Dear Mr. Kovic:

Thank you for your letter of October 10, 2014, regarding the Nunavut Wildlife Management Board's public hearing concerning the regional total allowable harvest (TAH) level for the Western Hudson Bay polar bear sub-population.

Environment Canada recognizes the role that Wildlife Management Boards play in integrating our agency's perspective with those of other stakeholders at this stage of the process. Environment Canada also recognizes that all correspondence related to this process will be made public, which we see as evidence of the openness and thoroughness of the decision-making process for establishing polar bear harvest levels in Canada.

When preparing recommendations pertaining to harvest levels, Environment Canada relies upon the expert assessments conducted by the Polar Bear Technical Committee (PBTC). According to the most recent (2014) PBTC status table, referencing historic to present-day numbers, the PBTC evaluates the Western Hudson Bay subpopulation as 'likely reduced' based on an observed overall decline in the population since the 1980s. However, the PBTC determined that the population trend for the subpopulation over the past 15 years has been 'likely stable' based upon — among other things - recent seasonal sea ice patterns that have resulted in increased female survival, in addition to reduced harvest levels in recent years. Furthermore, the PBTC noted that based on a variety of biological factors such as changes in body condition, reduced reproductive productivity and expected changes in ice conditions, the subpopulation will "likely decline" over the next ten years. However, recognizing the value of information provided by Aboriginal peoples living within the Western Hudson Bay region, and based on their assessment of the available Aboriginal Traditional Knowledge, the PBTC noted that the subpopulation was considered to be "increased" from previous levels.
These scientific PBTC trend assessments were based, in part, on the Environment Canada report by Dr. Nick Lunn and co-authors, entitled "Demography and Population Assessment of Polar Bears in Western Hudson Bay, Canada", which was widely circulated in November 2013 (report attached, with summary in Inuktitut). This report has received rigorous internal review by Environment Canada, the United States Geological Survey and the United States Fish and Wildlife Service, and a manuscript reporting the same results will be submitted for peer-reviewed publication by December 2014. You will recall that earlier in the fall of 2014, an Environment Canada official presented the report findings at the recent annual general meeting of the Kivalliq Wildlife Board.

As you are aware, the results of the 2011 Western Hudson Bay aerial survey have recently been published and provide a population estimate of 1,030 (95% CI: 715–1,398) bears. The Environment Canada study noted above reports a 2011 population estimate of 806 (95% CI: 653 – 984). While based on different methodologies, the overlapping confidence intervals of these two estimates indicate that they are therefore not significantly different. However, we note that the PBTC status table reflects the Committee consensus to use the 2011 aerial survey estimate of 1,030 bears.

As noted by many involved in polar management and conservation in Canada, the issue of human-polar bear conflict is of concern. We note that the number of defense of life and property (DLP) kills reached a high of 14 during the 2010-11 harvest season, when the quota was lowered to eight bears per year. We also recognize that this high number of defense kills is one reason that the quota was raised to 24 during the 2012 TAH decision-making process. We also note that in recent years, the number of DLP kills has decreased substantially, partly reflecting increased deterrence measures in key communities such as Arviat. Indeed, harvest data available on the Government of Nunavut (Department of Environment) website indicates that the past two years have each only seen one DLP kill. This significant improvement speaks to the commitment to conserve polar bears by the people of Nunavut and Manitoba.

The generally accepted practice is that when a polar bear subpopulation is healthy, the sustainable harvest can be up to a maximum of 4.5%, if criteria such as population stability and a sex ratio in the harvest of about 2 males:1 female are met. However, given ongoing declines in body condition and productivity of bears in Western Hudson Bay, and predictions that these will continue in the future, the biological criteria implicit in the "4.5% rule" cannot be met and application of the precautionary principle is warranted. As such, Environment Canada strongly recommends that the TAH does not reach these maximum values and suggests that the current TAH of 24 is maintained.
Furthermore, although there is no polar bear harvest in Manitoba, problem bears are still removed from this subpopulation in Manitoba, and these must be included in the total removals (harvest and DLP) considered by the NWMB. As Environment Canada understands it, three bears are 'assigned' for DLP kills each year when the NWMB recommends the quota. Manitoba Conservation reported four DLP kills in 2013, as well as the removal of three orphaned cubs sent to zoos.

The Government of Nunavut is proposing a survey in 2016, in collaboration with other parties, to update the population estimates for both the Western and Southern Hudson Bay subpopulations. Having up-to-date population information is essential for effective management, and conducting surveys of the entire Hudson Bay coast in one year will put to rest concerns about double-counting of bears or of missing bears during surveys.

In summary, it is Environment Canada’s position that maintaining a TAH of 24 bears would be the appropriate course of action at the current time. This level of harvest provides opportunities for hunters to exercise their traditional rights and accounts for DLP kills, yet adopts a precautionary approach that is warranted in situations with current or future uncertainty. Environment Canada also recommends that, as has been the practice, the TAH level be re-visited as new, relevant information becomes available.

As I have noted in previous correspondence, Canada’s management of polar bear continues to be under intense international scrutiny, and I cannot over-emphasize the importance of ensuring that harvest levels are sustainable and follow sound conservation principles. Ensuring that we are able to continue to demonstrate that our levels of harvest and trade are sustainable, according to international standards, will enable us to maintain trade from Western Hudson Bay as well as from other management units across the range of polar bears in Canada.

Sincerely,

Sue Milburn-Hopwood
Director General
Canadian Wildlife Service