

## Polar Bear ‘Special Concern’ Designation Raises Some Concerns of Its Own

By Jocelyn Stacey

### Decision Considered:

Order Amending Schedule 1 to the Species at Risk Act [SOR/2011-233](#) October 27, 2011.

On November 10, 2011, the Federal Government released its decision to list the polar bear as “special concern” under Schedule 1 of the *Species at Risk Act* (*Species at Risk Act*, SC 2002, c 29, hereinafter “SARA”). This decision has been a long time coming. This post reflects on the significance of the decision, and specifically two concerns it raises with the listing process under SARA.

Scientists have been waving warning flags about the health of Canada’s polar bear population for some time. COSEWIC (Committee on the Status of Endangered Wildlife in Canada), the scientific body that advises Cabinet’s listing decisions under SARA, has assessed the polar bear as special concern since 1991. COSEWIC’s assessments have consistently noted the multitude of human-initiated threats that polar bears face, including hunting, bioaccumulation of PCB’s in the arctic, and climate change and have concluded that legal protection is necessary to prevent the demise of the species (COSEWIC, [COSEWIC assessment and update status report on the polar bear \*Ursus maritimus\* in Canada](#) (Committee on the Status of Endangered Wildlife in Canada: Ottawa, 2002) at 18. Since the enactment of SARA in 2003, the federal government has delayed its listing decision for the polar bear, citing insufficient information (Order of Giving Notice of Decisions, Canada Gazette Part II, [SI/2005-2, January 26, 2005 at 115](#). Most recently in April 2008, COSEWIC recommended again, that the polar bear be designated as special concern. Since that time, the federal government has been conducting extensive consultations, including a [National Roundtable on Polar Bears](#). This culminated in the final decision to designate the species as special concern, released on November 10.

“ ‘Species of special concern’ means a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats” (s 2 (1)). Unlike designations of “threatened” or “endangered”, however, the polar bear’s new status as special concern has no immediate impact. SARA’s direct prohibitions on hunting and harming listed species do not apply to special concern designations (SARA ss 32-36). Nonetheless, I think that the decision is significant for two reasons. First, listing the polar bear as special concern in Canada brings the federal protection regime closer in line with protections in the U.S., where the polar bear is designated as “threatened” and internationally where it is listed as “vulnerable” by the International Union for Conservation of Nature and is controlled under the Convention on International Trade in Endangered Species of Wild Flora and Fauna. The decision is also consistent with provincial and territorial wildlife decisions as Manitoba, Newfoundland, Ontario, Quebec and the Yukon Territory all list the polar bear under their respective wildlife protection regimes (reasons for designation). Second, the decision is

significant because it means the polar bear is no longer floating in discretionary limbo. Listing decisions under SARA are relatively unconstrained. There is no express statutory language that requires the Minister or Cabinet to make a decision one way or another (s 27). And despite ostensibly binding statutory timelines for action, delay has been a perennial problem with SARA's implementation (more on this below). Put simply, decisions to list or not list a species are at the pleasure of the federal government and previous attempts to enforce the listing provisions of the statute in court have been unsuccessful (see, e.g., *Rounthwaite v. Canada (Environment)*, 2007 FC 921). Once a species is designated under SARA, however, the story changes. SARA imposes mandatory statutory duties on the government to take regulatory action in the case of protected species. And environmental NGOs have been successful in enforcing these provisions in Federal Court. As Nigel Bankes put it: "SARA has a spine as well as teeth". See [here](#). This is now true for the polar bear as SARA imposes a mandatory obligation on the federal government to produce a management plan within 3 years:

65. If a wildlife species is listed as a species of special concern, the competent minister must prepare a management plan for the species and its habitat. The plan must include measures for the conservation of the species that the competent minister considers appropriate and it may apply with respect to more than one wildlife species.

...

68. (1) Subject to subsection (2), the competent minister must include a proposed management plan in the public registry within three years after the wildlife species is listed as a species of special concern.

Now, section 65 is considerably less stringent than the duties that attach to species listed as "threatened", "endangered", or "extirpated." But the only victory that I am claiming is that the bear is out of discretionary territory.

Unfortunately, this is all the credit I am willing to extend as the polar bear decision illustrates two chronic concerns with the implementation of SARA: delay and the use of cost-benefit analysis.

The delay between COSEWIC's recommendation and the actual listing decision calls into question both the process for designating species and the substantive decision in this specific case. A lot can change in three and a half years. In some cases, this kind of delay might doom a species to extinction. Though the polar bear is not yet teetering on the brink of extinction, its situation nonetheless demonstrates how quickly scientific information can change. The bear's population health is contingent on its ability to hunt for seals on sea ice (COSEWIC, [Assessment Summary for the Polar Bear](#), (April 2008). The past three years have seen vigorous scientific debate over the effects of climate change on the timing, thickness and extent of arctic sea ice. Recent studies have questioned the accuracy of the Intergovernmental Panel on Climate Change's (IPCC) sea ice models, demonstrating that these models (circa 2005-2007) may underestimate the thinning trend of arctic sea ice by a factor of 4 (P. Rampal et al "IPCC climate models do not capture Arctic sea ice drift acceleration: Consequences in terms of projected sea ice thinning and decline" (2011) 116 J. of Geophysical Res. (in press), see also Michael Winton, "Do Climate Models Underestimate the Sensitivity of Northern Hemisphere Sea Ice Cover?" (2011) 24 J. of Climate 3924). While the IPCC's models predicted the first ice-free arctic summer to occur around the end of the century, current conservative models predict the first ice free summer by 2050, some even predict it within the next decade (see [Guardian](#); [Reuters](#)). In other words, the prediction of the first ice-free summer has been bumped up by *at the least half a century*. This is a significant shift in the understanding of the effects of climate change on the

polar bear's future. Delay, even where a species is not on the brink of extinction, can affect the substantive outcome of a listing decision by failing to account for developments in our scientific understanding of the health of a species.

Even if new sea ice information was enough to warrant a higher listing, SARA does not give Cabinet the authority to give a species a higher designation than the one recommended by COSEWIC:

- (1.1) Subject to subsection (3), the Governor in Council, within nine months after receiving an assessment of the status of a species by COSEWIC, may review that assessment and may, on the recommendation of the Minister,
- (a) accept the assessment and add the species to the List;
  - (b) decide not to add the species to the List; or
  - (c) refer the matter back to COSEWIC for further information or consideration. (s 27)

Presumably, this is because Parliament did not contemplate such lengthy delays. SARA expressly sets a 9-month timeline for the listing decision to take place. Indeed, where Cabinet has not made its decision by the 9-month timeline, the COSEWIC recommendation is supposed to default into place:

- (3) Where the Governor in Council has not taken a course of action under subsection (1.1) within nine months after receiving an assessment of the status of a species by COSEWIC, the Minister shall, by order, amend the List in accordance with COSEWIC's assessment. (s 27)

This type of default provision is known as a legislative “hammer” that is meant to ensure that action is taken, when otherwise the delegated authority might be inclined to delay. The federal government has circumvented this hammer by adopting a practice where the 9-month clock does not begin to run until Cabinet formally acknowledges receipt of COSEWIC's assessment, which often has the effect of substantially extending the timeline. Cabinet formally acknowledged receipt of COSEWIC's assessment of the polar bear on February 16, 2011, almost three years after COSEWIC released its 2008 assessment (Order Acknowledging Receipt of the Assessment Done Pursuant to Subsection 23(1) of the Act, [Canada Gazette Part II Vol. 145, No. 4 p. 430](#)).

The practice of extending SARA's explicit timeline and circumventing the hammer provision, and the inability to unilaterally make a stricter designation have the potential to frustrate SARA's mandate to

- prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened. (s 6)

The polar bear decision also illustrates a second concern with the implementation of SARA: the use of cost-benefit analysis in determining whether to list a species under the act. SARA does not require a cost-benefit analysis to determine whether to designate a species as “at risk”. Indeed, SARA does not even require the government to give reasons for a listing decision at all. Reasons are only required when the government rejects COSEWIC's recommendation. Thus, in this case, simply relying on COSEWIC's assessment and recommendation of “special concern” designation would have been sufficient for the purposes of the Act.

The practice of including a cost-benefit analysis comes from the [Cabinet Directive on Streamlining Regulation](#), which requires all federal government departments and agencies to conduct a Regulatory Impact Assessment of proposed regulatory actions. The Regulatory Impact Assessment must include an analysis of the costs and benefits of the proposal (at 8). This assessment procedure was expressly incorporated into the implementation of SARA (Environment Canada, [Consultation on Amending the List of Species Under the Species At Risk Act](#): March 2004 at 3. There is no question that this policy has influenced the substantive outcomes of listing decisions. Socio-economic costs are frequently cited when the government rejects COSEWIC's recommendation to protect a species (see, e.g., Findlay et al., "Species listing under Canada's Species at Risk Act" (2009) 23 Conservation Biology 1609).

The polar bear listing was no exception. The reasons considered active values derived from the polar bear (such as subsistence hunting and tourism) and passive values (bequest value, which is the "altruistic value of preserving a species for future generations" and existence value derived simply from knowing that the bear still exists) (reasons). In addition, the reasons considered costs of listing the polar bear as special concern, but noted that the bulk of costs would come during the implementation of a management plan. Despite the fact that designating the polar bear as "special concern" triggers none of SARA's substantive prohibitions the reasons perplexingly conclude that

[t]o the extent that the Order contributes to the protection of the species, the economic evidence presented indicates that the regulatory action is likely to result in a net benefit to Canadians.

This "net benefit" is supposedly attributable to the enhanced "existence" and "bequest" values, and perhaps increased tourism that will result from the incremental decision to designate the bear as "special concern" even in the absence of any further legal protections (reasons). I argue that this use of cost-benefit analysis is inconsistent with the purposes of the legislation and its mechanical use in this case highlights the risks inherent in unthinking economic analysis.

SARA is silent on what factors can be considered in making a decision to list or not list a species as "at risk" under the act. However, a purposive interpretation of the statute would preclude the use of cost-benefit analysis at the listing stage. The purpose of the legislation is quite clearly to prevent the extinction of species in Canada (s 6) and the preamble recognizes that "wildlife, in all its forms, has value in and of itself." Refusing to list species on the basis of net costs directly contravenes recognition of intrinsic value in wildlife (meaning value that is intrinsic to the species and not contingent on human interests) and frustrates the conservation purpose of the Act. In addition, SARA actually expressly requires the use of cost-benefit analysis at a later stage of protection: during the development of a recovery plan for threatened, endangered and extirpated species (s 49(1)(e)). This makes perfect sense, as the amount of information marshaled to design a recovery plan is significant in comparison to the relatively simple decision of whether or not to list a species. It is the recovery plan, or in the case of the polar bear and other species of special concern, the management plan, that details specific regulatory action – whether habitat needs to be set aside or actively restored, development ceased or pollution and other threats eliminated. Once these specific regulatory actions are on the table, assessing the costs and benefits of the action plan becomes much more feasible and meaningful. Attempting to assess the costs and benefits at the listing stage, before any specific regulatory measures are known, is speculative and misleading (see Findlay at 1615). This is even more obvious in the

case of special concern listings where the incremental costs and benefits of simply designating a species as such are negligible.

The use of cost-benefit analysis in all listing decisions is troubling – especially when it is used to justify not listing a species that has been found to be at risk by the scientific advisory board. But it is even more troubling in this case where it has a seemingly neutral effect. One reason is because it's a waste of government resources, resources that are becoming increasingly scant in the wake of massive cuts to Environment Canada funding (Meagan Fitzpatrick, "[Environment Canada job cuts raise concerns](#)" (CBC News, Aug. 5, 2011)). Another reason is that it demonstrates that the government is deploying cost-benefit analysis thoughtlessly, and thoughtless cost-benefit analysis is dangerous cost-benefit analysis. Cost-benefit analysis contains a number of embedded assumptions that are inherently conservative and adverse to environmental protection.

One of the primary difficulties in using a cost-benefit analysis for the protection of species (and, indeed, most environmental problems) is that it is difficult, if not impossible, to quantify the benefits that humans receive from the environment. Our understanding of ecology, even in this day and age, is limited. Identifying the benefits of preserving one species may not accurately capture the positive impacts on other species, the whole ecosystem, or services and functions that people derive from that system. Likewise, assessing the immediate costs of species loss will not be capable of accounting for ripple effects throughout the environment. Our lack of understanding creates an inherent risk of under-valuing environmental benefits.

It becomes even more problematic when we attempt to attach a dollar value to these benefits in a way that mirrors the market. The cost-benefit analysis of the polar bear focused explicitly on "quantify[ing] values associated with the economic value of the species" (reasons). This type of quantification may be fairly straightforward when there are direct "active" uses of a species that have a real market, such as sport hunting, but quantification becomes far more difficult in the case existence, bequest and option (the value of preserving the species so that you have options for use in the future) values. Economists have derived a variety of contingent valuation methods for valuing these otherwise invaluable environmental goods. Contingent valuation analysis is typically conducted by asking survey participants how much they would be willing to pay to preserve a species in a hypothetical market (K. Wallmo, "[Threatened and Endangered Species Valuation: Literature Review and Assessment](#)," cited at fn 18 of the reasons). According to the reasons for designation, a contingent valuation has not yet been completed for the polar bear in Canada, so the valuation was conducted by extrapolating from contingent valuation of other species (reasons citing ÉcoRessources Consultants, [Evidence of the Socio-Economic Importance of Polar Bears for Canada](#)). The contingent valuation concluded that Canadians would be willing to pay \$508 per household per year to preserve the polar bear (reasons). While a preservation value of \$6 billion annually is nothing to sneeze at, when the polar bear's existence is pitted against arctic oil and gas development (which is estimated at 8.4 billion barrels and 4.3 trillion cubic metres, respectively), even a significant monetary preservation value can become quickly overwhelmed (for oil and gas estimates see: Senate, Standing Committee on Energy, the Environment and Natural Resources, Evidence, 2nd Session, 39th Parliament, 11 March 2008, p. 5:6, (Mr. Patrick Borbey, Assistant Deputy Minister, Northern Affairs, Indian and Northern Affairs Canada)).

The \$508 figure is highly problematic. In the first instance, many studies have demonstrated that the amount people are willing to pay for a benefit is significantly lower than the amount they are willing to accept to avoid a loss (See, e.g., Jeremy D. Frailberg and Michael J. Trebilcock, "Risk

Regulation: Technocratic and Democratic Tools for Regulatory Reform” (1998) 43 McGill LJ 835 at para 83). Thus, respondents might say they would be willing to pay on average \$508 to protect the polar bear, but you would have to pay them significantly more to accept its loss. The report cited by in the polar bear reasons only using a willingness to pay standard, and therefore, contains a hidden value judgment that is adverse to environmental protection. In addition, how much someone is willing to pay (or accept) is directly related to how much money one has. Results might be skewed because respondents are willing to accept environmental damage or unwilling to pay for benefits because of limited resources. This is directly linked to the problems with treating citizens as consumers when it comes to the provision of public goods, such as species protection (see Frank Ackerman and Lisa Heinzerling, “Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection” (2001-2002) 150 U. Pa. L. Rev. 1553 at 1566-7 for an excellent summary of this argument). As a consumer, I typically operate as an individual: I am looking for a good deal for me. As a citizen, the way that I vote and participate in public decision-making is informed by a complex of values not just internal to me but about the relationship between me and my community. Collective decision-making about collective goods is more than just the sum of individual preferences. The translation of the benefits of preserving the polar bear in to tangible and monetary terms has the very real potential of understating what is at stake. It does not account for ecological uncertainty, it adopts a more conservative measure of ‘willingness to pay’ rather than ‘willingness to accept’, and it assumes that when attributing a dollar value that people are acting as individual one-dimensional consumers rather than complex socially conscious citizens. These are just a few examples of why cost-benefit analysis, if used, must not be used in a rigid and technical way.

The use of cost-benefit analysis in the decision to list the polar bear is concerning. The fact that it is being used at the listing stage at all flags an important issue of statutory interpretation. Conducting a cost-benefit analysis at this early stage is inconsistent with the purpose of protecting species: no cost-benefit analysis will change the reality of whether a species is at risk. Moreover, the way in which the analysis is used in the case of a listing decision for the polar bear – needlessly and mechanically – should cause us to think carefully about the role of cost-benefit analysis in environmental decision-making.