


Canada's Ethical Oil Fallacy

- What are the Tar Sands?**
- Ethical Oil**
- Corporate Position – TransaCanada & Enbridge**
 - Pipeline projects**
- Political Position**
- Environmental Issues**
- Health Issues**
- First Nations**
- My thoughts in Closing**

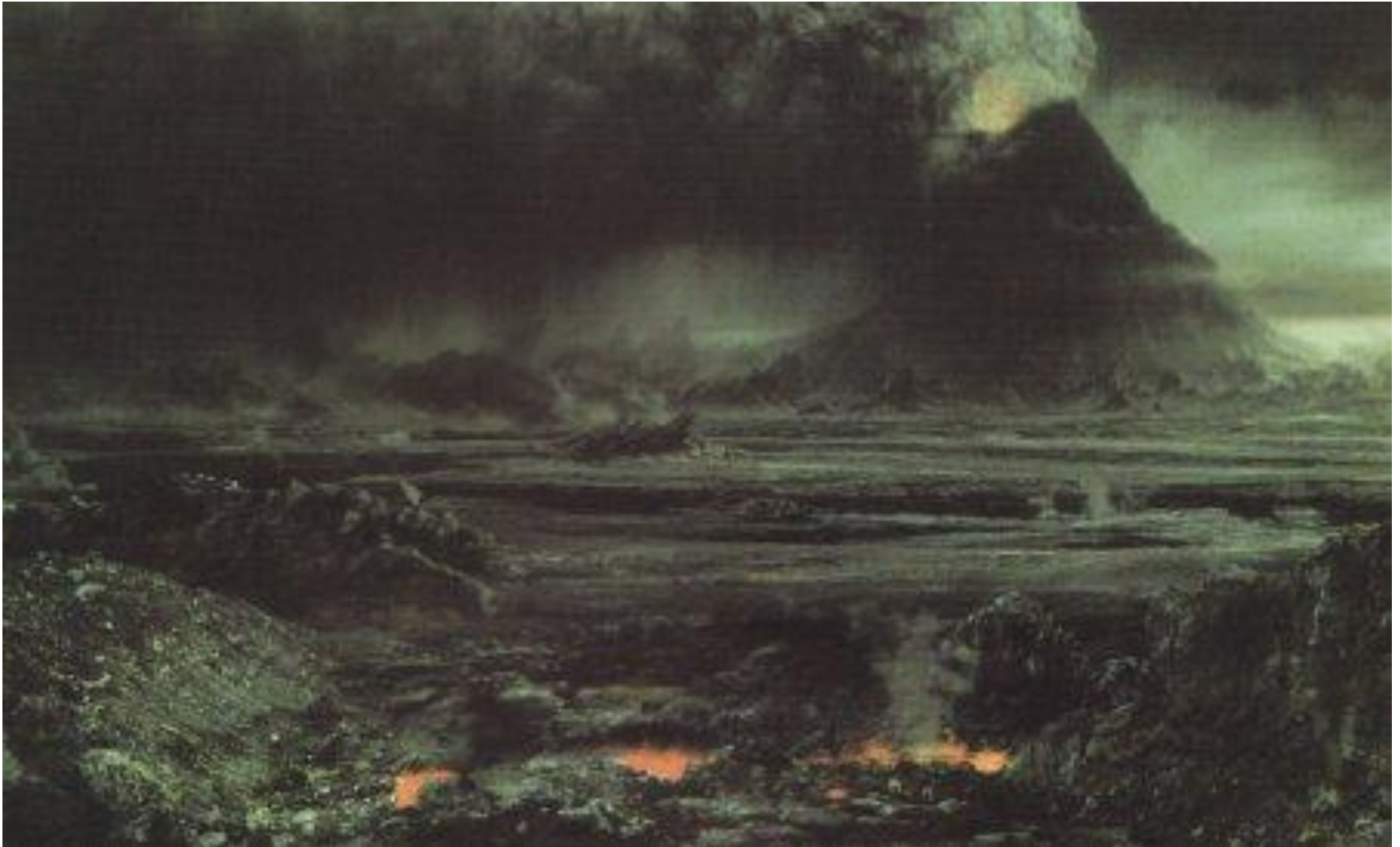
What are the Tar Sands?



***“To me, the tar sands are Canada’s Mordor.
The air is foul, the water is being drained and
poisoned and giant tailings ponds line the
Athabasca river”***

Maude Barlow, Council of Canadians Chairperson
and Senior Advisor on Water to the President of
the UN General Assembly

Lord of the Rings “Mordor”



What are the Tar Sands?

- **Oil sands or tar sands, are sands that contain naturally occurring mixtures of sand, clay, water, and a dense and extremely thick form of petroleum technically referred to as bitumen.**
- **Bitumen is a thick, sticky form of crude oil, so heavy and viscous (thick) that it will not flow unless heated or diluted with lighter hydrocarbons.**
- **Making liquid fuels from oil sands requires energy for steam injection and refining. This process generates two to four times the amount of greenhouse gases per barrel of final product as the "production" of conventional oil.**

What are the Tar Sands?

- **Naturally occurring bitumen is chemically more similar to asphalt than to tar.**
- **Because growth of oil sands production has exceeded declines in conventional crude oil production, Canada has become the largest supplier of oil and refined products to the United States, ahead of Saudi Arabia.**
- **The tar sand needs pre-processing before it is fit for conventional refineries. This pre-processing is called 'upgrading', the key components of which are as follows:**
 1. removal of water, sand, physical waste, and lighter products
 2. catalytic purification by hydrodemetalisation, hydrodesulfurization and hydrodenitrogenation.
 3. hydrogenation through carbon rejection or catalytic hydrocracking

What are the Tar Sands? – Here's what the processing (upgrader) plant looks like.



<http://www.pembina.org/oil-sands/photos>

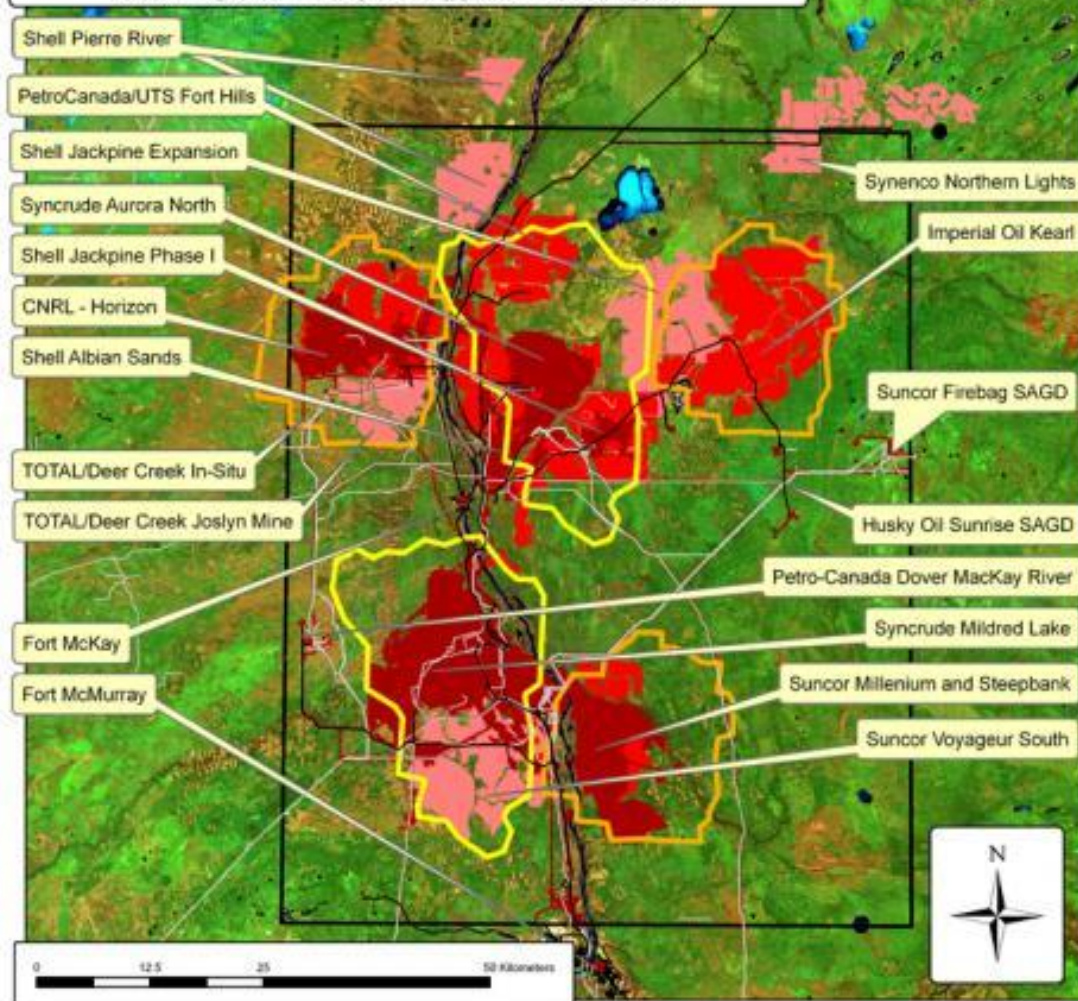
What are the Tar Sands? – Toxic Waste

- **Heavy metals such as vanadium, nickel, lead, cobalt, mercury, chromium, cadmium, arsenic, selenium, copper, manganese, iron and zinc are present in tar sands.**
- **After processing tar sands, naphthenic acids are one of the most significant environmental contaminants that result.**
- **Toxic materials found in all tar sands tailings ponds consist of more than 75 toxic substances. Some specific aggregate volumes are: Arsenic: 31,305 kg, Benzene: 162,000 kg, Lead: 651,875 kg, Mercury: 747 kg, Sum of all PAH compounds: 218,456 kg**
- **Between 2006 and 2009, total levels of mercury across all tailings ponds increased by 63%, lead by 29%, and arsenic by 28%. Asbestos topped the volume growth rates, with a 949% increase over the same four year period.**

What are the Tar Sands? – H2Oil Film

- H2Oil Documentary
 - [Animations clip](#)

**Existing, Approved, and Proposed
Mineable and "In-Situ" Tar Sands Operations
Athabasca - Upper Map Area
Total Physical Footprint Approx. 1,585 sq km**



Legend

- Edmonton Urban Footprints
- Calgary Urban Footprints
- Existing Tarpit Footprint 2006
- Approved Tarpits
- Proposed Tarpits
- Existing Roads
- Existing Pipelines
- Athabasca Upper Map Area

Satellite images:
Physical footprint of tar sands
operations digitized from
2006 Landsat 7 15 metre resolution
Global Observatory for Ecosystem Services
Michigan State University
<http://landsat.org/>

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What are the Tar Sands? – Syncrude operations



What are the Tar Sands?- Syncrude mining



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Syncrude 400 ton mining truck



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Suncor Trucks



What are the Tar Sands? – Syncrude Tailings



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Syncrude operations



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Syncrude Operations



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Syncrude Plant in the evening



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Syncrude tailings, sulphur stockpile and Upgrader



What are the Tar Sands? – Syncrude Tailings



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Suncor and the Athabasca River



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? - Suncor Tailings



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Athabasca River and Tailings Ponds



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? - Syncrude and Suncor Tailings



<http://www.pembina.org/oil-sands/photos>

What are the Tar Sands? – Suncor upgrader along the Athabasca River



What are the Tar Sands? – Suncor upgrader along the Athabasca River



Ethical Oil - ethicaloil.org

- **The founders of ethicaloil.org are Ezra Levant and Alykhan Velshi.**
- **Alykhan Velshi is a lawyer, policy analyst, and ministerial assistant. He has worked at the predominantly neoconservative American Enterprise Institute and was manager of research at the Foundation for the Defense of Democracies. He has written pieces in support of George W. Bush's foreign and military policies.**
- **Ezra Levant is a Canadian lawyer, Conservative Party of Canada political activist and Sun Media (aka Fox News North) figure. He voted for Quebec to leave Canada. He spreads his information using his newspaper and television access.**

Ethical Oil – Disinformation campaign

- Ethicaloil.org video
 - ethicaloil.org advertisement

Ethical Oil Continued – “Ethical”

Definition of “ethical”

- **conforming to accepted or established principles of right conduct (opposed to immoral)**
- **of, pertaining to, or concerned with the distinction between right and wrong**

Synonyms for “ethical”

- **moral, upright, honest, righteous, virtuous, honorable.**
 - **Does environmental disaster, death and serious health repercussions in Canada constitute being ethical?**

Ethical Oil – ethicaloil.org is hypocritical!

- **The Canadian government has pulled out of the Kyoto Protocol in an effort to keep the Tar Sands machine growing.**
- **Both Provincial & Federal governments are pretending that health problems are not being caused by Tar Sands production.**
- **Tar Sands oil productions is:**
 - **Killing Canadians**
 - **Killing ecosystems that took 10,000 to 15,000 years to form.**
 - **Killing animals**
 - **Destroying water sheds**
 - **Increasing greenhouse gas emissions**
- **Oil from Saudi Arabia is not much better from an ethical standpoint, but to claim Tar Sands is ethical is tomfoolery!**

Ethical Oil – 1600 ducks died in Syncrude tailings pond – Company found guilty in court



<http://www.edmontonjournal.com/business/Over+ducks+dead+toxic+Syncrude+tailings+pond/3729158/story.html>

The Corporate Position – Quick thoughts on Corporations

Definition of corporation

- **company or group of people authorized to act as a single entity (legally a person) and recognized as such in law.**

DSM-IV's symptoms of psychopathy

- **i.e. callous disregard for the feelings of other people, the incapacity to maintain human relationships, reckless disregard for the safety of others, deceitfulness (continual lying to deceive for profit), the incapacity to experience guilt, and the failure to conform to social norms and respect the law.**
- **To be honest, the corporate position does not matter. The definition of insanity could be defined as repeating the same behaviour and expecting a different result each time. Oil spills continually to happen. Disregard for humanity is the norm.**

Enbridge Inc & TransCanada Corp

- **There are three kinds of lies: lies, damned lies and statistics.**
 - **Disraeli**

Enbridge & TransCanada: Sanity is not Statistical!



Jeff Fitchett

Enbridge: Northern Gateway Pipeline Poll

- **“Vancouver Sun: British Columbians, by a 48-32 percentage, support the \$5.5-billion Northern Gate-way pipeline linking the Alberta oil sands to the West Coast, according to a poll. However, 20 per cent of poll respondents didn't know or refused to say whether or not they support the project, suggesting opinions could still shift on the issue.**
- **The Ipsos Reid survey, which was commissioned by project proponent Enbridge Inc. of Calgary, counters the perception that an over-whelming majority of British Columbians are against the controversial megaproject, according to Enbridge spokesman Paul Stanway.**
- **Northern Gateway critics have long cited a 2010 poll suggesting broad public opposition as a key factor in the campaign to block the project which, if it doesn't go ahead, could cost Canadian oil producers \$72 billion over nine years in lost revenue, according to a recent analysis commissioned by the Alberta government.**
- **University of B.C. forest resources management professor George Hoberg, a frequent commentator on the Northern Gateway project, cautioned that the Enbridge result didn't use the terms "oil sands" or "tanker." Use of those "hot button" terms could significantly influence the results, he said, adding he is skeptical of polls such as those by Ipsos and Mustel that were funded by parties with a stake in the debate.”**

Enbridge: Their point of view

Process Timeline

- Jan 2012 – Community hearings begin
- June 2012 – Final hearings scheduled to begin
- 1H 2013 – Expect decision from Joint Review Panel (NEB / CEA)
- 2014 – Conduct detailed engineering
- 2015 to 2017 – Construction period

Project Details

- \$5.5B project (excluding AEDC)
- 30% equity capital structure – 11% base ROE
- \$100MM+ of funding support from Founding Shippers to complete regulatory process
- **Total potential capital ~\$2.75B (ENB Share –50% of \$5.5B)**

Enbridge – Pipeline Route



Enbridge – Tanker Route



Enbridge – Spill study by Enbridge

- **An Enbridge study calculated that a spill of 36,000 cubic metres of bitumen — on the order of the Exxon Valdez spill — in Wright Sound would contaminate 240 kilometres of shoreline in 15 days. It could take four years for exposed rocky shores to recover, up to 12 years for sheltered shores.**
- **The Alberta-based company is spending \$700 million to clean up an oil spill from its pipeline on the Kalamazoo River in Michigan in July 2010. An estimated 3.5 million litres of 3.8 million spilled have been recovered to date.**

Enbridge – Kalamazoo Spill



Enbridge – Northern Gateway Facts

- **The Northern Gateway pipeline will cross 785 rivers and streams**
- **The pipeline will cross through the headwaters of three of the continent's most important watersheds – the Mackenzie, Fraser and the Skeena**
- **At Kitimat on the Pacific coast, the oil would be shipped in large oil supertankers that would then traverse 185 kilometres of inner coastal waters**
- **Hecate Strait is considered the fourth most dangerous body of water in the world due to quickly changing winds and sea states**
- **Supertankers will be required to make three 90 degree angle turns through the inner coastal waters**

Enbridge - Super Tankers will navigate these waters



Enbridge – Great Bear Rainforest and Spirit Bear



TransCanada Corp – Their Point of view

Process Timeline

- **Shovel ready**
- **Waiting for US approvals**
 - **Decision could be made within a month and a half. US politics are brutal. US unemployment benefits were set to expire for thousands of Americans. A bill was put in motion in the US by the Republicans to accept the unemployment insurance extension, but the deal stated that Barack Obama had to make a decision on the Keystone XL pipeline. The Republican's are the same as the Conservative governments in Canada.**

Project Details

- **US\$7 billion investment**
- **Hardisty, AB to Port Arthur, TX**
- **700,000 Bbl/d of capacity**
- **380,000 Bbl/d contracted so far**

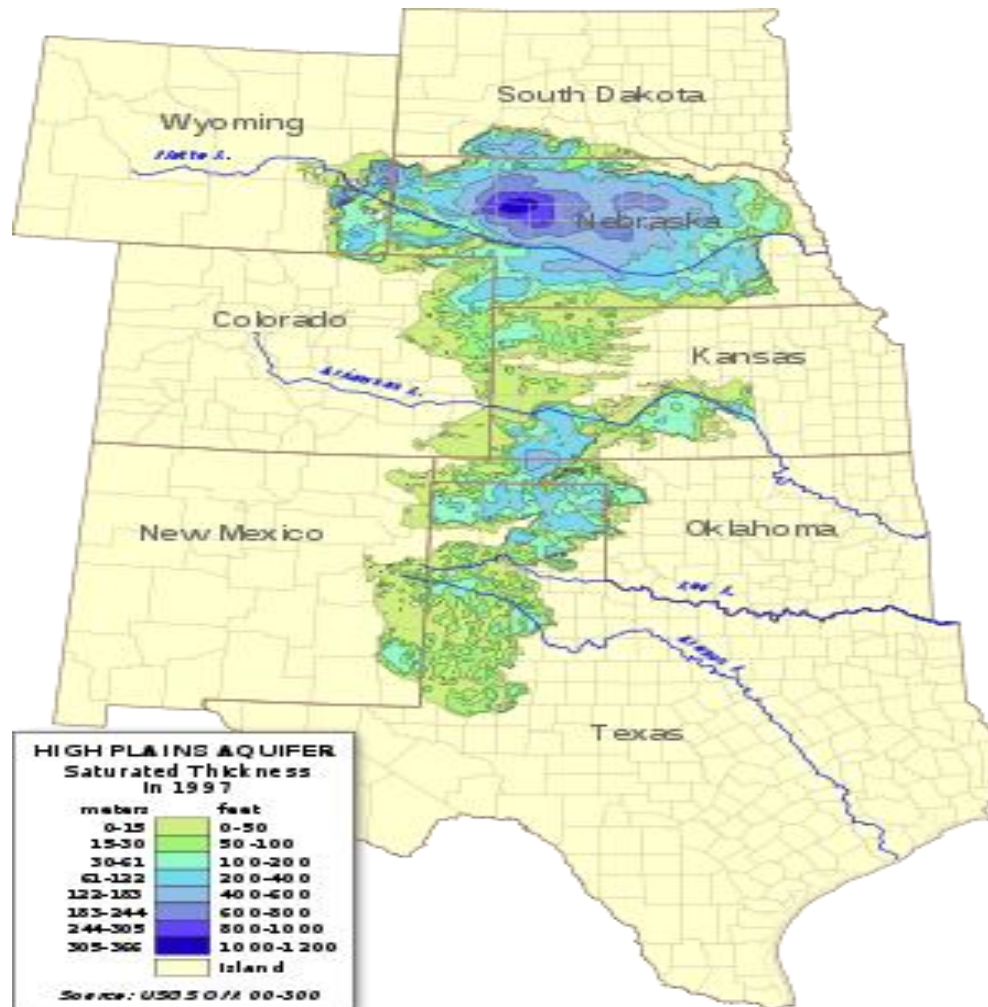
TransCanada – Pipeline route



TransCanada Corp – Keystone XL Facts

- **TransCanada hopes to build the Keystone XL pipeline over and, in some places, in the Ogallala Aquifer, which serves as the primary source of drinking water for millions of Americans and provides 30 percent of the nation's ground water used for irrigation.**
- **Many of the refineries proposing to take tar sands oil are located in areas that already do not meet air quality standards.**
- **With over 2 mbd of tar sands pipeline capacity already existing, Keystone XL would increase this to over 3 mbd. Assuming Canada's consumption of the tar sands stays constant, even industry estimates indicate that these pipelines could not be filled to capacity until 2025—and because of the structure of pipeline shipping fees, operating these pipelines well under capacity increases the cost of the oil shipped through them.**

TransCanada – Aquifers endangered



TransCanada – Water facts

- **By 2020, California will face a shortfall of fresh water as great as the amount that all of its cities and towns together are consuming today.**
- **To grow a ton of wheat uses 1,000 tons of water. The US is the largest exporter of wheat to the world. When we export a ton of our wheat, we are effectively including 1,000 tons of water in the bargain.**
- **In the US, 21 percent of irrigation is achieved by pumping groundwater at rates that exceed the water supplies ability to recharge.**
- **By 2025, 1.8 billion people will live in conditions of absolute water scarcity, and 65 percent of the worlds population will be water stressed.**

First Nations Point of view

- We will not allow the proposed Enbridge Northern Gateway Pipelines, or similar Tar Sands projects, to cross our lands, territories or watersheds, or the ocean migration routes of Fraser River salmon... we will not tolerate this great threat to us all and to all future generations.
- I interviewed a number of First Nations at the September 26th direct action in Ottawa. [Here is what they had to say:](#)
- Make no mistake, First Nations people are dead against the Northern Gateway Pipeline: [Save the Fraser Declaration](#)

Political Position

- Both the Federal Conservative Government and the Alberta Conservative Government have made their positions blatantly clear: The expansion of the Tar Sands and Pipeline projects will be pushed ahead regardless of what the Canadian population says or what the environmental & health repercussions are.
- Both governments do not care about future generations from an energy standpoint or the legacy of environmental and health concerns.
- Here's a quick clip of Natural Resource Minister Joe Oliver
 - [Keystone Pipeline Fall Out](#)
 - * [Video from CBC](#)

Political position – Environment Commissioner Report, Dec 13, 2011

- **Lax Federal Monitoring Putting Canadians at Risk: Environment Commissioner**
 - Conservative government is refusing to accept its environmental enforcement is inadequate and poorly managed.
 - Environment Canada is dragging its heels on improving scientific research in the department and adopting a long-term science plan.
 - The federal government has failed to provide adequate oversight of the transport of dangerous goods, such as oil and gas, that could imperil the safety of Canadians

Environmental Position – Athabasca River south of Fort McMurray



Environmental Position – Suncor Property East of Athabasca River



<http://www.pembina.org/oil-sands/photos>

Environment – Independent Research & Facts

- The Tar Sands is an environmental disaster.
 - [Dr David Schindler presentation](#)
- The issues are obvious to those who are inquisitive. It only takes 5 minutes of searching the internet to see the catastrophic effects of the Tar Sands and the proposed projects.
- Toxic chemicals, water destruction, boreal forest ecosystems & land are destroyed, air is contaminated and the list goes on.

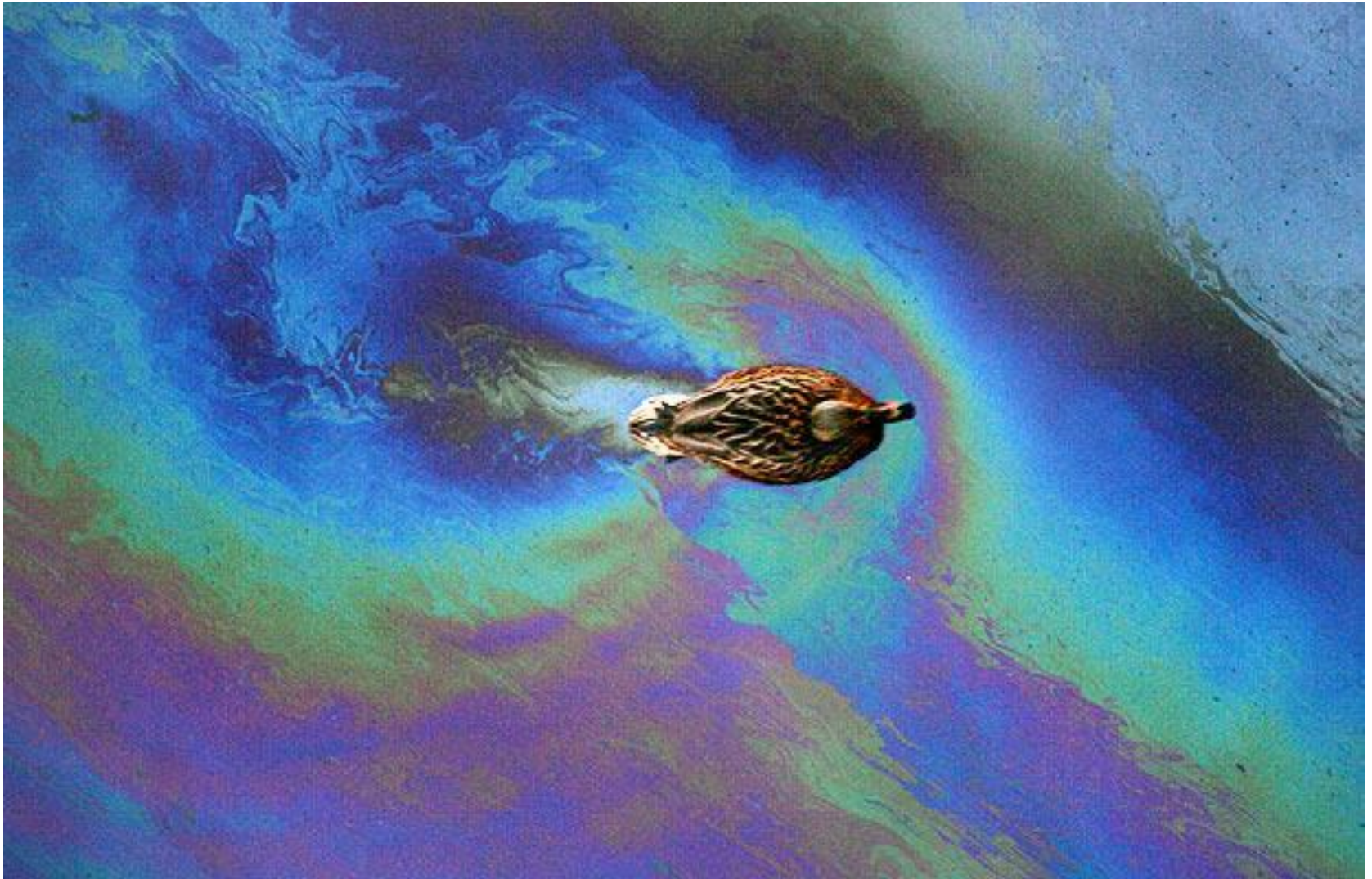
Environment – What do oil spills look like?



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Environment – What do oil spills look like?



Health Issues

- A 2006 study by Suncor found elevated arsenic levels in moose 453 times higher than the acceptable level in terms of cancer risk (that is, the levels could lead to 453 additional cases of cancer for every 100,000 residents).
- Hunters from the Fort Chipewyan First Nation have reported that their duck and muskrat tastes watery and bland, that moose livers are enlarged and spotted white, and that when they boil river water it leaves a viscous brown scum on the pot.
- Dr O'Connor documented what he was seeing and called for a thorough health study of Fort Chipewyan's residents. Government officials from Health Canada responded to O'Connor's health warnings by slapping him with a complaint to the Alberta College of Physicians that accused the doctor of raising undue alarm. He has been cleared.
- [Dr. Kevin Timoney on health issues from Tar Sands](#)

In Closing

- Peak Oil is upon us (Agricultural impact, revolution, excess waste)
 - We have become a society with a lack of understanding of the consequences of our actions.
 - If we wait for the government to take action for us, we will be long dead before that day happens.
 - Citizens need to take non-violent direct action.
 - Collectively, we need to become engaged and hold our government and corporations accountable. If their actions do not represent us, we vote them out and stop buying their products. We need to force change and keep significant pressure on offenders.
- “Be the change you want to see in the world” Ghandhi