

National First Nations Environmental Contaminants Projects – 2000-2008

Year	First Nation	Project Title	Principal Investigator	Methods
2000-01	Conne River First Nation (NFLD), Maliseet First Nation (NB), Mohawk Council of Akweesasne (ONT and QUE), Little Red River Cree Nation (AB), and Kingcome Inlet First Nation (BC)	Community Health Indicators Project – Phase I	Henry Lickers, Mohawk Council of Akweesasne Environment Department	Life Indicators Wheel concept. Development of a tool for analysis of risks to social structures and cultural practices First Nations communities face due to contamination of water, air and land.
2000-01	Lesser Slave Lake Indian Regional Council (Sucker Creek, Driftpile, Kapawe'no, and Swan River First Nations)	Lesser Slave Lake Health Study – Year I	Dr. Tee L. Guidotti, George Washington University	Health survey (Year I); soil, plant, snow, and wildlife sampling (Year II)
2000-01	Tl'azt'en Nation	Association Between Adverse Health Effects Reflected in Elevated Hospitalization Rates and Industrial Contaminants – Phase I	Andrew Jin, MD	Sampling: water, soil, fresh water sediment, plant, fish and wildlife. Examination of community cancer rates.
2000-01	Treaty 8 Health Authority (Bigstone Cree Nation, Sturgeon Lake Cree Nation, Sucker Creek/Driftpile/Swan River, Whitefish Lake First Nation, Athabasca Chipewyan First Nation, Fox Lake/Little Red River/John D'or) –	Northern River Basins Food Consumption Survey – Year I	James Badger	Dietary survey (food frequency questionnaires, 24 hour dietary recall, food security questionnaire, and consumption pattern survey), literature review, fish sampling, and a health risk assessment.
2001-02	Conne River First Nation (NFLD), Maliseet First Nation (NB), Mohawk Council of Akweesasne (ONT and QUE), Little Red River Cree Nation (AB), and Kingcome Inlet First Nation (BC)	Community Health Indicators Project – Phase II	Henry Lickers, Mohawk Council of Akweesasne Environment Department	2nd phase focused on community input to developing pilot material for the overall tool.
2001-02	Lesser Slave Lake Indian Regional Council (Sucker Creek, Driftpile, Kapawe'no, and Swan River First Nations)	Lesser Slave Lake Health Study – Year II	Dr. Tee L. Guidotti, George Washington University	Health survey (Phase I), soil, plant, snow, and wildlife sampling.
2001-02	Tl'azt'en Nation	Association Between Adverse Health Effects Reflected in Elevated Hospitalization Rates and Industrial Contaminants	Andrew Jin, MD	Water, soil, fresh water sediment, plant, fish and wildlife.
2001-02	North Shore Tribal Council (Ontario)	Fish Contaminants Monitoring Program – Development of Fish Consumption Guidelines Software	North Shore Tribal Council (person unknown)	The software application helps users determine the quantity of fish allowed for consumption according to contaminants guidelines and levels in different species of fish in different fishing locations; it also considers personal physical characteristics of the user such as age, gender, weight, average monthly meal consumption.
2001-02	Treaty 8 Health Authority (Bigstone Cree Nation, Sturgeon Lake Cree Nation, Sucker Creek/Driftpile/Swan River, Whitefish Lake First Nation, Athabasca Chipewyan First Nation, Fox Lake/Little Red River/John D'or)	Northern River Basins Food Consumption Survey – Year II	James Badger	Dietary survey (food frequency questionnaires, 24 hour dietary recall, food security questionnaire, and consumption pattern survey), literature review, fish sampling, and a health risk assessment.
2001-02	Nak'azdli Indian Band and Matimekush Innu Nation	Nay Yun Nzoo Environmental Contaminants Project – Year I	Clara Jack, Nak'azdli Band Andrew Jin, MD	Meetings and consultations between the two communities and did not include any field work.
2001-02	Kahnahwake Mohawk Territory	Environmental Health Clearinghouse Project	Bonnie J. Montour Kahnahwake	Development of a database on existing Indigenous environmental health studies across Canada.
2001-02	Treaty 8 Health Authority (Bigstone Cree Nation, Sturgeon Lake Cree Nation, Sucker Creek/Driftpile/Swan River, Whitefish Lake First Nation, Athabasca Chipewyan First Nation, Fox Lake/Little Red River/John D'or)	Northern River Basins Food Consumption Survey – Year II	James Badger	Health survey, traditional food consumption survey (including frequency and habit), 24 hour dietary recall, fish sampling (liver and fillets of 3 species with a total of 601 tissue samples).

2002-03	Nak'azdli Indian Band and Matimekush Innu Nation	Nay Yun Nzoo Environmental Contaminants Project – Year II - Investigating the Commonalities of Environmental Contaminants Issues in Matimekush-Lac John Innu Nation and Nak'azdli First Nation and Development of Approach to Assess these Commonalities	Clara Jack, Nak'azdli Band Andrew Jin, MD	Annotated bibliography, dietary survey, hair (Hg), soil, water, fish, and wildlife sampling, cultural impact statement .
2002-03	Conne River First Nation (NFLD), Maliseet First Nation (NB), Mohawk Council of Akwesasne (ONT and QUE), Little Red River Cree Nation (AB), and Kingcome Inlet First Nation (BC)	Community Health Indicators Project – Phase III	Henry Lickers, Mohawk Council of Akwesasne	Third phase involved finalizing the methodology and testing of indicator selection.
2002-03	Unama'ki Institute of Natural Resources	Contaminant Levels in Traditional Fish Species and Harvesting Areas in Unama'ki (Cape Breton) – Year I	Cheryl Berube	Sampling and analysis of traditional fish species for contaminants related to Sydney tar ponds, industrial activities, and municipal discharges.
2002-03	Union of New Brunswick Indians (UNBI)	Contaminants in the Major River Systems Around the Province and Effects on Selected New Brunswick First Nation Communities – Phase I	Darrell Paul	Surveying the UNBI member Nations for information on the extent to which environmental contamination concerns are affecting the traditional lifestyles of the people in these areas.
2003-04	Ktunuxa-Kinbasket (includes: Shuswap, Columbia Lake, St. Mary's, Tobacco Plains, and Lower Kootenay Indian Bands) and the Canadian Columbia Inter-tribal Fisheries Commission	Columbia Basin Aquatic Contaminants Project	Chris Beers	Ffish, water, and sediment sampling in the Columbia River Basin in relation to urban discharge, mining, and hydroelectric activities in the area
2003-04	Asubpeeschoseewagong Netum Anishinaabek (Grassy Narrows) First Nation and Wabaseemoong First Nation	Our Waters, Our Fish, Our People - Mercury Contamination in Fish Resources of Two Treaty #3 Communities	Laurie H.M. Chan	Assessment of the importance of fish resources to the diet, lifestyle, health, and quality of life in Grassy Narrows and Wabaseemoong First Nations communities; Sampling of four fish species (walleye, northern pike, large-mouth bass, and whitefish) in Treaty 3 waterways and analyzing samples for mercury levels; Providing community members with information on the balance between health benefits and health risks associated with fish consumption; Dietary interviews; Risk assessment, fish consumption recommendations.
2003-04	London District Chief's Council	Identification and Risk Assessment of Sources of Contaminants Utilizing Geographic Information Systems (GIS): GIS and Contaminants Database Development	Robert Bakalarczyk	Community questionnaire, mapping of environmental contaminants sources and locations on a GIS system, including overlays of community locations, available environmental data (known contaminated sites), primary sediment and water quality data, and air quality data from Environment Canada and the Ontario Ministry of the Environment (including an air dispersion model).
2003-04	Union of New Brunswick Indians (UNBI)	Contaminants in the Major River Systems Around the Province and Effects on Selected New Brunswick First Nation Communities – Phase II	Darrell Paul	Collecting and analyzing soil, blueberry plant, fiddlehead, moose tissue and water samples (Phase II)
2003-04	West Moberly and Saulteau First Nations	Petroleum Contaminants Community Research Project	Claudia Houwers	Literature review, survey of 78 well sites, collecting soil and water samples from flare pits and near areas affected by oil and gas activity where moose and deer are frequently seen by local First Nations people, and monitoring wildlife activity at target sites.
2004-05	Ahousaht First Nation, Klemtu First Nation, Kitsoo First Nation, and the British Columbia Aboriginal Fisheries Commission	Fish Farm Contaminant Levels in First Nations Traditional Marine Resources – Year 1	Diane Urban, Ph. D	Rockfish and shellfish samples near fish farms for analysis of typical fish feed contaminants such as DDT, HCH (hexachlorocyclohexane), heptachlor epoxide, mercury, arsenic and PCBs.
2004-05	Federation of Saskatchewan First Nations	Investigation of the Effects of Landfill Practices on Environmental Health in Selected First Nations Communities	Lalita Bharadwaj, Ph. D.	Elder interviews, Toxicogenomic analysis of human hepatoma (HepG2) cells, use of HPLC to analyze algal pigments associated with cyanobacterial contamination from groundwater samples (collected from

				landfill sites).
2004-05	Unama'ki Institute of Natural Resources	Contaminant Levels in Traditional Fish Species and Harvesting Areas in Unama'ki (Cape Breton) – Year II	Cheryl Berube	Risk assessment and fish consumption (amounts) recommendations.
2004-05	Asubpeeschoseewagong Netum Anishinaabek (Grassy Narrows) and Wabauskang First Nations	Impacts of Environmental Contamination on Asubpeeschoseewagong Netum Anishinaabek (Grassy Narrows) and Wabauskang First Nations	Dr. Leanne Simpson	Testing of wild meat for contaminants, Testing sediment samples in impacted lakes for contaminants with a focus on mercury, comparison of sampling results with levels with other studies done in the boreal forest of Canada, documentation of the impacts of contamination on the socio-cultural aspects of these two communities according to the Traditional Knowledge of community Elders and knowledge-holders.
2004-05	Nakazdli First Nation and Tahltan First Nation	Nay Yun Nzoo Project	Clara Jack Andrew Jin, MD	Plant, animal, and soil sampling for heavy metals and POPs, recommendations concerning health protection, prevention, and health practices based on the research findings, hair sampling for Hg analysis, literature review to determine past and present industrial activity and contaminant use within the area and traditional practices/health.
2006-07	I.O.S	Environmental Contaminants in the Marine Foods of Coastal First Nations in British Columbia: a community-oriented risk evaluation	unknown	unknown
2006-07	Hul'qumi'num Treaty Group	Risk Assessment of Shellfish Consumption in Coastal Communities in British Columbia (Year 2)	unknown	unknown
2006-07	Rainy River First Nations	Rainy River Watershed Program Environmental Contaminants Project		
2006-07	Takla Lake First Nation & Tsay Key Dene Band	Healthy Land and Healthy Future – A community study to examine the health issues and their relationship to environmental contaminants within the Takla Lake First Nation and Tsay Keh Dene Traditional Territories	unknown	unknown
2006-07	Mushkegowuk Environmental Research Centre	Moving towards the remediation of fifteen abandoned Mid-Canada Line Radar sites in Mushkegowuk Territory	unknown	unknown
2007-08	Lesser Slave Lake Indian Regional Council (LSLIRC)	Traditional Environmental Monitoring and Risk Communication Project	John Dennis, Ph.D	Inputs from lab data combined with community interviews and events will provide inputs to a health and environmental risk assessment.
2007-08	Windigo First Nation Council	Assessment of Metals in Fish in Waters Surrounding the First Nation Communities of Sachigo Lake & Slate Falls	Gord Persson, Biologist	Conducting assessments of metals in fish tissues within the waters surrounding the eastern Ontario FN communities of Sachigo Lake and Slate Falls. Analysis of fish tissues for As, Cd, Cr, Cu, Mn, Ni, Pb, Se, Hg (total), Fe, and Zn.
2007-08	Institute of Ocean Sciences (in conjunction with 5 Vancouver Island First Nation communities)	Environmental Contaminants in the Marine Foods of Coastal First Nations in British Columbia: A Community-oriented Risk Evaluation	Peter Ross, Ph.D	Conducting a more defensible health hazard assessment, considering nutritional interpretation and a risk-benefit analysis, community workshops and communications material to share research results with participating communities.
2007-08	Nlaka'pamux Tribal Council	An Investigation of Landfill Emissions in Assessing the Potential for Health Impacts on Communities within the Nlaka'pamux Nation	Michael Easton, Ph.D	Tissue analysis (POPs) of coyotes and fish from nearby waterways (Bonaparte River and Fraser River in southern interior of BC) – bisphenol A, dioxins, furans, BDEs, PCBs, perfluorinated compounds, PAHs, and chloronaphthalenes.
2007-08	Siska Traditions Society	Siska Salmon and Human Health Project – Effects of Environmental Contaminants in Upriver Migration in the Fraser and Thompson River Basins: Toxicity and Exposure Levels	Nancy MacPherson	Testing exposure and magnification of toxins in sockeye salmon and Chinook salmon as they migrate up two different rivers (contaminants of primary interest: Hg, Cd, Pb, As, PCBs, PCDD/Fs, and pesticides)—using reproductive tissue; Comparative analysis between contaminant levels at different stages of migration; Comparative analysis for different biological effects of contaminants in different species; (comparative analysis of contaminant levels between raw and cooked sample preparation); The

				two phases above are in preparation for a third phase which involves administration of a 24 hour dietary recall and a food frequency questionnaire in the participating communities; the assessment, combined with the information obtained through the first two phases, will help in developing estimates of the nutritional value from salmon and human contaminant exposure.
2007-08	Shibogama First Nation (in conjunction with 3 other First Nation communities in northern Ontario)	Risk-benefit Analysis of Contaminants in First Nations Communities Drawing from off-the-land Food Sources	Michael Robidoux, Ph.D	Risk assessment of off-the-land foods through determination of which foods are contributing most to contaminant exposure -> comparison of diets with WHO and HC TDIs; Project involves biomonitoring (blood) and physical activity/dietary response measurements (for metabolic determinations), along with a dietary survey
2007-08	Eagle Village Health Centre	Examination of Hg in fish and fish consumption rates in a group of FN communities concerned with Hydro electric and developments and resource extraction activities in and around Kipawa Lake (southwestern Quebec)	Denis Brouard, Ph.D	Project involves biomonitoring (hair samples for Hg), a dietary survey, and fish sampling for Hg levels