



Use of the Polar Bear Listing to Force Reduction of Greenhouse Gas Emissions: The Legal Arguments

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Summary

On May 15, 2008, the Fish and Wildlife Service (FWS) listed the polar bear as a threatened species under the Endangered Species Act (ESA). At the same time, it published a “special rule” limiting the application of ESA prohibitions to activities affecting the bear. The listing and special rule attracted attention due to the likelihood that the listing will be used as a legal basis to attempt to force reductions of greenhouse gas emissions from sources nationwide. At least two arguments might be made. First, the ESA prohibition of “takes” could be argued to be violated by major greenhouse gas sources. The special rule seeks to bar this argument, but has been challenged in court. Second, the ESA might require consultation with the Fish and Wildlife Service before a federal agency can authorize a major source of greenhouse gases, though the Service argues that current science does not support an adequate causal nexus between specific sources of greenhouse gases and specific effects on polar bears.

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On May 15, 2008, the deadline imposed by court order, the Fish and Wildlife Service (FWS) listed the polar bear as a threatened species under the Endangered Species Act (ESA).¹ At the same time, it published an ESA “special rule” limiting the application of ESA prohibitions to activities affecting the bear.² The listing and special rule sparked debate not only because of the polar bear’s charismatic qualities. It was widely known that the Center for Biological Diversity had petitioned the FWS to list the polar bear in 2005 in the hope that listing would provide a legal basis for forcing reduction of greenhouse gas (GHG) emissions throughout the country, to combat climate change. Thus, the consequences of the listing, many thought, could be vast.

The legal arguments, when they are eventually made, will presumably run like this. GHG emissions contribute to climate change. Climate change has produced disproportionate warming in the Arctic. That warming has already reduced the extent of Arctic sea ice, and will continue to do so in the future. Polar bears depend on sea ice for breeding, foraging, and travel. Thus, by diminishing the polar bear’s essential habitat and jeopardizing the species, GHG emitters *anywhere in the United States* now implicate the demands of the ESA—particularly sections 9 and 7, as follows.

ESA Section 9: The “Take” Prohibition

ESA section 9 makes it unlawful for any person to “take” an animal listed as endangered under the ESA.³ “Take” is defined broadly by the ESA to include “harm” to an endangered animal (or plant).⁴ And “harm,” critically for the climate change argument above, has been administratively defined to include indirect harm to listed species members through certain significant *habitat modifications*.⁵ Thus, at first glance an argument appears to exist that because a significant GHG emitter contributes to climate change, which melts the polar bear’s sea-ice, the emitter violates the section 9 “take” prohibition. If blessed by the courts, this argument would require a significant GHG emitter to obtain an “incidental take permit,” allowing incidental takes of polar bears after the emitter submits a conservation plan and the FWS finds that the applicant will minimize the impacts of such taking.⁶

This argument has some flaws. First, section 9, as noted, prohibits “takes” only as to *endangered* species, while the polar bear was listed as *threatened*. Here matters become more complex. By general rule, the FWS long ago extended the section 9 “take” prohibition to threatened species as well.⁷ Threatened species with atypical management needs, however, are subject instead to “special rules.”⁸ The FWS has great flexibility in writing special rules, because the ESA requires only that regulations protecting threatened species be “necessary and advisable to provide for the

¹ 73 Fed. Reg. 28212 (May 15, 2008). *See generally* CRS Report RL33941, *Polar Bears: Listing Under the Endangered Species Act*, by (name redacted), (name redacted), and (name redacted).

² 73 Fed. Reg. 28306 (May 15, 2008).

³ ESA § 9(a)(1)(B); 16 U.S.C. § 1538(a)(1)(B).

⁴ ESA § 3(19); 16 U.S.C. § 1532(19).

⁵ 50 C.F.R. § 17.3.

⁶ ESA § 10(a); 16 U.S.C. § 1539(a).

⁷ 50 C.F.R. § 17.31(a).

⁸ *See, e.g.*, 50 C.F.R. § 17.40 (special rules for mammals).

conservation of such species”⁹—not that they be the same as the act’s protections for endangered species. When the FWS listed the polar bear as threatened, it simultaneously issued a special rule for the species, also known as a “4(d) rule” after the relevant ESA subsection.

The polar bear 4(d) rule has been controversial. The rule narrows the section 9 “take” prohibition that normally would apply through the general rule above, by two exceptions. Only one is substantially relevant to climate change. It exempts from the section 9 prohibitions “any taking of polar bears that is incidental to, but not the purpose of, ... an otherwise lawful activity within any area subject to the jurisdiction of the United States except Alaska.” The effect of this exemption would appear to be that a coal-fired power plant anyplace in the United States except Alaska could not be deemed to “take” polar bears through its GHG emissions. Unless the section 4(d) rule is judicially invalidated, then, any effort to use the polar bear listing to reduce GHG emissions through a “take” argument will almost certainly be unsuccessful.

A second flaw in the GHG-emissions-take-polar-bears argument is that of causal proximity. GHG sources (anywhere in the U.S.) do not affect polar bears directly, but through the intermediary steps of atmospheric mixing, Arctic warming, and sea-ice melting. Is this a close enough nexus between activity and “take” to trigger section 9? Section 9 case law indicates that, for a violation to occur, there has to be a causal connection between the activity and the “take,”¹⁰ and “imminent harm” must be “reasonably certain to occur.”¹¹ Case law further indicates that *indirect* effects can constitute “takes,” but does not explicate further.¹² Given these vague standards, one can say only that the argument that a source of substantial GHG emissions “takes” polar bears is plausible. Greater certainty as to the argument’s chances of success is impossible given that the decided cases involve facts very different from climate change.

Judicial attitudes toward the causal proximity required by the ESA may be influenced by a Supreme Court decision in 2007, *Massachusetts v. EPA*, holding that EPA has authority under the Clean Air Act (CAA) to regulate GHGs from new motor vehicles.¹³ Relevant here is the Court’s discussion of Massachusetts’s standing to bring the suit. There, it found that the reduction in automobile GHG emissions sought by the state was likely to yield a non-negligible benefit to the state—slowing down its loss of shorelands to sea level rise—thus satisfying the “redressability” requirement of standing doctrine. The analogy between Massachusetts’s loss of shoreland and the polar bears’ loss of sea ice is evident, though standing law and the ESA are admittedly very different contexts.

Finally, there is the question of whether the effect of a particular GHG emissions source on polar bear habitat is de minimis.

⁹ ESA § 4(d); 16 U.S.C. § 1533(d).

¹⁰ See, e.g., *Cold Mountain v. Garber*, 375 F.3d 884, 890 (9th Cir. 2004).

¹¹ *Defenders of Wildlife v. Bernal*, 204 F.3d 920, 925 (9th Cir. 2000).

¹² For example, in *Defenders of Wildlife v. EPA*, 882 F.2d 1294 (8th Cir. 1989), EPA’s registration of strychnine for use in bait was held to constitute a prohibited “take” of endangered species. Registration allowed distribution of the bait, which led to its use against target species. Endangered non-target animals then ate the bait directly, or indirectly by consuming target animals that had ingested the bait and died. The court noted that EPA’s decision to register the pesticide was “critical” to the resulting poisonings of endangered species, and that the relationship between registration and deaths of endangered animals was “clear.” *Id.* at 1301.

¹³ 127 S. Ct. 1438 (2007).

ESA Section 7: Consultation with FWS

While section 9 applies to persons, section 7 applies only to federal agencies. It demands that each federal agency “insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated critical habitat].” To minimize the chance of “jeopardy” or “adverse modification,” section 7 creates a consultation process. If any listed species is present in the area of the proposed action, the agency proposing to act prepares a “biological assessment” identifying any such species likely to be affected, and setting out relevant details of the action and available information on its potential effects. The agency must then consult with the FWS, which prepares a “biological opinion” as to how the proposed action will affect the species or designated critical habitat. If the biological opinion finds jeopardy or adverse modification, the FWS must propose “reasonable and prudent alternatives” that the action agency or permit applicant can take to eliminate jeopardy or adverse modification.

Based on the argument above for “takes,” the argument may be made that the proposal of a federal action “authoriz[ing], fund[ing], or [carrying] out” substantial emissions of GHGs triggers section 7 consultation. And just as section 9 has a habitat modification component, so does section 7, though only where critical habitat has been formally designated. Moreover, case law supports the triggering of section 7 consultation even when the effect of an agency action is remote from the area of agency action.¹⁴ If sanctioned by the courts, this argument for section 7 consultation would effectively require an agency to adopt any reasonable and prudent alternatives proposed by the FWS, which presumably could include reduction of GHG emissions.

As with the section 9 “take” argument, the section 7 consultation argument has its vulnerabilities. The major one is causation. FWS regulations say that section 7 consultation evaluates the “direct and indirect effects” of the proposed action.¹⁵ “Indirect effects” are “those that are *caused by* the proposed action and are later in time, but still are reasonably certain to occur.”¹⁶ The listing preamble strongly insists that the “caused by” requirement is not satisfied in the case of GHG emissions and the plight of the polar bear.¹⁷ States the preamble: “The best scientific information available to us today ... has not established a causal connection between specific sources and locations of emissions to specific impacts posed to polar bears or their habitat.”¹⁸ Moreover, recently proposed amendments to the consultation regulations would make it even less likely that FWS would regard climate change-related impacts on the polar bear as an indirect effect of a federal action, triggering consultation.¹⁹

¹⁴ See, e.g., *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985) (in considering permit application for discharge into creek to build earthen dam, Corps of Engineers must factor in that dam will create reservoir, which will increase consumptive uses of creek water, which will deplete stream flow, which will adversely affect habitat of endangered whooping cranes 150 miles downstream).

¹⁵ 50 C.F.R. § 402.02.

¹⁶ *Id.* (emphasis added).

¹⁷ The listing preamble’s only explication of the “caused by” prong is to say that the FWS confines its section 7 evaluation to effects that would not occur “but for” the action under consultation. 73 Fed. Reg. at 28,299.

¹⁸ *Id.*

¹⁹ 73 Fed. Reg. 47868 (August 15, 2008). The proposed amendments to the current agency definition of “indirect effects” (see text above) would define indirect effects as those effects “for which the proposed action is an *essential cause*, and that are later in time, but still are reasonably certain to occur.” (Emphasis added.) Further, the amendments would specify that “[a] conclusion that an effect is reasonably certain to occur must be *based on clear and substantial* (continued...)”

The preamble reference to “[t]he best scientific information available to us today” acknowledges that new scientific information may provide the requisite causal connection. A second point is that while the causal nexus between “specific sources” and adverse effects on polar bear habitat may be elusive, some federal actions—such as CAA regulations—may increase GHG emissions from enough sources that the linkage may be more clear.²⁰ Third, in contrast with the section 9 prohibitions, the FWS cannot by special rule narrow the range of circumstances that trigger section 7 consultation—though its views on the causal nexus between GHG emissions and polar bears, or lack thereof, will likely be accorded deference by a court. A final point is that as with the causation issue under section 9, *Massachusetts v. EPA* may be influential here as well. As with section 7, a *de minimis* argument exists for consultation.

Another problem with use of section 7 for polar bears is that the May 15, 2008 listing was not accompanied by designation of critical habitat for the bear. The Center for Biological Diversity sued, challenging this failure to designate.²¹ In the meantime, any effort to force a section 7 consultation based on a proposed activity’s GHG emissions will have to argue that the emitting source satisfies the “jeopardy” trigger for consultation.

Other Listing Petitions Related to Climate Change

Though the polar bear petition was the most publicized, several other listing petitions have been filed for animals alleged to be endangered or threatened due, in whole or in part, to climate change. The Center for Biological Diversity is the sole petitioner in almost all of these, reflecting its campaign to use the ESA to address climate change.

Besides the polar bear, only one of these petitions has reached a final listing determination—that for the elkhorn and staghorn coral, in 2006. Seven other petitions are currently pending, and are listed below. To understand their status, the procedural stages in the ESA listing process must be reviewed. *First, the 90-day finding.* Upon receipt of a petition, the appropriate Secretary (of the Interior, or of Commerce) must determine if it “presents substantial ... information indicating that the petitioned action may be warranted,” and must do so within 90 days, if practicable. *Second, the 12-month finding.* If the 90-day finding is positive, the Secretary must determine whether listing is warranted, not warranted, or warranted but precluded by other pending proposals that require immediate attention, within 12 months of receiving the petition. If the 12-month finding concludes that listing is warranted, the Secretary must promptly publish a proposed rule to list. *Third, the final listing determination.* Within one year of publishing the proposed rule, the Secretary must publish a final listing determination either listing or withdrawing the proposal.

(...continued)

information.” (Emphasis added.) This means, states the preamble, that the indirect effect “cannot be speculative, and must be more than just likely to occur.” *Id.* at 47872. These proposed changes (and others) reinforce, in the FWS’s view, the agency’s “current view that there is no requirement to consult on [GHG] emissions’ contribution to global warming and its associated impacts on listed species (e.g., polar bears).”

²⁰ ESA regulations make express that a federal agency’s promulgation of regulations may trigger section 7. 50 C.F.R. § 402.02 (definition of “Action”).

²¹ *Center for Biological Diversity v. Kempthorne*, No. C-08-1339-CW (N.D. Cal. second amended complaint filed July 16, 2008).

The seven pending listing petitions related to climate change, together with the year each petition was filed and current status, are—

- Kittlitz’s murrelet, 2001. This Arctic sea bird has been in “warranted but precluded” status for several years. That status is being challenged in court on the ground that the Secretary of the Interior has not satisfied the ESA prerequisite for such status that “expeditious progress is being made” in adding and deleting other species from the endangered or threatened list.
- Twelve species of penguin, 2006. The failure to make a 12-month finding as to 10 of these species is being challenged in court. (In contrast to other species in this list, these twelve species are found exclusively outside the United States.)
- American pika, 2007. The failure to make a 90-day finding for this small alpine mammal is being challenged in court. (A similar suit attacks California’s rejection of a listing petition for the pika under that state’s Endangered Species Act).
- Ashy storm petrel, 2007. A positive 90-day finding for this seabird was made on May 15, 2008.
- Ribbon seal, 2007. A positive 90-day finding was made on March 28, 2008.
- Pacific walrus, 2008. The failure to make a 90-day finding has led to submission of 60 days’ notice of a future citizen suit.
- Ringed, bearded, and spotted seal, 2008. Petition to list filed May 28, 2008.

Other Efforts to Adapt Existing Laws to Addressing Climate Change

The Center for Biological Diversity’s campaign to use the ESA against climate change is only part of a broad effort by states, public interest groups, and individuals to use existing laws for this purpose. Climate change-related litigation has invoked the CAA, wildlife protection statutes (the ESA and Marine Mammal Protection Act), energy statutes (the Energy Policy and Conservation Act and Outer Continental Shelf Lands Act), information statutes (including the National Environmental Policy Act), nuisance law, and state laws governing electric utilities.²² The number of case filings has proliferated in recent years. Under either the ESA or other statutes, however, it is likely that complainants fully understand the inability of these laws to produce broad schemes for dealing with climate change. Rather, these suits have almost certainly been filed, in part, to pressure Congress or international negotiators to adopt comprehensive solutions tailored to the specifics of climate change.

²² See generally CRS Report RL32764, *Climate Change Litigation: A Growing Phenomenon*, by (name redacted).

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