL. ¹²

¹⁰ <https://www.motherjones.com/politics/2010/08/transcanada-already-bullying-landowners-nebraska/>

¹¹ <https://insideclimatenews.org/news/30082011/james-hansen-nasa-arrested-keystone-xl-pipeline-protests-oil-sands-climate-change-obama/>

¹² <https://insideclimatenews.org/news/07112011/largest-keystone-xl-protest-white-house-encircle-president-obama-transcanada-permit-state-department/>

Table 8: Representative quotes on opposition to Keystone XL

TransCanada	"Dear Owner: You by now are aware that TransCanada [...] is constructing and will operate a 2,833 mile crude oil pipeline [...]. As you know, the path of the pipeline will cross a portion of your property. In order to construct the pipeline, Keystone must acquire a permanent and temporary easement over your property. It is Keystone's strong preference to negotiate a voluntary transfer with each property owner. However, in the event we cannot come to an agreement, Keystone will use eminent domain to acquire the easement, which is authorized pursuant to Nebraska Revised statute § 57-1101 et. seq." (TransCanada, 2010).
Nebraska landowner	"And the more I checked it out, the more I found it was an issue worth fighting for. TransCanada told us we can either deal with their negotiators or deal with their attorneys. I said, 'Bring it on. For a few thousand dollars, you're not going to scare us'"—Randy Thompson, farmer, in 2010 on TransCanada's request for an easement. ¹³
Dr. James Hansen	"President George W. Bush said that the U.S. was addicted to oil. So what will the U.S. response to this situation be? Will it entail phasing out fossil fuels and moving to clean energy or borrowing the dirtiest needle from a fellow addict? That is the question facing President Obama. If he chooses the dirty needle it is game over because it will confirm that Obama was just greenwashing, like the other well-oiled coal-fired politicians with no real intention of solving the addiction". ¹⁴

¹³ <https://insideclimatenews.org/news/12102010/some-nebraska-landowners-wont-make-way-for-oil-sands-pipeline/>

¹⁴ <https://insideclimatenews.org/news/29082011/james-hansen-nasa-climate-change-scientist-keystone-xl-oil-sands-pipeline-protests-mckibben-white-house/>

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