

Opposing the Alberta Tar Sands - by Kelsey Mech, February 2009

The Alberta Tar Sands is the largest fossil fuel project on the planet, lying beneath 141,000 square kilometers of northern Alberta forest, an area almost as large as the state of Florida. According to studies, industrial development of this scale could push the boreal ecosystem over its tipping point and lead to irreversible ecological damage and loss of biodiversity.

For example, extraction and refining of Alberta Tar Sands oil is taking a toll on North American ducks and other waterfowl because the Tar Sands belt is on their migratory route. It is estimated that, over the next 30 to 50 years, the impact could be as high as 166 million birds lost, due to loss of breeding areas and from birds landing in tailing ponds of waste that look like real bodies of water.

Additionally, because of the effects of global warming, intact northern forest ecosystems will become very important to the forest birds and wildlife that will need to migrate northward in order to survive.

Not only is the Tar Sands development detrimental to biodiversity, but it is also the fastest growing source of greenhouse gas emissions in Canada. Producing a barrel of oil from the Tar Sands emits three times more greenhouse gases than producing a barrel of conventional oil, making Tar Sands oil some of the dirtiest on the planet. If current development plans proceed, by 2020 the Tar Sands will release twice as many greenhouse gases as are currently produced by all the cars and trucks in Canada.

And since Canada's boreal forest is the world's largest terrestrial carbon storehouse and contains more carbon per hectare than any other ecosystem on earth, the more forest disturbed for the Tar Sands, the more stored carbon released. As well, through photosynthesis, trees break down carbon dioxide molecules and derive the oxygen we need. At a time when global warming is likely to increase the threat of fires and insect damage, we should be limiting forest disturbance, not increasing it.

Daily generation of waste sand is immense. Two tons of oil sands are needed to produce one barrel of oil (roughly 1/8 of a ton). Just one of the four operating mines in Alberta has excavated more soil than the Great Pyramid of Cheops, the Great Wall of China, the Suez Canal and the world's 10 biggest dams combined!

Resource wise, in one day, Tar Sands extraction utilizes enough natural gas to heat over 3 million homes in Canada. As well, between 2 and 4.5 barrels of water are used to produce each barrel of oil. Tar Sands operations are currently allowed to draw 349 million cubic metres of water per year, twice that utilized by the city of Calgary. And, an estimated 82 % of this water comes from the Athabasca River, which is already facing loss of glacial water due to global warming.

Most waste water used to process Tar Sands oil ends up in acutely toxic tailing ponds; ponds so toxic that propane cannons are used to keep ducks from landing on them. For every barrel of oil extracted, six barrels of tailings are produced, resulting in 'ponds' that cover more than 50 square kilometers and can be seen from space.

Downstream aboriginal populations are experiencing increased respiratory diseases, rare cancers and cardiovascular problems, suspected to be caused by toxic substances that have leached downstream from Tar Sands production. Deformed fish have been found in nearby Lake Athabaska and game animals are being discovered with tumours and mutations.

Furthermore, Tar Sands development plans include massive pipeline construction and expansion from northern Alberta into the U.S. and to B.C. The latter could see the building of a supertanker port in Kitimat and oil tankers exporting oil via the Inside Passage of northern B.C. waters.

Extending our dependence on fossil fuels with the Alberta Tar Sands is environmentally unsound. If the billions of dollars involved were redirected into renewable energy, we could be well on our way towards a sustainable future. Expansion of the renewable energy industry would create jobs that could replace those lost if the Tar Sands were halted and, at the same time, would address the global warming crisis. According to analysts from the Centre for American Progress, every investment of \$1 billion in clean energy programs creates nearly 5,000 more jobs than traditional infrastructure spending.

As a member of the British Columbia Youth Parliament, at the December 2008 session in Victoria, I submitted and presented a Private Members' Resolution opposing the Alberta Tar Sands. It was carried 57-20.

The United Nations Framework Convention on Climate Change provides the basis for global action "to protect the global climate system for present and future generations". The United Nations Educational, Scientific and Cultural Organization states, "Present generations should take into account possible consequences for future generations of major projects before these are carried out." It is time that Canada, as a member of both of these organizations, take future generations into account and halt future Tar Sands projects and phase out existing ones.

As one of the largest, most intact old-growth forests left on Earth, the boreal forest provides ecosystem services that are globally important in mitigating climate change. Protecting it is a responsibility that Canadians owe to the world and future generations. As Dr. Andrew Weaver states in his book *Keeping Our Cool*, "Economic arguments... fall apart when it comes to sustained, irreversible changes to our planet. . . How do you cost the commitment to extinction of 40 to 70% of all species? How do you value the cost of a life?"