Testimony before the South Dakota Public Utilities Commission
Monday July 6, 2015
of
John Paul Clifford, Member of the Rosebud Sioux Tribe, and Owner
of Trust Land under the Tribal Land Enterprise System
[redacted] [redacted] St. Francis, SD 57570

Ladies and Gentlemen of the Commission,

My name is John Paul Clifford, I am a member of the Rosebud Sioux Tribe, and have come here today because I learned that the land I have in production is located in the Spill Zone of the intended route for the Keystone XL Pipeline. At the very least, I should have been notified that the Trans-Canada pipeline had been intending to cross and create a hazard of incredible proportions to the land. None of us affected in this defined area has had any notice.

While I am here to speak to you, what I am telling you, with the confidence of the Constitution and force of our Treaty Rights, is that: You have no jurisdiction to rule on anything that could potentially affect Indian Land on the Reservation or those lands that are Federal Indian Trust Lands and most certainly not to grant a permit to any corporate entity, foreign or domestic which would encroach in any way by crossing, spilling or causing any disturbance to these lands which afford financial support and homesteads to the Native American Indian Tribal Members.

Any ruling you make which would have any effect on Indian Lands is in direct violation of Article Six of the U. S. Constitution whereby Treaties are deemed the **"Supreme Law of the Land"** and in particular treaties made with Lakota Nations. Therefore, as a member of the Rosebud Sioux Tribe I hereby assert sovereign immunity and deem any granting of an easement or permit through my land as null and void and as inherently an unconstitutional invasion of my rights and resources.

However, even if it were allowable for you to grant the permit, as a citizen of the United States I am entitled, again under the Constitution, to full, equitable, and prompt compensation for any damage sustained and for any loss of income and loss of income producing property. as a result of any government entity's decision by which I am adversely affected. The same applies to **all** individual property owners adversely affected by your granting of a pipeline permit. It is then incumbent upon you, the PUC, to require of

the grantee adequate and full insurance coverage and bonding not only for me but also for **all** property owners who sustain similar damage and loss of income. To date you have provided no documentation showing that you are requiring that the grantee is providing full and adequate coverage for those losses and damages sustained by property owners as a result of your decision to grant a permit. Running pipeline protection ads by the grantee is no substitute for bankruptcy-proof insurance coverage and bonding.

Also incumbent upon you, the PUC, is the responsiblity to ensure that you avoid the same disastrous results that the oil spills of the Exxon Valdez and the BP Gulf disaster produced. That extensive damage has yet to be adequately cleaned up and the victims to be equitably compensated.

I am holding you accountable for even considering this lawless act of granting a permit to this foreign entity which is using the precious lands and waters of our country to profiteer for themselves and which in the end fail to benefit our country in any significant way. Trans-Canada is sending the oil sands to New Orleans for process and shipment to other countries, The few jobs it produces do not dignify the degradation of our precious resources, land and water,

Respectfully submitted,

John Clifford, Rosebud Sioux Tribal Member

STATE OF SOUTH DAKOTA
DENNIS DAUGAARD, GOVERNOR

July 6, 2015

Chris Nelson, Chairman
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, SD 57501

Dear Chairman Nelson,

I am writing to urge your approval of TransCanada's Certification of Permit request for the Keystone XL pipeline. Because of the project's economic and energy security benefits, I supported the initial permit approved by the Public Utilities Commission, and I urge your consideration of its reauthorization.

Having a reliable source of affordable energy is what powers our economy and allows people in the United States to enjoy a high quality of life. If this project fails to come to fruition we will continue to rely on potentially hostile energy sources to meet our needs, and we will remain vulnerable to global disruptions that can cause sudden price increases. Simply put, every barrel of oil we produce domestically or obtain from close allies, such as Canada, is a benefit to our economy and our national security.

We must be sensitive to the environmental impacts of such projects. The State Department's Environmental Impact Statement has determined the pipeline does not pose any significant environmental concerns. The South Dakota Underground Pipeline Task Force, formed by the South Dakota Legislature, has determined that existing state laws and regulations are adequate to ensure the safe and reliable operation of the pipeline.

This project has been studied and analyzed as thoroughly as any project in our nation's history. I urge your approval of this permit. Thank you for your consideration.

Sincerely,

Dennis Daugaard

Dennis Daugaard

DD:ke

Good afternoon, I am John Meyer from Winner, SD. I would like to thank the committee for allowing me to speak today.

I have a passion for growing business and economic development in SD. As a small business owner of 34 years, former President of the SD Retailers Association, and have served or am currently serving on many boards, committees, and elected positions.

When I first heard of the TransCanada-Keystone Project I could see the potential economic development for the area. So many times we are bypassed due to no interstate, not enough power, no natural gas, employee base, and so on.

The promising picture is the on-going property tax, gross receipts tax, and generation tax that will provide 1-3 million dollars a year to our city, county, and schools. Approximately 10 plus million to SD in property tax every year. This is the equivalent to the property tax collected in Tripp Co.

The jobs, business, and sales tax during construction could be as much as 30% increase with many permanent jobs created.

The 2 pump stations in Tripp County will use more electricity than the rural electric. This will require larger transmission lines. Let's expand this picture to add wind farms now that we have the transmission lines, thus increasing property tax base and yet another way to create permanent jobs.

Born and raised in SD, and having a business here for the past 34 years I fully respect and understand our property owner's rights. Signed easements, leases, and rentals are a must. I never saw this as a threat or condemnation of property, but actually as an alternative tax relief to property owners.

Every day you see truck after truck hauling pumps, stations, towers, pipe, and tanks to North Dakota oil fields, and you have to ask yourself: Who manufactured this and how many people, trucks, diesel fuel, and tires were required to build the TransCanada pipeline? How many spin off companies were created during and after construction? Always "how many jobs"?

We recently increased fees (taxes) up to 33% to maintain our failing highways, bridges, etc. The most amazing thing of all of this is a neighboring country (Canada) is investing 7 billion dollars in our country providing an infrastructure that we so often fail to do. An infrastructure that will carry our own domestic oil, pay on going property taxes, create jobs, and open the doors to future companies and more employment opportunities.

Alternative energy is great if it works and cost effective. Our trucks, tractors, combines, etc. that produce our food and carry our products to market use fuel.

Our dependence on a troubled Middle East oil leaves us vulnerable and does nothing for our development of jobs in America. History has shown us that food and fuel can shut down a country, shut down a controversy or win a war, aka Trade Embargo.

New refineries cost more than 30 billion dollars and are overwhelmed with EPA regulations. There are many of those who don't want it in their back yard but the irony is that every one of us every day use energy.

Now more than ever we need to support development in our country whether it be agriculture, energy exploration, manufacturing, or retail. With the ever increasing world's population counting on us to feed them we will need a reliable source of fuel.

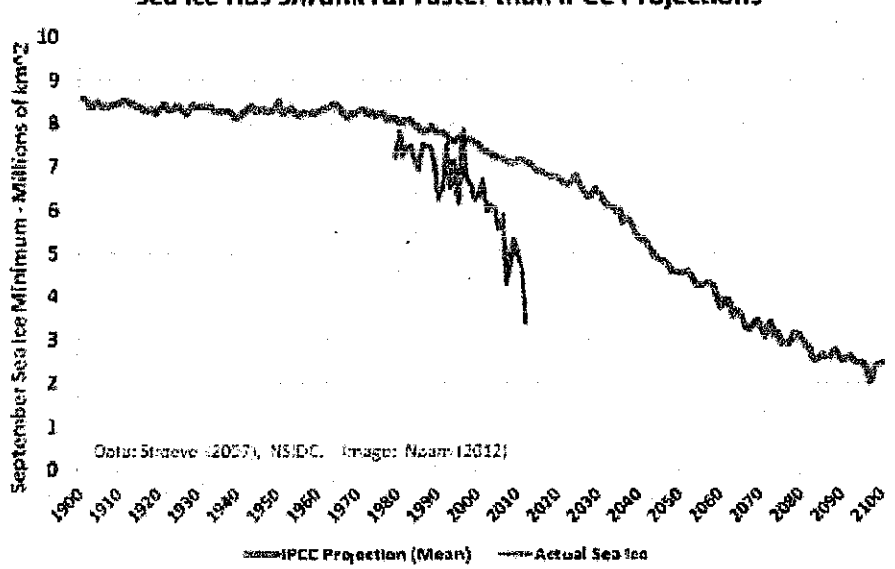
The pipeline route carries oil from Canada to Texas to a refinery for China, but also intersects the Bakken Formation to carry oil for our own domestic use.

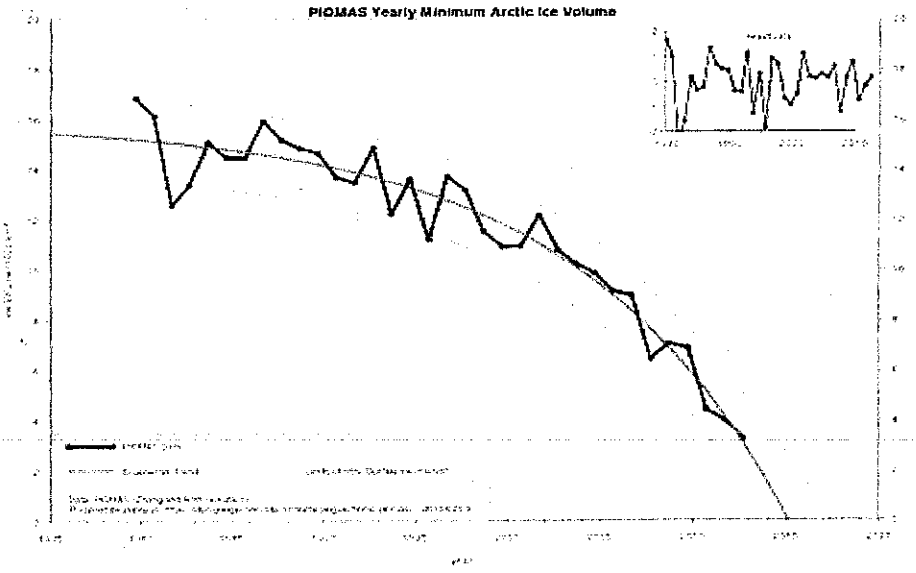
In summary I feel the TransCanada pipeline is the artery to America's energy independence, homeland security, and economic development.

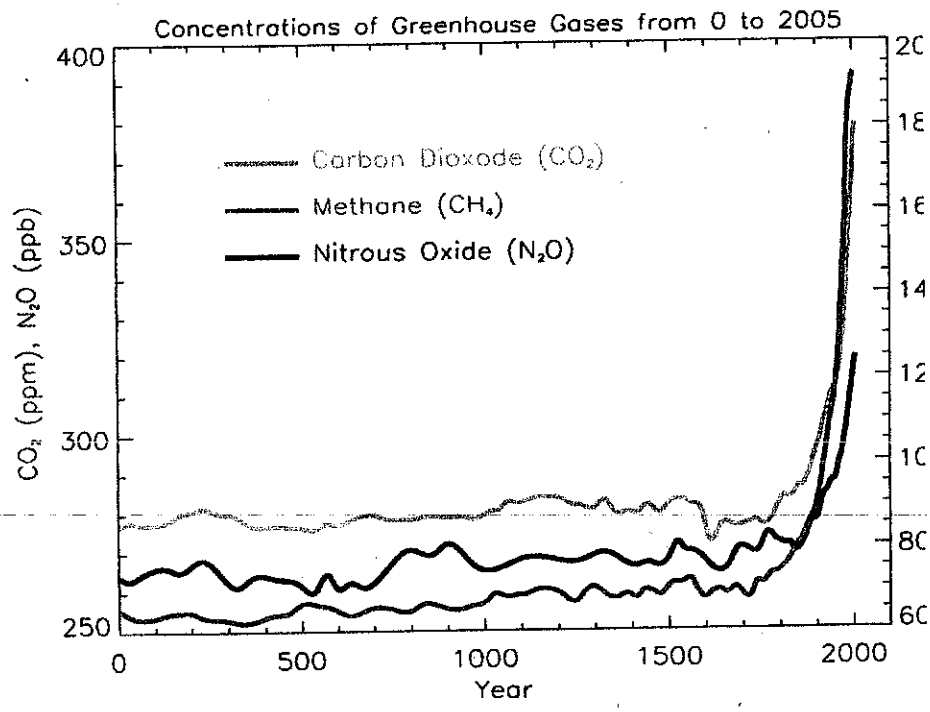
John S Meyer — [redacted] Winner SD 57580

John Schmidt
[redacted]
Woonsocket S.D. 57385
[redacted]

The Facts -- Too Late?







This is the tipping point that will seal the fate of all life on Earth, and perhaps the Universe. First, the suns energy, instead of reflecting 90% off the ice-- it has absorbed 94% into the dark water at an accelerated rate. The Artic will be ICE FREE this September or in the next few years. Meanwhile the Methane Hydrates are boiling out of the Oceans at an increasing rate particularly at the Eastern Siberian Artic shelf where there is one million square miles of frozen Methane Hydrates.

Studying one of the incredible number of plumes of methane bubbling out of the ocean in the last decade, it went from 10 feet to 2 Kilometers across.

Methane is 105 times more powerful than CO2 when it is averaged over a 20 year period. It is 22 times more potent averaged over a 100 year period as a greenhouse gas.

If 1 to 2% of Methane at just the Eastern Siberian Artic shelf is released it will more than double the effect of greenhouse gas since the Industrial age began.

John Schmidt
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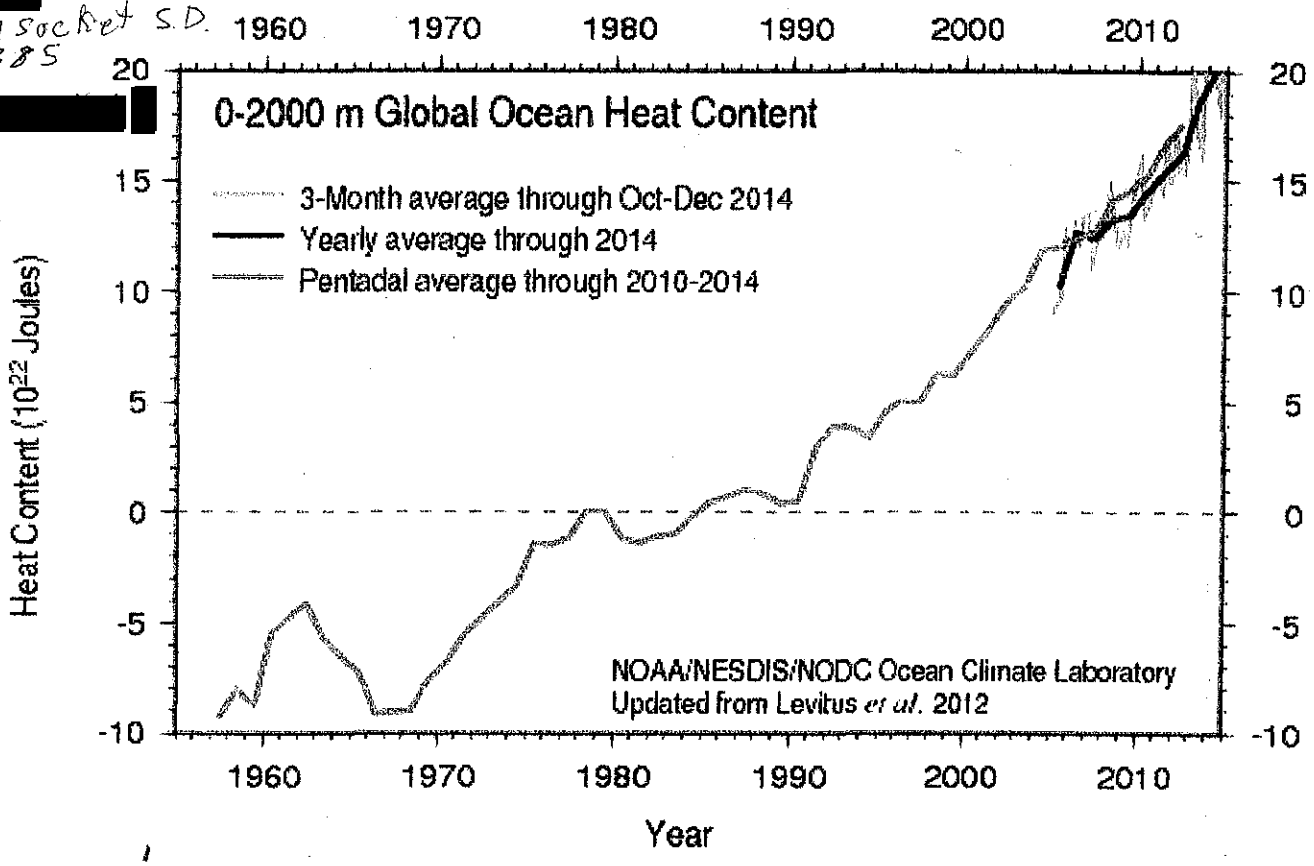
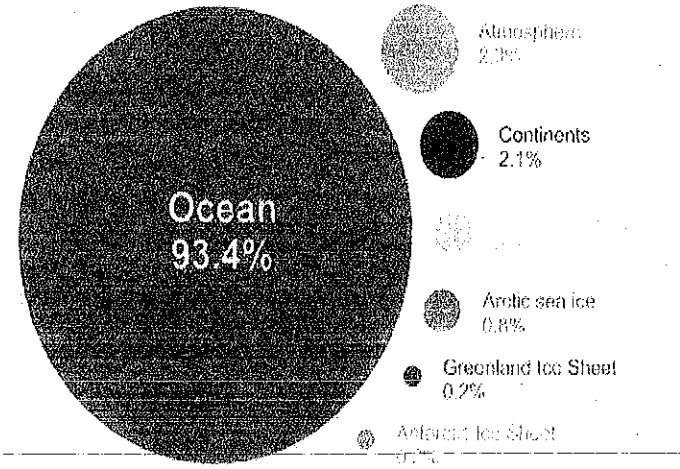
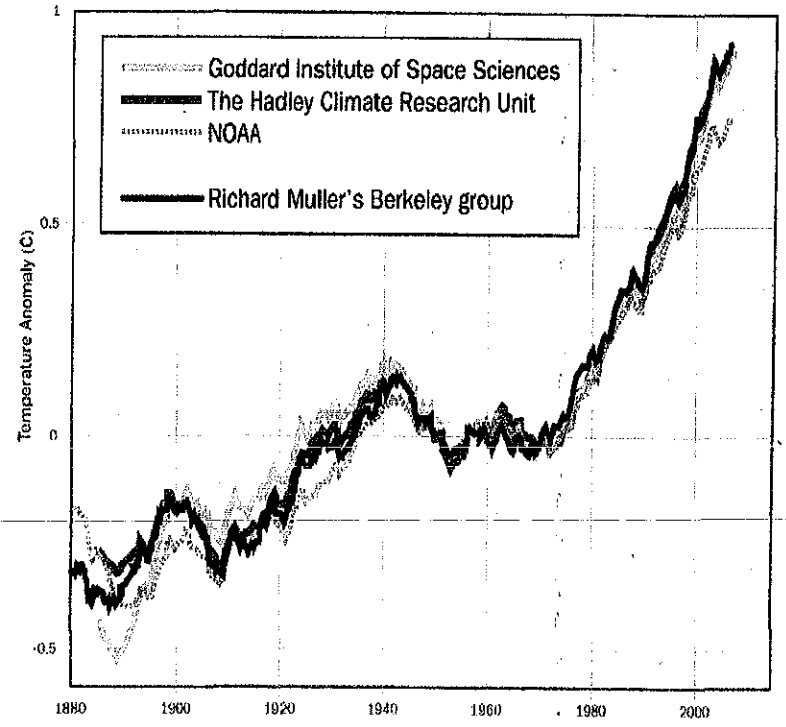


An additional Methane problem is Mantel Methane which is trapped under the Methane Hydrate. According to dozens of peer reviewed climate scientists who were most accurate to date, rapid melt or seismic activity could lead to a 50 giga ton Artic Methane Burp. This small fraction of the ESAS would end all possibility of survival in minutes. Dr. Natalia Shakhova, of the International Arctic Research Center, warned since 2008 that this could happen at any time.



Temperature data obtained by three original sources contrasted with the data obtained by Richard Muller's Berkeley group



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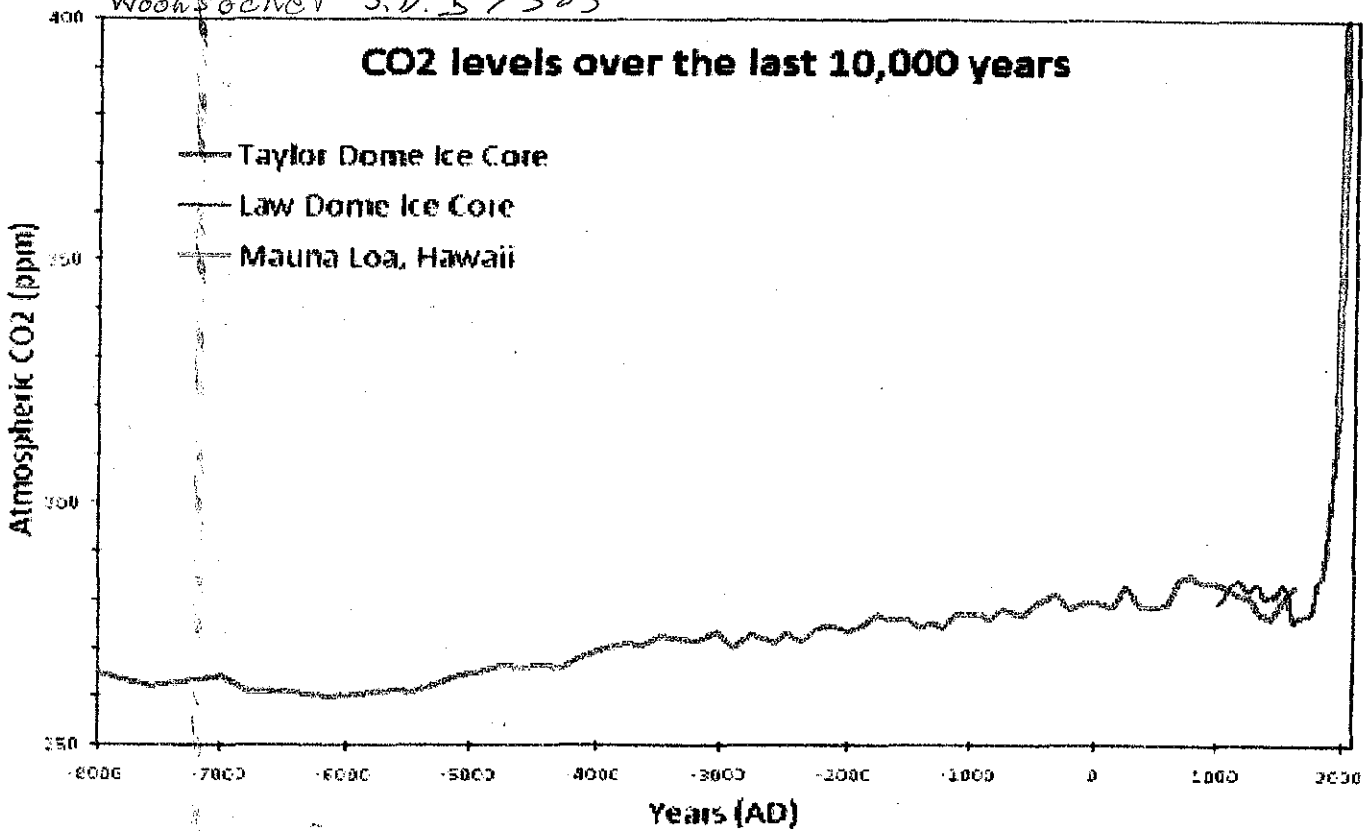


With the NOAA and NASA Methane Data showing exponential increase in the last 5 years, Paul Beckwith (an Artic Methane Specialist) announced in November of 2014 that a rapid rise event is underway. A 5 to 6 degrees Celsius or higher temperature increase in 10 to 20 years would cause human extinction. Even the very conservative International Energy Agency has human extinction in 35 years.

To make sure that life on Earth can't come back from this Permian type mass extinction, (where 95% of all life was lost,) there are over 440 Nuclear power plants that would go unattended as society falls apart. The radiation would sterilize the Earth forever. Fukashima alone has 14,000 times more power than the Hiroshima bomb.

WE NEED TO TAKE IMMEDIATE ACTION TO STOP THIS !!!!

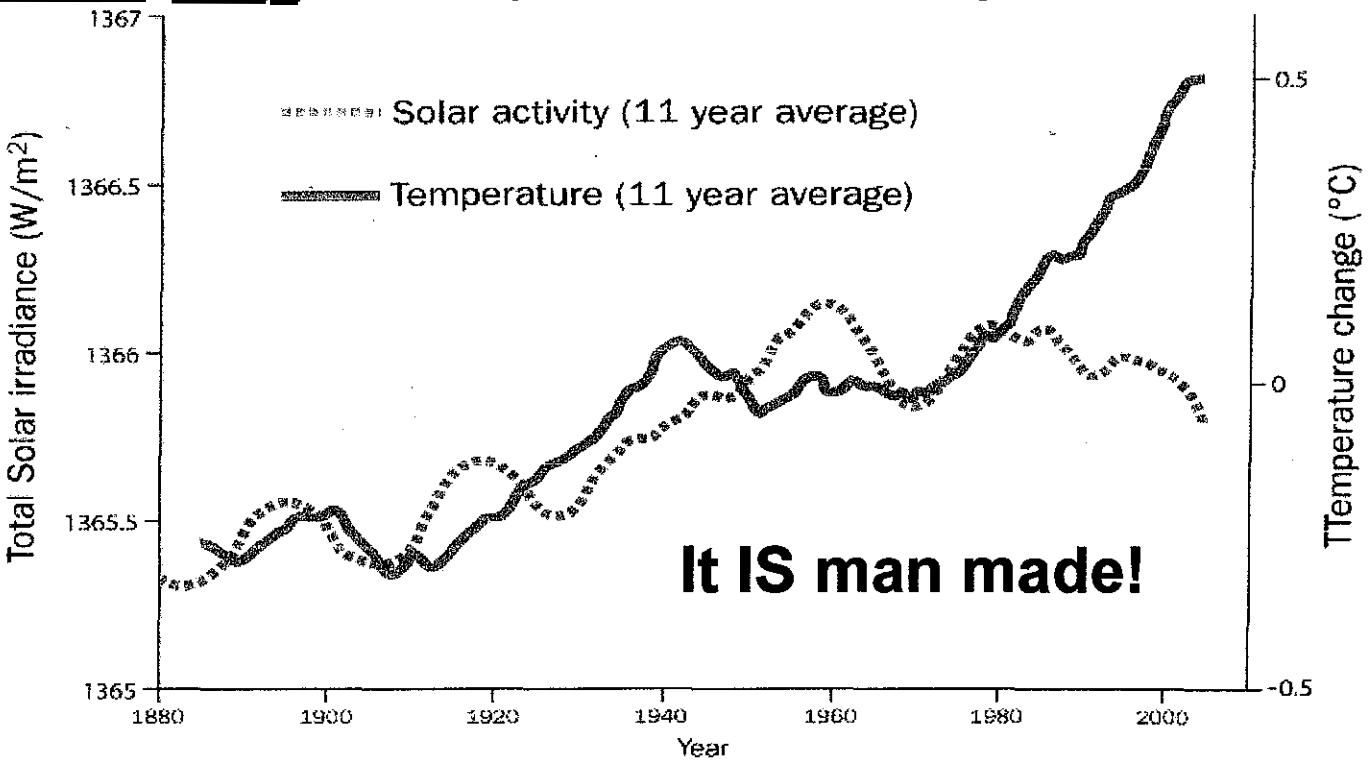
Think of yourself and your family if nothing else.

In a Universe without life or consciousness, even time has no value.

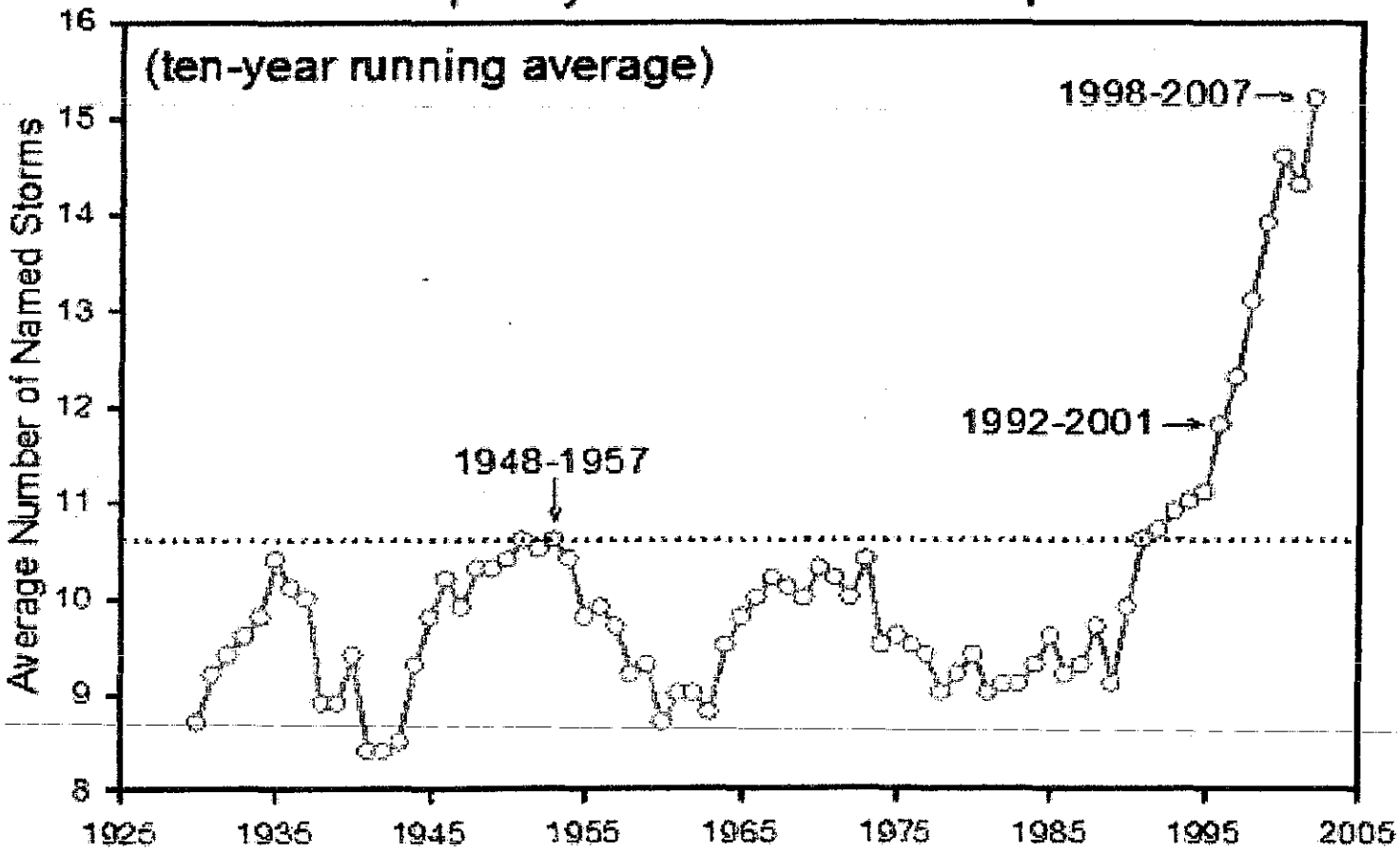
John Schmidt
[redacted]
Woonsocket S.D. 57385
[redacted]

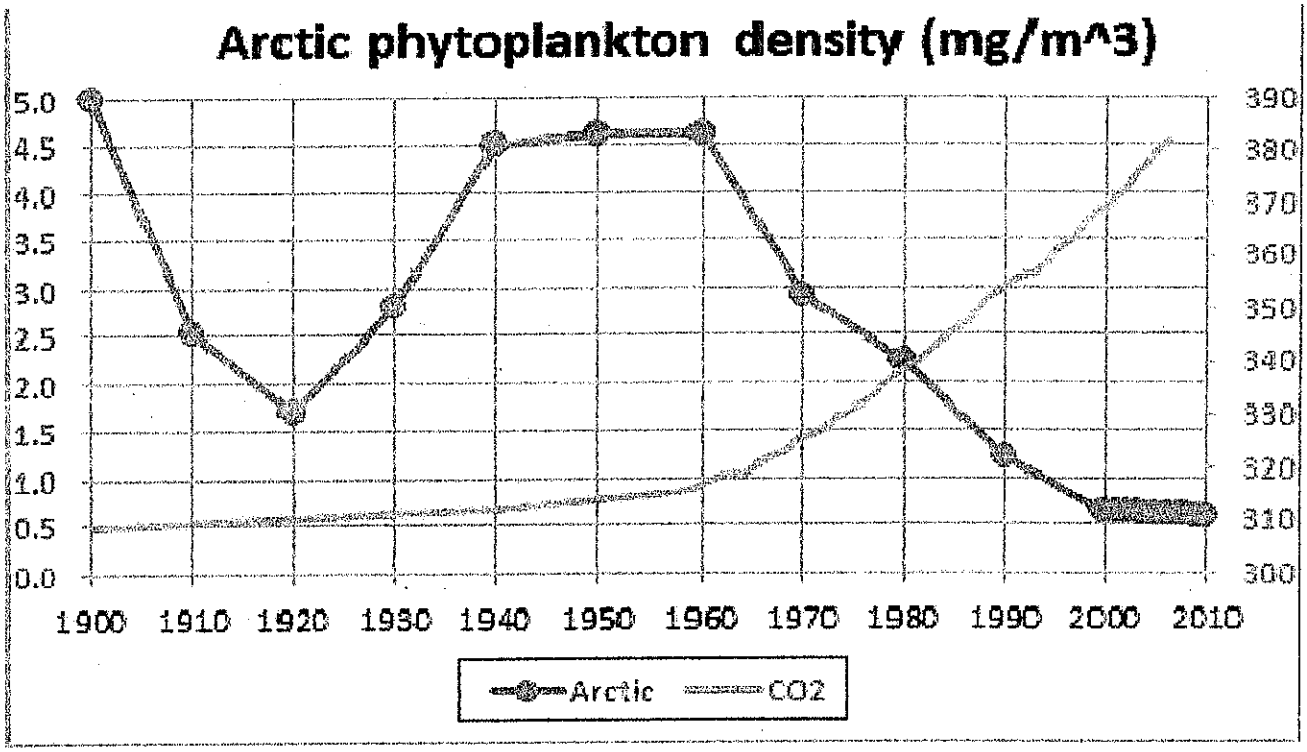
Additional Graphs

Temperature v. Solar activity



Annual Frequency of North Atlantic Tropical Storms





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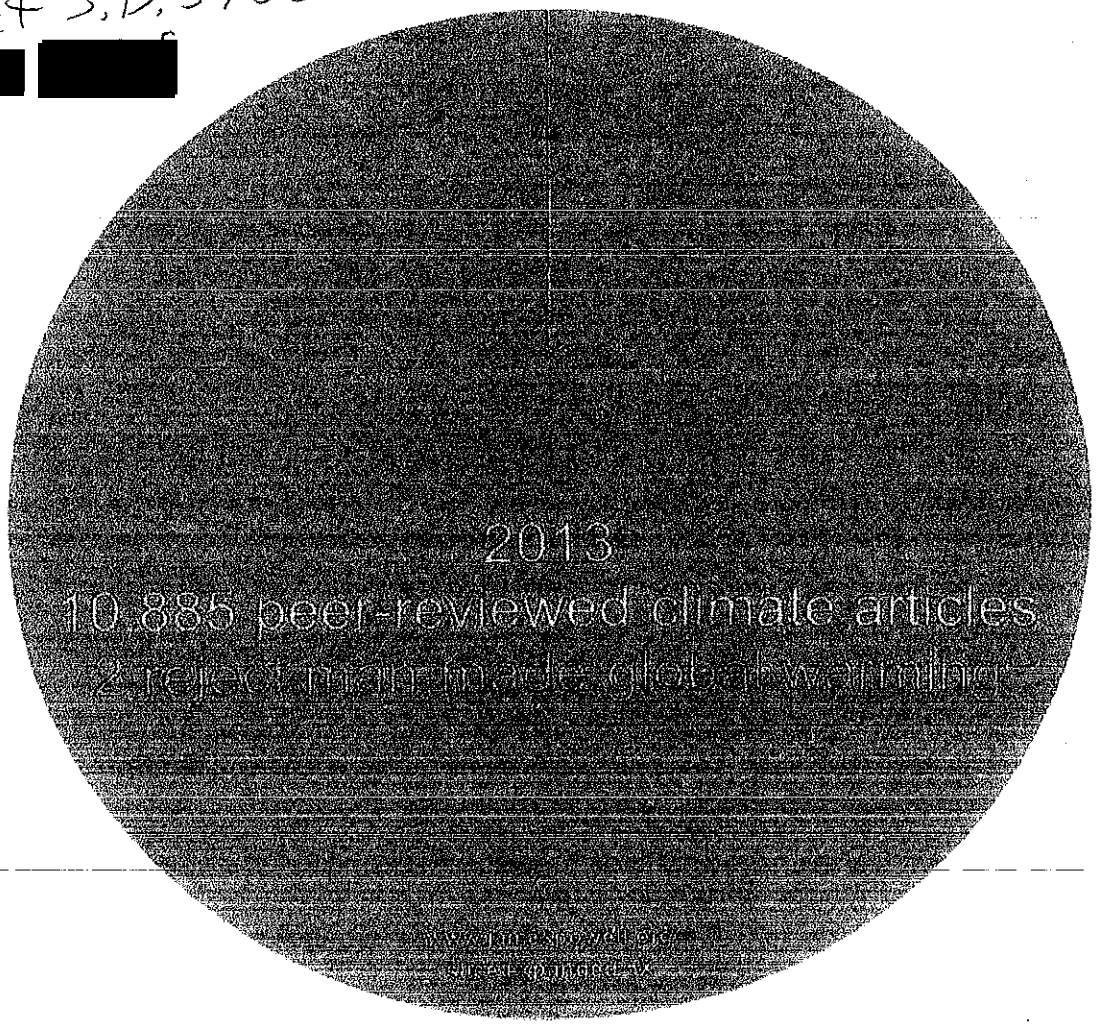
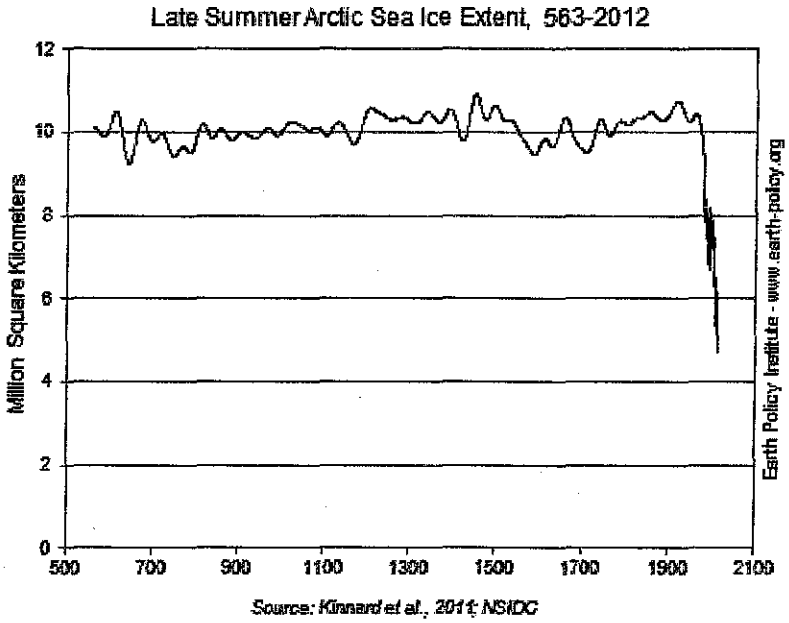
Phytoplankton produces 50% of the Earths oxygen.





John Schmidt
[redacted]
Woonsocket S.D. 57385
[redacted]

Kim Olson – Talkers on Keystone

- My name is Kim Olson, and I am speaking on behalf of U.S. Senator Mike Rounds of Fort Pierre, South Dakota.
- His Pierre office address is 111. W. Capitol Ave., Suite 210, in Pierre.
- Senator Rounds is a steadfast supporter of the Keystone XL pipeline project.
- As you know, the U.S. House and Senate passed legislation [redacted] that would authorize construction of the pipeline, and it received strong bipartisan support in both chambers.
- Unfortunately, the president vetoed this legislation.
- Senator Rounds voted for the Keystone XL pipeline because it's good for South Dakota and it's good for our country.
- It was the first bill he cosponsored when he took office in January.
- Nationally, construction of the pipeline alone would contribute roughly $3.4 billion into our economy.
- A Canadian Energy Research Institute report found that the production of oil flowing through the pipeline could support 72,000 to 81,000 jobs in the U.S. **each year** from 2021 through 2035.
- That is in addition to the 42,100 jobs the State Department found the pipeline will create, as soon as the permit is authorized.
- South Dakotans's slice of this would be received almost immediately.
- The increase in property taxes the pipeline is expected to generate in South Dakota would directly benefit our school systems and lessen the tax burden for many hard-working families.
- South Dakota farmers would be able to get their grain to market easier, as the pipeline would free up much-needed rail space currently being filled up by oil.
- The Keystone XL pipeline is also thought to be the safest pipeline ever constructed in the United States, if and when it is built, and have no effect on our environment, according to five EIS reports.
- Moving forward, Senator Rounds remains committed to moving the Keystone XL pipeline project across the finish line so our state and nation can begin to reap its many benefits.

SD CMKR #3

GNDC
Greater North Dakota Chamber

Keystone XL Hearing: Pierre, South Dakota
Docket Number: HP14-001
July 6th, 2015
Greater North Dakota Chamber of Commerce
Andy Peterson, President and CEO of the Greater North Dakota Chamber of Commerce

2000 Schafer St.
Bismarck, ND
58503

Commissioners, my name is Andy Peterson, and I am the President and CEO of the Greater North Dakota Chamber of Commerce. We represent nearly 1,100 businesses across the state of North Dakota and we are the voice of North Dakota Business.

We are here today to offer public comment on the construction permit certification for the South Dakota portion of the Keystone XL pipeline and to reiterate the Greater North Dakota Chamber of Commerce's strong support for the project to proceed.

I'm proud to be from North Dakota, our energy production has helped us become No. 1 in economic growth, in the past decade, even amidst some uncertain economic times.

The Greater North Dakota Chamber of Commerce believes the development of North American energy, like North Dakota oil and Canadian oil sands, clearly help our state and national economy, and create thousands of jobs.

One of the issues with oil development is transportation to refineries. In addition to the many pipelines that currently exist throughout North Dakota, the proposed Keystone XL pipeline will run through eastern Montana and go into South Dakota very close to our southwestern border. This pipeline construction and expansion will, in sum, create thousands of jobs, and many of which could be held by North and South Dakotans. Furthermore, local businesses will see more customers as more workers and families move into the region.

Along with these pipeline construction jobs, it's expected that a Keystone XL connection to North Dakota's Bakken supply will be constructed. With this connection, we would be able to move more oil safer and faster. As a result, oil-related employment would increase, and it wouldn't stop there. A boom like that would pump money into the local economies across the region. More people working here means more people spending money here. Businesses, jobs, and our region would continue to grow and benefit. Hundreds of indirect jobs in retail, hospitality and restaurants would be created. When businesses do well, our economy does well and everyone's lives improve. That's what this is really about.

The Keystone XL pipeline has the potential to change our state even more for the better. It opens the door to new opportunities that allow our state and us, as individuals, to flourish. Everyone in the state has been touched by our energy development.

GNDC
Greater North Dakota Chamber

The reality is, the oil from the Bakken and from Canada will make it to market, with the Keystone XL it will make it to market in the safest most efficient manner. Right now oil is transported by rail and by trucks; these methods serve a purpose, but are not as safe or as efficient as pipelines.

Considering all these issues, including the findings of the final Environmental Impact Statement, it remains our belief that the many benefits of the Keystone XL pipeline are greater than the minimal environmental risks. We believe this project is very much in the best interest of our region and nation.

The real benefit, however, is the pipeline's ability to help meet the region's critical and changing energy demands. The Keystone XL will serve as a long-term link, transporting supply of domestic energy to market efficiently and safely, at a low cost to the producer, which in turn will keep costs low for the consumers. This is vital to our regions ability to continue to capitalize on our vast crude resources in a manner that benefits both our local economy and the nation as a whole. We need more pipeline capacity, and it's needed now.

The Greater North Dakota Chamber of Commerce continues our support of the Keystone XL pipeline expansion project. It is our hope that the South Dakota Public Utilities Commission expeditiously approves construction permit certification for this project and allows our region's economy to grow.

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(605) 384-3804/384-3641
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July 6, 2015

STATEMENT FROM THE YANKTON SIOUX TRIBE TO THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION REGARDING THE PROPOSED KEYSTONE XL PIPELINE

Good evening Commissioners. I am here to speak to you today as a member of the Yankton Sioux Tribe Business and Claims Committee. As an elected leader of the Yankton Sioux Tribe, it is my duty to make the concerns of the Yankton Tribal membership known to you. Due to procedural developments in this case, I am disappointed to say that this public input session is the only way many of these concerns can be aired.

I am here despite the fact that the Commission has provided inadequate opportunities for Tribal members to participate and an inadequate process by excluding relevant evidence because this forum is the only forum provided to us to address these issues. This is par for the course, unfortunately, when it comes to outside governments' treatment of indigenous people. And this is something that must change for the PUC's proceedings to provide due process to all South Dakotans.

Any time our rights are at stake, it is first necessary to consider the treaties that apply. The Yankton Sioux Tribe is a party to the 1851 Fort Laramie Treaty, which sets aside nearly all land west of the Missouri River as Treaty Territory for the signatory tribes. Because the proposed Keystone XL pipeline route passes through South Dakota west of the Missouri River, this means that nearly all of the proposed project in South Dakota would exist on Treaty Territory reserved for the Yankton Sioux Tribe and other bands of the Oceti Sakowin. The interests we have in that land did not disappear when the land was taken from us in violation of the Treaty. Federal Courts have repeatedly held that even when a reservation has been diminished, a tribe continues to retain its usufructuary rights unless and until those rights have been expressly abrogated. Our usufructuary rights in the 1851 Treaty Territory have existed since long before South Dakota was a state, they have never been expressly abrogated, and they continue to exist to this day. It does not take a court decision to establish these rights; they exist already.

To deprive the Tribe of an opportunity to express its concerns relating to these rights is a violation of due process. A government agency cannot choose ignore the rights of a group of people just because they don't understand those rights without violating the interests of justice, yet that is precisely what the PUC has done.

The Yankton Sioux Tribe and others have countless sacred and cultural sites in the land that is threatened by this project. We use the plants, animals, and water on these lands as we have done since time immemorial, and if one of the inevitable spills were to occur on these lands, the effect on these resources would be devastating.

The Yankton Sioux Tribe also holds grave concerns about the proximity of construction workers living at "man camps" to our reservation and our casino. These man camps are notorious for bringing drug abuse, human trafficking, and violence including sexual violence to surrounding communities. The dangers these activities pose to our Tribal members, particularly our young women and youth, are unacceptable.

While we appreciate the opportunity to participate in this proceeding, and that others have been granted the opportunity as well, it now appears that intervenor status was not granted to enable the public to meaningfully participate but, rather, to give this proceeding the appearance of fairness to the public. Many of the Commission's decisions in the course of this proceeding do not comport with what is required by South Dakota statutes, and this process has become almost unrecognizable as a quasi-judicial proceeding. The public involvement element of this process has been a matter of form rather than substance, which is not what was intended by the statutes. To protect all of South Dakota, the voices of all South Dakotans must be considered in a meaningful way.

Jason Cooke, Member
Business and Claims Committee
Yankton Sioux Tribe

July 6, 2015

Chris Nelson, Chairperson
Kristie Fiegen, Vice Chairperson
Gary Hanson, Commissioner
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, South Dakota 57501-5070

Dear Chairperson Nelson, Vice Chairperson Fiegen and Commissioner Hanson:

The undersigned Tribal leaders, community leaders and everyday South Dakotans are writing to register our serious concerns with the process for the certification of the permit for the Keystone XL Pipeline. Under South Dakota law, the PUC must ensure that "the location, construction and operation of facilities will produce minimal adverse impacts on the environment and citizens of this state." SDCL §49-42B-1. If construction has not begun within four years of a permit, "the utility must certify to the Public Utilities Commission that such facility continues to meet the conditions upon which the permit was issued." SDCL §49-42B-27.

The law requires a thorough review, on your part, of all information relating to the project that may be available. An open process in which South Dakotans from all walks of life are provided an opportunity to provide information is necessary in order for the PUC to fulfill its statutory mission.

We are concerned that in considering whether to accept certification of the permit for the Keystone XL Pipeline, the PUC has taken repeated actions to limit the voice of the Indian nations and many concerned South Dakotans. On June 15, the PUC issued orders prohibiting consideration of Native American aboriginal title and gathering rights, as well as issues relating to the crossing by Keystone XL with the Mni Wiconi Project of the Oglala, Rosebud and Lower Brule Sioux Tribes. The PUC has also issued an order precluding the testimony and evidence of dozens of South Dakota landowners and ranching families, Indian and non-Indian, for alleged violations of procedural rules. TransCanada was found to have violated the very same rules, but has suffered no equivalent sanction. We believe this demonstrates a clear bias in favor of a Canadian corporation and against the concerns of South Dakota Tribes and their non-Indian neighbors.

The process for re-certifying the 2010 permit has been compromised by PUC rulings allowing TransCanada to hide important plans and documents from disclosure. At the outset, the Commission granted TransCanada's request for an expedited hearing schedule. On April 17, the PUC granted TransCanada a protective order, severely limiting the ability of the interveners to access and utilize information for the certification hearing.

At the April 14 hearing on the discovery of documents, TransCanada admitted that it had not prepared an Emergency Response Plan for the Keystone XL Pipeline. Condition 36 of the 2010 permit for the Keystone XL Pipeline requires filing an emergency plan. TransCanada has not bothered to comply and prepare and emergency response plan, instead spending millions of dollars on lobbying and television advertising.

TransCanada's performance with existing pipelines demonstrates that the PUC must closely scrutinize safety claims and promises to landowners. There have been at least 14 spills of dangerous tar sands crude from TransCanada's existing Keystone Pipeline and the Cushing Extension. In the face of

this dismal record, TransCanada consistently downplays the possibility of a significant oil spill in South Dakota, putting our land and water in jeopardy. Documents that intervenors have been able to obtain demonstrate that TransCanada is unprepared for an adequate emergency response in the event of a release of tar sands crude in rural South Dakota.

TransCanada has failed to comply with proper reclamation and mitigation of landowners' properties that are impacted by the original Keystone Pipeline. TransCanada has acted like a bully to South Dakota landowners and ranching families.

TransCanada and the United States federal government have both failed to properly consult with Indian Nations to acquire free, prior and informed consent for the construction of the Keystone XL pipeline across treaty and traditional territories.

TransCanada has not assessed the negative social impacts the construction of the Keystone XL pipeline will have upon native and non-native communities of South Dakota, in particular, the increased risks of sexual violence and the lack of emergency service infrastructure.

In the process of certifying the permit for the Keystone XL Pipeline, there has been a lack of transparency and due process by the PUC, and the appearance of bias in favor of TransCanada. This was epitomized by scheduling a single public comment hearing on July 6, the Monday after a holiday weekend -- which seems designed to minimize the important role of public comment in the decision whether to certify the permit for Keystone XL.

For these reasons, we urge the PUC to immediately schedule additional public hearings. All environmental issues must be thoroughly reviewed by the PUC, including impacts on water resources, climate change from the extraction of tar sands crude, fish and wildlife, medicinal plants, cultural resources and Tribal lands. The concerns of the Indian Nations must receive particularly judicious consideration – acknowledging the simple reality that the Tribes were here first.

The PUC should vacate existing orders in HP 14-001 precluding certain intervenors from testifying and precluding consideration of Native aboriginal title and gathering rights. Full due process must be afforded to all intervenors, Tribal governments, and all concerned South Dakotans. There must be no bias or favoritism by the PUC toward TransCanada in the certification proceeding for the permit for the Keystone XL Pipeline.

Respectfully Submitted,

No KXL Dakota Coalition
Indigenous Environmental Network
Dakota Rural Action
South Dakota Peace and Justice Center
BOLD Nebraska
Ihanktonwan Treaty Council
Kul Wicasta Treaty Council
Oyate Wahacanka Woecun
Rosebud Sioux Tribe
Yankton Sioux Tribe
William Kindle, Chairman of the Rosebud Sioux Tribe
William Bear Shield, Chairman of Land and Natural Resources, Rosebud Sioux Tribe

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Box 430
Rosebud, SD
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Dallas Goldtooth
Elizabeth Lone Eagle
Bud Lone Eagle
Art Tanderup
Wrexie Bardaglio
Carolyn Smith
John Harter
Faith Spotted Eagle
Carol Lynch
Brian Hemmelman
Donna J. Hess
Kimberly James
Gerald Sanftner
Laura Barnaud
Bruce A. Crisman
Elizabeth Fox
Rebecca R. Leas
Meghann Elizabeth Jarchow
Carl Kline
Paul Seamans
Emelie Haigh
Kevin Crosby
Patricia Fox
Sylvia Lambert
Sarah Peterson
Lyndsey Monroe
Jesse Monroe
Brad Hauck
Elaine Keats Noyes
Robert Allpress
Neal Olson
Kurt Seamans
Joan Trygstad
Sue Sibson

OAK CREEK RANCH

[redacted]

BURKE, SD. 57523

[redacted]

JULY 6, 2015

TO WHOM IT MAY CONCERN:

YOU DON'T HAVE TO BE VERY SMART TO DECIDE THE BEST WAY TO (PIPELINE) MOVE OIL FROM CANADA TO TEXAS. TRUCKS & TRAINS POLLUTE OUR AIR AND ARE VERY HAZARDOUS WHEN AN ACCIDENT OCCURS. IF WE FORCE CANADA TO BUILD PIPELINES DIRECT TO THE ATLANTIC & PACIFIC OCEANS WE LOSE TWICE. THE OIL WOULD BE PROCESSED IN CHINA AND WE WOULD GET THE WIND RIFT (POLLUTION) ALL OVER OUR COUNTRY.

NOT TO MENTION HOW IMPORTANT IT IS TO GET A STABLE SUPPLY OF CRUDE OIL INSTEAD OF BOWING DOWN TO MID-EAST & RUSSIAN OIL!! THE REFINED GAS IS ALSO BECOMING MUCH CLEANER AS WE LEARN SMARTE TECHNIQUES.

THE CRUDE OIL FROM CANADA, NORTH & SOUTH DAKOTA AND MONTANA WILL BE REFINED AND USED, PERIOD! WE SHOULD KEEP CONTROL OURSELVES SO IT WILL HELP OUR COUNTRY.

Larry Crouse

MAY 1st 2015

OIL LINE

Continued from Page A1

after the state permit was granted in 2010.

The company is waiting for clearance from President Barack Obama's administration for the pipeline to pierce the Canada-U.S. border.

TransCanada wants to ship tar-sands oil from Alberta, Canada, through Montana and South Dakota to Nebraska where the pipeline would connect with the existing distribution network.

The commission also listened to the sides argue for some 90 minutes Thursday about the protective order that had been granted earlier to TransCanada.

"At this point, we can't even show documents to our clients for comment," Robin Martinez, a lawyer representing Dakota Rural Action, said.

The order allows TransCanada to keep information out of the public domain but be available to lawyers and consultants working on the case.

The interveners opposing the pipeline's construction wanted the commission to scrap the protective order. Instead, the commission allowed the sides to work out modifications to it.

Nelson said the commission didn't have sufficient control over lay interveners who might violate the confidentiality requirements.

The state Supreme Court can discipline lawyers who don't abide by it.

Bill Taylor, a Sioux Falls lawyer representing TransCanada, said the company has been allowing consultants to review the documents if they sign the confidentiality conduct agreement.

Taylor said the company had offered to discuss such requests with any intervener. Aside from Standing Rock Sioux Tribe and Yankton Sioux Tribe, he said, no one had called.

Some of the information is kept secret to protect burial and artifact sites along the proposed route across western and south-central South Dakota.

Further, Taylor said, the company has invested millions of dollars and years of time into gathering information that shouldn't be free in the public domain.

"The company treats them as trade secrets," Taylor said.

Commissioner Gary Hanson said giving access to the pro se interveners — those representing themselves without attorney — could harm the company.

"It would be highly irregular for this commission to do that," Hanson said.

The commission's original schedule provided for a four-day hearing. Now it is possibly seven days.

Commissioner Kristie Fiegen proposed the July 27-31 dates. PUC lawyer Kristen Edwards said the staff's main consultant wouldn't available that week.

Nelson and Hanson added the two days in August to allow time for the PUC's main consultant to testify.

"I think that will allow for testimony of all the experts that need to be," Nelson said. "Perhaps having two extra days wouldn't be harmful."

Fiegen voted against two August days. The final schedule, including various deadlines for motions, witness lists and evidence, then was adopted 3-0.

PUC sets hearing in Keystone XL oil line case

By BOB MERCER
Capitol Correspondent

PIERRE — The state Public Utilities Commission set new dates Thursday for taking testimony whether TransCanada can still meet the conditions set five years ago for building the proposed Keystone XL pipeline through South Dakota.

The evidentiary hearing will be July 27-31 with Aug. 3-4 if needed. The hearing had been scheduled for May 5-8 until the commission decided Monday to push it back.

"As I look around the room there's a lot of — nobody's happy," Chris Nelson, the commission's chairman, said. "This may be the best that we can accomplish."

State law requires the certification hearing because TransCanada wasn't able to proceed on the project within four years

See OIL LINE, Page A6

July 2015

TransCanada: New CO2 rules should aid Keystone XL's OK

CALGARY, Alberta (Reuters) — TransCanada Corp. said on Tuesday that tightening climate-change rules from the governments of Canada and the province of Alberta help justify the construction of the controversial Keystone XL pipeline project.

The company, Canada's No. 2 pipeline operator, released a letter sent to U.S. Secretary of State John Kerry and other department officials saying that increased carbon levies for Alberta oil sands producers and new Canadian targets for greenhouse-gas emission cuts should serve to help assuage U.S. concerns that approving the $6.41 billion project would increase climate change.

TransCanada has waited more than six years for the Obama administration to make a decision on whether it would allow the embattled project to proceed, frustrating Canadian oil producers and governments eager to see the country's oil reach the high-paying refinery hub on Texas' gulf coast. However, Obama has said he will only permit the project, bitterly opposed by environmental groups in both the U.S. and Canada, when he is certain it will not significantly exacerbate climate change.

Study reveals a Keystone XL conundrum

By CHRIS MOONEY
The Washington Post

Our mental snapshot of the politics of the Keystone XL pipeline is pretty straightforward — Republicans and most independents want it built; so do some Democrats, but most Democrats and the environmental left are opposed.

A new study in the journal Energy Policy, though, suggests that this assumption about pipeline politics mainly holds on the national level — but not so much locally. Rather, the research finds, as you get closer to the proposed pipeline route, liberals and conservatives living in those areas look less different in their views — and liberals as a whole are more in favor of the pipeline than liberals farther off.

The result suggests that anti-pipeline advocates may be losing the framing war to those who endlessly cite the pipeline's supposed economic benefits.

The research, conducted by Timothy Gravelle of the University of Essex and Erick Lachapelle of the University of Montreal, drew upon data from three large Pew Research Center polls of public views of Keystone XL, conducted in 2013 and 2014. The Pew data allowed the researchers to "geocode" each survey respondent according to his or her Zip code. Then, for each respondent, the minimum distance from his or her home to the proposed pipeline route was calculated.

You might think that people living in close proximity would be more worried about the pipeline, given both the continual focus on possible environmental consequences and the so-called NIMBY ("Not in My Back Yard") phenomenon. But the study found that locally, the issue was less partisan and that there was more Democratic or liberal support, in comparison with how those on the left feel about Keystone XL on a national level.

"Proximity to the pipeline leads to a greater likelihood of favoring the pipeline," the study reports. The result amounts to an "inverse NIMBY effect," the authors continue.

One possible reason, the researchers suggest, is that on the local level, the pipeline received much more media coverage, with more of a focus on costs and benefits alike for local communities. As a result, goes the thinking, people living near the proposed route were probably more highly exposed to a kind of cost-benefit trade-off — one that pits potential local jobs from building the pipeline (granted, the actual number that would be created has sometimes been overblown) against ecological consequences.

This, in turn, would have caused people to engage in more of an "on the one hand, on the other hand" way of thinking about the matter. "The promise of local jobs and other economic benefits work against environmental considerations of local spills and global risks related to climate change," they write.

This dynamic mostly mattered for liberals, not conservatives, the study found. In general, conservatives didn't waver much in their views of Keystone XL according to their proximity to the proposed pipeline route. It was only liberals whose views varied — such that "among American liberals the likelihood of favoring the pipeline decreases as distance to the pipeline increases," the study reports.

"As a result, there is no ideological divide as it relates to the Keystone XL near the proposed route; it is only at a substantial distance from the pipeline that differences between liberals and conservatives emerge," the authors continue.

None of which is to say that some people living along the pipeline's proposed route aren't opposed — they are. And some are even Republicans or conservatives, raising property rights concerns in the face of the need to build across land that they own.

It's just that, in the words of study co-author Lachapelle, "We wouldn't expect to find opposition to be concentrated locally. That's not to say you won't find local opposition and local protests, but the local here is not the centre of gravity for opposition."

Approve the Keystone XL pipeline

SUPPORT

Sen. John Thune, R-S.D.

Thune is chairman of the Senate Republican Conference.

OPPOSE

Rep. Anna Eshoo, D-Calif.

Eshoo is a senior member of the House Energy and Commerce Committee.

With nearly 9 million Americans out of work and millions more working part time because they can't find full-time employment, creating jobs should be a priority for both Congress and the administration. The Keystone XL pipeline would support more than 42,000 jobs, ranging from construction jobs for welders and pipefitters to support jobs at hotels and gas stations – all without spending a dime of taxpayer money.

The pipeline would also bring billions in revenue to state and local governments. In South Dakota alone, the pipeline would bring in $20 million per year in property taxes. That's a lot of funding for local priorities such as schools, law enforcement, and roads and bridges.

In addition to transporting Canadian oil, the pipeline would carry oil from the Bakken oil fields in North Dakota to refineries along the Gulf Coast. This would help alleviate the rail overcrowding that is preventing farmers in the Midwest from getting their goods to market.

Opponents of the pipeline attempt to justify their opposition by claiming environmental concerns, but five separate environmental reviews by the State Department have found that the pipeline will have no meaningful impact on the environment. In fact, transporting oil via pipeline is better for the environment than via highway or rail. Canada will extract its oil regardless; the only question is whether we want it to come here via the pipeline, along with the thousands of jobs it will create, or whether we want Canada to ship it overseas via less environmentally friendly methods. Importing oil from Canada would also lessen our reliance on oil from less friendly countries.

The Keystone XL pipeline is a win-win for Americans. It's time to get it approved.

THE HEART OF THE ISSUE

Supporters of the proposed Keystone XL pipeline argue that it would create jobs and generate revenue for state and local governments. Opponents say these claims are exaggerated and that the project runs afoul of U.S. environmental laws.

Last November, for the ninth time, House Republicans force-fed Congress the idea that the Keystone XL pipeline will yield tens of thousands of jobs, secure a stable domestic oil supply, lower the price at the pump and prove an economic boon. For the ninth time, I voted against the bill. Why? Because the details in the fine print say otherwise.

Simply put, the economic benefits of the proposed pipeline are minimal and the risks high.

Supporters tout a State Department projection made in consultation with TransCanada, the company behind the pipeline, revealing that up to 42,100 direct and indirect temporary jobs would be supported during construction. Less known is that after construction is completed – in less than two years – the Keystone XL pipeline is expected to support only 35 permanent jobs.

Supporters also argue that the project guarantees the United States will be an end consumer of the tar sands oil. In fact, there's no guarantee we would see one drop; TransCanada's president of energy and oil pipelines acknowledged this under questioning at an Energy and Commerce hearing in 2011. Because tar sands oil is expensive to produce, oil companies need an export route to the more lucrative international market.

Furthermore, the United States would assume 100 percent of the risk of a catastrophic spill. The bill I opposed created a special exemption for the Keystone XL pipeline, essentially trampling on our environmental laws.

America needs reliable energy resources and job growth, but a proposal like this hardly scratches the surface while putting our environment and health at serious risk.

CONTACT YOUR ELECTED OFFICIALS

The Honorable *(name)*, U.S. Senate, Washington, DC 20510 • Phone: (202) 224-3121

The Honorable *(name)*, U.S. House of Representatives, Washington, DC 20515 • Phone: (202) 225-3121

Congress passes Keystone XL pipeline bill

Only one Republican voted against the bill, setting up veto from president

By DINA CAPPIELLO
The Associated Press

WASHINGTON — The Republican-controlled Congress cleared a bill Wednesday to construct the Keystone XL oil pipeline, setting up a confrontation with President Barack Obama, who has threatened to veto the measure.

The House passed the bill on a 270-152 vote, endorsing changes made by the Senate that stated climate change was real and not a hoax, and oil sands should no longer be exempt from a tax used to cleanup oil spills.

THUNE

"A bipartisan majority in both the House and Senate have spoken. The time to approve the job-creating Keystone XL pipeline is now."
South Dakota Sen. John Thune

Only one Republican, Michigan Rep. Justin Amash, voted against the measure, while 29 Democrats backed it. But neither the House nor the Senate has enough votes to overcome a veto, the first of many skirmishes between the Democratic White House and Congress on energy and environmental policy.

Supporters were already strategizing on how to secure the pipeline's approval using other legislative means.

"The evidence is in. The case ought to be closed," said Rep.

See KEYSTONE, Page A6

KEYSTONE

Continued from Page A1

Fred Upton, R-Mich., chairman of the House Energy and Commerce Committee.

Sen. John Hoeven of North Dakota, the chief Republican sponsor of the bill, said in a statement "we will continue to press for approval by attaching an approval measure to another bill, perhaps an energy bill or must-pass appropriations legislation."

Obama "needs to work with Congress in a bipartisan way and approve the Keystone XL pipeline project for the American people," he said.

For Republicans, the bill's passage capped weeks of debate on a top priority after they took control of Congress last month. Hours before the vote, they prodded Democrats who did not take their side. House Republicans, who have debated and passed numerous measures on the pipeline only to have them dead end in the Senate, claimed victory.

Rep. Cynthia Lummis, R-Wyo., said she was a having a "holy cow" moment.

"This kind of support ... It doesn't get any better than this," she said.

Democrats, meanwhile, called the effort a waste of time but said the provisions on global warming and oils spills marked progress for Republicans on those issues.

Rep. Alcee Hastings, D-Fla., said the bill was another example of Republicans prioritizing legislation to demonstrate a message, regardless of its chances of becoming law. The vote Wednesday marked the 11th attempt by Republicans to advance the pipeline.

"The last few years have been like a hamster on a wheel — spinning and spinning and not getting anywhere," said Hastings, who at one point held up a toy that looked like the rodent.

First proposed in 2008, the pipeline has come to symbolize the differences between the parties on energy and environmental matters.

Republicans and the oil industry have argued the $8 billion infrastructure project is about jobs and boosting energy security, by importing oil from a friendly neighbor and shipping it to domestic refineries subject to more stringent environmental regulations.

Democrats, and their environmental allies, have characterized it as a gift to the oil industry that would worsen global warming and subject parts of the country to the risks of an oil spill, with little economic benefit because the oil and its refined product would be exported abroad.

The pipeline would connect Canada's tar sands with Gulf coast refineries that specialize in processing heavy crudes.

A January 2014 analysis found that, with or without the pipeline, the tar sands would be developed, and thus the greenhouse gas emissions resulting from them would enter the atmosphere anyway. But the EPA said earlier this month that that analysis has to be revisited, because lower oil prices could make the pipeline more of a catalyst than the State Department initially predicted. A letter from the Canada's ambassador said the EPA's assessment was flawed.

Hours before the pipeline vote, Sen. James Inhofe, chairman of the Senate Environment and Public Works Committee, held the first of many hearings on the Obama administration's plans to control for the first time the pollution blamed for global warming from the nation's power plants.

And the House plans to unveil a large energy bill next week.

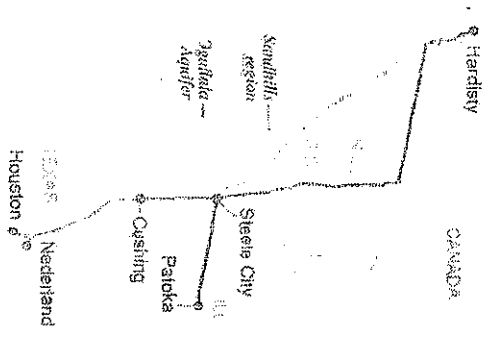
Democrats, too, want to move on.

"This Congress has much work to do on energy," said Rep. Frank Pallone, D-N.J., the top Democrat on the House Energy committee.

Keystone XL bid revived

The pipeline has exposed larger divisions between environmentalists concerned about global warming and potential oil spills against supporters who argue that the $8 billion project will create jobs and boost U.S. energy security. President Barack Obama has vowed to veto the approved bill from Congress.

Existing pipeline
Proposed XL extension
Newly-completed extension



AP graphic

FMCSA to Address Uptick in Crashes In North Dakota's Bakken Oil Region

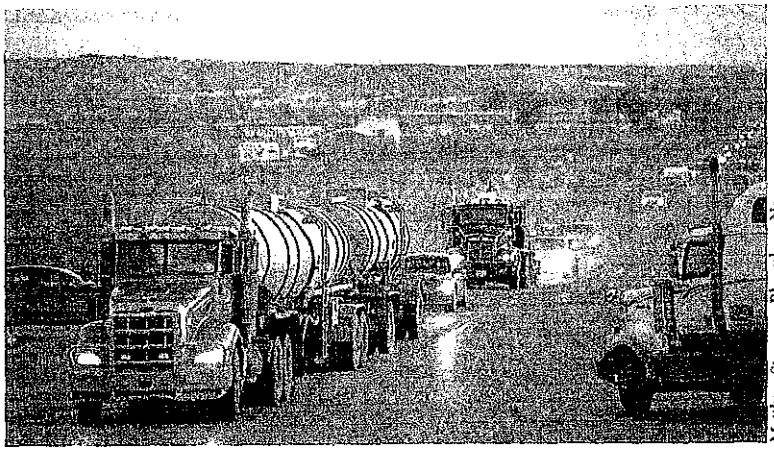
By Eric Miller
Staff Reporter

The Federal Motor Carrier Safety Administration said it is addressing an increasing and disproportionate number of fatal large truck-involved crashes in North Dakota's Bakken oil field counties.

Jack Van Steenburg, FMCSA's chief safety officer, said the agency has identified a "large cluster" of crashes in the oil field operations in North Dakota, one of the nation's largest crude oil production states.

"We have some strategies and we're working with other departments to reduce those crashes," Van Steenburg said.

Federal crash statistics show that the number of fatal large truck-involved crashes had increased to 54 in 2013 from 9 in 2010.



Matthew Staver — Bloomberg News

Traffic lines the main street in Watford City, N.D. The region's oil boom has led to increased traffic and truck-involved fatalities.

Many of the crashes in North Dakota occurred on two major highways where oil trucks run, U.S. 85 and Interstate 94, Van Steenburg said.

"It's an area of concern for FMCSA, the North Dakota Highway Patrol, and everyone in the

(See OIL, p. 28)

FMCSA Targets Oil Trucks

(Continued from p. 2)

state," said Denver Tolliver, professor of transportation and director of North Dakota State University's transportation and logistics program. "The FMCSA has concluded that the heavy-vehicle crashes and crash rates were increasing faster in the Bakken than they were in some of the other shale oil boom regions, such as Eagle Ford in Texas."

FMCSA is increasing oversight of tank truck carriers that haul crude oil and propane, giving its investigators advanced training, issuing grants to states, and stepping up traffic enforcement, according to Paul Bomgardner, chief of FMCSA's hazardous materials division.

"Moving forward we're going to . . . focus our attention, actually on the transportation of energy products," Bomgardner told an audience attending the annual conference of the Transportation Research Board in Washington, D.C., on Jan. 13. "What are we going to do? More oversight, more oversight, more oversight."

"We're going to be initiating a series of studies over the next year or so to not only look at where these accidents are located, but try to get a better idea of some of the cause and effect," Tolliver said.

According to recent research by the Upper Great Plains Transportation Institute, a research, education, and outreach center at North Dakota State University, roads once used for local access and agricultural purposes now mostly serve expanding oil production.

"Oil companies, workers, commercial trucks, and industrial equipment associated with oil extraction use these roads to access oil drilling and production sites," the group said.

In its 2013 report, the state's highway patrol said it has "strived" to meet the demands of the growing motor carrier industry operations.

"The need to move goods across the country and between points within North Dakota remains at an all-time high," the highway patrol report said.

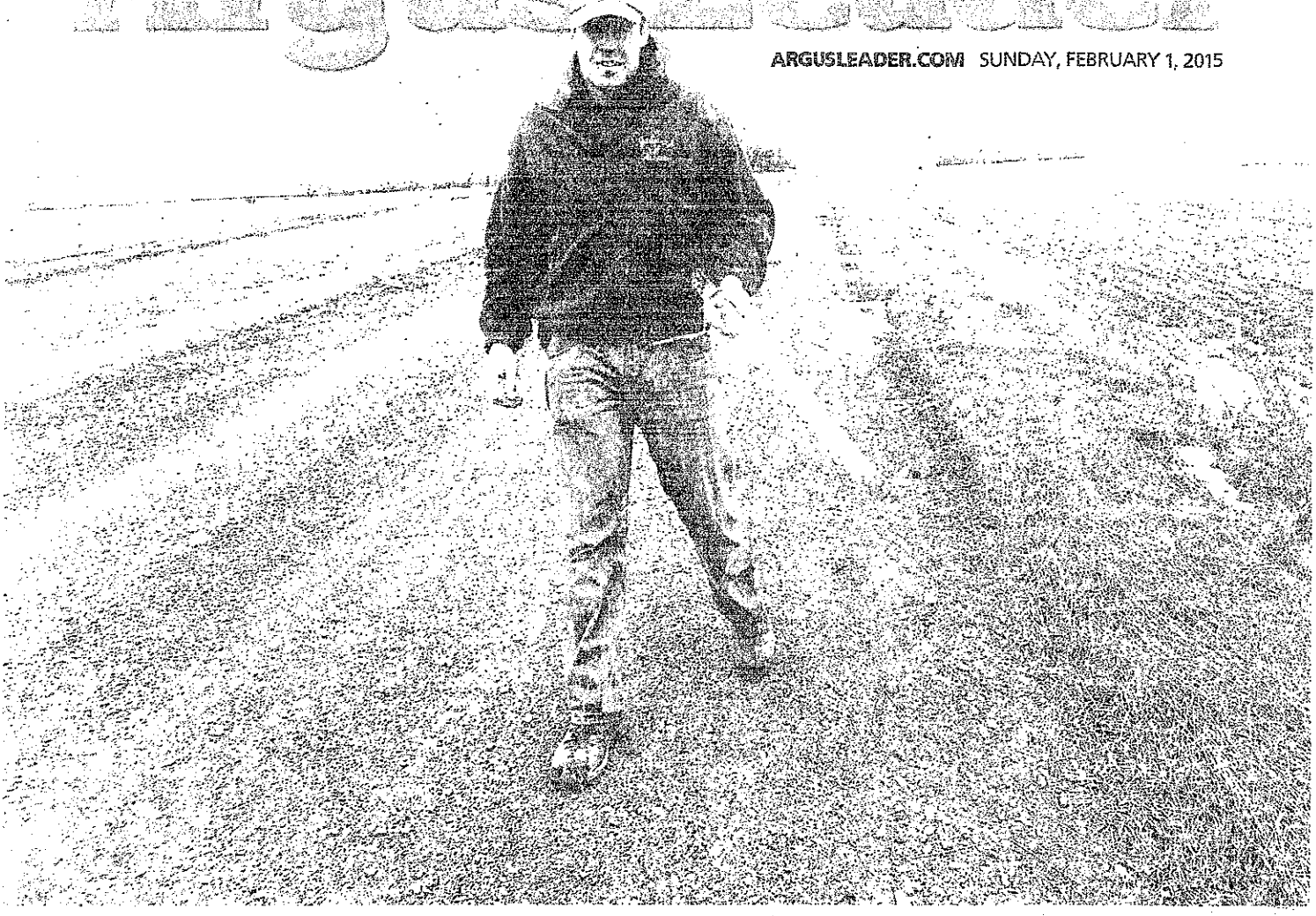
"The issue is between 2008 and 2013, vehicle miles traveled in the state — and mostly in that Bakken region of in our state — increased by about three billion miles," said Arik Spencer, executive vice president of the North Dakota Motor Carriers Association. "So you have a huge number of people traveling on infrastructure that [it] was never designed to hold."

Congestion on state, county and local roads has increased to the point that it too frequently causes motorists to get impatient, passing on hills when traffic slows and exhibiting other dangerous driving behaviors, Spencer said.

With oil trucks traveling on the state's highways and rural roads, the state's current budget for infrastructure maintenance, repair and rebuilding has grown to nearly $3 billion from $1 billion in 2007, Spencer said.

Staff Reporter Eugene Mulero contributed to this story.

SIOUX FALLS, SOUTH DAKOTA
Argus Leader
ARGUSLEADER.COM SUNDAY, FEBRUARY 1, 2015



LANDOWNERS PUSH FOR ANSWERS ON PIPELINE

JIM SCHMIDT
Lincoln County Commissioner

Pipeline

Continued from Page 1A

Texas-based company has ducked or dodged some difficult questions.

Some of the more than 500 landowners along the South Dakota path have raised concerns about the long-term effect on agricultural land, including the ripple effect on neighboring landowners of upsetting underground drain tiling.

Many raised the specter of spills, and several questioned the wisdom of accepting one-time easement payments for a pipeline moving a profitable product under their property.

"We've got a lot of serious issues to work out, and we haven't gotten a lot of good answers," said Lincoln County Commissioner Jim Schmidt, who was among the 400 to question company representatives at a public meeting in Sioux Falls last week.

Lincoln and Lake counties each have applied for party status on the pipeline's PUC docket. Party status allows a person or entity to cross-examine the permit applicant and request documents throughout the process.

Other parties include a Spink County farmer named Randy Kuehn, two lawyers who represent Sioux Falls-area landowners and the WEB water development association.

Easements worries, assurances wanted

Aaron Johnson's family has an organic farm near Madison. Dakota Access cuts through property his family farms.

Johnson told commissioners during a public hearing in Sioux Falls last week that he's unimpressed by one-time easement payments. Up to 570,000 barrels of oil would flow through the pipeline every day for years, and farmers could see less crop production long after the easement money ran out.

"This would be the equivalent of a farmer paying a one-time rental fee on land rented in exchange for production for unsaid years to come," Johnson told the PUC. "Landowners and the PUC should demand annual royalty and production payment and an annual lease payment."

He asked the PUC to force Dakota Access to bond the project as insurance against leaks.

Charlie Johnson, who also is part of the Johnson Farms business, said South Dakotans deserve safeguards. The pipeline should be bonded for the same reason vehicle owners have car insurance: To guarantee there's money for liability if the owner runs out.

Joey Mahmoud, a Dakota Access representative, said the company is fully liable for cleanup and any property damage from any spill. Federal law also protects against damage, he said, as the federal government collects per barrel fees for cleanup costs.

"Just because there's an LLC behind our name doesn't mean we're not liable," Mahmoud said.

Charlie Johnson said that's not as comforting as a bond would be.

"We need a bond so somebody pays right away," he said. "Right now, there are no safeguards."

PUC Commissioner Chris Nelson said the commission doesn't have the authority to order bonding for the project on that level as part of the construction permitting process. The commission can order indemnity bonds for potential damage to roads and bridges, but "does not provide any specific authority to us to provide the types of bonds that you talked about," Nelson said.

Nelson also told Aaron Johnson that commissioners don't have the authority to order the company to pay annual payments to landowners.

Dakota Access is expected to offer easement payments that take into account current land values and account for the diminished value of that land after placement of a pipeline. That arrangement is set forth by Supreme Court opinions.

Per-barrel payments to landowners or to the state are not part of the calculation, and concerns over royalties wouldn't hold up the pipeline's construction permit.

Charlie Johnson sees that as a flaw that should be corrected.

"Really, it's going to take some kind of legislative action," Johnson said. "There's no reason, at a time when we can't expand Medicaid or properly fund our schools, that we can't tap into this source of funding."

Spills a prime concern

The potential for spills has been a recurring theme at the public meetings and on comments entered into the official record on the Dakota Access docket.

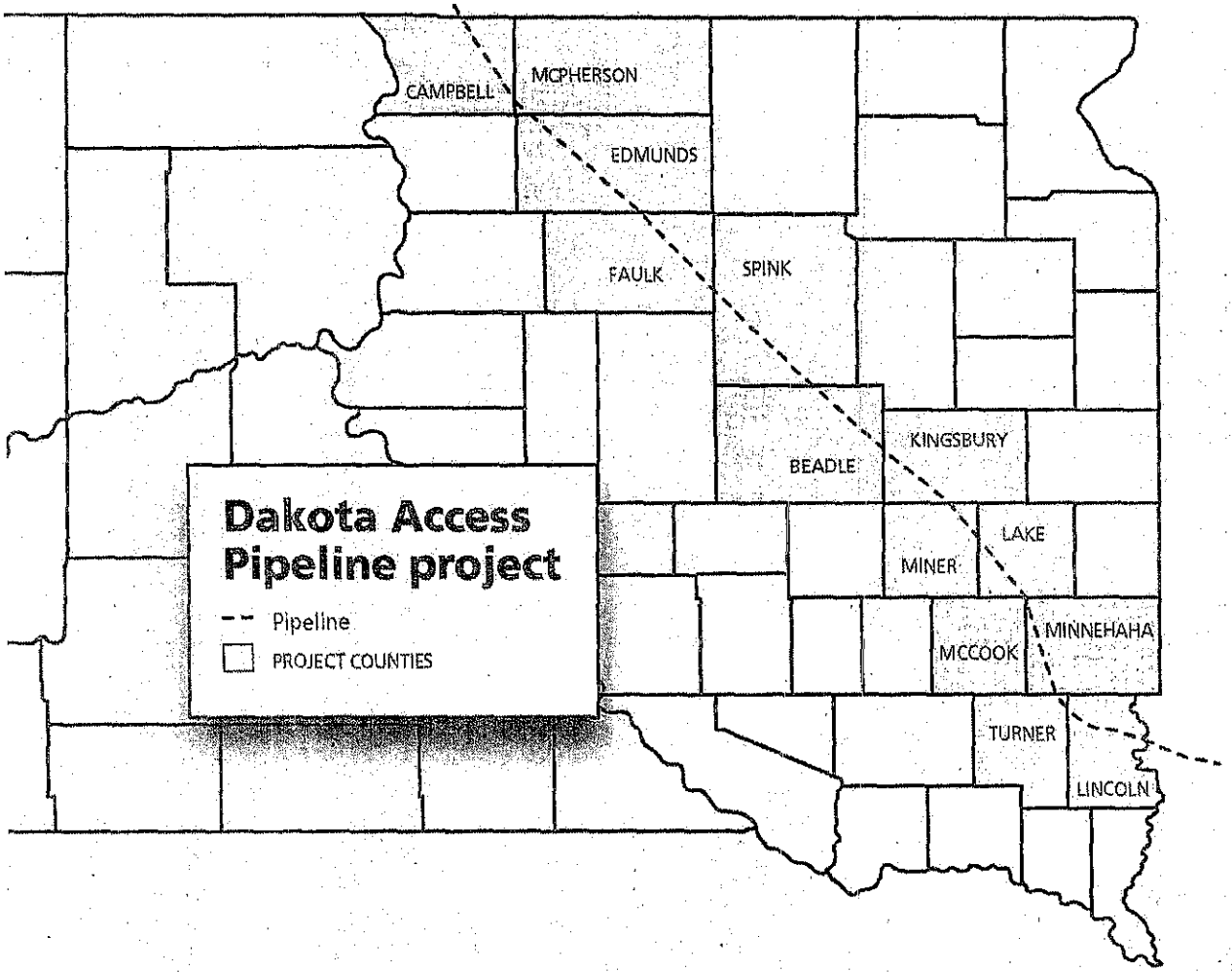
Anne Dilenschneider, a Sioux Falls counselor, submitted her comments in a letter, noting several pipeline spills, including ones in Bismarck, N.D., and another near Marshall, Mich.

"Pipelines are not a safe way to transport crude oil. They explode, rupture and leak. Even with automatic shut-off valves," Dilenschneider wrote.

Mahmoud said last week in Sioux Falls that the pipeline would be remotely monitored and could be shut down with the push of a button, and he said there would be emergency response plans in place, which would be shared with state and local officials.

He also said it could take three to four minutes for oil to stop flowing. That's troubling to Schmidt.

"What's an average spill? What's it cost to clean



up?" Schmidt said. "These are things we ought to know."

Since 1998, there have been 11 pipeline incidents in South Dakota, according to the Pipeline and Hazardous Materials Safety Administration. A total of 1,158 gallons spilled, causing a total of $2.83 million in property damage across South Dakota.

Vicki Granado, a spokeswoman for Energy Transfer Partners, acknowledged that spills are an issue, but said the company has protocols in place pletely liable for damages caused.

"There can be issues," Granado said. "These are underground pipelines. What we believe is that those are not the norm. Spills do happen, but they don't happen often."

Mahmoud said repeatedly during the public comment hearings that pipelines are a safer means of transporting crude oil than rail cars, which carry crude from the Bakken oil patch.

There were 1.15 million barrels of crude spilled cording to the Pipeline and Hazardous Materials Safety Administration.

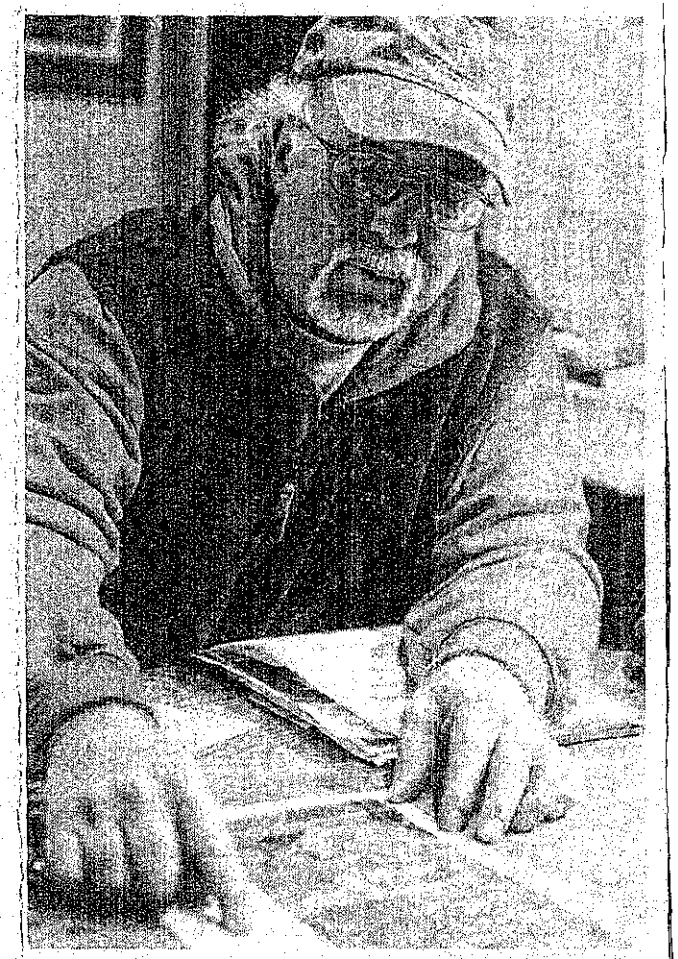
Mahmoud's point about safety was echoed this week by another man who attended the PUC's meeting but did not speak out loud, Ernest Kroger.

Kroger wrote a letter for the public docket recalling how his father had donated time to put up telephone poles on farmland, and later allowed electricity lines to be run through their property so his neighbors could benefit.

The whole country production, Kroger wrote, and he told commissioners that the pipeline's benefits are worth the risk.

"There are always 'ifs' connected with any project," Kroger wrote. "Oil spills happen because of rail and truck accidents. I'm certain that the safest way to transfer such a large volume of oil, a pipeline is the best option."

John Hult is the Reader's Watchdog reporter for Argus Leader Media. Contact him at 605-331-2301, 605-370-8617, twitter.com/ArgusJHult or Facebook.com/ArgusReadersWatchdog



ELISHA PAGE / ARGUS LEADER

Charlie Johnson points out where drain tiling on his family's farm near Madison could be affected by the proposed Dakota Access oil pipeline.

ARGUS LEADER EDITORIAL

Pipelines are necessary in oil-addicted world

Here is a tale of two proposed pipelines that could run through South Dakota.

The diameter of Pipeline 1 is 36 inches. Pipeline 2 is 30 inches.

The proposed length of Pipeline 1 will be 1,179 miles. Pipeline 2 is 1,134 miles.

Pipeline 1 will carry 830,000 barrels of oil a day. Pipeline 2? Up to 570,000 barrels.

The first pipeline would cut through western South Dakota en route to Nebraska. The second through eastern South Dakota, including the Sioux Falls area, to a final destination of Illinois.

One of those pipelines has created a national political controversy. The other? Had you even heard of it?

Keystone XL, the first pipeline in our examples, has caused picketing and political posturing. The second, the Dakota Access Pipeline, was first announced last summer. Unless the pipeline was proposed to cross your land, most people have been undeterred.

That doesn't mean we should accept the pipeline without asking questions or learning as much as we possibly can.

All residents in the area should be asking: What are the risks? Who will be monitoring and regulating the pipeline for leaks and other issues? What are the emergency shutoff procedures? Who will pay for any problems that arise from a leak?

But it's no surprise that when politics enter the picture, talking points get thrown about, facts get forgotten and the issue becomes one big argument.

Here are a few key points.

■ Pipelines are much safer than oil transportation by rail and more practical than truck. A train crash in Quebec in 2013 killed 47 people and spilled 1.5 million gallons of oil. There was a close call in North Dakota when several rail cars caught fire. If that incident had happened in a populated area, property damage would have been significant and lives could have been lost. As far as truck transportation, Forbes estimated it would take a million-and-a-half tanker trucks to transport the Keystone equivalent oil.

Pipelines have had their problems, though. In 2013, a Tesoro Corp. pipeline spilled 20,000 gallons in northwestern North Dakota. The worst was in Michigan in 2010 when an Enbridge pipeline spilled more than 25,000 barrels into a river. There is an environmental impact from pipelines, and Dakota Access advocates need to reassure the public that the new pipeline won't have those problems.

■ Transporting oil via pipeline is significantly cheaper. A 2013 *Christian Science Monitor* article stated that it costs $7 a barrel to transport oil on a pipeline compared to between $15.50 and $30 via rail.

■ Pipelines already are a key part of everyday life. There are pipelines carrying natural gas to homes across the city and surrounding areas. The first phase of the Keystone Pipeline already crosses eastern South Dakota.

■ For opponents, the Keystone Pipeline also is an environmental issue — mining a barrel from Canada's oil sands creates 17 percent more greenhouse gas emissions than the extraction of a standard barrel of oil, according to the *Washington Post*. North Dakota oil is not clean, either, but blocking pipeline plans won't stop the production. It still will travel by rail and alternative pipelines. To fix carbon emissions, the focus should be on the demand, not supply.

The Keystone Pipeline only became a national political issue because it crosses the U.S. border from Canada, thus involving the State Department.

It's OK to be skeptical of what those proposing the pipeline claim. A 2011 *Argus Leader* story showed that the eastern South Dakota Keystone pipeline wasn't raising as much tax revenue for local governments as officials had originally stated.

So as the Dakota Access Pipeline gets debated in the coming months, educate yourself about the pros and cons, and our reporters will continue to uncover as much as they can. Make your decisions based on logic, science and facts and not on political soundbites.

Weigh the risks of all choices and consider the options, but rejecting Keystone XL or Dakota Access won't solve the greater problem: The world has an insatiable appetite for oil.

The bottom line is that there is no perfect solution — no option that completely protects the environment, property and public safety.

But pipelines are the best option.

UPI.com

Nebraska court clears path of Keystone XL

Published: Jan. 9, 2015 at 10:11 AM

Daniel J. Graeber

OMAHA, Jan. 9 (UPI) –OMAHA, Jan. 9 (UPI) – In a mixed decision, the Nebraska Supreme Court ruled Friday the legal premise used to sanction the route for Keystone XL was permissible.

In a long awaited case on the route of the Keystone XL pipeline, the Nebraska Supreme Court cleared one of the remaining hurdles in a battle that began when TransCanada first applied to build the project more than six years ago.

Lancaster County District Court Judge Stephanie Stacy in February ruled a state law granting power of eminent domain to former Gov. Dave Heineman was unconstitutional. State law LB 1161, passed in 2012, gave the governor authority over the Keystone XL route from Canada through the state instead of the Nebraska Public Service Commission.

Environmental campaigners pressured pipeline planner TransCanada to revise the Keystone XL route through the state to avoid a sensitive aquifer. Heineman in 2013 said he was satisfied a revised route for the tar oil sands pipeline avoided the sensitive Sand Hills aquifer of the state.

The state Supreme Court, in Thompson v. Heineman, said the majority opinion was on the side of the landowners in the case.

"But because there are not five judges of this court voting on the constitutionality of LB 1161, the legislation must stand by default," the court's ruling stated. "Accordingly, we vacate the district court's judgment." Four members of the seven-judge panel voted.

The Republican-controlled 114th Congress put the measure at the top of its agenda when it took its seat in early January. Two measures in the U.S. House and Senate are aimed at pressuring the White House to sign off on the pipeline.

White House spokesman Josh Earnest affirmed signals from the president's desk that legislation meant to get around normal vetting procedures for the pipeline would be vetoed. The review process as it stands was awaiting the Nebraska courts, he said.

"Once that is resolved, that should speed the completion of the evaluation of that project," he said in a press briefing Tuesday.

President Obama has hinted he was not in favor of the project, saying he doubted many of the jobs claims surrounding it. Ultimately, he added, the pipeline would send Canadian oil through, not to, the United States for exports.

Jack Gerard, president of the American Petroleum Institute, said the court's ruling is an opportunity for the president to seize the moment of U.S. energy security

"President Obama has no more excuses left to delay or deny the Keystone XL pipeline," he said in a statement. "More stable domestic and Canadian oil will enhance our nation's national and economic security."

Randy Thompson, the Nebraska plaintiff, said the outcome was not what he had hoped for. The ruling, he said, represents a "gross injustice" to Nebraska landowners.

"When you take a punch, you stand up and keep on fighting," Jane Kleeb, director of pipeline opponent Bold Nebraska, said in a statement "We continue to stand with President Obama in his skepticism of the export pipeline and encourage him to reject Keystone XL now."

Keystone XL has multiple benefits

To the Editor:

Mavis Hambeck recently sent a letter to the editor wherein she castigates our congressional delegation for their support of the Keystone XL pipeline. Has Ms. Hambeck ever heard of the bad balance of trade problems that have been plaguing the U.S. dollar? This is when more dollars leave the U.S. than come in.

A good share of the Keystone crude oil will stay in the United States. Any that stays will help us balance our trade deficit.

We will be using our own oil, so we don't have to continue to buy crude from Iran, Venezuela and Russia, countries that hate us.

Our trade deficit has been high for years. This has had adverse affects on our dollar and our standing in the world financial marketplace.

In addition to creating badly needed jobs, the pipeline will contribute nearly $20 million in property taxes per year. With the drop in grain prices, this will give relief to our beleaguered farmers.

Agriculture is South Dakota's largest industry. Grain prices have been settling lower for three to four years. A large share of our grain goes overseas and this helps lower our trade deficit.

There is one major problem. Crude oil from the Bakken oil patch has been taking much rail space.

Our grain is sitting by the railroads in piles, subject to rot and spoilage. China, India and other countries in the Pacific rim are waiting impatiently for our grain and meats.

Another bad problem in transporting oil by rail is train wrecks. It seems there is one every couple months. The accidents have very hot fires and bad pollution to our environment. Lots of homes are burnt and people die.

These are some of the reasons, Thune, Rounds and Noem vote the way they do. I'm sure most of the voters agree with them. But thanks, Ms. Hambeck, for making us read and think about this important matter.

Milton Nelson
Mitchell

LAST WEEK OF MARCH 2015

The Daily Republic

"Serving Our Readers Since 1879"

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OUR VIEW: The following editorial represents the opinion of The Daily Republic's editorial board.

Time to approve pipeline

We totally get opponents' environmental worries about the Canadian Keystone XL Pipeline project — if the oil conduit were being built in a perfect world where all ideals were practically attainable when we wished.

Unfortunately, the Keystone project — which would lay pipe through parts of Montana, South Dakota and Nebraska — is being built in an imperfect world, where complex practicalities, unhelpful timing and economic necessity place environmental concerns at a lower priority than we may like. Yes, we understand the hazards in apparent global warming, the negative contribution of burning fossil fuels to that scenario and the desire to leave a cleaner, healthier planet to our children, children's children and other generations to follow.

The world is genuinely working on that, but it's not a problem amenable to a quick fix. Absent a new, better energy source, it's going to take many decades to resolve, and by then accessible oil for all intents and purposes may have run out.

In the meantime, people — in industrial behemoths like America and emerging economies such as China and India — will need lots and lots of energy, which for the foreseeable future will be in the form of petroleum, which is the commodity most available, energy-rich and easily distributed worldwide. Adequate production, infrastructure and distribution capacities for alternative fuels just do not yet exist to significantly fill the supply gap if new oil sources are shut-in before they begin. We strongly hope they do one day, but for now it's a pipe dream.

Beyond whether the XL Pipeline is philosophically a defensible idea, there are many concrete arguments in favor.

Heavy Canadian tar-sand oil will be mined and distributed around the world, whether or not the U.S. allows the pipeline to transport it through our states to refineries or ports. So, our national environmental concerns about it are moot.

We're also going to need imported oil from somewhere, and Canada seems a far more politically defensible supplier than, say, Saudi Arabia, which still supplies a sizeable chunk of our demand despite growing U.S. internal reserves.

Some opponents are wary of pipelines because they might rupture somewhere and spill crude on American soil, but if the pipeline were blocked, the Canadians would simply truck it or move it on trains, which is possibly even riskier. Six accidents have occurred in the past year involving trains carrying crude oil, plus some oil trucks have crashed.

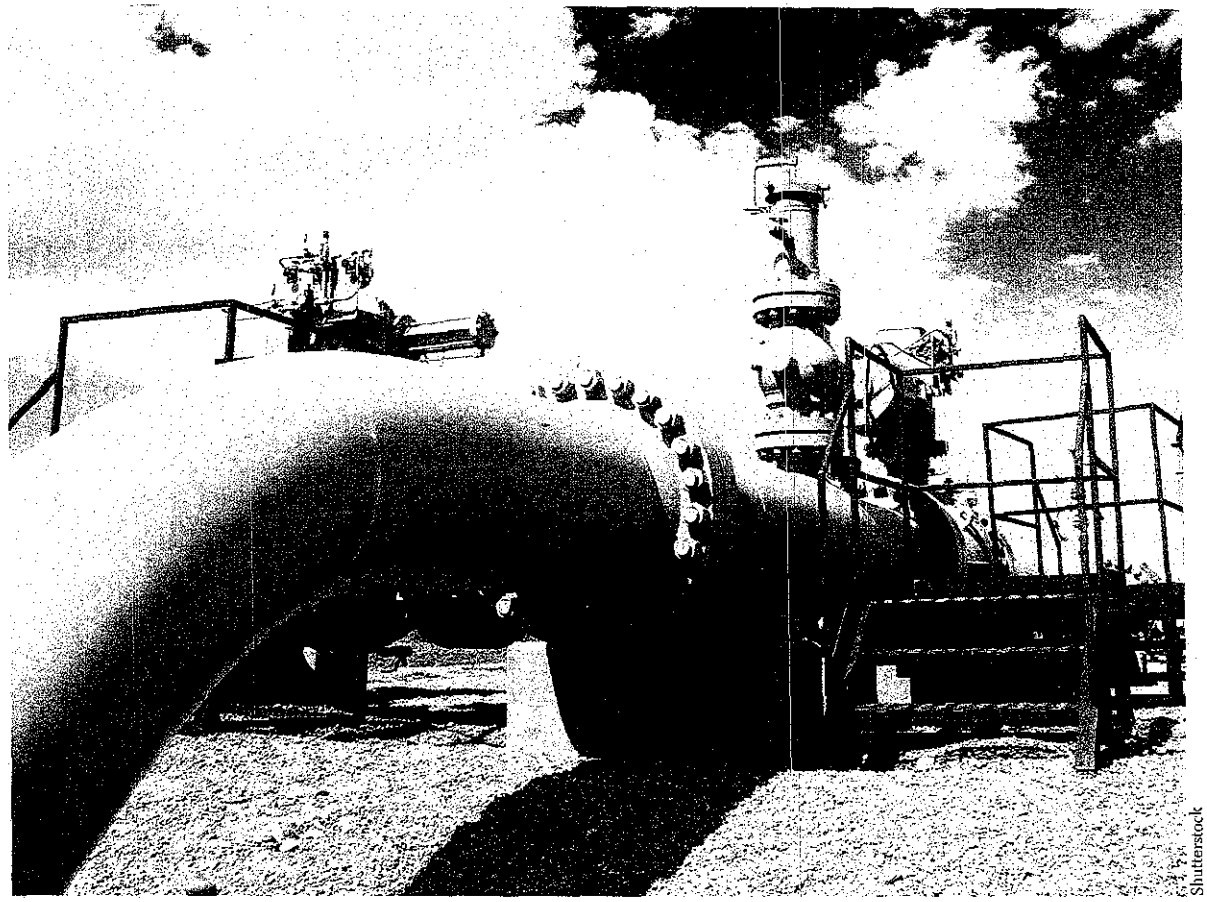
Also, Keystone officials have reconfigured the proposed pipeline's route to help avoid environmentally vulnerable or valuable sites, including the Nebraska Sandhills. The project will also support an estimated 2,000 direct jobs that will last about two years and support another 40,000 related jobs.

A recent report by the U.S. State Department highlights the jobs the pipeline would produce and characterizes its environmental risks as effectively neutral. Republicans and Democrats are joining across the aisle in support of the project.

It's time to stop haggling and let it happen.

Pipeline Boom Not Stalled By Fight in US Over Keystone XL

By Henry C. Jackson
Associated Press



A pipeline carries oil in Wyoming. Although there is a legislative fight over the Keystone XL pipeline, other conduits that do not cross international borders are not getting the same attention from environmentalists.

Shutterstock

WASHINGTON — In a far corner of North Dakota, just a few hundred miles from the proposed path of the Keystone XL pipeline, 84,000 barrels of crude oil per day recently began flowing through a new line that connects the state's sprawling oil fields to an oil hub in Wyoming.

In West Texas, engineers activated a new pipeline that cuts diagonally across the state to deliver crude from the oil-rich Permian Basin to refineries near Houston. And in a string of towns in Kansas, Iowa and South Dakota, local government officials are scrutinizing the path of pipeline extensions that would pass nearby.

While the Keystone project awaits a final decision, scenes like these are unfolding almost every week in lesser-known developments that have quietly added more than 11,600 miles of pipeline to the nation's domestic oil network.

Overall, the network has increased by almost a quarter in the past decade. And the work dwarfs Keystone. About 3.3 million barrels per day of capacity have been added since 2012 alone — five times more oil than the Canada-to-Texas Keystone line could carry if it's ever built.

The pipeline build-out provides a little noticed counterpoint to the fierce political battle being waged over the 1,179-mile TransCanada project, which still is in limbo seven years after it was proposed.

During the long wait for Keystone, the petroleum industry has pushed relentlessly everywhere else to get oil to market more efficiently, and its adversaries have been unable to stop other major pipelines.

"There's been a lot of growth — we're really positive on it in general," said Rob DeSai, an equity analyst with Edward D. Jones & Co who focuses on the energy industry. "The oil that's being produced in the U.S., in many cases, it's basically in the middle of nowhere. You need new infrastructure to get that oil to market."

Environmental groups have fought Keystone by citing the risk of leaks and the climate-change consequences of fossil fuels. They hope to make cleaner energy options more appealing. Their success has inspired local protest groups to challenge more projects.

But those efforts, while slowing a few pipelines, have not stopped any because the regulatory path is smoother when a pipeline does not cross an international border, as Keystone would.

In Minnesota, local opponents succeeded last year in getting state regulators to consider rerouting a 616-mile pipeline proposed by Toronto-based Enbridge Inc. around pristine lakes and forests, delaying it for at least a year.

More typical, though, was an Enbridge project to double the capacity of a 285-mile stretch of pipeline in Michigan. Groups such as the Michigan Coalition Against Tar Sands fought the proposal, citing a spill in 2010 that caused serious environmental damage. But the Michigan Public Service Commission ruled the project acceptable, and

the expansion went ahead.

In Texas, Magellan Midstream Partners' BridgeTex Pipeline, designed to take up to 300,000 barrels of crude per day from Colorado City to refineries in Houston, recently was completed over landowners' protests about its path. Local officials cleared the way for the company to use the state's eminent-domain law to condemn land for the pipeline. It came online last year.

Some environmentalists acknowledge that changing a pipeline's route often may be the best for which they can hope.

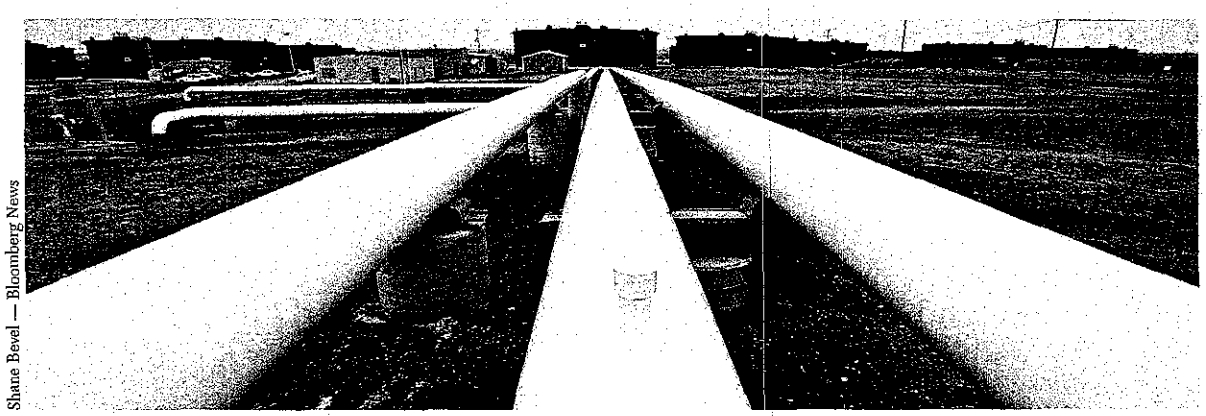
"I'm telling people I don't think it's going to stop," said Paul Stolen, a retired state biologist who has been working with groups opposing the Enbridge project in Minnesota. "I think it's going to escalate and get bigger."

In most states, opponents have to prove a project does not serve the public interest or poses a clear environmental threat.

In states that depend on energy jobs, regulators tend to be receptive to the industry. Supporters also argue that transporting oil by pipeline is safer than by train, noting recent accidents and spills.

Since 2012, more than 50 pipeline projects have been approved, completed or are under development, including the just-finished 600-mile Enbridge Flanagan South line, which runs through four states.

The recent surge in oil production, from about 5 million barrels a day in 2008 to 8.9 million barrels in 2014, has pushed new



Shane Bevel — Bloomberg News

400-mile route of a proposed pipeline and blogging about his trip to build support for environmentalists' protests.

"They want people to just roll over and take what's coming," he said of oil companies. "We know that's wrong. We know this pipeline can be stopped" because of the Keystone stalemate.

Oil pipelines run near storage tanks at the Enbridge Inc. Cushing Terminal in Cushing, Okla.

until recently had few of them. Dozens of new lines ranging up to 700 miles connect drill sites in the upper Midwest to refineries in the region or to hubs in Oklahoma and along the Gulf Coast.

Even TransCanada has been busy. The company unveiled a 200-mile, $600 million proposal late last month that would carry oil from North Dakota's Bakken field north to Canada and connect to other lines that can take it to the East Coast.

"When Keystone was first announced, I think that was something like a third of [TransCanada's] expected budget," said DeSai, the Edward Jones analyst. "TransCanada now has had so many projects that now Keystone's a much smaller percentage."

President Obama has said his decision on Keystone, which would take Canadian tar sands oil to Gulf Coast refineries, would depend in part on its possible contribution to global warming. He is awaiting a State Department report on its environmental effects.

But the State Department does not review pipelines that are entirely inside the United States, which is the vast majority of them.

Pipeline companies also soften resistance by paying landowners for access and by assuming all liability for leaks. But some opponents say they believe that the new resistance inspired by Keystone eventually will raise more public concern about oil shipments.

In Iowa, a former state lawmaker, Ed Fallon, is walking the

VOICES

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3C

Pipeline concerns draw crickets from Legislature


JOHN HULT

A lot of people have asked me about bonding for the Dakota Access pipeline over the past few weeks.

Landowners wondered out loud about bonding during meetings of the Public Utilities Commission and wondered through comments on the PUC's website. Dakota Access would run under 274 miles of eastern South Dakota land along a 1,134-mile route from North Dakota to Illinois if it's approved by the PUC.

> "We are 100 percent liable. Not the landowners, not the government. Not anyone but us. Because we're transporting it, if there's an issue, we'll take care of it."
>
> **JOEY MAHMOUD,**
> vice president, Energy Transfer Partners, partial pipeline owner

The idea behind bonding is pretty simple. A bond is money paid upfront to cover the cost of a particular problem. If the problem doesn't emerge, the money isn't used.

The argument for bonding on Dakota Access goes like so: If the pipeline is built as proposed and then leaks its cargo of North Dakota crude into the South Dakota soil, a bond would guarantee that the cleanup would be paid for.

Dakota Access representatives say the company is responsible for spill cleanup. They also say the pipeline will be monitored 24/7 and can be shut down remotely, so spills can be cleaned up quickly if they do happen. Even if there were a dispute about who pays for cleanup, the company would pay into the federal oil spill liability trust fund at a per-barrel rate. That would cover cleanup.

"We are 100 percent liable. Not the landowners, not the government. Not anyone but us. Because we're transporting it, if there's an issue, we'll take care of it," said Joey Mahmoud, a vice president of Energy Transfer Partners, one of the pipeline's owners. "If we don't take care of it, I promise you, the government will."

That's not enough to appease many of the landowners along

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Pipeline

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the pipeline route.

In a story that ran in Sunday's newspaper, Charlie Johnson said a bond would ease his mind. He'd also like to see a decommission bond to insure that the pipeline would be shut off and shut down properly if the oil stops flowing.

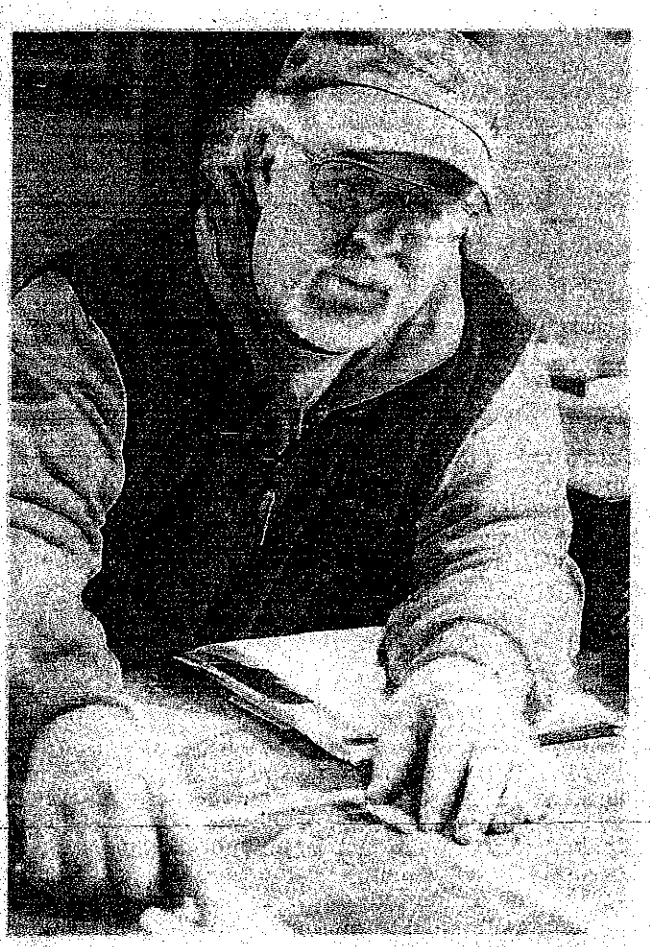
Johnson wanted action from the South Dakota Legislature on the bonding issue. Drivers need insurance, he said, in the event they can't afford to pay for the damage they cause. Pipeline companies should have insurance for mistakes, too.

"Why are we allowing a multibillion-dollar company to get away with something that someone who makes $50,000 a year doesn't get away with?" Johnson asked me last week.

Gaylynn Lang of Howard agrees. He called me Monday night to ask about bonds. He said he'd been in touch with state Rep. Lynn DiSanto of Rapid City and asked her to present a bill that would force bonding for pipeline companies.

Bonds are fairly common. The Keystone XL pipeline offered a $100 million bond to Nebraska legislators in 2011 to assuage skittish lawmakers. The proposed PolyMet mine in northern Minnesota sparked plenty of discussion on bonding for environmental damage.

Bonding happens in South Dakota, too. The PUC ordered Keystone XL to pay a $15.6 million bond to pay for potential road damage during each year of construction. The pipeline, as we know, has yet to be approved at the federal level.



ELISHA PAGE / ARGUS LEADER

Charlie Johnson points out where drain tiling on his family's farm near Madison could be affected by the proposed Dakota Access oil pipeline.

However, the PUC in South Dakota has the authority only to issue bonds to cover damage to public roads and bridges during construction. There's only so much that commissioners can do, Chairman Chris Nelson has said.

If the PUC wanted to order bonding for Dakota Access, lawmakers would need to give them more authority.

That doesn't look likely. DiSanto didn't promise Lang she'd drop a bill, and she didn't. As of Wednesday, one day after the deadline for individual bills to be filed in the Legislature, there's nothing about bonding and nothing about pipelines.

"If it's not on the list now, they'd have to suspend the rules to bring something in," said John Hancock, director of the Legislative Research Council.

I've contacted a handful of lawmakers to ask if they've heard of anyone pushing a bonding bill, and so far I've heard nothing. Sen. Dan Lederman of Dakota Dunes said he'd ask around to see if someone had worked on or researched anything. I'm still waiting to hear from that someone, although Lederman did direct me to former legislator Charlie Hoffman.

Lang seemed hopeful when I spoke with him Monday. Johnson was pretty sure he'd only hear crickets from the Legislature.

"They're not going to do it," Johnson said.

Johnson saw the overwhelming Republican majority as the impossible obstacle, but Democrats didn't bring a bill, either.

Democratic Rep. Patrick Kirschman of Sioux Falls said Wednesday that he'd like to see some kind of bonding push, but "you know we won't see that."

Kirschman has a more balanced view of the pipeline's safety. He'd like to see bonding as an insurance measure, but he'd also rather have oil moving through a pipeline than over land in rail cars. Transporting oil by rail is less safe than shipping it via pipeline, he says.

"There are rail cars coming right through Sioux Falls carrying Bakken oil," Kirschman said.

Kirschman's point echoes the words of Alberta Premier Jim Prentice, who visited Washington, D.C., this week to push for the Keystone XL pipeline. Prentice, a former environment minister in Canada, said he's more worried about rail disasters, such as the 2013 disaster in Quebec, than pipeline transport.

John Hult is the Reader's Watchdog reporter for Argus Leader Media. Contact him at 605-331-2301, 605-370-8617, twitter.com/ArgusJHult or Facebook.com /ArgusReadersWatchdog.

TransCanada creates safe transportation of oil

In regard to the letter 'Greed behind the push for Keystone XL Pipeline,' by Rick Weiland, TransCanada has been very consistent in the number of jobs we expect Keystone XL to create. That number is 9,000 direct, construction jobs, 7,000 manufacturing jobs supported by the project. We've been building and operating pipelines for over 60 years, we transport approximately 20 percent of North America's gas every day. We know how many people it requires to build a pipeline of this nature; in fact, we've provided job-by-job breakdowns.

For context, the first Keystone Pipeline, which is approximately the same length as Keystone XL, employed 8,969 people. The Gulf Coast Project, otherwise known as the southern leg of Keystone XL, employed 4,844 people directly and required over 11 million hours of labor.

The oil transported through Keystone XL is destined for U.S. refineries, which want to replace higher cost crude oil from Venezuela, Iraq and elsewhere, with stable North American production.

TransCanada has never "opposed" any amendments related to Keystone XL. Sen. Ed Markey's amendment would have no impact on Keystone XL, because TransCanada does not produce, refine or own the oil it transports. We are responsible for the safe and efficient transportation of that product; which brings us to the next inaccurate claim made by Weiland.

The Oil Spill Liability Trust fund is paid by oil producers. Since TransCanada is not an oil producer, we are not required to pay into the fund. However, in the unlikely event of a spill, TransCanada is 100 percent responsible for any costs associated with clean up and restoration of land. TransCanada is a $46 billion company, with the capital and liability insurance to cover any costs. Taxpayers or landowners will never be responsible.

Matthew John,
communications specialist
TransCanada
Houston, Texas

KEYSTONE XL

Continued from Page A1

conventional crude oil — would be developed regardless of whether the pipeline was built. But that conclusion was based on higher oil prices. Oil, the EPA points out, was trading at $50 per barrel last week.

"Given the recent variability in oil prices, it is important to revisit these conclusions," wrote Cynthia Giles, assistant administrator of EPA's enforcement office.

The comments sent Monday to the State Department come as the House prepares to vote next week and send to President Barack Obama's desk a bill approving the Keystone XL oil pipeline. The Senate voted 62-36 last week to build the $8 billion project that would connect with existing pipelines to carry more than 800,000 barrels of crude oil a day to refineries along the Texas Gulf coast. That vote was short of the two-thirds majority needed to override the veto the White House has promised. Obama has said all along that he would wait for the review process to conclude, and that the pipeline could not exacerbate global warming. The EPA's comments leave open the possibility that the State Department could do additional analysis, delaying the project's review again.

The American Petroleum Institute said the EPA was "inventing new excuses" to delay the project, which was first proposed in 2008, when oil prices were lower than they are now.

"Suggesting that the drop in oil prices requires a re-evaluation of the environmental impact of the project is just another attempt to prolong the KXL review," said Finkel.

But environmentalists, who have fought vigorously to kill the pipeline, applauded the EPA's assessment Tuesday.

"The EPA's assessment is spot-on. There should be no more doubt that President Obama must reject the proposed pipeline once and for all," said Danielle Droitsch, a director for the Natural Resources Defense Council who specializes in Canada's tar sands.

FEB 4, 2015

EPA: Climate impacts of oil line need to be revisited

By DINA CAPPIELLO
Associated Press

WASHINGTON — With the recent dip in oil prices, the Environmental Protection Agency wants the State Department to "revisit" how much of a toll the Keystone XL oil pipeline would have on global warming.

The EPA suggests that lower oil prices could make the pipeline more important in the development of the oil sands, and thus a chief culprit in the "significant greenhouse gas emissions" they would produce. A January 2014 environmental analysis by the State Department found that the oil sands — which it said would significantly increase greenhouse gas emissions over

See KEYSTONE XL, Page A4

FEB 4, 2015

EPA: 'Revisit' Keystone pipeline effect on climate

Agency cites recent volatility in oil prices

By Dina Cappiello
Associated Press

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"The EPA's assessment is spot-on. There should be no more doubt that President Obama must reject the proposed pipeline once and for all," said Danielle Droitsch, a director for the Natural Resources Defense Council who specializes in Canada's tar sands.

A State Department spokeswoman said it would take into account the views of all agencies in the review process.

FMCSA to Address Uptick in Crashes In North Dakota's Bakken Oil Region

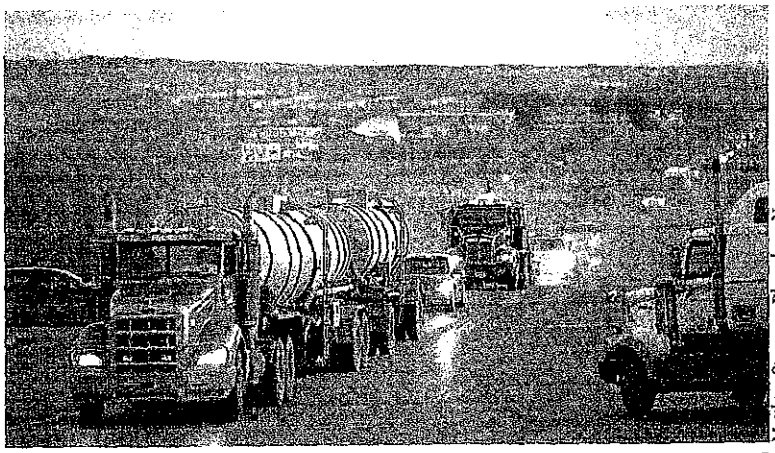
By Eric Miller
Staff Reporter

The Federal Motor Carrier Safety Administration said it is addressing an increasing and disproportionate number of fatal large truck-involved crashes in North Dakota's Bakken oil field counties.

Jack Van Steenburg, FMCSA's chief safety officer, said the agency has identified a "large cluster" of crashes in the oil field operations in North Dakota, one of the nation's largest crude oil production states.

"We have some strategies and we're working with other departments to reduce those crashes," Van Steenburg said.

Federal crash statistics show that the number of fatal large truck-involved crashes had increased to 54 in 2013 from 9 in 2010.



Matthew Staver — Bloomberg News

Traffic lines the main street in Watford City, N.D. The region's oil boom has led to increased traffic and truck-involved fatalities.

Many of the crashes in North Dakota occurred on two major highways where oil trucks run, U.S. 85 and Interstate 94, Van Steenburg said.

"It's an area of concern for FMCSA, the North Dakota Highway Patrol, and everyone in the

(See OIL, p. 28)

FMCSA Targets Oil Trucks

(Continued from p. 2)

state," said Denver Tolliver, professor of transportation and director of North Dakota State University's transportation and logistics program. "The FMCSA has concluded that the heavy-vehicle crashes and crash rates were increasing faster in the Bakken than they were in some of the other shale oil boom regions, such as Eagle Ford in Texas."

FMCSA is increasing oversight of tank truck carriers that haul crude oil and propane, giving its investigators advanced training, issuing grants to states, and stepping up traffic enforcement, according to Paul Bomgardner, chief of FMCSA's hazardous materials division.

"Moving forward we're going to . . . focus our attention, actually on the transportation of energy products," Bomgardner told an audience attending the annual conference of the Transportation Research Board in Washington, D.C., on Jan. 13. "What are we going to do? More oversight, more oversight, more oversight."

"We're going to be initiating a series of studies over the next year or so to not only look at where these accidents are located, but try to get a better idea of some of the cause and effect," Tolliver said.

According to recent research by the Upper Great Plains Transportation Institute, a research, education, and outreach center at North Dakota State University, roads once used for local access and agricultural purposes now mostly serve expanding oil production.

"Oil companies, workers, commercial trucks, and industrial equipment associated with oil extraction use these roads to access oil drilling and production sites," the group said.

In its 2013 report, the state's highway patrol said it has "strived" to meet the demands of the growing motor carrier industry operations.

"The need to move goods across the country and between points within North Dakota remains at an all-time high," the highway patrol report said.

"The issue is between 2008 and 2013, vehicle miles traveled in the state — and mostly in that Bakken region of in our state — increased by about three billion miles," said Arik Spencer, executive vice president of the North Dakota Motor Carriers Association. "So you have a huge number of people traveling on infrastructure that [it] was never designed to hold."

Congestion on state, county and local roads has increased to the point that it too frequently causes motorists to get impatient, passing on hills when traffic slows and exhibiting other dangerous driving behaviors, Spencer said.

With oil trucks traveling on the state's highways and rural roads, the state's current budget for infrastructure maintenance, repair and rebuilding has grown to nearly $3 billion from $1 billion in 2007, Spencer said.

Staff Reporter Eugene Mulero contributed to this story.

TransCanada takes steps to acquire XL land

By Grant Schulte
Associated Press

LINCOLN, Neb. — The developer of the Keystone XL oil pipeline made good on its promise Tuesday to try to seize access to the Nebraska land it needs to finish the project — the first steps it's taken since the state's high court removed a major legal barrier.

TransCanada employees said the company filed legal papers in nine Nebraska counties to invoke eminent domain for the land that's needed to construct, operate and maintain the pipeline.

The filings come just before the company's two-year window closes Thursday.

The pipeline still faces legal challenges in Nebraska, even though the state's Supreme Court allowed the route to stand by default. Opponents have sued to try to prevent the Calgary, Alberta-based company from using eminent domain and to overturn the state pipeline-siting law that allowed ex-Gov. Dave Heineman to approve the route in 2013.

The pipeline would carry an estimated 800,000 barrels of crude oil a day to Nebraska, where it would connect with existing pipelines headed for Gulf Coast refineries.

By law, TransCanada can use the courts to force Nebraska landowners to sell access to their land. Company officials say they still need to acquire 12 percent of the total land easements from owners who have not yet reached a deal.

Some holdouts have said they won't negotiate no matter how much TransCanada offers.

The company has acquired 100 percent of the private landowner easements in Montana and South Dakota, according to TransCanada's Keystone projects land manager Andrew Craig.

"This is all we have left," Craig told The Associated Press. "... We think 88 percent voluntarily agreements in the last two years is a substantial success."

Pipeline opponents argue that many of the landowners in Montana and South Dakota were "bullied" early in the process and told they had no other option.

Craig said the company has secured voluntary agreements with as many as 96 percent of the landowners in some of the remaining Nebraska counties. And he expects the company will sign agreements with at least half of the remaining landowners without having to use eminent domain.

Those still willing to negotiate mostly have concerns about compensation and restoration of native grasslands that could take three to five years to regrow, Craig said.

Jim Tarnick has received at least six offers — ranging from $30,000 to $58,000 — for his land on the route just south of Fullerton. TransCanada also sent the 39-year-old a letter and tried to call him last week after the court's ruling.

He opposes the pipeline and plans to continue fighting it, though he isn't part of the new lawsuits.

"If we can't stop the project, we at least have to do what's best for us and future generations," said Tarnick, who is concerned about the pipeline's possible effects on groundwater and soil. "When they're done with it, we're going to be left with a pipe in the ground."

Environmentalists and other pipeline opponents argue that any leaks could contaminate water sources and the project would increase air pollution around refineries and harm wildlife. Supporters, including state and national Republicans and oil industry members, say those fears are exaggerated and argue that the pipeline would create jobs and ease the country's dependence on foreign oil.

President Barack Obama has downplayed the project's benefits, and the White House has publicly threatened to veto legislation in Congress that would fast-track the project.

Nebraska lawmakers may debate the issue again this session. State Sen. Ernie Chambers introduced a bill Tuesday that would repeal the pipeline-siting law and bring the project "to a virtual standstill."

"The pipeline is like King Kong, and the people and farms are like ants and grasshoppers," Chambers said. "If they get in the way, they will be crushed with no redress."

It's not clear how it'll be received in the Legislature.

In the two lawsuits filed last week — which could delay the entire 1,179-mile Canada-to-Nebraska project — seven landowners in Holt and York counties said they've received written warning that TransCanada intends to initiate eminent domain proceedings.

ARGUS LEADER EDITORIAL

Pipelines are necessary in oil-addicted world

Here is a tale of two proposed pipelines that could run through South Dakota.

The diameter of Pipeline 1 is 36 inches. Pipeline 2 is 30 inches.

The proposed length of Pipeline 1 will be 1,179 miles. Pipeline 2 is 1,134 miles.

Pipeline 1 will carry 830,000 barrels of oil a day. Pipeline 2? Up to 570,000 barrels.

The first pipeline would cut through western South Dakota en route to Nebraska. The second through eastern South Dakota, including the Sioux Falls area, to a final destination of Illinois.

One of those pipelines has created a national political controversy. The other? Had you even heard of it?

Keystone XL, the first pipeline in our examples, has caused picketing and political posturing. The second, the Dakota Access Pipeline, was first announced last summer. Unless the pipeline was proposed to cross your land, most people have been undeterred.

That doesn't mean we should accept the pipeline without asking questions or learning as much as we possibly can.

All residents in the area should be asking: What are the risks? Who will be monitoring and regulating the pipeline for leaks and other issues? What are the emergency shutoff procedures? Who will pay for any problems that arise from a leak?

But it's no surprise that when politics enter the picture, talking points get thrown about, facts get forgotten and the issue becomes one big argument.

Here are a few key points.

■ Pipelines are much safer than oil transportation by rail and more practical than truck. A train crash in Quebec in 2013 killed 47 people and spilled 1.5 million gallons of oil. There was a close call in North Dakota when several rail cars caught fire. If that incident had happened in a populated area, property damage would have been significant and lives could have been lost. As far as truck transportation, Forbes estimated it would take a million-and-a-half tanker trucks to transport the Keystone equivalent oil.

Pipelines have had their problems, though. In 2013, a Tesoro Corp. pipeline spilled 20,000 gallons in northwestern North Dakota. The worst was in Michigan in 2010 when an Enbridge pipeline spilled more than 25,000 barrels into a river. There is an environmental impact from pipelines, and Dakota Access advocates need to reassure the public that the new pipeline won't have those problems.

■ Transporting oil via pipeline is significantly cheaper. A 2013 *Christian Science Monitor* article stated that it costs $7 a barrel to transport oil on a pipeline compared to between $15.50 and $30 via rail.

■ Pipelines already are a key part of everyday life. There are pipelines carrying natural gas to homes across the city and surrounding areas. The first phase of the Keystone Pipeline already crosses eastern South Dakota.

■ For opponents, the Keystone Pipeline also is an environmental issue — mining a barrel from Canada's oil sands creates 17 percent more greenhouse gas emissions than the extraction of a standard barrel of oil, according to the *Washington Post*. North Dakota oil is not clean, either, but blocking pipeline plans won't stop the production. It still will travel by rail and alternative pipelines. To fix carbon emissions, the focus should be on the demand, not supply.

The Keystone Pipeline only became a national political issue because it crosses the U.S. border from Canada, thus involving the State Department.

It's OK to be skeptical of what those proposing the pipeline claim. A 2011 *Argus Leader* story showed that the eastern South Dakota Keystone pipeline wasn't raising as much tax revenue for local governments as officials had originally stated.

So as the Dakota Access Pipeline gets debated in the coming months, educate yourself about the pros and cons, and our reporters will continue to uncover as much as they can. Make your decisions based on logic, science and facts and not on political soundbites.

Weigh the risks of all choices and consider the options, but rejecting Keystone XL or Dakota Access won't solve the greater problem: The world has an insatiable appetite for oil.

The bottom line is that there is no perfect solution — no option that completely protects the environment, property and public safety.

But pipelines are the best option.

UPI.com
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Nebraska court clears path of Keystone XL

Published: Jan. 9, 2015 at 10:11 AM

Daniel J. Graeber

OMAHA, Jan. 9 (UPI) --OMAHA, Jan. 9 (UPI) -- In a mixed decision, the Nebraska Supreme Court ruled Friday the legal premise used to sanction the route for Keystone XL was permissible.

In a long awaited case on the route of the Keystone XL pipeline, the Nebraska Supreme Court cleared one of the remaining hurdles in a battle that began when TransCanada first applied to build the project more than six years ago.

Lancaster County District Court Judge Stephanie Stacy in February ruled a state law granting power of eminent domain to former Gov. Dave Heineman was unconstitutional. State law LB 1161, passed in 2012, gave the governor authority over the Keystone XL route from Canada through the state instead of the Nebraska Public Service Commission.

Environmental campaigners pressured pipeline planner TransCanada to revise the Keystone XL route through the state to avoid a sensitive aquifer. Heineman in 2013 said he was satisfied a revised route for the tar oil sands pipeline avoided the sensitive Sand Hills aquifer of the state.

The state Supreme Court, in Thompson v. Heineman, said the majority opinion was on the side of the landowners in the case.

"But because there are not five judges of this court voting on the constitutionality of LB 1161, the legislation must stand by default," the court's ruling stated. "Accordingly, we vacate the district court's judgment." Four members of the seven-judge panel voted.

The Republican-controlled 114th Congress put the measure at the top of its agenda when it took its seat in early January. Two measures in the U.S. House and Senate are aimed at pressuring the White House to sign off on the pipeline.

White House spokesman Josh Earnest affirmed signals from the president's desk that legislation meant to get around normal vetting procedures for the pipeline would be vetoed. The review process as it stands was awaiting the Nebraska courts, he said.

"Once that is resolved, that should speed the completion of the evaluation of that project," he said in a press briefing Tuesday.

President Obama has hinted he was not in favor of the project, saying he doubted many of the jobs claims surrounding it. Ultimately, he added, the pipeline would send Canadian oil through, not to, the United States for exports.

Jack Gerard, president of the American Petroleum Institute, said the court's ruling is an opportunity for the president to seize the moment of U.S. energy security

"President Obama has no more excuses left to delay or deny the Keystone XL pipeline," he said in a statement. "More stable domestic and Canadian oil will enhance our nation's national and economic security."

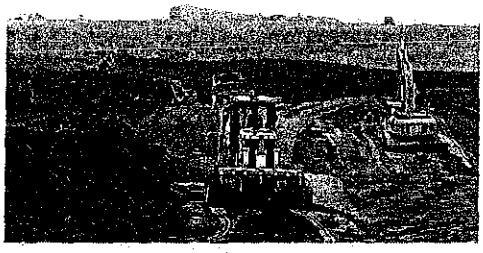
Randy Thompson, the Nebraska plaintiff, said the outcome was not what he had hoped for. The ruling, he said, represents a "gross injustice" to Nebraska landowners.

"When you take a punch, you stand up and keep on fighting," Jane Kleeb, director of pipeline opponent Bold Nebraska, said in a statement "We continue to stand with President Obama in his skepticism of the export pipeline and encourage him to reject Keystone XL now."

ISSUE 1 // VOLUME 1

KEYSTONE COMMUNITY CONNECTOR

Project Update



During Construction Photo taken May 27, 2009 *After Construction Photo taken August 26, 2010*
North of Yankton, South Dakota — Spread 4B Construction

Waiting Six Years

Keystone XL...A project in limbo for six years despite continuously receiving strong support from the public. American laborers and tradespeople are still clamoring for the jobs this project will generate and U.S. manufacturers are still in need of a stable, secure supply of crude oil in order to create products we all rely on every day.

Nebraska Hearing

Back in April, President Obama called a halt to the National Interest Determination process which was assessing whether Presidential Permit should be granted for the Keystone XL Pipeline. This was due to uncertainty on whether TransCanada had a valid route for the pipeline in Nebraska. Although the State Governor had approved the route, his authority in doing so was questioned and that issue is currently being reviewed by the Nebraska Supreme Court.

If the Court decides the State Governor didn't have authority, TransCanada will be required to file an application for the proposed route with Nebraska's Public Service Commission. If the Court accepts the route as previously approved, it's anticipated this could potentially have a positive impact regarding the Presidential Permit. Regardless of the Court's decision, TransCanada will continue to pursue the project as it's the right thing to do.

South Dakota Recertification

Due to the protracted process for a decision on a Presidential Permit for Keystone XL, South Dakota state law requires that TransCanada certify to the Public Utilities Commission that the project continues to meet the conditions upon which the permit was issued four years ago.

In fact, in its application, TransCanada maintains that not only are the conditions unchanged, in many cases they are stronger than they were in 2010.

On October 29, 2014 the PUC determined that approximately 40 interveners would be granted party status, for a hearing to be held in the coming months.

TransCanada welcomes a thorough vetting of all issues of interest to the commission and participation by those who have direct interest in those issues. As we said when we made our submission, while Keystone XL was a good project for South Dakotans in 2010 it is an even better project today.

INTRODUCING THE KEYSTONE COMMUNITY CONNECTOR

Welcome to the first issue of the new Keystone Community Connector! This newsletter will provide you with important project information, highlight upcoming events in your community, and share our involvement in communities along the Keystone XL route.

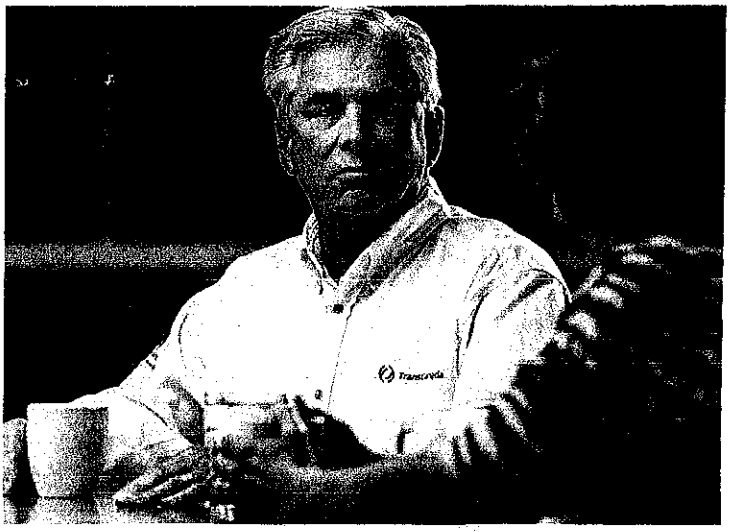
You may have noticed we changed the format of our newsletter. Share your feedback with us as this is all about providing information that's relevant to you! Contact us and let us know by emailing keystone@transcanada.com.

IN YOUR COMMUNITY

The Keystone Stakeholder Relations team is busy preparing to host numerous open house events for the general public. Coming to a community near you, these open house events will be an opportunity to learn about emerging details about the project and also share your feedback with us!

Visit the Keystone XL Pipeline website **(www.keystone-xl.com)** for open house times and venue information as it becomes available.

TransCanada
In business to deliver



TransCanada representatives meet with local community members to help build an understanding about the safe operations of work camps.

Keystone XL workers will benefit local economies

Workers on the Keystone XL Pipeline will use a mix of rental accommodations, hotel rooms, RV sites and work camps, contributing to the local economies of Montana, South Dakota and Nebraska.

Currently, TransCanada is planning work camps to be built on eight spreads through those states. The camps which will house between 900 and 1,200 workers at peak construction periods, will help neighboring communities reap significant economic benefits to local businesses, such as service stations, convenience and grocery stores, restaurants, pharmacies and other local amenities.

It is in the company's interests to ensure that the camps are professionally run and respectful to the communities they neighbor, said Rick Perkins, TransCanada's project manager of logistics and service for Keystone XL. ▩

Keystone XL Camp Features

- 24/7 security
- Hospital with 24/7 medical coverage
- Catering
- Laundry facilities
- Recreation facilities
- 24/7 emergency power back-up capabilities
- Strictly enforced code of conduct
- Zero tolerance to drugs, firearms and public alcohol consumption

To read the full version of this article, please visit the Keystone XL blog at www.keystonenewsletter.com.

Respect all Altars

A personal essay by Calvin Harlan, Regional Tribal Liaison, U.S. Tribal Relations

As TransCanada moves ahead with implementing the Tribal Relations Policy with the many tribes it interacts with, there are some aspects of developing these positive relationships that are often overlooked while this process is taking place.

This includes the cultural/spiritual side of relationship building. Each and every tribe the company partners with has a spiritual background that is unique to them, but one that follows the same principals as all tribes in Native America. In my journey I have strived to follow a rule that was taught to me by my grandfathers, that of "respect all altars." Let me explain.

Calvin Harlan, Regional Tribal Liaison, U.S. Tribal Relations

Each tribe is different in its beliefs, spiritual traditions and views of its homeland. There is a bond with the land that surpasses personal feelings and reservation boundaries. It is through this bond and innate understanding that the people can identify that the company's interests are positive for all involved.

There are many different methods of engagement conducted as each tribe becomes involved in a project. When TransCanada makes contact with a tribe, we as individuals must show respect of their cultural diversity and meet their people with an open handshake and mind.

Through our efforts, and those of the tribes in maintaining open lines of cultural communication, we are able to establish an understanding from the very beginning of our professional relationship. This open form of communication often provides a great tool for better understanding of any situation that may arise or a difference of opinion on an issue pertaining to the work performed. ▩

Ask the Expert

BY COREY GOULET,
President, Keystone Projects

Q. Why will Keystone XL be the safest pipeline ever constructed?

A. **Simply put — the build of Keystone XL will incorporate both the newest and most technically advanced pipeline standards, as well as an additional 59 special safety conditions in its design and construction. These specifications, along with TransCanada's commitment to safety, will make Keystone XL the safest pipeline ever constructed.**

This statement is mirrored in the U.S. Department of State's Final Environmental Impact Statement, issued January 2014. Plainly put — "Keystone XL will be the newest and most technically-advanced pipeline built in the U.S. to date."

Although a pipeline leak or spill is highly unlikely, if a spill were to occur from Keystone XL we would initiate our well-practiced Emergency Response Program working alongside state and federal agencies.

Have a question? Contact us at keystone@transcanada.com.

Each issue will feature a different expert answering questions submitted by our stakeholders. We put our most knowledgeable employees to the test to ensure you receive the most accurate answer!

Community Investment Highlight

South Dakota students taking a shine to Apple donation

Tradition has always been for students to give apples to their teachers.

But thanks to a donation from TransCanada, some Midland, South Dakota elementary students have been given Apples from their teachers — iPads, that is.

The $2,500 donation has allowed the students to purchase five iPads, five protective cases, five earbuds, and a variety of educational apps for the school's two classrooms.

"The kids love the iPads," said teacher Renee Schofield.

"They have used them in a variety of ways. They used them daily to work on Lexia phonics which is a supplement to our reading program. Other ways they have used them include taking tests, math supplements, and the older kids even did some video activities."

Schofield said with the grant the school was able to purchase a variety of apps, some of which will be incorporated into the school's curriculum in the fall.

"The opportunities are endless," she said.

Having a variety of learning tools in classrooms helps keep children enthused about learning, she said.

Students from Midland Elementary School show off their new iPads thanks to a $2,500 donation from TransCanada.

WE WANT TO HEAR FROM YOU!

If you have questions, need more information, would like to suggest a topic for future issues of the newsletter, or would like to unsubscribe, please contact us by email or at any of the addresses listed.

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Keystone Senate vote hangs in balance after Obama remarks

By TIMOTHY GARDNER and RICHARD COWAN
Reuters

WASHINGTON — Supporters of the Keystone XL pipeline in the U.S. Senate scrambled on Monday to gather one last vote to pass a bill that authorizes the project that would help send Canadian oil to the U.S. Gulf, a task that became harder after President Barack Obama made his toughest comments yet on the topic.

Momentum appeared to be going against the pipeline as Democratic Sen. Jay Rockefeller of West Virginia told reporters late on Monday that he would vote against it today.

At the same time, Democratic Sen. Carl Levin of Michigan also proclaimed to reporters, "I'm voting no," and independent Sen. Angus King of Maine said he "probably" would vote against approving the oil pipeline. King added that he would make his final decision during the vote "when they get to the Ks" in the roll-call.

The three senators have been heavily lobbied by pipeline backers. Rockefeller and Levin are retiring at year's end and some had thought they could be persuaded to vote yes in a vote that appears to be going down to the wire on Tuesday.

Sen. Mary Landrieu, a Louisiana Democrat, is co-sponsoring the bill with Republican Sen. John Hoeven of North Dakota. She faces a runoff for another six-year term next month and has been working hard to gather the 60th vote needed to pass a bill that the House of Representatives approved on Friday.


LANDRIEU


HOEVEN

Late on Monday Hoeven told reporters: "We've got 59 announced (supporters). I think we'll get there but I don't know for sure until we have the vote." Hoeven said there were still some "maybes" but he would not elaborate.

The Senate is expected to vote as early as 5:15 p.m. today on the TransCanada Corp. pipeline, which would transport more than 800,000 barrels per day of oil.

All 45 Senate Republicans support the pipeline, so backers need 15 Democrats to reach the 60 votes needed under an agreement outlining the rules for debating and passing the bill.

Reuters photo

Climate advocates and representatives from the Rosebud Sioux Tribe in South Dakota protest Monday against the Keystone XL pipeline in front of the home of U.S. Sen. Mary Landrieu, D-La., the chairwoman of the Senate Energy Committee, in Washington.

Obama criticized the project during a trip to Asia late last week, saying it would not lower fuel prices for drivers, but would allow Canada to "pump their oil, send it through our land, down to the Gulf, where it will be sold everywhere else."

His adviser, John Podesta, reiterated Obama's message in a call with reporters on Monday: "I would just repeat what he said, which is we ought to take the time to let the process play out and let the analysis come in."

The State Department has been studying the pipeline proposal, and its approval is needed because the project crosses an international border.

Republicans and energy analysts said those comments likely meant Obama was leaning toward vetoing any Keystone bill that passes, either this year or early next year.

As House approves Keystone pipeline, Obama veto grows more likely

© Scott Dalton/Bloomberg A worker walks through the TransCanada Corp. Houston Lateral Project pipe yard in Mont Belvieu, Texas, U.S., on Wednesday, March 5, 2014. Russ Girling, TransCanada Corp. president

Even as the House passed legislation Friday authorizing construction of the Keystone XL oil

At an earlier presentation to investors, Valero said it is planning to increase its capacity to export refined products.

On the question of how many jobs the pipeline will generate, foes and backers have cited radically different figures. Supporters of the pipeline have been citing a figure of 42,000 jobs, which includes jobs with no direct connection to the pipeline but which would be created as a result of buying additional crude oil from Canada, which tends to recycle more dollars back into the U.S. economy compared to other oil exporting countries. That would be about 20 percent of the jobs created in a single month at current rates.

The number of construction jobs would total a couple of thousand and would last a few months to two years. TransCanada said it took an average of 5,000 workers 15 months to build the southern leg from Cushing, Okla. to the Texas gulf coast.

Proponents of the pipeline also include indirect jobs at suppliers, but TransCanada long ago bought and warehoused the pipe and pumps and most other equipment it needs for the project.

In the long term, about 100 jobs would go to people working directly on the pipeline itself, doing jobs such as monitoring pumping stations.

Ed O'Keefe contributed to this report.

steven.mufson@washpost.com

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MORE IN POLITICS

Pipeline OK sought by GOP — with a dare to Obama to veto project

By LAURA LITVAN
Bloomberg News

WASHINGTON — A top priority for a Republican-led Senate will be to send President Barack Obama a bill to authorize the Keystone XL pipeline and dare him to veto it.


OBAMA

While most senators support TransCanada's proposed $5.4 billion Canada-to-U.S. oil pipeline, the Senate under a Democratic majority hasn't held a binding vote on it since 2012. The Republican-controlled House has repeatedly voted to permit the pipeline's construction.

Advocates say the shift in Senate leadership next year will give them more leverage in the oil-versus-environment debate that has raged since TransCanada applied for a permit in 2008. While they say they have at least the 60 votes needed to get a bill through Congress, they will lack the two-thirds margin to override a presidential veto.

Senate Minority Leader Mitch McConnell, poised to lead the Republican majority in January, told Time magazine in an interview published that supporters can force the president's hand.

"I actually think the president will sign the bill on the Keystone pipeline because I think the pressure — he's going to be boxed in on that, and I think it's going to happen," Priebus said on MSNBC.

Calgary-based TransCanada's proposed pipeline would link Canada's oil sands with refineries on the U.S. Gulf coast. The company Tuesday said delays in getting approval have increased its costs by 48 percent to $8 billion.

Russ Girling, the company's president, said in a statement Wednesday that it's "time to break the gridlock on Keystone and move forward."


GIRLING

The administration is in a difficult spot as the fight over approval has split major parts of the Democratic Party base. Environmentalists oppose the pipeline, contending it would boost greenhouse-gas emissions linked to climate change. Supporters, including labor unions, say it would create jobs and promote North American energy independence.

The divide extends to Senate Democrats and was on display before the construction, Weiss said the real test is whether he would also reject it as part of a "must-pass" spending bill or a debt-limit increase.

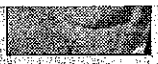
"We could have another case of government-shutdown chicken, where the Republicans take a spending bill needed to keep the Centers for Disease Control running and the Pentagon running and the Coast Guard running and load it up with special-interest provisions that benefit Big Oil and Big Coal," Weiss said.

Some business supporters of the pipeline say Republican leaders may get more leverage by not rushing ahead with a vote.

The State Department suspended its review of the project in April after a Nebraska state court ruled against the process under which Republican Gov. Dave Heineman approved the route through his state. The case is now before the Nebraska Supreme Court.


HEINEMAN

Karen Harbert, president of the U.S. Chamber of Commerce's Institute for 21st Century Energy, said Obama could more easily explain a veto of legislation if Congress passes it before the Nebraska court and State Department finish


McCONNELL

lished online Wednesday that Keystone is among a handful of items the Senate is "very likely" to vote on early in 2015.

"I think we need to do everything we can to get America back to work," said McConnell, of Kentucky, who planned a news conference in Louisville Wednesday to discuss his agenda.

Charles Ebinger, director of the energy security initiative at the Brookings Institution in Washington, predicted that Obama would veto any bill requiring approval of the pipeline.

"On issues like Keystone, Republicans will quickly try to bring up a bill and could send it to the president," Ebinger said. "But I think the president will veto it. The president will be very hard on any bill that massively appears to be expanding the use of oil or gas in this country."

Sen. John Hoeven, a North Dakota Republican and a top pipeline advocate, said Republican backers of the pipeline in the current Senate — joined by a handful of Democrats — are three or four votes shy of the 60 needed to approve a bill despite delaying tactics of opponents.


HOEVEN

They picked up support in Tuesday's election, with voters electing Republican senators in Iowa, Montana, Colorado, West Virginia and South Dakota to replace Democrats who don't support it before and who won't be returning in the next session.

Republican National Committee Chairman Reince Priebus said Tuesday election. Four incumbent Democrats on the ballot — Kay Hagan, of North Carolina; Mark Pryor, of Arkansas, Mary Landrieu, of Louisiana; and Mark Begich, of Alaska — campaigned in support of the pipeline, similar to their Republican opponents.

Hagan and Pryor lost their elections Tuesday and Landrieu will be in a run-off in Louisiana, where neither candidate won more than 50 percent of the vote. Begich was running behind his Republican opponent Wednesday in a race that hasn't been declared by the Associated Press.

Last year, Obama said in a speech at Georgetown University in Washington that he wouldn't approve the pipeline if it would significantly exacerbate carbon-dioxide emissions.

A State Department environmental study concluded the pipeline probably wouldn't have a big effect on the climate because Canadian oil likely would be developed even if Keystone is rejected. The department's review is continuing.

To Daniel Weiss, a senior vice president at the League of Conservation Voters, the election outcome means the loss of a "firewall in the Senate."

Democrats under Senate Majority Leader Harry Reid have refused to consider House-passed bills on Keystone and other energy matters opposed by environmentalists.

The Senate hasn't taken a binding vote on authorizing the pipeline since 2012, when an amendment from Hoeven failed after getting 56 of the 60 votes needed. Negotiations fell apart on holding a vote on Keystone this year.

Although Obama most likely would veto a stand-alone bill passed by Congress to allow Keystone their deliberations.

The president could simply say the process needs to continue before Congress tries to step in, she said.

"They will have to be strategic in how they advance this, rather than trying to score an immediate political point," Harbert said.

Others say they're not optimistic about forcing the president's hand under any circumstances.

"This president is not going to approve Keystone," said Michael McKenna, a Republican strategist on energy policy and president of the MWR Strategies lobbying group in Midlothian, Va. "It's a religious item among environmentalists. He's just not going to approve it, and that's that."

Tuesday's election will put Republican supporters of the pipeline in charge of Senate energy-related panels when Congress convenes in January.

Sen. Lisa Murkowski of Alaska is set to become chairman of the Energy and Natural Resources panel. The oil and natural gas industries can count on her advocacy of Keystone, expanded domestic drilling and U.S. energy exports.

Sen. Bob Corker of Tennessee is expected to take over the Senate Foreign Relations Committee, which oversees the State Department.

He has called Obama's refusal to approve the pipeline illogical and harmful to the economy.

Also, Sen. James Inhofe of Oklahoma, who has said warnings of climate change are "the biggest hoax perpetrated on the America people," has enough seniority to take the gavel at the Senate Environment and Public Works Committee. He would replace Sen. Barbara Boxer, D-Calif., one of the chamber's most ardent Keystone foes.

NOVEMBER 5, 1914

(MITCHELL)

TransCanada boosts Keystone XL cost nearly 50% to $7B

By NIA WILLIAMS
Reuters

TransCanada Corp., Canada's No. 2 pipeline company, on Tuesday raised estimated capital costs for its controversial Keystone XL project to $7.02 billion from an initial projection of $5.4 billion, citing lengthy delays.

OBAMA

GIRLING

Keystone XL, which would carry as much as 830,000 barrels per day of Alberta oil sands crude to the U.S. Gulf Coast, has been awaiting U.S. presidential permit for more than six years amid bitter opposition from environmental groups.

After the mid-term elections on Tuesday, there may be an opportunity for lawmakers in favor of the 830,000 barrel-per-day pipeline to force President Barack Obama to make a call.

TransCanada Chief Executive Officer Russ Girling said he could not predict what effect the election might have on Keystone XL, but he hoped whatever the outcome, a decision on the project could be made quickly.

"Suffice to say that we are supportive of any process that can help advance the decision on the project given that the environmental review is completed and at this point in time we are just sitting and waiting for someone to say go," he said.

TransCanada last week filed for regulatory approval of its $12 billion Energy East pipeline, which will take 1.1 million bpd oil sands crude to refineries and export ports in Quebec and New Brunswick.

Some of that oil sands crude is expected to be exported via tanker to the Gulf Coast, North America's largest refining center, but Girling said Keystone XL remained a more competitive transport option, even with the increased project cost estimate.

DAILY REPUBLIC 10/2/14

SD voters support minimum wage measure, Keystone XL pipeline

By Northern Plains News

South Dakota voters continue to ıpport an increase in the state's ınimum wage, according to ıe Sept. 21 to Sept. 25 Nielson rothers Polling/Northern Plains ews survey.

They also support the building of ıe Keystone XL pipeline.

Over half the respondents — 53 ercent — said they would vote for Initiated Measure 18, which would increase the state's minimum wage from $7.25 per hour to $8.50 per hour and tipped worker's wages from $2.13 per hour to $4.25 per hour. It would also require future wage adjustments in conjunction with cost of living increases. Thirty-two percent of respondents said they would vote against the initiated measure while 15 percent are still unsure.

The September survey does show a slight rise in opposition since the July NBP survey. The July results were 52 percent "for," 28 percent "against" and 20 percent "unsure."

While 69 percent of Democrats support the measure, with 16 percent against and 15 percent "unsure," only 39 percent of Republicans now say they will support it, with 44 percent against and 17 percent "unsure."

The NBP/NPN statewide survey also asked about the proposed Keystone pipeline. Sixty-four percent of respondents say they support construction of the pipeline, 24 percent oppose it, 7 percent are "unsure," and 5 percent have not heard of it. Seventy-seven percent of Republicans and 49 percent of Democrats support it.

Nielson Brothers Polling, an independent company based in Sioux Falls, conducted this South Dakota survey of likely voters from Sept. 21 to Sept. 25. NBP is releasing its findings in conjunction with Northern Plains News, an online news and distribution service in Harrisburg.

Woman donates to rail rehab project

By Republic Capitol Bureau

PIERRE — A Presho ɔman donated $10,000 ward the project to rehalitate the state-owned railad line from Chamberlain Presho.

Norma Johnson presented e money to Gov. Dennis ıugaard on Wednesday. ıe federal Department of Transportation recently awarded a TIGER grant of $12.7 million toward the project.

The Legislature appropriated $7.2 million, the state Railroad Board agreed to loan $7 million and another $1 million was raised from local producers and agricultural groups.

"This is a very generous thing," Daugaard told Johnson. She replied, "I sure want to see that railroad go."

The last loaded train left Presho on the line in 2007. The line is known as the Mitchell-Rapid City railroad. It currently has service from Mitchell to Chamberlain.

Person found dead in Lake Andes

By The Daily Republic

LAKE ANDES — Charles Mix County Sheriff's Office responded Monday afternoon to a call of an unattended death in Lake Andes, meaning no one was present to witness how the person died.

Deputy Neal Moad said Wednesday the call came in Monday afternoon and the person was found in a house in Lake Andes, but would not release any more details. He said an autopsy has been performed and law enforcement is awaiting results.

Moad said officers are not releasing the person's name at this time as it is an ongoing investigation.

The Family of Howard Fett would like to thank everyone for their prayers, memorials, food and visits during this difficult time. A special thank you to Pastor Milbrandt and Mary for their many visits and support. We appreciate everyone's kindness and thoughts.

Donna Fett
John & Lori Fett & Family
Joan & Tom Hoefert & Family
Ed & Merridy Fett & Family

STATEMENT OF OWNERSHIP MANAGEMENT AND CIRCULATION
(required by 39 U.S.C. 3685) Title of Publication: The Daily Republic Publication No. 145-160; Date of filing: September 30, 2014; Frequency of Issue: Daily; Number of Issues Published Annually: 306; Annual Subscription: $175.00; Complete Mailing Address of Known Office of Publication: 120 S. Lawler St., Mitchell,

morning, but Blaalid said the flower-filled field offered a valuable resting spot for the Monarch butterflies, which are in the process of an annual migration and are now headed far to the south to mountain forests in central Mexico.

"I suspect it was such a magnet because there is just not a lot blooming

pays producers to take environmentally sensitive farmland out of production to control soil erosion, improve water quality and enhance wildlife habitat.

The number of CRP acres in South Dakota has fallen from about 1.56 million acres in 2007 to about 937,000 acres earlier this year, a

between the flowers nearby, Blaalid stressed the importance of having diverse species of plants and wildlife, as well as CRP.

"Obviously, it's doing a lot more than just helping pheasants," he said. "Having grass and flowers are important for all species, even butterflies."

KEYSTONE

Continued from Page A1

"If we put it on his desk, the broad support nationally for the Keystone pipeline, as well as the pressure he will get from the unions, will provide significant pressure on the president," Barrasso told Reuters.

TransCanada's pipeline, first proposed six years ago, is a rallying point for environmental groups opposed to increasing production of oil sands crude, which they say is high in emissions linked to climate change. They have urged Obama to reject the company's application at the State Department to build the 1,180-mile cross-border line. The administration has delayed making a decision.

Energy industry executives say stopping the pipeline will not slow Canadian crude from reaching the world market and will prolong U.S. reliance on imports from less stable suppliers.

As stand-alone legislation, it would force Obama to either approve or reject the long-stalled plan. Attached to a must-pass but unrelated bill, it would put Obama in the uncomfortable position of either vetoing important legislation or accepting a congressional measure.

It is not uncommon for the U.S. Congress to pass legislation that contains unrelated provisions. Such measures have a better chance of being included in unrelated bills if they are broadly popular or have the backing of House and Senate leaders.

Republican Sen. John Hoeven, an Energy Committee member from North Dakota, said that were at least 57 votes for Keystone now and he expected to have more after the mid-terms.

"We'll be able to pick the vehicle, and we'll have the 60 votes. We'll just attach it and pass it," Hoeven, who has sponsored several Keystone bills, told Reuters.

Six years and counting

So far, past Senate action on the pipeline has consisted of successful Energy Committee votes, attempts to attach approval to a now-dead energy efficiency proposal and symbolic measures.

The Senate in March voted 62-37 in favor of a non-binding Keystone proposal attached to a budget resolution, giving hope to pipeline backers that bipartisan support would be strong for an actual approval of the project.

In June, Democratic Sen. Mary Landrieu, the current head of the energy panel, passed a bill out of the committee to approve the pipeline by a 12-10 vote, but Reid never brought it before the full Senate for a vote.

More than 60 percent of the public and nearly half of Democrats support the pipeline, according to a March Pew Research Center poll. The Laborer's International Union of North America and the leader of the AFL-CIO, the largest U.S. labor federation, both support it, saying it would create union jobs.

Keystone makes a good goal for Republicans since — even with a slim majority — it would be difficult for them to undo other key Obama energy and environmental initiatives, such as the Environmental Protection Agency's plan to curb carbon pollution from power plants.

A path to Keystone could be rocky, though. Obama has said he will only approve a plan that does not significantly exacerbate climate change. And it is unclear whether he would risk his environmental legacy by signing a Keystone bill or opt to veto and wait for the State Department to make a recommendation on the project.

Spearheading any effort to force the president's hand would be the presumed leader of a Republican-controlled Senate, current Minority Leader Mitch McConnell, from coal-producing Kentucky. Energy policy would also probably be shepherded by Lisa Murkowski from oil and gas-rich Alaska, who is expected to lead the Senate Energy Committee if Republicans take control.

Her agenda would start with areas where there is bipartisan support since "whatever the Senate passes has to pass both the House and the president's desk," spokesman Robert Dillon said.

McConnell, who is locked in a tight re-election race, has pledged, if he becomes leader, to eliminate procedural hurdles that have prevented the Senate from debating and voting on bills.

"If we have a new majority next year ... the Keystone pipeline will be voted on," McConnell told reporters recently.

"I will be the one setting the agenda."

U.S. stocks fell sharply. Airline and hotel company shares dropped over concerns that Ebola's spread outside Africa might curtail travel. Drugmakers with experimental Ebola treatments in the pipeline saw their shares rise.

with bodily fluids like blood or saliva, which health experts say limits its potential to infect others, unlike airborne diseases. Still, the long window of time before patients exhibit signs of infection, such as fever, vomiting and diarrhea, means an infected person can travel without detection.

While past outbreaks killed as many as 90 percent of victims, the

Several leading U.S. airlines said they were in close contact with federal health officials about Ebola-related travel concerns.

On Wednesday, officials repeated a call to health care workers to be vigilant in screening patients in the United States for possible signs of the virus.

"If you have someone who's been in West Africa in the past

DAILY REPUBLIC 9-25-14

Energy unleashed

Building Keystone XL pipeline a step to North American independence

By REP. KRISTI NOEM

With conflicts arising in energy-rich areas of our world, the importance of North American energy independence to our wallets, economy and national security increases every day. Last week marked six years since permits were first filed to construct the Keystone XL pipeline, a critical channel when looking to achieve a more abundant, affordable and secure energy supply.

NOEM

I am a strong supporter of the Keystone XL pipeline. Moving oil by pipeline has shown a number of public safety benefits. Doing so could also pull oil off the railroads, thereby allowing rail companies to focus on moving our commodities to market. The U.S. State Department has confirmed the pipeline's construction will have no major climate impact. And the construction of the Keystone XL promises to create thousands of jobs.

I have co-sponsored the Northern Route Approval Act to move the project forward. I've written to Secretary of State John Kerry requesting he support the immediate approval of the pipeline.

I've also joined more than 145 members of Congress in reaching out to President Barack Obama to encourage immediate approval. The administration and U.S. Senate have refused to advance the project.

Moving forward on the Keystone XL pipeline is only part of what is necessary to achieve North American energy independence. I believe we need an all-of-the-above energy solution that includes natural gas, wind, biofuels, clean coal, renewable energies and domestic oil.

To accomplish this, energy innovators need Washington to get out of the way and stop burying American energy opportunities in red tape, taxes and mandates.

Consider the natural gas industry. Today, it is a reliable and affordable fuel that has moved us toward more energy-efficient utilities. Those advancements weren't possible until Washington stepped out of the way and allowed companies to explore for natural gas.

Over the last few years, I've worked to provide similar opportunities for other sectors of the energy industry. I'm proud to have led efforts in the House to extend tax credits for wind energy.

I've fought back EPA regulations that threaten to increase electricity costs for hardworking families living paycheck to paycheck. And I've voted for legislation that would improve America's energy infrastructure so we can better use upgraded technologies.

Our economy and our security are reliant on an energy supply that is accessible, abundant and affordable. Without North American energy independence, countries like Iran, Russia and Venezuela can manipulate the marketplace, using energy as a political weapon against us and our allies. Meanwhile, many believe some of the beneficiaries of our Middle East oil purchases could be using revenues to fund terrorist activities and organizations.

We should be powered by American energy. Relying on imports from Russia and Iran is not only inefficient, but a foolish risk to our economy and security.

Constructing the Keystone XL pipeline is step one. It will help us transport North American energy resources more affordably and in a more environmentally-conscious way. But we must also focus on the larger effort of getting Washington out of the way of energy innovators. We have the potential; it just needs to be unleashed.

— Kristi Noem, a Republican, is South Dakota's lone representative in the U.S. House.

Keystone XL operator to seek PUC's recertification

By Regina Garcia Cano

AP - The operator of the long-delayed Keystone XL crude oil pipeline said Thursday it will ask South Dakota's utility regulators to recertify the portion of the project that runs through the state before the end of the month.

The president of Keystone Projects for TransCananda Corp., Corey Goulet, said the state's Public Utilities Commission must re-certify that the conditions for construction of that portion of the nearly 1,200-mile pipeline have not changed since the permits were issued four years ago.

Goulet said the company will submit the petition Sept. 15.

"What we are doing is providing a petition that shows that if anything, the conditions are better than they were previously," Goulet said, adding that the construction conditions have improved in part because of nearly 60 stipulations that the federal government imposed on the project since it was first approved by the commission. The three commissioners will determine the process to recertify the pipeline.

SEPT 9 & 2014

The proposed project would transport oil from Canadian tar sands through Montana and South Dakota to Nebraska, where it would connect with existing pipelines to carry more than 800,000 barrels of crude oil a day to refineries along the Gulf Coast.

Advocates say it will create thousands of jobs and aid energy independence, but environmentalists warn of possible spills and say transporting oil will eventually contribute to global warming.

The State Department said in a Jan. 31 report that building the pipeline would not significantly boost carbon emissions because the oil was likely to find its way to market by other means. It added that transporting it by rail or truck would cause greater environmental problems than if the Keystone XL pipeline were built.

The project has become a major flashpoint alongside the larger debate over carbon emissions, drilling policies and tax breaks for energy companies.

"I think the average person in America and South Dakota supports this project," Goulet said. "There is a minority of people that kind of fundamentally oppose this project because it's associated with energy from hydrocarbons."

Goulet said the project would generate $20 million in taxes per year for the counties through which the pipeline would run, as well as 4,200 jobs in the state and about $200 million in wages associated with those jobs.

The Obama administration said in April it was putting off its decision on whether to approve the pipeline indefinitely. A decision now isn't expected until after the November elections.

Goulet said TransCanada could be ready to begin construction in the last quarter of 2015 should the project receive presidential approval at the beginning of next year.

Keystone XL operator to seek PUC's recertification

By REGINA GARCIA CANO
Associated Press

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In Keystone pipeline debate, Neb. high court will have sway

WASHINGTON (Reuters) — Nebraska's top court will hear arguments today about how the Keystone XL pipeline might cross the state — a narrow question of routing and permitting that has clouded the project's fate after more than five years of wrangling at the federal level.

At issue is a 2012 law that gave Gov. Dave Heineman authority to approve a route for TransCanada Corp's proposed Canada-to-Texas project.

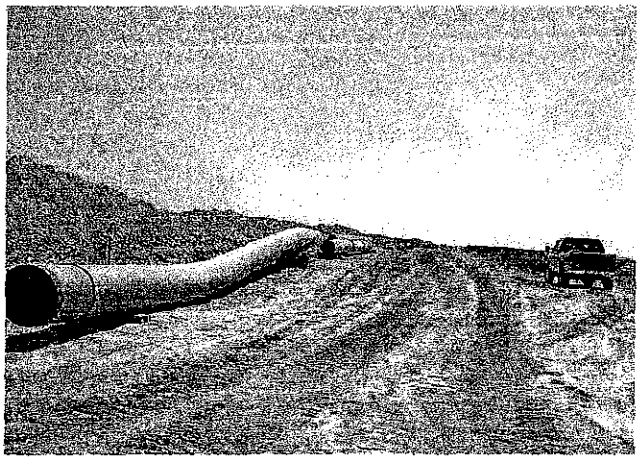
Siting issues are typically settled by the state's Public Services Commission. In February, a Nebraska court ruled that the governor had been wrong to interrupt that process.

The decision was a win for landowners and environmentalists who oppose the Keystone project, aimed at transporting at least 730,000 barrels per day from the oil sands region of Western Canada to Gulf Coast refineries. The Nebraska court decision forced the U.S. State Department to put on hold its review of project pending a resolution, which might not come until early 2015.

DAILY REPUBLIC
9-5-14

Keystone and its discontents

The American people largely support the Keystone XL Pipeline, which would transport oil 1,179 miles from the oil sands of Canada, through a 36-inch-diameter pipeline, southward as far as Texas to oil refineries in the Gulf of Mexico. A 2014 study by the Pew Research Center in Washington showed 61 percent of the public in favor of the project, with only one of seven political groups – "solid liberals" – opposed.



Wikimedia

The pipeline is slowly being built in phases throughout U.S. states. But why, after six years of wrangling, is the project still languishing for final approval in Washington?

Because the pipeline crosses an international border, the State Department and president must approve the project. The environmental lobby and donors see the pipeline as leverage to hold President Barack Obama to their interests, disregarding the majority of the American public.

The $7 billion project "would reduce America's reliance on Middle Eastern oil suppliers, provide jobs for veterans and improve national security," then-American Legion National Commander Dan Dellinger said in February. The Legion has passed resolutions in favor of the pipeline, predicting that it would create 20,000 jobs immediately and an additional 118,000 jobs in adjacent industries.

Canada – the top oil exporter to the United States, the third-largest reserve of oil in the world and arguably the closest U.S. ally – is waiting to build the pipeline. It would transmit up to 830,000 barrels per day, including crude from the Canadian oil sands as well as oil from the Bakken deposit in Montana and North Dakota. At present, crude oil from the Bakken travels by truck and rail to refineries and markets on the East Coast. Several train-car accidents have caused fires and dozens of deaths in recent years, raising major safety concerns.

Keystone XL would start in Hardisty, Alberta, and extend south to Steele City, Neb., with further extensions to Nederland, Texas, to the south and Patoka, Ill. It could possibly include pipeline shortcuts, links and extensions in the booming oil region of North Dakota. Three phases of the project are already approved at state levels. The fourth – a bullet-like pipeline going from Hardisty to Steele City – is awaiting U.S. government approval.

The main obstacle has been presidential approval because of environmental concerns. In January 2012, Obama rejected the application to finish the project because of protests by environmentalists about Nebraska's Sand Hills region. TransCanada Corp. adjusted the route to minimize the impact, and Nebraska Gov. Dave Heineman approved the plan in January 2013.

Environmentalists and key Democratic donors continue to rally against the project, seeing it as a battle for leverage over the Obama administration's environmental policy. Some think the pipeline could leak and affect groundwater and cattle, despite TransCanada's assurances of the pipeline's high-tech safety features.

In April, Obama extended the review of the pipeline project until at least after the Nov. 4 midterm elections.

– Paul Glader

Canada tries turning up the heat on Obama as Keystone remains stalled

By THEOPHILOS ARGITIS and ANDREW MAYEDA
Bloomberg News

NEW YORK — Canadian Prime Minister Stephen Harper's government, which has failed to persuade President Barack Obama to approve TransCanada's Keystone XL, moved Wednesday to turn up the heat on the U.S. administration.

Finance Minister Joe Oliver, Natural Resources Minister Greg Rickford and Foreign Affairs Minister John Baird traveled to New York this week, arguing that Obama has unfairly entangled the $5.4 billion pipeline with U.S. politics. According to Oliver, Canada's intention is is to keep the issue alive with the U.S. public and business.

"This is a democracy, and I'm sure the government listens to the people," Oliver said in an interview at Bloomberg's New York headquarters.

The issue has become the biggest bilateral irritant between the world's two largest trading partners, fueled tensions between Obama and Harper and threatens Canada's ability to develop its oil resources.

The proposed pipeline, which would transport crude from Alberta's oil sands to refineries on the Gulf Coast, is in its sixth year of review by Obama. The latest delay came in April, with Obama's administration giving federal agencies more time to comment. That further stalled a project first proposed in 2008 and originally intended to come online in 2012.

"It's not going to vanish as a business issue for those who are going to be directly impacted" in the U.S., Oliver said. "There's a real sense this is a very unhappy delay."

The official U.S. position is that the administration is making every effort to ensure it adequately consults on the pipeline. Canadian officials claim Obama is deliberately delaying approval of the project to assuage environmentalists.

"We feel entitled to say, 'Wait a minute, this isn't right, this isn't fair,' " Oliver said in the interview.

Messages left at the State Department and White House seeking comment on the Canadian officials' statements weren't immediately returned.

Whatever its environmental impact, Keystone's political implications loom large. Republicans and Democratic candidates for U.S. Senate who are running in key energy states, such as Alaska and Louisiana, are pressuring Obama to approve the project. Delays have frustrated Harper, who has made the construction of energy infrastructure a national priority. Harper, who faces elections next year, has been criticized by the opposition Liberal Party for bungling the file.

At a meeting on Monday in New York organized by Goldman Sachs, Canada's Baird said the U.S. was intentionally delaying Keystone for political purposes, undermining the interests of a key ally.

US corrects Keystone pipeline study estimate of rail deaths, other errors

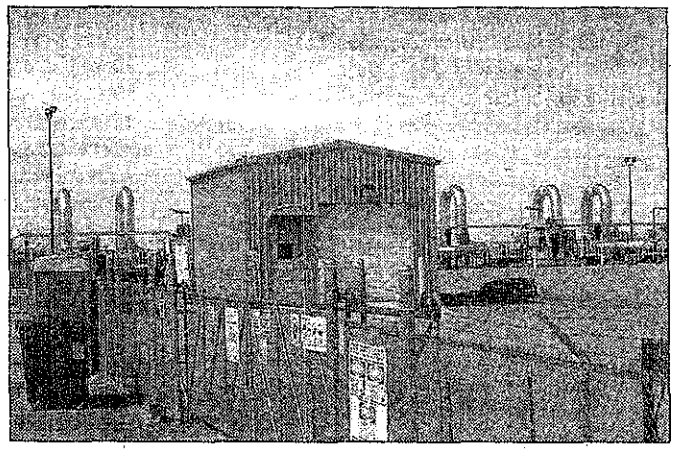
By PATRICK RUCKER
Reuters

WASHINGTON — The U.S. State Department on Friday corrected several errors it made in a key study evaluating the impact of the proposed Keystone XL pipeline, including an understatement of how many people could be killed on railroad tracks if the project were rejected and oil traffic by rail increased.

The department said, however, these corrections had "no impact" on the integrity of the conclusions of the January report, which played down potential environmental consequences of TransCanada Corp.'s Canada-to-Texas project.

The Obama administration has not yet decided whether to approve the project.

The January report determined that blocking the controversial pipeline could increase oil train traffic and lead to an additional 49 injuries and six deaths per year, mostly by using historical injury and fatality statistics for railways.



Reuters photo

A TransCanada Keystone Pipeline pump station operates outside Steele City, Neb., on March 10.

That finding was a small element of a broader examination of how building the pipeline could impact climate change, endangered species, quality of life and other issues.

But the report mistakenly used a forecast for three months of expected accidents rather than full-year figures, officials said. The correct estimate of deaths should be roughly four times as large — between 18 and 30 fatalities per year.

Officials also revised a footnoted reference to how much electricity would be needed to power pumping stations along the route of the pipeline that would link Canada's oil sands region to Texas refineries.

Running at something less than full capacity, the pumping stations would not require as much electricity — and so tax power plants less — than originally reported. Revising that footnote has no impact on the State Department's estimation of expected greenhouse gas emissions tied to the pipeline, a spokesperson said.

"It is common practice to publish an errata sheet that notes and corrects errors in voluminous technical documents such as environmental impact statements," the State Department said.

"The Department has reviewed each of the items listed in the errata sheet and has determined that they have no impact on the integrity of, or the conclusions reached in, the (final report)."

The State Department also published several dozen public comments that had not been included in the roughly 2.5 million it received and previously disclosed.

Shale Boom Has US Production Surging

By Mark Shenk
Bloomberg News

U.S. crude production climbed to a 28-year high in May as the shale boom moved the world's biggest oil-consuming country closer to energy independence.

Output rose 78,000 barrels a day to 8.428 million in early May, the most since October 1986, according to Energy Information Administration data. The combination of horizontal drilling and hydraulic fracturing, or fracking, has unlocked supplies from shale formations in the central United States, including the Bakken in North Dakota and the Eagle Ford in Texas.

"This is an incredible phenomena that looks set to continue," John Kilduff, a partner at Again Capital, a hedge fund that focuses on energy, said by phone. "There's a long way to go before we explore and exploit all of the shale deposits out there."

The United States met 87% of its energy needs in 2013, and 90% in December, the most since March 1985, according to EIA, the statistical arm of the Energy Department.

Crude output will average 8.46 million barrels a day this year and 9.24 million in 2015, up from 7.45 million last year, EIA said. Next year's projection would be the highest annual average since 1972.

EIA forecasts that the gain in production at shale fields will be augmented by greater offshore output this year and next. Crude output in the waters of the Gulf of Mexico will climb by 150,000 barrels a day in 2014 and by an additional 240,000 barrels in 2015,after four consecutive years of declines, EIA reported.

Energy Secretary Ernest Moniz said that the mismatch between rising production of light oil in the United States and the country's refining ability is driving the debate over whether to lift a ban on crude exports. The crude unlocked from shale deposits is too low in density to be absorbed entirely by the U.S. refining system, Moniz told reporters.

"The driver, or the consideration, is that the nature of oil we are producing may not be well-matched to our current refinery capacity," Moniz said.

The remarks highlighted pressure to overturn 1975 legislation that bars exports while U.S. production rises and inventories swell. Sen. Lisa Murkowski of Alaska, the senior Republican on the Energy and Natural Resources Committee, said in a Jan. 7 speech that she supports changing the export rules.

"This increases the pressure on the U.S. to finally allow for the export of crude," Kilduff said. "The U.S. could be a major player in the global export market.

Production gains helped send U.S. inventories to 399.4 million barrels in the week ended April 25, the most since the EIA began reporting weekly data in 1982.

Matthew Staver — Bloomberg News

Some 8.46 million barrels of U.S. crude oil will be produced each day this year as a result of horizontal drilling and fracking.

OPINION

Stopping Keystone Ensures More Railroad Tank-Car Spills

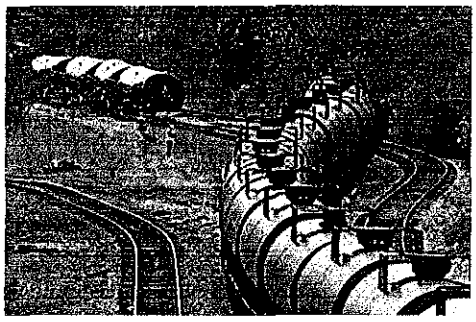
Pipelines in the U.S. carry 25 times more oil than tank cars do, yet derailments are by far the biggest threat.

By TERRY L. ANDERSON

May 13, 2014 6:43 p.m. ET

The Keystone XL Pipeline got another nail in its coffin Monday, in the form of a Senate energy vote that excluded the pipeline issue. But Keystone was already near death thanks to the Obama's administration's recent decision to ignore the evidence of a definitive government study—and instead keep listening to environmentalists' dubious claims. The upshot will be more political fires in Washington caused by train derailments in the absence of a pipeline to transport oil more safely.

After the derailment in downtown Lynchburg, Va., on April 30, approximately 30,000 gallons of Bakken crude oil burned or spilled into the James River. On May 9, a derailment north of Denver spilled another 6,500 gallons of oil, which was contained in a ditch before reaching the South Platte River. Fortunately, unlike in the 2013 derailment in Quebec where a 1.3 million-gallon spill killed 47 people and incinerated 30 buildings, no one was injured in Lynchburg or Colorado.



Workers inspect the scene after several CSX tanker cars carrying crude oil derailed and caught fire along the James River in Lynchburg, Va *Associated Press*

These and other tank-car derailments are prompting local, state and federal officials to consider various regulations to reduce the threats of such accidents, including lower train speed limits and safer tank cars. Unfortunately, few policy makers are doing sensible risk assessment.

Clearly, we are going to continue moving crude oil and petroleum products from where they are extracted to where they are needed. When considering whether to approve the Keystone XL, therefore, the question has to be: Which is safer, pipeline or rail tank cars?

President Obama's own State Department answered the comparison question plainly in February. According to the report, pipelines larger than 12 inches in diameter in 2013 spilled more than 910,000 gallons of crude oil and petroleum products—compared with 1.15 million gallons for tank cars, the worst in decades. Comparing total oil spilled makes it appear, at first glance, that pipeline and rail safety records are similar. That's only until you factor in that pipelines carry nearly 25 times more crude oil and petroleum products.

The State Department report estimates that the Keystone XL carrying 830,000 barrels a day would likely result in 0.46 accidents annually, spilling 518 barrels a year. Under the most optimistic rail-transport scenario for a similar amount of oil, 383 annual spills would occur, spilling 1,335 barrels a year.

The report is even harsher on railroads when it comes to human injuries and fatalities. It estimates that tank cars will generate "an estimated 49 additional injuries and six additional fatalities" every year, compared with one additional injury and no fatalities annually for the pipeline.

Consider the safety record of the Trans-Alaska Pipeline System, which includes the huge 48-inch-diameter mainline pipe carrying crude from Prudhoe Bay, 11 pumping stations, several hundred miles of feeder pipelines and the Valdez Marine Terminal. The largest oil spill in the system occurred in 1978 when an unknown person blasted a one-inch hole into a pipeline. It leaked 16,000 barrels and had no disastrous effects.

The debate over the Keystone XL vs. railcar transport can be likened to the safety of offshore vs. onshore oil production. By putting nearly 60% of potentially oil-rich onshore lands off limits, we have forced exploration and production offshore. Oil production onshore is safer than offshore just as pipelines are safer than tank cars. While the Deep Water Horizon oil spill well gushed nearly five million barrels into the Gulf of Mexico over an 87-day period beginning on April 20, 2010, a blowout in western Pennsylvania in June (while Deep Water Horizon was spilling) was capped in 16 hours and spilled only a few thousand gallons.

Similarly, pipeline spills are more easily controlled and cleaned up than are tank-car derailments. With so many railroads running along waterways and wetlands, 17-mile-long oil slicks, like the one from the Lynchburg derailment, will be more common. In contrast, the State Department reports that the Keystone XL would drill under rivers to avoid "direct disturbance to the river bed, fish, aquatic animals and plants, and river banks." Moreover, between 1992 and 2011, 40% of the liquids spilled from pipelines was recovered.

Putting the debate over the Keystone XL in this context shows the absurdity of killing the pipeline project. But the Obama administration appears determined to accept environmental arguments that the pipeline could leak (even though the likelihood is less than with rail) and that with the extraction and use of oil from Alberta, Canada's oil sands will increase global warming. On the latter point, the State Department report again is clear that net carbon emissions won't be much different with or without the Keystone XL—because the Canadian tar sands will likely be developed regardless of how the oil is transported and because trains emit more carbon dioxide than pipelines.

Whether the president and other politicians or environmentalists like it or not, oil and gas will be moved from remote areas in the north to refineries in the south, east, and west or to overseas terminals. Opponents may take smug satisfaction in raising the cost of energy and discouraging consumption, but their actions are hypocritical when it comes to saving the environment.

Fish, birds, wildlife—and people—beware.

Mr. Anderson is president of the Property and Environment Research Center (PERC) in Bozeman, Mont., and a senior fellow at Stanford University's Hoover Institution.

Keystone XL Hinges on Railroad Reform; Obama Administration Suspends Review

By Jim Snyder
Bloomberg News

The future of the Keystone XL oil pipeline may turn on a century-old measure to curb the influence of railroad barons.

If Nebraska's Supreme Court decides Keystone has the same legal status as a rail line, it could trigger a review by the state's Public Service Commission. That would push a decision on a project first proposed in 2008 into the second half of 2015 at the earliest, and may force pipeline builder TransCanada Corp. to alter the route for a second time.

"I don't think it's a sure thing by any means that the PSC will say, yeah, we're done,' " and approve the existing path, said Sandra Zellmer, a University of Nebraska law professor who has testified before the state Legislature on regulatory authority.

The Obama administration announced April 18 that it was suspending its review of Keystone until the legal questions are cleared up.

This enraged backers of the $5.4 billion project, which is designed to pump 830,000 barrels a day of Canadian oil sands to refineries on the U.S. Gulf Coast and has been the subject of intense lobbying from Ottawa to Washington.

Nebraska Gov. Dave Heineman (R) is asking the state's top court to reverse a trial judge's February decision that declared Calgary, Alberta-based TransCanada a common carrier like railroads and pipeline and taxi cab companies, and operators of grain warehouses.

"The whole idea was to give the power back to the people and to resist the political influence that large, important and well-heeled companies could have on decision making," Zellmer said.

Landowners opposed to Keystone argue the same philosophy applies, more than a century later, and that the ability to exercise eminent domain over private property needs to be granted by regulators, not the governor.

Nebraska trial judge Stephanie Stacy ruled in February that TransCanada was a common carrier like railroads because it transported people or goods for a fee.

As such, Keystone XL is subject to oversight by the Public Service Commission exclusively, including approval of the route, Stacy said, declaring unconstitutional the Legislature's attempt to give that authority to the governor.

Attorney General Jon Bruning, a Republican running to replace Heineman, has argued that the law isn't unconstitutional because it retains a role for the commission by letting companies apply to it or the governor.

The court isn't expected to hear the case until at least September. An opinion could take months.

The U.S. State Department cited

(See KEYSTONE, p. 29)

first proposed in 2008 into the second half of 2015 at the earliest, and may force pipeline builder TransCanada Corp. to alter the route for a second time.

"I don't think it's a sure thing by any means that the PSC will say, 'yeah, we're done,' " and approve the existing path, said Sandra Zellmer, a University of Nebraska law professor who has testified before the state Legislature on regulatory authority.

The Obama administration announced April 18 that it was suspending its review of Keystone until the legal questions are cleared up.

This enraged backers of the $5.4 billion project, which is designed to pump 830,000 barrels a day of Canadian oil sands to refineries on the U.S. Gulf Coast and has been the subject of intense lobbying from Ottawa to Washington.

Nebraska Gov. Dave Heineman (R) is asking the state's top court to reverse a trial judge's February decision that declared Calgary, Alberta-based TransCanada a common carrier like a railroad. As such, a 2012 state law giving the governor authority over Keystone's route violated a provision of the state's constitution that gave that power to the Public Service Commission.

The lower court "got it right," in finding that a state law granting Heineman the authority to approve Keystone's path in Nebraska was unconstitutional, Zellmer said.

Anthony Schutz, an associate professor of law at the University of Nebraska, said that the lower court's ruling "stands a decent chance of being upheld."

Because the state's constitution doesn't explicitly say that the Public Service Commission has authority over oil pipelines, however, there may be enough legal leeway for the court to overturn and cite deference to the legislative process, Schutz said.

"We didn't have pipeline companies digging across the state," when the commission was added to the state constitution in 1906, he said.

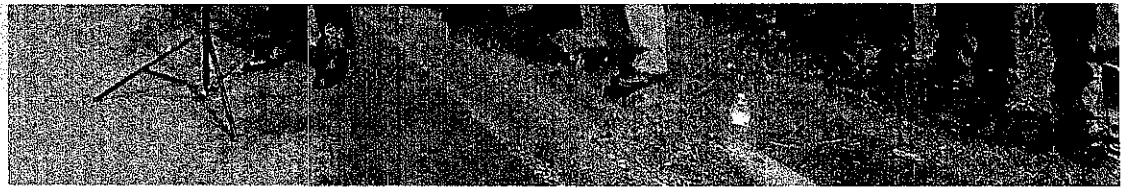
The commission's origins date to the wave of progressive reforms in the late 1800s and early 1900s that were designed to ensure people weren't trampled in the name of progress. Legislatures established the boards to regulate industries deemed particularly important to the public good, and tried to insulate regulators from the lobbying of businesses that had grown into behemoths.

Initially called the Railway Commission, the five-member panel's jurisdiction has expanded to include telecommunications carriers, natural-gas utilities, furniture movers

ments are done in a manner to improve efficiency or add capacity, you're going to see that relief in congestion. And that in and of itself will assist in the ability to make deliveries in a much more timely fashion," she said.

A recent report by the American Road and Transportation bridges and 360 underwent major repairs.

Built in 1932, the bridge is named after American Revolutionary War Gen. Casimir Pulaski, recognized in military circles as the "Father of the American Cavalry." It was featured in the opening credits of the HBO series "The Sopranos."



Office of Gov. Jay Inslee

Inslee announces $300,000 in grants to underwrite fuel costs for truckers forced to detour after the mudslide in Oso, Wash. He spoke outside the Hampton Lumber Mill in Darrington on April 25.

Keystone Hinges on Old Railroad Reforms

(Continued from p. 25)

the possibility that the Nebraska court case could result in a new route as a reason to suspend its review. The agency is charged with determining if the pipeline is in the national interest because it would cross an international boundary. The delay probably will enable President Obama to avoid deciding a contentious issue before the November midterm elections to determine control of Congress.

If the Nebraska Supreme Court agrees with Stacy that Heineman doesn't have the authority to approve the pipeline's route, Trans-Canada will have to apply to the Public Service Commission.

By law, commissioners must consult with nine other state agencies before reaching a verdict within seven months of receiving an application. Among the factors they must consider are soil permeability and the distance to groundwater sources, according to a summary on its website.

Shawn Howard, a spokesman for TransCanada, which isn't a party to the court case, said the company was confident any "reasonable review" would find the pipeline poses minimal environmental risks and should be approved.

Nebraska's Public Service Commission's first iteration was created by legislation in 1885. Such was the importance of its role that the Legislature added its authorities to the state constitution in 1906.

Progressives started with the idea that "business corrupts politics" and worked on "institutional ways to try to curb this influence," said William Novak, a law professor at the University of Michigan who has written about the history of regulation.

The initial target was railroads, he said.

"The railroads changed everything from the moment of their inception before the Civil War, but then they exploded as big businesses after the War," Novak said. "It would probably be impossible to overstate their significance."

Scott Dalton — Bloomberg News

TransCanada CEO Russell Girling said at the company's pipe yard in Mont Belvieu, Texas, he's "optimistic" Keystone XL will be built.

State of Nebraska

Heineman

Edward Balleisen, an associate professor of history at Duke University in Durham, North Carolina, said legislatures created the commissions because the issues involved were highly technical and believed their ongoing work "should be at least partly insulated from the normal give and take of electoral politics."

In a brief filed with the state Supreme Court, Bruning argued that the trial judge set too low a threshold for taxpayers to bring court challenges to state legislation. Bruning also argued that not all crude oil pipelines qualified as common carriers falling under the exclusive jurisdiction of the Public Service Commission.

TransCanada already has had to alter Keystone's route to ease concerns in Nebraska. State officials — including Heineman — objected that the original pathway threatened the Ogallala aquifer, which provides drinking water for 1.5 million people and irrigates almost half of Nebraska's cropland.

Obama rejected the original application in January 2012 after Congress set a 60-day deadline for a decision. He invited the company to reapply with a different route.

TransCanada submitted a new application that May, charting a path farther east that the Nebraska Department of Environmental Quality said avoided the aquifer as well as a network of wetlands known as the Sandhills.

TransCanada took advantage of the law passed a month earlier that gave it the option of seeking approval from the governor instead of the commission. Heineman, who approved the project after a state environmental review, criticized the State Department's delay.

"It's time for a yes or no decision on the Keystone pipeline," he said in an interview with the Nebraska Radio Network.

The case is *Thompson v. Heineman, S-14-000158, Nebraska Supreme Court (Lincoln).*

The Daily Republic

"Serving Our Readers Since 1879"

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Other View

Counter Putin with action on Keystone XL

By The Grand Forks (N.D.) Herald

Why has Vladimir Putin succeeded? In part, because he understands the virtue of decisiveness. He acted: He assessed the risks of intervening in Ukraine, judged them acceptable, and gave the orders.

Mind you, these were not rash decisions on Putin's part. The Russian president rightly calculated that around the world, only Ukraine would care as much about Ukraine as Russia does, and Ukraine posing no significant military threat (at least in Crimea), the odds of Russia's success upon intervening were high.

But dictators and presidents alike ponder those kinds of odds all the time. The difference is, Putin said "Go," and Crimea was his within the week.

President Barack Obama can be and has been decisive in this way. The president's order to send Navy SEALS into Pakistan after Osama bin Laden clearly showed this power of will.

But the president's response to Putin's incursion has seemed more tentative. Perhaps that's because he has felt there were no good options, military intervention by the United States being obviously off the table.

Now, though, the U.S. Senate has given Obama the opening he needs.

The president should seize the moment and very publicly act.

"A bipartisan group of eight senators returned from a weekend trip to the region and called for quick congressional action on a package of aid for Ukraine and sanctions against Russia," The Washington Post reported.

Among the senators was Sen. John Hoeven, R-N.D., who rightly suggested that U.S. action on energy could go a long way.

If ever there were a time to approve the Keystone XL pipeline and green light our ability to sell natural gas overseas, that time is now. But don't take our word for it:

"If we want to make Mr. Putin's day and strengthen his hand, we should reject the Keystone," said retired Marine Gen. James Jones, Obama's national security adviser from 2009 to 2010, in testimony to the Senate Foreign Relations Committee.

If the president acted fast on key energy issues, including Keystone, he easily could win bipartisan congressional support. That's the kind of unity that makes for second-guessing in the Kremlin, and that's the kind of decisiveness Ukraine and America's other allies need.

Keystone Canadian oil shipped to U.S. for years

By Merrill Matthews

Here's a little-known fact: The Keystone pipeline system has been transporting oil sands from Canada to U.S. refineries in the Midwest for three years -- with no major leaks and, more importantly, no major complaints from environmentalists.

The Keystone pipeline project includes four phases. The Keystone XL that has received so much media attention is only the last phase.

Phase 1 has been operating since 2010, carrying oil from Alberta across three Canadian provinces and six states to refineries in Illinois. Phase 2 put a link connecting the Phase 1 pipeline from Steele City, Nebraska, to Cushing, Oklahoma, a major U.S. oil refining and storage hub. It went operational two years ago, again with no major problems or complaints.

Phase 3 is currently under construction, extending the pipeline from Cushing to the Gulf refineries in Texas. President Obama even gave a speech in Cushing in March 2012--during his reelection bid--praising the pipeline extension as good for the economy.

The Keystone XL, the proposed Phase 4, would build a separate pipeline from Alberta, crossing only three states (Montana, South Dakota and Nebraska), and connecting to the existing pipeline in Steel City

While the Keystone XL would have the capacity to deliver more oil--830,000 barrels a day vs. 590,000 for Phase 1--its U.S. footprint is more than 200 miles shorter than Phase 1.

Environmentalists complained that Phase 4 would transport oil across environmentally sensitive areas of Nebraska. Governor Dave Heineman expressed similar concerns. So the pipeline builder, TransCanada Corp., has proposed to reroute the pipeline, which satisfied the governor and the Nebraska legislature. Even the U.S. State Department has said the risks are minimal

One reason TransCanada located the Phase 4 route where it did was to transport up to 100,000 barrels a day of U.S. crude oil from the Bakken reserves in North Dakota and Montana. That means the Keystone XL would be shipping high-quality U.S. oil to U.S. refineries.

Mr. Obama has recently turned defensive, claiming that the pipeline won't create many permanent jobs. But pipeline jobs are infrastructure jobs, and the president is promoting more infrastructure spending to create jobs.

Phases 1 and 2 directly employed nearly 9,000 workers on U.S. facilities and pipelines. Phase 3 currently employees about 4,000 workers. Those aren't debatable projections; those are real Americans working at high-wage jobs. And the pipeline jobs won't cost the government a dime. In fact, the government will gain revenue from them.

The Keystone XL is also a trade-deficit reducer. News reports say that the U.S. trade deficit declined by 22 percent in the last quarter, primarily due to importing less oil. Rejecting the XL means that much of that Canadian oil will be shipped to China for refining instead. And seeing that oil go elsewhere when foreign hot spots like Syria can drive up oil prices or threaten supplies is not a good idea.

Unfortunately, environmentalists don't seem to care about the Keystone XL's economic merits. They have decided to draw a line in the oil sand at Phase 4. But surely they know that the U.S. leads the world in refining. If Canadian oil is going to be refined, and it is, better to do it under U.S. standards and quality controls. And U.S. workers get the benefits.

The fact is that the Keystone XL pipeline is simply an extension of an already existing program that is working well, creating jobs and expanding U.S. manufacturing. It should be an easy, and quick, decision for any president concerned about the economy.

Merrill Matthews is a resident scholar at the Institute for Policy Innovation in Dallas, Texas.

Senator, ambassador push for Keystone XL

Hoeven says energy 'juggernaut' could help in situations like Ukraine'

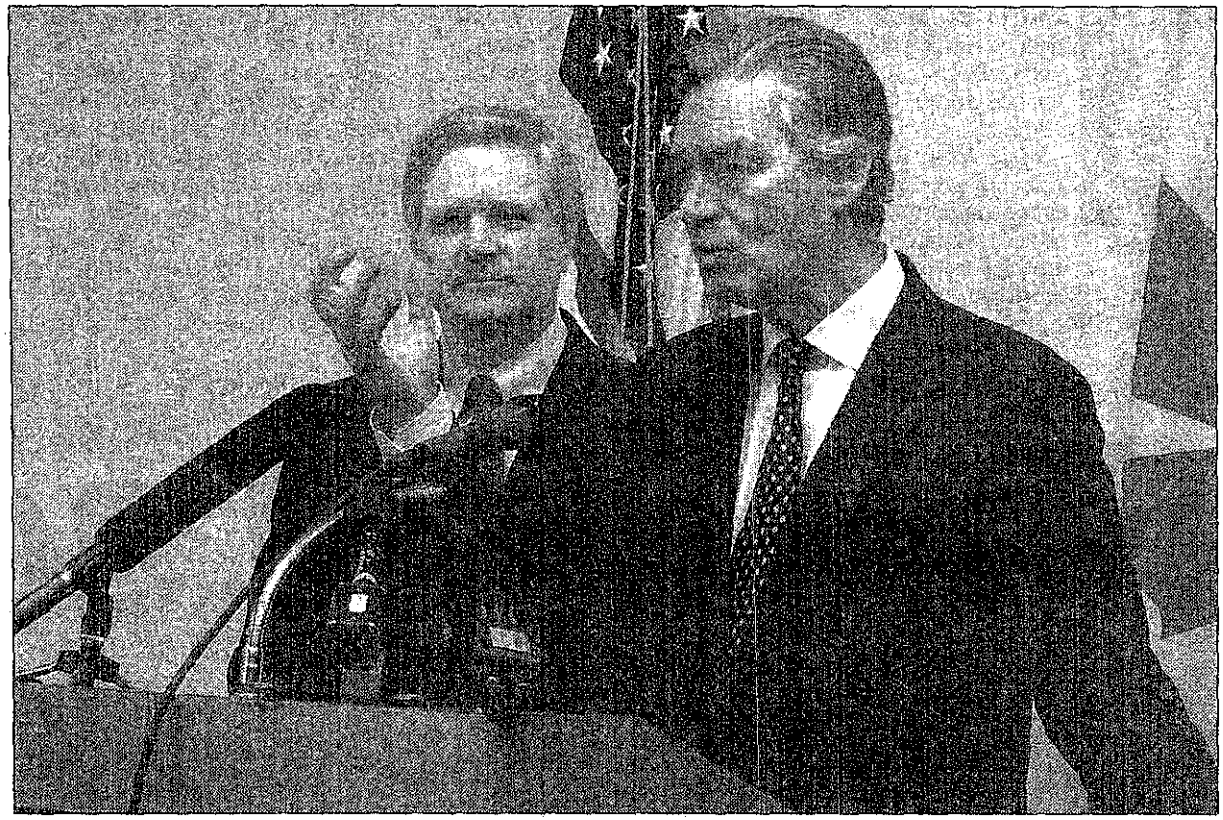
By MIKE NOWATZKI
Forum News Service

BISMARCK, N.D. — Canada's ambassador to the United States joined U.S. Sen. John Hoeven here Wednesday in making a renewed push for the Keystone XL pipeline that awaits President Barack Obama's approval, promoting it as key to achieving energy independence and security.

"When you look at the opportunity, it makes more sense to take oil from middle North America than rely on oil from the Middle East. We just think it's a no-brainer," Ambassador Gary Doer said during his keynote address at a trade and transportation summit put on by the Central North American Trade Corridor Association.

Hoeven, R-N.D., who during his 10 years as North Dakota's governor worked closely with Doer when he was Manitoba's premier, listed several reasons why he believes TransCanada's Keystone XL pipeline will win approval this year — firstly that the U.S. State Department's final Environmental Impact Statement found that the project will not have a significant environmental impact.

Doer said those who have opposed Keystone XL because of environmental concerns about the tar sands oil from western Canada argued that the oil would stay in the ground without the pipeline connecting Alberta to Gulf Coast refineries. But instead oil sands output has increased and it's moving to market by rail, which is more expensive and generates more greenhouse gases than pipelines, he said.



Forum News Service photo

Canadian Ambassador to the United States Gary Doer, right, talks about the Keystone XL pipeline with U.S. Sen. John Hoeven on Wednesday at the Ramkota Hotel in Bismarck, N.D.

The State Department report issued Jan. 31 said denying the pipeline isn't likely to slow the pace of Canadian oil sands development, though it did note that the Canadian crudes are generally more greenhouse gas-intensive than other heavy crudes they would replace in U.S. refinerie

Doer and Hoeven also highlighted the economic impact of the $5.4 billion project. The St Department estimates it would support 42,100 jobs during con struction and about 50 jobs on the pipeline is operating. Obam has questioned the estimate.

"We believe it just makes sense to go ahead with this pip line. We want the president to choose blue-collar workers ove Hollywood celebrities," Doer sa

The pipeline will have the in tial capacity to transport up to 100,000 barrels of Bakken cru and without it as many as 1,40 additional railcars carrying cru oil could pass through North Dakota and Minnesota daily, Hoeven said, citing the report.

Sen. Heidi Heitkamp, D-N.D and Rep. Kevin Cramer, R-N.D also have called on the preside to approve the pipeline.

Hoeven and Doer said they h approval comes before this yea construction season. If Obama doesn't approve the project, Hoeven said senators are work ing on three pieces of legislatio designed to overturn his decisi — though he noted they would require 60 votes in the Democ controlled Senate.

Bill authorizing Keystone pipeline gets panel's OK despite veto threat

By Dina Cappiello
Associated Press

WASHINGTON — Republicans pushed veto-threatened legislation to build the Keystone XL oil pipeline through a Senate committee Thursday, but Democrats blocked plans for an immediate debate in the full Senate.

The Energy and Natural Resources committee moved the bill closer to the floor on a 13-9 vote. Sen Joe Manchin of West Virginia, one of six Democrats sponsoring the bill, was the only committee Democrat to support it. The House will vote today on its version of the bill and is expected to pass the measure easily.

A few hours after the committee voted, Senate Majority Leader Mitch McConnell sought to begin Senate floor debate on the measure. Democrats objected, setting up a test vote for early next week that the bill is expected to clear easily.

The pipeline bill, the first piece of legislation in the Republican-controlled Senate, is on a collision course with the White House, and neither side appeared to be giving any ground on Thursday. The new energy committee chairman, Republican Sen. Lisa Murkowski of Alaska, urged colleagues not to be deterred by the veto threat, reminding them that the bill fell just one vote shy of Senate approval when Democrats controlled the chamber last year.

This time, the bill already has enough support to overcome a filibuster: 54 Republicans and six Democrats are sponsors. But supporters acknowledge they remain short of the numbers that would be needed to overcome a veto and already are discussing other means to get the pipeline approved.

Prior to the committee's vote, McConnell called on Obama to rescind his veto threat.

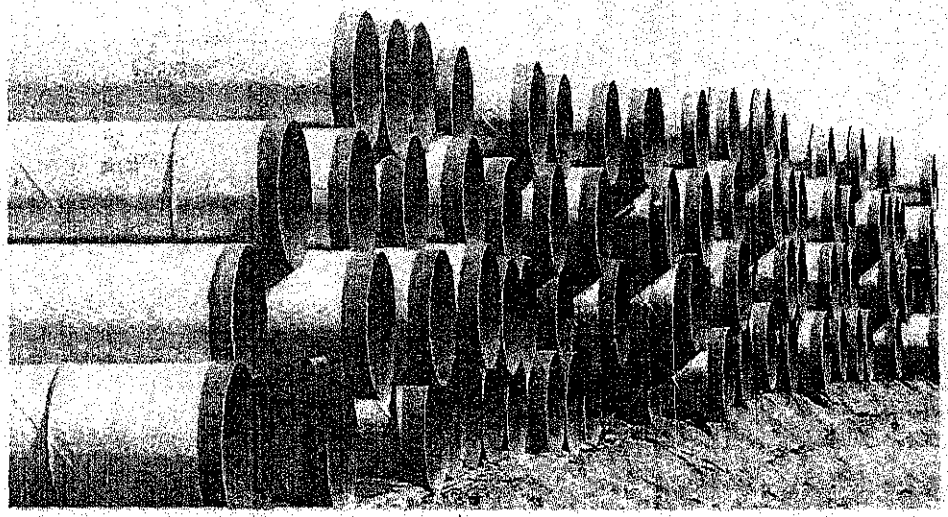
"So for a president who has said he'd like to see more bipartisan cooperation, this is a perfect opportunity," McConnell said in a statement.

While the $5.4 billion project has become a political lightning rod, it will have minimal impact on issues the two sides care most about. For Republicans, it is about jobs, and for liberal Democrats, it is about their concern about worsening climate change. In the State Department's evaluation of the pipeline, now on hold until a Nebraska court rules on the pipeline's route, officials said the tar sands would be developed regardless of whether the pipeline was built.

The same review said that during the two-year construction period, about 42,000 jobs would be created, but only 3,900 would be directly related to the pipeline that would carry oil from tar sands in Canada to the Gulf Coast, where it would be refined.

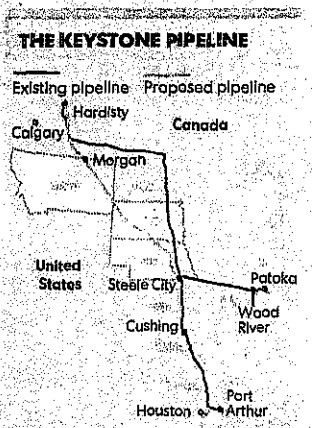
Democrats held off on introducing most amendments Thursday, saving them for the Senate floor.

But in comments that gave a hint of the debate to come, Sen. Bernie Sanders, a Vermont independent, offered an amendment that would put the entire Senate on record as recognizing that global warming is a threat and that the U.S. needs to transition as fast as possible away from fossil fuels. But he lost the attempt to add the amendment to the bill.



SUE OGROCKI/AP FILE

Miles of pipe ready to become part of the Keystone Pipeline wait near Ripley, Okla. Legislation to approve construction of the pipeline passed a key hurdle in the U.S. Senate Thursday.



Keystone XL foes use flattery to sway Kerry against oil pipeline

By Bloomberg News

WASHINGTON — Environmentalists are praising Secretary of State John Kerry in hopes of burying, figuratively speaking, the Keystone XL pipeline.

KERRY

Bill Burton, a former press secretary to President Barack Obama who is helping a coalition of environmental groups opposed to the project, calls Kerry, "one of the great climate leaders of his generation."

Dan Weiss, climate strategy director at the Center for American Progress, put Kerry on par with environmental icons like the naturalist John Muir and anti-pollution writer Rachel Carson. Academy Award winner Jared Leto, along with other activists, sent a letter last week urging him to take a stand against Keystone as he did against the Vietnam War as a young veteran in testimony to a Senate committee in 1971.

"We dare to believe that it's not just an accident of history that this recommendation falls to you," the group wrote.

The accolades are piling up just as Kerry, who was known as a leader in the fight against climate change when he was a senator, takes a more direct role in Keystone's review. The activists want their flattery to get them somewhere: a recommendation from Kerry that Obama scuttle the proposed project.

The pipeline from Alberta to Steele City, Neb. — most of which would be buried at a depth of greater than 3 feet — has become a benchmark for environmental groups to judge the administration's commitment on climate change.

At a Feb. 26 press conference with reporters, Kerry said he had intentionally stayed away from Keystone so that he could be seen as an impartial judge as to whether the project is in the national interest.

"I want to do it with a complete tabula rasa approach," he said, meaning he was looking at it from a clean slate. Now, he said, "I'm entering a very intensive evaluation."

Kerry thus far has left it to deputies to direct the process, including an environmental review that found Keystone wasn't likely to increase the risks of climate change because Alberta's oil sands would be developed anyway.

Poll shows strong support to go on with Keystone XL

By The Washington Post

Americans support the idea of constructing the Keystone XL oil pipeline between Canada and the United States by a nearly 3 to 1 margin, with 65 percent saying it should be approved and 22 percent opposed, according to a new Washington Post-ABC News poll.

The findings also show that the public thinks the massive project, which aims to ship 830,000 barrels of oil a day from Alberta and the northern Great Plains to refineries on the Gulf Coast, will produce significant economic benefits. Eighty-five percent say the pipeline would create a significant number of jobs, with 62 percent saying they "strongly" believed that to be the case.

Nearly half of those interviewed — 47 percent — say they think Keystone will pose a significant risk to the environment.

Several poll participants said they are convinced the pipeline represents the safest way to transport the oil the United States needs from a reliable ally, Canada. But a liberal minority — most of whom strongly support the president — said it will deepen the country's dependence on fossil fuels.

Both sides in oil line make final pleas to persuade government

By Bloomberg News

WASHINGTON — Proponents and critics of Keystone XL are unleashing a final flurry of pleas to persuade the government on the pipeline, which has become a flash point in a debate over energy development versus climate protection.

Friday marked the deadline to be part of the official review of whether Keystone is in the national interest. After that Secretary of State John Kerry will weigh in and President Barack Obama will decide whether to approve or scrap the long-delayed $5.4 billion plan by TransCanada Corp. to bring fuel from Alberta's oil sands to Gulf Coast refineries.

Most of the more than 15,000 comments submitted through Thursday reiterate arguments made during five years of review.

Foes said the project would worsen climate change by promoting development of Alberta's oil sands. Proponents said Keystone would help the economy and boost U.S. energy security.

Chris Mueller/Republic

U.S. Rep. Kristi Noem, R-S.D., speaks to students Friday afternoon at Mitchell High School.

US rep: Oil line OK likely before end of president's term

By CHRIS MUELLER
The Daily Republic

U.S. Rep. Kristi Noem believes President Barack Obama will decide whether to approve the proposed Keystone XL oil pipeline before the end of his term in 2016.

Noem supports the pipe-

See KEYSTONE, Page A6

Medicaid
Health plan critics tread lightly on federal program. A3

KEYSTONE

Continued from Page A1

line, which would carry crude oil from Canada through parts of Montana, South Dakota and Nebraska and on to refineries elsewhere in the U.S. It has been talked about for years, but definitive action has been slow in coming.

"I do believe it will be approved," Noem said in an interview Friday with The Daily Republic's editorial board at the newspaper's office in Mitchell. "I don't know necessarily if it will be approved before this next election."

At this point, Noem said, politics is likely more of a culprit for the delay than any lingering economic or environmental concerns.

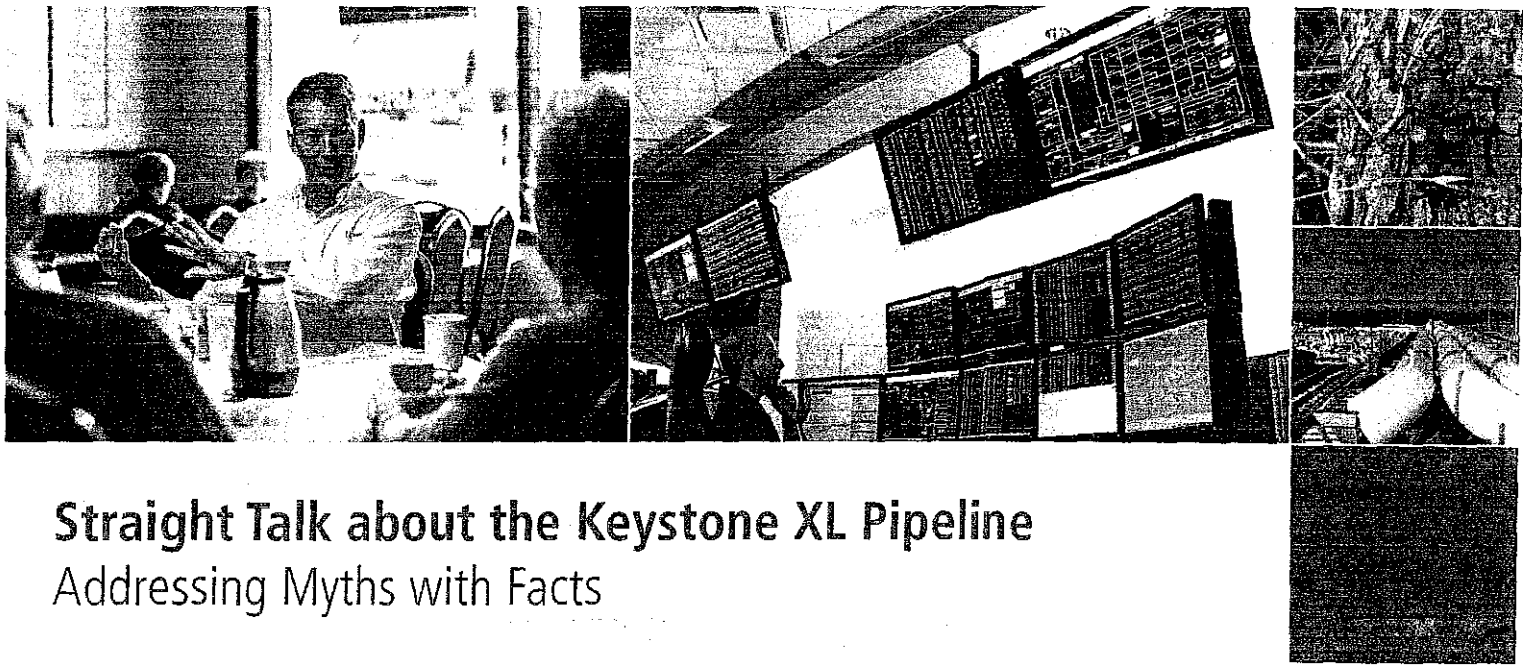
"It's certainly gone through all the processes," Noem said. "It's been under years of study and the route has been moved to safer environmental areas."

With many interests at stake on both sides of the issue, Noem said, it's hardly a surprise the process has taken such a long time.

"You've got people on both sides of the issue and it's been pretty contentious over the last several years," she said.

Whatever the outcome, the oil from Canada will find its way to American refineries whether by pipeline, Noem said, or in trucks and trains.

"Those are even riskier and harder on our environment," she said of the latter options.

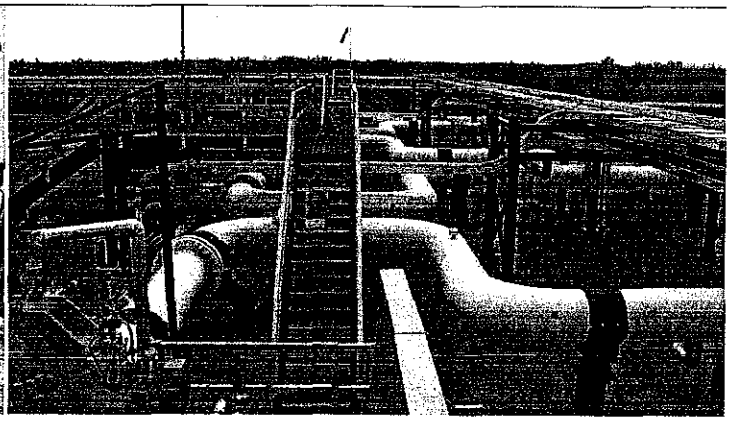


Straight Talk about the Keystone XL Pipeline

Addressing Myths with Facts

TransCanada
In business to deliver

TransCanada takes pride in the relationships we have with more than 60,000 landowners across North America.



The Keystone XL Pipeline will be buried a minimum of four feet below the surface. Only pump stations (above) will have piping above ground.

People along the proposed route have been asking many questions about the Keystone XL Pipeline. Many have concerns about the impact it will have on their land, their communities and on the United States as a whole. As we've been out talking to people we've heard a lot of misinformation. It's time to set the record straight and provide the facts about this critical piece of energy infrastructure.

1. **Myth:** Keystone XL Pipeline will not be a safe pipeline.

   Fact: It's clear that Keystone XL will be the safest pipeline ever built in North America. Keystone XL will use satellite technology to monitor 20,000 data points on the pipeline's operating conditions. TransCanada has also voluntarily agreed to 59 new safety procedures to provide even greater confidence regarding the operating and monitoring of Keystone XL. This includes a higher number of remotely controlled shut-off valves, increased pipeline inspections and burying the pipe deeper in the ground. The Department of State, Final Supplemental Environmental Impact Statement (Final SEIS - January, 2014) for Keystone XL concluded, "the incorporation of 59 special conditions would result in a project that would have a degree of safety over any other typically constructed domestic oil pipeline system under the current code".

2. **Myth:** Keystone XL will provide little or no economic benefits to the United States.

   Fact: The Keystone XL Pipeline project will support the creation of 9,000 construction jobs in the United States – work for pipefitters, welders, electricians, heavy equipment operators and many more. The Department of State noted in the Final SEIS that Keystone XL will contribute to America's long-term energy security, support tens of thousands of jobs, and provide billions in private sector investment, earnings and taxes. The Final SEIS report states:

   - Construction of the proposed project would contribute approximately $3.4 billion to U.S. GDP if implemented.
   - A total of 42,100 direct, indirect and induced jobs throughout the United States would be supported by construction of the proposed project.
   - Total employment earnings supported by the proposed project would be approximately $2 billion.
   - Seventeen of 27 counties along the pipeline route are expected to see tax revenues increase by 10 per cent or more.

3. **Myth:** Oil sands crude is more corrosive than conventional crude and will cause the pipeline to leak.

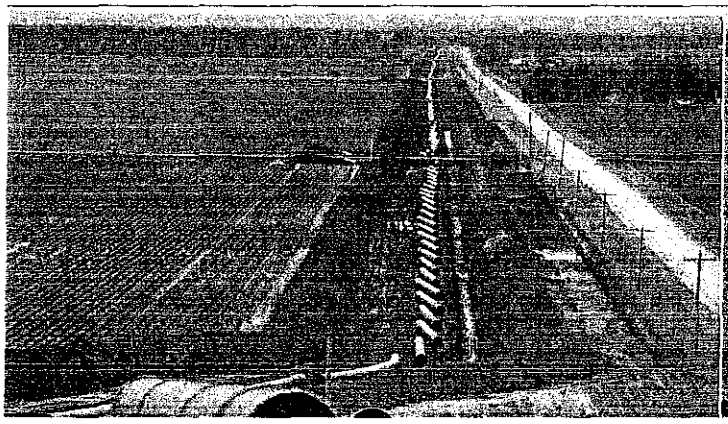
   Fact: Oil sands crude is no different than any other heavy crude and is completely safe to transport through pipelines. Keystone XL will carry light and heavier blends of oil from Canada and the U.S. Numerous world-renowned laboratory studies, including a study by the National Academy of Sciences, have shown that pipelines carrying oil sands oil are just as safe as other pipelines carrying crude oil. The study concluded diluted bitumen (dilbit) does not have unique properties that make it more likely than other crude oils to cause internal damage to pipelines from corrosion, nor is dilbit more likely to cause spills when compared to other crude oils.

4. **Myth:** The Keystone XL Pipeline is an export pipeline to China.

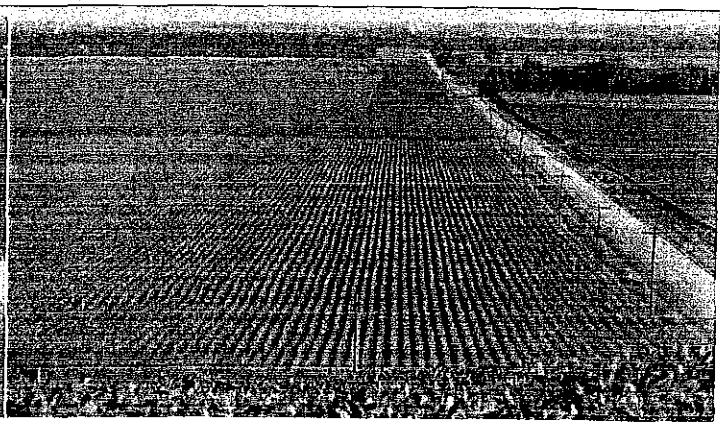
   Fact: Keystone XL will transport Canadian and U.S. crude oil to refineries on the Gulf Coast. The U.S. Gulf Coast currently relies heavily on imports from Venezuela and the Middle East. Growing U.S. and Canadian production will displace more expensive crude oils from less stable countries.

5. **Myth:** Keystone XL will substantially increase greenhouse gas (GHG) emissions.

   Fact: Since 2008, five Department of State environmental impact studies have consistently shown that Keystone XL will have "no significant impact on the environment". The most recent Final SEIS finds that if this project is approved, the public will see fewer spills, fewer injuries, and fewer fatalities when compared to the alternative of transporting crude oil by rail. Under any of the scenarios where the project is denied, GHG emissions from the movement of this oil would actually increase – 28 per cent more GHGs if all the oil is railed to the Gulf Coast, and 42 per cent higher GHGs if a combination of rail and new pipelines is used.



Near David City, Nebraska. Construction Spread 5B.
Photo taken June 15, 2009.



Near David City, Nebraska. After restoration.
Photo taken August 25, 2010.

6. **Myth:** The Keystone XL Pipeline is no longer needed.

   Fact: **Today, the United States consumes 15 million barrels of oil a day (bbl/d) and imports six to seven million barrels every day – close to 50 per cent of its needs.** A 2014 forecast by the Energy Information Administration (EIA) states that the U.S. will continue to import six million bbl/d into 2040 to meet its needs. Americans have a fundamental choice to make: get their oil from a secure, stable and friendly neighbor in Canada, or continue to import higher priced, "conflict oil" from the Middle East and Venezuela – where American values and interests are not shared or respected.

7. **Myth:** TransCanada will take land from farmers and other private landowners.

   Fact: **For a pipeline easement, property ownership never changes hands.** Just like a water, sewer or utility line on most people's property, when an easement is registered for the pipeline the landowner always retains ownership of the property and once construction is complete they continue to maintain the economic right to the surface. The landowner is able to continue to use the land for agricultural activities. Easement agreements only provide the right to access the pipeline right-of-way during construction and for maintenance, once the pipeline is in operation. With little exception, the landowners will continue to use their land within the easement and only signs along the pipeline let people know the pipeline route is there. TransCanada is committed to treating all landowners who may be affected by our project honestly, fairly and with mutual respect. All landowners will receive fair and equitable compensation for land easements granted. TransCanada will work closely with landowners to identify special circumstances, land restrictions, access routes and other construction requirements to minimize disturbance to the land and the environment.

8. **Myth:** Landowners are responsible and liable in the event of an oil spill.

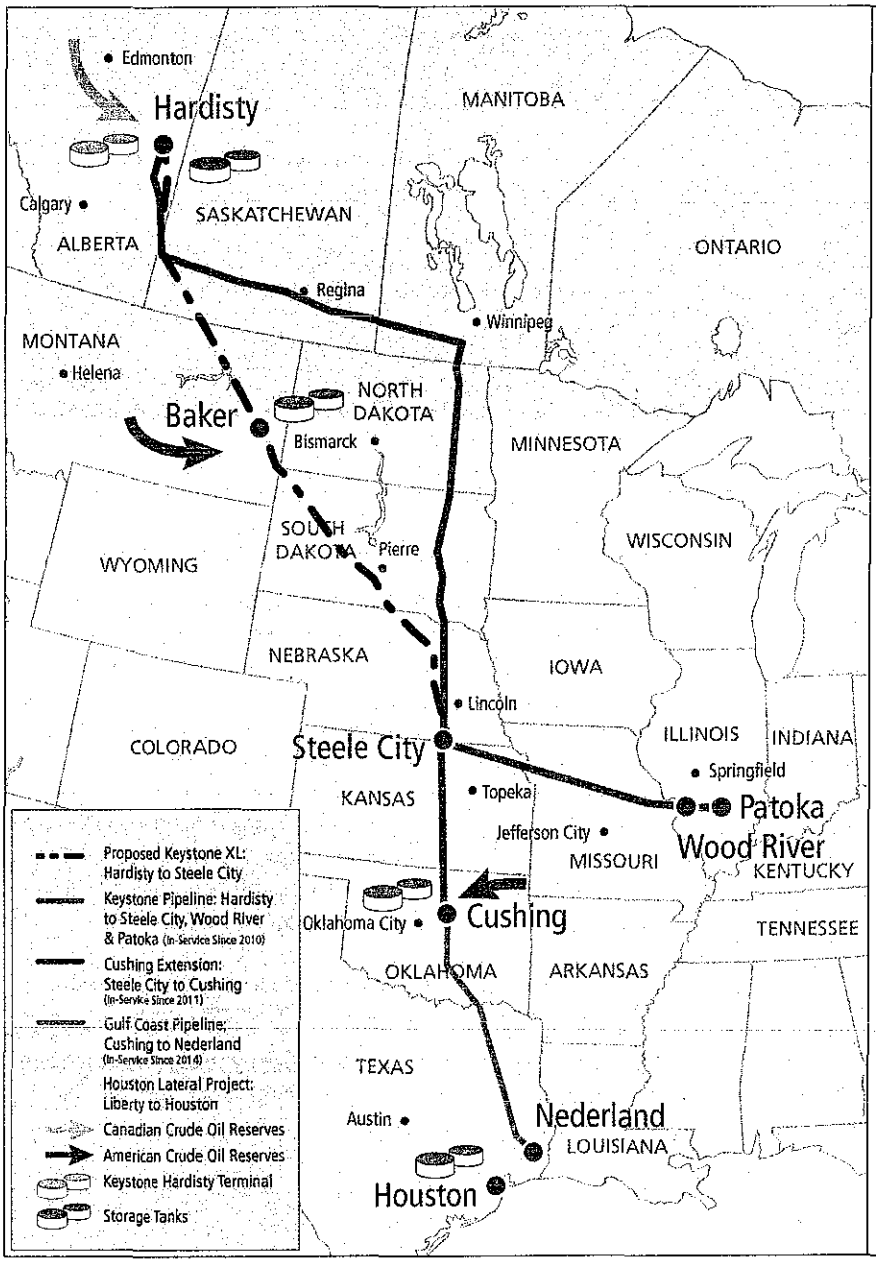
   Fact: **TransCanada is 100 per cent responsible for responding, cleaning and restoring the site in the unlikely event of a pipeline leak.** It's our responsibility – as a good company and under law. If anything happens on the Keystone XL Pipeline, rapid response is key. That's why our Emergency Response plans are approved by state and federal agencies, and why we practice them regularly. We conduct regular emergency exercises, and aerial surveys every two weeks. We're ready to respond with a highly-trained response team standing by. At TransCanada, we continually look at ways to improve our system. Since 2011, TransCanada has invested an average of about $900 million per year in its pipeline integrity and maintenance programs.

9. **Myth:** Landowners will have to give back payments negotiated for easements if the Keystone XL Pipeline isn't approved.

   Fact: **Landowners keep the money they received for easements from TransCanada.** We take pride in the relationships we have with more than 60,000 landowners across North America.

10. **Myth:** Once the pipeline is built, TransCanada has no further obligations to the farmer or private landowner.

    Fact: **Our commitment to landowners doesn't end when the Keystone XL Pipeline is built – that's when it begins.** The safety of the entire pipeline is our responsibility for as long as it operates, and it's a responsibility we take very seriously. Once completed, TransCanada will provide continuous state-of-the-art monitoring to ensure the Keystone XL pipeline operates safely. We will work closely with landowners to preserve the land and care for right-of-ways. TransCanada works with environmental experts and landowners to preserve topsoil and replant with the most appropriate native grass and plant species to promote rapid reclamation and erosion prevention. We monitor environmental reclamation for years following construction, and our job isn't done until landowners and regulatory agencies are satisfied.



About the Keystone System

The Keystone Pipeline System is a 3,861-mile (6,214-kilometre), 30 and 36-inch-diameter crude oil pipeline system, beginning in Hardisty, Alberta, and extending south to refining hubs in Illinois, Oklahoma and Nederland, Texas.

The system includes:

- Oil storage facilities in Hardisty, Alberta
- The Keystone Pipeline: a 1,853-mile (2,982-kilometre), 30-inch pipeline that delivers crude from the oil sands in Alberta to refinery hubs in Illinois and Oklahoma. The Cushing Extension has been in-service since 2011.
- Cushing Extension: an additional 298-mile (480-kilometre) pipeline extension between Steele City, Nebraska, and Cushing, Oklahoma. The Cushing Extension has been in-service since 2011.
- The Gulf Coast Pipeline: a 485-mile (780-kilometre), 36-inch pipeline that connects oil storage facilities in Cushing, Oklahoma with Gulf Coast refineries in Texas. The Gulf Coast Pipeline has been in-service since 2014.
- Bakken Marketlink and Cushing Marketlink Projects: provides access for domestically produced crude oil into the Keystone System.
- The Keystone XL Pipeline: a proposed 1,179-mile (1,897-kilometre), 36-inch, 830,000 barrel per day pipeline running from Hardisty, Alberta to Steele City, Nebraska.
- Houston Lateral Project: an additional 48-mile (77-kilometre) pipeline designed to transport oil to refineries in Houston, Texas.

When complete, the Keystone Pipeline System will be capable of transporting 1.4 million barrels of crude oil per day to state-of-the-art refinery hubs in the U.S. Midwest and Gulf Coast.

Contact Us

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TransCanada
In business to deliver

Crashed Train Carried 'Keystone Pipeline' Style Crude Oil

BY LISA RIORDAN SEVILLE

Federal investigators say a freight train that crashed outside Pittsburgh last week and spilled thousands of gallons of crude oil was carrying heavy Canadian crude, marking the first U.S. rail spill of the controversial oil at the center of the Keystone pipeline debate.

A 120-car Norfolk Southern train derailed on a curve in Vandergrift, Pa., at 8 a.m. Feb. 13 and crashed into a building. Twenty-one cars left the track and spilled from 3,500 to 12,000 gallons of the tar-like crude. About 75 percent of the spill has been cleaned up, and none entered the local water supply. No injuries were reported.

Oil production has surged in recent years in both North Dakota's Bakken region and the tar sands of Canada. Trains have become key to moving crude out of North Dakota, but a number of explosive accidents, including one that killed 47 in Quebec, have sparked calls for overhaul of the little-regulated "crude by rail."

The proposed Keystone XL Pipeline would move the Canadian tar-sand oil from Canada through the U.S. Plains states to the Gulf of

Mexico. But the pipeline, which is opposed by environmentalists, has been delayed, and on Wednesday a Nebraska judge struck down a law that would have sped up pipeline construction in that state.

Without sufficient pipeline capacity, some of the heavy crude has begun to move by rail, and regulators from the Federal Railroad Administration confirmed Thursday that the oil that spilled in Vandergrift on Feb. 13 was carbon-heavy tar-sand crude from Canada.

Canadian oil, which is much denser than Bakken crude, rarely explodes but poses other risks, particularly because it sinks in water. A 2010 pipeline breach along Michigan's Kalamazoo River that leaked more than 1 million gallons of Canadian crude has cost more than $1 billion so far to clean up.

"You can't just start running trains of tar sands all over the place without doing the work to make sure we're ready for that," said Eddie Scher, spokesman for the Sierra Club. "And we certainly haven't done that."

Rail and oil industry representatives have been meeting with regulators in efforts to come up with better policies to mitigate accidents and improve emergency response.

"Safety is always our top priority," said American Petroleum Institute President and CEO Jack Gerard in a statement.

First published February 21st 2014, 10:40 am

LISA RIORDAN SEVILLE

Federal regulators and the nation's major railroads said Friday that they had agreed on new voluntary measures to make shipping crude oil by rail safer, including rerouting trains, cutting their top speed and increasing inspections.

The agreement between the Department of Transportation and the industry's trade group, the American Association of Railroads, follows a series of crashes and derailments in North Dakota, Alabama, Pennsylvania and elsewhere. A train full of U.S. crude that crashed and exploded in Lac Megantic, Que. last July killed almost 50 people, and a train that derailed and burned in Casselton, N.D. in December sent plumes of black smoke a mile into the air.

"Safety is our top priority, and we have a shared responsibility to make sure crude oil is transported safely from origin to destination," said Transportation Secretary Anthony Foxx in a statement. "Today's changes will enhance safety while we continue to pursue our comprehensive approach focused on prevention, mitigation and emergency response through collaboration with our partners."

The voluntary measures, which will be rolled out between March and July, include:

• Slowing trains carrying more than 20 cars of crude oil that also include at least one old-style tank car to 40 miles per hour as they travel through some urban areas. The industry currently observes a self-imposed speed limit of 50 miles per hour.

• More track inspections

- New braking systems that allow for faster stops
- An analysis to determine the safest routes for trains carrying more than 20 tanks of crude
- Enhanced training and planning for emergency responders

Oil train traffic has ballooned from just 9,500 carloads in 2008 to about 400,000 last year, according to the Association of American Railroads (AAR), because of increased domestic oil production. Much of the increase comes from the oil boom in the Bakken region of North Dakota. About 70 percent of Bakken oil moves by rail, in part because of limited pipeline infrastructure.

But with that increase has come an exponential increase in crashes and spills. About 1.15 million gallons of oil spilled from trains last year, according to data from the federal Pipeline and Hazardous Material Administration. That's nearly double the 800,000 spilled in all the years between 1975 and 2012, and does not include the approximately 1.5 million gallons spilled in Lac Megantic from a train that originated in North Dakota.

Critics say safety was pushed to the side as both the rail and oil industries sought to cash in on the domestic energy boom.

"Regulatory authorities in Canada and the United States all agree that the crude by rail boom has happened in what is a regulatory blind side," said Anthony Swift, an attorney with the National Resources Defense Council, an environmental group. "There's no question that nationally we need better protections for public safety when it comes to crude by rail."

Today's announcements, expected in the wake of meetings between oil and rail industry representatives and federal regulators last month, are meant to address some significant concerns in communities given the recent crashes.

"We share the Administration's vision for making a safe rail network even safer, and have worked together to swiftly pinpoint new operating practices that enhance the safety of moving crude oil by rail," said AAR President and CEO Edward R. Hamberger.

The industry has taken the lead on safety measures as federal regulators work to catch up.

Several railroads and oil companies have in recent weeks announced moves to increase safety by mandating the use of safer tank cars, known as the DOT-111. Last summer an NBC News investigation revealed long-known problems with the cars.

Read the original NBC News investigation into the DOT-111.

The industry has begun to produce a sturdier version, but tens of thousands of the older cars continue to transport crude and ethanol.

Canadian Pacific and Canadian National, the country's two largest railroads, in early February announced they would charge higher rates to oil companies that used the older model cars. Two oil companies -- Tesoro and PBF Energy -- also announced they would update their entire fleet to the newer cars by April.

This week, BNSF Railway, which owns the majority of the rail lines in the Bakken region, announced it would acquire its own fleet of 5,000 new tank cars, marking a change in the status quo. Normally, the shippers own the cars and the railways simply move them, giving railroads little control over the types of cars that move over their tracks.

The oil industry also said this week that in addition to participating in these safety measures it will step up testing and labeling of crude, which recent crashes indicated may have been more dangerous than previously known.

Broad coalition backs Keystone XL oil pipeline

By MATTHEW DALY
Associated Press

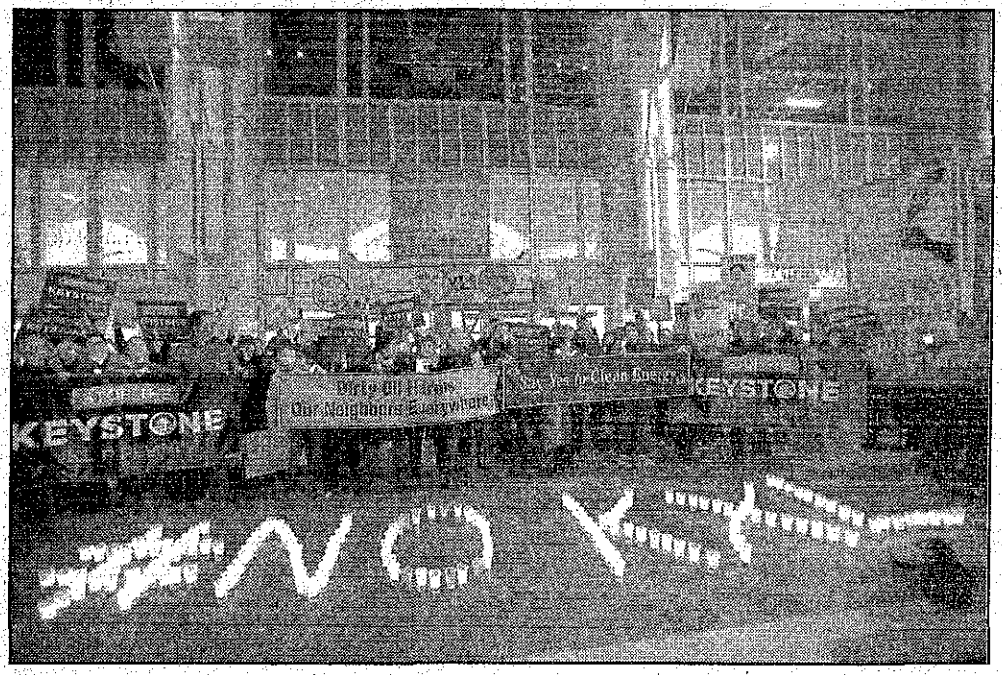
WASHINGTON — An unusual coalition of lawmakers from both parties, labor and business leaders, veterans groups and Canada's ambassador to the United States joined forces Tuesday to push for quick approval of the Keystone XL oil pipeline.

Five Democrats joined Republicans at a Capitol news conference to urge President Barack Obama to approve the pipeline following a State Department report last week that raised no major environmental objections. The $7 billion pipeline would carry oil from tar sands in western Canada to refineries along the Texas Gulf Coast. The project has lingered for more than five years and has become a symbol of the political debate over climate change.

Canadian Ambassador Gary Doer also spoke at the news conference, along with labor union officials and a retired Navy admiral. A top oil industry lobbyist attended the event but did not speak.

Environmental groups that oppose the pipeline have been making a lot of "noise," Doer said, but polls show a majority of Americans favor the project. Pipeline opponents, including many Democratic lawmakers, say it would carry heavy oil that contributes to global warming. They also worry about a spill.

Doer urged Obama to "choose blue-collar workers over Hollywood celebrities" and accept crude oil from Canada — the closest U.S ally — over oil from Venezuela. Robert Redford and Daryl Hannah are among scores of celebrities who have spoken out against the pipeline.



Reuters photo

Demonstrators rally against the proposed Keystone XL oil pipeline Monday in San Francisco, Calif.

Sen. Mary Landrieu, D-La., said the time to build the pipeline "is now," adding that pipelines are safer and more environmentally friendly than oil that is transported by trains or trucks. Keystone XL, proposed by Calgary-based TransCanada Corp., not only would create jobs and boost her state's economy, it also would "connect two of the strongest allies in the world," Landrieu said.

"I would swap Canada for Venezuela any day of the week and twice on Sunday," added Rep. John Barrow, D-Ga., another pipeline supporter.

A report released Friday by the State Department cited no major environmental objections to the 1,179-mile pipeline, which would carry oil through Montana and South Dakota to a hub in Nebraska, where it would connect with existing pipelines to get the oil to refineries on the Texas Gulf Coast.

Pipeline supporters say it will create thousands of jobs and move the U.S. toward North American energy independence.

Foes say the pipeline would carry "dirty oil" that contributes to global warming. The State Department report says oil derived from tar sands in Alberta generates about 17 percent more greenhouse gas emissions than traditional crude. But the report makes clear that other methods of transporting the oil — including rail, trucks and barges — would release more greenhouse gases than the pipeline.

The news conference in support of the pipeline came as environmental activists held vigils throughout the country on Monday to protest the pipeline, including one outside the White House attended by about 250 people.

Opponents also are scheduling "pipeline meet-ups" throughout February to encourage people to raise the issue with candidates in the 2014 elections.

Joining Landrieu and Barrow at the Capitol event Tuesday were Democratic Sens. Joe Manchin of West Virginia, Heidi Heitkamp of North Dakota and Mark Pryor of Arkansas. Landrieu and Pryor face tough re-election fights this year in energy-producing states where the pipeline is popular and Obama is not. Republican Mitt Romney easily carried Louisiana and Arkansas in the 2012 presidential election.

Landrieu, who is expected to become chairwoman of the Senate Energy Committee later this month, said she is "open to whatever needs to be done" to approve the pipeline, including use of the project as a bargaining chip with Republicans in upcoming talks over raising the federal debt limit.

Keystone Canadian oil shipped to U.S. for years

By Merrill Matthews

Here's a little-known fact: The Keystone pipeline system has been transporting oil sands from Canada to U.S. refineries in the Midwest for three years -- with no major leaks and, more importantly, no major complaints from environmentalists.

The Keystone pipeline project includes four phases. The Keystone XL that has received so much media attention is only the last phase.

Phase 1 has been operating since 2010, carrying oil from Alberta across three Canadian provinces and six states to refineries in Illinois. Phase 2 put a link connecting the Phase 1 pipeline from Steele City, Nebraska, to Cushing, Oklahoma, a major U.S. oil refining and storage hub. It went operational two years ago, again with no major problems or complaints.

Phase 3 is currently under construction, extending the pipeline from Cushing to the Gulf refineries in Texas. President Obama even gave a speech in Cushing in March 2012--during his reelection bid--praising the pipeline extension as good for the economy.

The Keystone XL, the proposed Phase 4, would build a separate pipeline from Alberta, crossing only three states (Montana, South Dakota and Nebraska), and connecting to the existing pipeline in Steel City

While the Keystone XL would have the capacity to deliver more oil--830,000 barrels a day vs. 590,000 for Phase 1--its U.S. footprint is more than 200 miles shorter than Phase 1.

Environmentalists complained that Phase 4 would transport oil across environmentally sensitive areas of Nebraska. Governor Dave Heineman expressed similar concerns. So the pipeline builder, TransCanada Corp., has proposed to reroute the pipeline, which satisfied the governor and the Nebraska legislature. Even the U.S. State Department has said the risks are minimal

One reason TransCanada located the Phase 4 route where it did was to transport up to 100,000 barrels a day of U.S. crude oil from the Bakken reserves in North Dakota and Montana. That means the Keystone XL would be shipping high-quality U.S. oil to U.S. refineries.

Mr. Obama has recently turned defensive, claiming that the pipeline won't create many permanent jobs. But pipeline jobs are infrastructure jobs, and the president is promoting more infrastructure spending to create jobs.

Phases 1 and 2 directly employed nearly 9,000 workers on U.S. facilities and pipelines. Phase 3 currently employees about 4,000 workers. Those aren't debatable projections; those are real Americans working at high-wage jobs. And the pipeline jobs won't cost the government a dime. In fact, the government will gain revenue from them.

The Keystone XL is also a trade-deficit reducer. News reports say that the U.S. trade deficit declined by 22 percent in the last quarter, primarily due to importing less oil. Rejecting the XL means that much of that Canadian oil will be shipped to China for refining instead. And seeing that oil go elsewhere when foreign hot spots like Syria can drive up oil prices or threaten supplies is not a good idea.

Unfortunately, environmentalists don't seem to care about the Keystone XL's economic merits. They have decided to draw a line in the oil sand at Phase 4. But surely they know that the U.S. leads the world in refining. If Canadian oil is going to be refined, and it is, better to do it under U.S. standards and quality controls. And U.S. workers get the benefits.

The fact is that the Keystone XL pipeline is simply an extension of an already existing program that is working well, creating jobs and expanding U.S. manufacturing. It should be an easy, and quick, decision for any president concerned about the economy.

Merrill Matthews is a resident scholar at the Institute for Policy Innovation in Dallas, Texas.

Larry -
This article was in our l/a weak paper last night. I did not know all the back-ground of the Keystone present system. They should get this info out to the general public & congress so pressure can be put on Obama (if that will do any good).
Ken

NYC Group Acquires Maine Railroad Involved in Deadly July Derailment

By David Sharp
Associated Press

PORTLAND, Maine — A railroad that went bankrupt after a fiery oil train derailment killed 47 people last summer in Canada was sold at auction Jan. 21 to a subsidiary of a New York City-based investment management company.

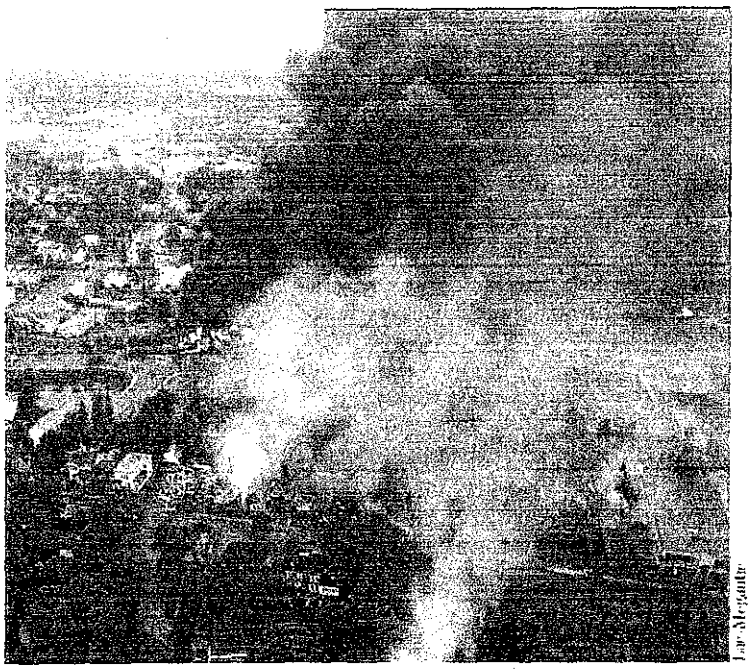
Railroad Acquisitions LLC, a subsidiary of Fortress Investment Group, won the closed-door bidding for Montreal, Maine and Atlantic Railway, according to one of the losing bidders. The winning bid still has to go before a U.S. bankruptcy judge in Maine and a Superior Court judge in Quebec.

The Fortress subsidiary had submitted a bid of $14.25 million. A Fortress spokesman didn't immediately return a call seeking comment on the auction.

More than a dozen companies expressed interest in the bankrupt company, which owns about 500 miles of track in Maine, Vermont and Canada, although it is unknown how many submitted bids.

One bidder, Eastern Maine Railway, a subsidiary of Canada-based J.D. Irving, said it partnered with Springfield Terminal Railway Co. to bid for the Maine portions of the track.

"In the end, the trustee went forward with a single buyer of the entire MMA railway line [Maine, Quebec and Vermont track]. We look forward to working with Fortress Investment Group of New York as they assume operation of the MMA railway," Wayne Power, vice president of Irving's transportation and logistics division, said in a statement.



Jan Megantic

The railroad that went bankrupt after this fiery oil-train derailment last summer in Quebec was sold at auction Jan. 21.

Chapter 11 trustee Robert Keach declined to comment on the proceedings, but said previously that the goal was to recoup losses for creditors while keeping the entire rail line in operation.

In the July derailment, an unmanned Montreal, Maine and Atlantic Railway train with 72 oil tankers began rolling after it was left unattended by the sole crew member. The train picked up speed and derailed in downtown Lac-Megantic, causing an explosion and fire that destroyed about 30 buildings in the community 10 miles north of the Maine border.

Proceeds from the company's sale would be used to repay creditors and victims, supplementing $25 million in insurance payouts available for wrongful death, personal injury, property damage, fire suppression and environmental impact.

Critics say the cleanup alone will exceed $25 million.

Chop Hardenbergh, editor of Atlantic Northeast Rails & Ports, a Maine-based industry newsletter, said he waited outside the law offices where the auction was held and learned that the auction took only 40 minutes.

Fortress has a reputation for turning around distressed companies, he said.

Backers: Report on rail risks boosts Keystone XL

WASHINGTON (AP) — A government warning about the dangers of increased use of trains to transport crude oil is giving a boost to supporters of the long-delayed Keystone XL pipeline.

U.S. and Canadian accident investigators urged their governments Thursday to impose new safety rules on so-called oil trains, warning that a "major loss of life" could result from an accident involving the increasing use of trains to transport large amounts of crude oil.

Pipeline supporters say the warning highlights the need for Keystone XL, which would carry oil derived from tar sands in western Canada to U.S. Gulf Coast refineries.

North Dakota Sen. John Hoeven said the yearslong review of Keystone has forced oil companies to look for pipeline alternatives in the booming Bakken region of North Dakota and Montana.

US Officials: More Safety For Oil Transported by Rail

By Matthew Brown
Associated Press

U.S. transportation officials on Jan. 16 pressed for companies to come up with safer ways to transport oil on the nation's rail lines following some explosive accidents as crude trains proliferate across North America.

After a closed-door meeting with oil and railroad executives in Washington, D.C., Transportation Secretary Anthony Foxx said the industry agreed to make voluntary changes aimed at accident prevention within the next 30 days.

Topping the list are plans to analyze the risks of oil trains that in recent years began passing regularly through major metropolitan areas across the United States, Foxx said. The results could be used to alter some routes, government officials said. Railroads also will consider where oil trains could be slowed down, to lessen the potential danger in areas that pose the greatest threat to public safety.

"The industry, if they are motivated, can undertake preventative steps that will enhance the safety of the movement of these materials across the country," Foxx said.

The Obama administration is under increased pressure to take action after fiery accidents over the past seven months in North Dakota, Quebec, Alabama and New Brunswick.

But a safety advocate said the proposed measures fail to address a crucial and long-standing problem: defects in many of the tank cars used to haul crude.

"Just moving the problem around is not solving it," said Karen Darch, president of the village of Barrington, Ill., and co-chairman of a coalition of local officials who have pushed for rail safety enhancements. "If you did that, you are creating too high a risk for the area where [oil trains] might be rerouted."

The accidents have revealed significant gaps in federal oversight of the rail industry, and emergency officials in cities and towns across America have said they would be ill-prepared to handle another derailment.

Under current rules, shipments of most hazardous liquids including oil do not have to undergo the type of risk studies that were proposed. Those studies are limited to a handful of radioactive, explosive and highly toxic chemicals.

The rapid expansion of crude-by-rail has been fueled by booming U.S. production of shale oil, particularly in the Bakken oil patch of North Dakota and Montana. Trains hauling 3 million gallons of crude per shipment to refineries go through hundreds of towns and dozens of cities, from Chicago and Kansas City, to Philadelphia and Seattle.

Last year, after a runaway train hauling North Dakota crude derailed and exploded in the town of Lac-Megantic, Quebec, incinerating much of the downtown and killing 47 people, the rail industry adopted voluntary speed restrictions for trains hauling hazardous liquids.

Guidelines issued by the Association of American Railroads in August capped speeds at 50 mph for trains hauling 20 or more tank cars of crude. It's unclear how the speed reductions proposed Jan. 16 would be different.

Experts say the same high-grade qualities that make Bakken oil attractive to companies also can make it prone to ignite during an accident. Regulators who have been analyzing the oil earlier this month issued a public safety warning that the light, sweet crude from the Bakken may be more flammable than traditional heavy crude.

North Dakota Sen. John Hoeven attended the meeting along with other members of the state's congressional delegation. He characterized the results as a "step in the right direction" but said there was more work to do given projections that domestic oil production will keep growing and companies will continue moving it by rail.

Railroads recently began pushing for retrofits to improve the safety of 78,000 older, defective tank cars that make up the bulk of traffic hauling oil and other hazardous liquids. Oil companies that own or lease the tank cars have resisted retrofits that could cost $1 billion.

The oil industry contends defective track, train-on-train collisions and other matters under the purview of the railroads make up the "root cause" of accidents. During the meeting, American Petroleum Institute President Jack Gerard told Foxx that the best way to improve safety is "to keep trains from going off the tracks," according to a statement from the group.

Government regulators declined to give a timeline on pending proposals for tank car safety improvements.

TRANSPORT TOPICS 1-27-2014

Poll: Canadian support for Keystone XL declining

By THEOPHILOS ARGITIS
Bloomberg News

OTTAWA — TransCanada Corp.'s proposed Keystone XL pipeline is losing popular support in Canada, a development that could embolden opponents of the project, according to a poll released Wednesday by Nanos Research Group.

Canadian support for the $5.4 billion link between Alberta's oil sands and Gulf Coast refineries has declined to 52 percent in December from 68 percent in April, while opposition has increased to 40 percent from 28 percent. The survey of 1,000 Canadians taken between Dec. 14 and Dec. 16 has a margin of error of 3.1 percentage points, according to the Ottawa-based agency.

Working on the pipeline, eh?
North Dakota senators, Canadian officials talk about project. A4

The poll adds to evidence that a push b environmental groups, aboriginal activists and celebrities such as musician Neil Young opposed to big oil projects may be affecting public opinion. President Barack Obama's government is weighing whether to approve TransCanada's plans. Canadian Prime Minister Stephen Harper is a stron proponent of the pipeline, a key part of th

See PIPELINE, Page A4

PIPELINE

Continued from Page A1

country's plans to find new markets for its oil.

The Canadian government "has to be concerned about the erosion of approval in Canada, not just in terms of its impact in Canada but also in terms of the U.S.," Nik Nanos, president of Nanos Research and Global Fellow at the Woodrow Wilson International Center for Scholars, said in an interview. "This has implications for the anti-Keystone movement in both countries."

Keystone is becoming a barometer for many environmental groups on Obama's commitment to addressing climate change.

The State Department is overseeing the review of the pipeline because it crosses an international border. The agency is preparing a final version of an environmental review that will assess whether Keystone would contribute to greenhouse gas emissions, which many scientists believe are warming the planet.

A State Department official said Wednesday the agency will give the public more time to comment on the pipeline, which could delay the final decision.

A Bloomberg National Poll in December showed support in the United States was at 56 percent of respondents. That survey also found that 58 percent said they want Canada to take steps to reduce carbon dioxide emissions as a condition for approval.

Canadian oil-sands developers are counting on Keystone XL to lift heavy crude prices by connecting them to the U.S. Gulf Coast, the world's largest refining center, as they double production by 2025.

Keystone would ship about 830,000 barrels a day.

Environmentalists are trying to block the line because they say it would encourage oil-sands development, which releases more of the carbon dioxide that scientists say is warming the planet than extracting some conventional crudes.

A glut of oil caused by a lack of transportation options for Alberta production has led to Canadian heavy crude selling last year for an average $24.46 a barrel less than the U.S. benchmark.

Other proposed pipeline projects for Albertan oil include Enbridge Inc.'s Northern Gateway pipeline to the Pacific coast that also faces opposition from environmental and aboriginal groups and a separate TransCanada pipeline to transport oil to eastern Canada.

Canada's government has been staging a public relations battle with opponents of the nation's oil industry for years. The latest volley came from Neil Young, the Canadian folk singer famous for songs such as "Heart of Gold" and "Old Man," who held a press conference and a concert in Toronto last week to protest development of the oil sands. He compared the environmental impact to the 1945 bombing of Hiroshima in Japan.

That comparison "is as inaccurate as it is insulting to victims," Natural Resource Minister Joe Oliver told reporters Wednesday on a conference call.

The Nanos poll also found that 94 percent of Canadians have heard of the project, up from 92 percent in April. Of those surveyed, 48 percent had a positive impression of the project, down from 60 percent in April.

DAILY REPUBLIC 1-16-2014

Keystone Canadian oil shipped to U.S. for years

By Merrill Matthews

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Phase 1 has been operating since 2010, carrying oil from Alberta across three Canadian provinces and six states to refineries in Illinois. Phase 2 put a link connecting the Phase 1 pipeline from Steele City, Nebraska, to Cushing, Oklahoma, a major U.S. oil refining and storage hub. It went operational two years ago, again with no major problems or complaints.

Phase 3 is currently under construction, extending the pipeline from Cushing to the Gulf refineries in Texas. President Obama even gave a speech in Cushing in March 2012--during his reelection bid--praising the pipeline extension as good for the economy.

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The Keystone XL is also a trade-deficit reducer. News reports say that the U.S. trade deficit declined by 22 percent in the last quarter, primarily due to importing less oil. Rejecting the XL means that much of that Canadian oil will be shipped to China for refining instead. And seeing that oil go elsewhere when foreign hot spots like Syria can drive up oil prices or threaten supplies is not a good idea.

Unfortunately, environmentalists don't seem to care about the Keystone XL's economic merits. They have decided to draw a line in the oil sand at Phase 4. But surely they know that the U.S. leads the world in refining. If Canadian oil is going to be refined, and it is, better to do it under U.S. standards and quality controls. And U.S. workers get the benefits.

The fact is that the Keystone XL pipeline is simply an extension of an already existing program that is working well, creating jobs and expanding U.S. manufacturing. It should be an easy, and quick, decision for any president concerned about the economy.

Merrill Matthews is a resident scholar at the Institute for Policy Innovation in Dallas, Texas.

Deadly Derailment Won't Stop Oil on Trains

By Jonathan Fahey
Associated Press

NEW YORK — A train loaded with crude oil could soon roll through a town near you.

A fiery and fatal train derailment in July in Quebec, near the Maine border, highlighted the danger of moving oil by rail. But while the practice could be made safer, it won't be stopped in its tracks. This year, more trains carrying crude will chug across North America than ever before — nearly 2,400 carloads a day. In 2009, there were just 31 carloads a day.

Since the July 6 tragedy in Lac-Megantic, where a runaway train carrying 72 carloads of crude derailed and killed 47 people, there have been calls for tougher

Analysis

regulations, stronger railcars and more pipelines.

But experts say the oil industry's growing reliance on trains won't be derailed anytime soon. There's just no other way to get vast amounts of oil from North Dakota and Rocky Mountain states to refineries along the coasts, which are eager for cheaper, homegrown alternatives to imports brought in by boat.

"Stopping crude by rail would be tantamount to stopping oil production in a lot of the places it is now being produced," said Michael Levi, who heads the Council on Foreign Relations' program on energy security and climate change.

Even safety experts worried about the dangers of shipping oil by rail acknowledge that the safety

(Continued on next page)

record of railroads is good — and improving. The scope of the Lac-Megantic disaster, which is still under investigation, appears to have been the result of uniquely bad circumstances, these experts say.

"Rail is going to remain a significant part of the way we move crude around the country for a long time," said Jason Bordoff, head of Columbia University's center on global energy policy. "I don't think this rail accident will significantly change that."

In the first half of this year, U.S. railroads moved 356,000 carloads of oil. That's a 48% increase from the same period last year and 66 times more than the same period of 2009. The Railway Association of Canada estimates that as many as 140,000 carloads of crude oil will be shipped on Canada's tracks this year, up from 500 carloads in 2009.

Whether crude traffic on the rails will continue to grow quickly depends on oil prices around the globe, but many North American refineries are gearing up for more.

While crude transport by rail has grown quickly, it still is a relatively small part of train traffic and the crude trade.

Just 1.4% of U.S. rail traffic in the first half of this year was crude oil, according to the Association of American Railroads, an industry group. Pipelines and tankers remain by far the most important way to move crude. Railroads and trucks together supplied just 3% of the crude oil that arrived at refineries last year, according to the Energy Department.

And of all the hazardous material trains carry, crude isn't the most volatile or hazardous.

Trains transport materials such as chlorine, phosphoric acid and propane — even rocket fuel for the space shuttle was moved by train. Railroads also move three quarters of the nation's ethanol — which is quicker to explode than crude — from Midwest farms to fuel terminals around the country for blending into gasoline.

Last year, the National Transportation Safety Board issued a safety recommendation to the Department of Transportation that suggested that all tank cars that carry crude and ethanol be outfitted with stronger protective equipment. The Lac-Megantic accident increases pressure on regulators to adopt at least some of the recommendations, experts say.

Rail shipments of crude have spiked because oil is being produced in North Dakota in volumes far beyond what drillers had predicted five years ago. Pipelines take years to build and can be difficult to acquire land and permits for, so drillers and refiners needed railroads to quickly move the oil.

There also was big money to be made.

North Dakota crude has been selling for significantly less than similar crude that coastal refineries had been importing from the North Sea and West Africa. Even with the extra cost of shipping by rail, the benefit to refiners' bottom lines is sizable.

Railroads such as Union Pacific and Burlington Northern Santa Fe also were eager to transport more oil by train. It has helped offset a steep decline in coal shipments, which occurred as the drilling boom led more utilities to produce electricity with natural gas.

But the torrid growth of crude shipments by rail isn't likely to continue.

Several new pipelines are planned, and prospects for controversial ones, such as the Keystone XL, may be helped by the devastation in Lac-Megantic. Pipeline spills generally release more oil than train spills, but they are less frequent and not as dangerous to people.

Also, the price difference between North Dakota crude and imported crude, which had been as high as $35 a barrel in November, has recently fallen to just $3 a barrel, thanks in part to rising rail shipments.

Delivery of crude by rail will have staying power, though, experts say.

"Initially, rail was a placeholder, but [refiners] like the flexibility and speed to market it offers," said Anthony Hatch, a transportation analyst and consultant.

Shipping crude by rail is roughly $5 to $10 per barrel more expensive than shipping it by pipeline. But pipelines require refiners to enter into long-term contracts for delivery.

TRANSPORT TOPICS 8-19-2013

OAK CREEK RANCH

[redacted] • Mills, NE 68753

LARRY CROUSE

[redacted]
Burke, SD 57523
[redacted]

[redacted]
Sun Lakes, AZ 85248
[redacted]

Nancy Hilding
President
Prairie Hills Audubon Society
[redacted]
Black Hawk, SD 57718
July 6, 2015.

Attached find exhibits re Keystone XL

#1. Downloaded web page from State Dept for FSEIS

#2 Downloaded web page from State Dept for FEIS
Also cover page of FEIS

#3 Final Supplemental Environmental Impact Statement
Executive Summary
about 44 pages, superseding

#4 Canadian Energy Pipeline Association -
Pipeline Abandonment Assumptions
Sept 2006 - April 2007
about 23 pages - I did not include Appendix which would add 60 or so more pages

over

these documents are offered to supplement my statement

#1

Hilda July 6 2015

PROJECT INFORMATION

Project Home Page
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Final Supplemental Environmental Impact Statement (SEIS)

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Executive Summary

Executive Summary [3675 Kb]

Errata Sheet

Errata Sheet [4197 Kb]

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1.5 Agency Participation [231 Kb]
1.6 Tribal and SHPO Consultation [27 Kb]
1.7 Environmental Review of Canadian Portion [42 Kb]
1.8 Preparation of Publication [132 Kb]
1.9 Permits, Approvals, and Regulatory Requirements [197 Kb]
2.0 Description of the Proposed Project and Alternatives [448 Kb]
2.1 Overview of the Proposed Project [8002 Kb]
2.2 Description of Reasonable Alternatives [6679 Kb]

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3.5 Terrestrial Vegetation [3984 Kb]
3.6 Wildlife [1613 Kb]
3.7 Fisheries [767 Kb]

3.8 Threatened and Endangered Species [1334 Kb]
3.9 Land Use, Recreation, and Visual Resources [742 Kb]
3.10 Socioeconomics [4215 Kb]
3.11 Cultural Resources [1090 Kb]
3.12 Air Quality and Noise [651 Kb]
3.13 Potential Releases [535 Kb]

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4.2 Soils [696 Kb]
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4.4 Wetlands [631 Kb]
4.5 Terrestrial Vegetation [2866 Kb]
4.6 Wildlife [414 Kb]
4.7 Fisheries [402 Kb]
4.8 Threatened and Endangered Species [1017 Kb]
4.9 Land Use, Recreation, and Visual Resources [878 Kb]
4.10 Socioeconomics [2236 Kb]
4.11 Cultural Resources [477 Kb]
4.12 Air Quality and Noise [1474 Kb]
4.13 Potential Releases [2016 Kb]
4.14 Greenhouse Gases and Climate Change [2528 Kb]
4.15 Cumulative Effects Assessment and Extraterritorial Concerns [5503 Kb]
4.16 Summary of Impacts [217 Kb]

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Volume V Comments and Responses Part 1 [5712 Kb]

Volume 6: Comments and Responses Part 2

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Volume VI Comments and Responses Part 2 [4979 Kb]

Volume 7: Appendices A-G

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H.C.D. July 6 2015

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United States Department of State
Final Environmental Impact Statement

For the

KEYSTONE XL PROJECT

Applicant for Presidential Permit:
TransCanada Keystone Pipeline, LP

Alexander Yuan, NEPA Contact & Project Manager
United States Department of State
Bureau of Oceans and International Environmental
and Scientific Affairs, Room 2657
Washington, DC 20520

Cooperating Agencies

U.S. Army Corps of Engineers (USACE)
U.S. Department of Agriculture – Farm Service Agency (FSA)
U.S. Department of Agriculture – Natural Resource Conservation Service (NRCS)
U.S. Department of Agriculture – Rural Utilities Service (RUS)
U.S. Department of Energy – Office of Policy and International Affairs (PI)
U.S. Department of Energy – Western Area Power Administration (Western)
U.S. Department of Interior – Bureau of Land Management (BLM)
U.S. Department of Interior – National Park Service (NPS)
U.S. Department of Interior – U.S. Fish and Wildlife Service (USFWS)
U.S. Department of Transportation – Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety (PHMSA)
U.S. Environmental Protection Agency (EPA)
Montana Department of Environmental Quality (MDEQ)

Assisting Agencies

U.S. Department of Interior – Bureau of Reclamation (Reclamation)
Filmore, Greeley, Holt, Merrick, Nance, Saline, and Wheeler counties, Nebraska
Lower Big Blue Natural Resources and Upper Elkhorn Natural Resources districts, Nebraska

August 26, 2011

United States Department of State
Bureau of Oceans and International
Environmental and Scientific Affairs

#3

1 of 2
H.18.14

Final Supplemental Environmental Impact Statement

for the

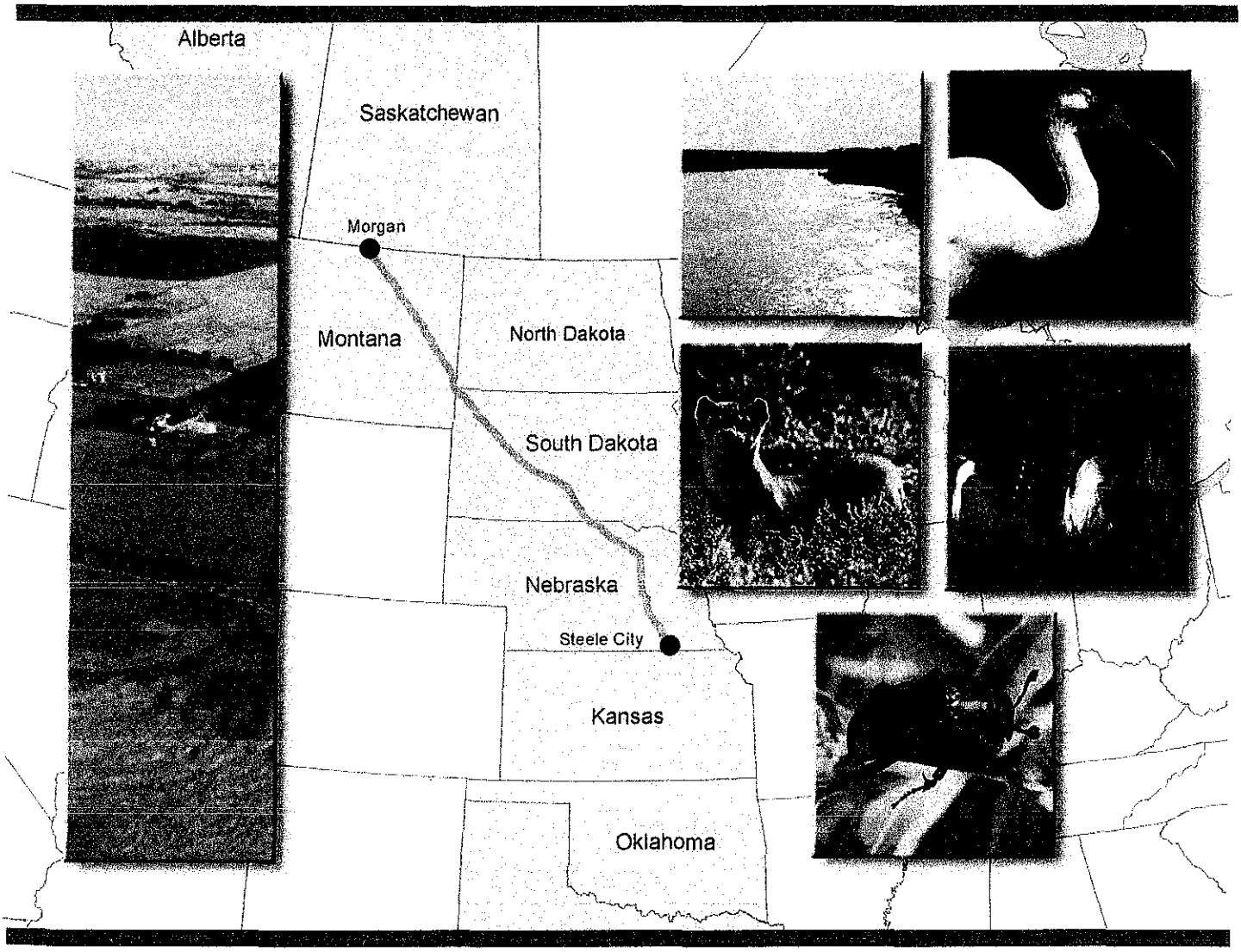
Keystone XL Project

Executive Summary

see page ES-3

January 2014

Applicant for Presidential Permit: TransCanada Keystone Pipeline, LP



Front cover photo sources in order of appearance top to bottom:

Whooping crane
Hagerty, Ryan. 2012. *Endangered Whooping Crane (Grus Americana).* Photograph. U.S. Fish and Wildlife Service. 23 February 2012. Website: http://www.flickr.com/photos/usfwshq/6777481034/.

Black-footed ferret
U.S. Fish & Wildlife Service. 2012. *Black-footed ferret.* Photograph. USFWS Headquarters. 3 July 2012. Website: http://www.flickr.com/photos/usfwshq/7013874797/in/photolist-9Z7MXd-bFMWBP-bsoAvk-9DoXKC-bZh2uu/.

Sage grouse
Rush, Kenneth. No Date. *Male Greater Sage Grouse Strutting at Hat Six Lek near Casper, Wyoming.* Photograph. Shutterstock, Image ID: 52631191. Website: http://www.shutterstock.com/pic-52631191/stock-photo-male-greater-sage-grouse-strutting-at-hat-six-lek-near-casper-wyoming.html.

American burying beetle
Backlund, Doug. No date. *Untitled [American Burying Beetle].* Photograph. U.S Fish & Wildlife Service – South Dakota Field Office. Website: http://www.fws.gov/southdakotafieldoffice/BEETLE.HTM.

United States Department of State
Final Supplemental Environmental Impact Statement

For the

KEYSTONE XL PROJECT

Applicant for Presidential Permit:
TransCanada Keystone Pipeline, LP

Executive Summary

Genevieve Walker
Project Manager
United States Department of State
Bureau of Oceans and International Environmental and Scientific Affairs
2201 C Street NW, Room 2726
Washington, DC 20520

Cooperating Agencies
U.S. Army Corps of Engineers (USACE)
U.S. Department of Agriculture—Farm Service Agency (FSA)
U.S. Department of Agriculture—Natural Resource Conservation Service (NRCS)
U.S. Department of Agriculture—Rural Utilities Service (RUS)
U.S. Department of Energy (DOE)
U.S. Department of Interior—Bureau of Land Management (BLM)
U.S. Department of Interior—National Park Service (NPS)
U.S. Department of Interior—U.S. Fish and Wildlife Service (USFWS)
U.S. Department of Transportation—Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety (PHMSA)
U.S. Environmental Protection Agency (USEPA)

Assisting Agencies
U.S. Department of the Interior, Bureau of Reclamation (BOR)
Nebraska Department of Environmental Quality (NDEQ)
Various State and Local Agencies in Montana, South Dakota, Nebraska, and Kansas

January 2014

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2.0 Description of the Proposed Project and Alternatives

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4.0 Environmental Consequences

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The Keystone XL Pipeline (the proposed Project) is a proposed 875-mile pipeline project that would extend from Morgan, Montana, to Steele City, Nebraska. The pipeline would allow delivery of up to 830,000 barrels per day (bpd) of crude oil from the Western Canadian Sedimentary Basin (WCSB) in Canada and the Bakken Shale Formation in the United States to Steele City, Nebraska, for onward delivery to refineries in the Gulf Coast area (see Figure ES-1). TransCanada Keystone Pipeline, LP (Keystone) has applied for a Presidential Permit that, if granted, would authorize the proposed pipeline to cross the United States-Canadian border at Morgan, Montana.

The proposed route differs from the route analyzed in the 2011 Final Environmental Impact Statement (2011 Final EIS) in that it would avoid the environmentally sensitive Nebraska Department of Environmental Quality (NDEQ)-identified Sand Hills Region and no longer includes a southern segment from Cushing, Oklahoma, to the Gulf Coast area.

The U.S. Department of State (the Department) prepared this Final Supplemental Environmental Impact Statement (the Supplemental EIS) to assess the potential impacts associated with the proposed Project and its alternatives. The Supplemental EIS takes into consideration over 400,000 comments received during the scoping period and 1.5 million comments received on the Draft Supplemental EIS issued in March 2013. Notable changes since the Draft Supplemental EIS include:

- Expanded analysis of potential oil releases;
- Expanded climate change analysis;
- Updated oil market analysis incorporating new economic modeling; and
- Expanded analysis of rail transport as part of the No Action Alternative scenarios.

ES.1.1 Presidential Permit Process

For proposed petroleum pipelines that cross international borders of the United States, the President, through Executive Order (EO) 13337, directs the Secretary of State to decide whether a project serves the national interest before granting a Presidential Permit.

To make this decision (i.e., the National Interest Determination), the Secretary of State, through the Department, considers many factors, including energy security; environmental, cultural, and economic impacts; foreign policy; and compliance with relevant state and federal regulations. This Supplemental EIS was produced consistent with the National Environmental Policy Act (NEPA) and will help inform that determination. Before making such a decision, the Department also asks for the views of eight federal agencies identified in EO 13337: the Departments of Energy, Defense, Transportation, Homeland Security, Justice, Interior, and Commerce, as well as the U.S. Environmental Protection Agency (USEPA).

If the proposed Project is determined to serve the national interest, it will be granted a Presidential Permit that authorizes the construction, connection, operation, and maintenance of the facilities at the border between the United States and Canada. The applicant would be required to abide by certain conditions listed in this Supplemental EIS and the Presidential Permit. The Department's primary role is to make a National Interest Determination. Its jurisdiction does not include selection of specific pipeline routes within the United States.

In addition, the Department acts consistent with the National Historic Preservation Act (NHPA) and the Endangered Species Act (ESA) as part of its comprehensive NEPA consistent review.

ES.1.2 Background

Keystone's first application for the Keystone XL pipeline was submitted on September 19, 2008, and a Final EIS was published on August 26, 2011. The route proposed included the same U.S.-Canada border crossing as the currently proposed Project but a different pipeline route in the United States. The 2011 Final EIS route traversed a substantial portion of the Sand Hills Region of Nebraska, as identified by the NDEQ. Moreover, the 2011 Final EIS route went from Montana to Steele City, Nebraska, and then from Cushing, Oklahoma, to the Gulf Coast area.

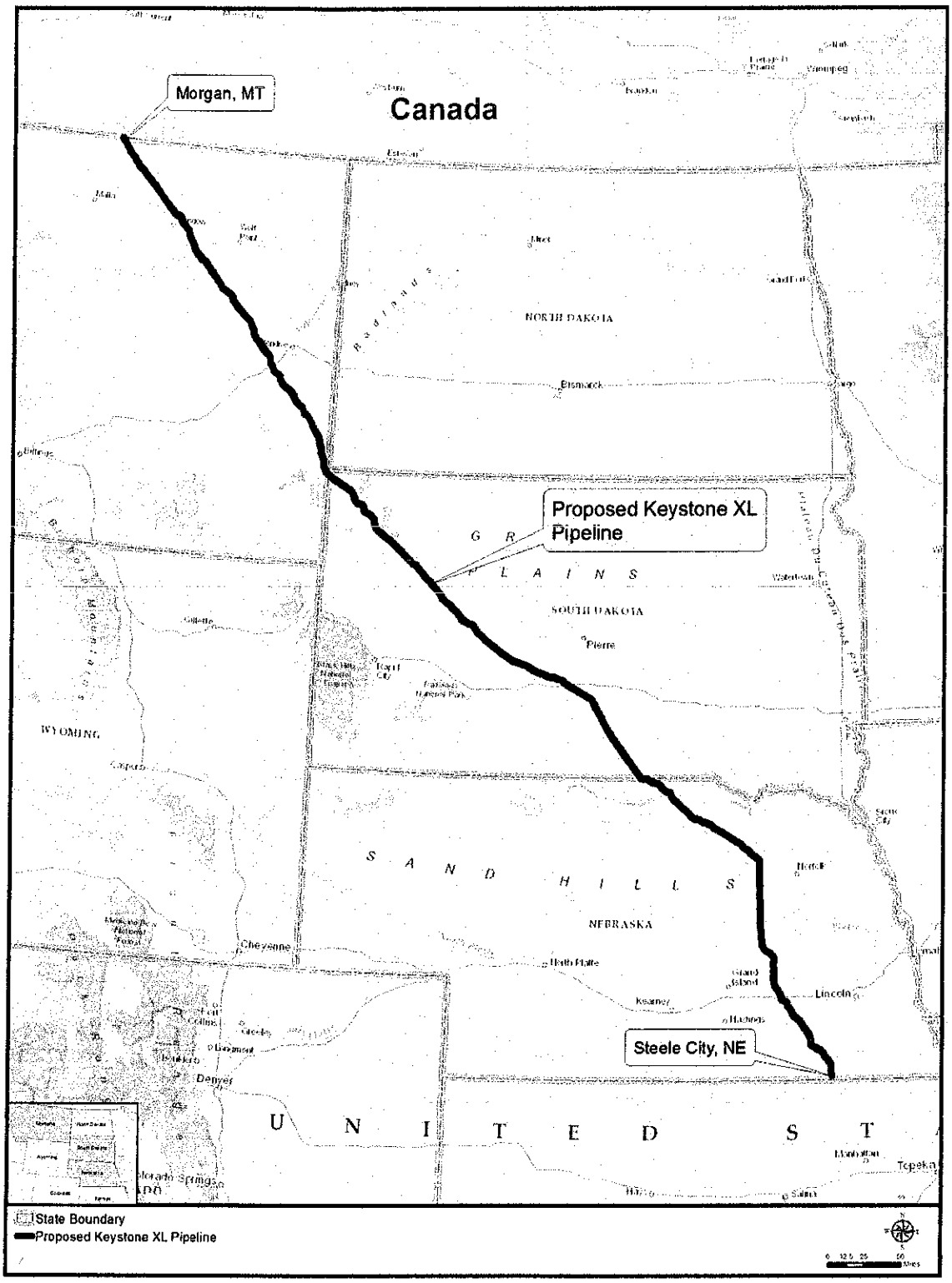


Figure ES-1 Proposed Keystone XL Project Route

In November 2011, the Department determined that additional information was needed to fully evaluate the application—in particular, information about alternative routes within Nebraska that would avoid the NDEQ-identified Sand Hills Region. In late December 2011, Congress adopted a provision of the Temporary Payroll Tax Cut Continuation Act that sought to require the President to make a decision on the Presidential Permit for the 2011 Final EIS route within 60 days. That deadline did not allow sufficient time to prepare a rigorous, transparent, and objective review of an alternative route through Nebraska. As such, the Presidential Permit was denied.

In February 2012, Keystone informed the Department that it considered the Gulf Coast portion of the originally proposed pipeline project (from Cushing, Oklahoma, to the Gulf Coast area) to have independent economic utility, and indicated that it intended to proceed with construction of that pipeline as a separate project, the Gulf Coast Project (see Figure ES-2). The Gulf Coast Project did not require a Presidential Permit because it does not cross an international border. Construction on the Gulf Coast Project was recently completed.

On May 4, 2012, Keystone filed a new Presidential Permit application for the Keystone XL Project. The proposed Project has a new route and a new stated purpose and need. The new proposed route differs from the 2011 Final EIS Route in two significant ways: 1) it would avoid the environmentally sensitive NDEQ-identified Sand Hills Region and 2) it would terminate at Steele City, Nebraska. From Steele City, existing pipelines would transport the crude oil to the Gulf Coast area. In other words, the proposed Project no longer includes a southern segment and instead runs from Montana to Steele City, Nebraska.

In addition to the NDEQ-identified Sand Hills Region, the proposed Project route would avoid other areas in Nebraska (including portions of Keya Paha County) that have been identified by the NDEQ as having soil and topographic characteristics similar to the Sand Hills Region. The proposed Project route would also avoid or move further away from water wellhead protection areas for the villages of Clarks and Western, Nebraska. Figure ES-3 compares the 2011 Final EIS route and the proposed Project route.

The proposed route in Montana and South Dakota is largely unchanged from the route analyzed in the 2011 Final EIS except for minor modifications that Keystone made to improve constructability and in response to landowner requests (see Figure ES-3).

The Department, after discussions with the USEPA and the Council on Environmental Quality (CEQ), determined consistent with NEPA that issuance of the new Presidential Permit would constitute a major federal action that may have significant environmental impact, and that it would prepare a supplement to the 2011 Final EIS for the new application. This Supplemental EIS provides a thorough analysis of the environmental impacts from the proposed Project; it has been revised, expanded, and updated to include a comprehensive review of the new route in Nebraska as well as any significant new circumstances or information that is now available and relevant to the overall proposed Project.

To assist in preparing this Supplemental EIS, the Department retained an environmental consulting firm, Environmental Resources Management (ERM). ERM was selected pursuant to the Department's interim guidance on the selection of independent third-party contractors. This guidance is designed to ensure that no conflicts of interest exist between the contractor and the applicant and that any perceived conflicts that would impair the public's confidence in the integrity of the work are mitigated or removed. ERM works at the sole and exclusive instruction of the Department and is not permitted to communicate with Keystone unless specifically directed to do so by Department officials.

On June 15, 2012, through a Notice of Intent, the Department solicited public comments for consideration in establishing the scope and content of this Supplemental EIS. The scoping period extended from June 15 to July 30, 2012. In total, an estimated 406,712 letters, cards, emails, e-comments, or telephone conversation records (henceforth referred to as submissions) were received from the public, agencies, and other interested groups and stakeholders during the scoping period. In March 2013, the Department issued a Draft Supplemental EIS that included new analysis and analysis built upon the work completed in the 2011 Final EIS, as well as the estimated 406,712 submissions mentioned above that were received during the 2012 scoping process.

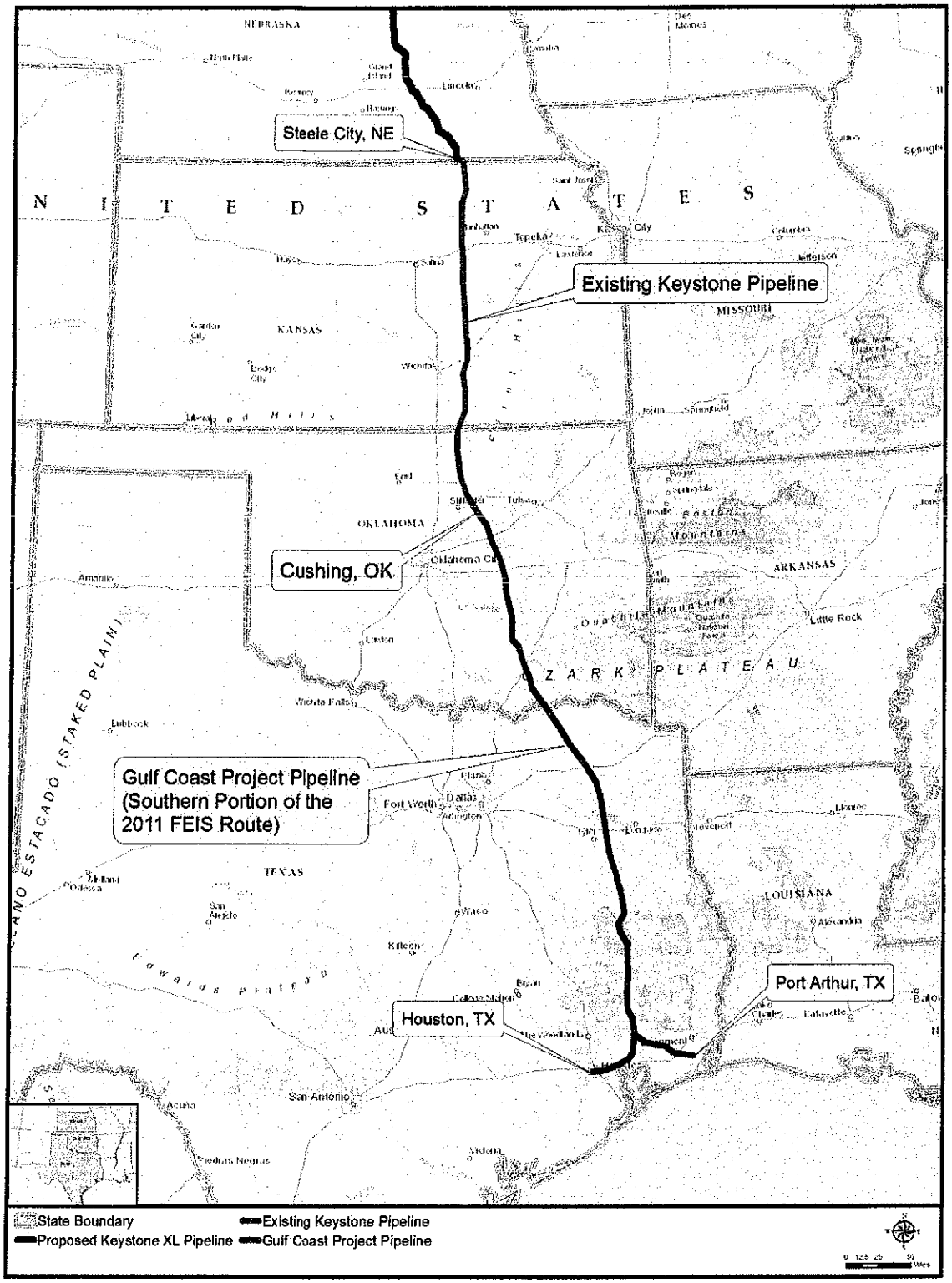
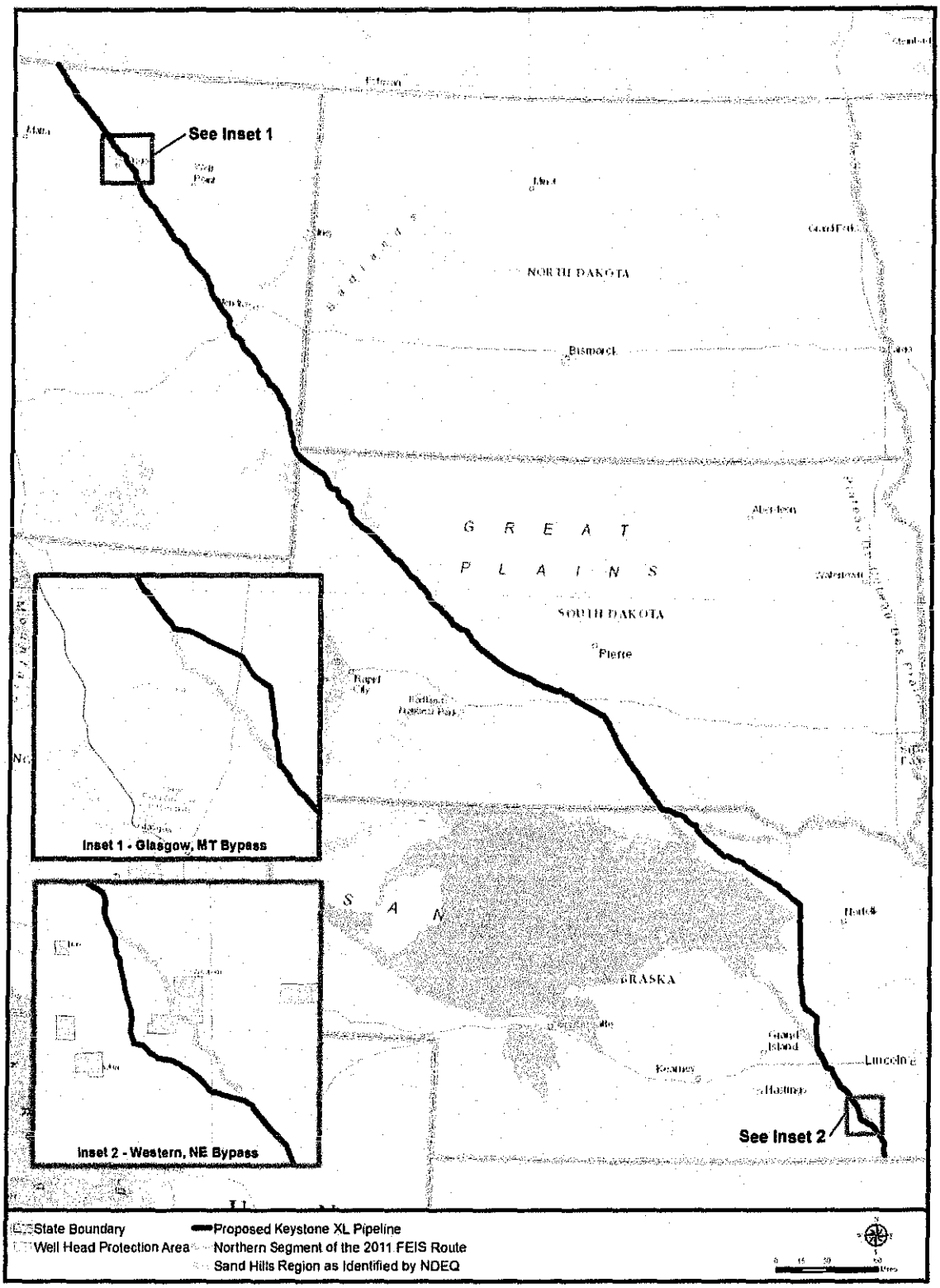


Figure ES-2 Gulf Coast Project Route



Note: The 2011 Final EIS route is also referred to in this Final Supplemental EIS as the 2011 Steele City Segment Alternative.

Figure ES-3 Comparison of Proposed Project to 2011 Final EIS Route

ES.1.3 Public Comments Received Regarding the Draft Supplemental EIS

Following publication of the 2013 Draft Supplemental EIS, the Department invited the public to comment on the document. Electronic versions were made available for download, and hard copies were made available in public libraries along the proposed pipeline route. Hard and electronic copies of the Draft Supplemental EIS were sent to interested Indian tribes, agencies, elected and appointed officials, non-governmental organizations (NGOs), and other parties. The Department also solicited input at a public meeting held on April 18, 2013 in Grand Island, Nebraska. In total, the Department received an estimated 1,513,249 submissions during the public comment period for the Draft Supplemental EIS. Submissions were made by federal, state, and local representatives, members of the public, government agencies, Indian tribes, NGOs, and other interested groups and stakeholders. Submissions made by the public on the Draft Supplemental EIS were posted on www.regulations.gov.

Of this total number of submissions, an estimated 1,496,396 submissions (99 percent of the total) were form letters sponsored by NGOs. The remaining 16,853 submissions were identified as unique submissions. All submissions were evaluated and addressed, as appropriate, in this Supplemental EIS. Some of the most frequent comment topics included:

- Concerns that the 2013 Draft Supplemental EIS did not adequately address the greenhouse gas (GHG) and climate change effects of the extraction, processing, and use of the crude oil that the proposed Project would carry;
- Concerns that potential releases from the proposed Project (i.e., spills) could pollute major groundwater resources such as the Ogallala Aquifer;
- Concerns that the 2013 Draft Supplemental EIS did not adequately address the impacts of bitumen extraction in Canada;
- Concerns about the contractor and subcontractor selection process for preparing this Supplemental EIS;
- Concerns that the crude oil transportation market was not adequately analyzed;
- Suggestions that the existing Keystone Pipeline right-of-way (ROW) be considered in lieu of the currently proposed pipeline route; and
- Questions about the accuracy of job creation estimates for construction and operation of the proposed Project, as well as the types, locations, and hiring preferences of those jobs.

ES.1.4 About the Final Supplemental EIS

This Supplemental EIS for the proposed Keystone XL pipeline project builds on the analysis provided in the 2011 Final EIS and the 2013 Draft Supplemental EIS and is now available for download by the public. Moreover, this Supplemental EIS has been distributed to participating federal and state agencies, elected officials, media organizations, Indian tribes, private landowners, and other interested parties. Printed copies have also been distributed to public libraries along the proposed pipeline route.

In completing this Supplemental EIS, the Department took into consideration the over 1.5 million submissions received. In response to these comments, the Department has revised the text from the 2013 Draft Supplemental EIS for the proposed Project. This Final Supplemental EIS includes the latest available information on the proposed Project resulting from ongoing discussions with federal, state, and local agencies. It also describes updated analysis of the potential effects (including direct, indirect, and cumulative effects) of the proposed Project and alternatives on various resources. The analysis reflects inputs from other U.S. government agencies and was reviewed through an interagency process.

ES.2.0 OVERVIEW OF PROPOSED PROJECT

ES.2.1 Proposed Project Purpose and Need

According to the application submitted by Keystone, the primary purpose of the proposed Project is to provide the infrastructure to transport crude oil from the border with Canada to delivery points in the United States (primarily to the Gulf Coast area) by connecting to existing pipeline facilities near Steele City, Nebraska. The proposed Project is meant to respond to the market demand of refineries for crude oil of the kind found in Western Canada (often called *heavy* crude oil). The proposed Project would also provide transportation for the kind of crude oil found within the Bakken formation of North Dakota and Montana (often called *light* crude oil).

The proposed Project would have the capacity to deliver up to 830,000 bpd, of which 730,000 bpd of capacity has been set aside for WCSB crude oil and the remaining 100,000 bpd of capacity set aside for Williston Basin (Bakken) crude oil. Keystone has

represented that it has firm commitments to transport approximately 555,000 bpd of heavy crude oil from producers in the WCSB, as well as 65,000 bpd of crude oil from the Bakken. The ultimate mixture and quantity of crude oils transported by the proposed Project over its lifetime would be determined by market demand.

There is existing demand for crude oil—particularly heavy crude oil—at refiners in the Gulf Coast area, but the ultimate disposition of crude oil that would be transported by the proposed Project, as well as any refined products produced from that crude oil, would also be determined by market demand and applicable law.

ES.2.2 Proposed Project Description

The proposed Project would consist of approximately 875 miles of new 36-inch-diameter pipeline and related facilities for transport of WCSB and Bakken crude oil, the latter from an oil terminal near Baker, Montana. Crude oil carried in the proposed Project would be delivered to existing pipeline facilities near Steele City, Nebraska, for onward delivery to refineries in the Gulf Coast area. The proposed Project would also include two pump stations (one new and one expanded) along the existing Keystone Pipeline in Kansas (see Figure ES-5).

Construction of the proposed Project would include the pipeline itself plus various aboveground ancillary facilities (e.g., access roads, pump stations, and construction camps) and connected actions. Figure ES-4 illustrates the construction sequence that would be followed for the proposed Project.

Construction of the proposed Project would generally require a 110-foot-wide temporary ROW and is expected to last 1 to 2 years. After construction, the proposed Project would generally maintain a 50-foot-wide permanent ROW easement over the pipeline in Montana (approximately 285 miles), South Dakota (approximately 316 miles), and Nebraska (approximately 274 miles).

Keystone would have access to property within the easement, but property owners would retain the ability to farm and conduct other limited activities within the easement. The permanent aboveground ancillary facilities would include electrically operated pump stations, mainline valves, and permanent access roads.

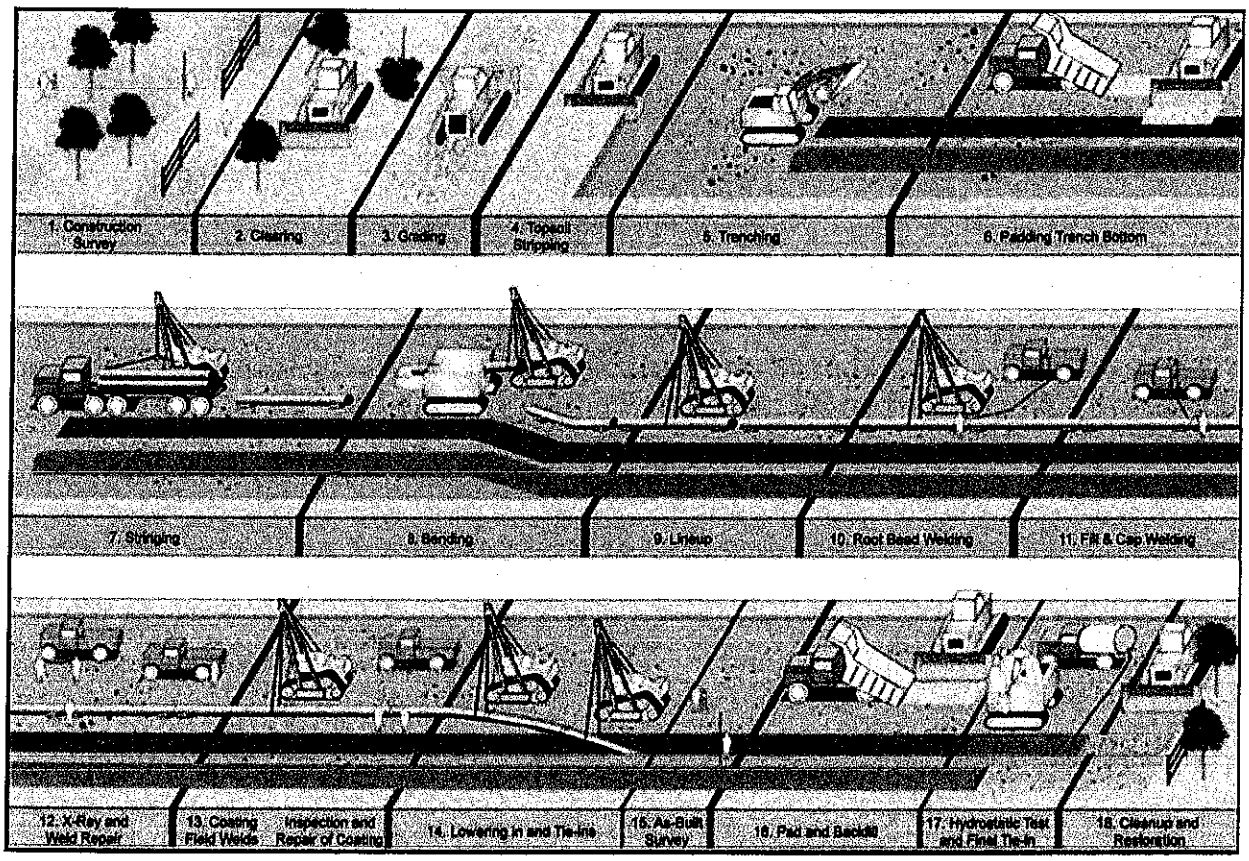


Figure ES-4 Keystone XL, Typical Pipeline Construction Sequence

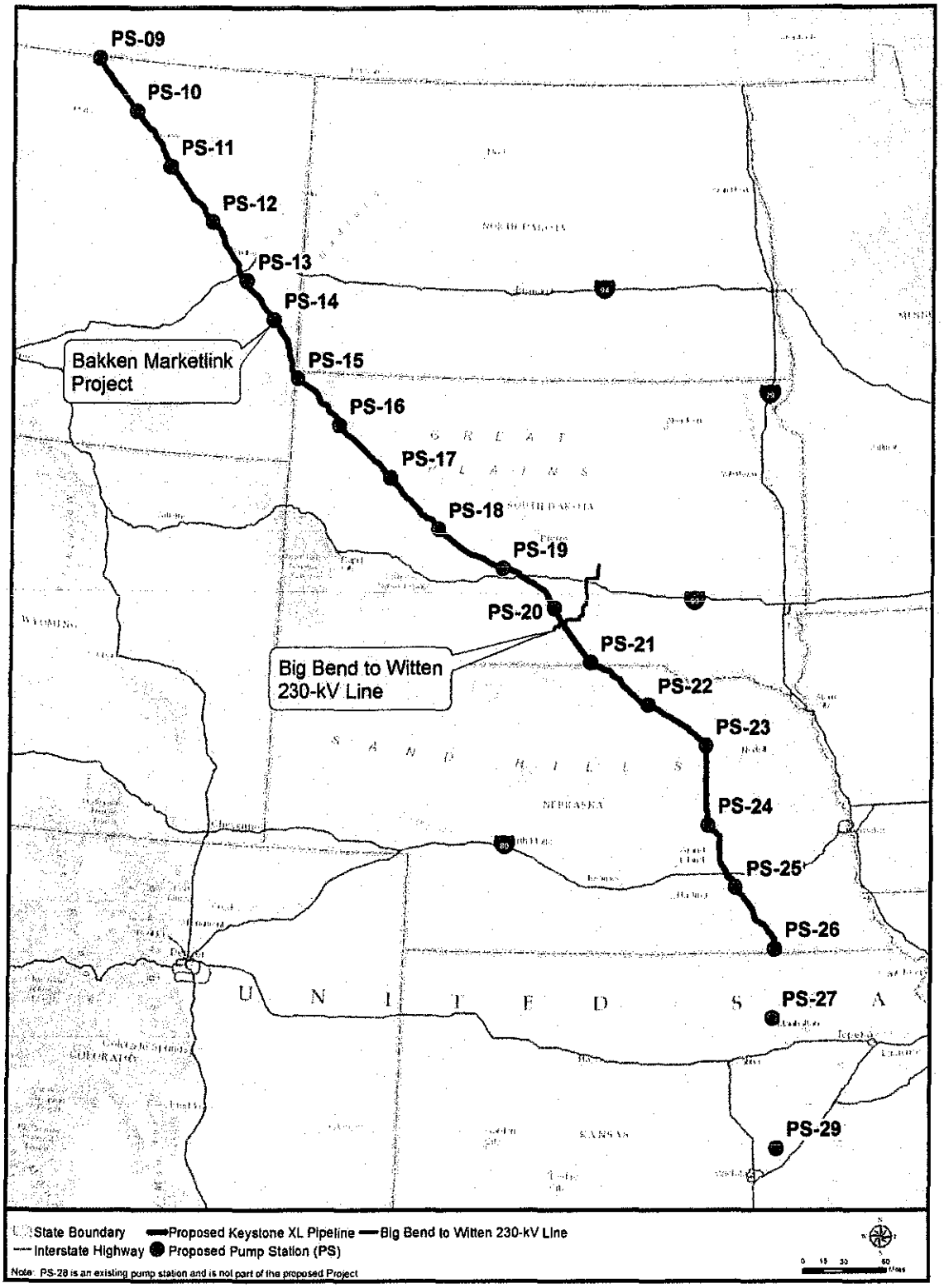


Figure ES-5 Proposed Project Overview

The U.S. portion of the proposed Project is estimated to cost approximately $3.3 billion, and would be paid for by Keystone. If permitted, the pipeline would begin operation approximately 2 years after final approvals were received, with the actual in-service date dependent on construction as well as obtaining any additional permits, approvals, and authorizations necessary before operations can commence.

ES.2.2.1 The Bakken Marketlink Project

Keystone Marketlink, LLC, a wholly owned subsidiary of TransCanada Pipelines Limited, would construct and operate the Bakken Marketlink Project. This project would include a 5-mile pipeline, pumps, meters, and storage tanks to supply Bakken crude oil to the proposed pipeline from the Bakken Marketlink pipeline system in North Dakota and Montana. Two crude oil storage tanks would be built near Baker, Montana, as part of this project. This project would be able to deliver up to 100,000 bpd of crude oil, and has commitments for approximately 65,000 bpd.

ES.2.2.2 Big Bend to Witten 230-kV Electrical Transmission Line

The Western Area Power Administration (Western) has determined that providing reliable electricity for operation of the proposed Project requires the construction of a new 230-kilovolt (kV) transmission line originating at the Fort Thompson/Big Bend Dam area in South Dakota and extending south to the existing Witten Substation, near Pump Stations 20 and 21. To meet these demands, Western would repurpose existing transmission infrastructure and construct new infrastructure between the Big Bend Dam and a proposed Big Bend Substation. The Basin Electric Power Cooperative would construct a new 76-mile, 230-kV transmission line from the Big Bend Substation to the existing Witten Substation, and would operate both the transmission line and the Big Bend Substation.

ES.2.2.3 Electrical Distribution Lines and Substations

Electrical power for the proposed Project would be obtained from local power providers. These power providers would construct the necessary substations and transformers, and would either use existing service lines or construct new service lines to deliver electrical power to the specified point of use (e.g., pump stations and mainline valves), which would be located at intervals along the proposed Project route.

ES.3.0 OVERVIEW OF PETROLEUM MARKETS

The scope and content of the market analysis in this Supplemental EIS were informed by public and interagency comments as well as new information that was not previously available. Among the notable updates to this analysis are revised modeling to incorporate evolving market conditions, more extensive information on the logistics and economics of crude by rail, and a more detailed analysis of supply costs to inform conclusions about production implications.

The updated market analysis in this Supplemental EIS—similar to the market analysis sections in the 2011 Final EIS and 2013 Draft Supplemental EIS—concludes that the proposed Project is unlikely to significantly affect the rate of extraction in oil sands areas (based on expected oil prices, oil-sands supply costs, transport costs, and supply-demand scenarios). The Department conducted this analysis, drawing on a wide variety of data and leveraging external expertise.

ES.3.1 Summary of Market Analysis

The 2011 Final EIS was developed contemporaneously with the start of strong growth in domestic light crude oil supply from so-called *tight* oil formations, such as those formations found in North Dakota's Bakken region. Domestic production of crude oil has increased significantly, from approximately 5.5 million bpd in 2010 to 6.5 million bpd in 2012 and 7.5 million bpd by mid-2013. Rising domestic crude production is predominantly light crude, and it has replaced foreign imports of light crude oil. However, demand persists for imported heavy crude by U.S. refineries that are optimized to process that kind of oil. Meanwhile, Canadian production of bitumen from the oil sands continues to grow, the vast majority of which is currently exported to the United States to be processed by U.S. refineries that want heavy crude oil. North American production growth and logistics constraints have contributed to significant discounts on the price of landlocked crude and have led to growing volumes of crude shipped by rail in the United States and, more recently, Canada.

Both the 2011 Final EIS and the Draft Supplemental EIS published in March 2013 discussed the transportation of Canadian crude by rail as a possibility. Due to market developments since then, this Supplemental EIS notes that the transportation of Canadian crude by rail is already occurring in substantial volumes. It is estimated that approximately 180,000 bpd of Canadian crude oil is already traveling by rail (see Figure ES-6).

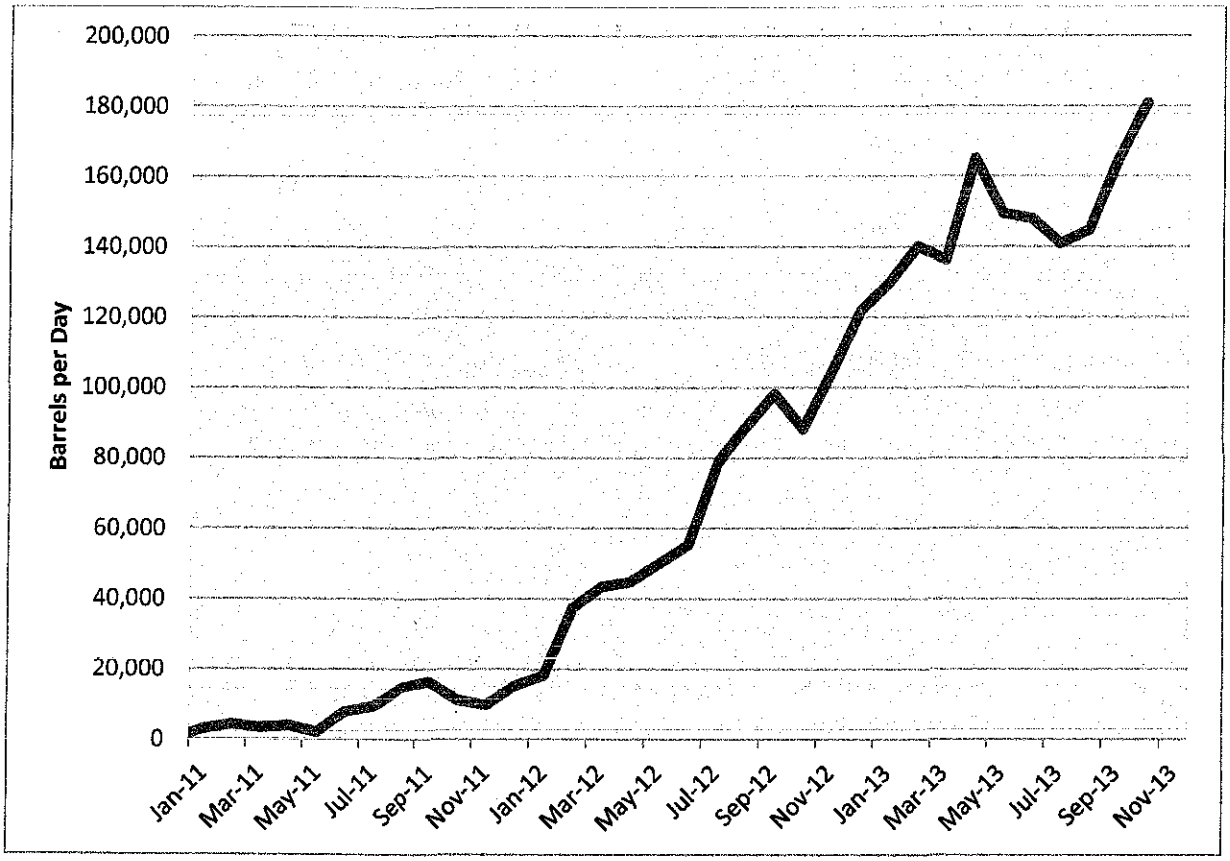
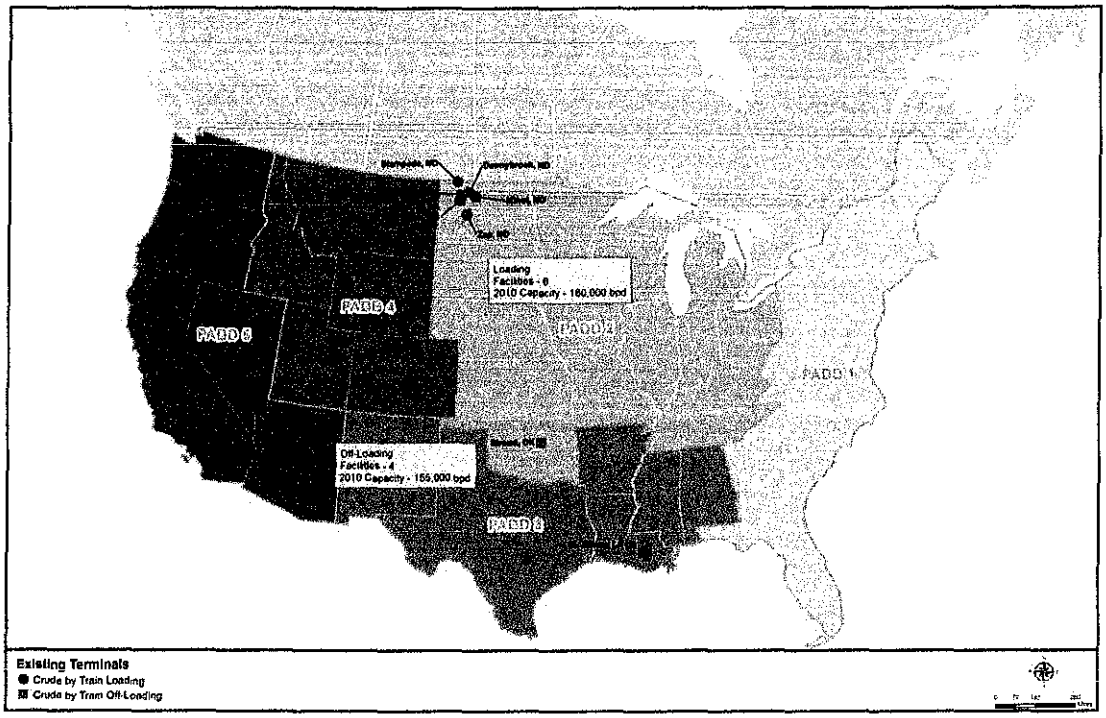


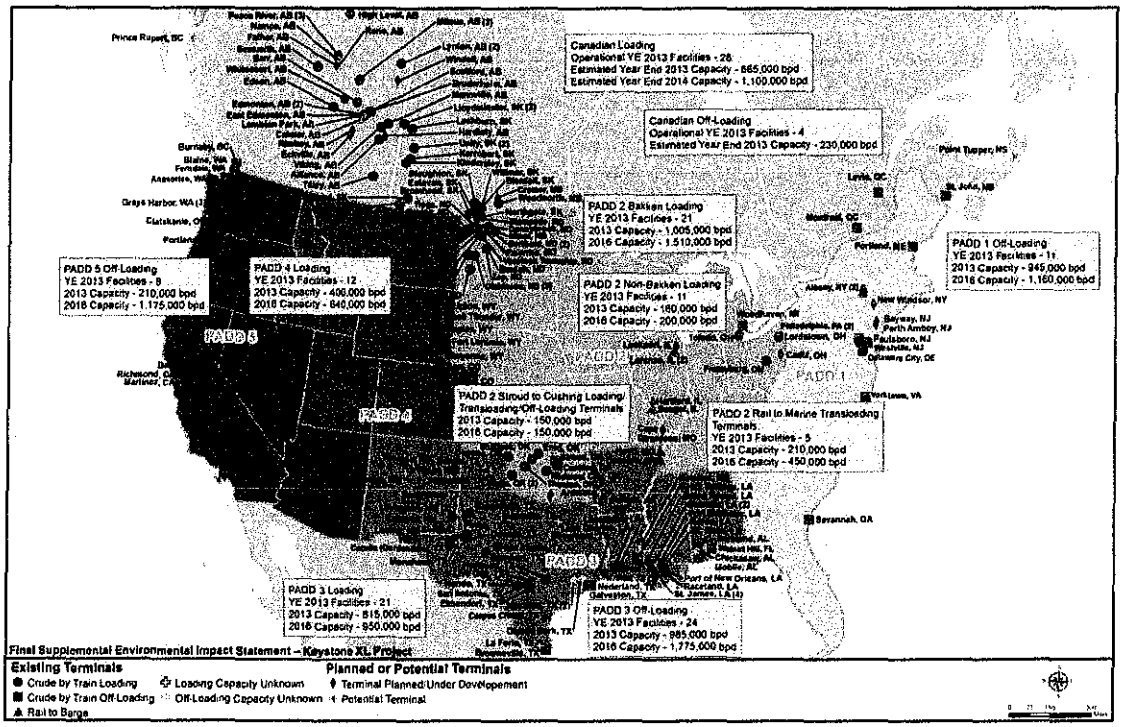
Figure ES-6 Estimated Crude Oil Transported by Rail from WCSB, bpd

The industry has been making significant investments in increasing rail transport capacity for crude oil out of the WCSB. Figure ES-7 illustrates the increase in rail loading and unloading terminals between 2010 and 2013. Rail loading facilities in the WCSB are estimated to have a capacity of approximately 700,000 bpd of crude oil, and by the end of 2014 this will likely increase to more than 1.1 million bpd. Most of this capacity (approximately 900,000 to 1 million bpd) is in areas that produce primarily heavy crude oil (both conventional and oil sands), or is being connected by pipelines to those oil production areas.

Various uncertainties underlie the projections upon which this Supplemental EIS partially relies. In recognition of the uncertainty of future market conditions, the analysis included updated modeling about the sensitivity of the market to some of these elements.

Updated information on rail transportation and oil market trends, particularly rising U.S. oil production, was incorporated in oil market modeling. This modeling was developed in response to comments received on the Draft Supplemental EIS. To help account for key uncertainties about oil production, consumption, and transportation, the modeling examined 16 different scenarios that combine various supply-demand assumptions and pipeline constraints. Modeled cases test supply and demand projections based on the official energy forecasts of independent U.S. Energy Information Administration's (EIA) 2013 Annual Energy Outlook that correspond to uncertainties raised in public comments, including potential higher-than-expected U.S. supply, lower-than-expected U.S. demand, and higher-than-expected oil production in Latin America.





Note: These estimates do not include a facility being constructed in Edmonton, Canada, with a design capacity of 250,000 bpd (100,000 bpd expected to be operational by the end of 2014) that was announced shortly before this Supplemental EIS was completed. In addition, Altex Energy has plans for a 55,000 bpd loading facility in Vermillion, Alberta.

Figure ES-7 Crude by Train Loading and Off-Loading Facilities in 2010 (top map) and 2013 (bottom map)

The supply-demand cases were paired with four pipeline configuration scenarios: an unconstrained scenario that allows pipelines to be built without restrictions; a scenario in which no new cross-border pipeline capacity to U.S. markets is permitted, but pipelines from the WSCB to Canada's east and west coasts are built; a scenario where new cross-border capacity between the United States and Canada is permitted, but Canadian authorities do not permit new east-west pipelines; and a constrained scenario that assumes no new or expanded pipelines carrying WCSB crude are built in any direction.

Updated model results indicated that cross-border pipeline constraints have a limited impact on crude flows and prices. If additional east-west pipelines were built to the Canadian coasts, such pipelines would be heavily utilized to export oil sands crude due to relatively low shipping costs to reach growing Asian markets. If new east-west and cross-border pipelines were both completely constrained, oil sands crude could reach U.S. and Canadian refineries by rail.

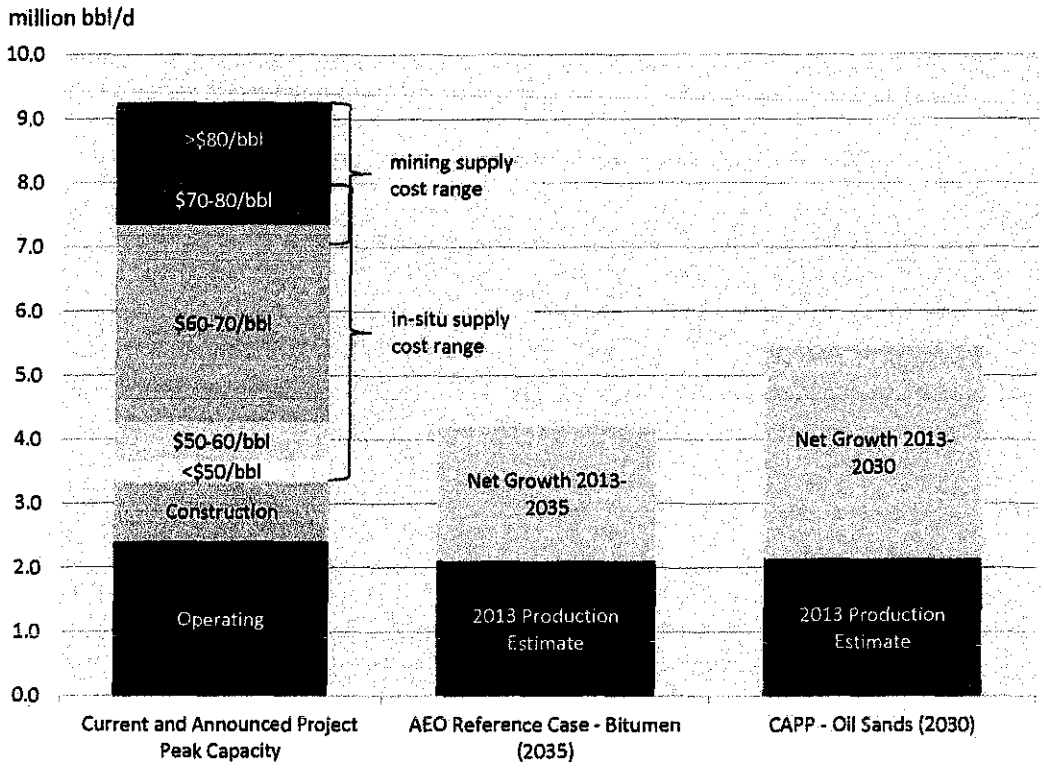
Varying pipeline availability has little impact on the prices that U.S. consumers pay for refined products such as gasoline or for heavy crude demand in the Gulf Coast. When this demand is not met by heavy Canadian supplies in the model results, it is met by heavy crude from Latin America and the Middle East.

Conclusions about the potential effects of pipeline constraints on production levels were informed by comparing modeled oil prices to the prices that would be required to support expected levels of oil sands capacity growth. Figure ES-8 illustrates existing oil sands capacity, the estimated supply costs of announced capacity, and the capacity growth that will be required to meet EIA and Canadian Association of Petroleum Producers production projections. Projected prices generally exceed supply costs for the projects responsible for future oil sands production growth. Modeling results indicate that severe pipeline constraints reduce the prices received by bitumen producers by up to $8/bbl, but not enough to curtail most oil sands growth plans or to shut-in existing production (based on expected oil prices, oil-sands supply costs, transport costs, and supply-demand scenarios). These conclusions are based on conservative assumptions about rail costs, which likely overstate the cost penalty producers pay for shipping by rail if more economic methods currently under consideration to ship bitumen by rail are utilized.

Several analysts and financial institutions have stated that denying the proposed Project would have significant impacts on oil sands production. To the extent that other assessments appear to differ from the analysis in this report, they typically do so because they have different focuses, near-term time scales, or production expectations, and/or include less detailed data and analysis about rail than this report. While short-term physical transportation constraints introduce uncertainty to industry outlooks over the next decade, new data and analysis in Section 1.4, Market Analysis, indicate that rail will likely be able to accommodate new production if new pipelines are delayed or not constructed.

Over the long term, lower-than-expected oil prices could affect the outlook for oil sands production, and in certain scenarios higher transportation costs resulting from pipeline constraints could exacerbate the impacts of low prices. The primary assumptions required to create conditions under which production growth would slow due to transportation constraints include: 1) that prices persist below current or most projected levels in the long run; and 2) that all new and expanded Canadian and cross-border pipeline capacity, beyond just the proposed Project, is not constructed.

Above approximately $75 per barrel for West Texas Intermediate (WTI)-equivalent oil, revenues to oil sands producers are likely to remain above the long-run supply costs of most projects responsible for expected levels of oil sands production growth. Transport penalties could reduce the returns to producers and, as with any increase in supply costs, potentially affect investment decisions about individual projects on the margins. However, at these prices, enough relatively low-cost *in situ* projects are under development that baseline production projections would likely be met even with constraints on new pipeline capacity. Oil sands production is expected to be most sensitive to increased transport costs in a range of prices around $65 to $75 per barrel. Assuming prices fell in this range, higher transportation costs could have a substantial impact on oil sands production levels—possibly in excess of the capacity of the proposed Project—because many *in situ* projects are estimated to break even around these levels. Prices below this range would challenge the supply costs of many projects, regardless of pipeline constraints, but higher transport costs could further curtail production.



Note: The green shaded areas in the *Current and Announced Project Peak Capacity* represent the capacity of projects that are operating or already under construction, which are expected to continue producing and/or remain under development as long as oil prices are above operating costs. The purple shaded areas represent the capacity of potential projects that would likely only go forward with oil prices above the stated ranges.

Figure ES-8 Oil Sands Supply Costs (West Texas Intermediate-Equivalent Dollars per Barrel), Project Capacity, and Production Projections

Oil prices are volatile, particularly over the short-term. In addition, long-term trends, which drive investment decisions, are difficult to predict. Specific supply cost thresholds, Canadian production growth forecasts, and the amount of new capacity needed to meet them are uncertain. As a result, the price threshold above which pipeline constraints are likely to have a limited impact on future production levels could change if supply costs or production expectations prove different than estimated in this analysis.

The dominant drivers of oil sands development are more global than any single infrastructure project. Oil sands production and investment could slow or accelerate depending on oil price trends, regulations, and technological developments, but the potential effects of those factors on the industry's rate of expansion should not be conflated with the more limited effects of individual pipelines.

ES.4.0 ENVIRONMENTAL ANALYSIS OF THE PROPOSED PROJECT

The Department evaluated the potential construction and operational impacts of the proposed Project and alternatives across a wide range of environmental resources. The analysis discusses public and agency interests and concerns as reflected in the submissions received during the scoping period and on the 2013 Draft Supplemental EIS, and includes:

- Climate change, including lifecycle (well-to-wheels [WTW]) GHG emissions associated with oil sands development, refining, and consumption;
- Potential releases or spills of oil;
- Socioeconomics, including the potential job and revenue benefits of the proposed Project, as well as concerns about environmental justice;
- Water resources, including potential effects on groundwater aquifers (e.g., Ogallala Aquifer) and surface waters;
- Wetlands;
- Threatened and endangered species;
- Potential effects on geology, soils, other biological resources (e.g., vegetation, fish, and wildlife), air quality, noise, land use, recreation, and visual resources; and
- Cultural resources, including tribal consultation.

ES.4.1 Climate Change

Changes to the Earth's climate have been observed over the past century with a global temperature increase of 1.5 degrees Fahrenheit between 1880 and 2012. This warming has coincided with increased levels of GHGs in the atmosphere. In order for the Earth's heat and energy to remain at a steady state, the solar energy that is incoming must equal the energy that is radiated into space (see Figure ES-9). GHGs contribute to trapping outbound radiation within the troposphere (the layer of the atmosphere closest to the Earth's surface), and this is called the greenhouse effect.

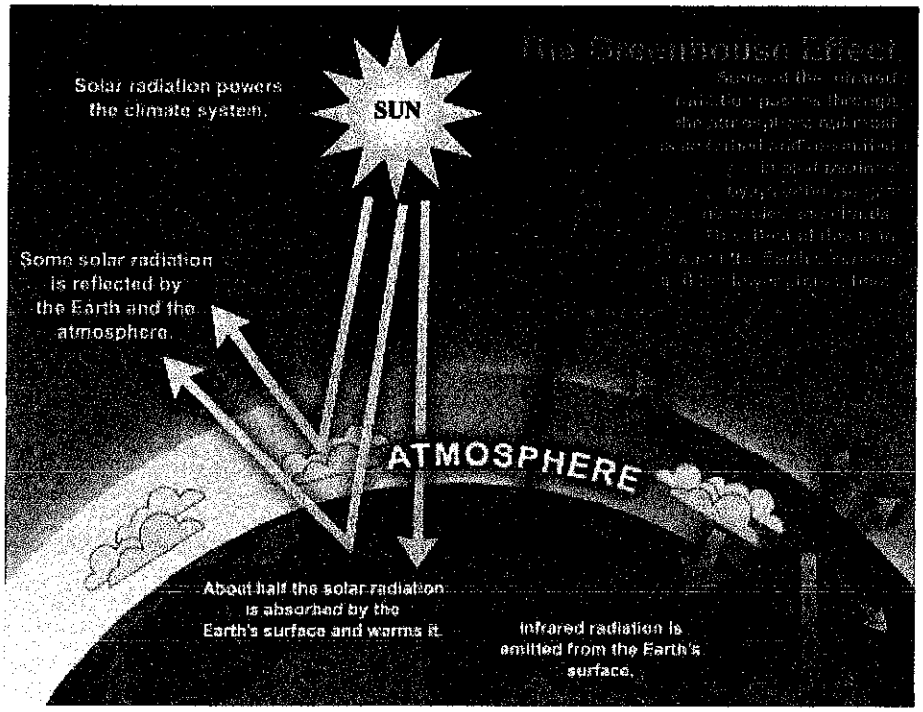


Figure ES-9 The Greenhouse Effect

Since the beginning of the Industrial Revolution, the rate and amount of GHGs have increased as a result of human activity. The additional GHGs intensify the greenhouse effect, resulting in a greater amount of heat being trapped within the atmosphere. The Intergovernmental Panel on Climate Change, a group of 1,300 independent scientific experts from countries around the world, in its Fifth Assessment Report concludes that global warming in the climate system is unequivocal based on measured increases in temperature, decrease in snow cover, and higher sea levels.

This Supplemental EIS evaluates the relationship between the proposed Project with respect to GHG emissions and climate change from the following perspectives:

- The GHG emissions associated with the construction and operation of the proposed Project and its connected actions;
- The potential increase in indirect lifecycle (wells-to-wheels) GHG emissions associated with the WCSB crude oil that would be transported by the proposed Project;
- How the GHG emissions associated with the proposed Project cumulatively contribute to climate change; and
- An assessment of the effects that future projected climate change could have in the proposed Project area and on the proposed Project.

ES.4.1.1 Greenhouse Gas Emissions from the Proposed Project

The proposed Project would emit approximately 0.24 million metric tons of carbon dioxide (CO_2) equivalents ($MMTCO_2e$) per year during the construction period. These emissions would be emitted directly through fuel use in construction vehicles and equipment, as well as, land clearing activities including open burning, and indirectly from electricity usage.

During operations, approximately 1.44 $MMTCO_2e$ would be emitted per year, largely attributable to electricity use for pump station power, fuel for vehicles and aircraft for maintenance and inspections, and fugitive methane emissions at connections. The 1.44 $MMTCO_2e$ emissions would be equivalent to GHG emissions from approximately 300,000 passenger vehicles operating for 1 year, or 71,928 homes using electricity for 1 year.

ES.4.1.2 Lifecycle Analysis

To enable a more comprehensive understanding of the potential indirect GHG impact of the proposed Project, it is important to also consider the wider GHG emissions associated with the crude oil being transported by the proposed Project. A lifecycle approach was used to evaluate the GHG implications of the WCSB crudes that would be transported by the proposed Project compared to other crude oils that would likely be replaced or displaced by those WCSB crudes in U.S. refineries. A lifecycle analysis is a technique used to evaluate the environmental aspects and impacts (in this case GHGs) that are associated with a product, process, or service from raw materials acquisition through production, use, and end-of-life. The lifecycle analysis considered wells-to-wheels GHG emissions, including extraction, processing, transportation, refining, and refined product use (such as combustion of gasoline in cars) of WCSB crudes compared to other reference heavy crudes. The lifecycle analysis also considered the implications associated with other generated products during the lifecycle stages (so-called *co-products*) such as petroleum coke. WCSB crudes are generally more GHG intensive than other heavy crudes they would replace or displace in U.S. refineries, and emit an estimated 17 percent more GHGs on a lifecycle basis than the average barrel of crude oil refined in the United States in 2005. The largest single source of GHG emissions in the lifecycle analysis is the finished-fuel combustion of refined petroleum fuel products, which is consistent for different crude oils, as shown in Figure ES-10.

The total lifecycle emissions associated with production, refining, and combustion of 830,000 bpd of oil sands crude oil transported through the proposed Project is approximately 147 to 168 $MMTCO_2e$ per year. The annual lifecycle GHG emissions from 830,000 bpd of the four reference crudes examined in this Supplemental EIS are estimated to be 124 to 159 $MMTCO_2e$. The range of incremental GHG emissions for crude oil that would be transported by the proposed Project is estimated to be 1.3 to 27.4 $MMTCO_2e$ annually. The estimated range of potential emissions is large because there are many variables such as which reference crude is used for the comparison and which study is used for the comparison.

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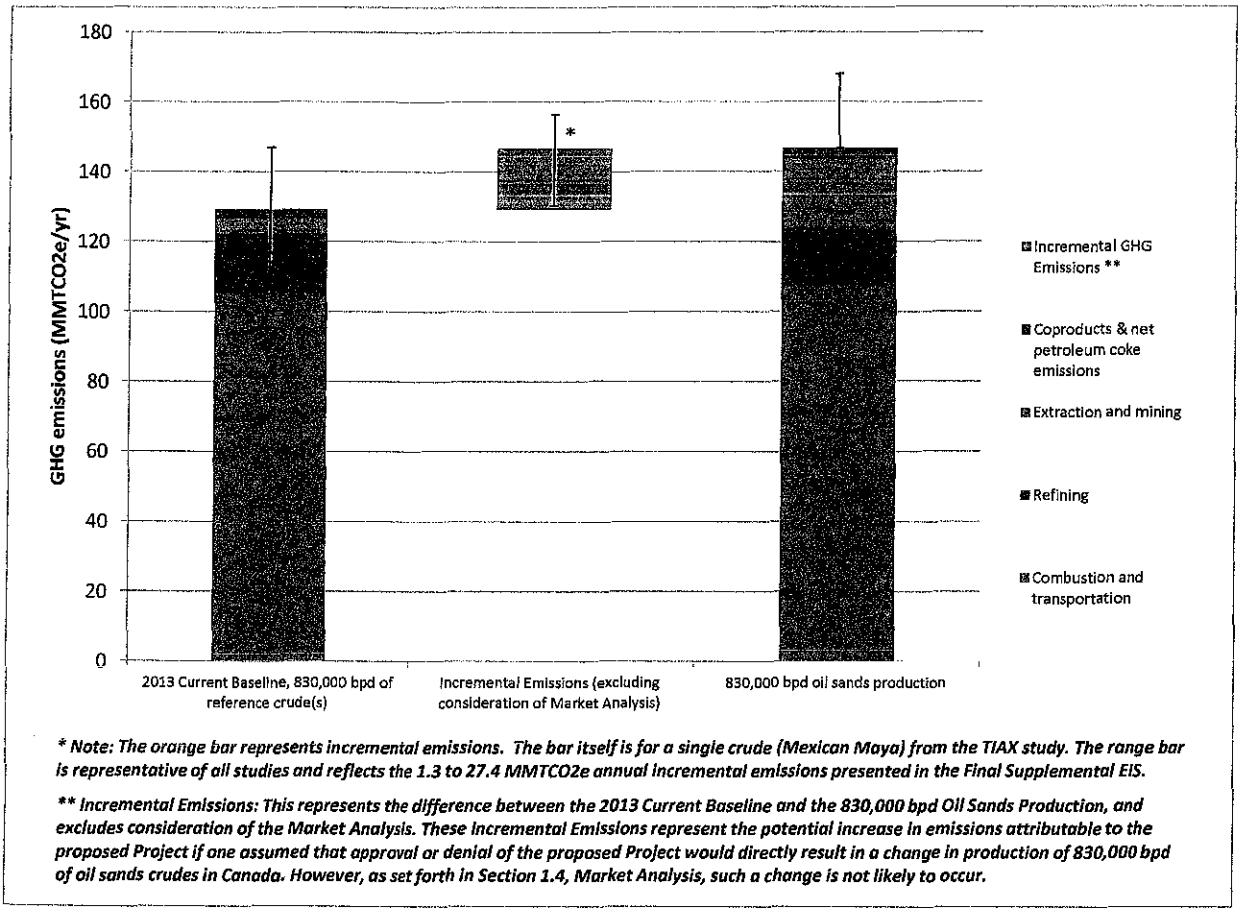

Note: See Figure 4.14.3-7 in Section 4.14.3.5, Incremental GHG Emissions, for a full description of the information presented in this figure.

Figure ES-10 Incremental Well-to-Wheels GHG Emissions from WCSB Oil Sands Crudes Compared to Well-to-Wheels GHG Emissions from Displacing Reference Crudes

The above estimates represent the total incremental emissions associated with production and consumption of 830,000 bpd of oil sands crude compared to the reference crudes. These estimates represent the potential increase in emissions attributable to the proposed Project if one assumed that approval or denial of the proposed Project would directly result in a change in production of 830,000 bpd of oil sands crudes in Canada (See Section 4.14.4.2, Emissions and Impacts in Context, for additional information on emissions associated with increases in oil sands production). However, as set forth in Section 1.4, Market Analysis, such a change is not likely to occur under expected market conditions. Section 1.4 notes that approval or denial of any one crude oil transport project, including the proposed Project, is unlikely to significantly impact the rate of extraction in the oil sands or the continued demand for heavy crude oil at refineries in the United States based on expected oil prices, oil-sands supply costs, transport costs, and supply-demand scenarios.

The 2013 Draft Supplemental EIS estimated how oil sands production would be affected by long-term constraints on pipeline capacity (if such constraints resulted in higher transportation costs) if long-term WTI-equivalent oil prices were less than $100 per barrel. The Draft Supplemental EIS also estimated a change in GHG emissions associated with such changes in production. The additional data and analysis included in this Supplemental EIS provide greater insights into supply costs and the range of prices in which pipeline constraints would be most likely to impact production. If WTI-equivalent prices fell to around approximately $65 to $75 per barrel, if there were long-term constraints on any new pipeline capacity, and if such constraints resulted in higher transportation costs, then there could be a substantial impact on oil sands

production levels. As noted in E.S.3.1, Summary of Market Analysis, this estimated price threshold could change if supply costs or production expectations prove different than estimated in this analysis. This is discussed in Section 1.4.5.4, Implications for Production.

ES.4.1.3 Climate Change Effects

The total direct and indirect emissions associated with the proposed Project would contribute to cumulative global GHG emissions. However, emissions associated with the proposed Project are only one source of relevant GHG emissions. In that way, GHG emissions differ from other impact categories discussed in this Supplemental EIS in that all GHG emissions of the same magnitude contribute to global climate change equally, regardless of the source or geographic location where they are emitted.

As part of this Supplemental EIS, future climate change scenarios and projections developed by the Intergovernmental Panel on Climate Change and peer-reviewed downscaled models were used to evaluate the effects that climate change could have on the proposed Project, as well as the environmental consequences from the proposed Project.

Assuming construction of the proposed Project were to occur in the next few years, climate conditions during the construction period would not differ substantially from current conditions. However, during the subsequent operational time period, the following climate changes are anticipated to occur regardless of any potential effects from the proposed Project:

- Warmer winter temperatures;
- A shorter cool season;
- A longer duration of frost-free periods;
- More freeze-thaw cycles per year (which could lead to an increased number of episodes of soil contraction and expansion);
- Warmer summer temperatures;
- Increased number of hot days and consecutive hot days; and
- Longer summers (which could lead to impacts associated with heat stress and wildfire risks).

This Supplemental EIS assessed whether the projected changes in the climate could further influence the impacts and effects attributable to the proposed Project. Elevated effects due to projected climate change could occur to water resources, wetlands, terrestrial vegetation, fisheries, and endangered species, and could also contribute to air quality impacts. In addition, the statistical risk of a pipeline spill could be increased by secondary effects brought on by climatic change such as increased flooding and drought. However, this increased risk would still be much less than the risk of spills from other causes (such as third-party damage). Climate change could have an effect on the severity of a spill such that it could be reduced in drought conditions but increased during periods of increased precipitation and flooding.

ES.4.2 Potential Releases

The proposed Project would include processes, procedures, and systems to prevent, detect, and mitigate potential oil spills.

Many commenters raised concerns regarding the potential environmental effects of a pipeline release, leak, and/or spill. Impacts from potential releases from the proposed Project were evaluated by analyzing historical spill data. The analysis identified the types of pipeline system components that historically have been the source of spills, the sizes of those spills, and the distances those spills would likely travel. The resulting potential impacts to natural resources, such as surface waters and groundwater, were also evaluated as well as planned mitigation measures designed to prevent, minimize, and respond to spills.

ES.4.2.1 Historical Pipeline Performance

In response to numerous comments regarding pipeline performance, the Department analyzed historical incident data within the PHMSA and National Response Center incident databases to understand what has occurred with respect to crude oil pipelines and the existing Keystone Pipeline system.

Table ES-1 summarizes hazardous liquid pipeline incidents reported to the PHMSA across the United States from January 2002 through July 2012 and shows the breakdown of incidents by pipeline component. A total of 1,692 incidents occurred, of which 321 were pipe incidents and 1,027 were involving different equipment components such as tanks, valves, or pumps.

Table ES-1 Summary of PHMSA Database Incidents[a] (January 2002 to July 2012)

Incident Category	Incidents	Incident Sub-Category	Incidents
Crude oil pipeline	1,692	Crude oil mainline pipe incidents	321
		Crude oil pipeline, equipment incidents (not mainline pipe)	1,027
		Crude oil pipeline system, unspecified elements	344
Crude oil mainline pipe	321	16-inch or greater diameter	71
		8-inch or 15-inch diameter	154
		Less than 8-inch diameter	52
		Diameter not provided	44
Crude oil pipeline, equipment (not mainline pipe)	1,027	Tanks	93
		Valves	25
		Other discrete elements (pumps, fittings, etc.)	909

[a] *Incident* as used in the Final Supplemental EIS is in reference to a PHMSA and/or a National Response Center record of a reportable spill or accident found within their respective databases.

To assess the likelihood of releases from the proposed Project, risk assessments were conducted addressing both the potential frequency of releases and the potential crude oil spill volumes associated with the releases. The assessments used three hypothetical spill volumes (small, medium, and large scenarios) to represent the range of reported spills in the PHMSA's spills database. Table ES-2 shows these spill volumes and the probabilities of such volumes.

Most spills are small. Of the 1,692 incidents between 2002 and 2012 (shown in Table ES-1), 79 percent of the incidents were in the small (zero to 50 bbl) range, equivalent to a spill of up to 2,100 gallons (see Table ES-2). Four percent of the incidents were in the large (greater than 1,000 bbl) range.

ES.4.2.1.1 Small and Medium Spills

The potential impacts from small spills of oil would typically be confined to soil immediately surrounding the spill, and would have little effect on nearby natural resources. These types of spills would generally be detected by maintenance or operations personnel and addressed through repair of the leak and remediation of the impacted area by removal of impacted soil and cleaning of stained concrete or containment areas.

With medium spills, a release could occur as a subsurface or surface event depending upon the cause. Similar to a small spill, a slow subsurface leak could potentially reach a groundwater resource and, if the leak is faster than the soil can absorb the oil, could seep to the ground surface. Once the migrating oil leaves the release site, impacts to soil, vegetation, wildlife, and surface water along the flow path would occur. Depending on how quickly it is remediated, some of the oil might tend to pool in low areas and potentially infiltrate back into the soil and to groundwater depending on the depth to groundwater.

ES.4.2.1.2 Large Spills

With a large spill, the majority of the spill volume would migrate away from the release site. The potential impacts from a large spill would be similar to the impacts from the medium-sized spill, but on a much larger scale. More oil would seep into the soil over a larger area and could infiltrate deeper into the soil. Once the spill reaches the surface, the oil would flow following topographic gradient or lows (e.g., gullies, roadside drainage ditches, culverts, or storm sewers) and eventually to surface water features.

Table ES-2 Spill Scenarios Evaluated in Supplemental EIS

Spill Volume Scenario	Frequency[a]
Small: Less than 50 bbl (2,100 gallons)	79%
Medium: 50–1,000 bbl (2,100–42,000 gallons)	17%
Large: >1,000 bbl (>42,000 gallons)	4%

[a] Indicates the share of all releases reported in the PHMSA database that fit each spill volume scenario.

If the release enters flowing water or other surface water features, the extent of the release could become very large, potentially affecting soil, wildlife, and vegetation along miles of river and shoreline. As has been seen in recent large spills, sinking oil can be deposited in river or stream bottoms and become a continual source of oil release over time.

ES.4.2.2 Prevention and Mitigation

In order to reduce the risk of spills, if permitted Keystone has agreed to incorporate additional mitigation measures in the design, construction, and operation of the proposed Keystone XL Project, in some instances above what is normally required, including:

- 59 Special Conditions recommended by PHMSA;
- 25 mitigation measures recommended in the Battelle and Exponent risk reports; and
- 11 additional mitigation measures.

Many of these mitigation measures relate to reductions in the likelihood of a release occurring. Other measures provide mitigation that reduces the consequences and impact of a spill should such an event occur. Mitigation measures are compiled in Appendix Z, Compiled Mitigation Measures, of this Supplemental EIS. Mitigation measures are actions that, if the proposed Project is determined to be in the national interest, Keystone would comply with as conditions of a Presidential Permit.

If a spill occurred, the degree of impact to water, people, livestock, soil, and other natural resources would depend on the distance from the spill source. A large spill of 20,000 bbl, for example, could have a combined overland and groundwater spreading of up to 2,264 feet (or 0.42 miles) from a release point. Oil could spread on flat ground up to 1,214 feet from the proposed pipeline, depending on the volume spilled. If oil reached groundwater, components in the oil, such as benzene, could spread in groundwater up to an additional 1,050 feet downgradient (essentially, downhill underground and on land) of the spill point.

The proposed Project would, if permitted, include processes, procedures, and systems to prevent, detect, and mitigate potential oil spills that could occur during construction and operation of the pipeline. These would include a Spill Prevention, Control, and Countermeasure Plan as well as a Construction, Mitigation, and Reclamation Plan (CMRP). In the event of a large leak, Supervisory Control and Data Acquisition sensors would automatically detect noticeable changes in pipeline pressure and flow rates. Leaks and spills could also be identified during routine aerial surveillance along the pipeline ROW. In addition, Keystone would be required, if permitted, to prepare an Emergency Response Plan that would contain further detail on response procedures and would be reviewed by the PHMSA prior to granting permission to operate the proposed pipeline. Keystone would incorporate into these plans lessons learned from past spills such as the pipeline rupture in 2010 that affected the Kalamazoo River (Marshall, Michigan). For example, Keystone would, if permitted, procure equipment required to respond to sunken and submerged oil and ensure personnel are appropriately trained.

ES.4.3 Socioeconomics

ES.4.3.1 Economic Activity Overview

During construction, proposed Project spending would support approximately 42,100 jobs (direct, indirect, and induced), and approximately $2 billion in earnings throughout the United States. Of these jobs, approximately 3,900 would be direct construction jobs in the proposed Project area in Montana, South Dakota, Nebraska, and Kansas (3,900 over 1 year of construction, or 1,950 per year if construction took 2 years). Construction of the proposed Project would contribute approximately $3.4 billion (or 0.02 percent) to the U.S. gross domestic product (GDP). The proposed Project would generate approximately 50 jobs during operations. Property tax revenue during operations would be substantial for many counties, with an increase of 10 percent or more in 17 of the 27 counties with proposed Project facilities.

The jobs and earnings analysis recognizes three distinct components of economic activity and job creation: direct, indirect, and induced.

- Direct economic activity associated with construction includes all jobs and earnings at firms that are awarded contracts for goods and services, including construction, directly by Keystone.
- Indirect economic activity includes all goods and services purchased by these construction contractors in the conduct of their services to the proposed Project. Examples of these types of activities related to pipeline construction include the goods and services purchased to produce inputs such as concrete, fuel, surveying, welding materials, and earth-moving equipment.
- Induced economic activity includes the spending of earnings received by employees working for either the construction contractor or for any supplier of goods and services required in the construction process. Examples of induced activities include

spending by access road construction crews, welders, employees of pipe manufacturers, and ranchers providing beef for restaurants and construction camps.

ES.4.3.2 Pipeline Geography, Population

Of the land area near the proposed pipeline route, approximately 17 percent intersects areas with low-income or minority populations, including Indian tribes. Such populations could potentially be disproportionately affected by the proposed Project.

The proposed pipeline route would go through 27 counties: six in Montana, nine in South Dakota, and 12 in Nebraska. These counties are referred to as the *pipeline corridor counties* and would be expected to experience most of the direct socioeconomic effects of the proposed Project.

The 27 pipeline corridor counties are predominantly rural and sparsely populated, with a total population of approximately 263,300 (2010 Census). Population density (number of persons per square mile) is low.

ES.4.3.3 Economic Activity During Construction

Construction contracts, materials, and support purchased in the United States would total approximately $3.1 billion. Another approximately $233 million would be spent on construction camps for workers in remote locations of Montana, South Dakota, and northern Nebraska.

Construction of the proposed Project would contribute approximately $3.4 billion to the U.S. GDP. This figure includes not only earnings by workers, but all other income earned by businesses and individuals engaged in the production of goods and services demanded by the proposed Project, such as profits, rent, interest, and dividends. When compared with the GDP in 2012, the proposed Project's contribution represents approximately 0.02 percent of annual economic activity across the nation.

Construction spending would support a combined total of approximately 42,100 jobs throughout the United States for the up to 2-year construction period. A *job* consists of one position that is filled for one year. The term *support* means jobs ranging from new jobs (i.e., not previously existing) to the continuity of existing jobs in current or new locations. The specific number of jobs at any location would result from the individual decisions of employers across the country affected by the proposed Project based on their labor needs, work backlog, and local hiring conditions. Of these jobs, approximately 16,100 would be direct jobs at firms that are awarded contracts for goods and services, including construction, by Keystone. The other approximately 26,000 jobs would result from indirect and induced spending; this would consist of goods and services purchased by the construction contractors and spending by employees working for either the construction contractor or for any supplier of goods and services required in the construction process.

About 12,000 jobs, or 29 percent of the total 42,100 jobs, would be supported in Montana, South Dakota, Nebraska, and Kansas. Also, of the 42,100 jobs, approximately 3,900 (or 1,950 per year if construction took 2 years) would comprise a direct, temporary, construction workforce in the proposed Project area.

Employment supported by construction of the proposed Project would translate to approximately $2.05 billion in employee earnings. Of this, approximately 20 percent ($405 million in earnings) would be allocated to workers in the proposed Project area states. The remaining 80 percent, or $1.6 billion, would occur in other locations around the country.

ES.4.3.4 Economic Activity During Operations

Once the proposed Project enters service, operations would require approximately 50 total employees in the United States: 35 permanent employees and 15 temporary contractors. This small number would result in negligible impacts on population, housing, and public services in the proposed Project area.

The total estimated property tax from the proposed Project in the first full year of operations would be approximately $55.6 million spread across 27 counties in three states. This impact to local property tax revenue receipts would be substantial for many counties, constituting a property tax revenue benefit of 10 percent or more in 17 of these 27 counties. Operation of the proposed Project is not expected to have an impact on residential or agricultural property values.

ES.4.4 Environmental Justice

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* directs federal agencies to identify and address, as appropriate, disproportionately high and adverse health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. Environmental justice refers to the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (USEPA 2007). The CEQ has provided guidance for addressing environmental justice.

Within the socioeconomic analysis area identified for the proposed Project, 16 census groupings contain minority populations that are meaningfully greater (equal or greater than 120 percent) than the share in the surrounding state, and five census tracts have larger shares of low-income populations. Four of these areas contain meaningfully greater populations of both minority and low income residents. Two minority populations are located on Indian lands: the Cheyenne River Indian Reservation and the Rosebud Indian Reservation.

Impacts during construction could include exposure to construction dust and noise, disruption to traffic patterns, and increased competition for medical or health services. Typical proposed Project operations are unlikely to disproportionately adversely impact the environmental justice populations present. Because the risk of a potential release is roughly equal at all points along the pipeline, the risks associated with such releases would not be disproportionately borne by minority or low-income populations. However, such populations could be more vulnerable should a release occur.

If permitted, Keystone has agreed to avoidance and mitigation measures to minimize negative impacts to all populations in the proposed Project area. Specific mitigation for environmental justice communities during construction would involve ensuring that adequate communication in the form of public awareness materials regarding the construction schedule and construction activities is provided.

ES.4.5 Water Resources

The proposed Project route would avoid surface water whenever possible, but would cross approximately 1,073 surface waterbodies including 56 perennial rivers and streams as well as approximately 24 miles of mapped floodplains. If permitted, Keystone would drill underneath major rivers to mitigate construction impacts as described below and in Section 4.3, Water Resources.

The proposed pipeline would cross important aquifers such as the Northern High Plains Aquifer (NHPAQ) (which includes the Ogallala Aquifer) and the Great Plains Aquifer (GPA). Modeling indicates that aquifer characteristics would inhibit the spread of released oil, and impacts from a release on water quality would be limited.

Nevertheless, within 1 mile of the proposed Project route are 2,537 wells, including 39 public water supply wells. Wells that are in the vicinity could be affected by a release from the proposed Project.

ES.4.5.1 Surface Water

ES.4.5.1.1 Construction

Construction of the proposed Project could result in temporary and permanent impacts such as:

- Stream sedimentation;
- Changes in stream channel morphology (shape) and stability;
- Temporary reduction in stream flow; and
- Potential for hazardous material spills.

Open-cut methods would be used at most waterbody crossings. However, impacts to surface waterbodies would be mitigated through various means. Horizontal directional drill (HDD) methods would be used at 14 major and sensitive waterbody crossings (see Figure ES-11). Waterbody banks would be restored to preconstruction contours or to a stable slope. Seeding, erosion control fabric, and other erosion control measures would be installed, as specified in the CMRP and permit documents.

ES.4.5.1.2 Operations

Surface water impacts associated with potential releases of crude oil and other hazardous liquid spills are addressed in detail in the Potential Releases section. Other potential impacts during the operations phase would include:

- Channel migration or streambed degradation that exposes the pipeline;
- Channel incision that increases bank heights to the point where slopes are destabilized, ultimately widening the stream; and
- Sedimentation within a channel that triggers lateral bank erosion.

Mitigation measures to address these impacts would include those specified in the CMRP. The proposed pipeline would be at least 5 feet below the bottom of waterbodies and at least 3 to 4 feet below the bottom of waterbodies in rocky areas, and that depth would be maintained at least 15 feet from either waterbody edge.

Where an HDD method is used, the crossing depth would be up to 55 feet below the stream bed. Potential bank protection measures could include installing rock, wood, or other materials keyed into the bank to provide protection from further erosion or regrading the banks to reduce the bank slope.

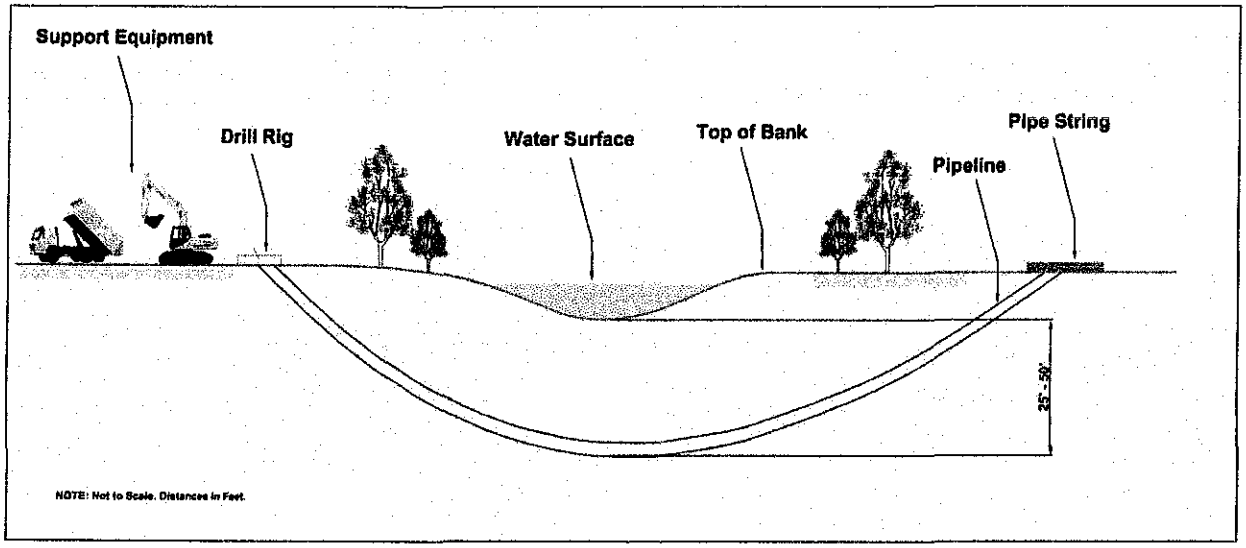

Figure ES-11 Cross Section of the Horizontal Directional Drilling Method

ES.4.5.2 Floodplains

The proposed pipeline would cross mapped and unmapped floodplains in Montana, South Dakota, and Nebraska. In floodplain areas adjacent to waterbody crossings, contours would be restored to as close to previously existing contours as practical, and the disturbed area would be revegetated during construction of the ROW in accordance with the CMRP. After construction, the proposed pipeline would not obstruct flows over designated floodplains, and any changes to topography would be minimal and thus would not affect local flood elevations.

ES.4.5.3 Groundwater

The primary source of groundwater impacts from the proposed Project would be potential releases of petroleum during pipeline operation and, to a lesser extent, from fuel spills from equipment. Any petroleum releases from construction or operation could potentially impact groundwater where the overlying soils are permeable and/or the depth to groundwater is shallow. Table ES-3 summarizes the anticipated effects of potential releases from the proposed Project on aquifers along the proposed Project route.

ES.4.6 Wetlands

The proposed Project would affect approximately 383 acres of wetlands. Potential impacts include:

- Impacts to wetland functions and values;
- Conversion from one wetland type to another; and
- Permanent loss of wetlands due to fill for permanent project-related facilities.

An estimated 2 acres of permanent wetland loss is anticipated. Remaining wetlands affected by the proposed Project would remain as functioning wetlands, provided that impact minimization and restoration efforts described in the CMRP are successful.

Wetlands are regulated primarily by Section 404 of the Clean Water Act, but other regulations could apply if, for example, a wetland area provides important habitat for federally listed species and species protected by the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act. Section 404 requires that wetland impacts are avoided, minimized, and mitigated to the greatest practicable extent possible. Keystone has made route modifications to avoid wetland areas (such as the NDEQ-identified Sand Hills Region) and has prepared a CMRP that summarizes the proposed wetland avoidance, minimization, and mitigation measures. In addition, various agencies, such as U.S. Army Corps of Engineers, could require additional mitigation in accordance with American Indian tribal, local, state, and federal permits and regulations.

Table ES-3 Effects of Potential Releases on Aquifers

Aquifer	Effects
Alluvial Aquifers and Northern High Plains Aquifer (NHPAQ), including the Ogallala Aquifer	Aquifer conditions in the NHPAQ in the proposed Project area indicate that shallow groundwater generally discharges to local surface waterbodies, and typically does not flow downward in significant amounts or flow horizontally over long distances. Analysis of historic spills and groundwater modeling indicate that contaminant plumes from a large-scale release that reaches groundwater in the NHPAQ and alluvial aquifers could be expected to affect groundwater quality up to approximately 1,000 feet downgradient of the source. This localized effect indicates that petroleum releases from the proposed Project is unlikely to extensively affect water quality in this aquifer group.
Great Plains Aquifer (GPA)	Across most of the proposed pipeline area where the GPA is present, it is very unlikely that any releases from the proposed pipeline would affect groundwater quality in the aquifer because the aquifer is typically deeply buried beneath younger, water-bearing sediments and/or aquitard units. The exception is in southern Nebraska, where the aquifer is closer to the surface. Water quality in the GPA could be affected by releases in this area, but groundwater flow patterns in the vicinity of the proposed Project route make such effects unlikely. Overall, it is very unlikely that the proposed pipeline area would affect water quality in the GPA due to weak downward gradients (downward groundwater flows) in the aquifers overlying the GPA.
Northern Great Plains Aquifer System (NGPAS)	As with the GPA, petroleum releases from the proposed Project would only affect water quality in portions of the NGPAS near the ground surface. In the case of a large-scale release, these impacts would typically be limited to within several hundred feet of the source, and would not affect groundwater within areas that provide groundwater recharge to large portions of the NGPAS.
Western Interior Plains Aquifer	The depth to this aquifer is several hundred feet below the ground surface in the proposed Project area; therefore, there is an extremely low probability that a petroleum release from the proposed Project would affect water quality in this aquifer.
Shallow Groundwater and Water Wells	There are 2,537 wells within 1 mile of the proposed Project, including 39 public water supply wells and 20 private wells within 100 feet of the pipeline ROW. The majority of these wells are in Nebraska. Those wells that are in the vicinity of a petroleum release from the proposed Project may be affected.

ES.4.7 Threatened and Endangered Species

Consultation and coordination with the U.S. Fish and Wildlife Service (USFWS) identified 14 federally protected, proposed, and candidate species that could be affected by the proposed Project: 11 federally-listed threatened or endangered species, as defined under the ESA, one proposed species for listing as endangered, and two candidate species for listing as threatened or endangered. Of the federally listed, proposed, and candidate species, the endangered American buying beetle (*Nicrophorus americanus*) is the only species that is likely to be adversely affected by the proposed Project (see Figure ES-12). Other species could potentially be affected by the proposed Project; among these are whooping cranes (*Grus americana*), greater sage-grouse (*Centrocercus urophasianus*), and Western prairie fringed orchids (*Platanthera praeclara*).

In consultation with the USFWS, the Department prepared a Biological Assessment to evaluate the proposed Project's potential impacts to federally listed and candidate species and designated critical habitat. In addition, USFWS has developed a Biological Opinion for the proposed Project, which includes recommended conservation measures and compensatory mitigation for unavoidable impacts that were assessed during the formal consultation process. The Biological Opinion is attached in Appendix H, 2012 Biological Assessment, 2013 USFWS Biological Opinion, and Associated Documents.

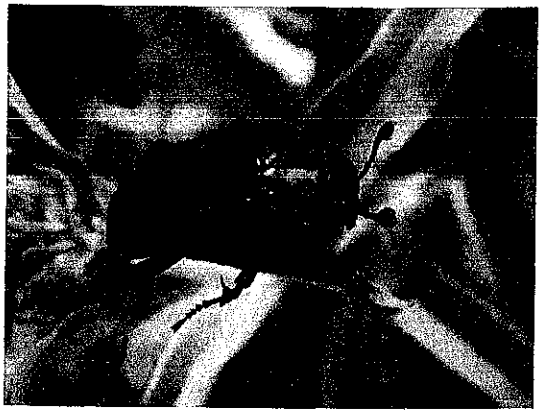

Figure ES-12 American Burying Beetle

Approximately 83 miles of the proposed Project Route in South Dakota and Nebraska would affect suitable American burying beetle habitat. Consultation between the Department and USFWS resulted in development of conservation measures and compensatory mitigation, such as trapping and relocating beetles, special lighting restrictions (the beetles are attracted to light), and establishment of a habitat conservation trust.

Even with these measures, the proposed Project would be likely to adversely affect the American burying beetle, resulting in incidental take (such as unintended death or harm of individual beetles) during construction or operation. The combination of Keystone's American burying beetle monitoring program and Reclamation Performance Bond would provide assurances that the acres disturbed by the proposed Project would be restored appropriately. The USFWS concluded in the 2013 USFWS Biological Opinion that the proposed Project is not likely to jeopardize the continued existence of the American burying beetle.

ES.4.8 Geology and Soils

The proposed route extends through relatively flat and stable areas, and the potential for seismic hazards (earthquakes), landslides, or subsidence (sink holes), is low. The pipeline would not cross any known active faults. During construction, land clearing could increase the risk of landslides and erosion. Keystone would, if permitted, construct temporary erosion control systems and restore the ROW after construction.

The proposed Project route would avoid the NDEQ-identified Sand Hills Region, where soils are particularly susceptible to damage from pipeline construction. Potential impacts to soils resources in other areas associated with construction or operation of the proposed Project and connected actions could include soil erosion, loss of topsoil, soil compaction, an increase in the proportion of large rocks in the topsoil, soil mixing, soil contamination, and related reductions in the productivity of desirable vegetation or crops. Construction also could result in damage to existing tile drainage systems (an agriculture practice that removes excess water from soil subsurface), irrigation systems, and shelterbelts.

To mitigate and minimize these impacts, Keystone would, if permitted, put in place procedures for construction and operation that are designed to reduce the likelihood and severity of proposed Project impacts to soils and sediments, including topsoil segregation methods, and to mitigate impacts to the extent practicable. After construction, areas of erosion or settling would be monitored.

ES.4.9 Terrestrial Vegetation

Potential construction- and operations-related impacts to general terrestrial vegetation resources associated with the proposed Project include impacts to cultivated crops, developed land, grassland/pasture, upland forest, open water, forested wetlands, emergent herbaceous wetlands, and shrub-scrub communities. In addition, the proposed Project route would result in impacts to biologically unique landscapes and vegetation communities of conservation concern.

Keystone would, if permitted, restore topsoil, slopes, contours, and drainage patterns to preconstruction conditions as practicable and to reseed disturbed areas to restore vegetation cover, prevent erosion, and control noxious weeds. Because disturbed prairie areas are difficult to restore to existing (pre-disturbance) conditions, Keystone would, if permitted, use specific best management practices and procedures to minimize and mitigate the potential impacts to native prairie areas and coordinate with appropriate agencies as necessary to monitor progress.

ES.4.10 Wildlife

Potential impacts to wildlife associated with construction of the proposed Project could include habitat loss, alteration, and fragmentation; direct mortality during construction and operation (e.g., vehicle collisions, power line/power pole collisions, etc.); indirect mortality because of stress or avoidance of feeding due to exposure to construction and operations noise, low-level helicopter or airplane monitoring overflights, and from increased human activity; reduced breeding success from exposure to construction and operations noise and from increased human activity; reduced survival or reproduction due to decreased availability of edible plants, reduced cover, and increased exotics and invasives; and increased predation (i.e., nest parasitism, creation of predator travel corridors, and poaching).

To reduce potential construction- and operations-related effects where habitat is crossed, Keystone would, if permitted, implement measures to minimize adverse effects to wildlife habitats, including shelterbelts, windbreaks, and living snow fences. Pipeline construction would be conducted in accordance with required permits.

ES.4.11 Fisheries

The proposed route would cross rivers and streams, including perennial streams that support recreational or commercial fisheries. Most potential impacts to fisheries resources would occur during construction and would be temporary or short term. Potential impacts from construction of stream crossings include siltation, sedimentation, bank erosion, sediment deposition, short-term delays in movements of fish, and transport and spread of aquatic invasive animals and plants. Keystone would, if permitted, minimize vehicle contact with surface waters and clean equipment to prevent transportation of aquatic invasive animals and plants. Impacts associated with potential releases of oil are described in Section 4.13, Potential Releases.

Most streams would be crossed using one of several open-cut (trenching) methods. Most stream crossings would be completed in less than 2 days, grading and disturbance to waterbody banks would be minimized, and crossings would be timed to avoid sensitive spawning periods, such that resulting steam bed disturbance and sediment impacts would be temporary and minimized.

Most large rivers would be crossed using HDD methods, which would install the pipeline well below the active river bed. As a result, direct disturbance to the river bed, fish, aquatic animals and plants, and river banks would be avoided. If permitted, Keystone has agreed to develop site-specific contingency plans to address unintended releases of drilling fluids that include preventative measures and a spill response plan.

ES.4.12 Land Use

Construction of the proposed Project would disturb approximately 15,427 acres of land. Approximately 90 percent of that land is privately owned while the remaining is owned by federal, state, or local governments. Rangeland (approximately 9,695 acres) and agriculture (approximately 4,975 acres) comprise the vast majority of land use types that would be affected by construction.

After construction, approximately 5,569 acres would be retained within permanent easements or acquired for operation of the proposed Project; this includes the pipeline ROW and aboveground facilities. Nearly all agricultural land and rangeland along the ROW would be allowed to return to production with little impact on production levels in the long term. However, there would be restrictions on growing woody vegetation and installing structures within the 50-foot-wide permanent ROW. Keystone has agreed to compensate landowners for crop losses on a case-by-case basis.

Keystone would if permitted use construction measures designed to reduce impacts to existing land uses such as topsoil protection, avoiding interference with irrigation systems, repairing or restoring drain tiles, assisting with livestock access and safety, and restoring disturbed areas with custom native seed mixes.

ES.4.13 Air Quality and Noise

Dust and emissions from construction equipment would impact air quality. Construction emissions typically would be localized, intermittent, and temporary since proposed pipeline construction would move through an area relatively quickly. Mitigation measures would be employed and enforced by an environmental inspector assigned to each construction spread.

All pump stations would be electrically powered by local utility providers. As a result, during normal operation there would be only minor emissions from valves and pumping equipment at the pump stations. The proposed Project would not be expected to cause or contribute to a violation of any federal, state, or local air quality standards, and it would not require a Clean Air Act Title V operating permit.

Construction activities would result in intermittent, temporary, and localized increases in noise levels. To reduce construction noise impacts, Keystone would, if permitted, limit the hours during which activities with high-decibel noise levels are conducted in residential areas, require noise mitigation procedures, monitor sound levels, and develop site-specific mitigation plans to comply with regulations.

ES.4.14 Cultural Resources

The proposed Project route would cross various private, state, and federal lands in Montana, South Dakota, and Nebraska where cultural resources would be encountered. Literature searches were conducted to locate previously identified cultural resources within the designated area of potential effects. Field studies were conducted between 2008 and 2013 to identify cultural resources and assess archaeological resources (i.e., sites), historic resources (i.e., buildings, structures, objects, and districts), and properties of religious and cultural significance, including traditional cultural properties.

As of December 2013, most of the proposed Project area has been surveyed for cultural resources. The proposed Project area of potential effects is approximately 39,500 acres, of which approximately 1,038 acres remain unsurveyed and are the subject of ongoing field studies. As part of this Supplemental EIS route evaluation process, consistent with the National Historic Preservation Act, the Programmatic Agreement (PA) that was signed in 2011 has been amended, finalized, and re-signed. Signatory parties to this agreement were the Department, Advisory Council on Historic Preservation, Bureau of Land Management, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, National Park Service, Western, Rural Utilities Service, Natural Resources Conservation Service, Farm Service Agency, Bureau of Indian Affairs, and the State Historic Preservation Offices of Montana, South Dakota, Nebraska, and Kansas. Invited signatories included the Montana Department of Natural Resources and Conservation, Montana Department of Environmental Quality, and Keystone. Indian tribes that participated in consultation were asked in 2013 to sign as Concurring Parties, consistent with 36 Code of Federal Regulations §§ 800.2(c)(2) and 800.6(c)(3).

Pursuant to the stipulations outlined in the PA, Keystone is required to complete cultural resources surveys on all areas that would be potentially impacted by the proposed Project, make recommendations on National Register of Historic Places eligibility, provide information on potential effects of the proposed Project, and provide adequate mitigation in consultation with the Department, state and federal agencies, and Indian tribes. Construction would not be allowed to commence on any areas of the proposed Project until these stipulations are met. The PA, therefore, would ensure that appropriate consultation procedures are followed and that cultural resources surveys would be completed prior to construction. If unanticipated cultural materials or human remains were encountered during the construction phase of the proposed Project, Keystone would implement Unanticipated Discovery Plans pursuant to the PA.

ES.4.14.1 Tribal Consultation

Upon receiving a new application, the Department reached out directly to 84 Indian tribes throughout the United States with potential interest in the cultural resources potentially affected by the proposed Project (see Figure ES-13). Of the 84 Indian tribes, 67 tribes notified the Department that they would like to consult or were undecided as to whether they would become consulting parties. All Indian tribes that participated in consultation were asked in 2013 to sign the amended PA.

The Department has conducted a broad range of tribal consultations, ranging from group meetings involving many Indian tribes and discussion topics to individual discussions on specific topics via letter, phone, and email. In addition to communication by phone, email, and letter, high-level Department officials travelled to areas near the proposed Project route to hold four face-to-face consultations, to which all Indian tribes were invited and whose participation was funded by Keystone, and one teleconference. Tribal meetings were held in October 2012 (three meetings), May 2013 (one meeting), and July 2013 (teleconference). Face-to-face meetings were held in four locations: Billings, Montana; Pierre, South Dakota; Rapid City, South Dakota; and Lincoln, Nebraska.

The Department engaged in discussions with the tribes and Tribal Historic Preservation Officers on issues relating to cultural resources. Consultations included discussions of cultural resources, in general, as well as cultural resources surveys, Traditional Cultural Properties surveys, effects to cultural resources, and mitigation. The Department has continued government-to-government consultations to build on previous work, to ensure that tribal issues of concern are addressed in the consultation process, and to amend and incorporate comments and modifications to the PA, as appropriate, in consultation with the tribes to conclude the Section 106 consistent process for the proposed Project. Additionally, tribes were provided proposed Project cultural resources survey reports and opportunities to conduct Traditional Cultural Property surveys funded by Keystone.

ES.4.15 Cumulative Effects

The cumulative effects analysis evaluates the way that the proposed Project's impacts interact with the impact of other past, present, or reasonably foreseeable future actions or projects. The goal of the cumulative impacts analysis is to identify situations where sets of comparatively small individual impacts, taken together, constitute a larger collective impact.

Cumulative impacts associated with the proposed Project and connected actions vary among individual environmental resources and locations. Generally, where long-term or permanent impacts from the proposed Project are absent, the potential for additive cumulative effects with other past, present, and reasonably foreseeable future projects is negligible.

Keystone's CMRP and planned mitigation measures, individual federal and state agency permitting conditions, and/or existing laws and regulations would, if permitted, work to control potential impacts and reduce the proposed Project's contribution to cumulative effects.

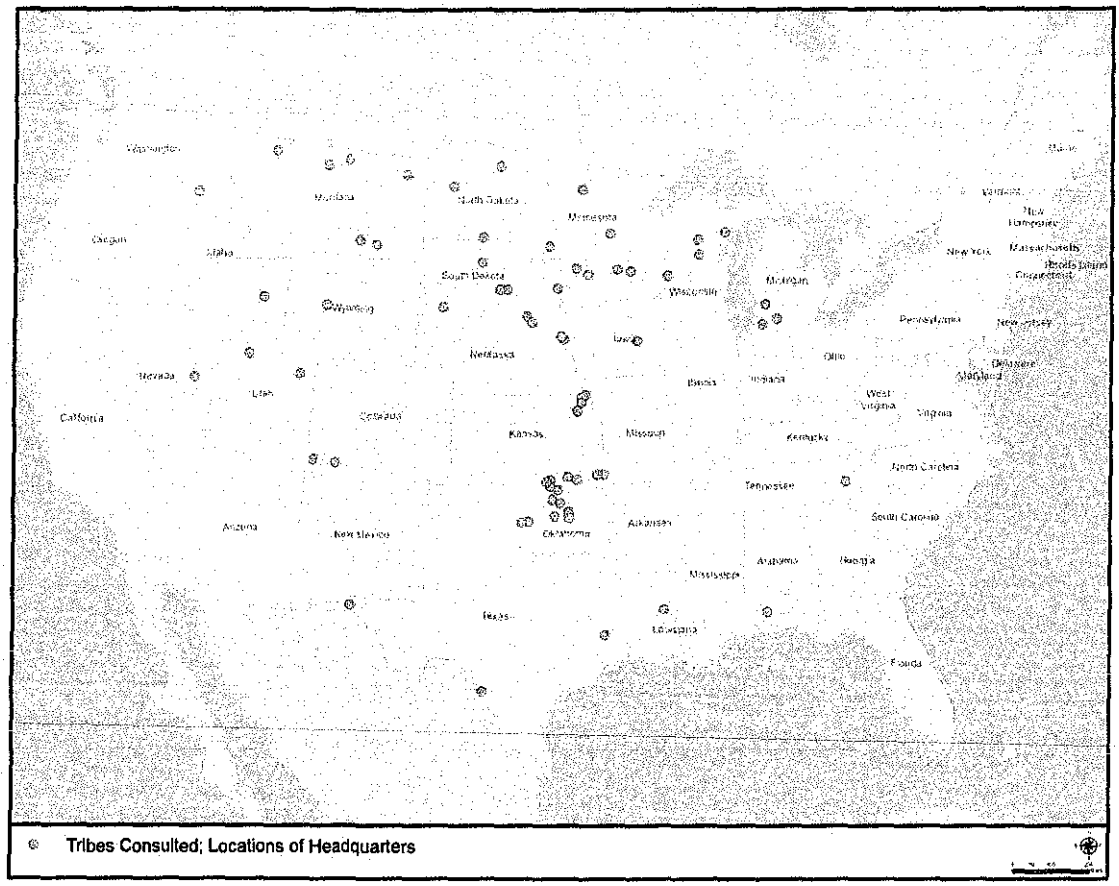

Figure ES-13 Indian Tribes Consulted

ES.4.16 Environmental Impacts in Canada

While the proposed Project analyzed in this Supplemental EIS begins at the international boundary where the pipeline would exit at Saskatchewan, Canada, and enter the United States through Montana, the origination point of the pipeline system would be in Alberta, Canada. In addition to the environmental analysis of the proposed Project in the United States, the Department monitored and obtained information from the environmental analysis of the Canadian portion of the proposed Project. The Canadian government, not the Department, conducted an environmental review of the portion of the proposed Project within Canada. However, the Department has included information from the Canadian government's assessment in this Supplemental EIS and has continued to monitor information from Canada as it becomes available.

On March 11, 2010, the Canadian National Energy Board issued its 168-page Reasons for Decision granting Keystone's application to build the Canadian portion of the proposed Project. This document provided a rationale for the approval of the pipeline by Canadian regulatory authorities and a description of the National Energy Board's analysis of the following topics: economic feasibility, commercial impacts, tolls and tariffs, engineering, land matters, public consultation, aboriginal consultation, and environmental and socioeconomic matters.

Moreover, analysis and mitigation of environmental impacts in Canada more generally are ongoing by Canadian officials. For example, on September 1, 2012, the Government of Alberta's development plan for the Lower Athabascan oil sands region became effective. The plan requires cancellation of about 10 oil sands leases, sets aside nearly 20,000 square kilometers (7,700 square miles) for conservation, and sets new environmental standards for the region in an effort to protect sensitive habitat, wildlife, and forest land.

ES.5.0 ALTERNATIVES

Detailed analysis was conducted on three broad categories of alternatives to the proposed Project, consistent with NEPA:

- No Action Alternative—which addresses potential market responses that could result if the Presidential Permit is denied or the proposed Project is not otherwise implemented;
- Major Route Alternatives—which includes other potential pipeline routes for transporting WCSB and Bakken crude oil to Steele City, Nebraska; and
- Other Alternatives—which include minor route variations, alternative pipeline designs, and alternative sites for aboveground facilities.

Several alternatives exist for the transport of WCSB and Bakken crude oil to Gulf Coast refineries, including many that were not carried forward for detailed analysis. This Supplemental EIS provides a detailed description of the categories of alternatives, the alternative screening process, and the detailed alternatives identified for further evaluation.

ES.5.1 No Action Alternative

The No Action Alternative analysis considers what would likely happen if the Presidential Permit is denied or the proposed Project is not otherwise implemented. It includes the Status Quo Baseline, which serves as a benchmark against which other alternatives are evaluated. Under the Status Quo Baseline, the proposed Project would not be constructed and the resulting direct, indirect, and cumulative impacts that are described in this Supplemental EIS would not occur. The Status Quo Baseline is a snapshot of the crude oil production and delivery systems at current levels – in other words, no change at all – irrespective of likely alternative transport scenarios to transport WCSB and Bakken crude.

The No Action Alternative includes analysis of three alternative transport scenarios that, based on the findings of the market analysis, are believed to meet the proposed Project's purpose (i.e., providing WCSB and Bakken crude oil to meet refinery demand in the Gulf Coast area) if the Presidential Permit for the proposed Project were denied, or if the pipeline were otherwise not constructed. Under the alternative transport scenarios, other environmental impacts would occur in lieu of the proposed Project. This Supplemental EIS includes analysis of various combinations of transportation modes for oil, including truck, barge, tanker, and rail. These scenarios are considered representative of the crude oil transport alternatives with which the market would respond in absence of the Keystone XL pipeline. These three alternative transport scenarios (i.e., the Rail and Pipeline Scenario, Rail and Tanker Scenario, and Rail Direct to the Gulf Coast Scenario) are described below and illustrated on Figure ES-14.

ES.5.1.1 Rail and Pipeline Scenario

Under this scenario, WCSB and Bakken crude oil (in the form of dilbit or synbit) would be shipped via rail from Lloydminster, Saskatchewan (the nearest rail terminal served by two Class I rail companies), to Stroud, Oklahoma, where it would be temporarily stored and then transported via existing and expanded pipelines approximately 17 miles to Cushing, Oklahoma, where the crude oil would interconnect with the interstate oil pipeline system.

This scenario would require the construction of two new or expanded rail loading terminals in Lloydminster, Saskatchewan (the possible loading point for WCSB crude oil), one new terminal in Epping, North Dakota (the representative loading point for Bakken crude oil), seven new terminals in Stroud, and up to 14 unit trains (consisting of approximately 100 cars carrying the same material and destined for the same delivery location) per day (12 from Lloydminster and two from Epping) to transport the equivalent volume of crude oil as would be transported by the proposed Project.

ES.5.1.2 Rail and Tanker Scenario

The second transportation scenario assumes crude oil (as dilbit or synbit) would be transported by rail from Lloydminster to a western Canada port (assumed to be Prince Rupert, British Columbia), where it would be loaded onto Suezmax tankers (capable of carrying approximately 986,000 barrels of WCSB crude oil) for transport to the U.S. Gulf Coast (Houston and/or Port Arthur) via the Panama Canal. Bakken crude would be shipped from Epping to Stroud via BNSF Railway or Union Pacific rail lines, similar to the method described under the Rail and Pipeline Scenario. This scenario would require up to 12 unit trains per day between Lloydminster and Prince Rupert, and up to two unit trains per day between Epping and Stroud. This scenario would require the construction of two new or expanded rail loading facilities in Lloydminster with other existing terminals in the area handling the majority of the WCSB for shipping to Prince Rupert. Facilities in Prince Rupert would include a new rail unloading and storage facility and a new marine terminal encompassing approximately 4,200 acres and capable of accommodating two Suezmax tankers. For the Bakken crude portion of this Scenario, one new rail terminal would be necessary in both Epping, North Dakota, and Stroud, Nebraska.

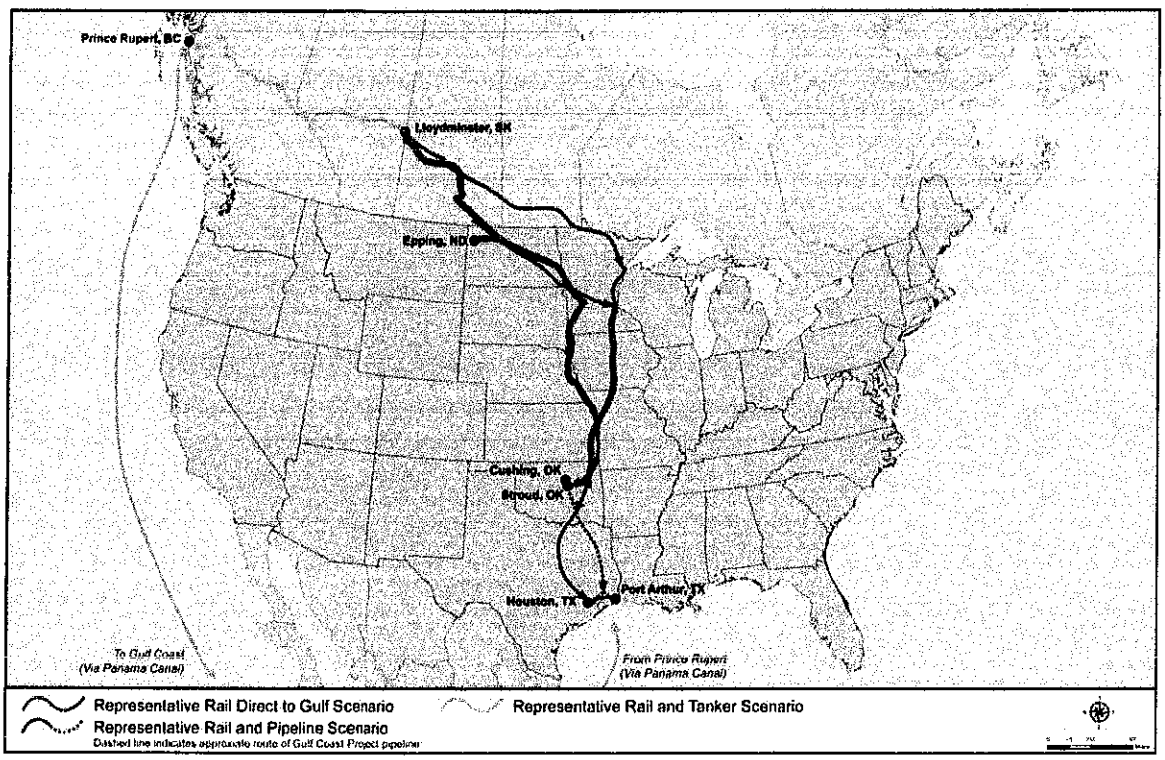

Figure ES-14 Representative No Action Alternative Scenarios

ES.5.1.3 Rail Direct to the Gulf Coast Scenario

The third transportation scenario assumes that WCSB and Bakken crude oil (as dilbit) would be shipped by rail from Lloydminster, Saskatchewan, and Epping, North Dakota, directly to existing rail facilities in the Gulf Coast region capable of off-loading up to 14 unit trains per day. These existing facilities would then either ship the crude oil by pipeline or barge the short distance to nearby refineries. It would largely rely on existing rail terminals in Lloydminster, but would likely require construction of up to two new or expanded terminals to accommodate the additional WCSB shipments out of Canada. One new rail loading terminal would be needed in Epping to ship Bakken crude oil. Sufficient off-loading rail facilities currently exist or are proposed in the Gulf Coast area such that no new terminals would need to be built under this scenario.

ES.5.2 Major Pipeline Route Alternatives

The Department considered potential alternative pipeline routes to assess whether or not route alternatives could avoid or reduce impacts to environmentally sensitive resources while also meeting the proposed Project's purpose. Consistent with NEPA, a two-phase screening process was used to evaluate prospective alternatives using a set of criteria to determine their technical, environmental, and economic viability. Alternatives that failed to meet the screening criteria were not brought forward for detailed analysis in this Supplemental EIS. The initial (Phase I) screening of other major route alternatives considered the following criteria:

- Meeting the proposed Project's purpose and need, including whether the alternative would require additional infrastructure such as a pipeline to access Bakken crude oil;
- Availability;
- Reliability;
- Length within the United States;
- Total length of the pipeline, including both the United States and Canada;
- Estimated number of aboveground facilities;
- Length co-located within an existing corridor;
- Acres of land directly affected during construction; and
- Acres of land directly affected permanently.

Pipeline length was used as an important screening criterion because it has a relatively direct relationship with:

- System reliability, in that the longer the pipeline the greater risk that some portion may become inoperable at some point, thereby delaying shipments.
- Environmental impacts, including:
  - Risk of spills and leaks, which represent the greatest potential threat to water and aquatic resources;
  - Temporary construction-related disturbance to natural habitat (e.g., wetlands, forests, native prairie); and
  - Permanent habitat fragmentation.
- Construction and operational costs, which generally increase in proportion to overall pipeline length.

All other factors being equal, longer pipelines are less desirable because they represent greater risks to system reliability, environmental impacts, and project costs.

As a result of this Phase I screening process, the following alternatives were eliminated because they would not meet the project purpose and/or were significantly longer than other viable options (see Figure ES-15):

- Western Alternative (to Cushing);
- Express Platte Alternative; and
- Existing Keystone Corridor
  - Option 1: Proposed Border Crossing (near Morgan, Montana)
  - Option 2: Existing Keystone Pipeline Border Crossing (at Pembina, North Dakota).

Several commenters recommended that the proposed Project parallel the existing Keystone Pipeline rather than the proposed route. The Department considered these comments, but ultimately concluded that the existing Keystone Pipeline Route was not a reasonable alternative because it would not meet the proposed Project's purpose and need (i.e., would not meet Keystone's contractual obligations to transport 100,000 bpd of Bakken crude oil). Further, the existing Keystone Pipeline Corridor would be longer (taking into consideration pipeline length in both Canada and the United States), which represents an increased spill risk. The 2011 Steele City Segment, the I-90 Corridor, and the Steele City Segment A1A alternatives, however, were retained for further screening.

The Phase II screening used a desktop data review of key environmental and other features (e.g., wetlands and waterbodies crossed, total acreage affected). After this Phase II screening, the Steele City Segment A1A Alternative was eliminated because this route would be longer with an associated increased risk for spills and leaks, would cross more miles of principal aquifer and wetlands, and would require a second major crossing of the Missouri River, relative to the proposed Project. For these reasons, the Steele City A1A Alternative would not offer any offsetting environmental advantages relative to the proposed Project to warrant further consideration. However, both the 2011 Steele City Segment and I-90 Corridor alternatives were considered reasonable alternatives and were retained for full evaluation in this Supplemental EIS. These two route alternatives are described below and depicted in Figure ES-15. Table ES-4 summarizes key aspects of the major pipeline route alternatives.

Table ES-4 Summary of Major Pipeline Route Alternatives

	Proposed Project	2011 Steele City Segment Alternative	I-90 Corridor Alternative
New Pipeline Length (miles)	875	854	927
Number of Aboveground Facilities[a]	73	71	77
Length Co-Located with Existing Keystone Pipeline (miles)	0	0	254
NDEQ-Identified Sand Hills Region Crossed (miles)	0	89	0
Highly Erodible Soil (Wind) Crossed (miles)	73	116	36
Perennial Waterbody Crossings	56	53	61
Wetlands Affected during Construction (acres)	262	544	223
Average Annual Employment During Construction	3,900	3,900	4,100
Property Tax Revenues (millions)	$55.6	$53.7	$59.3
Construction Land Area Affected (acres)	11,593	11,387	12,360
Operations (Permanent) Land Area Required (acres)	5,569	5,176	4,818

[a] Does not include 2 pump stations for the Cushing Extension in Kansas

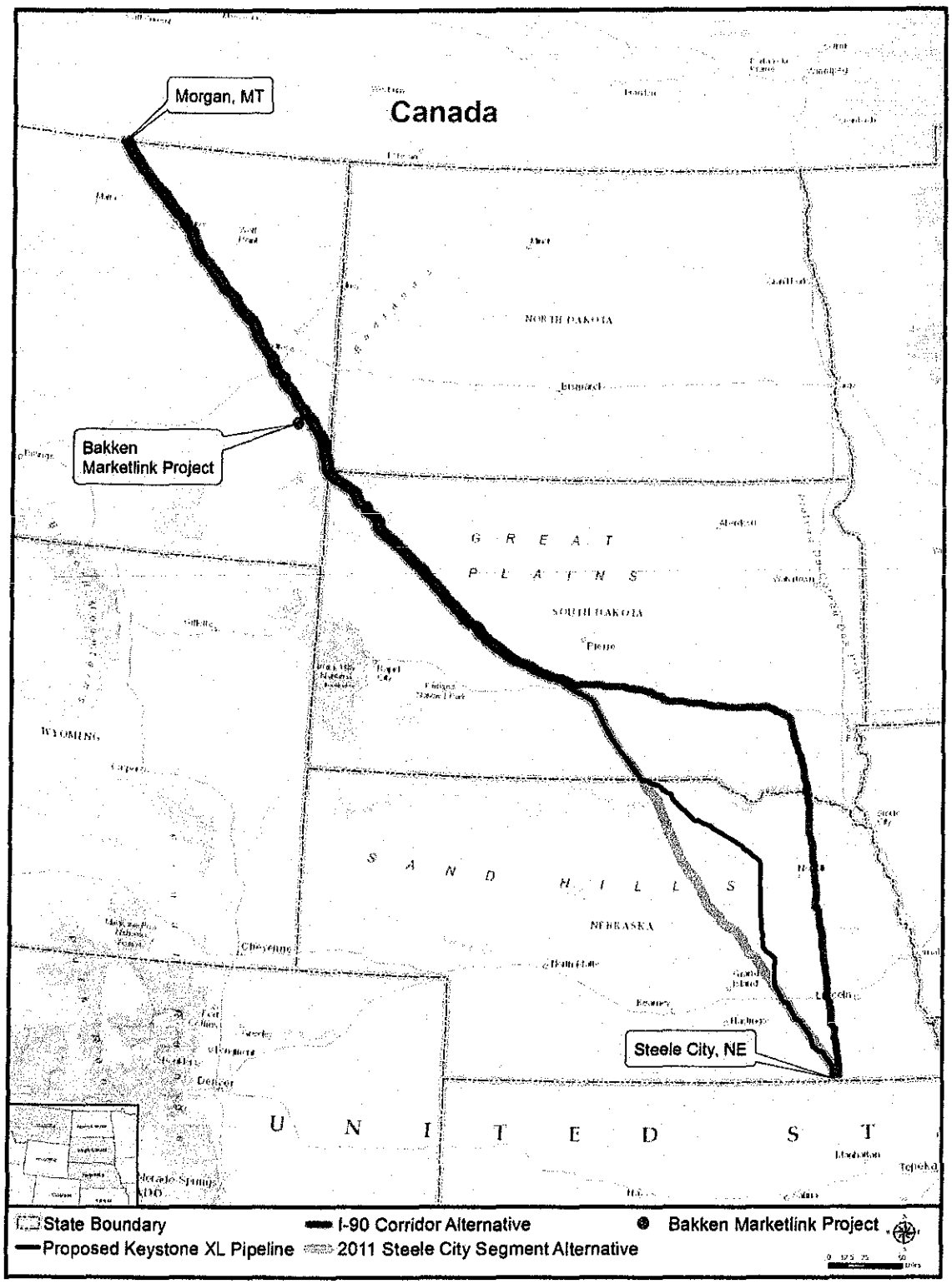

Figure ES-15 Preliminary Pipeline Route Alternatives

ES.5.2.1 Keystone XL 2011 Steele City Segment Alternative

The Keystone XL 2011 Steele City Segment Alternative evaluates the impacts of constructing the route proposed in the 2011 Final EIS as a comparison against which other route alternatives, including the proposed Project, can be made. This alternative would follow Keystone's proposed Project route from the Canadian border, designated Milepost (MP) 0, south to approximately MP 204, where it would connect with the Bakken Marketlink Project onramp at the same location as the proposed Project and continue to approximately MP 615 in northern Nebraska near the South Dakota state line. At that location, the Keystone XL 2011 Steele City Segment Alternative would divert from the current proposed Project and would continue southeasterly for another 240 miles to the southern terminus at Steele City, Nebraska. For approximately 89 miles, the Keystone XL 2011 Steele City Segment Alternative would cross the NDEQ-identified Sand Hills Region.

ES.5.2.2 I-90 Corridor Alternative

Keystone's proposed Project route starts at the Canadian Border (MP 0) and stretches south through Montana and into South Dakota to approximately MP 516, where the proposed pipeline route intersects Interstate 90 (I-90). From this point, this alternative pipeline route would diverge from the proposed Project route, following the ROW of I-90 and State Highway 262 for 157 miles, where it would then intersect and follow the ROW of the existing Keystone pipeline to Steele City, Nebraska.

The I-90 Corridor would avoid crossing the NDEQ-identified Sand Hills Region, and would reduce the length of pipeline crossing the NHPAQ system, which includes the Ogallala Aquifer.

ES.5.3 Other Alternatives Considered

In addition to the major route alternatives, the Department reviewed proposed variations—relatively short deviations—to the proposed route that were designed to avoid or minimize construction impacts to specific resources (e.g., cultural resource sites, wetlands, recreational lands, residences) or that minimize constructability issues (e.g., shallow bedrock, difficult waterbody crossings, steep terrain).

The Department also considered two alternative pipeline designs in response to public comments: an aboveground pipeline and an alternative using a smaller-diameter pipe. The Department determined that both alternative designs were not reasonable alternatives for the proposed Project because they would not meet the proposed Project purpose and need and/or because of safety and security reasons; therefore, they were not considered further in this Supplemental EIS.

This Supplemental EIS considered renewable energy sources and energy conservation as alternatives to the proposed Project. As noted in Section 1.4, Market Analysis, the crude oil would be used largely for transportation fuels and, therefore, any alternatives to the crude oil would need to fulfill the same purpose. The analysis found that even with renewable energy and conservation, there would still be a demand for oil sands-derived crude oil. Based on this evaluation, these alternatives were not carried forward for further analysis as alternatives to the proposed Project.

ES.5.4 Comparison of Alternatives

Consistent with NEPA and the CEQ regulations, the Department compared the proposed Project with the alternatives that met the proposed Project's purpose and need, and that were carried forward for detailed analysis in this Supplemental EIS. The alternatives carried forward for detailed analysis were: the 2011 Steele City Segment Alternative, the I-90 Corridor Alternative, and the three identified No Action Alternative scenarios (i.e., the Rail and Pipeline Scenario, the Rail and Tanker Scenario, and the Rail Direct to the Gulf Coast Scenario).

The two pipeline alternatives compare different routes that meet the purpose and need of the proposed Project, and the No Action Alternative scenarios describe the likely potential impacts associated with transport of crude oil from the WCSB and the Bakken formations if the Presidential Permit is denied or if the proposed Project is not otherwise implemented. The comparison focuses on three categories of impacts: physical disturbance, GHG emissions, and potential releases.

ES.5.4.1 Physical Disturbance Impacts Alternatives Comparison

The primary differences between the proposed Project and the alternatives related to physical disturbance are summarized in Table ES-5.

Table ES-5 Physical Disturbance Impacts Associated with New Construction and Operations for the Proposed Project and Alternatives

	Status Quo Baseline	Proposed Project	2011 Steele City Segment Alternative	I-90 Corridor Alternative	No Action Rail/Pipeline Scenario	No Action Rail/Tanker Scenario	No Action Rail Direct to the Gulf Coast Scenario
New Pipeline Length (miles)	0	875	854	927	17	32	0
Number of New Aboveground Facilities	0	73	71	77	33	33	19
Length Co-located with Existing Keystone Pipeline (miles)	0	0	0	254	NA	NA	NA
NDEQ-Identified Sand Hills Region Crossed (miles)	0	0	89	0	0	0	0
New Highly Erodible Soil (Wind) Crossed (miles)	0	73	116	36	0	0	0
Perennial Waterbody Crossings	0	56	53	61	1,216	330	711
Major Water Crossings[a]	0	62	60	61	42	14	40
Number of Shallow Wells in Proximity [b]	0	113	97	42	NA	NA	NA
New NHPAQ Crossed (miles)	0	294	247	145	NA	NA	NA
Wetland Affected during Construction (acres)	0	262	544	223	193	351	NQ[c]
Communities within 2 Miles	0	17	16	37	350	182	669
Construction (Temporary) Land Area Affected (acres)	0	11,599	11,387	12,360	5,227	6,427	1,500
Operations (Permanent) Land Area Required (acres)	0	5,309	5,176	4,818	5,103	6,303	1,500

Notes: This table does not include Canadian impacts for pipeline alternatives.
NA = not applicable
NQ = not quantified; insufficient design data
NDEQ = Nebraska Department of Environmental Quality
NHPAQ = Northern High Plains Aquifer
[a] This is defined as channel crossings of waterbodies that delineate U.S. Geological Survey National Hydrography Dataset Level 4 (HUC4) Hydrologic Unit watershed basins.
[b] A shallow well is defined as a well with a depth of 50 feet or less, but does not include wells with zero depth; proximity is defined as within ¼ mile of the centerline.
[c] Specific facility footprints for this scenario are not known at this time. However, impacts would be generally similar to the other rail scenarios.

ES.5.4.2 Greenhouse Gas Emissions Alternatives Comparison

To facilitate comparison of GHG emissions across all alternatives for operational GHG emissions, an assessment was made for all alternatives along the entire route from Hardisty, Alberta, to the Gulf Coast (including pipelines in Canada and from Steele City to the Gulf Coast). GHG emissions from the two pipeline route alternatives would be similar in scale to those of the proposed Project. The direct emissions during the operation phase of the 2011 Steele City Segment Alternative would be essentially the same as those generated by the proposed Project because they would have the same number of pump stations (20). The I-90 Corridor Alternative is expected to have similar but slightly higher GHG emissions because it would have one more pump station than the proposed Project and could generate slightly higher amounts of indirect GHG emissions from electricity consumption.

During operation of all No Action rail scenarios, the increased number of unit trains along the scenario routes would result in GHG emissions from both diesel fuel combustion and electricity generation to support rail terminal operations (as well as for pump station operations for the Rail/Pipeline Scenario). The total annual GHG emissions (direct and indirect) attributed to the No Action scenarios range from 28 to 42 percent greater than for the proposed Project (see Table ES-6).

The indirect GHG emissions over the lifecycle of oil sands crude oil production, transportation, refining, and product use are compared between the proposed Project and the evaluated alternatives in Section ES.4.1.2, Lifecycle Analysis.

Table ES-6 Annual Greenhouse Gas Emissions from Crude Transport (from Hardisty/Lloydminster, Alberta, to the Gulf Coast Area) Associated with the Proposed Project and Alternatives (per 100,000 bpd)

	Overall Proposed Project Route[a]	Overall 2011 Steele City Segment Alternative Route[b]	Overall I-90 Corridor Alternative Route[c]	No Action Rail/Pipeline Scenario	No Action Rail/Tanker Scenario	No Action Rail Direct to the Gulf Coast Scenario
Operation (direct and indirect)—Transportation, Not Extraction						
$MTCO_2e$/Year per 830,000 bpd	3,123,859	3,123,844	3,211,946	4,428,902	4,364,611	3,991,472
$MTCO_2e$/Year per 100,000 bpd	376,369	376,367	386,981	533,603	525,857	480,900
% Difference from Proposed Project	NA	0.0%	2.8%	41.8%	39.7%	27.8%

[a] Canadian, Proposed Project, and Gulf Coast
[b] Canadian, Steele City Segment, and Gulf Coast
[c] Canadian, I-90, and Gulf Coast
Notes: The emissions shown for the overall proposed Project differ from those shown for the proposed Project in Section ES.4.1.1, Greenhouse Gas Emissions from the Proposed Project, in order to present a full comparison of the overall proposed Project route to the other alternatives. All data include train emissions for return trips as well.
$MTCO_2e$ = metric tons of CO_2 equivalents
NA = not applicable
bpd = barrels per day

ES.5.4.3 Potential Spill Risk Alternatives Comparison

Similar to the GHG emissions comparison, potential spill risk was evaluated for alternatives along the entire route from Hardisty, Alberta, to the Gulf Coast (including portions of the route in Canada and including existing pipelines from Steele City to the Gulf Coast). Table ES-7 provides a summary of calculated potential release impacts for the various alternatives analyzed in terms of the number of potential releases per year and the potential volume of oil released per year.

Both of the major route alternatives would begin at the same border crossing as the proposed Project (near Morgan, Montana) and end at the same location as the proposed Project (near Steele City, Nebraska); as such, the pipelines in Canada north of the border crossing and the pipelines south of Steele City down to the Gulf Coast would be identical for all three overall pipeline routes. Compared to the proposed Project, the two major pipeline route alternatives would have similar potential spill risks (see Table ES-7). In addition, both of these major route alternatives would require aboveground facilities that are similar to those for the proposed Project; therefore, potential releases impact areas would be similar. Because the I-90 Corridor Alternative is slightly longer than the proposed Project, it would carry a slightly higher spill risk (with an estimated 533 bbl released per year compared to 518 annual bbl released for the proposed Project).

The three No Action Alternative scenarios differ from the proposed Project in that they would use alternative modes of transportation to deliver crude oil to refinery markets in the Gulf Coast rather than just a pipeline (although one of the three scenarios includes a pipeline as a significant part of its delivery system). Potential spill risks for these alternative modes differ from the proposed Project in terms of both average spill frequency and average spill size.

Volume of crude oil transportation by rail in the No Action Alternative scenarios would generally be limited to the volume contained within individual railcars. This volume constrains the total volume of crude oil that could potentially impact groundwater relative to the proposed Project in the event of a release. This constraint is offset by the increased statistical likelihood of spills associated with these alternative modes of crude oil transport relative to pipelines.

Historical rail incident data were analyzed to evaluate potential releases associated with rail transport in the United States. The results help provide insight into what could potentially occur with respect to spill volume, incident cause, and incident frequency for the No Action Alternative scenarios that involve rail transport. In addition, rail incident frequencies were compared to frequencies for other modes of transport (i.e., pipeline, marine tanker). Although the product to be transported by the proposed Project is crude oil, incidents for petroleum products were also analyzed to provide a comparison to a larger dataset. In order to make comparisons between the modes of transportation, the statistics regarding releases are expressed in terms of *ton-miles* (1 ton-mile is transporting 1 ton of product 1 mile; to calculate total ton-miles in a given year, one multiplies the total tons transported by the total number of miles transported).

The rates of releases and average size of releases vary between modes of transportation. For instance, rail transport has more reported releases of crude oil per ton-mile than pipeline or marine transport but, overall, pipeline transport has the highest number of barrels released per ton-mile. Comprehensive data from 2010 to 2013 are not yet available and therefore this analysis does not include incidents subsequent to 2009 such as the 2013 Lac-Mégantic rail tragedy or the Tesoro Logistics pipeline incident. The number of barrels released per year for the No Action scenarios is higher than what is projected for the proposed Project or the other pipeline alternatives (as detailed in Table ES-7) because of the alternate modes of transport in the No Action scenarios.

There is also a greater potential for injuries and fatalities associated with rail transport relative to pipelines. Adding 830,000 bpd to the yearly transport mode volume would result in an estimated 49 additional injuries and six additional fatalities for the No Action rail scenarios compared to one additional injury and no fatalities for the proposed Project on an annual basis.

Table ES-7 Potential Releases Impacts (Full Pathway) Associated with the Proposed Project and Alternatives

	Overall Proposed Project Route[a]	Overall 2011 Steele City Segment Alternative Route[b]	Overall I-90 Corridor Alternative Route[c]	No Action Rail/Pipeline Scenario	No Action Rail/Tanker Scenario	No Action Rail Direct to the Gulf Coast Scenario	
						Option 1[g]	Option 2[g]
Miles for Transport (Overall Route)	1,938	1,917	1,990	3,902	14,014	4,624	5,375
Releases per Year[d,e]	0.46	0.46	0.48	294	276	383	455
Barrels Released per Year[f]	518	513	533	1,227	4,633	1,335	1,606

[a] Canadian, Proposed Project, and Gulf Coast
[b] Canadian, Steele City Segment, and Gulf Coast
[c] Canadian, I-90, and Gulf Coast
[d] Releases per year frequency was calculated using databases from the U.S. Department of Transportation covering U.S. transportation in the years 2002 to 2009. The pipeline spill frequency was based on a 16-inch diameter crude oil pipeline.
[e] Releases per Year = (16-inch U.S. crude pipeline spill frequency * total pipeline ton-miles) + (U.S. rail spill frequency * total rail ton-miles) + (U.S. marine spill frequency * total rail ton-miles) + (U.S. truck spill frequency * total truck ton-miles).
[f] Barrels Released per Year = (average 16-inch U.S. crude pipeline barrels (bbl) released * total pipeline ton-miles) + (average rail bbl released * total rail ton-miles) + (average marine bbl) released * total rail ton-miles) + (average truck bbl released * total truck ton-miles).
[g] The Option 1 route goes through Lloydminster while Option 2 routes through Fort McMurray.

ES.6.0 GUIDE TO READING THE SUPPLEMENTAL EIS

The Supplemental EIS consists of 11 volumes and is available electronically for viewing or download at www.keystonepipeline-xl.state.gov. Various sections of this document contain bibliographies with full lists of references and citations. A list of where to find printed copies of the complete Supplemental EIS can be found at www.keystonepipeline-xl.state.gov or by mail inquiry to:

U.S. Department of State
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Washington D.C. 20520

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#4

Held

Nancy Held July 6, 2015

CEPA

Canadian Energy Pipeline Association

Association canadienne de pipelines d'énergie

Pipeline Abandonment Assumptions

Technical and Environmental considerations for development of Pipeline Abandonment strategies

Prepared for the Terminal Negative Salvage Task Force of the Canadian Energy Pipeline Association

September 2006 – April 2007

Does not include Appendix

Disclaimer

This report was prepared by the Terminal Negative Salvage Technical Working Group, a subcommittee of the Terminal Negative Salvage Steering Committee of the Canadian Energy Pipeline Association (CEPA). The working group included representatives of CEPA member companies. While every means was taken to ensure the accuracy of the information contained in this report, CEPA does not guarantee its accuracy.

The use of this report will be at the user's sole risk, regardless of any fault or negligence of CEPA.

Executive Summary

Companies that own and operate oil and gas pipelines in Canada recognize the need to develop guidelines to safely and viably abandon pipelines and other related facilities when they reach the end of their economic lives. Technical guidelines were drawn up by industry groups 10 years ago to help companies plan abandonment strategies. The basic assumptions made in a 1996 discussion paper on pipeline abandonment (Pipeline Abandonment – A Discussion Paper on Technical and Environmental Issues – see Appendix C) are still appropriate. Land use is the most important factor used to determine abandonment strategies and specific site assessments must be conducted for every potential abandonment.

This report documents CEPA's review of those assumptions to today's technical standards and regulatory environment. The pipeline abandonment matrix developed for this report allows pipeline owners to plot variables, including land use and pipeline properties (i.e. diameter) to guide decision making about removal, abandoning in place or abandoning with special treatment is the most appropriate abandonment strategy. A risk-based, comprehensive site specific assessment is needed to validate the chosen abandonment strategy for specific pipelines.

For major abandonment projects, it is expected that a combination of treatments will be used, based on site specific assessments. Most common issues are dealt with in this report including regulatory requirements, environmental considerations, land use, ground subsidence, remediation, pipe cleanliness, water crossings, erosion, water conduits, rail, road or utility crossings, and post-abandonment responsibilities, providing companies with the technical background to make appropriate abandonment decisions.

This report is a preliminary and broad based look at technical abandonment assumptions and requires discussions with appropriate parties supported by detailed analysis of historical case studies and issue-specific research. It is recognized that further effort is required to develop a risk based decision process to support the required site specific assessments. Also, some of the assumptions contained within this report and the earlier works are too broad and/or require validation (An example of an issue identified as candidate for further specific attention is pipeline cleanliness to provide further understanding and guidance about "how clean is clean).

Abbreviations

AENV	Alberta Environment
AEPEA	Alberta Environmental Protection and Enhancement Act
C&R	Conservation and Reclamation
CAPP	Canadian Association of Petroleum Producers
CCME	Canadian Council of Ministers of the Environment
CEPA	Canadian Energy Pipeline Association
DOT	U.S. Department of Transportation
EUB	Alberta Energy and Utilities Board
FERC	U.S. Federal Energy Regulatory Commission
km	kilometre
mm	millimetre
NEB	National Energy Board
NORMs	Naturally occurring radioactive materials
O.D.	Outside diameter
OPS (PHMSA)	U.S. Office of Pipeline Safety (Pipeline Hazardous Materials Safety Administration)
PCB	Polychlorinated biphenyl
TNS	Terminal Negative Salvage

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1. Introduction

The energy pipeline grid in Canada has been growing for many decades. This pipeline infrastructure is fundamental to the safe, reliable, and efficient delivery of hydrocarbon fluids from producing areas to domestic and U.S. markets.

While the energy industry is expected to remain robust well into the future, it must be recognized that the necessity to abandon pipeline facilities may be triggered by changing supply and demand patterns, both at the local and macro levels. Changing technologies and other economic influences may also affect pipeline lifecycles.

In April 2005, the Canadian Energy Pipeline Association (CEPA) formed a Task Force to study the issues relating to Terminal Negative Salvage (TNS) for pipeline systems. Simply put, TNS is the cost associated with all activities involved in the eventual permanent abandonment of the pipeline facilities. Before one can begin the process of estimating these costs it is necessary to start discussing some of the technical assumptions for abandonment and retirement of these facilities.

A Steering Committee was formed to direct the study of various TNS sub-committees. As part of this initiative, a technical subcommittee of the Steering Committee (Technical Working Group), comprised of representatives from several CEPA member pipeline companies, was formed to update pipeline [technical] abandonment assumptions. This report is the result of the work of this subcommittee.

From a technical standpoint, and in light of cost and land use considerations, decisions have to be made by pipeline companies concerning the appropriate retirement of pipeline facilities, whether above or below ground. As a general proposition, the recognized practice is to dismantle and remove above-ground facilities. The appropriate method to use for abandonment of buried pipe is not quite so straightforward. Options range from abandonment in place, complete removal, or some intermediate option.

For any large-scale abandonment project, it is unlikely that any one abandonment technique will be employed. Rather, a project will likely involve a combination of pipe removal and abandonment in place along the length of the pipeline. A key factor influencing the choice between the two options is present and future land use.

No matter what abandonment techniques are used, it is reasonable to expect that the associated costs will outweigh any proceeds which may be realized from the sale of removed pipe for scrap or other use. Terminal negative salvage costs are those which are net of salvage proceeds recovered.

To provide a framework for the development of abandonment plans, this report sets forth technical abandonment assumptions. The information contained in this report builds on the information contained in the 1996 discussion paper. In most cases the 1996 information is still appropriate and the information was not copied into the main body of

this report. The 1996 report is included in Appendix C in order to provide a more complete reference collection of relevant information

In essence, the report seeks to provide guidance in terms of the appropriate retirement of pipeline facilities. Importantly, this report includes a pipeline abandonment options matrix by pipeline diameter and land use category for general reference.

This report forms the basis for further discussion and development. Notwithstanding the abandonment methodology noted in the matrix, it is recognized that any specific abandonment plan should be developed on the basis of comprehensive site-specific assessments, company specific considerations, landowner/stakeholder input and the various technical and environmental factors described in this report. A risk based decision process shall be developed for the site-specific assessments to support appropriate actions by an operator for a particular pipeline situation.

2. Past Initiatives

2.1 Overview

Pipeline abandonment and the funding of future abandonment projects, or TNS, have been discussed by energy producers, facility operators and regulatory agencies in Canada for over 20 years.

The first significant foray into this area resulted in the publication of a comprehensive background paper by National Energy Board (NEB) staff in 1985 (the 1985 NEB Staff Paper). The NEB issued a further guidance letter on TNS in February 1986 (the 1986 NEB Letter). In the mid-1990s, two major discussion papers were spawned by an intense collaborative review involving the NEB, the Alberta Energy Utilities Board (EUB), the Canadian Association of Petroleum Producers (CAPP) and CEPA. The first discussion paper was issued in 1996 and was entitled "Pipe Abandonment – A Discussion Paper on Technical and Environmental Issues" (the 1996 Discussion Paper). The second discussion paper was issued in 1997 and was entitled "Legal Issues Relating to Pipeline Abandonment: A Discussion Paper" (the 1997 Legal Paper). The subject was also further explored by CAPP in a 2002 paper entitled "Draft Guidelines for Pipeline Abandonment Applications in Alberta" (the 2002 CAPP Guidelines).

Taken together, these initiatives provided a solid starting point for this recent CEPA effort. For background and context, this chapter provides a synopsis of each of these initiatives.

2.2 The 1985 NEB Staff Paper

In 1984, at an NEB gas pipeline tolls hearing, several parties demonstrated an interest in addressing the issue of TNS related to pipeline abandonment. This provided the impetus

for a background paper on TNS to be prepared by NEB staff. This paper was issued in September 1985.

For ease of reference, the executive summary of the 1985 NEB Staff Paper has been reproduced as Appendix D to this report.

This discussion paper represented the first significant examination by a Canadian regulatory authority of the appropriate abandonment techniques for buried pipelines. Importantly, the paper acknowledged that abandonment in place is a viable option for smaller-diameter pipelines, and that such an approach might also be viable in certain situations for larger-diameter pipelines.

In so doing, the paper supports in many instances that pipelines may be abandoned in place. NEB staff pointed to the environmental disturbance that would be caused by removal in some circumstances, and the extreme costs that would be associated with removing all facilities.

The paper pointed to the various factors that should be considered in deciding the proper abandonment approach. These factors included land use and the potential for ground subsidence arising from the eventual deterioration of pipelines abandoned in place.

2.3 The 1996 and 1997 Discussion Papers

The twin matters of pipeline abandonment and TNS again came to the fore in the mid-1990s when the NEB, the EUB, CAPP, and CEPA embarked on a comprehensive collaborative review.

That particular initiative resulted in the issuance of a discussion paper on technical and environmental issues in November 1996, as well as a discussion on associated legal issues in May 1997. These papers were leading edge at the time and provided considerable guidance to stakeholders in the formulation of abandonment and decommissioning plans.

For ease of reference, the 1996 Discussion Paper on technical and environmental issues has been reproduced as Appendix C of this report.

The 1996 Discussion Paper canvassed many of the same issues that had been addressed in the 1985 NEB Staff Paper. In essence, the 1996 Discussion Paper took the 1985 NEB Staff Paper's initial analysis to the next level, and looked more closely at issues such as ground subsidence and pipe cleanliness. Specific studies on these issues were commissioned for purposes of completing the 1996 Discussion Paper and remain leading edge to this day. These studies entitled Identification and Assessment of Trace Contaminants Associated with Oil and Gas Pipelines Abandoned in Place, Preliminary Geotechnical Assessment of Pipeline Subsidence Phenomena and Environmental Issues

Concerning Pipeline Abandonment are referenced in Appendix E of this report. These studies are available for viewing at the NEB or EUB libraries or from CEPA.

Consistent with the 1985 NEB Staff Paper, the 1996 Discussion Paper acknowledged and confirmed that abandonment in place is a viable option in many circumstances. The 1996 Discussion Paper reconfirmed that any large-scale abandonment project would likely involve a combination of pipe removal and abandonment in place along the length of the pipeline.

Various technical and environmental factors were addressed at length in the 1996 Discussion Paper, with the paper recommending that comprehensive site-specific assessments be conducted in support of any abandonment plan.

The legal discussion paper that followed in May 1997, the 1997 Discussion Paper, examined a variety of legal issues, including liability issues relating to the discontinuation and abandonment of pipelines. Owing to the composition of the legal work group, the effort focused largely on pipelines subject to the jurisdiction of the NEB and the EUB.

2.4 The 2002 CAPP Draft Guidelines

Drafted six years after the 1996 Discussion Paper, the 2002 CAPP Draft Guidelines focused solely on Alberta, providing direction to pipeline owner/operators planning to abandon a pipeline within that province. These draft guidelines supported the 1996 Discussion Paper with regard to the management of technical and environmental issues affecting pipeline abandonment.

The 2002 CAPP Draft Guidelines also provided a thorough and expanded list of both operator and regulator responsibilities associated with the pipeline abandonment process.

2.5 Review of Recent Abandonment Case Studies

To help give context to abandonment planning strategies, the CEPA Technical Working Group looked for recent examples of medium to large scale pipeline abandonment projects that could be used as case studies to broaden the understanding of abandonment issues being studied in this report. A literature review was conducted in search of both Canadian and U.S. examples. The few documented case studies found in the public domain, are included in this section. It is hoped that future pipeline abandonment projects will be tracked as they occur to provide additional case studies.

2.5.1. Canadian Review

A literature search did not turn up any major pipeline abandonment projects in the public domain. To follow up, staff at the EUB and NEB were contacted to determine whether they were aware of any recent large-scale abandonment projects.

At the time, NEB staff were not aware of any major projects, only the abandonment of some discrete sections of pipe (Recently the abandonment of a major above-ground pipeline in the Yukon is providing some case history and a point of reference going forward). At the EUB, officials were aware of a number of pipeline abandonment projects in Alberta. For the most part, these projects involved the abandonment in place of small diameter pipelines in all types of land use categories.

During the development of the 1996 Discussion Paper, two pipeline abandonment case studies were reviewed. Both of these case studies supported abandonment in place strategy as a viable option for some pipelines. The case studies reviewed in the development of the 1996 Discussion Paper were:

1. Trans-Northern Pipelines Inc. (NPS 8 pipe abandoned in place)
2. Montreal Pipe Line Limited (NPS 12 pipe abandoned in place)

These pipeline companies were contacted to see if they had any new information to add to their case studies today.

In November 1995, Trans-Northern Pipelines submitted a case history to the 1996 Pipeline Abandonment Steering Committee for their eight-inch diameter pipeline referred to as the Ottawa Lateral. It was constructed in 1952 and abandoned in place in segments between 1968 and 1987. When contacted in October 2005, officials at Trans-Northern Pipelines said they did not have any new information to add to their original case study.

In January 1996, Montreal Pipe Line submitted a letter to the 1996 Pipeline Abandonment Steering Committee outlining its abandonment in place of a 12-inch diameter pipeline in 1984. When contacted in 2005, officials at Montreal Pipe Line Limited were unable to provide an update on their abandonment experience.

2.5.2. U.S. Review

Several companies in the U.S. have filed applications with the Federal Energy Regulatory Commission (FERC) to abandon older pipelines and a summary of these applications can be found at the FERC website at http://elibrary.ferc.gov/idmws/docket_search.asp and entering the Docket numbers stated below.

A summary of these applications and corresponding FERC decisions are:

1. El Paso Natural Gas, Docket No. CP04-423, Order approving abandonment plan
2. Northwest Pipeline Corporation, Docket No. CP05-32, Order authorizing abandonment and issuing certificate
3. Paiute Pipeline Company, Docket No. CP03-31, Order approving contested settlement, issuing certificate and authorizing abandonment

While these applications and FERC decisions discuss broad issues, they do not contain detailed technical information. They show that present and future land use, safety and

environmental considerations are important factors in determining a pipeline abandonment plan. They also demonstrate that site specific assessments are required in managing these factors.

To better understand these U.S. case studies, the next paragraph is a summary of the abandonment and decommissioning process for pipeline facilities subject to FERC jurisdiction (Section 7(b) of the Natural Gas Act, 15 U.S.C. 717f(b)(2005)) along with a summary of the environmental assessment requirements from each of the U.S. case studies reviewed.

Under the Natural Gas Act section 7(b), a natural gas pipeline company must seek approval from FERC to abandon/decommission any pipeline facilities. FERC considers whether the abandonment is in the public convenience or necessity. In this process FERC approves the plan for pipeline abandonment based on various factors, including consideration of State and/or local permitting requirements. In making its decision, FERC balances landowner claims of economic and environmental harm from leaving abandoned pipeline in the ground against the benefits of removing it, in its environmental assessment of the abandonment application. The Environmental Assessment addresses geology, soils, mineral resources, fisheries, threatened and endangered species, cultural resources, water resources, wetlands, land use, residential impacts, and alternatives. For each area that would be used or disturbed, each company must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area.

Case Study No. 1
El Paso Natural Gas
Docket No. CP04-423
Order Approving Abandonment (issued January 27, 2005)

El Paso sought to decommission sections of its 16-inch diameter Jal Lines by *using a combination of removal and abandonment in place*. The lines, which were originally constructed in 1929 and 1937, extended about 207 miles and 178 miles respectively. El Paso has been progressively decommissioning segments of these lines since the early 1990s. The Commission found that because the lines were old, obsolete and underutilized, the abandonment was in the public convenience and necessity. The Commission *approved El Paso's application* on the condition that the company implement the mitigation measures contained in its application.

Case Study No. 2
Northwest Pipeline Corporation
Docket No. CP05-32
Order Authorizing Abandonment and Issuing Certificate (issued September 13, 2005)

Northwest filed an application seeking approval of its Capacity Replacement Project in response to an order issued by the U.S. Department of Transportation's Office of Pipeline Safety after a series of pipeline failures. As part of the project, Northwest sought

permission to *abandon in place* 268 miles of 26-inch diameter pipeline between Sumas and Washougal, Washington, and to isolate the 26-inch pipeline from other system components. The Commission *approved* the application subject to Northwest meeting certain environmental conditions identified in the Environmental Assessment.

Case Study No. 3
Paiute Pipeline Company
Docket No. CP03-31
Order Approving Contested Settlement, Issuing Certificate, and Authorizing Abandonment (issued July 14, 2003)

Paiute Pipeline applied for authorization to abandon segments of deteriorating pipeline on its Carson Lateral in Nevada. Paiute planned to replace the deteriorating pipeline with a larger diameter pipeline, thus expanding its capacity overall. The Commission approved the *abandonment in place* of the 10-inch diameter pipeline and said the environmental conditions attached to the order would mitigate any impacts associated with this strategy. As well, Paiute must comply with the terms of the Environmental Assessment.

From the limited technical information found in these case studies it appears that FERC is receptive to abandonment in place strategies providing that the associated technical and environmental issues are appropriately managed.

It is important to note, that no U.S. case studies were found in the public domain that required the entire removal of a pipeline system once it was no longer required.

3. Guidelines and Assumptions

3.1 Overview

This section discusses the key issues involved in the safe, environmentally sound and financially viable abandonment of buried metallic hydrocarbon transmission pipeline facilities. These same issues were reviewed and discussed in the 1996 Discussion Paper and, where applicable, this section provides a current update to these issues. The content of the 1996 Discussion Paper remains valid and was not copied in the main body of this report. Rather it is contained in Appendix C and should be referenced. A key deliverable of this report is to produce an abandonment matrix that can be used to assist with planning pipeline abandonment projects.

3.2 Pipeline Abandonment Matrix

The origins of the matrix produced in this report are found in the pipeline abandonment matrix developed in the 1985 NEB Staff Paper. This matrix has been modified to provide an updated perspective on the primary pipeline abandonment options based on pipeline diameter and land use categories.

There are several broad assumptions that apply to the pipeline abandonment matrix for all diameter ranges and land use categories. These assumptions are as follows:

- The matrix in this report is applicable for all hydrocarbon pipelines.
- Cathodic protection will be discontinued in all cases.
- Site specific assessments may override any of the primary options recommended in the matrix. As part of a site specific assessment there may be legal or other considerations (easement agreements, landowner input, etc.) that may change the recommended option.

The horizontal axis of the matrix is organized by the following three outside diameter ranges:

- Small (2" to 12")
- Medium (14" to 24")
- Large (26" and greater)

Three diameter ranges were chosen because they provide an appropriate level of guidance for pipe abandonment options. Based on the CEPA review, it was found that iIncluding more diameter ranges would not necessarily enhance the matrix or provide more definitive guidance.

The most important consideration for any pipeline abandonment/removal project is the existing and potential land use. The vertical axis of the matrix is structured around three broad land use areas containing 10 land use categories. These categories are discussed in more detail in the upcoming sections:

- Agricultural
  - Cultivated
  - Cultivated with special features (deep tilling, tree farms, etc.)
  - Non-cultivated (pasture, prairie, etc.)
- Non-agricultural
  - Existing developed land
  - Prospective developed land
  - No future development (forest, Crown Lands, etc.)
- Other areas
  - Environmentally sensitive (wetlands, endangered species habitat, etc.)
  - Water crossings
  - Roads and railways
  - Utilities crossings

Table 1 – Pipeline Abandonment Matrix

Land Use		Pipe Diameter		
		60.3 to 323.9 mm (2" to 12")	355.6 to 610 mm (14" to 24")	> 660 mm (> 26")
Agricultural	**Cultivated**	A	A	A
	Cultivated with special features (depth of cover considerations)	R	R	R
	Non Cultivated (Native Prairie, Rangeland, Pasture)	A	A	A
Non-Agricultural	**Existing Developed Lands** (Commercial, Industrial, Residential)	A	A	A
	Prospective future development (Commercial, Industrial, Residential)	R	R	R
	No future development anticipated (eg, Forest Areas)	A	A	A
Other Areas	**Environmentally Sensitive Areas** (including Wetlands)	A	A	A
	Roads & Railways	A+	A+	A+
	Water Crossings	A	A	A
	Other Crossings (Utilities)	A	A+	A+

Each box in the matrix represents the primary option for pipeline abandonment for each of the land use categories. It is recognized that there will always be a certain amount of pipe that will be removed or abandoned in place for each of the categories based on site specific assessments, but the primary option is the one listed in the matrix. As well, it is recognized that further development is needed to further refine land use categories. This development will occur as part of the development of the risk based site specific assessment process.

The three recommended options available in the matrix are described in Table 2.

Table 2 – Primary Pipeline Abandonment Options

Abandonment Option	Description
A	pipeline is abandoned in place
A+	pipeline is abandoned in place with special treatment to prevent potential ground subsidence (e.g., fill pipe with concrete)
R	pipeline is removed

At the initial stages of any pipeline abandonment project, site specific assessments will be necessary and will probably determine that a combination of abandonment options be performed for the various land use categories. In doing so, pipeline companies may determine a percentage split between the primary option in the matrix and any potential secondary option. For example, the matrix recommends that all diameter ranges of pipelines be abandoned in place for a cultivated land use category. However, when the time arrives to initiate an actual abandonment project for this land use category, there is a reasonable likelihood that a small amount of pipe will require removal or abandon with special treatment after the completion of site specific assessments. A similar approach can be applied for the other land use categories.

3.2. Regulatory Requirements

The 1996 Discussion Paper included an appendix summarizing the regulatory requirements which prevailed for pipeline abandonment in Canada at that time.

An updated tabular summary of current regulatory requirements has been compiled and appears as Appendix B of this report.

Any proposed abandonment activity for NEB regulated pipelines has to be approved in advance by the NEB and other applicable regulatory agencies. Applications for such approvals have to include the rationale for the abandonment and the measures to be employed to carry out the abandonment.

Applicable provincial legislation and regulations are also included in the summary in Appendix B for information purposes.

3.3. Environmental Considerations

The following key fundamental assumptions from the 1996 Discussion Paper remain relevant and applicable:

- Pipe abandoned in place shall be emptied of service fluids, purged or appropriately cleaned or both; physically separated from any in-service piping; and capped, plugged, or otherwise effectively sealed.
- It is assumed that pipe can be cleaned to an acceptable level (applicable regulatory standards)
- It is assumed that all external pipe coatings are stable (environmental) and acceptable to remain in place
- A responsible approach to all pipe abandonment projects includes an assessment of potential environmental effects.

Although various provincial regulators consider environmental issues such as cleanliness of the pipe, environmental regulatory process requirements specific to the abandonment phase of a pipeline remain limited to those of Alberta Environment. At this time, no other provincial jurisdiction specifically deals with pipeline abandonment.

Under the *Alberta Environmental Protection and Enhancement Act*, an operator must obtain a Reclamation Certificate once the pipeline right-of-way has been reclaimed to the current standard. If the abandonment project includes pipe removal that meets the index of a Class I pipeline, then AEPEA approval is required to ensure appropriate conservation and reclamation. A Class I pipeline is defined as one with an index of 2960 or greater (index = outside diameter in millimetres times length in kilometres). Class II pipelines are subject to conservation and reclamation direction provided in AENV's *Environmental Protection Guidelines for Pipelines*. A Class II pipeline is defined as one with an index less than 2960.

Since the 1996 Discussion Paper was issued, there has been increasing regulatory interest in environmental issues such as contamination from both provincial and federal regulatory bodies. These issues exist for both removal and abandon in place options. For example, if the pipe is a potential source of polychlorinated biphenols (PCBs) or naturally occurring radioactive materials (NORMs), it will affect the removal operation and the ability to safely dispose of the pipe and contaminants. However, if the pipe is left in place, the PCBs or NORMs could flow along the pathway inside or alongside the pipe spreading contamination. In both cases, to ensure compliance companies need to have an understanding of allowable threshold criteria for specific contaminants and current regulatory requirements at the time of abandonment.

At this time revisions are being considered by Environment Canada under the Canadian Environmental Protection Act related to PCB regulation. Currently a multi-stakeholder group led by the EUB, is developing guidelines for disposal of NORMs. The abandonment matrix in this report is based on current requirements, which at this time does not include any specific regulations for NORMs.

3.4. Land Use Considerations

From a review of the technical and environmental issues, it is clear that existing and future land use is the most important factor to consider when determining whether pipe should be removed or abandoned in place.

The 1996 Discussion Paper also reached the same conclusion. For the purpose of this report, it is assumed that there are no existing easement agreements and Crown Land Authorizations that would affect the abandonment options in the matrix.

Abandonment in place is recommended for the following land uses because the disturbance caused by pipe removal would adversely affect sensitive areas or existing infrastructure:

- Environmentally Sensitive Areas (parks, wetlands, natural areas, species at risk habitat)
- Water crossings (streams, rivers, lakes, canals)
- Non-agricultural lands such as:
    - forested lands,
    - existing developed lands (commercial, industrial, residential)
- Non-cultivated lands (native prairie, rangeland)
- Roads and railways
- Other crossings (utilities, other pipelines)
- Cultivated (including those that are irrigated)

Removal is recommended for the following land uses because of the potential for the pipe to become a hindrance to ongoing land management activities:

- Prospective future development (commercial, industrial, residential)
- Cultivated with special features where depth of cover is of concern (tree farms, turf farms, deep-tilling operations)

Generally, the process should be to abandon in place until the land is to be developed to lessen the overall impact to the area.

3.5. Ground Subsidence

Wherever abandonment in place is recommended in the matrix, it is assumed that ground subsidence levels are within the tolerable range for the land use. Abandonment plans should consider site-specific conditions to evaluate the degree and tolerability of subsidence that might be expected.

The 1996 Discussion Paper concluded after significant study that even under the worst conditions of total structural collapse, ground subsidence would be negligible for pipelines with diameters of 12-inches and smaller. It went on to conclude that for pipelines with greater diameters, the degree of subsidence may be within tolerable ranges. Studies commissioned on corrosion observed that less then 1 % of the pipeline length

contain coating defects which may lead to corrosion. In layman's terms, this means that most abandoned pipelines would retain their overall structural integrity for decades, if not centuries. The risk-based comprehensive site specific assessment would validate the subsidence risks.

Subsidence is known to be highly dependant on pipeline diameter, depth of cover and local soil conditions. Consideration for safety, land-use and environmental factors should help determine if the land can tolerate subsidence. The matrix identifies the general acceptability of in-place abandonment through most land-use categories except lands with special features and prospective future development areas. It is recognized that a proportion of pipelines abandoned in-place may be in-filled with solid materials to reduce or eliminate long-term subsidence.

In the case of pipe removal, subsidence continues to be an issue. Ditch line subsidence resulting from the removal of pipelines is to be addressed on a site-specific basis. Considerations should include: soil volumes required for backfilling, sources of material, topsoil conditions, compaction and application of a roach.

For further reference, in Section 3.3 of the1996 Discussion Paper (Appendix C) there is a more thorough overview of potential ground subsidence issues. It is recognized that considerable work is needed to validate the risk of subsidence due to pipeline corrosion. This work could occur as part of the effort to define a risk-based assessment process.

3.6. Remediation Considerations

It is assumed that any residual contamination found on the right-of-way or company owned/leased properties will be remediated to the applicable standards and regulatory requirements prior to final abandonment, regardless of the abandonment strategy.

3.7. Pipe Cleanliness

It is assumed that any pipe abandoned in place will be cleaned to meet all applicable guidelines and regulatory requirements. The question noted in the 1996 Discussion Paper of "How clean is clean?" remains unclear. One way to address this question is to consider not just the condition inside the pipe, but the potential for migration of any materials out of the pipe and the sensitivity for degradation of the surrounding soil or water to that particular material.

Companies need to understand the current criteria for various contaminants for those particular mediums along with the potential for movement of any materials beyond the pipe. The Canadian Council of Ministers of the Environment (CCME) developed guidelines (as have several provinces through harmonization initiatives), "Canada-Wide Standards for Petroleum Hydrocarbons (PCH) in Soil, 2001" that sets acceptable levels of certain contaminants in soil based on land use. It may be reasonable to expect that if the potential for any material movement within the pipeline is eliminated and if the level of listed contaminants inside the pipe meets the defined criteria, then there is no potential for

contaminants that may migrate out of the pipe to result in unacceptable levels in the surrounding land or water. Thus the pipe could be considered 'clean'. The risk is that these criteria for acceptable conditions may change over time as new information arises and regulatory policies evolve.

In addition to potential contaminants inside the pipe, an operator should also consider the potential for concern with pipe coating degradation. The potential for degradation of certain coatings, for example asbestos coatings, needs to be balanced with the risk to human health by removing the coatings.

3.8. Water Crossings

Water crossings remain an environmentally sensitive location on a pipeline right-of-way. For the purposes of the abandonment matrix in this report, it is assumed that any pipe abandoned in place will be cleaned to meet current criteria and that intact coatings are in an acceptable condition to be left in place.

3.9. Erosion Considerations

The 1996 Discussion Paper fully captured the various aspects of erosion issues that should be considered when abandoning a pipeline and these remain unchanged. For ease of reference, 3.7 of the 1996 Discussion Paper can be found Appendix C. In summary, these considerations included:

- Special consideration should be made for pipelines in areas of slope instability. Over time, a pipeline may play a role in reinforcing and stabilizing a slope. This is a primary reason for the preferred option of abandoning a pipeline in place on a slope. Protective measures, including building berms, ditch plugs, sub-drains, etc., may be required when removing a pipeline on a slope, increasing the cost of the abandonment project.
- Forested areas are likely less susceptible to erosion than areas like native prairie or cultivated land.
- The erosion history of an area, starting with construction through the life of the pipeline, should be considered when developing an abandonment plan.
- Longer-term erosion issues are a key consideration for pipelines abandoned in place that may, over time, become exposed for developed or cultivated land categories.
- Post-abandonment responsibilities should include erosion monitoring and remediation. In the case of pipeline removal, the pipeline right-of-way should be monitored for re-vegetation, weed control and surface subsidence.
- Stakeholder input, which includes consultation with other pipeline operators in the immediate area and landowners, is an important factor in selecting an appropriate abandonment option in areas of erosion or slope instability concerns.

3.10. Water Conduits

The potential for a pipe abandoned in place to become a conduit for water movement was discussed in the 1996 Discussion Paper. In developing the pipeline abandonment matrix, it is assumed that the abandoned pipe would be segmented at appropriate locations to address this potential concern. In determining the appropriate locations for the segmentation, factors such as terrain and land use are considerations. The 1996 Discussion Paper provides specific locations where segmentation and plugs are recommended (Table 3-1 of that report) and these remain valid today. Impermeable materials such as concrete, polyurethane foam or soil are still reasonable materials to create plugs in the pipe.

3.11. Highway, Road, Railway and Utility Crossings

Ground subsidence is the primary consideration for determining the appropriate pipeline abandonment option for highways, roads and railways. To address this concern it is recommend for all diameter ranges in the matrix that pipelines be abandoned in place with special treatment. The special treatment part of this option includes filling the pipeline with a material to prevent future subsidence. A concrete slurry mixture is still the most cost effective material available today to inject into the pipeline.

In Section 3.8 of the 1996 Discussion Paper there is an outline of several considerations to be assessed in determining the appropriate abandonment option for the various types of utility crossings. In summary these include:

- type of utility crossing
- congestion of other utilities that may limit access to pipeline
- pipeline may provide support to other utilities located above
- burial depth of pipeline
- pipeline diameter and subsidence tolerance
- disruption of cathodic protections systems of other utilities

It is assumed in the pipeline abandonment matrix that the primary option is to abandon the pipeline in place for all types of utility crossings in order to avoid potential impacts to the stability of those facilities. For the medium and large diameter ranges it is assumed that the pipeline be filled with a concrete slurry mixture to prevent future ground subsidence.

3.12. Other Facilities

The 1996 Discussion Paper provides an overview of all the other ancillary and auxiliary facilities that are associated with a pipeline system.

In summary, the main types of facilities include:

- above ground piping (including in-line inspection barrels)
- valves
- cathodic protection equipment (rectifiers, ground beds, test leads)
- above and below ground tanks
- compression and metering facilities

- buildings
- telemetry equipment
- slope monitoring equipment
- foundations and supports

These types of facilities are not specifically included in the pipeline abandonment matrix. However, in general all above ground facilities should be cleaned to an acceptable standard and removed. Below ground ancillary and auxiliary equipment can be abandoned according to the applicable land use category in the matrix providing that all environmental and safety considerations are appropriately managed.

For compression/pump, metering and some valve facilities a pipeline company should consider developing an appropriate decommissioning standard. Often these facilities reside upon company owned property, which may lead to the decommissioning of these facilities and sites to a company specific standard. For example, some companies may choose an industrial standard for their own reasons rather than returning the site fully back to its original state. Regardless of the standard chosen, all environmental and safety consideration should be fully addressed.

3.13. Post Abandonment Responsibilities

Section 4.0 of the 1996 Discussion Paper presented a full discussion of post-abandonment responsibilities to be considered. That discussion and the responsibilities to be considered remain relevant today. Post abandonment responsibilities may include activities for addressing future depth of cover issues due to erosion and scour, line location of abandoned in place pipeline facilities for future encroachment and utility crossings and maintenance of right-of-way signage and markers. Companies may want to consider developing a checklist of post abandonment responsibilities to ensure future compliance to all pertinent regulatory requirements.

4. Path Forward

a) Industry should consider sponsoring collaborative research to develop innovative cost-effective technologies to address certain pipeline abandonment issues discussed in this report. The abandonment assumptions contained in this report are based on existing technologies and the development of new technologies could have the potential to change the recommended pipeline abandonment options in the matrix.

Areas for further advancement include:

- alternative to a concrete slurry fill material to prevent ground subsidence
- development of cleaning solvents to more effectively address potential environmental contaminants
- quantification of subsidence threat for large diameter pipelines
- algorithms to model structural collapse of the pipeline

- pipeline cleanliness specifications (how clean is clean for required land use?)

c) Future pipeline abandonment projects need to be based on site specific assessments, having regard to the factors and assumptions included in this report.

d) Pipeline abandonment assumptions should be reviewed by affected parties on a periodic basis. This review should incorporate new knowledge that may be gained from pipeline abandonment projects and other case studies along with incorporating any changes to applicable codes and regulations.