



PACIFIC LEGAL FOUNDATION

July 23, 2008

Secretary Dirk Kempthorne
Secretary of the Interior
1849 C Street, N.W.
Washington, DC 20240

VIA FEDERAL EXPRESS

Director Dale Hall
United States Fish and Wildlife Service
1849 C Street, N.W., Room 3256
Washington, DC 20240

VIA FEDERAL EXPRESS

Re: 60-Day Notice of Intent To Sue for Violations of Section 4 of the Endangered Species Act in Connection with: *Determination of Threatened Status for the Polar Bear (Ursus maritimus) Throughout Its Range; Final Rule, 73 Fed. Reg. 28,212 (May 15, 2008)*

Dear Secretary Kempthorne and Director Hall:

This notice is submitted under sections 11(g)(1)(C) and 11(g)(2)(C) of the Endangered Species Act (ESA), 16 U.S.C. § 1540(g)(1)(C) and (g)(2)(C), on behalf of the California Cattlemen's Association, the California Forestry Association, and the Congress of Racial Equality to apprise you that the listing of the polar bear as a threatened species violates the Endangered Species Act and the Administrative Procedure Act for the reasons set forth below. You are advised immediately to withdraw the Final Rule as unlawful and unwarranted. Failure to do so will result in legal action to invalidate the Final Rule.

The California Cattlemen's Association is a nonprofit trade association that represents California's ranchers and beef producers in legislative matters. The association also engages in litigation to advance the interests of its members in such areas as food safety, endangered species, wildlife management, air quality, conservation, wetlands, and federal land grazing regulations. The EPA has identified livestock grazing as a major source of greenhouse gas emissions in the United States.

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The California Forestry Association is also a nonprofit association. Its diversified membership includes biomass energy producers, environmental consultants, financial institutions, forest land owners, forest products producers, loggers, registered professional foresters, wholesalers and retailers, wood products manufacturers, and others who are interested in responsible forest policies. Association members are committed to staying abreast of the issues facing the forest products profession, and taking an active role in protecting and enhancing California's forests. Forest management has been predicted both to affect and to be affected by global warming trends.

The Congress of Racial Equality (CORE) is a philanthropic human rights organization established to fight discrimination and encourage the economic and social independence of the poor and minorities. CORE was the first civil rights organization in this country to receive nongovernmental consultative (NGO) status at the United Nations. CORE is assigned to two of the UN's most prestigious departments—the United Nations Department of Public Information (UNDPI) and the United Nations Economic and Social Council (UNESCO). Environmental regulation that drives up the cost of energy, housing, transportation, and food disproportionately harms low-income minorities.

Legal Background

The ESA authorizes the Secretary to list “threatened” or “endangered” species. 16 U.S.C. § 1533(a)(1), (c). The term “threatened species” means “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(20). The term “endangered species” means “any species which is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). The Act prohibits the unauthorized “taking” of an endangered species. *Id.* § 1538(a)(1)(B). The “taking” of a species is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Id.* § 1532(19). The United States Fish and Wildlife Service has extended the Act's “take” prohibition to threatened species. 50 C.F.R. § 17.31(a).

In determining whether a species is “threatened” or “endangered,” the Secretary is required to consider five factors:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;

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- (D) the inadequacy of existing regulatory mechanisms; or
- (E) other natural or manmade factors affecting its continued existence.

16 U.S.C. § 1533(a)(1).

The Secretary must make the listing determination

solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas.

Id. § 1533(b)(1)(A). In the courts, the review of a final agency action is governed by the Administrative Procedure Act under an “arbitrary or capricious” standard; thus an agency’s decision should be overturned if it was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *Idaho Farm Bureau Fed’n v. Babbitt*, 58 F.3d 1392, 1401 (9th Cir. 1995).

Factual Background

On February 16, 2005, the Center for Biological Diversity (CBD) petitioned the United States Fish and Wildlife Service to list the polar bear under the Endangered Species Act. 72 Fed. Reg. 1064, 1065 (Jan. 9, 2007). On July 5, 2005, the Natural Resources Defense Council and Greenpeace, Inc., joined in the petition with CBD. *Id.* On January 9, 2007, the Department of the Interior issued a proposed rule to list the polar bear as “threatened” throughout its entire range (much of the Arctic Circle). *Id.* On May 15, 2008, the Department issued a Final Rule listing the polar bear as “threatened.” 73 Fed. Reg. 28,212. The following facts are known.

- 1) The “prediction” that 2/3 of the polar bear population will be lost by mid-century, touted by the popular press, is incorrect. That estimate is the guesswork of one man and is based on a qualitative “prototype” model that the Department warns is only preliminary and not to be taken as final. 73 Fed. Reg. at 28,273-74.

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- 2) Contrary to (1) above, the Intergovernmental Panel on Climate Change (or IPCC) models actually relied on by the Department predict that **3/4 of the polar bear population will survive into the foreseeable future** (45 years). These models forecast only a 10-22% range-wide decline in seasonal sea ice during that period. 73 Fed. Reg. at 28,273.
- 3) Of the 19 polar bear populations worldwide, only two are subject to the regulatory control of the United States. The majority (14 populations) are found in Canada. Others are located in Greenland, Russia, and Norway. 73 Fed. Reg. at 28,212-18.
- 4) Only two polar bear populations (one in the U.S. and one in Canada) are declining due to melting sea ice. See Dr. Mitchell Taylor & Dr. Martha Dowsley, *Demographic and Ecological Perspectives on the Status of Polar Bears* (2008), available at http://scienceandpublicpolicy.org/images/stories/papers/reprint/taylor_polar_bears.pdf (last visited July 22, 2008) (Taylor & Dowsley (2008)).
- 5) Almost 3/4 of the 19 populations are stable, increasing, or indeterminate in number. 73 Fed. Reg. at 28,217.
- 6) As temperatures have increased over the past 40-50 years, the polar bear population has increased to the highest levels in recorded history. The current population is approximately 25,000, up from an estimated low of 5,000-10,000 in the 50's and 60's. 73 Fed. Reg. at 28,215; U.S. Senate Environment and Public Works Committee, *U.S. Senate Report Debunks Polar Bear Extinction Fears*, Jan. 30, 2008, available at http://epw.senate.gov/public/index.cfm?FuseAction=PressRoom.Facts&ContentRecord_id=cb2faa9c-802a-23ad-4bcc-29bb94ceb993 (last visited July 22, 2008).
- 7) The Department considers the polar bear "threatened" because computer models forecast a declining trend in sea ice. 73 Fed. Reg. at 28,225, 28,275-76.
- 8) The Department admits that Arctic climate models are highly uncertain. 73 Fed. Reg. at 28,227-28.
- 9) Researchers from Wharton and Harvard have found that none of the models relied on meets accepted scientific standards. See J. Scott Armstrong, et al., *Polar Bear Population Forecasts: A Public-Policy Forecasting Audit* (2008), available at http://forecastingprinciples.com/Public_Policy/PolBears.pdf (last visited July 22, 2008) (Armstrong, et al. (2008)).
- 10) The sea ice models relied on by the Department assume a one-to-one correlation between sea ice reduction and population declines. They do not account for temperature variability (such

as the fact that global temperatures have not increased in the last decade), or polar bear adaptability, or changes in global influences. 73 Fed. Reg. at 28,272-74.

- 11) IPCC models do not predict the complete loss of sea ice. Taylor & Dowsley (2008).
- 12) Polar bears have survived previous global warming periods with higher temperatures than today and with a severe reduction in sea ice. 73 Fed. Reg. at 28,255-56.
- 13) Polar bears are already protected from direct harm through national and international laws and treaties. 73 Fed. Reg. at 28,281-88.
- 14) The Department has not determined what constitutes a viable polar bear population.
- 15) The Department has not articulated a standard for determining “threatened” or “endangered” status.
- 16) According to the Secretary of the Interior, the ESA listing will not provide any additional protections to the polar bear because the 4(d) rule will authorize any activity that is already permissible under the Marine Mammal Protection Act. *See* U.S. Dep’t of the Interior, Remarks by Secretary Kempthorne, Press Conference on Polar Bear Listing, May 14, 2008, *available at* http://www.doi.gov/secretary/speeches/081405_speech.html (last visited July 22, 2008).
- 17) According to the Secretary of the Interior, the ESA listing will not address the risk that is the basis for the listing (*i.e.*, “this listing will not stop global climate change or prevent any sea ice from melting” in the Arctic.). *Id.*

Threatened Status Is Not Supported by Sea Ice Models

The only reason given for the polar bear listing is the Secretary’s reliance on sea ice forecasting models that do not meet the standard for “best available science.” It is axiomatic that computer models are not the equivalent of observations in the field. No climate model has accurately replicated observed climate conditions, either retrospectively or prospectively, over the period defined by the Secretary as the “foreseeable future.” “Foreseeable future” is defined by the Final Rule as three generations or 45 years. This time line, however, is inconsistent with international protocols (*e.g.*, IUCN Redbook and COSEWIC) which give a mean generation time of 12 years instead of 15 for a foreseeable range of 36 years, not 45 years. Use of a proper generation time would greatly reduce the projected risks to polar bears. But this is not the only problem.

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Although the United States Geological Survey (USGS) praises the efforts of climate modelers, the agency acknowledged, as it must, that the ice flow models relied on by the Secretary either overstate or understate actual climatic conditions, some by a wide margin, because of the “sensitivity” of climate systems. DeWeaver (2007) states:

[W]hile most aspects of climate simulations have some degree of uncertainty, projections of Arctic climate change have relatively higher uncertainty. This higher level of uncertainty is, to some extent, a consequence of the smaller spatial scale of the Arctic, since climate simulations are believed to be more reliable at continental and larger scales (Meehl et al. 2007, IPCC 2007, both cited in DeWeaver 2007). The uncertainty is also a consequence of the complex processes that control the sea ice, and the difficulty of representing these processes in climate models. The same processes which make Arctic sea ice highly sensitive to climate change, the ice-albedo feedback in particular, also make sea ice simulations sensitive to uncertainties in model physics.

73 Fed. Reg. at 28,228.

In other words, because the factors which affect sea ice in the Arctic are unknown, and probably unknowable, due to their high degree of complexity and variability, they cannot be reproduced by any known modeling system. DeWeaver concludes:

Thus, even if climate models perfectly represented all climate system physics and dynamics [which they don't], inherent climate unpredictability would limit our ability to issue highly detailed forecasts of climate change, particularly at regional and local spatial scales, into the middle and distant future.

Id.

Armstrong, et al. (2008), took this analysis a step further and conducted an audit of the models relied on by the Department to project polar bear population trends. The following abstract summarizes their findings.

Calls to list the polar bears as a threatened species under the U.S. Endangered Species Act are based on forecasts of substantial long-term declines in their population. Nine government [USGS] reports were [issued] to inform the U.S. Fish and Wildlife Service decision on whether or not to list polar bears as threatened under the Endangered Species Act. We assessed these reports in light of evidence-based (scientific) forecasting principles. None of the reports referred to works on

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scientific forecasting methodology. Of the nine, Amstrup, Marcot and Douglas (2007) and Hunter et al. (2007) were the most relevant to the listing decision. Their forecasts were products of complex sets of assumptions. The first in both cases was the erroneous assumption that General Circulation Models provide valid forecasts of summer sea ice in the regions inhabited by polar bears. We nevertheless audited their conditional forecasts of what would happen to the polar bear population *assuming*, as the authors did, that the extent of summer sea ice would decrease substantially over the coming decades. We found that Amstrup et al. properly applied only 15% of relevant forecasting principles and Hunter et al. only 10%, while 46% were clearly contravened and 23% were apparently contravened. As a consequence their forecasts are unscientific and of no consequence to decision makers. We recommend that *all* relevant principles be properly applied when important public policy decisions depend on accurate forecasts.

Armstrong, et al. (2008).

Notwithstanding this damning assessment of climate models generally, and of the Arctic sea ice models specifically, the listing relies on these models. The Final Rule singles out two model types—the Carrying Capacity Model (CM) and the Bayesian Network Model (BM). As to the first, CM, we are assured that although there is a wide variation in forecasts, this is ameliorated by averaging the results to lessen the impact of extreme outcomes. But this approach does not address the fundamental flaw in these models; whether taken at face value or viewed in the mean, they are speculative. Moreover, they are skewed by inaccurate assumptions. The most blatant inaccuracy is the researchers' conclusion that there is a one-to-one correspondence between ice flow decline and population decline. Table 1 appears to equate sea ice levels (represented as “carrying capacity”) with population levels. 73 Fed. Reg. at 28,273. This cannot be squared with observed population trends which show some populations as currently stable or increasing while other populations (two) are showing signs of decline. Each of the 19 polar bear populations has responded differently to changing sea ice conditions and will continue to do so. There is no straight-line correlation between sea ice levels and population numbers. Therefore, the CM modeling is not a conservative estimate of future conditions, but bald speculation on a worst-case scenario.

More importantly, the Carrying Capacity Model does not predict that the polar bear will be at risk of extinction within the foreseeable future:

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Although the pattern of projected carrying capacity varied greatly among regions, the summary finding was for a range-wide decline in polar bear carrying capacity of between 10 and 22 percent by year 45

73 Fed. Reg. at 28,273.

This means a predicted survival rate of between 78% and 90% in the foreseeable future. Under accepted norms, a 10-22% decline in “carrying capacity,” habitat, or even actual bear population, does not constitute a threat of endangerment in the foreseeable future (*i.e.*, 36-45 years). This is especially true when the polar bear population is the highest in recorded history. Population levels in the 50’s and 60’s were well below the levels predicted by CM over the next 45 or even 75 years.

The Bayesian Network Model (BM) provides even less support for the listing decision.

Although the Final Rule cites the extraordinary claim that changes in sea ice “could result” in a loss of 2/3 of the world’s polar bear population by the mid-21st century, the Final Rule also reveals how insupportable this claim is. According to the Department, the Bayesian Model is only preliminary and cannot be taken as final.

We reiterate the caveat that a BM combines expert judgment and interpretation with quantitative and qualitative empirical information, therefore necessitating inputs from multiple experts (if available) before it can be considered final.

73 Fed. Reg. at 28,274.

In this case, multiple experts were inexplicably not available and the Bayesian Model only included the unverified and subjective assumptions of one researcher.

We note again that because the BM presented in Amstrup et al. (2007) incorporates the input of a single polar bear expert, it should be viewed as a first-generation prototype

Id.

This is a gross understatement. Rather than garner 1-1/2 pages of substantive discussion in the Final Rule, this qualitative “prototype” should not have been mentioned at all. It is evident that the Bayesian Model does not satisfy even minimal scientific standards. Therefore, this model cannot remotely be classified as “best available” scientific data. Reliance on this putative model is a clear violation of the ESA. It provides, in effect, no data at all. The claim that 2/3 of the polar bear

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population will be lost by the mid-21st century is the guesswork of one man and is not supported by credible scientific information. Repeating the same exercise with more realistic assumptions that the climate will fluctuate (as currently observed) or that polar bears can adapt (to a greater or lesser extent) to changing conditions (as currently observed) would result in an entirely different prediction. This is the conclusion the Secretary should have reached rather than tout this unsubstantiated claim as a basis for the listing.

Given that polar bear populations are hypothetically predicted to decline by only 10% to 22% over the next 45 years (i.e., that 78% to 90% will survive) and that the effect of sea ice decline will vary by population, it is not rational to conclude that polar bears are at risk of extinction within the foreseeable future.

Threatened Status Is Not Supported by Current Polar Bear Demographics

The Polar Bear Specialist Group status report (Aars, et al., 2006) indicates that approximately 3/4 of the 19 polar bear populations worldwide are either increasing, stable, or indeterminate. Of the 5 populations identified as declining, only 2, the Western Hudson Bay (WH) and Southern Beaufort Sea (SB) populations, are deemed in decline due to reduced ice conditions. The other 3 populations—Baffin Bay, Kane Basin, and Norwegian Bay—are identified as declining solely due to over-harvest, not climate change effects. Taylor & Dowlsey (2008). And yet, the Secretary determined that over-harvest did not support listing. Instead, the Secretary found “that overutilization does not currently threaten the polar bear throughout all or a significant portion of its range.” 73 Fed. Reg. at 28,280.

According to the Final Rule, changes in ringed seal distribution and abundance “will likely be the most important factor determining effects on polar bear populations.” 73 Fed. Reg. at 28,261. Climate models predict decreasing seal populations. *Id.* The Final Rule, however, fails to document actual declines in ringed seal distribution and abundance, which, like the polar bear itself, are at an all time high: “The most recent population estimates of ringed seals, the preferred prey of most polar bear populations, range to about 4 million or more, making them one of the most abundant seal species in the world.” *Id.*

Moreover, melting sea ice will improve access to seal prey for some populations. The Norwegian Bay population (a declining population) is characterized by predominantly heavy multi-year ice which limits accessibility to seals. The polar bear population in this area would likely benefit from increased abundance and accessibility to seals due to more open seas caused by climate warming. *See Taylor & Dowsley (2008).*

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Although global temperatures (including the Arctic region) have risen over the past 40+ years (with the exception of the past ten years which show *no increase in temperatures*), it is universally accepted that polar bear populations have increased range-wide. They now number approximately 25,000 today, whereas they only numbered an estimated low of 5,000 fifty years ago. This increase has been attributed to the 1973 International Agreement for the Conservation of Polar Bears, which resulted in better polar bear conservation. 73 Fed. Reg. at 28,277.

Seven polar bear populations have been surveyed relatively recently: Viscount Melville Sound in 1992 (Taylor, et al., 2002), Lancaster Sound in 1997 (Taylor, et al., 2008), Norwegian Bay in 1997 (Taylor, et al., 2008), Kane Basin in 1997 (Taylor, et al., 2008), Baffin Bay in 1997 (Taylor, et al., 2005), McClintock Channel in 2000 (Taylor, et al., 2006), and Gulf of Boothia in 2000 (Taylor, et al., 2008). These surveys demonstrate birth and survival rates sufficient to increase current numbers with no harvest or to maintain current populations indefinitely with a sustainable harvest rate. Taylor & Dowsley (2008) at 16.

In addition, polar bears have already survived previous warming periods with higher temperatures than exist today and with significant reductions in sea ice. 73 Fed. Reg. at 28,255. The scientific literature shows that polar bears have historically maintained viable populations even in seasonally ice-free areas, as with the Western Hudson Bay, Southern Hudson Bay, Davis Strait, Baffin Bay, and Foxe Basin populations. With the exception of the Western Hudson Bay population, researchers believe that these populations remained stable or increased during the most recent period of climate warming. *See* Taylor & Dowsley (2008).

Although this information suggests the need for ongoing management of polar bear populations, it does not support a conclusion that polar bears as a species are “threatened” within the foreseeable future (whether in 36 or 45 years). Based on current data, the listing was arbitrary and capricious.

Anecdotal Information Is Not Best Available Scientific Data

The Department’s citation of anecdotal evidence of polar bear drowning, cannibalism, and apparent starvation as proof of dire stresses on the polar bear population—without any critical evaluation—is emblematic of the Department’s preference for speculation over scientific fact in the listing process.

The Final Rule does not disclose that four drowned bears were observed only after a severe storm event, or that cannibalism has been observed in healthy populations. *See* Taylor & Dowsley (2008). While the Final Rule calls the death of four bears an incident of “apparent” starvation, it quickly abandons the modifier as if the cause of death were now an established fact. *See* 73 Fed. Reg. at 28,268. No examination to determine actual cause of death was undertaken, and no evidence established that other members of the same population were suffering from starvation. Rather than

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provide additional scientific data supporting the need for listing, the Department's uncritical acceptance of any and all claims of harm to polar bears simply feeds the popular but inaccurate perception that polar bears, which are at the highest population levels in recorded history, are barely hanging on.

One picture of an emaciated polar bear has found its way into the media and has been widely cited by activists as suggestive of the current status of polar bear populations. But nothing could be further from the truth. That picture does not reveal the age or health of the bear (whether diseased or injured), yet speculation about the bear's fate is taken as fact. The observation of local Inuit who were surprised to see such a skinny bear among a healthy population is never mentioned. *See* Taylor & Dowsley (2008) at 24. According to those who engage in routine tagging of bears in the area, that picture was taken of a bear in the Davis Strait population, which is not declining but is healthy and stable. *Id.*

These anecdotes are completely consistent with the *natural* mortality associated with polar bear populations. It is surprising they are not observed more often. "Natural mortality can occur from a number of causes (e.g., disease, injury, intra-specific predation (cannibalism), drowning, and starvation). *Id.* Most demographic studies show rates of mortality for adult bears of about 4-5% a year, with higher rates for younger bears. *Id.* at 23. For the current range-wide population of close to 25,000, a mortality rate of polar bears of all ages and genders could reach 1,500 bears a year. *Id.* at 23-24. "Incidental observation of natural mortality does not mean the population from which the observation was taken, or polar bears as a species, have become non-viable. Mortalities are as natural as births." *Id.* at 24.

Because the ESA Listing Does Not Provide Additional Protections the Listing Was Arbitrary

With the listing of the polar bear as a threatened species, the Secretary of the Interior announced the release of a proposed 4(d) rule that, he declared, would permit any activity under the Endangered Species Act that is already permissible under the Marine Mammal Protection Act. *See* http://www.doi.gov/secretary/speeches/081405_speech.html (last visited July 22, 2008). Dale Hall, Director of the United States Fish and Wildlife Service, made a similar statement when testifying to Congress about the delay in the listing decision. These admissions that the ESA listing would provide no additional protections to the polar bear—standing alone—reveal the listing as an arbitrary act. But there is more.

The Secretary also admitted, as he must, that "this listing will not stop global climate change or prevent any sea ice from melting." *Id.* Which is to say, the listing will not address the very risk that formed the basis for the listing.

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Moreover, the Secretary determined that the polar bear is already protected from direct harm “through international agreements, national, State, Provincial or Territorial legislation, and other regulatory mechanisms.” 73 Fed. Reg. at 28,288. This is significant not only because the Secretary must take into account the conservation efforts of the States and foreign nations, but also because there are only two polar bear populations subject to federal regulation under the ESA. At no time did the Secretary make a determination that the entire species would be at risk of extinction if these two populations declined (or were extirpated) or that the area used by these two populations constituted a “significant portion” of the polar bear’s world-wide range. This was a violation of the Act.

If the ESA listing does not provide additional protections—either because existing regulatory mechanisms are adequate, within the realm of practicality, as the Secretary found in this case, or because the ESA does not allow the regulation of activities with uncertain global influences, as the Secretary believed in this case—the listing was nonsensical and irrational. The law does not authorize, let alone compel, an empty gesture.

Declining Trends Do Not Constitute a Threat of Endangerment

The Final Rule repeatedly admonishes that forecasted population numbers and estimated future time periods are not to be taken at face value, ostensibly because they are inherently uncertain. Instead, the Rule states that the trend is worrisome and that the listing is warranted essentially because melting sea ice will negatively affect polar bear populations, perhaps resulting in a steady decline in abundance. 73 Fed. Reg. at 28,275-77. But given that the current data do not show a steady decline in abundance, this worry does not justify a listing at this time.

Observed trends may someday correspond with predicted trends, but that correspondence has not yet arrived. Until it does, the ESA does not authorize a listing. As noted above, the term “threatened species” means “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” 16 U.S.C. § 1532(20). The term “endangered species” means “any species which is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). Other than citing expected declines in habitat and population, the Secretary has not articulated any standard that would indicate when the polar bear is “threatened” or “endangered.” Is it when the habitat or population has declined by 10%? Or 20%? Or 75%? Without defining when a species is in danger of extinction, no objective test of “threatened” or “endangered” can be applied. It is not enough that the Secretary identify a trend downward without ascertaining whether we are at the front or back end of that trend and when the trend reaches “a point of no return.” In short, the Secretary must determine when the polar bear will no longer be a viable species and articulate an objective standard for “threatened” status. Even the

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worst case predictions cited in the Final Rule do not predict the complete extirpation of the polar bear.

The mere itemization of risks to the polar bear, with the implication that “we know a threatened species when we see it,” does not satisfy the legal standard for rational decisionmaking under the Administrative Procedure Act. The Secretary must “articulate[] a rational connection between the facts found and the choice made.” *Baltimore Gas and Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 105 (1983); *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 377 (1989).

For the foregoing reasons, the listing should be revoked.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Reed Hopper', written in a cursive style.

M. REED HOPPER

DAMIEN M. SCHIFF

Attorneys for California Cattlemen's
Association, the California Forestry Association,
and the Congress of Racial Equality