

September 16, 2010

The Right Honourable Stephen Harper, Prime Minister of Canada  
Office of the Prime Minister  
80 Wellington Street  
Ottawa, Canada  
K1A 0A2

**Re: *Fish Health Monitoring Program for the lower Athabasca River, Athabasca Delta and Lake Athabasca***

Dear Prime Minister Harper,

We respectfully request that the Canadian government make funds available to plan and implement a comprehensive, long-term fish health monitoring program for the lower Athabasca River, Athabasca Delta and Lake Athabasca. We include residents of Fort Chipewyan and Fort MacKay, subsistence and commercial fishers, the leadership and health professionals within the communities of Fort Chipewyan and Fort MacKay, and scientists who have conducted studies within these waters.

Unhealthy fish, such as those in the photographs at [www.athabascafish.wordpress.com](http://www.athabascafish.wordpress.com), have been collected from the lower Athabasca River, Athabasca Delta and Lake Athabasca. The photographs provide clear evidence of the presence of deformities, lesions, and tumours or cysts. Indicators of possible infection or disease are evident. Linear markings from gillnets and damage from the gillnetting process are also visible, but are quite distinct.

Fishers have noted that the incidence and frequency of unhealthy fish within their catch has increased substantially over time. The fish in the attached photographs were collected during a University of Alberta fish sampling campaign of the lower Athabasca River and Delta in 2008, and between 2009 and 2010 by local fishers of the Delta and Lake Athabasca. Many were caught together in a gillnet set during May 2010. It was reported that of the 27 whitefish, burbot and northern pike collected, 7 had lesions, hemorrhages and/or crooked spines. Some had bulging eyes.

This is of concern because: 1) many residents of Fort MacKay and Fort Chipewyan maintain a traditional lifestyle and consume fish as an important part of their diet, 2) Commercial fishing occurs on Lake Athabasca, and 3) Fort MacKay and Fort Chipewyan are located downstream of oil sands development.

Two recent publications in the Proceedings of the National Academy of Sciences show that oil sands development releases substances known to be toxic at low concentrations to the Athabasca River and its tributaries (Kelly et al. 2009, 2010). These peer-reviewed papers indicate that spring melt runoff is likely a source of polycyclic aromatic compounds (PAC) (Kelly et al. 2009) and metals to these waterbodies (Kelly et al. 2010). Of the 24 fish species resident in the Athabasca River, 19 spawn in the spring or early summer (Kelly et al. 2009, 2010). Embryos of these fish species are likely present when PAC concentrations in water are at their greatest (Kelly et al. 2009). CCME guidelines for the protection of aquatic life have been exceeded for metals during spring freshet near and downstream of oil sands development, when metals would be most toxic because of decreased water hardness (Kelly et al. 2010). Metal mixtures can act synergistically, and some metals increase the toxicity of PAC to aquatic organisms (Kelly et al. 2010). PAC and metals may contribute to a greater prevalence of abnormal juvenile and adult fish captured in the Athabasca River near and downstream of oil sands development (Kelly et al. 2009, 2010). Scientists, including those with the Federal government, have previously identified associations between exposure of early life stages of fish to contaminants in oil sands and wastewater from oil sands development that include: premature hatching, reduced growth, exposure-dependent mortality and larval malformations (i.e., edemas, hemorrhages and skeletal, craniofacial and eye defects) (Colavecchia 2004, 2006, 2007), reduced sex steroid production (Parrott et al. 2003, Tetreault et al. 2003).

We feel strongly that the monitoring program should be independent of existing programs, be carried out by the Federal Government (which is ultimately responsible for the *Fisheries Act*), and be overseen

by an independent steering committee comprised of community members, fishermen, community leadership, federal government scientists and academic researchers. The fish health monitoring program that we request would be complementary to, and go beyond, existing monitoring programs in this region. In addition to external pathology, the involvement of a fish parasitologist, histopathologist and veterinarian would be required.

Sincerely,

**Residents of Fort Chipewyan and Fort MacKay**

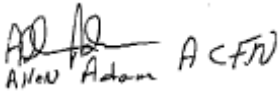
*\* signatures of community members are still being collected and will be forwarded at a later date*

**Fishers of Fort Chipewyan and Fort MacKay**

Robert Grandjambe, Sr., Mikisew Cree First Nation  
Robert Grandjambe, Jr., Mikisew Cree First Nation  
Ray Ladouceur, Métis Local 125  
Gordon MacDonald, Fort McKay First Nation

*\* signatures of other fishers are still being collected and will be forwarded at a later date*

**Leadership**



A handwritten signature in black ink, appearing to read "Allan Adam" with "A C F N" written to the right.

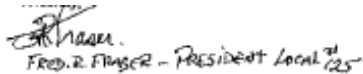
Allan Adam, Chief, Athabasca Chipewyan First Nation  
Grand Chief, Treaty 8 First Nations of Alberta



A handwritten signature in black ink, appearing to read "Roxanne Marcel" with "CHIEF, ROXANNE MARCEL MCFN" written below it.

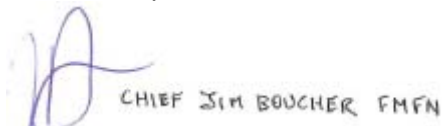
Roxanne Marcel, Chief, Mikisew Cree First Nation

George Poitras, former Chief of Mikisew Cree First Nation



A handwritten signature in black ink, appearing to read "Fred Fraser" with "FRED R FRASER - PRESIDENT LOCAL 125" written below it.

Fred Fraser, president of Métis local 125



A handwritten signature in blue ink, appearing to read "Jim Boucher" with "CHIEF JIM BOUCHER FMFN" written below it.

Jim Boucher, Chief, Fort McKay First Nation

Sonny Flett, Regional Municipality of Wood Buffalo, Councillor, Ward 2: Fort MacKay, Fort Chipewyan, Fort Fitzgerald

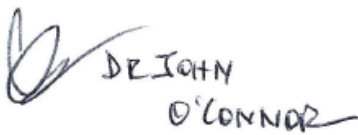
David Allen Blair Regional Municipality of Wood Buffalo, Councillor, Ward 2: Fort MacKay, Fort Chipewyan, Fort Fitzgerald

Letters of Support (attached)

Honourable Guy Boutilier, MLA Fort McMurray-Wood Buffalo

Melissa Blake, Mayor, Fort McMurray, Regional Municipality of Wood Buffalo

**Health Professionals**

A handwritten signature in black ink that reads "DR JOHN O'CONNOR". The signature is written in a cursive style with a large initial "J".

Dr. John O'Connor, Physician, Fort Chipewyan and Fort MacKay  
Health Director Fort MacKay

A handwritten signature in black ink that reads "Dr. William Griffin". The signature is written in a cursive style.

Dr. William Griffin, Physician, Fort Chipewyan

**Scientists**

A handwritten signature in black ink that reads "Erin Kelly". The signature is written in a cursive style.

Dr. Erin Kelly, University of Alberta

A handwritten signature in black ink that reads "David Schindler". The signature is written in a cursive style.

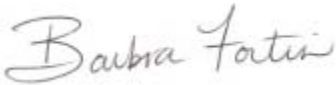
Dr. David Schindler, University of Alberta

A handwritten signature in black ink that reads "Peter V. Hodson". The signature is written in a cursive style.

Dr. Peter Hodson, Queen's University



Dr. Jeffrey Short, Oceana



Barbra Fortin, M.Sc., University of Alberta



Roseanna Radmanovich, MSc. Candidate, University of Alberta



Dr. Kevin Timoney, Treeline Ecological Research



Peter Lee, Global Forest Watch

cc:

The Honourable Jim Prentice, Minister of the Environment  
The Honourable Gail Shea, Minister of Fisheries and Oceans  
Michael Ignatieff, Leader, Liberal Party of Canada  
Jack Layton, Leader, New Democratic Party of Canada  
Gilles Duceppe, Leader, Bloc Québécois  
Elizabeth May, Leader, Green Party of Canada  
The Honourable Ed Stelmach, Premier of Alberta  
The Honourable Rob Renner, Minister of the Environment, Alberta

References:

- Colavecchia MV, Backus SM, Hodson PV, Parrott JL (2004) Toxicity of oil sands to early life stages of fathead minnows (*Pimephales promelas*) *Environ Toxicol Chem* 23:1709–1718.
- Colavecchia MV, Hodson PV, Parrott JL (2006) CYP1A induction and bluesac disease in early life stages of white sucker (*Catostomus commersoni*) exposed to oil sands. *J Toxicol Environ Health A* 69:967–994.
- Colavecchia MV, Hodson PV, Parrott JL (2007) The relationships among CYP1A induction, toxicity and eye pathology in early stages of fish exposed to oil sands. *J Toxicol Environ Health A* 70:1542-1555.
- Kelly EN, et al. (2009) Oil sands development contributes polycyclic aromatic compounds to the Athabasca River and its tributaries. *Proc Natl Acad Sci USA* 106:22346–22351.
- Kelly EN, et al. (2010) Oil sands development contributes elements toxic at low concentrations to the Athabasca River and its tributaries. *Proc Natl Acad Sci USA* 106:22346–22351.

Parrott S, Sherry J, McMaster M (2003) Fish health effects from oil sands wastewater discharges and naturally occurring oil sands compounds in the Athabasca River system. *Assessment of Natural and Anthropogenic Impacts of Oil Sands Contaminants Within the Northern River Basins - Final Summary Report - Task 5: Hydrocarbons/oil sands and heavy oil research and development*, Brua RB, Cash KL Culp JM. Submitted to the Panel on Energy Research and Development (Environment Canada, Saskatoon, Saskatchewan, Canada).

Tetreault GR, McMaster ME, Dixon DG, Parrott JL (2003) Using reproductive endpoints in small forage fish species to evaluate the effects of Athabasca oil sands activities. *Environ Toxicol Chem* 22:2775–2782.