An XL Proposal with Larger Consequences

The argument over the Keystone pipeline pits economic gains versus the maintenance of the environment. However, the economic gains the pipeline would create may not be nearly as tangible as proponents believe. Republican lawmakers are among these proponents, believing that the nation should allow the construction of the pipeline. Following the 2014-midterm elections, Republican Senate Majority Leader Mitch McConnell stated: “We’ll be starting next year with a job-creating bill that enjoys significant bipartisan support,” referring to legislation forcing the approval of the pipeline (Harder et al.). Nicholas Loris, an expert on Environmental Policy at the Thomas A. Roe Institute for Economic Policy Studies, voiced a similar opinion in early 2015: “it is time for Congress to pass legislation to approve the Permit for Keystone XL. If President Obama chooses to veto any Keystone XL bill, he will be vetoing job creation, energy production, and common sense” (Loris). While Senator McConnell and Loris believe in the benefits of the Keystone pipeline, their sole focus on the economic side of the project fails to realize the other, more dangerous consequences of the proposal.

Other experts warn of the environmental dangers associated with the XL pipeline. Danielle Droitsch, a senior policy analyst at the Canada Project, stated: “The Obama administration should reject this pipeline soundly because it is clearly not in America’s national interest” when the Obama administration was considering the proposal (Droitsch). President Obama and Secretary of State John Kerry took a similar position. As a result, the president denied the presidential Permit for the XL pipeline in early November 2015 (Obama). This paper sides with Droitsch and the Obama administration, believing that the pipeline is a serious threat to the environment.
The future president and Congress must decline the Keystone XL pipeline. In fact, the pipeline only benefits Canada while causing significant disadvantages to American citizens. This paper will provide a thorough background of the history of the Keystone pipeline before explaining the negative and unsubstantial effects of the XL pipeline. The pipeline’s negative impact on the environment, disappointing long-term employment and economic effects, and negligible to unfavorable influence on gas prices prove the XL pipeline is not in the United States’ national interest, and therefore must be denied construction.

Despite the controversy surrounding the Keystone XL pipeline, it is important to note that sections of the overarching Keystone project already exist. In fact, some 2,000 miles of the pipeline connect the tar sands of Hardisty, Alberta, Canada to refineries in Wood River and Pakota, Illinois—known collectively as phase I of the Keystone project (Cherry 126). Phase II connects Alberta to Midwestern US refineries in Cushing, Oklahoma—this section of the pipeline is coined the “Keystone Cushing” (Rogers et al. 16) (Cherry 126). TransCanada, the company using these pipelines, did not simply build phases I and II on their own accord. Instead, TransCanada applied for a Presidential Permit issued by the State Department (Parfomak et al. 5).

Presidential Permits are required for any pipeline that crosses into the US from a foreign nation: “the construction, connection, operation, and maintenance of a pipeline that connects the United States with a foreign country requires executive permission conveyed through a Presidential Permit” (Parfomak et al. 3). In order to decide whether to issue a Presidential Permit, the State Department undergoes a rigorous investigation into whether the proposed project is in the United States’ national interest. Specifically, the investigation dives into the environmental, economic, energy security, and many other impacts the proposal carries (Parfomak et al. 5). The
US State Department approved phases I and II of the Keystone pipeline with minimal fuss on March 17th, 2008 (Parfomak et al. 3). In contrast, phases III and IV were denied a Presidential Permit (US State Department 32). These phases, known collectively as the Keystone XL, include building 1,700 miles of new pipeline connecting the Cushing refinery pipelines with the Gulf Coast as well as a new section from Alberta to Kansas—requiring the pipeline to pass through Montana and North Dakota (Rogers et al. 16). In total, the four phases of the pipeline—including the parts not constructed—would cross through the states of Montana, South Dakota, Kansas, Nebraska, Oklahoma, and Texas (Rogers et al. 16). It is also important to note that 89% of the land needed for the project is privately owned (US State Department 17). The new and perhaps most important addition provided by stage IV is the extension to the Gulf Coast, where large and capable refineries exist in Port Arthur and Houston, Texas.

The Keystone XL pipeline will cost a total of approximately $7 billion US dollars, with an estimated $5.2 billion spent in the US (Rogers et al 17). Taxpayers will have to foot around $1 billion of this proposal due to tax cuts available to TransCanada (Paulman). Fervent opposition to the construction of this pipeline has pervaded for over half a decade.

Environmental groups and individual citizens banded together to stop the construction of the pipeline. In 2010 the National Resources Defense Council (NRDC) initiated a lawsuit against the US State Department over the proposed damage the project would cause to the environment (Cherry 126). Similarly, the No Tar Sand Oil Coalition created a $500,000 campaign advocating for President Obama to reject the XL pipeline. Other prominent environmental clubs such as the NDRC, Sierra Club, National Wildlife Federation, and more also supported the campaign (Cherry 127). By October 2011, President Obama decided to delay the Presidential Permit until 2013, citing environmental concerns.
The potential environmental impact of the Keystone XL pipeline is immense. First, the construction of the pipeline would severely disturb the ecosystems it crosses. The National Interest report from the Department of State reveals that the pipeline would impact cultivated crops, upland forest, open water, forested wetland, as well as additional sources of water. Additionally, the project crosses 1,074 surface water bodies, 24 miles of floodplains, and 383 acres of wetlands—including two acres that may be permanently lost (US State Department 18). Moreover, the pipeline affects 13 federally listed threatened or endangered species (US State Department 17). The loss of wetlands and disturbance of species in the area are only risks associated with construction—more danger arises when one considers the possibility of an oil spill over the following decades. Any oil spill can cause severe damage to the surrounding ecosystem. A spill in the area would likely cause “sickness or mortality” among organisms surrounding the pipeline (US State Department 14). Moreover, a spill “could produce localized effects on plant populations by direct oiling or by oil permeating through the soil, affecting root system and indirectly affecting plant respiration and nutrient uptake” (US State Department 14). Lasty, there is no 100% effective method to cleanup an oil spill. Even “Aggressive cleanup methods could mix oil and water, which might result in longer-lasting impacts to sensitive waterbody habitat” (US State Department 14).

The detrimental effects of a spill are even more concerning when one considers the path of the pipeline. In Nebraska alone, “There are 1,232 identified wells within the potential range of a large spill” (US State Department 14). In fact, the path of the proposed XL pipeline passes over one of the biggest aquifer systems in the world, the Ogallala Aquifer, located in Nebraska (Parfomak et al.13). This aquifer provides 78% of the region’s public water, 83% of irrigation water in Nebraska, and 30% of water used in the U.S. for irrigation and agriculture” (Parfomak
et al. 14). The potential contamination of this water source could have devastating effects to public services and agriculture. Moreover, the lasting presence of oil in water means the spill could plague the community for years to come. In fact, the threat of a spill is even greater due to the kind of crude carried by the XL pipeline.

The diluted bitumen that would be transported by the XL pipeline is prone to leaks. Diluted bitumen (dilbit) is the chemical necessary to transport the tar sands through the pipe. Because tar sands are thicker than other types of petroleum, the pipes transporting dilbit/tar sands mixture needs to be kept at a higher operating temperature. These increased temperatures will, “pose new and significant risks of pipeline leaks or ruptures due to corrosion, as well as problems with leak detection and safety problems from the unstable mixture” (Swift et al. 3). Additionally, leaks in dilbit pipelines are difficult to detect for the dilbit in the pipeline often forms bubbles that can disrupt the flow of oil, known as a column separation (Swift et al. 6-7). This normal process often displays the same signs as a leak even though it is harmless. The similarities between column separation and real leaks can cause pipeline monitors to assume the pipe is experiencing column separation when in reality a leak has occurred (Swift et al. 7).

Column separation occurred in 2010, when dilbit gushed out of a pipeline in Marshall, Michigan for over half a day before it was discovered. By the time the leak was stopped over 800,000 gallons of dilbit had spilled into the Kalamazoo River (NTSB). The effects of the spill on the surrounding population are even more consequential. In fact, “nearly 60 percent of individuals living in the vicinity of the spill experienced respiratory, gastrointestinal, and neurological symptoms consistent with acute exposure to benzene and other petroleum related chemicals” (Swift et al. 7). Many skeptics would be quick to write off the Kalamazoo spill as an anomaly—a rare mistake. However, some 16,800 gallons leaked out of the phase I area of the
Keystone pipeline on April 2nd of this year (Illgunas). Clearly, the Kalamazoo spill is not an isolated incident. The environmental impact of any oil spill is tremendous. Dartmouth Environmental Science Professor Dr. Andrew Freidland explains, “It only takes a couple of drops of oil to contaminate a gallon of water.” Therefore, any oil leak—whether it is 16,000 or 800,000 gallons—will cause a real impact on the environment. Building the Keystone XL pipeline only increases the chances for another huge oil spill similar to the one that occurred in Kalamazoo.

The greenhouse gas emissions from the XL pipeline also raise legitimate concerns. In fact, a report by the Congressional Research Service estimated that the environmental impact of the pipeline’s construction would be the equivalent of adding at least 4 million new cars to the road (Congressional Research Service 2). This same report also stated the increased environmental pollution of Canadian oil sands versus other crude oil sources, via a (oil) Well-to-Wheels greenhouse gas measurement. Canadian tar sands, the oil to be transported by the pipeline, is on average 17% more greenhouse gas intensive than the average barrel of refined crude oil in the US (Congressional Research Service 2). US taxpayers funding a pipeline to advance the production of more emission intensive fuel is completely inconsistent with the nation’s effort to curb climate change. The pipeline also fails to provide a boon to US employment.

Republican lawmakers wrongly believe the Keystone XL pipeline will lead to a wealth of new jobs. Senator Joni Ernst of Iowa called on President Obama to accept a Senate bill allowing the creation of the Keystone pipeline, “This commonsense legislation would help create thousands of new jobs, [and] grow our economy…” (Office of Senator Joni Ernst). Similarly, Congressmen Tom Graves of Georgia’s 14th district claimed, “Building the Keystone XL
pipeline is just common sense. It creates tens of thousands of good-paying jobs and adds billions of dollars to our economy” (Office of Congressman Tom Graves). The estimated number of jobs created by the construction of the Keystone pipeline varies by source. The Canadian Energy Research Institute concluded that the pipeline would create 21,000 initial jobs, and 465,000 jobs by 2035—including both part and full-time jobs (Honarvar xii). However, a report issued by the US State Department led by Secretary Kerry expressed more tempered job numbers, concluding that the proposed project would create a total of 42,100 jobs over two years. The State Department document also specified the nature of the jobs created by the pipeline. Specifically, the report estimated that 16,100 persons would be employed in positions directly attributed to the pipeline’s construction. In fact, the majority of jobs created as a result of the pipeline do not come from construction. Instead, the remaining jobs stem from indirect spending, or the goods and services that contractors and workers would purchase while working on the project (US State Department 15-16). While these numbers seem impressive at first, it is important to note that nearly all the jobs created by the XL pipeline last only two years, the estimated time of construction. In fact, after the completion of the pipeline only 35 full-time employees and 15 temporary workers are required (US State Department 15). Clearly, the employment benefit of this project is short-lived.
Proponents also praise the pipeline’s contribution to taxes and spending. In the first year of construction, the XL pipeline is estimated to garner $55.6 million in property taxes in 27 counties in three states (US State Department 15). Further estimations found that approximately $3.1 billion will be spent on construction related expenses (US State Department 16). Finally, construction would generate $3.4 billion in GDP (US State Department 16). However, the overall benefit of the pipeline to the nation’s GDP is just as disappointing as the job figures. Specifically, the $3.4 billion generated by Keystone construction amounts to only 0.02% of the US GDP in 2012—a truly miniscule amount (US State Department 16). In fact, the report issued by the State Department stated the pipeline would amount to “negligible impacts on population, housing, and public services in the proposed Project area” (US State Department 15). In sum, Kerry concluded, “The proposed project’s long-term contribution to our economy would be marginal” (Kerry). Clearly, this project only creates a short-term benefit that fizzes out.
overtime—not the economic boon the Congressional members stated. The small effects of the pipeline on the employment and economy of the US extends to US gas prices.

Other proponents of Keystone point to the positive effects the pipeline will have on gas prices, yet these beliefs are unfounded. In reality, the pipeline would actually cause an increase in gas prices for millions of Americans. A current oil glut in the Midwest means oil prices there remain lower than the rest of the country because the oil refined in the area is sold domestically at a lower price than the international mark (Slade 41). Edwin Slade, writing for the Creighton Law Review, explains:

Because of limited pipeline capacity, oil from Canada and North Dakota cannot easily reach refineries and terminals on the Gulf Coast. Instead, the oil is getting caught up around Cushing. Midwest refineries benefit from this abundance and pay lower prices for the crude oil. The Midwest refineries then pass those savings down to consumers so consumers will drive more and demand can increase. This has translated into relatively low Midwest and Mountain West gasoline prices (Slade 41).

In fact, oil prices in the Midwest were 41 cents lower than the national average in 2012 (Slade 41). The proposed pipeline expansion would shuttle the excess oil in Cushing, Oklahoma to refineries in the Gulf Coast (Slade 45). Thus, the oil glut in the Midwest would cease and cause higher prices for these citizens. American citizens—especially those in the Midwest—would certainly be unhappy with a pipeline through their communities that actually raises their gas prices instead of lowering them. More controversial is the fact that Americans will never use nearly any of the oil transported by the pipeline.

Due to low oil prices, the additional 830,000 barrels produced by the pipeline will be exported to foreign countries. Droitsch reveals, “The real story is Keystone XL would skip over refineries and U.S. consumers in the Midwest, allowing tar sands producers to send Canadian crude to Gulf Coast refineries from where it can be exported anywhere in the world.” (Droitsch
2). A report from the Journal of International Energy policy notes, “Since our oil demand is expected to decline anyway, the oil will be pumped down to ports in Texas, where it can easily be shipped to other countries in Europe or Asia, which is also a concern that many critics have raised” (Rogers et al 22). In fact, the Keystone Pipeline provides far more benefits for the Canadian economy than the US. The XL Pipeline “would increase the number of refineries [Canada] could sell their crude to because Gulf Coast refineries have more upgrading capacity which is better suited to run heavy crude” (Parformak et al.18). As a result, “Canada intends to fetch higher world oil market prices for its oil by removing oversupply in the Midwest and pushing its oil to the Gulf Coast where it can be priced according to world markets” (Slade 46).

The rationale behind exporting oil refined from the XL pipeline is consistent with the profits of higher oil prices. Edwin Slade explains, “Gulf Coast refineries export their oil products to the global market at the Brent price, realizing higher profits than those refineries in the middle of the United States” (Slade 45). Specifically, the Midwestern US typically prices its oil on the West Texas Intermediate (WTI) pricing system. However, much of the international community bases its prices on the Brent North Sea (Brent) pricing system. Brent is typically higher than the WTI pricing, meaning it is more profitable for both Canada and the US to export the oil to foreign countries. Slade further explains, “Given that Canadian companies have so much to gain from manipulating the current market dynamics to achieve higher profits for Canadian oil, the Keystone addition will probably not lead to decreased gasoline prices as proponents estimate” (Slade 46). The idea that the Keystone XL pipeline’s oil will never even be used by American citizens makes the whole proposal absurd. American taxpayers have to foot part of the construction, private citizens would lose hundreds of miles of land, greenhouse gas emissions would increase, and the communities in the pathway of the project would remain at risk for a
disastrous spill—all for oil they will never use. Keystone XL advocates hold one last hope concerning the benefits of the pipeline: that the oil exported to the world market will lower international prices.

The XL pipeline has a nonexistent effect on world oil prices. The 830,000 gallons produced by the pipeline amount to less than one percent of the world’s global oil— an insignificant amount. In reality, “The market cares more about the disruption of Iran’s 3.5 million bpd” than the 830,000 bpd from the XL pipeline (Slade 48). Even the optimistic Canadian Energy Research Institute predicted, “relative [oil] prices and productivity are expected to remain relatively constant” (Honarvar 57). In sum, the additional oil created by the pipeline would augur an unintelligible effect world oil prices.
Figure 2: This graph depicts the small amount of barrels per day the Keystone XL pipeline produces relative to the leading 5 oil-producing nations in 2014. Keystone only produces 830,000 bpd, while Russia alone produces nearly 11 million. In fact, the top five nations combined, totaling over 37 million bpd, completely overshadows the XL pipeline. In sum, the limited barrels per day produced by the Keystone XL pipeline would have a negligible effect on world oil prices. Data obtained from the CIA World Factbook.

Canada stands to make huge economic gains by the construction of the pipeline, and would regret the denial of the proposal. In fact, Canada is projected to make $2.1 trillion (CAD) over the first 25 years of the project (Honarvar et al. x). Direct and indirect employment would also net 75,000 initial jobs, and as many of 905,000 jobs 25 years later in Canada (Honarvar et al. x). The US State Department report notes that the denial of this project “could temper
Canada’s willingness to partner with the United States on some bilateral issues” (US State Department 25). However, the US maintains an incredibly strong bilateral relationship with Canada that “is resilient and is likely to outlast any single foreign policy discrepancy” (US State Department 25). In fact, the US-Canada trade relationship is one of the strongest in the world, producing over $2 billion dollars of trade per day (US State Department 25). Clearly, the long and extensive US-Canada relationship will survive a disagreement over the XL pipeline.

Republican congressmen such as Mitch McConnell, Joni Ernst, and Tom Graves would also disapprove the rejection of the pipeline. All three have shown substantial support for the deal via press releases and quotes. Therefore, a rejection of the pipeline proposal will negatively affect their images in Congress. However, multiple sources have proved the pipeline provides no long-term economic gains for the US and could also cause significant damage to the environment. Plentiful research shows the pipeline is prone to leaks, will raise gas prices in the Midwest, and transport oil that will not even be used by US citizens. (Droitsch). Clearly, these facts prove the deal is not in the best interest of the American people. It is these politicians’ responsibility to only pass laws that enhance and not hinder the progress of the nation Therefore, congressional leaders must end their push for the passage of the proposal. The consequences of constructing the pipeline would put the environment at an unnecessary risk.

The aforementioned oil spill in Kalamazoo, Michigan depicts the environmental and economic impact oil spills have on ecosystems and communities. Enbridge—the Canadian company operating the pipeline—completed a 2005 internal report that found 15,000 defects in the pipeline, yet the company chose to do nothing. On Sunday, July 25, 2010 a segment of a tar sands oil pipeline ruptured in a wetland in Marshall, Michigan (NTSB). Oil continued to leak out of pipeline for 17 hours until finally discovered. In the end, an estimated 843,444 gallons spilled
into Talmadge Creek and the Kalamazoo River (NTSB). The cause of the spill was due to the corrosion of the pipeline. In total, $800 million was spent cleaning up the spill (NTSB). However, Enbridge claims to have contributed over $1.2 billion on cleanup efforts (Mitchell). This figure does not account for the businesses, citizens, and other groups negatively affected by the spill. The cleanup and lost business alone caused by a spill can potentially negate many of the already insignificant economic benefits related to the construction of a pipeline.

The Kalamazoo oil spill provides a pertinent warning. Here, a Canadian tar sands oil company experienced a major spill that devastated the surrounding area, due to neglectful maintenance of pipelines. US citizens in the pathway of the XL pipeline could experience a déjà vu moment if the US proceeds with another Canadian company pipeline transporting tar sands oil. A Kalamazoo resident explains why the Kalamazoo spill is a clear example of why the US must deny the XL pipeline, “‘We've been the example of why Keystone XL can't go through. In Canada, we're the example of why they need to stop tar sands extraction and movement up there’” (Mitchell). There is no need to go through with a project that could result in additional carbon pollution, let alone the possible destruction of perfectly healthy ecosystems. The Keystone XL pipeline is a risk America does not need to take. Professor Freidland believes if “People want oil they are going to find a way to get it.” However, the Keystone XL pipeline is a method the US needs to decline. Congress and the future president should follow in the footsteps of President Obama and deny the construction of the pipeline.
Is It Worth the Risk?
Images from the 2010 Kalamazoo Oil Spill


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Works Cited


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<http://www.heritage.org/research/reports/2015/01/more-than-six-years-later-keystone-xl-is-still-a-good-idea>.


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