

Statement  
of  
William P. Horn  
Before the  
Committee on Natural Resources  
Regarding Implementation of the  
Endangered Species Act

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Mr. Chairman: My name is William P. Horn and I appreciate the opportunity to appear before the Committee to discuss implementation of the Endangered Species Act (ESA) and how matters of policy and science interact. These comments arise from my tenure as Assistant Secretary of the Interior for Fish, Wildlife and Parks from 1985-1988, my present service on the National Academy of Sciences Board on Environmental Science and Toxicology, and my long term representation of the U.S. Sportsmen's Alliance and its interests in wildlife conservation, scientific management of wildlife, and related ESA issues.

Implementation of the ESA is an exercise in both policy and science. It cannot be any other way. One incontrovertible fact is that Congress has never provided the responsible agency – the Department of the Interior and its U.S. Fish and Wildlife Service (FWS) – with infinite resources to administer the program. As a result, program administrators are compelled to make choices regarding which species to focus on, which recovery programs to pursue, which listing decisions take priority, etc. These unescapable choices – that have afflicted every Administration, Democrat or Republican, since 1973 – require policy decisions and it goes without saying that policy choices are political choices.

Science plays an important role in making these choices but only the most naive would conclude that science provides clear answers, and clear policy choices, for every ESA decision. For example, in Florida's Everglades the water management regime to benefit the Cape Sable Seaside Sparrow adversely impacts other listed species such as the Everglades Kite and the Wood Stork. The scientists who constitute the recovery team for each species are making focused judgments, and recommendations, designed to benefit "their" species even if it means hindering the conservation or recovery of the other species. Someone has to make a policy decision, appropriately informed by relevant scientific data, about which water management approach should be pursued and that someone is usually a senior policy maker (i.e., a political appointee) and not a biologist in his or her white lab coat

The limitations of "science" were very evident in one major issue that arrived on my desk during my term as Assistant Secretary. In the late 1980's, only seven California Condors remained in the wild following a series of deaths from power line collisions and unknown causes. One half of the condor recovery team scientists argued that the remaining birds needed to be captured and become part of a captive breeding program. The other half were adamant that captive breeding was scientifically unproven, the birds should be allowed to "die with dignity" in the wild. Ultimately, I made a policy decision to try the unproven science, capture the remaining

birds, and embark on the breeding program – an effort that was delayed while the Department was sued by a group of environmentalist plaintiffs which opted for the “die with dignity” approach. As the Committee may know, the captive breeding program turned out to be a great success and today approximately five dozen condors in at least two separate populations exist in the wild. Had we waited for some kind of consensus to arise from the battling scientists, wild condors would likely be extinct.

In the same time frame, FWS received from a group of Stanford University professors a petition to list a purported subspecies of Bay Checkerspot butterflies. However, the lepidopterist taxonomists were hopelessly divided over whether or not the butterflies were a bona fide subspecies. That was the crucial issue as if they were a subspecies, they would be eligible to be listed and if not, there were sufficient numbers of this species elsewhere that listing would not be warranted. Ultimately, I made a policy decision to list the butterfly by siding with those taxonomists claiming it was a subspecies.

This happens to be one area where there is no “pure” science to help resolve disputes. The taxonomy community is famous for being divided between “lumpers” and “splitters.” The former take a dim view of subspeciation and are much inclined to group things at the species level. In contrast, the latter leans toward dividing (i.e., splitting) species into smaller and smaller subspecies. For ESA purposes, this is important since “subspecies” are eligible for listing and the taxonomic determination, as in the butterfly case, drives the listing decision. A policy maker (i.e., a political appointee) who, in effect, puts the splitters in charge will end up listing many more subspecies compared to a policy maker who puts lumpers in charge of speciation determinations. Both sides of the taxonomic community can claim the mantle of good science, yet a policy maker who goes with one side will surely be criticized by the other for departing from good science.

A fundamental problem with the present ESA is that it does not allow for enough policy judgments. For example, the statute provides for the listing of six different types of “species”: at one end are “endangered species” and at the other end’ “threatened distinct population segments.” It was always my policy judgment that more attention – and finite resources – needed to be directed toward “endangered species” as these “species” are on the brink of extinction. On the other hand, a “threatened distinct population segment” means that only this limited segment is in serious trouble and that the species, or subspecies, as a whole is likely doing alright. The Act clearly contemplated allowing Interior and FWS to make these kinds of distinctions, especially between “endangered” and “threatened” species, but court rulings over the years have largely erased this intended and needed flexibility.

The sloppy language of the Act has been construed by courts to create a situation where, in essence, every listed species must be recovered regardless of cost or consequence. Of course, without infinite resources, the agency lacks the ability to do everything it is supposed to do under the Act: review species, list species, engage in consultation with other federal agencies, issue biological opinions, conserve species, recover species, fulfill the international side of the program, and enforce the taking proscriptions. When senior policy makers attempt to make needed choices, informed by scientific information, to establish priorities and decide which endangered species, endangered subspecies, endangered population segment, threatened species,

threatened subspecies, or threatened population segment requires attention over another, litigation is almost automatic from those adherents of the species given second or third priority. A federal court then commandeers the program and directs the commitment of finite staff and monetary resources until the next court moves a different species to the head of the list. No application of “science” in a policy/political vacuum is going to solve these inherent problems with the ESA.

Repeated judicial intervention has also been a bane of the program and many of the rulings have little to do with science but a lot to do with the badly written Act. Please note that this trend is hardly recent. During Secretary Bruce Babbitt’s tenure at Interior, during the Clinton Administration, the Department and FWS were the target of incessant ESA lawsuits – mostly from the “environmental” side. Career staff complained repeatedly about how ESA program resources were being commandeered by the courts and how difficult it was to administer the program amid a welter of often conflicting judicial edicts.

A more recent example of judicial overreach is the lynx. Every wildlife biologist knows that lynx populations are tied inextricably to their primary prey species – snowshoe hares. In addition, the lynx is a northern species primarily occupying habitats in Alaska and Canada where populations are unendangered and unthreatened. In contrast, lynx populations in the northern tier of the Lower 48 states cycle up and down with the relative abundance of hares. When the lynx population shrinks, as it always does in this natural cycle, it contracts and lynx numbers in states such as Maine or Minnesota drop. The FWS, aware of this cycle, declined to list as endangered or threatened the naturally marginal lynx POPULATION SEGEMENTS in the Lower 48. This science-based decision was rejected by a U.S. District Court in D.C., based on the sloppily written ESA, and now these lynx are listed as a threatened distinct population segment. Of course, listing won’t do much for lynx abundance in these states since no Act of Congress or federal court can keep snowshoe hares at perpetually high levels. If the Committee is serious about ensuring a primary role for science in ESA decisionmaking, it should amend the Act to ensure greater judicial deference to the expert determinations of the FWS.

We all have a front row seat to the next case of the courts v. science. In Yellowstone, the previously threatened distinct population segment of grizzly bears has reached numbers substantially greater than the recovery goal set 20 years ago in its recovery plan. Indeed, it’s safe to say that this population of bears recovered years ago, and should have been delisted then, but the agency is genuinely fearful of political fallout from delisting and judicial intervention. The “usual suspects” have announced their intention to challenge in court, this completely warranted and scientifically established delisting, and it will be interesting to see if science (and FWS) prevail over those interests with an apparently vested interest in keeping the recovered bears on the ESA list.

The obvious thesis of this hearing is that the Bush Administration is singularly responsible for making ESA policy decisions, such as listings, in contravention of scientific information. A pending proposed listing, however, represents the triumph of politics – and gesture making – over science. Polar bear populations are at historic highs throughout the Arctic and Canada so successfully manages six (of the 19) populations that they sustain both subsistence and sport hunting. Similarly effective management in Canada, by FWS in Alaska,

and in other countries has led FWS to conclude that no present hunting, habitat alteration, etc. are causing adverse impacts on these populations. Nonetheless, in response to a lawsuit filed in California, FWS is now proposing to list all polar bears as threatened under ESA based on one disputed model that predicts shrinking sea ice in 45 years.

Canada and the Alaska Department of Fish and Game, among others, have reacted strongly to this proposal contending that the science does not support the conjecture enshrined in this one model. Good science would recognize that there are many climate change sea-ice models, some of which predict differing levels of nearshore and multi-year sea ice during summer months from 40 to 100 years from now. Good science would acknowledge that polar bears have previously survived at least two major climate warming periods (centuries before humans loosed carbon dioxide into the atmosphere). Good science would recognize that changing sea-ice conditions will benefit some seal species that serve as prey for the bears. Good science would note that present studies indicate that polar bear survival may be more dependent on certain snow conditions for denning rather than sea-ice conditions. Good science would recognize the overall health of polar bear populations. Good science would also recognize that if any bear population segments deserved listing, it would be the two or three populations for which little information is available so no one knows conclusively if these populations are indeed threatened.

Unfortunately, instead of good science, we see a political gesture. We understand the desire of some interest groups to turn the polar bear into their poster child for “global warming.” We’re bitterly disappointed that the Interior Department, so far, has bought into this kind of gesture-making and is trumping good science and conservation. In fact, listing would hurt bear conservation efforts by barring U.S. citizens from participating in the Canadian sport hunting program and cut off a primary source of funding for important conservation and scientific management programs.

Let me conclude by noting that any attempt to rely on “pure science” to run the ESA program is divorced from reality. There is no “pure science” as in many instances answers aren’t clear or are completely provisional. Scientists disagree, often strongly, and predictive models are usually more at odds. Such uncertainties, inherent in wildlife management, necessitate policy judgments by responsible and accountable officials. Someone other than dueling or competing scientists have to make the calls on whether or not to capture the condors or choose an Everglades water flow regime to benefit the sparrows, the storks, or the kites. Fundamentally the availability of only finite staff and funding resources – per Congress – mandate that policy choices be made. Priorities have to be set because all elements, and all species, cannot be treated equally despite what the law may provide. Those too are policy decisions – not science. Under these immutable circumstances it would be naive, at best, and counterproductive to try to administer the ESA program on the basis of a myth – “pure science.”