Society for Conservation Biology
A global community of conservation professionals

October 9, 2011

The Honorable Hillary Clinton
Secretary of State

The Honorable Kerri-Anne Jones
Assistant Secretary for Oceans, Environment and Science

Dear Mesdames Secretary and Assistant Secretary:

I write to convey to you for the record the comments of the Society for Conservation Biology on the question of whether you should find that to permit the crossing of the U.S. border by the proposed Keystone XL Pipeline would be in the nation's interest.

These comments are based upon our extensive comments filed with the State Department during the consideration of the draft (June 28, 2010) and revised environmental impact statements and upon our related statements on climate (2009 and 2010) and forest policy (2011), all of which I incorporate by reference as posted on our website at http://www.conbio.org/Activities/Policy/. I reprint below the introductory outline of our 2010 comments to you and will note key developments since then affecting certain points.

At this stage of the process, you are provided by an Executive Order issued by President George W. Bush with the power to make one finding – whether to permit the crossing into the U.S. of the proposed oil pipeline is in the national interest.

That finding is necessary but not sufficient to issue a permit that is in compliance with the law that will allow the construction of the pipeline. This is in part because by requiring that finding, the President set one standard that must be met, but did not and could not waive the other standards set by laws that control such actions and in particular, your action in issuing the permit. SCB outlined several of those laws in our comments of June 28, 2010, and now over a year later, our points have not been met satisfactorily. The Environmental Protection Agency has concluded that your attempts so far to properly set forth the likely impact on the human environment of this proposed action, and reasonable alternatives to it, were inadequate.

That inadequacy raises today's first question, which is:

1) **"If you cannot adequately assess the effects of the pipeline and alternatives to it, how can you determine that it would be in the national interest?"**

That inadequacy also leads to our second question:

2) "How can the Secretary comply with her duties to ensure that her action will not be likely to jeopardize the continued existence of the endangered whooping crane when neither her Biological Assessment nor the Interior Secretaries' Biological Opinion consider the impact of the oil sands developments and the pipeline that makes them probable on the northern third of the habitat?"

In one day, over two thousand migrating ducks were killed in violation of Canada's Migratory Bird Treaty Act, when they landed in an oil sands tailing pond whose sound cannon had failed to go off in time to warn them away as we described in our comments of June 20910. Like ducks, cranes are drawn to what they perceive to be bodies of water where the shores, sand bars and marshes provide feeding grounds. We do not have two thousand whooping cranes to lose. We have 74 breeding pairs in the only remaining natural population, which is the main population of the species.

Since our last comments, the Fish and Wildlife Service has delivered a Biological Opinion that is biologically and probably legally inadequate for its failure to consider the impact of the pipeline and the increased oil sands development it will make possible upon the whooping cranes and their very significant habitat and nesting grounds north of the U.S. border relatively close to the areas being mined and covered with tailing ponds for oil sands. The current regulations do not require consideration of impacts outside U.S. territory but they do not ban such consideration and the highest court to have considered that Reagan-era reduction in scope on its merits found it to be illegal, as we noted in our June 2010 comments (8th Circuit Court of Appeals, Defenders of Wildlife v. Lujan).

Had the Secretary of the Interior fully considered the Canadian habitat in his opinion, you might have felt reassured that it was legally and biologically sound. Now you are only assured of continued litigation on these points at least until the Secretary of the Interior finishes the part he left out.

If on the other hand, legislators preempt the process and direct or permit you to allow the pipeline without precautions informed by a full analysis, then you are likely not only to be publicly undercutting the rule of law, the use of the best available science and, as we described in our comments of June 2010, our commitments under international treaties to conserve this protected species as best we can.

Climate Change Impacts and Related Duties

In recent days, the Canadian Environment Commissioner has concluded that Canada's oil sands developments have "inadequate environmental monitoring systems" and that the developments will render Canada unable to meet its obligations under the Kyoto Protocol of the UN Framework Convention on Climate Change.

> <http://www.cbc.ca>
> By CBC News, cbc.ca, Updated: October 4, 2011 11:36 AM
> Canada's climate change goals falling short

The federal government doesn't have a good understanding of how the oil sands in Alberta are affecting the environment, and it's not on track to hit greenhouse gas emission targets, according to a new report by Canada's environment commissioner.

In a critical report released Tuesday, Scott Vaughan says that decisions about oil sands development projects have been based on "incomplete, poor or non-existent environmental information."

Vaughan's audit found that there is a lack of basic information on conditions in the ecosystems that surround Alberta's oil sands and "inadequate environmental monitoring systems." As a result, the federal government's understanding of how conditions are changing there has been hampered, Vaughan reports.

"When there are several development projects in the same region, it's important to understand their combined impacts on the environment and how to minimize them," Vaughan said. "Failure to prevent environmental impacts from the start can lead to significant problems down the road."

The chapter in the Commissioner of the Environment and Sustainable Development's report on northern Alberta's oil sands comes as the United States prepares to make a major decision on TransCanada's proposed Keystone XL pipeline project. The proposed pipeline would carry oil from Alberta to Texas and it has prompted numerous protests in recent weeks by environmentalists and other activists on both sides of the border who are opposed to the project. The U.S. government will be deciding this fall whether to allow the project, which Canada's federal government fully supports.

The lack of a proper monitoring system for the environmental impact of the oil sands has been highlighted before, by the expert panel convened by the federal government last year. Ottawa responded to the report in March with a two-phase plan and Vaughan applauded the government for setting out a detailed plan to fix the deficiencies in monitoring.

He says that if it is implemented it will be credible and robust and he hopes it will be applied to other regions that have been deemed "ecological hotspots" such as the Bay of Fundy, the North and the Great Lakes region. Vaughan is also critical of the federal government's lack of monitoring when it comes to measures to reduce greenhouse gas emissions. He reports that over $9 billion was devoted to the government's 2010 climate change plan but he doubts that it will even achieve its goals. Vaughan says the plan lacks the "tools and management systems needed to achieve, measure and report emission reductions."

His audit states that Canada is not on track to meet its greenhouse gas emissions target under the Kyoto Protocol and that the federal government doesn't know what results it has achieved with the money allocated to climate change plans.

Canadians, as a result, don't know if they are getting their money's worth and they aren't well-informed about changes in the environment and the actions needed to safeguard it, Vaughan concludes.

He found that the government's climate change plans are not in compliance with the Kyoto Protocol Implementation Act and that the government has been lowering its targets for reducing greenhouse gas emissions since its first climate change plan was introduced in 2007.

The expected emission reductions have dropped from 282 million tonnes in 2007 to just 28 million tonnes in 2010, a 90 per cent drop.

The environment commissioner says it's not new that the Conservative government isn't meeting Kyoto targets, but he says the government has made other reduction commitments, including those set out by the Copenhagen Accord and the Cancun action plan, and it's "unclear" whether it will be able to achieve those until a system is in place that has clear objectives, timelines, targets, and expectations with key stakeholders.

"The government will also need an overall strategy to coordinate efficient and effective spending of billions of dollars," Vaughan says.

Vaughan's report is mandated under the Kyoto Protocol Implementation Act.

Therefore before approving the permit, you should ask yourself a third question:

3) **"How can I find the pipeline to be in the national interest when Canada's own Environment Commissioner has found that the effects are poorly understood, poorly controlled and will diminish the effectiveness of Canada's participation in international agreements for the control of climate change and the reduction of greenhouse gases?"**

Department of Homeland Security's Planned Canadian Border Fences and Other Security Activities Not Considered

Since your initial draft EIS, the Department of Homeland Security has issued a draft programmatic EIS proposing to build fences or other barriers across unspecified parts of the Canadian – U.S. border to better control various threats which may include drug smuggling and the entry of terrorists. The DHS is planning a variety of activities across the border with Canada along the lower 48 states, which they describe in their draft programmatic impact statement. It is unlikely that you or the Secretary of the Interior have adequately considered the effects of such actions on the nation or the listed species when combined with the effects of the oils sands development and pipelines, such as the Enbridge pipeline now being planned to carry oil sands product west to the Pacific. In particular, the DHS seems to envision illegal or threatening persons or groups operating in the border area. It is entirely possible that such person might threaten or actually damage the pipeline and/or its electric pumps or power sources and/or attempt to blackmail those who operate or guard the pipeline. This is a scenario that oil companies have seen played out repeatedly in Columbia and other places around the world where terrorists and extortionists have found oil pipelines to be convenient targets of opportunity. In an article in Pipeline & Gas Journal, February 2005, Dr. Gal Luft,

Executive Director, Institute for the Analysis of Global Security, Washington, D.C., described both the terrorist and extortionist phenomena and wrote:

> "Pipelines are very easily sabotaged. A simple explosive device can put a critical section of pipeline out of operation for weeks." …

Dr. Luft noted that while pipelines that are largely buried, fenced, and guarded and in developed countries are less vulnerable, he concludes:

> "It is important to realize that none of the approaches discussed here is likely to put an end to the problem. As long as oil and gas continue to be essential to the functioning of the world's economy, pipeline sabotage is likely to remain one of the industry's risks. …"
> (See, http://www.oildompublishing.com/pgj/pgjarchive/Feb%2005/pipeline%20sabotage-02-05.pdf)

For industry, leaks, both man-made or otherwise, and the ensuing repairs are simply an added cost to be passed on, but for wildlife, fish, and ecosystems, the results of oil spills, often include irreparable damage, particularly to very sensitive or highly endangered species, such as the whooping crane. The crane depends on feeding and watering at sand bars on rivers including the Platt where the Keystone Pipeline is slated to cross under the river about fifty four miles from some of the cranes' critical habitat. The migratory pathway that the Fish and Wildlife Service maps show for the crane is two hundred miles wide.

While the proponents of such pipelines point to cut-off valves on either side of rivers as providing security against prolonged leaks, if the valves themselves or their power sources are targeted, directly or electronically, then as in the deep water horizon spill, there may be more prolonged leaks than anyone has anticipated.

Therefore you should answer a fourth question:

4) **"Will approving the permit reduce our environmental and other security risks more than choosing more prudent available alternatives?"**

Oil for the U.S. or China?

The debate over the Keystone XL Pipeline is often framed as one over whether the US or China will get the bulk of the oil produced from the sands. Some say that if the US does not approve the Keystone Pipeline, Canada will build the Enbridge Pipeline to the coast of British Columbia, (threatening pristine salmon habitat and coastlines) and providing direct access to Chinese and other Pacific Rim customers.

Another element of this argument is that the US needs this oil for strategic purposes.

For several reasons, this is probably a false choice and therefore should not be a determining factor in a decision about the national interest. The primary fact to consider here is that the Keystone XL pipeline's terminus is at none of the several refineries in the

heart of the US, but at those on the Gulf of Mexico, near the wintering grounds of the whooping crane, and the loading platforms for oil tankers from around the world, including Asia, if need be, so if Chinese or other bidders were to bid high enough they would be able to outbid US competitors at the ports of the Gulf.

Another factor is that pipelines to the west coast face greater legal and practical obstacles, from the opposition of First Nations, scientific and conservation groups, to a lack of existing electric power and refinery capacity of the magnitude required.

A better course of action may be to leave the oil sands in the ground for a day when we know how to use them without such significant, multiple and irreparably harmful results.

Therefore you should answer a fifth question:

5) "Will approving the permit guarantee a source of transportation fuel for the U.S. at any reasonable price considering the competing bidders who will be much less constrained by market prices? Or will it merely guarantee access to those very bidders who would not otherwise have that access at all?"

The Ultimate Question

As we stated in our climate statement of 2009, since 1991, the Department of Energy has found that the US has sufficient wind energy potential to meet all of the nation's electric energy demands from as few as three states or off-shore developments in the mid-Atlantic alone. Modern commercial wind turbines are two to three times as productive as they were in 1991 and are commercially viable in more and more areas.

> Studies in the U.S. and elsewhere have shown that major economies and some developing nations have several times the renewable energy capacity that they need at practical prices when external costs and subsidies are considered.xxv The Chairman of the U.S. Federal Energy Regulatory Commission declared in 2009 that the U.S. is likely to need no new traditional base-load (coal or nuclear) power plantsxxvi if better efficiency standards and related initiatives are implemented.
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> …
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> In the spring of 2009 the Secretary of the Interior declared in hearings on the energy potential of coastal plain that the wind energy potential off the mid-Atlantic coast of the U.S. was three times the current U.S. demand for electricity.
> These estimates should be considered seriously in weighing climate options. The 1991 DOE study was entitled "An Assessment of the Available Windy Land Area and the Wind Energy Potential in the Contiguous United States", Pacific Northwest Laboratory, U.S. DOE, 1991. Further wind development beyond the windiest states was estimated in that1991 study to have the potential to produce about 10.8 billion kilowatt hours, well more than twice the electric power
> the U.S. used in 2005.

Since that study was conducted, wind turbine design has improved. Each new utility-scale turbine now produces more than twice the power that the average turbine produced in the 1990s at any given time and several times as much over the course of a year due to increased efficiency at lower wind speeds and larger turbine sizes. Any energy technology should be applied after carefully ensuring minimal wildlife impacts and it is likely that a shift to properly applied wind,
solar and small hydro, will also help to end practices like mountain top removal for coal, resulting in greatly reduced net mortality.

xxvi http://www.nytimes.com/gwire/2009/04/22/22greenwire-no-need-to-build-new-us-coal-or-nuclear-plants-10630.html. Numerous experts have suggested specific paths to a carbon free future. In addition to Barrett (2002) and Laitner (2004) such studies include the Harvard University Medical School's Center for Global Environmental Health's Healthy Solutions for the Low Carbon Economy -- Guidelines for Investors, Insurers and Policy Makers, http://chge.med.harvard.edu/programs/ccf/healthysolutions.html. See also, Makhijani, A., Freeman, S. D., & Caldicott, H. (2007). Carbon-free and nuclear-free: A roadmap for U.S. energy policy, Takoma Park, MD: IEER Press, and Brown, L. R. (2009). Plan B 4.0: Mobilizing to save civilization , New York: W. W. Norton.

While no one would recommend such intense development as to try to meet all our demand from one area, it is clear that, properly sited and controlled, wind combined with solar, efficiency improvements, and modern grid and demand management can meet considerable demand for energy with no direct air pollution impacts and very small overall net environmental impact over the life of the turbines and other sources, and an apparently large net positive impact on employment within the U.S.

The Department of the Interior is now developing a habitat conservation plan for the whooping crane and other species likely to be affected by wind energy development in the Great Plains states through which the Keystone XL Pipeline would pass. Incidental takes caused by the pipeline, its power lines and oil sands developments would need to be directly subtracted from those that could be allowed for wind, solar, natural gas and other forms of energy development that have much smaller climate and environmental footprints thus reducing room for renewable energy not only in the market but in allowable incidental takes of listed species.

With the rapidly increasing use of hybrid and all-electric cars and other surface transportation technologies, from trains to trucks, you should ask the question:

6) **"Why cause serious environmental harm and raise serious security risks -- and reduce room for renewable energy -- by permitting the pipeline, when we can conserve wildlife and supply our energy needs with secure, safe, clean, renewable energy in ways that can probably provide more permanent jobs across the US?"**

In addition we ask you to consider in this context our comments on the Draft EIS filed last year as they are just as germane to the question of whether the permit is, all things considered, in the national interest.

The outline of those comments follows and the full comments are in your files and on our website at www.conbio.org/resources/policy.

Thank you,

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SCB's 2010 Comments – Outline

June 28, 2010

Delivered by Email and Registered Mail

RE: Comments from the Society for Conservation Biology (SCB) on FR Doc. 2010-9075, on the Draft Environmental Impact Statement (DEIS) for the Proposed TransCanada Keystone XL Pipeline Project

OUTLINE

Introduction

Analysis

I. Inadequate Basic Compliance with NEPA

NEPA requires an EIS to include a full and fair discussion of the significance of all direct, indirect, and cumulative effects of an action; it must also analyze connected actions.

A. "Connected Actions" Are Inadequately Addressed

The existing and foreseeable expansion of oil sands mining, among other things, should be considered a "connected action".

B. The DEIS Does Not Adequately Examine the Alternatives to the Project

Demand and supply alternatives that better meet the energy and environmental needs of the U.S. and other affected nations should be considered as they are much more likely to be in the nation's best interests.

C. The DEIS Inadequately Examines the "No Action" Alternative to the Project in Violation of NEPA

There is current existing pipeline capacity; to increase pipeline capacity would only encourage further mining.

D. The DEIS Inadequately Examines Adverse Effects

The State Department is required to more fully assess the impacts of the action inside and outside the US, when the action will affect natural or ecological resources of global importance.

1. **Adverse Effects on Wildlife, Ecosystems and Biodiversity**
    a. **Degraded Water Quality and Overconsumption**
    Tailing ponds kill birds, pollute groundwater, and could pollute neighboring waterways if a dike or berm were to break.
    b. **Potential for Serious Air Quality Consequences**
    Oil sands releases of benzene are currently at 100 tons per year, and could grow to 500 to 800 per year by 2015, for example.
2. **Natural Gas Consumption and Leakage**
    Extracting a single barrel of bitumen requires 250 cubic feet of natural gas for which there are better uses.

E. Extensive Water Use and Contamination
Extracting a single barrel of bitumen using surface mining requires two to five 159-liter barrels of fresh water.

F. DEIS Inadequately Examines Cumulative Effects
The reach of the pipeline's environmental affects go far beyond its physical bounds.

G. The Scope of the DEIS Was Too Narrow to Adequately Analyze the Effects of the Project Particularly on Human Communities in the Area & Public Meetings Avoided Large Cities and Colleges
Meetings were held in 20 communities; two communities have populations exceeding 100,000, but the average population of the other 18 communities was 7,912.

II. The DEIS Inadequately Examines Adverse Effects on Wildlife and Endangered Species And May Reflect a Failure Prepare a Proper Biological Assessment in Violation of Section 7 of the Endangered Species Act

Each Federal agency shall insure that any action authorized is not likely to jeopardize the existence of any endangered species.

A. Effects on the Black-Footed Ferret Are Inadequately Examined
Destruction of prairie dog habitat could harm the black-footed ferret.

B. Effects on the Whooping Crane Are Underestimated – Geographic Limits Are Illegal and Data Insufficient
The pipeline route follows the migratory route of the crane and could potentially affect designated critical habitat in Nebraska.

III. Approval of the Project Would Be Arbitrary and Capricious Under the Administrative Procedures Act Because the Project Is Likely to Be In Violation of the Migratory Bird Treaty Act

The MBTA's prohibition states that taking is unlawful "at any time, by any means or in any manner."

IV. Approval of the Project Would Be Arbitrary and Capricious Under the Administrative Procedures Act Because the Project Is Likely to Be In Violation of the Fish and Wildlife Coordination Act

If an applicable body of water is controlled or modified for any purpose whatsoever, the agency must consult with FWS, amongst others, with a view to the conservation of wildlife resources.

V. The DEIS Inadequately Addresses National and Global Climate Change Concerns

Climate change is the greatest single environmental threat of our time.

A. **The DEIS Is Misleading in its Emissions Analysis – Grossly Understating Known Emissions Resulting from Such Production and Use**

CEQ's draft Guidance is a partial example what reasonable analysis might include and this does not come close, rather it seriously misrepresents emissions and ignores the full cost CO2 equivalent per btu in delivered end use energy.

B. The DEIS Lack of Climate Change Considerations Is Contrary to the UN Framework Convention on Climate Change

The Parties to the UNFCCC, including the US and Canada, should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Nothing in the DEIS does this with any rigor.

C. Final International Concerns

As Canada is a party to the CBD, the Department of State should not place its imprimatur on an action that may compromise Canada's responsibilities under the CBD such as its assessment duties, its duties to control actions degrading biodiversity, and its duty not to harm other nations.

Conclusions
Appendix