

BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN RE APPLICATION BY TRANSCANADA KEYSTONE PIPELINE,
LP FOR A PERMIT TO CONSTRUCT KEYSTONE XL PIPELINE

DOCKET NO. HP 001

PREFILED TESTIMONY BY DOUG CROW GHOST
DIRECTOR, DEPARTMENT OF WATER RESOURCES
STANDING ROCK SIOUX TRIBE

APRIL 2, 2015

Exhibit 8010

Q. State your name and address for the record.

A. Errol D Crow Ghost Jr., 207 1st Avenue W, McLaughlin, South Dakota.

Q. What is your occupation?

A. Director / Administrator of the Standing Rock Sioux Tribe Department of Water Resources.

Q. Summarize your education and professional background.

A. I earned a Bachelor's Science Degree in Restoration Ecology, from the Salish-Kootenai College in 2002. I have worked as a professional Fire Fighter for Chief Mountain Hotshots in the U.S. Bureau of Indian Affairs from 1997-2002. I have served on the Standing Rock Tribal Council as a District Representative of the Bear Soldier District 2009-2013, and served on the Health, Education and Welfare Committee. I am a veteran of the armed forces, with an honorable discharge in 1996. (Army Active).

Q. Describe your duties as Director of the Standing Rock Sioux Tribe?

A. I supervise all of the Department's activities involving the regulation of water flows and water quality on the Standing Rock Indian Reservation. I oversee implementation of the Standing Rock Sioux Tribe Water Code, which requires permits for most diversions of surface and groundwater. I also supervise all Clean Water Act Section 106 activities, including the maintenance of baseline water quality data through the sampling and analysis of surface water and ground water resources, and the development of water quality standards for the Standing Rock Reservation. This involves calibration of testing and sampling equipment, including maintaining required updates, sample collection methods, chain of custody forms, quality control practices and quantitative analysis procedures, and use designations of our waters. As needed, our Department also samples for domestic drinking water source supplies for appropriate parameters, and consults with the Standing Rock Municipal, Rural and Industrial Water Supply system on compliance with the Clean Water Act and Safe Drinking Water Act.

I assist with the coordination between the Standing Rock Sioux Tribe and state and federal water management agencies. The Standing Rock Sioux Tribe is engaged in a multi-year effort to identify needed water flows and perfect our reserved water rights, through negotiations

with water teams appointed by the governors of South Dakota and North Dakota. I serve as the lead Tribal agent with the Army Corps of Engineers on the management of Missouri River water flows. I also serve as a lead organizer on the Standing Rock Emergency Response Committee, for purposes of responding to chemical or other spills, flood management and related emergency response by the Tribal government.

Q. What is the Winters Doctrine?

A. The judicially crafted *Winters Doctrine* (1908) provides water for the needs of Native Americans who reside on Tribally-reserved lands. This judicial guarantee is highly significant, given the demands for this critical natural resource in a region where water is often not abundantly available.

Water policy in the Great Plains is shaped by powerful political forces. Economic demands translate into political pressures and ultimately into water law. State water laws are generally designed to allocate water for "beneficial uses," following the doctrine of prior appropriation. Stressing uses, rather than needs, is inconsistent with Native American ideals, whereby water, like other aspects of the environment, is connected to a higher sacred order. Consequently, European American water schemes have often been in conflict with Native American concepts. As Director of the Department of Water Resources, it is my job to reconcile Lakota values with modern regulatory requirements, for the optimal protection of our water.

In 1908, Native Americans prevailed in the landmark case *Winters v. United States*, 207 U.S. 564 (1908). The case involved the Gros Ventres and Assiniboines of the Fort Belknap Reservation in Montana and their right to use the water of the Milk River. When farmers upstream diverted water upstream, the United States brought an injunction against them, reasoning that this left insufficient water for agriculture on the reservation. The farmers appealed. On January 6, 1908, the Supreme Court ruled in favor of the United States and the Native Americans, arguing that the establishment of the Fort Belknap Reservation entitled the Native Americans to perpetual use of the water that it contained. Their rights were "reserved" at the date of establishment (1888), and, contrary to the doctrine of prior appropriation, those rights could not be lost through nonuse.

The Winters Doctrine was a major victory for all Native Americans, serving notice that state laws are secondary to federally reserved water rights and preventing prior appropriation

schemes from extinguishing Native American needs. In 1976, in *Cappaert v. United States*, 426 U.S. 128 (1976), the doctrine was extended to groundwater use on or near federally created reservations.

As a result of these court cases, under federal law, the Standing Rock Sioux Tribe possesses reserved water rights for all present and future beneficial uses that are necessary for our Reservation to be a permanent homeland for our people. We own land, and we own the water rights needed for our land to sustain our people through the generations. In times of shortage, our priority date traces back to the establishment of our Reservation in the 1868 Fort Laramie Treaty. We possess the senior water right. Our reserved water rights are very important to our Tribe.

While the Winters Doctrine protects Native American water rights, this protection is still vulnerable to changes in the prevailing political climate. Consequently, I am very concerned with the water use by TransCanada in the construction of Keystone Pipeline, as well as the potential pollution that would result from the release of oil near one of the many river crossings in South Dakota. (Peter J. Longo University of Nebraska, Kearney).

Q. What waters does the Tribe claim a right to under the Winter Doctrine?

A. We possess reserved water rights to all waters arising on, bordering or crossing our Reservation, and aquifers subsurface to our lands. This includes extensive rights to divert water from the Missouri River, Grand River, Cannon Ball River, Cedar Creek, Porcupine Creek, Oak Creek and our groundwater.

Q. Does the Winters Doctrine include the right to future water use on the Reservation?

A. Yes. It extends to all reasonable, beneficial uses that are needed in the present and in the future.

Q. How do you know much water you will need in the future?

A. We are engaged in a process with the States of South Dakota and North Dakota, by which a Tribal water team appointed by the Tribal Council meets bi-monthly with teams appointed by the governors. The purpose is to address the present and future water

consumptive needs of the Tribe, and the Missouri River water levels and Grand River instream flows that are needed to fulfill our needs.

Q. Is the Winters Doctrine a federal law?

A. Yes. Compliance with the *Winters Doctrine* would be required under Amended Condition number 1 in the 2010 Final Order in HP 09-001.

Q. Will construction of the Keystone Pipeline affect the waters claimed by the Tribe under the Winter Doctrine?

A. Yes. Keystone has estimated that the construction of the pipeline will require 79 million gallons of water. The Standing Rock Sioux Tribe asked TransCanada interrogatories about the points of diversion for all of this water, and they gave unclear, even conflicting answers. So we really do not know the sources from which TransCanada will take water. But 79 million gallons equals approximately 250 acre-feet – and that is a significant amount of water to be taken from tributaries to the Missouri River in western South Dakota, even if for temporary use. I do question that amount as too conservative for a construction project of that magnitude. We asked TransCanada for information supporting that calculation, and none was provided.

Q. How has the recent drought affected the waters the Tribe?

A. Our waters are in danger. The snow melt from the Rocky Mountains is declining annually. Data from stream gages of the U.S. Geologic Survey preliminarily indicate diminished streamflows is a long-term trend, for important tributaries to the Missouri River. I also make reference to Cook et al, *Unprecedented 21st Century Drought Risk in the American Southwest and Central Plains*, J. ADVANCEMENT OF SCIENCE (Feb. 12, 2015), which states,

In the multi-model mean, all three moisture balance metrics show markedly consistent drying during the later half of the 215¹ century... the consistent cross-model drying trends are driven primarily by the forced response to increased greenhouse gas concentrations, rather than any fundamental shift in ocean-atmospheric dynamics.

Consequently, I remain concerned that the drought is indeed long-term. This jeopardizes our way of life as hunters. Some people call it being an outdoorsman, but to the Lakota, subsistence hunting has always been a way of life, and it remains so today. The long-term

drought affects wildlife. There is less vegetation cover in the riparian areas. Farmers are being forced to take land out of the CRP program to maintain their harvest of hay and feed for livestock, which further diminishes wildlife habitat. Our surface waters are increasing in temperature, resulting in fish kills, on the Standing Reservation – right here in South Dakota. I reference the study by the National Wildlife Federation, *Great Plains: Wildlife in the Grips of Heat Waves and Drought*.

Q. TransCanada has identified the Little Missouri River, Cheyenne River, North Fork of the Moreau River, Bad River and White River s water sources for significant depletions for hydrostatic testing and other construction activities. Are these river systems in South Dakota potentially impacted by long-term drought?

A. Yes.

Q. If Keystone withdraws water from these river systems, is it possible that downstream water users, including Tribal water uses and non-Indian farmers and ranchers, will have adequate water supplies?

A. Yes, in a drought condition, these rivers do not carry unappropriated water in the quantities needed by TransCanada for construction of Keystone XL. TransCanada has not complied with Finding of Fact number 41, in which the temporary water use permitting process was deemed underway.

The treatment of water in the Construction Mitigation and Reclamation Plan (CRMP) reflects the problem with the CRMP generally, from an ecology standpoint. It is too general, too vague. For example, it states, "Throughout construction, the contractor shall maintain adequate flow rates to protect aquatic life and to prevent the interruption of downstream uses." (TransCanada 2008) p. 53. However, no specific steps are identified. Instead, TransCanada identified stream systems throughout South Dakota from which it seeks to divert water, which are already over-appropriated during drought conditions. There is already environmental stress in these riparian habitats. The platitudes in the CRMP are meaningless, in light of the water requirements for construction. Amended Conditions number 13-14 will not be achieved due to the lack of specificity with respect to mitigation in the CRMP.

Q. Will construction of the Keystone Pipeline affect water quality?

A. Yes. We have learned more about the potential impacts of pipeline construction from the release of the U.S. State Department Supplemental Environmental Impact Statement (SEIS) in January, 2014. The SEIS identifies "Construction-related impacts" as including "Temporary increases in total suspended solids (TSS) concentrations and increased sedimentation during stream crossings." (US DOS 2014). The pipeline will cross the Little Missouri and North Fork of the Grand River, which directly flows onto the Standing Rock Reservation. Both of these waters are currently listed as impaired waters under the Clean Water Act, due to high levels of TSS. The 2012 S.D. *Integrated Report for Surface Water Quality Assessment* states, "The Little Missouri River is listed as impaired for TSS... (and) Elevated specific conductance and sodium absorption ratios (SAR) are typical of the entire (Grand River) basin." (S.D. DENR 2012, pp. 96, 111). The construction activities associated with stream crossings will exacerbate the current water quality impairments of these waters of the Standing Rock Sioux Tribe.

The EPA has urged that this issue be addressed, in order to ensure that Indian water rights are not adversely impacted by Keystone XL. I reference the EPA letter dated July 16, 2010, stating "We recommend ... (that the State Department) address the potential impacts to areas where Tribes may have unadjudicated claims to water bodies that could be affected by spills. From the proposed pipeline." Giles July 16, 2010, encl. p. 6. However, this has never been done. Consequently, the project will infringe upon the reserved water rights of Standing Rock and other South Dakota Tribes, in violation of Amended Condition number 1 in the 2010 permit, requiring compliance with all applicable laws.

Q. Would a release of oil from the Keystone Pipeline near the Grand River or Missouri River affect the waters claimed by the Tribe under the Winter Doctrine?

A. Yes, very possibly.

Q. Are you concerned about that?

A. The most direct threat to our water stems from potential spills. Many recommendations for pipeline safety and spill response have been ignored or glossed over. The EPA explained in a letter dated July 16, 2010,

The potential human health impacts associated with both air emissions from refineries and the potential contamination of drinking water supplies from an oil spill have not been evaluated. We recommend that the State Department prepare a health risk assessment to specifically address these issues as they relate to low income, minority and Tribal communities. (Giles, July 16, 2010, p.6).

For these reasons, the State Department FEIS on the Keystone XL Pipeline was rated as insufficient by the Environmental Protection Agency. (Giles, June 6, 2011).

Q. In the Final SEIS volume on "Potential Releases" the State Department estimated that any spills would likely be minor. So why are you concerned?

A. There have been numerous significant oil spills since TransCanada was awarded its S.D. permit on June 29, 2014. In the last three months there have been significant spills affecting the Missouri River basin – the Bridger Pipeline spill which released 40,000 gallons of crude into the Yellowstone River and shut down the drinking water system in Glendive due to benzene in the water, and 3 million gallons released from a Summit Midstream Partners pipeline near Williston, N.D. From Montana, to Arkansas to Michigan, communities are affected by oil pipelines, especially when heavy tar sands crude is transported.

TransCanada's spill frequency estimates are widely considered by objective commentators to be too conservative. I reference the Congressional Research Service, *Oil Sands and Keystone XL Pipeline: Background and Selected Environmental Issues*, CRS REPORT TO CONGRESS (2012): "the pipeline's operating parameters – temperature and pressures higher than conventional crude pipelines – would yield spill frequencies above historical averages ... Keystone has operated the Keystone mainline pipeline and the Cushing Extension since 2010. Since that time **the Keystone Pipeline has generated 14 unintentional releases.**" p. 39; Daniel J. Graeber, *Are Pipeline Spills a Foregone Conclusion*, May 21, 2013, posted at <http://oilprice.com/TheEnvironment/Oil-Spills/Are-Pipeline-Spills-a-Foregone-Conclusion>. (emphasis added).

Q. Are you familiar with TransCanada's safety record? Explain.

A. From 2011-2013, the Coast Guard National Response Center indicates that TransCanada had 34 reported spills, and was required to contribute \$118 million for remediation. The Pipeline and Hazardous Materials Safety Administration has been critical of TransCanada's safety record, denying numerous waiver requests (reference PHMSA letters dated June 27, 2011, June 27, 2011, June 27, 2011, July 26, 2010, July 16, 2010 and May 5, 2010). PHMSA wrote "PHMSA is denying your May 26, 2010 special permit application based on operator compliance issues related to not performing weekly aerial patrols and quarterly ground controls as required." (PHMSA, June 26, 2011). That is a repeated complaint by the federal regulators with TransCanada – a lack of on-going monitoring for leaks.

Safety may be further compromised by the low cost of oil at present. The production of tar sands is jeopardized by high production costs generally. The decreasing cost of oil enhances the importance of Keystone XL as a cost-effective means of transporting tar sands crude, as compared to rail. So the Keystone XL Pipeline will result in the production of greater amounts of tar sands, and will increase greenhouse gas emissions.

That exacerbates the long-term severe drought currently affecting the northern plains and the Standing Rock Indian Reservation. On November 23, 2003, the Tribe's drinking water intake at Fort Yates for our community drinking water system malfunctioned, due to low water levels caused by drought. Three Standing Rock Reservation communities and 6,000 Tribal members were without potable water for two weeks. Schools were affected, and Tribal elders on kidney dialysis were forced to travel to Bismarck for treatment, 60 miles away. The Standing Rock Sioux Tribe already suffers the effects of long-term drought and climate change.

Meanwhile, companies like TransCanada may compromise on safety, due to lower revenues. This could pose further adverse effects on our water. In any event, TransCanada can no longer demonstrate the capability to comply the Findings of Fact number 43-45 in the Final Order, HP 09-001, with respect to spill frequency estimates. It also fails to meet Finding number 52 regarding the threat of contamination to surface water.

Q. You testified that as Water Resources Director you assist with emergency management on the Standing Rock Reservation. Are you satisfied with TransCanada's Emergency Response Plan?

A. TransCanada is hiding it. They will not release a copy of a Facility Response Plan for the Keystone XL Pipeline, as required in the Clean Water Act and in Finding of Fact number 51. The PUC order also requires TransCanada to engage in training for local emergency response personnel in Finding of Fact number 51, and that has not occurred. TransCanada is unable to certify to the PUC that important findings have been complied with.

Q. Have you ever seen an oil pipeline emergency response plan?

A. Yes. The Kinder Morgan Canada, Inc. Emergency Response Plan for the Puget Sound Pipeline System, wholly unredacted, is posted at (ecy.wa.gov/programs/spills/preparedness/cplan/Kinder_Morgan_Plan_Review_4_7_08.pdf&keyword=kinder). The Washington State Department of Ecology also makes public and posts on-line a HazMat Spill Contractors List and Approved Primary Response Contractors list - information that TransCanada has refused to disclose for the Keystone XL Pipeline. This is all standard emergency response cooperation. However, TransCanada will not provide this information to the South Dakota PUC as required in Finding of Fact number 52, or to the Standing Rock Sioux Tribe.

Q. Do you know why Washington State has emergency response plans for the release of oil from pipelines and lists of available contractors and equipment, but TransCanada refuses to provide this information in proceedings before the South Dakota Public Utilities Commission?

A. No, TransCanada is totally unjustified in keeping Tribal, state and local emergency responders in the dark.

Q. As Director of the Water Resources Department, if an oil company initiated a dialogue or consultation with the Standing Rock Tribal government, in the ordinary course of business, would this be the type of meeting you would be informed of, and participate in?

A. Yes.

Q. Do you know Lou Thompson is?

A. No.

Q. Did you ever meet Lou Thompson?

A. No.

Q. Do you know Sarah Metcalf is?

A. No.

Q. Did you ever meet Sarah Metcalf?

A. No.

Q. Is there anything else you would like to say to the Public Utilities Commission?

A. The State Department released the Final Supplemental EIS in January, 2014. This document casts a pall over any further approval of the Keystone XL Pipeline. I reference the EPA letters dated June 6, 2011, rating the draft study as inadequate (Giles 2011); and February 2, 2015, EPA found that "Over the 50-year lifetime of this pipeline, this could translate into releasing as much as 1.37 billion more tons of greenhouse gases into the atmosphere." (Giles 2015). The *Fifth Assessment Climate Change Synthesis Report* by the United Nations Intergovernmental Council on Climate Change (2014) comprises new information on the need to mitigate greenhouse gas emissions, which was not available to the PUC in 2010, and which requires a denial of the certification of the Keystone XL Permit.



Errol Doug Crow Ghost Jr.

STATE OF NORTH DAKOTA)

SIoux COUNTY)

SUBSCRIBED and SWORN to before me
this ___ day of April, 2015.

TAMERA ALKIRE
Notary Public
State of North Dakota
NOTARY PUBLIC My Commission Expires Feb. 4, 2021

My Commission Expires _____