THE IMPORTANCE OF PROPERTY RIGHTS FOR SUCCESSFUL ENDANGERED SPECIES CONSERVATION

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PROPERTY RIGHTS AND ENDANGERED SPECIES CONSERVATION

INTRODUCTION

The central point of my testimony is that landowners and their concerns, which include their property values and property rights, are the key to the conservation of this country's biodiversity, particularly endangered species. Unfortunately, one of main ways the United States goes about trying to conserve endangered species—the Endangered Species Act—is especially counterproductive because it is a penalty-based approach that often violates landowners' property rights, and negatively impacts property values and the ability of people to earn income from their land. Due to this approach, the Act discourages landowners from harboring and conserving endangered species, encourages landowners to rid their property of endangered species and the habitat necessary to support them, and discourages landowners from allowing scientists and researchers on their land to study endangered species.

ESA's PENALTIES and PROPERTY RIGHTS

It's not hard to understand why the Endangered Species Act is so feared by landowners, which results in the Act being so counterproductive. By violating landowners' property rights, the Act makes otherwise normal and legal forms of land and resource use illegal, such as farming, homebuilding and timber harvesting. Furthermore, through the Act's prohibition on "harm" to listed species, the federal government can prohibit land use that merely occurs in a type of habitat suitable to a listed species even if the species is not necessarily present.

The ESA's penalties are severe: $100,000 and/or 1 year in jail for individuals committing misdemeanor harm to a fish, bird, or even its habitat, which increases to $250,000 for a felony. For corporations the jail time is the same but the fines double to $200,000 for a misdemeanor and $500,000 for a felony. When these fines are combined with two other factors—(1) that there are no objective standards for what constitutes harm to species habitat so the process by which the federal government determines this is necessarily arbitrary and unpredictable for landowners, and (2) federal regulatory agencies have the ability to use the ESA to lock up vast amounts of land and resources—the Act's fearsome reputation becomes apparent.

PRIVATE LANDOWNERS ARE THE KEY

The Endangered Species Act's penalty-based approach is especially counterproductive to the goal of conserving species because private landowners are the linchpin for the conservation of this country's biodiversity, including endangered species. There are several reasons for this:

1) Private landowners own most of the habitat for endangered and imperiled species.

- Almost 80% of endangered species depended on private land for all or some of their habitat, compared to 50% for federal land. In addition, 91% of all endangered species had at least some habitat on nonfederal land.[1]

2) Private lands are also crucially important for endangered species in states with large amounts of federal land because private landowners own most of the well-watered land, which also tends to be the land with the most biodiversity.

A good example of this is the greater sage grouse, which is being considered for listing under the Endangered Species Act across 10 states and over 160 million acres. The sage grouse is usually associated with public lands because 61% of its habitat is on federal land, compared to 31% on private land (with the remaining 8% split among state and Native American lands). Yet a new study of sage grouse habitat in California, Oregon and northwest Nevada found that 81% of the critically important moist habitat—irrigated meadows, streamsides, and seasonal wetlands—sage grouse depend on for food in summer is privately owned, despite that it constitutes only 2% of the bird's total habitat.[2]

3) In the past 10 years it has become increasingly clear that many endangered species are what is known as "conservation reliant." This means that these species will depend indefinitely on a variety of conservation activities to ensure their continued survival because the threats to these species are impossible to eliminate. These actions can include predator and parasite control, prescribed fires, and mowing and grazing.[3] A classic example is the red-cockaded woodpecker of the southern U.S., which evolved requiring frequent, low-intensity fires to maintain the open, park-like forests it inhabits. Historically, fires would occur due to lightning or Native Americans setting them to improve habitat for hunting. Over the last hundred years or so, fire suppression by humans has reduced the frequency of fires. So the red-cockaded woodpecker is reliant on people maintaining its habitat through controlled fires, mechanical brush removal or application of herbicides.

A number of prominent scientists estimate that 84% of species under the Endangered Species Act are conservation reliant. The implication of this is quite profound because it means that the Act's ultimate goal—recovering species so that they no longer require the Act's protection and can be delisted—is unattainable for the vast majority of species.[4]

The fact that so many species will likely require perpetual conservation has an important implication. It provides justification for eliminating the Endangered Species Act's penalties because the goodwill and willing cooperation of private landowners will be *the* key factor in determining the fate of species that require ongoing help from the landowners that harbor them.

4) Endangered species are spread across hundreds of millions of acres, often on private lands in rural areas that are sparsely populated and far from the eyes of regulatory authorities. So it is simply impossible for enforcers and supporters of the Endangered Species Act to patrol constantly this country's hundreds of millions of acres of endangered species habitat. Short of turning the U.S. into a police state, private

landowners will always be able lawfully to make habitat unsuitable for species that are already listed or proposed for listing, lawfully refrain from notifying authorities about the presence of rare species on their land, and most landowners will be able to break the law without detection by destroying species and habitat. Given these realities, the government must find a way to trust and gain the willing cooperation of landowners, many of whom good conservationists, proud to conserve species and would respond positively to incentives instead of penalties.

FOUR WAYS ESA HARMS SPECIES

There are four ways in which the Endangered Species Act can harm species.

1) Scorched Earth: Due to the Act's punitive nature, some landowners are financially encouraged to pursue a "scorched earth" strategy, destroying habitat in order to make it unsuitable for endangered species. This is the most damaging because habitat destruction is the leading cause of imperilment for species in the U.S.[5] Not only are imperiled species harmed by ESA-induced habitat destruction but so are many more common species that depend on the same habitat.

2) Deny Access: Landowners deny researchers and public agencies access to their land because they fear that the discovery of species or suitable habitat will result in land and resource use restrictions.

3) Keep Quiet: For essentially the same reasons as those landowners who deny access, other landowners keep quiet in the hope that the presence of endangered or potentially endangered species, as well as suitable habitat, is not noticed by regulatory authorities or non-profit groups that are proponents of the Endangered Species Act and often assist regulatory authorities.

4) Shoot, shovel, shut-up: Because it consists of a catchy phrase that has been repeated in the media, direct persecution of species and then destroying the evidence is likely the most well-known way the Endangered Species Act causes harm to species, yet it also likely occurs least frequently among the four ways the ESA causes harm to species because it is often difficult to kill wildlife, especially rare and elusive species, many people likely have a moral aversion to wanton killing of wildlife, and many people also are likely averse to breaking the law.

The Endangered Species Act's penalties so effectively undermine the incentives for private landowners to conserve species that species appear to be faring much worse on private land than public land. The ratio of declining to improving species on private land is an abysmal 9 to 1, whereas on federal lands the ratio is a much better 1.5 to 1.[6]

EVIDENCE OF HARM TO SPECIES

1) Expert Opinion

During the late 1980s and early 1990s, as the harm to wildlife and habitat caused by the Endangered Species Act was becoming an increasingly significant problem, accounts of landowners dealing with this problem by destroying habitat began to proliferate.[7] In 1994, Michael Bean, while still at the Environmental Defense Fund but currently at the Interior Department, made the following observation:

> *There is, however, increasing evidence that at least some private landowners are actively managing their land so as to avoid potential endangered species problems…Now it's important to recognize that all of these actions that landowners are either taking or threatening to take are not the result of malice toward the red-cockaded woodpecker, not the result of malice toward the environment. Rather, they're fairly rational decisions motivated by a desire to avoid potentially significant economic constraints. In short, they're really nothing more than a predictable response to the familiar perverse incentives that sometimes accompany regulatory programs.*[8]

This is an important admission from the person who is likely the foremost expert on the ESA and one of the Act's foremost proponents.

2) Empirical Evidence

In the 2000s, as the anecdotal evidence that the Endangered Species Act was causing significant harm to species mounted and became more widely known, the issue began to attract the attention of academic researchers.

<u>Red-Cockaded Woodpecker</u>

The red-cockaded woodpecker referenced by Michael Bean, which lives in the pine forests of the southern U.S., has been the focus of a number of research projects that found landowners took a number of actions to avoid land use restrictions due to the Endangered Species Act:

- Landowners preemptively cut trees in efforts to deny the red-cockaded woodpecker habitat.[9]
- Landowners who did harvest timber were 21% more likely to clear-cut, rather than selectively cut, due to the desire to deny woodpeckers habitat.[10]
- Landowners within a one-mile radius of a red-cockaded woodpecker colony were 25% more likely to harvest their timber than landowners who were not within a one-mile radius.[11]
- Private landowners were 5% less likely to reforest the land once it had been cut if their land was near red-cockaded woodpeckers.[12] While 5% might not seem to be much, it is for an imperiled species like the woodpecker that needs every bit of habitat to survive.

Preble's Meadow Jumping Mouse

Researchers surveyed landowners in the habitat for the Preble's meadow jumping mouse about their attitudes toward the mouse. The results are sobering: 26% of the land area surveyed was being managed to make it inhospitable to the mouse, and most landowners would not let their land be surveyed for the mouse.[13] "The efforts of landowners who acted to help the Preble's mouse were canceled by those who sought to harm it," according to the study. "As more landowners become aware that their land contains Preble's habitat, it is likely the impact on the species may be negative."[14]

Cactus Ferruginous Pygmy-Owl

In Tucson, Arizona the land proposed to be designated as critical habitat for the cactus ferruginous pygmy-owl was developed one year earlier than habitat out of the critical habitat zone. There is "the distinct possibility the Endangered Species Act is actually endangering, rather than protecting, species" surmised the authors of the study on the effects of critical habitat designation on development.[15]

Utah Prairie Dog

The U.S. Fish and Wildlife Service estimated prairie dogs cost farmers in the southern Utah habitat of the Utah prairie dog $1,500,000 annually due to lost crops and damaged equipment.[16] A survey revealed that one-third of landowners had taken actions to discourage prairie dogs from inhabiting their property. Also, very few landowners were willing to have prairie dogs translocated to their land, a management strategy for the species. [17]

3) Harming Species Not Yet Listed

The Endangered Species Act is so detrimental to conservation that species not yet listed under the Act, but under consideration for protection, are also harmed. All indications show this has been occurring for most of the ESA's 40-year history.

San Diego Mesa Mint

Following the 1978 proposal to list the San Diego mesa mint, a plant from San Diego County, California, a developer who owned 279 acres on which he planned to build 1,429 houses became worried that the development would be derailed. Days before the mesa mint was listed in 1979, the developer engaged in the scorched earth strategy by bulldozing the plants.[18]

Black-Tailed Prairie Dog

In 1998 several pressure groups petitioned Fish and Wildlife to list the black-tailed prairie dog under the Act across its entire range, an enormous region of the grassland

stretching from Arizona, New Mexico and Texas, through Oklahoma, Colorado, Kansas, Nebraska, Wyoming, North Dakota, South Dakota and Montana.

Landowners' response to the listing petition was predictable. "The petition has created difficulties for us," said Dennis Flath, a biologist with the Montana Department of Fish, Wildlife and Parks, in an article in *High Country News*. "Now private landowners don't want us to find out if there are any prairie dogs. They want to get rid of prairie dogs quickly, while they have the opportunity," before listing occurs.[19] The Montana Department of Agriculture would typically get 20 or so requests annually to help ranchers poison prairie dogs, which are perceived as competing with cattle for grass. Following the petition, however, the Department had already received approximately 30 such requests by March 1999.[20]

INCREASING PRESSURE ON PRIVATE LANDOWNERS

The pressures put on landowners by the Endangered Species Act are in the process of getting much worse due to a couple of factors.

1) <u>The Number of Listed Species Is Increasing</u>

Due to a 2011 lawsuit settlement between the U.S. Fish and Wildlife Service and two environmental pressure groups, the Service is now obligated to consider for listing 757 species. Of these species, final listing decisions must be made about 253 species by 2016, while the remaining 504 species are in the "hopper" awaiting listing decisions.[21] To date, final listing decisions have been made about approximately 156 species, or 21% of the total, which means the final status of 79% of species has yet to be finalized or determined.[22] The listing of these lawsuit settlement species could increase the number of listed species by as much as 50%. Moreover, regions of the country that have been relatively unaffected by the Endangered Species Act—such as the Midwest, Great Plains and Intermountain West—are going to be heavily impacted by these lawsuit settlement species.

2) <u>Freshwater Aquatic Species</u>

Most of the species covered under the 2011 lawsuit settlement are based in freshwater aquatic habitats, including all 374 species that are concentrated in the Southern U.S. but also extend across essentially the entire Eastern portion of the country and much of the Midwest.[23]

This means entire watersheds, not just discrete parcels of land (as is the norm for terrestrial species), may well be subject to the Endangered Species Act's punitive regulations. Due to the extensive and transboundary nature of watersheds, land uses and

other human activities many miles away from the habitat occupied by freshwater aquatic species listed under the Act could very possibly be subject to the Act's regulations.

It appears that any human activity that can affect water quality or quantity is going to be in the sights of groups that excel at filing lawsuits under the Endangered Species Act to force federal agencies to implement stricter measures for land and resource control. In the petition to list these 374 species submitted by the Center for Biological Diversity, one of the two plaintiffs involved in the 2011 lawsuit settlement stated:

> *Southeastern aquatic biota are threatened not only by direct physical alteration of waterways, but also by activities in the watershed that directly or indirectly degrade aquatic habitats such as residential, commercial, and industrial development, agriculture, logging, mining, alteration of natural fire regime, and recreation. Land-use activities can alter water chemistry, flow, temperature, and nutrient and sediment transport, and can interfere with normal watershed functioning… Thus, when identifying habitat threats to aquatic species, entire watersheds must be considered and not just localized sites where species occur*.[24]

The petition adds:

> *[T]he Clean Water Act is not effective at preventing activities within a watershed which negatively impact water quality, and the health of aquatic systems needs to be evaluated and regulated on a watershed-wide scale*.[25]

3) Intersection of the Clean Water Act and the Endangered Species Act

In May 2015 the Environmental Protection Agency significantly expanded the definition of waters under jurisdiction of the Clean Water Act with its "Waters of the United States" rule.[26] The agency claims the new rule contains a more limited definition of waters than previously fell under the jurisdiction of the Clean Water Act.[27] Yet this is not the case because under the new definition of Waters of the U.S. the scope of waters that fall within the jurisdiction of the Clean Water Act is significantly expanded.[28]

The expansion of the Clean Water Act, if it survives expected challenges in court, could well create significant problems for landowners, corporations, municipalities and states via the Endangered Species Act. The Waters of the U.S. rule could create a significant regulatory nexus that would oblige the Environmental Protection Agency and the Army Corps of Engineers—the two agencies that implement the Clean Water Act—to consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service—the two agencies that implement the Endangered Species Act—if they think that an actual or proposed action, such as a landowner maintaining a drainage ditch or a municipality building a bridge, may affect a species listed under the Endangered Species Act.

The Environmental Protection Agency is already working closely with the U.S. Fish and Wildlife Service and National Marine Fisheries Service to coordinate implementation of the Clean Water Act and Endangered Species Act. The three agencies signed a Memorandum of Understanding in 2001 "because EPA and the Services believe that a national statement detailing how these programs protect an important component of the aquatic environment, i.e., endangered and threatened species, will help achieve the complimentary [*sic*] goals of the Clean Water Act (CWA) and the Endangered Species Act (ESA)," according to the Environmental Protection Agency. "In recent years, EPA and the Services have increased their efforts to achieve greater integration of CWA and ESA programs."[29] Given the regulatory expansion of the Clean Water Act, this coordination and integration will only increase.

In addition to the large number of species covered under the 2011 lawsuit settlement that are based in freshwater aquatic habitats, a 2008 study found that more than 67% of the watersheds in the lower 48 states have private forests that contain a minimum of one at-risk species. Watersheds that contain the most at-risk species are in the West Coast, Midwest and Southeast.[30]

SUPERFICIAL REFORM

There is a view among some that the Endangered Species Act only needs to be tweaked and implemented creatively to address its counterproductive nature. At best, these reforms, which offer limited incentives to certain landowners, merely put a velvet glove over the Act's iron fist because they leave intact the penalties that cause the Act to fail on private lands by only softening the penalties around the edges.

These superficial reforms fail to address the negative conservation incentives created by the Endangered Species Act for several reasons:

1) Given the regulatory uncertainty surrounding the Endangered Species Act—such as the unpredictable and arbitrary way Fish and Wildlife treats landowners and the penchant of pressure groups to sue the agency to make the law even more onerous—landowners, especially those who have to make a living off their land, will find it very difficult to measure the value of a particular incentive now against the probability of being hit by the Act's penalties in the future.

2) As increasing numbers of species are listed, more and more landowners are becoming aware of the Endangered Species Act's penalties, and as a result want little to do with the law.

3) Landowners are wary of accepting "carrots" from the government because there are always strings attached, and they are also very hesitant to allow biologists on their land for fear other endangered species will be found. With the exception of Habitat Conservation Plans, which are part of the Act's 1982 amendments, these so-called

reforms have been implemented administratively and are subject to change at the whim of federal regulatory agencies.

4) Common sense dictates that adding incentives on top of existing disincentives is inefficient because the disincentives counteract the incentives. It would be far more efficient to start with a clean slate by removing the disincentives and then adding incentives so that the true costs of conserving species could be seen by all. This approach would also be much more transparent and easier for all involved to understand, most importantly those harboring endangered species.

SUBSTANTIVE REFORM

Substantive reform of the Endangered Species Act to make it more successful at conserving species starts with eliminating the penalties that harm species by violating landowners' property rights, which causes landowners to take any one of the four actions outlined in this testimony—and acknowledged by experts and confirmed by empirical research—that are detrimental to endangered species.

A Path Toward Substantive Reform

Fortunately, a path forward has been offered by six of the Endangered Species Act's foremost proponents. Sam Hamilton, while he was head of the Fish and Wildlife Service in Texas, observed in *U.S. News and World Report*:

> *The incentives are wrong here. If I have a rare metal on my property, its value goes up. But if a rare bird occupies the land, its value disappears.*[31]

It just so happened that Hamilton's boss at the time knew how to solve the problem. Mollie Beattie, while Director of the Fish and Wildlife Service, in an extraordinary moment of candor, compared the Endangered Species Act to the U.S. Department of Agriculture's Conservation Reserve Program (CRP) in *Beef Today*, a trade publication of the cattle industry:

> *I think this [the CRP] really, really opened people's eyes to what could be achieved in a basically non-regulatory, voluntary program. If there were an incentive to make the best habitat [for endangered species], we'd be miles ahead.*[32]

Michael Bean, and his then-colleagues at the Environmental Defense Fund—Robert Bonnie, Tim Male and Tim Searchinger—understood very well this two-step process of first removing disincentives and then adding incentives. According to them:

> *Removing perverse incentives is a necessary first step to effective conservation. Ensuring that private stewardship is rewarded and that it is made easy by both federal and state laws is also an important part of encouraging landowners to manage their lands in ways that conserve natural ecosystems.*[33]

Landowner Surveys

Perhaps most significantly, a growing number of actual landowners who have been, or potentially could be, affected by the Endangered Species Act's regulations provide crucial insights into the issues that encourage and discourage landowners from conserving species. Some of the issues identified in these surveys that affect landowners' willingness to conserve imperiled species are:

- Landowners have significant concerns about risks to their property values and livelihoods associated with protecting endangered species.[34]
- For the most part, landowners think they should be compensated for conserving species that are endangered or close to being endangered. In many cases compensation increases landowners' willingness to conserve endangered species.[35]
- Other financial assistance, such as technical assistance and cost sharing, can also improve landowners' willingness to conserve endangered species.[36]
- Landowners do not like long-term contracts or permanent conservation easements.[37] This strongly suggests that landowners don't like many of the Habitat Conservation Plans under the ESA, which run for long time periods.
- Landowners prefer shorter (5–10 year) contracts to conserve endangered species.[38]
- Independence and autonomy are very important values to landowners, and these values exert a strong influence over their willingness to become involved in conservation initiatives in general.[39] Landowners strongly prefer to have some management and decision-making authority if they are involved in a program to conserve wildlife and very much object when they do not.[40]
- Many landowners have a strong sense of stewardship.[41]
- Landowners are more likely to join incentive programs if they are approached by trusted intermediaries, instead of public officials from regulatory agencies.[42] Similarly, landowners are more likely to be involved in incentive programs if they receive positive signals from their social networks and peer groups.[43]

Successful Species Conservation and Landowner Confidentiality

Another important concern of landowners is that, if they become involved in an effort to conserve an endangered species or a species that is at-risk or a candidate to be listed under the Endangered Species Act, their identities and data about species be kept confidential. This concern is quite understandable, given the Act's formidable penalties, ability to regulate land and resource uses, and the fear landowners have of the federal agencies that implement the Act. Landowner confidentiality is also important to encourage landowners to participate in initiatives to prevent species from being listed under the Endangered Species Act.[44]

Lessons Learned

Taken together, all of these factors that motivate and are of importance to landowners provide strong evidence of the need to move away from the current penalty-based Endangered Species Act and protect landowners' confidentiality and property rights. These issues also strongly support the idea that removing the ESA's penalties, providing compensation and other financial incentives for conserving endangered species, and giving landowners more control and autonomy is not only a viable approach but one that will likely result in better conservation outcomes. Moreover, these issues and attitudes point away from many of the superficial reforms that are often touted as substantive, such as Habitat Conservation Plans, Safe Harbor and No Surprises.

100-YEAR-OLD ANSWER HIDDEN IN FRONT OF US

Fortunately, the answer for a new, more successful approach to conserving endangered species is in front of us, hidden in plain sight and has been around for over 100 years. Cooperative agricultural extension is highly popular with landowners, exists in many states and could serve as a model for how to conserve endangered species successfully while fostering better relationships with landowners and protecting their property rights.

The researchers who conducted the survey of landowners impacted by the Utah prairie dog saw how counterproductive the Endangered Species Act's approach was and that cooperative extension could be a more successful approach. The survey's authors conclude:

> *The fear generated by ESA regulation is a poor motivator for species conservation on private lands. Rather, incentive based approaches that consider the needs of landowners are more likely to result in species conservation over the long term.*[45]

This survey was based largely off of the PhD research of Dwayne Elmore, who is currently a professor in the Department of Natural Resource Ecology and Management at Oklahoma State University. According to Elmore, state universities' cooperative extension services, which typically include education and natural resource management advice for landowners, are a good model for organizing endangered species conservation efforts:

> *Cooperative Extension is an ideal facilitator for volatile wildlife issues such as endangered species management on private lands. Often, lack of trust in government agencies or fear of Endangered Species Act regulations hinders conservation efforts on these private lands. Extension personnel have close ties to local affected communities and thus can be instrumental in educating landowners regarding options that may be available to them in regards to sensitive, candidate, threatened, or endangered species.*[46]

Cooperative extension is quite a contrast to the Endangered Species Act. The Act is characterized by:

- Conflict, antagonism, divisiveness, compulsion, hard feelings, top-down dictates from afar, and it is intimidating and fear-inducing for landowners.

By contrast, cooperative extension is characterized by:

- Collaboration, give-and-take, open lines of communication, flexibility, voluntarism, accommodation, and the type of mutual respect that results from shared purpose.

There is a reason why landowners willingly and eagerly pick up the phone and call their local federal or state agricultural extension office. But most landowners would not dream of doing so for endangered species. The reason is cooperative extension comes with help, some financial assistance and little if any punitive regulations. By contrast, endangered species and the federal agencies that implement the Endangered Species Act result in fear, intimidation, and reduced land values.

If this country embarked on an approach to endangered species conservation based on cooperative extension, it would most likely result in tens or even hundreds of thousands of landowners emerging from the shadows and volunteering that they have endangered species on their land. If landowners were free from the fear of being clobbered by the Endangered Species Act, then the most significant barrier standing in the way of a more successful approach to conserving endangered species would be removed.

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