

Rank and Proposed Timing of Circumpolar Actions 2020-2025

Objective	Circumpolar Action Number	Circumpolar Information Exchange Number	Description	Tier based on Mean Score (B*S/C)	Tier based on B*S	Mean Cost Score	# of 2 year	When should this action be initiated? (next 2 years, 3-5 years, > 5 years) (Canada)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(Norway)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(Greenland)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(US)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(PBSG)
Ensure the conservation of essential habitat for polar bears.	EH-A2		Define levels of protective status of polar bear essential habitat (likely 3 categories)	1	1	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Ensure the conservation of essential habitat for polar bears.	EH-A7		Develop messages about the importance of conserving essential habitat	1	1	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A4		Establish baseline for human injuries and deaths using existing data from 2006-2015.	2	3	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A7		Develop, and post to the RS website, core polar bear safety messages for a general audience and more detailed guidelines for specific user groups (e.g., industry, guide- led tourist groups, hunting/subsistence camps, researchers) as needed. One such product is tourism-operator guidelines to be published on the RS website and shared with The Association of Arctic Expedition Cruise Operators (AECO) etc.	2	2	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Ensure that harvest of polar bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices.	HM-A1	·	Define the components necessary for a "quantitative assessment of the population".	1	1	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Ensure that harvest of polar bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices.	HM-A2		Define "biologically sustainable harvest" in terms of conserving polar bear subpopulations for future generations.	1	1	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years

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Ensure that harvest of polar bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices.	HM-A3		Define the components of a "demonstrated sustainable harvest management regime".	1	1	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality		HBC-IS2	Make available on the RS website Bear deterrent training protocols from the U.S., Canada, and Norway	1	2	Low	5	next 2 years	next 2 years	next 2 years	next 2 years	next 2 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation	CCC-A3		Identify strategic communications opportunities for the Range States to provide information regarding the threat to the Arctic and to polar bears from climate change and the need for the global community to reduce GHG emissions	1	1	Low	4	next 3-5 years	next 2 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A3		Establish baseline for bear injuries and deaths using existing data from 2020.	2	3	Low	4	next 3-5 years	next 2 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A5		Report findings on human-bear conflicts which end in injury or death (to bears or humans) annually on the RS website for each country or subpopulation	2	3	Low	4	next 2 years	next 2 years	next 2 years	next 2 years	next 3-5 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A6		Develop standardized polar bear attack response protocols (WHART)	2	2	Low	4	next 2 years	next 3-5 years	next 2 years	next 2 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A2		Develop standardized data collection protocols for human-bear Incidents which result in injury or death (to bears or humans)	2	2	Low	4	next 2 years	next 2 years	next 2 years	next 2 years	next 3-5 years

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Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A2		Share research plans among jurisdictions to encourage consistency of methods and data	2	3	Low	4	next 2 years	next 2 years	next 2 years	ongoing	next 2 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation	CCC-A1		Establish baselines for the performance metrics (if the baseline actions above are adopted then remove this action).	2	2	Low	3	next 3-5 years	>5 years	next 2 years	next 2 years	next 2 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation	CCC-A2		Develop a climate change communications plan that outlines key messages (e.g., how climate change effects vary among subpopulations on both temporal and spatial scales, impacts to prey and denning habitat) regarding the threat to the Arctic and to polar bears from climate change and the need for the global community to reduce GHG emissions	2	1	Medium	3	next 3-5 years	next 3-5 years	next 2 years	next 2 years	next 2 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation	CCC-A5		Enter into climate change communication partnerships with organizations that have targeted audiences and strong public reach	1	1	Low	3	next 3-5 years	next 2 years	next 3-5 years	next 2 years	next 2 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation	CCC-A6		Communicate key messages regarding the threat to polar bears and to the Arctic from climate change and the need for the global community to reduce GHG emissions	1	1	Low	3	next 3-5 years	next 2 years	next 2 years	next 3-5 years	next 2 years
Ensure the conservation of essential habitat for polar bears.	EH-A1		The PBSG will be asked to define categories of essential polar bear habitat and then compile existing information to generate an inventory of essential habitat by the categories (and identify gaps in existing information).	2	1	Medium	3	next 3-5 years	next 2 years	next 3-5 years	next 2 years	next 2 years
Ensure the conservation of essential habitat for polar bears.	EH-A3		For each of the areas identified by the PBSG as essential habitat, the Range States will identify the conservation status applied to that habitat (as defined by the previous action).	1	1	Low	3	next 2 years	next 2 years	next 3-5 years	next 2 years	next 3-5 years

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Ensure the conservation of essential habitat for polar bears.	EH-A4		In each biennial report, the Range States will identify any changes in protection status for essential polar bear habitat.	2	3	Low	3	next 2 years	next 3-5 years	next 2 years	ongoing	next 2 years
Ensure the conservation of essential habitat for polar bears.	EH-A5		In each biennial report, the PBSG will be asked to provide an inventory of essential habitat by the categories identified previously by the PBSG.	2	2	Low	3	next 2 years	next 2 years	next 2 years	ongoing	next 3-5 years
Ensure the conservation of essential habitat for polar bears.	EH-A8		Develop messages about changes in the amount (spatial and temporal) of essential habitat	1	1	Low	3	next 2 years	next 3-5 years	next 2 years	next 3-5 years	next 2 years
Track and reduce emerging threats to polar bears	ET-A1		Develop and implement a procedure for horizon scanning for emerging threats (could just be a reporting component at the biennial meeting)	3	3	Low	3	next 3-5 years	next 2 years	next 2 years	next 3-5 years	next 2 years
Ensure that harvest of polar bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices.	HM-A4		RS submit a description of the harvest regime for each subpopulation addressing the following: whether a quantitative assessment of the population exists (with uncertainty), available data on harvest and associated uncertainty, whether harvest has been determined to be biologically sustainable based on a quantitative assessment, including associated uncertainty and whether quotas and harvest are within biologically sustainable limits (as defined by performance metric 3).	2	2	Medium	3	next 3-5 years	next 3-5 years	next 2 years	next 2 years	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A12		Maintain long-term monitoring of polar bear subpopulations where data exists	3	2	High	3	>5 years	next 2 years	next 2 years	ongoing	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A13		PBSG will regularly update the status and trends table using information provided by the RS for subpopulations	1	2	Low	3	next 2 years	next 2 years	next 2 years	ongoing	next 3-5 years

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Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A9		 Consider the "actions" in the "Actions Not Circumpolar" table below when developing new coordinated plan 	2	2	Low	3	next 2 years	>5 years	next 2 years		next 2 years
Ensure the conservation of essential habitat for polar bears.		EH-IS1	Share existing BMPs addressing potential impacts for mineral and energy exploration and development on essential habitat	1	2	Low	3	next 2 years	next 2 years	next 2 years	ongoing	next 3-5 years
Communicate to the public, policy makers, and legislators around the world the importance of mitigating GHG emissions to polar bear conservation			Maintain a climate change communications page on the RS website	2	3	Low	2	next 3-5 years	>5 years	next 2 years	next 3-5 years	next 2 years
Ensure the conservation of essential habitat for polar bears.	EH-A9		Redo of Durner et al. 2009. An update of this paper to see whether sea ice habitat and polar bear distribution have changed as projected.	2	2	Medium	2	next 2 years	next 3-5 years	next 3-5 years	next 3-5 years	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A1		Make available to all Range States the Polar Bear-Human Information Management System (PBHIMS); use smart where possible.	3	3	Medium	2	>5 years	next 3-5 years	next 2 years	ongoing	next 2 years
Ensure that harvest of polar bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices.	HM-A6		Methods development to collate available data from harvested bears and how to analyze that data. Could potentially inform indicators to be incorporated into harvest management (could result in recommendations for what data to be collected from harvested bears and how to collect it)	3	3	Medium	2	>5 years	>5 years	next 3-5 years	next 2 years	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A8		- Include all research and monitoring activities identified under other objectives	3	3	Low	2	next 3-5 years	>5 years	next 2 years		next 2 years

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Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality		HBC-IS1	Share information related to strategies for responding to the potential for large numbers of bears stranded on shore near communities and human developments and consider the consequences including those for human safety.	2	2	Low	2	next 3-5 years	next 3-5 years	next 2 years	ongoing	next 2 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality		HBC-IS3	Collaborate and share information on applied research and testing of new deterrent tools (i.e., drones, olfactory, electric fences) on wild and captive bears.	2	2	Low	2	next 2 years	next 3-5 years	next 2 years	ongoing	next 3-5 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality		HBC-IS4	Share BMPs for minimizing the impact of tourism-related activities on polar bears	3	3	Low	2	>5 years	next 2 years	next 2 years	ongoing	next 3-5 years
Manage human-bear interactions to ensure human safety and to minimize polar bear injury or mortality	HBC-A8		Develop a template for site-specific, jurisdictional (e.g. community, military site, industrial site, etc.) conflict management plans and standardized training protocols.	3	2	Medium	1	next 3-5 years	next 3-5 years	next 3-5 years	next 3-5 years	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A1		Develop models to better understand the potential effects of climate change within the circumpolar region on polar bear subpopulations.	3	2	High	1	next 3-5 years	next 3-5 years	next 2 years	next 3-5 years	>5 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A10		Re-evaluate subpopulation boundaries	3	3	Medium	1	>5 years	>5 years	next 2 years	>5 years	>5 years

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Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A3		Encourage support and compile population size estimates for all 19 subpopulations of polar bears according to the inventory schedule provided in this Plan (see Appendix V)	3	3	High	1	>5 years	next 3-5 years	next 3-5 years	ongoing	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A4		Encourage, support and compile estimates of vital rates for all 19 subpopulations of polar bears	3	3	High	1	>5 years	next 3-5 years	next 3-5 years	ongoing	next 2 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A5		Collate information on vital rates for each of the 19 subpopulations of polar bears	2	2	Low	1	next 3-5 years	next 2 years	next 3-5 years	ongoing	next 3-5 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-A7		Develop a coordinated, comprehensive research and monitoring plan at the circumpolar level	2	2	Medium	1	>5 years	next 3-5 years	next 3-5 years	next 2 years	next 3-5 years
Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the vision of the CAP	PRM-14		Conduct a cumulative effects analysis of climate change and human activities on polar bear and their habitats;	3	2	Medium	1	>5 years	next 2 years	next 3-5 years	ongoing	>5 years

according to Conservation principles. Iffe and property Image of a plan basis is carried out according to conservation principles. T-A2 Conduct review and analysis of Canadian trade in polar basis is carried out basis of plan basis is carried out basis subpopulations is managed in a biologically sustainable manner in subpopulations is conservation practices. T-A2 Conduct review and analysis of Canadian trade in polar basis (S) basis analysis of Canadian trade in polar basis (S) managed in a biologically sustainable manner in subpopulations is conservation practices. T-A2 Comple an evaluation of Biologically Sustainable manner in subpopulation, considering the Influence of climate change. 3 2 Medium 0 >5 years next 3-5 years next 3	Objective	Circumpolar Action Number	Circumpolar Information Exchange Number	Description	Tier based on Mean Score (B*S/C)	Tier based on B*S	Mean Cost Score	# of 2 year	When should this action be initiated? (next 2 years, 3-5 years, > 5 years) (Canada)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(Norway)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(Greenland)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(US)	When should this action be initiated? (next 2 years, 3-5 years, > 5 years)(PBSG)
of polar bears is carried out according to conservation principles.T-A2Conduct review and analysis of clandian trade in polar bears (including a broader market analysis)32Medium1next 3-5 yearsnext 3-5 yearsne	of polar bears is carried out according to conservation	T-A1		harvested bears and bears taken in defense of	2	3	Low	1	next 3-5 years	next 2 years	next 3-5 years	ongoing	next 3-5 years
bear subpopulations is managed in a biologically sustainable manner in accordance with sound conservation practices. HM-AS Compile an evaluation of Biologically Sustainable Harvest for each Polar Bear subpopulation, considence of climate change. 3 2 Medium 0 >5 years next 3-5 years next 3-	of polar bears is carried out according to conservation	T-A2		in polar bear from 2015-2021 (including a	3	2	Medium	1	next 3-5 years	next 3-5 years		next 3-5 years	next 2 years
circumpolar population research and monitoring that addresses achieving the objectives and providing monitor progress toward the vision and monitor progress toward the vision and monitor progress toward the vision of the CAPLong-term population monitoring of high arctic subpopulations32High0>5 years>5 yearsnext 3-5 yearsongoingnext 3-5 yearsCarry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help makePRM-A6Investigate how climate change effects vary among subpopulations on both temporal and spatial scales, including comparative studies aptial scales, including comparative studies32High0>5 years>5 yearsnext 3-5 yearsparatis 3-5 yearsparatis 3-5 yearsInvestigate how climate change effects vary addresses achieving the spatial scales, including comparative studies aptial scales, including comparative studies aptial scales, including comparative st	bear subpopulations is managed in a biologically sustainable manner in accordance with sound	HM-A5		Sustainable Harvest for each Polar Bear subpopulation, considering the influence of	3	2	Medium	0	>5 years	next 3-5 years	next 3-5 years	next 3-5 years	next 3-5 years
circumpolar population research and monitoring that addresses achieving the Investigate how climate change effects vary objectives and providing PRM-A6 PRM-A6 PRM-A6 Addresses achieving the objectives and providing and cross subpopulation indices and cross subpopulation indices	Carry out coordinated circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the	PRM-A11			3	2	High	0	>5 years	>5 years	next 3-5 years	ongoing	next 3-5 years
monitor progress toward the vision and vision and vision and vision and vision of the CAP	circumpolar population research and monitoring that addresses achieving the objectives and providing information to help make progress toward the vision and monitor progress toward the	PRM-A6		among subpopulations on both temporal and spatial scales, including comparative studies	3	2	High	0	>5 years	>5 years	next 3-5 years	ongoing	>5 years

Included in 2020-2023 action plan

next 3-5 years

>5 years