

GENERAL INTRODUCTION

In 1991, the Northern Contaminants Program (NCP) was established to examine contaminants in the north. The NCP is part of the Arctic Environmental Strategy (AES) which is managed by the Department of Indian and Northern Affairs (DIAND) and is partnered with the Dene Nation, the Metis Nation, the Council of Yukon First Nations, Inuit Tapirisat Canada and the Inuit Circumpolar Conference. A summary of work conducted under this program over 5 years was published in the Canadian Arctic Contaminants Assessment Report (1997). Results were variable and the database too limited to apply to the Deh Cho territory.

DIAND has continued to fund the NCP for another 5 years and has encouraged the aboriginal communities to develop their own contaminant research proposals. The Deh Cho First Nations produced a report (Contaminants in the Deh Cho. A Summary of Five Years of Research under the Northern Contaminants Program) that summarized relevant information from the Canadian Arctic Contaminants Assessment Report (1997). The summary report identified a lack of "baseline" data on levels of contaminants specific to wildlife and fish species in the Deh Cho Territory and recommended research to identify levels of contaminants in fish, moose and woodland caribou.

As the cost of undertaking a comprehensive baseline study of contaminants in fish, moose and caribou is significant, this project has been split into five distinct phases. Phase 1 is the communications phase which deals with collecting traditional knowledge to aid in the development of the exact time and location of sampling for the other phases. As well, Phase 1 will concentrate on ensuring local peoples are aware of the overall project, the goals of the project, and how they can become involved in the project. Phase 2 deals with the collection, analysis and interpretation of data from boreal caribou (*Rangifer tarandus*). Phase 3 deals with the collection, analysis and interpretation of data from moose (*Alces alces*). Phase 4 deals with the collection of lake whitefish (*Coregonus clupeaformis*), lake trout (*Salvelinus namaycush*), northern pike (*Esox lucius*), pickerel (*Stizostedion vitreum*), burbot (*Lota lota*), inconnu (*Stenodus leucichthys*), grayling (*Thymallus arcticus*), and long nose sucker (*Catostomus catostomus*) to examine these species for the presence of heavy metals and organochlorines. Phase 5 deals with the establishment of long term lichen monitoring plots. These plots will aid in the tracking of accumulating contaminants and can be used by the "Boreal caribou habitat and land use planning in the Deh Cho" as an indicator of forage availability and quality.

As it is unclear at this time how much commitment of time and resources can be solicited from various government agencies and personnel all costs for each phase of this project have been estimated assuming that the project will have to purchase equipment and that consultants and local workers will have to be hired. If government personnel do provide some of their time or resources as in-kind contributions the overall cost of the project may be reduced significantly. A cost savings may also be achieved by partnering with Western College of Veterinary Medicine to provide research opportunities to graduate students in veterinary medicine. A graduate student may be able to perform many of the tasks outlined in this proposal; however, funding commitments would have to be in place prior to graduate student being offered the opportunity. This possibility should be explored further once funding agencies have given initial feedback on the level of funding available for each individual project phase.