

Framework for Action for Management of Polar Bears in the Inuvialuit Settlement Region

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The Inuvialuit Settlement Region Polar Bear Co-management Plan describes the management goal, objectives and recommended approaches for polar bears in the entire Inuvialuit Settlement Region (ISR), including NWT and Yukon. This Framework for Action, a companion document to the ISR Polar Bear Co-Management Plan, was developed at the same time to facilitate implementation of the co-management plan. This framework outlines actions and areas where further work should be directed. It will be used to develop an implementation table. This Framework for Action will be reviewed at the same time as the management plan.

This document and the management plan itself do not commit any party to actions or resource expenditures; implementation is subject to appropriations, priorities, and budgetary constraints of the participating parties.

For additional information, please refer to the management plan. Acronyms used in the table are explained at the end of this document.

Recommended Specific Actions for Management of Polar Bears in the ISR

MANAGEMENT GOAL:

To ensure the long-term persistence of healthy polar bears in the ISR while maintaining traditional Inuvialuit use.

Objective #1: Collect traditional knowledge, scientific knowledge and monitoring information in a timely manner to inform management decisions

Approach 1.1 Document traditional knowledge and use traditional knowledge to inform management decisions on an ongoing basis

Action 1.1.1 Use the report *Inuvialuit and Nanuq: A Polar Bear Traditional Knowledge Study* and associated database to identify additional research needs and priorities

Action 1.1.2 Make results of queries to the database from *Inuvialuit and Nanuq: A Polar Bear Traditional Knowledge Study*, available to management partners, as appropriate

Action 1.1.3 Increase systematic collection and analysis of Inuvialuit observations

Action 1.1.4 Develop and apply policy/best practices for traditional knowledge research in the ISR

Recommended Specific Actions for Management of Polar Bears in the ISR
Approach 1.2 Monitor contaminants in polar bears
Action 1.2.1 Develop a monitoring plan for contaminants in polar bears and seals (DFO)
Action 1.2.2 Implement plan to collect baseline information, followed by periodic monitoring of contaminants
Approach 1.3 Monitor polar bear subpopulations
Action 1.3.1 Set up an inventory schedule (plan to monitor subpopulations)
Action 1.3.2 Investigate alternative methods to assess subpopulation size
Action 1.3.3 Finalize Viscount Melville subpopulation abundance estimate in collaboration with Nunavut
Action 1.3.4 Encourage enhanced reporting of local observations (eg, body condition, litter size, sex, age, location, habitat, bear observations), quantify and map (linked to 1.1.3)
Action 1.3.5 Refine understanding on subpopulation delineation, including seasonal fidelity
Action 1.3.6 Research changes in diet over time, in consideration of sex, age and condition using samples from research activities and harvested bears (fat, bone, hair\skin)
Action 1.3.7 Research changes in parasites and disease prevalence over time, in consideration of demographics and subpopulations
Action 1.3.8 Develop data sharing guidelines or protocols amongst the parties involved in polar bear research and monitoring in the ISR
Approach 1.4 Consider best available information on habitat and prey in polar bear management
Action 1.4.1 Consider best available information from seal monitoring/research in polar bear management
Action 1.4.2 Consider best available information on sea-ice conditions in polar bear management
Objective #2: Adaptively co-manage polar bears and their habitat in accordance with the best information available
Approach 2.1 Review information annually to inform adaptive management
Action 2.1.1 WMACs and Inuvialuit Game Council annually review information in collaboration with jurisdictions that share management authority
Action 2.1.2 WMACs make management recommendations to federal and territorial governments
Action 2.1.3 Identify priorities for scientific and traditional knowledge research

Recommended Specific Actions for Management of Polar Bears in the ISR
Approach 2.2 Communicate with harvesters and local communities to foster information flow in both directions
Action 2.2.1 Continue/enhance HTC communications (for example, continue to send them posters of research projects and harvest information; use social media)
Action 2.2.2 Hold community meetings for information sharing
Action 2.2.3 Share information at ISR research day
Approach 2.3 Coordinate with other jurisdictions on a national and international level
Action 2.3.1 Continue annual meetings of Inuvialuit-Inuit and Inuvialuit-Inupiat
Action 2.3.2 Continue participating in Polar Bear Technical Committee (PBTC) and Polar Bear Advisory Committee (PBAC)
Action 2.3.3 Continue to participate in Canadian discussions regarding the implementation of the Circumpolar Action Plan for the Conservation of Polar Bears
Action 2.3.4 Continue participating in international meetings and coordination (e.g. range state meetings, Polar Bear Specialist Group, Canada-US Oversight Group)
Action 2.3.5 Continue participating in Inuit Communication Group for polar bears
Action 2.3.6 Coordinate actions and messaging related to CITES, e.g. strengthen tracking of exports and update non-detrimental finding
Objective #3: Encourage wise use of polar bear populations and all polar bear products
Approach 3.1 Continue to encourage a male-dominated harvest
Action 3.1.1 Continue to implement HTC bylaws and associated regulations that prohibit taking females with cubs and bears in dens
Action 3.1.2 Continue to implement the Inuvialuit-Inuit and Inuvialuit-Inupiat user to user agreements by setting quotas so that the female proportion of harvest does not exceed one third of total subpopulation harvest
Action 3.1.3 Continue to provide community workshops and education on identifying sex of polar bears, as required
Approach 3.2 Manage human-caused mortalities so they do not exceed the quota
Action 3.2.1 Continue tracking all human-caused polar bear mortalities through tag system including harvest, defense of life and property kills, industry-related mortalities, and other mortalities
Action 3.2.2 Continue to enforce harvest quotas and the tag system

Recommended Specific Actions for Management of Polar Bears in the ISR
Action 3.2.3 Annually review harvest based on all available information
Approach 3.3 Continue to manage guided hunts to achieve conservation benefits
Action 3.3.1 Continue to implement regulations specifying that unsuccessful guided hunt tags cannot be re-allocated
Approach 3.4 Continue to regulate polar bear trade
Action 3.4.1 Continue to regulate and track trade of polar bears and polar bear parts through permits
Action 3.4.2 Investigate the use of PIT tags (personal identification tags) to facilitate increased traceability of hides
Approach 3.5 Explore tools to investigate impacts of harvest on subpopulation trend
Action 3.5.1 Hold workshop to better understand the model of Regehr et al. (2015) and its application in the ISR
Objective #4: Minimize detrimental effects of human activities on polar bears and their habitat
Approach 4.1 Minimize detrimental effects of human-bear conflicts
Action 4.1.1 Systematically track and compile records for all human-bear encounters or incidents (implement PBHIMS format)
Action 4.1.2 Analyze human-bear incidents and adaptively change advice as we learn more about appropriate mitigation measures
Action 4.1.3 Develop guidelines for tourism operators and film crews interacting with polar bears
Action 4.1.4 Promote bear awareness training for all visitors and workers in polar bear country
Action 4.1.5 Work with communities and industry to reduce human-bear conflicts
Action 4.1.6 Encourage/help communities and MACA to review the design and operation of local landfills, including consideration of electric fencing
Action 4.1.7 Support community bear patrols during key problem times/seasons, as necessary
Approach 4.2 Minimize detrimental effects of research on polar bears
Action 4.2.1 Annually provide information to PBTC on bears handled in the ISR and documented impacts
Action 4.2.2 Advocate for further research regarding the impacts of handling
Action 4.2.3 Explore alternate methods for subpopulation monitoring

Recommended Specific Actions for Management of Polar Bears in the ISR
Action 4.2.4 Consider the need for research and provide advice on research projects to mitigate impacts to polar bears
Action 4.2.5 Advocate for power analysis of existing data to determine the minimum number of bears needing to be handled to achieve sufficient confidence in results
Approach 4.3 Minimize detrimental effects of development and industrial activity on polar bears
Action 4.3.1 Improve tracking and analysis of the human footprint in polar bear range so that environmental screening and review can better take cumulative effects into account
Action 4.3.2 Finalize denning habitat maps (from traditional knowledge and Resource Selection Function model) and make them available in digital and paper format
Action 4.3.3 Continue to collect denning information through local observations of denning and collared polar bears
Action 4.3.4 Use information from collared animals and from <i>Inuvialuit and Nanuq: A Polar Bear Traditional Knowledge Study</i> to help identify areas of significance for polar bears to develop mitigation measures
Action 4.3.5 Develop protocol for surveying polar bear maternity denning habitat prior to industrial activity
Action 4.3.6 Develop protocol/regulations for operating near active den sites, to limit industrial activity and disturbance of denning female bears
Action 4.3.7 Develop oil spill response protocols for polar bears
Action 4.3.8 Develop protocol for shipping and traffic (boats, ships, aircraft and other vehicles) to avoid disturbance of polar bears
Action 4.3.9 Develop protocol for polar bear monitoring at industrial facilities
Action 4.3.10 Develop guidance for industry on how to work with communities to avoid disturbance of subsistence harvest
Action 4.3.11 Provide information and guidance into EISC, EIRB and CEAA 2012 processes of screening, environmental impact assessment and project approvals
Objective #5: Communicate and share information on polar bears and impacts of climate change on polar bears
Approach 5.1 Encourage youth stewardship of polar bears in the ISR
Action 5.1.1 Work with youth to teach about polar bear management in the ISR, the importance of polar bears in Inuvialuit culture and the impacts of climate change on polar bears

Recommended Specific Actions for Management of Polar Bears in the ISR

Approach 5.2 Enhance national and international communications with a particular focus on climate change impacts on polar bears

Action 5.2.1 Continue supporting development of Inuit Tapiriit Kanatami (ITK) website

Action 5.2.2 Continue developing communication material (including update of fact sheets and brochures) on the cultural importance of polar bears to the Inuvialuit and how they are managed in the ISR

Action 5.2.3 Share communication material on the impacts of climate change on polar bears

Action 5.2.4 Share information about polar bear management at national and international fora (e.g. public meetings, media, conferences)

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EXPLANATION OF ABBREVIATIONS:

19	ATV:	all-terrain vehicle
20	CAP:	Circumpolar Action Plan
21	CBMP:	Community Based Monitoring Program
22	CCWHC:	Canadian Cooperative Wildlife Health Centre
23	CEAA 2012:	<i>Canadian Environmental Assessment Act, 2012</i>
24	CITES:	Convention on International Trade in Endangered Species
25	CWS:	Canadian Wildlife Service
26	DFO:	Department of Fisheries and Oceans
27	DoE:	Yukon Department of Environment
28	EC:	Environment Canada
29	ED:	Environment Division
30	EIRB:	Environmental Impact Review Board
31	EISC:	Environmental Impact Screening Committee
32	ENR:	NWT Environment and Natural Resources
33	FJMC:	Fisheries Joint Management Council
34	GN:	Government of Nunavut
35	GNWT:	Government of the Northwest Territories
36	GoC:	Government of Canada

37	HTC:	Hunters and Trappers Committee
38	IFA:	Inuvialuit Final Agreement
39	IGC:	Inuvialuit Game Council
40	I-I	Inuvialuit-Inuit and Inuvialuit-Inupiat
41	ISR:	Inuvialuit Settlement Region
42	ITK:	Inuit Tapiriit Kanatami
43	JS:	Joint Secretariat
44	MACA:	NWT Municipal and Community Affairs
45	NCP:	National Contaminants Program
46	NDF:	Non-detriment finding
47	NSB:	North Slope Borough, Alaska
48	NWT:	Northwest Territories
49	PAH:	Polycyclic aromatic hydrocarbons
50	PBHIMS:	Polar Bear Human Information Management System
51	PBTC:	Polar Bear Technical Committee
52	RCMP:	Royal Canadian Mounted Police
53	RRO:	Renewable Resource officers
54	SARA:	National <i>Species at Risk Act</i>
55	SDW:	GNWT's spatial data warehouse
56	TEK:	Traditional Ecological Knowledge
57	TK:	Traditional Knowledge
58	WMAC (NS):	Wildlife Management Advisory Council (North Slope)
59	WMAC (NWT):	Wildlife Management Advisory Council (Northwest Territories)
60	WMACs:	both WMAC (NWT) and WMAC (NS)
61	YG:	Yukon Territorial Government
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