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Federal v. State Effectiveness:

An Analysis of the Endangered Species Act and Current Potential Attempts at Reform

Nicholas Primo

Introduction

On November 19, 2013, Senators Rand Paul of Kentucky and Dean Heller of Nevada, along with Representative Mark Amodei of Nevada sent out a press release describing a new bill they had authored to reform the Endangered Species Act of 1973 (ESA) (Paul, 2013). In it, the authors described their hope to update the very important law that had for decades been the federal response to preserving and protecting wildlife and plant species across the country from extinction. This new law, titled the Endangered Species Management Self-Determination Act (ESMSDA), would, according to Senator Paul, “better protect endangered species by allowing a more tailored response as implemented by the states” (Paul, 2013, para. 2). This state-oriented approach to protecting endangered species, rather than the current approach that relies on the federal government through the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), would attempt to minimize federal bureaucratic oversight and replace it with localized oversight instead. Such removal of “red tape” would leave, “state governments better equipped to manage, regulate, develop, and implement recovery plans for their critical habitats” (Paul, 2013, para. 2). Though the likelihood of the law’s passage in the politically charged Senate of the 113th U.S. Congress is low in its current form, it has the

potential to be debated and revised, becoming one of the first major attempts at updating the crucial U.S. environmental policy in decades.

However, questions remain over whether or not this new bill would actually reform the ESA to the betterment of both effective policy implementation and, more importantly, species protection. Many environmentalists have seen this move by members of Congress as yet another attempt in a long history of attempts to diminish the scope and power of the ESA. This, they fear, will weaken policies in various regions across the country with threatened species, causing extinctions and the diminishment of the biodiversity and species variation of the nation. Yet, the supporters of the new bill see it as a much needed step towards removing the enormous bureaucratic system out of the way of local policymaking strategies that better understand the environment within their own state. Moreover, state governments could and would respect the manifold issues and interests that motivate their constituents, especially those whose land or water property is at risk due to the protection of the threatened species. Both environmentalists and state reformists seek to control the act of making policy geared toward the protection and recovery of endangered species. Both do so for very different goals, and very important values.

This article will analyze the original 1973 ESA, followed by an analysis of the ESMSDA currently being considered as a reforming addition to the original bill. It will discuss the various strengths and weaknesses of both bills in the hopes of gleaning which approach, federal-oriented or state-oriented policymaking, is ultimately more effective at implementing regulations that not only benefit American citizens, but the many endangered species the law was created to protect. Through this discussion, the article will discuss issues of federal versus state authority, as well as which is more effective at showing results. It will discuss the role of science in each and where and how such science is important to the process overall. Ultimately, the article argues that the

original law is still the most effective form of endangered species environmental policy, and the current attempt to change it, while written to take into account valid concerns over current policies, may cause more harm to potentially threatened species than benefits. It concludes with some alternatives that seek to improve the relationship between federal and state governments, thereby allowing aspects of the ESA to be better implemented to the benefit of the citizens, whether human, wildlife or plant, of the United States.

1973 Endangered Species Act Analysis

President Richard Nixon signed the ESA on December 28, 1973. Almost immediately, it was considered one of the most comprehensive and important pieces of legislation ever to define and set policy for the protection of endangered species in the history of the United States, if not the world (Czech & Krausman, 2001). As specifically written, the law states,

The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section. (Czech & Krausman, 2001, p. 3).

From this framework, the law focuses on the main points of studying and identifying species threatened with extinction as well as their environment. Once analyzed and submitted to the Secretary of the Interior or Secretary of Commerce, the USFWS or NMFS respectively places the species on the endangered list (Czech & Krausman, 2001). These agencies then create a plan to protect the habitat from development and intrusion (human, invasive species, etc.) for the sake of the threatened species, thereby allowing the species space to recover and hopefully thrive (Czech & Krausman, 2001). This “protective area paradigm,” has been the standard policy since

the law's passage, and continues to be the basis for all placements of threatened species on the endangered list now and into the immediate future (Alagona, 2013, p. 225).

One of the law's achievements is the decision to make a concerted effort to protect and strengthen the biodiversity of the United States. The importance of biodiversity cannot be understated. It is the genetic health of species within the environment (Tobin, 2013). Should the genetic variance decrease for whatever reason, this makes populations of any species susceptible to disease and other environmental factors that could lead to extinction (Tobin, 2013). Scientists have already determined "the current rate of extinction," due in large part to the intrusion of man and development for economic growth, "is 10 to 1,000 times the historical average and amounts to the sixth great extinction in geological history" (Tobin, 2013, p. 283). Despite this, the ESA has made some inroads at protecting the delicate biodiversity within the United States. As expressed by Professors of Environmental Policy Michael Kraft and Norman Vig (2013), "[b]y late 2011, 1,383 species had been listed as either endangered or threatened. Over 520 critical habitats have been designated, more than 950 conservation plans have been approved, and 1,138 recovery plans have been put into effect" (p. 24). From these actions, currently 43% of endangered species on the list are considered stable or improving, 30% are considered in decline, 24% are considered in unknown status, while only 1% is believed extinct (Kraft & Vig, 2013). While not perfect, the ESA has shown results in the important job of protecting the biodiversity and genetic health of the United States.

However, this is not to say the law is flawless. Senator Heller, a co-signer of the Management and Self-Determination Act, views the ESA as an ineffective law because the ESA has an "abysmal success rate" at helping species recover (Paul, 2013). This view was even placed within his bill, and in one section, clearly argued, "The ESA has not achieved its stated

goal of recovering threatened species or endangered species” (A Bill to Amend the Endangered Species Act of 1973, 2013). Thus, the true purpose of the law is a major point of contention. While environmentalists see the continuous protection of species in their natural and necessary environments as the purpose, others see results of recovery to the point of being removed from the endangered list as the purpose and proof of success. The very low visible rate of success, therefore, convinces many the policies have failed, in large part to the cumbersome nature of the federal regulatory agencies that run the implementation of the conservation plans.

These habitat conservation plans (HCPs) are discussions between federal authorities and private landowners (Aengst et al, 1997). The habitats themselves can be over huge areas and acreages or on small plots of land (Aengst et al, 1997). In these discussions, “landowners agree to pursue specific management protections for endangered and threatened species” (Aengst et al, 1997, para. 1). Should landowners fail to maintain their property based on the standards of their agreements, they can be subjected to fines and other penalties for damages done to a federally protected species. These penalties are in addition to the costs of maintaining the specified standards of the protected habitat (Aengst et al, 1997). These costs, oftentimes paid by federal or state and local governments, are often still placed on individual property owners putting heavy burdens on them to implement policy under the ESA. This in turn has led to the opposition by those with property that helped formulate the current reform efforts that promote the interest of landowners within the Management Act.

Furthermore, the federal government’s regulatory prerogative to establish protected habitats comes in direct conflict when dealing with privately owned land. This in turn leads to greater conflicts, not just with states and the policies they implement but individual interests that often fall along economic and financial motivations. As author Peter Alagona (2013) notes,

oftentimes endangered species become the fronts for other battles over other environmental policies. He explains, “[m]any commentators have noted that in such struggles, the species in question often serve as proxies for much larger debates involving the politics of place,” ultimately concerning, “who should have access to and control over lands and natural resources” (Alagona, 2013, pp. 3). The fact that it also involves environmental policies beyond mere protection of endangered species also continues this division of purpose (Alagona, 2013).

Yet, it is exactly these economic developments that can threaten the biodiversity of the United States. The extensive research done by biologists Brian Czech and Paul Krausman has shown that above all else, the dramatic increase in extinctions that weaken the genetic variance in the environment is due to actions of man (Czech & Krausman, 2001). Urbanization, increased use of land for agrarian purposes, among a plethora of other factors all contribute to the decrease in genetic variation in the species of the United States (Czech & Krausman, 2001). Coincidentally, they are also the key factors of economic development and prosperity to the citizens of the United States. As Czech and Krausman (2001) note, “agriculture and urbanization encompass the vast majority of the American socioeconomic context” (p. 88). Thus, there is a clear division between the desires of the people for their own economic gain and the need to protect the fragile health of genetic variation inherent in biodiversity. Czech and Krausman ultimately acknowledge that until the importance of genetic variability within the United States is made clear to people, through what they call “legitimacy in nontechnical philosophy,” many who deem the rights to property supersede all other concerns will continue to combat the influence of environmental laws like the ESA (Czech & Krausman, 2001, p. 115). While not perfect, the ESA has at least made progress in protecting the many species threatened by the growing rate of human

settlement and development for the sake of economic growth. In doing so, the ESA has worked to prevent the deterioration of the biodiversity of species within the United States.

This of course is also not to say the leadership of the government may always be interested in the protection of species or biodiversity either. In fact, should leadership in either the executive, legislative, or judicial branch change, their change to regulatory structure, agency leadership, and legislative understanding could pose as much a threat to endangered species as any other environmental challenge (Vig, 2013). Such a case occurred during the Bush Administration in 2008 when the administration created a rule to protect species, but not regulate individuals or companies that might be leading to their extinction if far enough removed from the habitat of the threatened species (Vig, 2013). The case of the polar bear, threatened by extinction from global climate change, became eligible for protection (Vig, 2013). The Bush administration through its rule, “listed the polar bear because of the threat posed by global warming while simultaneously exempting greenhouse gas emitters from the application of the ESA” (Vig, 2013, p. 197). These gas emitters, many of whom were located in the lower forty-eight states and thus far removed from the Arctic habitat of the polar bear, were exempted, effectively saving the polar bear while doing nothing to stop the cause of its extinction (Vig, 2013).

Having said this and despite all the potential pitfalls from ideologically unsympathetic leaders that may control any of the leadership positions required to implement the ESA, of the underlying base of federal authority is well connected to the needs of species and biodiversity. A cultural understanding and respect within the USFWS for the “fundamental requirement that federal agencies consult with biologists,” when making decisions concerning endangered species is very important (Vig, 2013, p. 146). This respect for expertise even translates to the Supreme Court. The 1995 case of *Babbitt v. Sweet Home Chapter of Communities of Oregon*, 515 U.S.

687, pitted a community organization against the USFWS over a regulation promulgated by the Secretary of the Interior to include significant habitat modification as damaging to endangered species (O’Leary, 2013). The Court, unwilling to make a decision based on “arbitrary or capricious action, or obvious error,” instead found the regulation reasonable due mainly to the fact that it was a “technical and science-based regulation” (O’Leary, 2013, pp. 197). Overall, the character of the federal government at any level of implementation, while not perfect, still has insight, breadth of scope, and authority to effectively protect endangered species in the U.S.

2013 Management Self-Determination Act Analysis

The ESMSDA, written and proposed in 2013, makes marked changes to the framework established in the original ESA of 1973. Its stated purpose is, “[t]o amend the Endangered Species Act of 1973 to permit Governors of States to regulate intrastate endangered species and intrastate threatened species, and for other purposes” (Rabe, 2013, pp. 31). With the clear goal of wresting authority away from the Secretary of the Interior and the USFWS, the bill seeks to shift the original understanding of the ESA to make it a more local issue that states deal with them. The bill also includes various benefits to property owners threatened with losing property value due to their land becoming a protected habitat for a listed species. This in itself is a dramatic change. As already explained, much of the original ESA is defined by the Secretary of the Interior as well as environmental scientists rather than private property owners. Ultimately, the bill concludes that state governments are “highly dynamic and effective,” “at the cutting edge of policy innovation,” and finally “eager to find creative solutions,” to all policy issues, including environmental concerns (Rabe, 2013, p. 33). Barry Rabe (2013) also points out states, “bottom-up policy development,” enjoys much better support from the people as compared to the far off oversight of the detached federal authorities (p. 31). This positive view of states alone is in part

the reason for the creation of the Management Reform Bill. It redefines the important job of protecting endangered species under the perceived better stewards in state government.

However, some who argue for greater state authority to create environmental policy at times fail to recognize is the character of the state the will do the defining and how it will affect policy. Since states by their very nature are independent from all other states, they also carry different ideologies. More importantly, they hold varying political leanings. According to a nation-wide mail survey done by biologists Brian Czech and Paul Krausman (2001), political party does influence public valuation of animals, birds, fish and plants. The study found “Republicans value species significantly less than Democrats and Independents” (Czech & Krausman, 2001, pp. 62). While this statement, in and of itself may not be entirely surprising considering the long and shifting nature of environmental policy and politics in the United States, it does prove the political party of individuals, and if collected together, a state, can define the value of a species and affect the type and scope of policy to protect it. Thus, allowing all states greater freedom to create policy specific to the needs of their environments and species within them provides for greater innovation. Should some states have conservative constituencies and therefore conservative policymakers, this will undoubtedly negatively affect the policies that protect species from potential endangerment or extinction due to the low value such species have to the citizens as a whole (Czech & Krausman, 2001). This fact therefore stands as a warning to those that put their faith in states alone. If run by governors supported by majority populations unconcerned about the consequences of endangered species protection, let alone survival, it will prove disastrous to many species within those states and potential ramifications to the biodiversity of the entire country (Czech & Krausman, 2001, p. 62).

Another issue often overlooked when considering the effectiveness of state government when compared to federal governance is the notion of federal grants. As environmental expert Barry Rabe (2013) explains, “[a] good deal of the most innovative state-level activity has been at least partially underwritten through federal grants” (p. 42). These extra funds subsidize many state governments to help fund the innovative experiments in environmental policy. Moreover, the states that create new policies to protect endangered species and the environment more broadly also receive the scientific data necessary for their innovations from the federal government. Rabe again explains; “states remain almost totally dependent on the federal government for essential insights gained through research and development” (2013, p. 43). Both of these facts reveal a broader weakness of relying solely on the independent nature of state governance for environmental policy.

The federal government, for all of its slow and bureaucratic methods of implementing any policy, has the most resources, the widest scope and the greatest authority to gather and disseminate important information crucial to formulating policies. This is especially the case for environmental policy, as only the federal government has the resources and manpower to fund government research on the latest methods of species protection and conservation. Only the federal government has the scope to study and interact with all 50 states to see emerging trends as well as dangers to the species that inhabit the country. Without the federal government through its stewardship from the Secretary of the Interior and the policy actions of the USFWS, states would struggle greatly not only to innovate but to maintain their endangered species protective policies, if not fail outright (Rabe, 2013, pp. 42-43).

Finally, referring back to the already discussed issues with property interests as the main opposition, the law also stands as a huge improvement for those with land under threat of

habitation for endangered species. Environmental journalist Chris Clarke (2013) makes it very clear in an op-ed that the winners in the law are not the endangered species, but those with property and other interests. He explains for those whose property is ultimately designated necessary for habitation for threatened species, “the landowner will then be entitled to receive 150% of the property's fair market value if they can make a case that the property's value has taken a 50% hit” (Clarke, 2013, para. 7). He also notes that, “[t]he bill is silent on criteria for determining whether a property has actually lost that much value,” potentially leading, in his view, to cases of fraudulent claims in order to receive extra funds for giving up land (Clarke, 2013, para. 7). Along with limiting the time the USFWS could view a project for habitation, the law also allows an individual land owner to give up any obligation to work with the USFWS should they fail to respond. This limiting of action only hinders the regulatory agency rather than attempts to work with local state governments, and if anything, proves certain interests are put ahead of threatened species (Clarke, 2013).

Still, the policy actions of states should be taken into account before denying they are too limited in scope to properly address the issues facing endangered species. Of the many states to consider for insight into the strengths and weaknesses of individual state policy towards endangered species, California acts as a great case study. California, though often considered a very progressive state when it comes to environmentalism, has had similar conflicts with the various economic interests that other conservative states might have to enact their protective policies for species. California’s policies show insights on both the potential for success and conflict due to these competing interests.

First, there is the example of the debate over the protection of the endangered kit fox, living in the San Joaquin Valley ecosystem rich in natural resources that took place in 1998.

Threatened with extinction from human interaction, but without much concern from the local citizenship, the federal government stepped in and declared the kit fox an endangered species. Though initially shocked by the sudden declaration that threatened to cut off their land from development, the local communities that lived near the kit fox came to form a different response (Alagona, 2013). After much divisive debate in setting up the kit fox as a listed and therefore protected species, the innovative streak of local government soon showed itself. As described, the local city and even state authorities of the region “use[d] farmland retirement funds as a means of purchasing parcels that might facilitate endangered species recovery” (Alagona, 2013, p. 189). This innovative way of using land sales to buy other lands suitable for habitation shows recognition among those involved that local governance and policies from the bottom up are better supported by the people and therefore make conflict and mismanagement less likely. Furthermore, it reinforces the image of states as innovative governments that can best respond to their unique instances of species endangerment rather than a federal task force too far removed from the local scene. The kit fox became a prime example of the good works states could do in defining protective environmental policies within their own borders (Alagona, 2013).

The Delta smelt, a small fish in the waterways of Northern California, is another example of California-specific endangered species policy, but one conveying more of the difficulties of bringing together two diametrically opposed positions than one of ease. The smelt became a huge topic of controversy in 2007. Due to their habitat existing in the water system of the Sacramento-San Joaquin Delta that provided water to thousands of acres of farms in the Central Valley, the smelt was in danger of extinction due to being killed in the system that delivered the water. Environmental groups sued to have the water pumps shut down, sparing the fish but harming farmers. Of course, scientists later found that the lack of water was as much to do with

evaporation and poor rainfall as shutting down of the pumps to save the smelt, but by then, too many already saw the efforts to save the smelt as an environmentalist issue and uncaring to the needs or desires of the people (Alagona, 2013). As author Peter Alagona (2013) succinctly put it, “the smelt’s current condition is more a symptom than a cause of California’s water problems” (p. 200). Here, the needs of water by the citizens in the Delta region, a problem systematic to almost the entire state of California, motivated policy makers to a large extent rather than the understanding of the importance of species protection. Thus, from both examples, one can see the states as capable of both good and bad protection policies for their own species, nor always the best judges to make the best decisions (Alagona, 2013, p. 200).

Conclusions

Ultimately, the current attempt to change the 1973 Endangered Species Act has valid concerns about the effectiveness of the original bill as well as the rights and needs of individual’s right to property. However, its policies are incomplete and potentially more damaging than beneficial to the most important constituents of the act, the endangered species throughout the United States. Again, the needs of individuals in states that contain threatened species too often motivates constituents, political leaders and their policy makers to make decisions that fail to benefit the endangered species first. The state is both an engine for creative policy solutions, as well as a community with immense and intense division of interest. While the federal authority is far from perfect by being detached, cumbersome in response and potentially damaging to the private property rights of citizens, it still is has the most resources, the most experienced professionals, and the widest scope of policies to study and protect not just one state but the entire national environment. No single state could perform such an immense duty, and if a state could, it would be due to support from the government through aid and scientific data. In the end,

the current system under the 1973 ESA is still more effective than a simple shift in power to state governors inherent in the current form of the Management Self-Determination Act.

The main debate that occurs between those that want to see the states have more control over protective policies and the continuation of the current federally controlled policies is in defining what the purpose of the law truly is. Many who wish to see the states have more authority see the ESA's purpose as saving species and ultimately removing them from the endangered list all together. This results-focused approach, therefore, views the current federal approach as ineffective because only a small minority of species have actually been saved and removed from the endangered species list. States, with their long history of innovation and successful policy implementation, seem the better form of government to control and set policy that protects policies for their own species. Their connection to local communities and local understanding of the needed protection of their respective environments further proves the better ability of states over the federal government and its various agencies.

Those that support the current form of the ESA, on the other hand, do not focus on the result of saving the species, but rather focus on the continuous protection of the species, in order to protect biodiversity, not only of individual states, or even simply the United States. They see the protection of species variation as crucial to the health and survival of the biodiversity of the entire world. Thus, many times environmentalists do not seek or expect results from the ESA. They instead wish to continuously support those species crucial to the genetic diversity of life on earth, and are willing to apply resources and energy into maintaining that protection. Furthermore, the always looming threat of human intervention into fragile environments crucial to the survival of various species and potential destruction of those environments warrants more

concerted action from the only authority powerful enough with the scope and resources enough to cover the entire environment, mainly federal government agencies.

Policymakers still have the opportunity to review and reform the current form of the Management Self-Determination Act. Currently, as already mentioned, the bill seeks to shift power to state governors and provide greater protections to property owners whose land may be altered and monitored by federal authorities. The likelihood of its passage in the U.S. Senate is unlikely due to the chamber's control by Democrats opposed to any Republican legislation. One possible reform would be to maintain the Secretary of the Interior's current leadership role in endangered species protection efforts, but also allow all fifty state governors access and the ability to take part in policy discussions. As of now, the ESA does not allow state input into federal planning of protection efforts, only allowing them to expand on them instead. Creating a mechanism for state governors to review, comment and provide local expertise to federal policy would satisfy much of the opposition of state-oriented policymakers.

Furthermore, taking into account the needs of private property owners would also assuage efforts to wholly dismantle the ESA. The current Management Act is too unrestricted in its benefits to property holders and allows for potential abuse of the law to benefit property holders at the expense of wildlife. Still, it does bring up the issue that the current ESA does not provide enough compensation to property owners for the many changes and maintenance costs of their land to accommodate the species on their land. Reforms to the Management Act could include curtailing much of the giveaways in compensation, while still acknowledging and providing opportunities for property owners to comment and defend their use of land that both allows them their freedom to operate and ability to maintain and protect the endangered species on their land. Together, both these reforms would placate much of the opposition and call for

total reform to the ESA, while still acknowledging and incorporating the needs of state governments and property holders in the process and management of endangered species protection.

Still, rather than trying to decide which level of government, state or federal, should have overall authority over endangered species protection, states and the federal government should also work together and form cooperative policies. Endless competition between both over policy has only continued to stifle the process of studying, defining, planning and ultimately protecting environments housing endangered species. Policy analyst Barry Rabe (2013) argues that federal government agencies under the guidance of the Secretary of the Interior should promote interaction between states, such as providing and “developing a system informed by ‘best practices’” (p. 50). This would undoubtedly further competition between states, thereby increasing the competitive and innovative streaks so many states take pride in. These new and improved state policies would then be used to inspire other states to form their own policies while still utilizing their own unique understanding of the local environment, species, and needs of their constituents (Rabe, 2013).

Besides better partnerships between the federal government and states, all fifty states should also endeavor to work together and share their policies with one another. Another of the solutions offered by Barry Rabe (2013) in fostering greater involvement and cooperation among states in environmental policy is the continuation and expansion of such efforts like the Environmental Council of States (ECOS) (p. 51). This organization, along with providing valuable data and scientific sources for all states to view, stands as one of the premier attempts at state collaboration on very important issues, including air and water quality management. However, upon exploring the website provided by Rabe for ECOS, there is no current section on

concerted efforts to discuss endangered species protection. This should be expanded further to include practices and discussions of practices and policies that have succeeded in various states, again providing greater examples from which struggling states may seek policy inspiration.¹

Laws can always be improved and should take into account the various groups it affects at all times. Still, the reform offered in the recently proposed ESMSDA as of now, is simply a policy in opposition to the current regulatory system of the ESA rather than reform. Greater state involvement is welcome, and the federal government should make attempts to foster this relationship. Ultimately, the ESA's true contribution to U.S. environmental policy is its protection and strengthening of the nation's biodiversity, something that must be maintained rather than weakened.

REFERENCES

- A Bill to Amend the Endangered Species Act of 1973, S. __, 113th Cong. (2013) Retrieved 4 December, 2013 from <http://www.paul.senate.gov/files/documents/ESA2013.pdf>.
- Alagona, P. (2013). *After the grizzly: endangered species and the politics of place in California*, Berkeley: University of California Press.
- Aengst, P. et. al. (1997). Introduction to Habitat Conservation Planning, *University of Michigan's School of Natural Resources and Environment*, Retrieved 4 December, 2013 from <http://www.umich.edu/~esupdate/library/97.07-08/hcp.html>.
- Clarke, C. (2013, Dec. 2). Bill would gut Endangered Species Act. *KCET*, Retrieved 4, December, 2013 from <http://www.kcet.org/news/redefine/rewild/legislation/bill-would-gut-endangered-species-act.html>
- Czech, B. & Krausman, P. (2001). *The Endangered Species Act: history, conservation, biology and public policy*, Baltimore: John Hopkins University Press
- Kraft, M. & Vig N. (2013). "Environmental Policy over Four Decades: Achievements and New Directions," Vig, Norman J. and Michael E. Kraft, eds. *Environmental Policy*, Washington, D.C: CQ Press, 8th edition
- O'Leary, R. (2013). "Environmental Policy in the Courts," Vig, Norman J. and Michael E. Kraft, eds. *Environmental Policy*, Washington, D.C: CQ Press, 8th edition

¹ To view the website, visit, <http://www.ecos.org/>.

- Paul, R. (2013, Nov. 19). Sens. Paul, Heller and Rep. Amodei Introduce Endangered Species Management Self-Determination Act, *United States Senate*, Retrieved 4 December, 2013 from, http://www.paul.senate.gov/?p=press_release&id=1040
- Rabe, B. (2013). "Racing to the Top, the Bottom, or the Middle of the Pack? The Evolving State Government Role in Environmental Protection," in Vig, Norman J. and Michael E. Kraft, eds. *Environmental Policy*, Washington, D.C: CQ Press, 8th edition.
- Tobin, R. (2013). "Environment, Population, and the Developing World," Vig, Norman J. and Michael E. Kraft, eds. *Environmental Policy*, Washington, D.C: CQ Press, 8th edition.
- Vig, N. (2013). "Presidential Powers and Environmental Policy," Vig, Norman J. and Michael E. Kraft, eds. *Environmental Policy*, Washington, D.C: CQ Press, 8th edition.