DIALOGUE

THE ESA AT 50

SUMMARY-

December 2023 marked 50 years since the Endangered Species Act (ESA) was signed into law. The ESA has proven resilient to numerous legal challenges and saved many species from extinction. But its overall success has been debated, as the list of endangered and threatened species continues to grow, and only 54 species have been taken off of the list completely. On October 26, 2023, the Environmental Law Institute hosted a panel of experts who explored the successes and shortcomings of the statute and discussed what might happen next as climate change increases the risk of extinction. Below, we present a transcript of that discussion, which has been edited for style, clarity, and space considerations.

Madison Calhoun is Senior Manager of Educational Programs at the Environmental Law Institute (ELI).

Sharmeen Morrison (moderator) is a Senior Associate Attorney in the Biodiversity Defense Program at Earthjustice. **Derb Carter** is a Senior Attorney with the Southern Environmental Law Center.

J.B. Ruhl is David Daniels Allen Distinguished Chair in Law and Co-Director of the Energy, Environment, and Land Use Program at Vanderbilt Law School.

Sean Skaggs is a Partner with Ebbin Moser + Skaggs LLP. **William Snape III** is Assistant Dean of Adjunct Faculty Affairs, American University Washington College of Law.

Madison Calhoun: December 28 marks 50 years since the Endangered Species Act (ESA)¹ was signed into law. In celebration of the 50th anniversary of the statute, we decided to hold a program to explore the successes and shortcomings of the Act, as well as discuss what might be ahead for the ESA. Some of the panelists contributed to a debate article about the ESA that was published in ELI's journal the *Environmental Forum*.²

I will turn things over to our moderator Sharmeen Morrison. Sharmeen is a senior associate attorney with Earthjustice's Biodiversity Defense Program, which engages in national litigation to confront the major drivers of biodiversity law.

Sharmeen Morrison: Good afternoon. I'm going to start by introducing our four panelists.

J.B. Ruhl is the David Daniels Allen Distinguished Chair of Law at Vanderbilt University Law School, where he also serves as director of the Program on Law and Innovation and co-director of the Energy, Environment, and Land Use Program. Before joining the Vanderbilt faculty, he taught at Florida State University and Southern Illinois

University. His academic research has focused on endangered species and ecosystem management. Prior to teaching, he practiced with Fulbright & Jaworski in Austin, Texas, and was deeply involved in the ESA issues emerging there in the 1990s.

Derb Carter is a senior attorney in the Chapel Hill, North Carolina, office of the Southern Environmental Law Center (SELC), which he joined in 1989. From 2005 to 2022, he was director of the North Carolina offices of SELC in addition to litigating cases in state and federal courts. Prior to this, he was director of the Southeastern Natural Resource Center of the National Wildlife Federation and an attorney with the Solicitor's Office at the U.S. Department of the Interior (DOI) in Washington, D.C.

Sean Skaggs is a partner at Ebbin Moser + Skaggs in San Diego, California, where his practice has been focused on natural resources law for the past 20 years. Prior to forming Ebbin Moser + Skaggs, Sean served at DOI for 10 years, where he was involved in the development of the No Surprises Rule,³ the Safe Harbor Rule,⁴ and the five-point habitat conservation plan (HCP) policy.⁵ Sean is currently editor of the Biodiversity Chapter of the American Bar Association's *Year in Review*.

Bill Snape is a professor and assistant dean at American University's Washington College of Law, where he also directs the Program on Environmental and Energy Law. Bill also litigates on behalf of the Center for Biological Diversity on endangered species, public lands, climate change, and freedom of information issues. He is the author of many articles on the ESA, and most recently published a chapter entitled "Biodiversity Litigation in the United States: Strong Conservation Laws but Challenges

54 ELR 10101

^{1. 16} U.S.C. §\$1531-1544, ELR STAT. ESA \$\$2-18.

The Debate—The Endangered Species Act at 50: Making the Statute More Effective, Env't F. (Sept./Oct. 2023), https://www.eli.org/sites/default/files/files-pdf/TEF-sept-oct-2023-DEBATE.pdf.

Habitat Conservation Plan Assurances ("No Surprises") Rule, 63 Fed. Reg. 8859 (Feb. 23, 1998).

Announcement of Final Safe Harbor Policy, 64 Fed. Reg. 32717 (June 17, 1999)

Notice of Availability of a Final Addendum to the Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, 65 Fed. Reg. 35242 (June 1, 2000).

With Enforcement" in a global compendium published by Oxford University Press in 2022.⁶

I want to start by asking our panelists to share their reflections on the effectiveness of the ESA 50 years since its enactment and the ways in which they think the Act could be made more effective.

J.B. Ruhl: I'm going to throw a curveball into this. As I was contemplating the theme of the panel and sketching out some notes to myself about my reflections on the ESA, I thought, why don't I do what all my students are doing, and ask ChatGPT?

So, I had a nice conversation with ChatGPT. It did a pretty good job, although it has some shortcomings of its own. And I'll get to those later in the panel. But with a very broad brush, I explained what the ESA is, and asked what it thought the successes and shortcomings have been over the past 50 years. It matched up quite well with where I was going. I'll go through the points, and I want to come back to one in particular that I think is overlooked as a success.

I asked ChatGPT to identify just five categories. The first was recovery of iconic species. I think we'd all agree that has over time placed the theme of endangered species in the public discourse successfully. That's helped the ESA "stick," notwithstanding all of its controversy.

The second was habitat protection and conservation plans. We have, in fact, extended a tremendous amount of protection through the HCP permit program through its mitigation requirements, with some HCPs operating at large regional scales. So I would agree that's a success, and that's been very targeted habitat conservation.

Third, ChatGPT pointed out that the ESA has been a catalyst for collaboration among federal agencies, federal and state agencies, local agencies, and even with private landowners, particularly during the Bruce Babbitt era in which Secretary Babbitt reached out and developed programs that facilitated those kinds of collaborations and partnerships.

Fourth was global impact and leadership. The ESA has positioned the United States as a leader. It's an environmental law we're proud of—along with the National Environmental Policy Act (NEPA)⁷—particularly in terms of its global impact and modeling for other nations.

The fifth success story was scientific research and monitoring, and I'm going to come back to that. But first, I'll briefly tell you what ChatGPT said were the shortcomings or failures. I think they're more problems and challenges, not necessarily shortcomings. They include inadequate funding and resources, which is not the ESA's failure. It's our failure to fund the ESA adequately. The second was political interference and delays. This is also not the ESA's failure. It is one of its greatest challenges.

We've seen periods of tremendous political backlash and insufficient habitat protection.

Conflict with economic development has been a source of controversy. And there is limited success in actual recovery. That's the standard criticism of the ESA, that it hasn't led to recovery. On the other hand, of course, it has prevented probably thousands of extinctions through its process.

But that point about actual recovery brings me back to the scientific research and monitoring point. We've learned that recovery is hard. I think the premise of the Act, perhaps not explicitly, was that extinction is kind of a linear process. Then when we decide to develop a recovery plan, we sort of make that happen. We didn't know at the time that recovery of a species that's been brought to the brink of extinction is actually very hard and could take hundreds of years. Fifty years is probably not enough for most species.

We've learned that, and we've learned so much more because many environmental laws are known to have a technology-forcing effect. They're forcing better technology for pollution control. But many environmental laws also have what I would call a science-forcing effect. Section 404 of the Clean Water Act (CWA)⁸ created a science of wetlands—although it might not be as robust or relevant after the *Sackett* opinion.⁹ In other words, we learned more about wetlands because they became an important regulatory phenomenon.

Then, with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)¹⁰ and Superfund, we learned a lot about groundwater hydrology because that became one of the key threats that CERCLA was designed to ultimately remediate and the potential liability for groundwater contamination was so high.

With the ESA, one of the understated success stories is its science-forcing effect. Learning more about species dynamics. Learning more about how ecological disturbance threatens the viability of species. Learning about how species interact with ecosystems. Concepts like distinct population segments, foreseeable future, and critical habitat that really, prior to the ESA, weren't in the science dialogue but were forced into it as a matter of law.

I think it has led to a tremendous amount of improved scientific knowledge about species and their fate. It made us think harder about concepts like how far into the future we can look and predict a species' viability. Again, recovery is hard, and all of this is nonlinear. It's complex ecological dynamics that we're learning more and more about. A lot of this scientific study would have happened without the ESA, just as a matter of original research that scientists engage in. But I think the ESA has really focused and amplified the amount of scientific research that we have about species.

William J. Snape, Biodiversity Litigation in the United States: Strong Conservation Laws but Challenges With Enforcement, in BIODIVERSITY LITIGATION 267 (Guillaume Futhazar et al. eds., Oxford Univ. Press 2022).

^{7. 42} U.S.C. §§4321-4370h, ELR STAT. NEPA §§2-209.

^{8. 33} U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607.

Sackett v. Environmental Prot. Agency, 143 S. Ct. 1322, 53 ELR 20083 (2023).

^{10. 42} U.S.C. §§9601-9675, ELR STAT. CERCLA §§101-405.

Relying on ChatGPT is something that we want to be careful about, but I think it did a nice job capturing the theme. I mean, ChatGPT is just reflecting what it finds on the database. I don't think any of these are big surprises at all, but we can chalk up a good number of successes to the ESA over the past 50 years even in the face of the criticism that it hasn't recovered hundreds of species yet.

Derb Carter: I appreciate the opportunity to share some perspectives on the ESA looking back, but also some perspectives on what can be done to improve the Act moving forward. I view it over the past many decades as being a generally effective and resilient law given the challenges that the law is trying to address, which is protection of our endangered species and their recovery and the restoration of ecosystems. Some estimate that it has prevented 99% of the species that have been listed from going extinct. That has to be viewed as a general accomplishment.

Last week, the U.S. Fish and Wildlife Service (FWS) delisted 21 species, half of them in our region, including nine mussels and the Bachman's warbler, because they have gone extinct.¹² That's a somber wake-up call that we still have work to do. Most of those species, actually, did not get the full benefit of the law because they were either already extinct in many estimations or at the verge by the time they were listed.

Another measure of success is that one assessment showed that the longer a species is listed, the more likely its population increases.¹³ Even though it may not recover, it's at least on a path toward recovery, showing that the requirements of the law can and do work.

Unfortunately, as J.B. mentioned and ChatGPT confirmed, a big problem is getting to recovery, which is the ultimate goal of the Act with respect to species. FWS estimates that over the 50-year period, about 100 species were listed or were either recovered or at least downlisted from endangered to threatened. So, there has been progress, but there could be a lot more in terms of that ultimate goal.

Finally, the legal framework that's been put in place has been very durable. It's been supplemented by use of HCPs, candidate conservation agreements, safe harbors, and other innovative tools that have made the law very resilient over time.

I have three points on how the Act can be improved. I'll begin with what is already underway, which is a repeal of rules put in place by the previous administration that would set back efforts to allow the law to do what it's intended to do. Those rules have allowed the use of economic impacts in deciding to list species, would repeal long-standing blanket protections for threatened species, and would define "critical habitat" in a narrow way that

would not allow adequate response to some conservation challenges. Repeal of all those rules has either been completed or is underway by the Joseph Biden Administration. ¹⁴ So, that's a good step in righting the ship in terms of moving forward.

Second, as J.B. mentioned, funding has always been an issue with the ESA. There's a lot to be done. It costs a lot both to meet the legal responsibilities and, in a bigger way, to supplement the various efforts that are underway to protect and recover endangered species. More funding is needed. There's a good influx of funding now from the previous U.S. Congress and the Biden Administration for broad-scale ecosystem restoration and land protection. The Biden Administration has characterized this as once-in-a-generation funding.¹⁵ In my view, it needs to be sustained into the future if we're going to meet the challenges of restoring these ecosystems and protecting endangered species.

Finally, I think it's time to integrate the more strict legal framework and efforts that are underway under the ESA into a much broader effort as a country to really focus on ecosystem restoration at a landscape level, where we can identify, plan, and fund efforts to protect the critical parts of our country that still remain somewhat wild and support endangered species.

It's all happening in a very haphazard way, but I think a bigger coordinated effort that would supplement the legal efforts and framework put in place by the ESA not only would go a long way toward meeting these goals, but is really necessary to address many of the challenges we have in protecting our biodiversity, wildlife, and these really important parts of our nation.

Sean Skaggs: I want to look at this from the perspective of climate change. Mostly what we've been talking about is whether the Act is effective in the face of climate change. What do we need to do? I would make the case that it's an interesting piece of legislation. It's not really locked into the 1970s or even into the 1980s, when \$10 habitat conservation planning amendments came into the Act. It's flexible enough to accommodate new threats.

I would make the case that, because of the way \$7 consultations are structured, the requirement for best available science is to go in those consultations. The courts have interpreted that to mean that you cannot ignore a fundamental aspect of the problem, which these days is climate change. So, we've seen in \$7 consultations that the agencies have been wrestling with these issues for quite a period now, especially in the larger public water projects.

I'll also note that the No Surprises Rule that came about in the 1990s, as part of the regional habitat conservation

Noah Greenwald et al., Extinction and the U.S. Endangered Species Act, 7 PEERI e6803 (2019).

Endangered and Threatened Wildlife and Plants; Removal of 21 Species From the List of Endangered and Threatened Wildlife, 88 Fed. Reg. 71644 (Oct. 17, 2023).

Martin F.J. Taylor et al., The Effectiveness of the Endangered Species Act: A Quantitative Analysis, 55 BIOSCIENCE 360 (2005), https://scholarship.law. cornell.edu/cgi/viewcontent.cgi?article=1730&context=facpub.

Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat, 87 Fed. Reg. 37757 (June 24, 2022); Proposed Rule on Threatened Species, 88 Fed. Reg. 40742 (June 22, 2023).

Press Release, DOI, Biden-Harris Administration Announces More Than \$68 Million From Bipartisan Infrastructure Law to Conserve and Strengthen Ecosystems and Economies (May 12, 2022), https://www.doi.gov/pressreleases/biden-harris-administration-announces-more-68-million-bipartisan-infrastructure-law.

planning programs brought about in the Babbitt era, included concepts that help adapt to new threats. There was the requirement to plan for changed circumstances. I don't think we've ever seen a program like that before, where the mitigation wasn't really done. Before, you locked up the land with a conservation easement and provided for stewardship management, but after the No Surprises Rule, you really weren't done yet.

In addition to the normal stewardship level of management, the No Surprises Rule requires that the preserve management program specifically consider and fund changed circumstances, which from the onset have always been the types of factors that are implicated by climate change. Increased floods and fires, invasive species, and drought were all explicitly considered on the front end for these very large regional habitat preserves. In that sense, it was essentially an Act ahead of its time, or the innovations of the 1990s were ahead of its time. They're actually serving well in this changing dynamic, at least within certain parameters.

Obviously, we can get to the point where we hit the tipping point and all of this becomes somewhat of an academic debate. But I would also emphasize other innovations, like the Safe Harbor Program that led to the conservation of millions of acres for the benefit of species. That's really what I would argue has been very effective, especially the regional habitat conservation plans for nonfederal projects. We need to see a lot more of that. We need to see it exported beyond the western United States.

For me, one way the Act can be made more effective is that right now, in the rulemaking that's out with FWS and the National Marine Fisheries Service (NMFS), we have proposed revisions to the \$7 consultation process that would finally require compensatory mitigation in \$7 even when there is not a jeopardy impact. This would essentially bring \$7(a)(2) and \$10 into the same arena in terms of what's required to offset the impacts of incidental take. For the first time, \$7 would require compensatory mitigation and essentially habitat acquisition in non-jeopardy situations. I think that makes sense. It also balances the Act so people don't try to stay away from \$10 and go hunt down a \$7 federal handle to not have to mitigate.

We also see that \$7(a)(1) for federal agencies has a lot of promise, but hasn't ever become what it could be. To Derb's point, we see a lot of uncoordinated actions that could be put together better for species. The Bureau of Land Management (BLM) right now has a proposal out under the Federal Land Policy and Management Act (FLPMA).¹⁷ It's not really ESA-directed, but it would provide for conservation at the landscape level. It emphasizes protecting intact landscapes and restoring degraded habitat. That's something that would fit very well under \$7(a)(1) wherever there are listed species.

First, I think the Act has been unequivocally effective. Countless species have been saved from extinction. One recent study counted at least 300 directly at all taxa, from mammals to invertebrates. If there is any area where systematic improvement could still happen, I think it would have to be on private lands, either statutorily or administratively. For example, we spend billions of taxpayer dollars every year for private conservation easements that the Internal Revenue Service (IRS) approves. We could have a much better endangered species focus if we really wanted that to happen.

Second, despite the fact that the architecture of the Act is sound, it absolutely has suffered from this administrative lurching back and forth. Just in my professional lifetime—George H.W. Bush Sr., William Clinton, George W. Bush Jr., Barack Obama, Donald Trump, Biden—it's like *Groundhog Day* every time we have these changes of administration with a different political party. It's like we go through the moment, and then here we are doing it again. We're now doing with the Trump-Biden transition exactly what we did in the first years of Obama, overturning the George W. Bush rollback.

That takes its toll. I don't have an answer for that. It's the nature of the beast. I will say that I think Babbitt is unequivocally the best Secretary of the Interior in my lifetime. And I like him personally. But perhaps the biggest mistake he made that's relevant to one of the points J.B. made was that he put most of the FWS scientists into the National Biological Service. Then, the National Biological Service got creamed by Congress, and we lost a lot of federal biological scientists.

That was a very important point. I don't blame him for doing that. It was a rational gambit at the time, but we never went back. The science has not been the same at FWS since the early 1990s, which is an issue that a couple of us have pointed out.

Again, the architecture of the Act is sound. Obviously, fiddling can always be done. There's fine tuning. I don't see the need for any fundamental changes to the Act.

Third, recovery is not only hard, it is also frequently a long process. Look at recovery plans, which they have for many but not all species when the feds finally assemble a recovery plan team. With these plans, there are 20-, 30-, 40-, 70-year windows by which we're going to recover species. The Act is only 50 years old. And it took a long time to get species to the point where they're near extinction. I think we have to be patient or communicate that patience. That's a little bit related to funding, but it's also related to scientific reality. And the greatest big-picture existential

William Snape: Well, either the good news or the boring news is that I haven't really disagreed with anything yet. Nonetheless, I think some very cogent things have been laid out, and I know we've got some questions piling up. Let me try to make three succinct points.

Endangered and Threatened Species: Interagency Cooperation, 88 Fed. Reg. 40753 (June 22, 2023).

^{17. 43} U.S.C. §§1701-1785, ELR STAT. FLPMA §§102-603.

^{18.} Center for Biological Diversity, A Promise to the Wild: The Endangered Species Act, 50 Years of Extraordinary Success (2023), https://www.biologicaldiversity.org/publications/papers/The-Endangered-Species%20Act-50-Years-of-Extraordinary-Success.pdf.

threat to endangered species is climate change and fossil fuels, but that's another topic I'll get to later.

Sharmeen Morrison: Because we're just talking about recovery, I'm going to take a few audience questions about recovery and bundle them together. One asks, is the way we define "recovery" part of the problem? Is it realistic to say a species is recovered when it continues to rely on human protection?

Then, we have another question in terms of failure to recover species. This one asks, is it true that as soon as the species shows any forward progress, there is political and industry pressure to reduce protections and, in many cases, resume direct hunting for species that are still very low in abundance?

William Snape: Biologist Mike Scott, a great endangered species scientist who was with the U.S. Geological Survey (USGS) for many years, has a book and many articles on the concept of conservation-reliant species, and there are a number of them.¹⁹ He very convincingly points out that if the conservation measures are enshrined in some sort of binding legal protection, then the species is recovered. And as long as we know that they're reliant upon those measures, then we can relax other non-relevant legal protections for them.

This approach is not for all species. But I think for many of these mostly endemic, smaller range species, if they do have the conservation measures in place, yes, they do need our continued help. Still, I would consider them recovered on some level. I know there's more to your question than that, but I wanted to get that concept out.

J.B. Ruhl: I'd add to that, Bill, that the Act itself contemplates that. In other words, the assessment of threat to the species takes into account the inadequacy of regulatory measures. So, if the regulatory measures in place are supporting the now viable species, I think that's perfectly consistent with the Act itself. I don't think the Act even contemplated recovery without the assistance of legal apparatus to bring about conservation.

Sharmeen Morrison: Does anyone want to speak to this component about industry pressure to reduce protections after a species shows progress?

William Snape: I'll generically say, depending upon the industry, whatever the affected industry is, if they perceive it as impacting their profits or their interest, they push back. That's been a constant, at least in the 40 years I've been involved with the statute. It's sort of like "dog chases cat" on some level. That's a huge dynamic.

Sean Skaggs: I think that's right, Bill, in the sense that as soon as you delist, if you don't have \$9 and you don't have the requirement to avoid take or to mitigate for take, then you're probably taking a step back every time a project moves forward. That is a tension in the delisting process.

Maybe this is slightly different from the question, but I'd throw in a perspective that one area of the Act that does have some ambiguity right now, and needs to be settled, is that recovery plans are declared to be nonregulatory, but they're starting to creep into some of the \$10 permit processes. When FWS realizes a project with its mitigation is really good but may actually prevent certain aspects of the recovery plan from being reached, what do you do then?

As much as it's been billed as nonregulatory, it looks like they may start to drive permit denials or other issues like that. I think it would help to sort that out and help to better understand how you do move forward with delisting without taking a step back.

J.B. Ruhl: I'll throw in a little devil's advocacy here. The statute is designed to identify threatened and endangered species, to protect them through \$9 and \$7, and then it's about permitting. It's about projects going forward. Under \$7, federal agencies fund, carry out, and authorize land development and water resource development and other uses of resources. Section 10 is explicitly about permitting of land development and other actions not funded, carried, or authorized by a federal agency.

So, it's recovery- and protection-oriented, but it's also a permitting statute. That's how it's being implemented. That's how the U.S. Supreme Court looks at it. And that's how other courts look at it, too. I'm not saying that that means we don't implement \$7 and \$10 the way they're intended to be implemented, but we have to recognize that it is ultimately a permitting statute.

William Snape: I would not go along with that sentiment, because the first stated purpose of the statute is to conserve ecosystems upon which threatened and endangered species depend. My response, J.B., is to invoke former Justice Stephen Breyer who said, for any hard and fast rule, there's always an exception.²⁰ For example, thou shall not mur-

See, e.g., J. Michael Scott et al., Conservation-Reliant Species and the Future of Conservation, 3 Conservation Letters 91 (2010). See also Carlos Carroll et al., Connectivity Conservation and the Endangered Species Recovery: A Study in the Challenges of Defining Conservation-Reliant Species, 8 Conservation Letters 132 (2015).

^{20.} See, e.g., Powerex Corp. v. Reliant Energy Servs., Inc., 551 U.S. 224, 240 (2007) (Breyer, J., dissenting) (stating that statutory conflicts may be resolved "by reading a later more specific statute as creating an implicit exception to" an earlier statute (citing Osborn v. Haley, 549 U.S. 225, 243-44 (2007))); Wilkinson v. Dotson, 544 U.S. 74, 79 (2005) (Breyer, J.) ("These considerations of linguistic specificity, history, and comity led the Court to find an implicit exception from §1983's otherwise broad scope for actions that lie 'within the core of habeas corpus.'" (quoting Preiser v. Rodriguez, 411 U.S. 475, 487 (1973))); Federal Commc'ns Comm'n v. NextWave Personal Commc'ns Inc., 537 U.S. 293, 317 (2003) (Breyer, J., dissenting) ("Well over a century ago, the Court interpreted a statute that forbade knowing and willful obstruction of the mail as containing an implicit exception permitting a local sheriff to arrest a mail carrier." (citing United States v. Kirby, 74 U.S. (7 Wall.) 482, 485-87 (1868))); Alabama v. Bozeman, 533 U.S. 146, 153 (2001) (Breyer, J.) ("First, the language of the Agreement militates against an implicit exception, for it is absolute."); United States v. Brockamp, 519 U.S. 347, 350 (1997) (Breyer, J.) (stating that statute that "sets forth its limitations in a highly detailed technical manner . . . cannot easily be read as containing implicit exceptions").

der, except in self-defense. I think in these exceptions, you are right—there is permitting, and there are exceptions in the statute. But you still have *Tennessee Valley Authority v. Hill*, ²¹ which says the overriding purpose of the statute is to conserve species. I think the permitting is subservient to the conservation, not the other way around. That distinction is important.

Sean Skaggs: I would agree with that. It almost takes us back to the fundamental principles in the 1970s for all these statutes, which was to get folks to internalize their negative externalities. That's where you're going to mitigate and offset your impacts. I guess the question becomes, when you do that or even when you overachieve in doing that (i.e., overmitigate) but somehow something in the recovery plan won't be met, where does that fall? Should that result in a permit denial for a single project, or is there an approach that makes it more of a type of larger societal burden? That is, mitigation is a project proponent task, but conservation is a larger societal responsibility.

Again, that's the tension between the two pieces of the Act: we're going to recover species, but we're also going to stick to our rough proportionality and our landowner rights and everything else, and put them all in the hopper and come out somehow with recovery and with projects.

Sharmeen Morrison: One audience member touched on how Derb was discussing the benefits of reversing Trump regulations, but many actions of the Trump Administration were themselves reversing Obama Administration actions. How can we prevent the next Republican president from quickly resurrecting the Trump regulations?

J.B. Ruhl: You can't, at least not other than through statutory amendment, to which I give a low probability. I'm being a bit provocative, but you just can't. Most of those regulations and certainly guidance documents can be reversed perfunctorily. Regulations take a long time to reverse or amend, but administrations know how to do it and have been successful, and executive orders can be rescinded with a stroke of a pen. It's not just the ESA that faces this problem.

We are stuck in this world under so many of our environmental and conservation statutes in which we are left to fixing the problems through agency rule amendments and guidance. Freezing particular policies is a very difficult process these days, so we're in this back-and-forth.

Sean Skaggs: It seemed to me that the last administration really held back on their amendments. I don't know if that's a political choice or the popularity of the Act, but they were working around the edges, in my view, and they could have done much more damage both to \$7 and other areas by the things they were doing. I think I described the Trump Administration's ESA regulatory revisions to \$7 as a nothing burger when they were first rolled out, because

of how little they had done to the substance of the interagency consultation process.

What we've been seeing is that one administration, like the Trump Administration, will put into the regulations something like "the causal standard should include aspects of proximate cause." Now, it appears that the current administration is going to take that language back out. But the statute is still going to function roughly the same way. I think it's the same causal test we've always used. It's interesting that way. I don't know if it's a political dynamic there.

William Snape: That's a fair point. One dynamic that happened during the Trump Administration was that we had two Secretaries of the Interior. The first one, Ryan Zinke, was an administrative idiot. He did everything wrong. Most of his decisions were thrown out. David Bernhardt came in, had the same agenda, but was a former Solicitor, was much more meticulous, and I think made some strategic decisions to get things on their agenda done. That's a partial answer to Sean.

I think the answer to your question, Sharmeen, is ultimately political. How do we make conservatives care about conservation, is really what the questioner is asking. If we could get the Republicans back to Teddy Roosevelt, that would be great. But that, I think, is ultimately the answer, because the Republican party right now is the party of big industry and just plowing ahead at all costs. No Republican national leader seems to care about conservation at all that I can see. I'd like to put Derb on the spot because I know he deals with these issues all the time.

Derb Carter: I agree with all these points. The reality is that Congress is not going to deal with this law. They are not going to make fixes. I think it's a political nonstarter, which means that the back-and-forth is going to be all administrative. If parties change and the administration changes, you can expect these changes.

Courts will continue to review agency rules and actions for consistency with the statute and what the Act requires. We now have 50 years of administration of the Act and 50 years of case law on what the Act requires.

Sharmeen Morrison: I'm going to get back to one planned question for the panel. The drafters of the ESA did not address climate change. Each of you has a slightly different conception of how the ESA can or cannot be leveraged to mitigate climate impacts on endangered and threatened species in the coming decades. Please talk about those views.

William Snape: I'll start with a couple of legal points I don't think anyone can disagree with. First, is that one of the listing factors, the reason why a species must be listed, is for "other natural or man-made factors." Congress was very aware of the fact that many things cause species to decline. To me, that clearly covers climate change. That's not a major question as far as I'm concerned. I think that's a pretty large window.

^{21. 437} U.S. 153 (1978).

Then, to buttress that window, conservation is the overriding objective of the Act. Not only is it the objective of the Act, but it's the obligation of all federal agencies. Since all federal agencies have some impact or are impacted by climate change and greenhouse gas (GHG) pollutants, it seems to me that it's unavoidable if causation can be proven. That's the big "if," which I'll leave hanging, but note that climate science is getting more and more precise every day.

Then, lastly, is "climate and global warming" something that the ESA should address? It doesn't mean the ESA becomes an emissions statute. But it is a statute that says, if GHGs and climate change are impacting a listed species and its recovery, we need to have a game plan on what to do about it. You can't just stick your head in the sand and pretend that's out of our gamut, we're just going to let the species go away. I think climate change unquestionably is a part of the Act. For some species, how it's actually implemented is not always straightforward or easy, but that doesn't mean we can ignore the issue.

Sean Skaggs: For me, it's really about supporting adaptation and trying to work with the HCP preserves that have been built and connecting to large blocks of public land. In other words, it's kind of what Bill said: the ESA is really not the vehicle for regulating GHG emissions across the board. Do you capture a big federal project that was already into \$7 because it had habitat impacts and now you managed to address this threat? Yes.

But I don't think that the statute would be able to grab all the projects that it would need to make any difference at all. It doesn't have an international reach, so it's the wrong vehicle for that. And we just talked about its political capital or whatever is keeping the Act alive. It would certainly take a hit if it starts to just regulate GHG emissions as an indirect effect even for projects that, for example, are taking place in existing paved areas.

The Act is unlikely to grab those, and probably would receive a lot less support if it did. Again, especially in the West, it's back to building on some of those regional HCP habitat reserves that had been built and connecting them to public lands and then managing all of it for biodiversity. That's my view of where the ESA can help on habitat.

Derb Carter: It's always been interesting to me that Congress directed that key decisions under the ESA be based on the best scientific information available. As a lawyer, it's like it's almost arbitrary and capricious even without that direction to make a decision that's not based on the best scientific information available. But here, Congress has said that's what you have to do. It's a mandate of the Act. It applies to listing critical habitat designation, \$7, and biological opinions. There's a legal wrangling now over whether it actually applies to recovery plans or not, but it's very embedded in the Act.

Then, there's been a fair amount of litigation, climaterelated, that goes back to that mandate and that requirement. So, I would argue that climate change considerations are required by the Act. The science of climate change is becoming much more certain and precise, as are the effects on species.

I would argue that that requirement—to consider the best scientific information available in all these key decisions—now requires us and FWS and those involved in ESA decisions to fully factor in how climate is affecting a species as it relates to particular decisions that have to be made. Whether it's listing critical habitat designation, biological opinions, or probably even recovery going forward.

J.B. Ruhl: I think there are two big dimensions to the answers to the question. First, I agree completely with everyone else. Sean discussed helping species adapt. Absolutely. I think there are tools within the Act that may require a little bit of innovation, but not so much innovation that we're running into the major questions doctrine or *Chevron*,²² or whatever the post-*Chevron* world looks like.

In past writing, I've discussed where to locate HCP mitigation lands.²³ Now, we also can do that under \$7. But why wouldn't we want to think about where the species' range is moving under a 50-year time frame for climate change and consider those lands that aren't presently even occupiable by the species, but that we expect will transition into that kind of habitat, for HCP and \$7 mitigation areas? That should be fair game for mitigation.

I also argued, and the agency has dabbled in it a few times, the same analysis could apply to critical habitat. If the species is losing its habitat on the southern end of the range and the habitat is moving into the northern new areas, isn't that what is essential for the continued survival of the species over that long term? I think, after *Weyerhaeuser*, ²⁴ that's problematic. It has to be habitat before it's critical habitat, and we haven't seen that issue resurface in critical habitat designations since the case was decided.

I agree that GHG regulation is not where the statute should go. That probably would run smack dab into the major questions doctrine if anyone tried to use this statute to directly regulate.

I think there are some really big problems that we're going to start facing. That is, as we start listing more and more species primarily because of climate change threats, they're protected under §9 for any other harm or take. That puts a lot of pressure on those other potential sources of take that aren't the primary source of threat to the species. I could foresee conflict and controversy over that.

The other is that as a species' range moves, the species moves with it and may be entering existing ecosystem assemblies, so that now we're not talking about invasive species. We're talking about adapting species and how we deal with those conflicts.

The other big dimension is how we think about saving species, and us, through decarbonization. Decarbonization

Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 14 ELR 20507 (1984).

See J.B. Ruhl, Climate Change and the Endangered Species Act: Building Bridges to the No-Analog Future, 88 B.U. L. Rev. 1 (2008).

Weyerhaeuser Co. v. United States Fish & Wildlife Serv., 139 S. Ct. 361, 48 ELR 20196 (2018).

is going to involve a tremendous, unprecedented amount of infrastructure at massive scale over an urgent 25-year time frame. We need to think innovatively and creatively about how, when those infrastructure projects do intersect the ESA and certainly not just the ESA, we can get those projects done efficiently.

"No" is really not an option for decarbonization infrastructure, but how do we say yes and still meet the conservation goals of the ESA? We had a great pulse of innovation under Secretary Babbitt. I think we need another pulse of innovation that balances that very delicate problem of saying yes to infrastructure, because we don't have a choice, but saying it in a way that is still consistent with the Act's goals.

William Snape: First of all, I don't think I disagreed with any of the other panelists' answers on this. There's a lot of nuance and detail.

Let me give two examples that provide a little more detail to what we've been talking about. The first is the Willow project.²⁵ Biden approved this huge oil and gas project in Alaska. There will be a monumental amount of fossil fuel emissions. If for the reasons Derb identified we could actually link in a scientific way that project with jeopardy to the polar bear, to me that's a legitimate linkage. That's not the agency acting as an emissions agency. It's an agency saying that pollutants, just like a toxic spill, are going to harm the species. If it's jeopardy, it's jeopardy. So, that's one example of causation. Sean talked about that as well.

Second, on the last point J.B. just made, which I think is fair and important, and clearly something that has been debated hotly in Congress, something for which neither party agrees with each other or within itself, I agree that there ought to be a priority on an expedited basis to get good renewable projects through.

But the reality is that there are a lot of bad renewable projects. There was a project that the Trump Administration approved literally at the 23rd hour and 59th minute of the Administration that would have put miles of solar panels in prime desert tortoise habitat. When you look at the project just like a front line, it seems like environmentalists are going to kill solar panels. But it was the worst place to put an industrial solar park, and some people opposed it. The project was modified, thank goodness, as a result of that legal opposition by conservationists.

Sometimes, in fact frequently, the detailed permitting process leads to a good result. Or maybe an original project was not as good, and the endangered species consultation helped guide it to a better result. Those solar panels were eventually built, by the way. So, the permitting issue is loaded because it has so many permutations, and is incredibly fact-specific. The big industries like oil and gas warp reality here all the time.

J.B. Ruhl: I didn't suggest it would be easy.

Sharmeen Morrison: Let's pivot to a discussion of funding. We've been dancing around it. Let's face it head on. As we all know and have been referencing, ESA programs are chronically underfunded. There are a lot of implications to this—listing backlogs, recovery plan backlogs, and critical habitat designation backlogs. Meanwhile, the Biden Administration has both proposed and recently finalized regulations concerning experimental populations, monitoring an adaptive management for HCPs, and expanded requirements for compensatory mitigation for incidental take. If all of these existing and proposed programs actually received the funding they require, would that obviate the need for congressional amendment to the ESA?

Derb Carter: My starting point on this is that we shouldn't at this point politically think about any action by Congress to come in and fix anything that's broken or could be improved with the Act. We've got a majority party in the U.S. House of Representatives that can barely elect a speaker, much less the bipartisan effort that would be required to step in and help fix any problems or issues that exist with the current statute.

I look back out of interest. In 1973, the U.S. Senate passed the ESA unanimously. The House passed it 390 to 12. I can't think of any action that has any controversy that this Congress can address and, unfortunately, I don't see any fix to that coming any time soon. I think all the foreseeable changes and tweaks and fixes are going to have to come administratively.

As I said initially, this Act has been pretty resilient. Secretary Babbitt has been mentioned for innovations related to habitat conservation planning, candidate conservation agreements, and safe harbors. Likewise, I think there are ways to administratively make the Act work better, and that's what we're going to have to rely on.

Funding is a key issue, and that's Congress. So, we're going to have to hope that Congress can recognize that there's a need for funding of these administrative initiatives and that funding is at an adequate level. This has always proved to be a very popular law. I think when the American people weigh in, if they're given that opportunity, they'll support increasing funding that's necessary to achieve a lot of these objectives and address a lot of these challenges.

Sean Skaggs: Sharmeen, you mentioned a couple of the changes lately, or the regulatory amendments that we're going to see. For example, the Five-Point HCP policy, which includes adaptive management, that I believe has been around since 1999. It has actually been required of HCP permittees as a policy, but it will now be codified in the regulations. That's funded by project proponent money. That's really the private landowner fulfilling the mitigation, as it's part of the mitigation. So, it's already funded essentially and really the extension of compensatory mitigation.

Similarly, in \$7, the expanded requirement for compensatory mitigation is either going to be funded by a nonfed-

See, e.g., Press Release, Sen. Lisa Murkowski, Biden Administration Defends Alaska's Willow Project in Court: Determines Project ROD Finalized Under Trump Administration to Be Legally Sufficient After Review (May 27, 2021), https://www.murkowski.senate.gov/press/release/biden-administration-defends-alaskas-willow-project-in-court-.

eral project proponent who needed a federal permit, or it will be the federal action agency, when they're budgeting for projects like that, where money tends to show up—the compliance money—more easily than, say, conservation dollars. If we're really talking about conservation dollars, for me, the bottom line is like that expression from real estate when talking about coastal land with coastal views: they're not making any more of it. I think that's where our focus is, to acquire as much habitat as we can.

I think it's about explicitly harnessing conservation dollars in programs like 30x30, and the pilot project that's out there now,²⁶ for addressing legacy barriers on old infrastructure projects so that we can connect habitat again. All these programs ought to be explicitly directed first and foremost to endangered species. The low-hanging fruit in this whole thing is to enlarge the HCP preserves. Let's connect them to other protected lands.

There's a very effective program in §6 of the ESA to fund the preparation of regional plans. That's why we have them. They were too expensive for counties to do on their own. But the other piece of §6 has recovery land acquisition grants. It's not mitigation, so you can't subsidize your mitigation. But you can build on your preserve once you've mitigated. I think that's where we need to see real effort, to fund the acquisitions around HCP preserves.

Also, in the *Environmental Forum*, Melinda Taylor had a good suggestion, which is to incentivize conservation more.²⁷ Right now, the Safe Harbor Program says you won't get punished for good things.²⁸ In other words, you can return to baseline later after you have recovered some habitat or done good stuff on your land. But there's no real financial incentives to do that. It's just that you're going to get regulatory relief later. Melinda had suggested that we could incentivize a lot of voluntary conservation. Maybe something different than the sale of conversation easements.

J.B. Ruhl: I'll add a higher-level perspective. I think that question reveals a tendency many of us who are interested in conservation have: to expect too much work out of the ESA. It goes back to Derb's point that, when we step back and ask what we are trying to accomplish here, it's conservation. It's protection of biodiversity.

Let's think of the ESA as one player, one tool we have. There are other tools that probably, as Sean has put a little meat on that concept of integration, could attract more funding and go a long way toward contributing to that overarching goal. We tend to think that the ESA is going to solve this big problem. It's not an ecosystem management statute. It's a species-specific conservation statute. But it can play into a larger scale and broader-framed ecosystem management biodiversity conservation agenda. We may find funding. We already see evidence of funding for that. It may be easier to get through this extremely

polarized Congress than asking for more money for specific ESA programs.

William Snape: All fair points. I have a couple to add. First, the Act is sound. I don't think it needs amendments. I think this is really about implementation. Yes, we obviously need more money. We all agree with that. I think J.B.'s point is a decent one. I think there have been funding proposals in Congress that would do that, that would take that wider look Sean was mentioning. Some of those bills have been bipartisan. The Inflation Reduction Act²⁹ had some of that funding, although not as much as some other bills.³⁰

Then, in terms of what does need to be done by Congress, I want to talk about the broad federal conservation easement program again because it's not only a program that the IRS administers, but we're talking about billions and billions of dollars a year. These IRS-approved easements are related to but legally distinct from state easements and federal easements through DOI and the U.S. Department of Agriculture.

There's always a bad easement here and there, but by and large, the vast majority of them are good. But they are completely incoherent from a policy perspective. There's no overarching examination of them. I think USGS should be empowered administratively to help. Congress should probably clean up the federal easement law, but has no real inclination to do that.

Second are federal public lands. I've admitted private lands are a challenge because of how our U.S. Constitution and society are structured: not undoable, but sometimes a challenge. But on federal public lands, it shouldn't be an issue at all. All those agencies have clear conservation duties under the Act. These lands are owned by the American people through Congress.

I get that the Forest Service and BLM are multiple-use sustained-yield agencies, but that should never interfere with the conservation of endangered species.³¹

When you look at public lands across the country, by far, the greatest threat right now is fossil fuel extraction. That leads us right back to the beast of big industry, and what's really driving this thing, and why it is we can't get meaningful protections for the sage-grouse, for example. Why is that so difficult? It's difficult because there's a huge, entrenched interest on the other side fighting tooth and nail.

Sharmeen Morrison: While we're on the funding piece, I want to take one audience question. This audience member observes that each action agency is responsible for \$7 using their own funds. NMFS and FWS have funds to implement restoration projects and not deal with the day-to-day impacts. NMFS and FWS are short-staffed. They have long backlogs, as we have discussed. But there are

^{26. 23} U.S.C. §171.

^{27.} The Debate—The Endangered Species Act at 50: Making the Statute More Effective, supra note 2, at 58.

^{28. 50} C.F.R. §§17.22(c) and 17.32(c).

^{29.} Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818.

^{30.} See, e.g., Recovering America's Wildlife Act of 2023, S. 1149, 118th Cong.

See, e.g., Sarah F. Bates, Discussion Paper: The Changing Management Philosophies of Public Lands (Univ. of Colorado School of Law, 1993).

three different buckets of funds. Where exactly do you see the shortages, and how would you propose that additional funding be allocated?

William Snape: I think listing. We need more funds to list species that are clearly in need. Derb mentioned the longer we don't list them when they're in need, the harder recovery is, the greater the likelihood of extinction. Even though I think part of the listing program could be dealt with administratively, Congress has limited the amount of money they give to listing. That has had a huge impact on being scientifically sound about our protection.

Sean Skaggs: I think we should emphasize funding recovery plan implementation tasks. You know that if you don't fund them, then you're just writing these plans and putting them on a shelf. So that's a big piece. And now, we're seeing these big adaptation policies by FWS and NMFS that are more comprehensive in that sense, and I think fully funding those types of plans should be prioritized as well.

Then, we have \$7(a)(1) for federal agencies. Not just NMFS and FWS, but the notion of how much more money could we actually direct toward public lands. For example, that new BLM policy I mentioned. The perfect thing to fund is protecting intact ecosystems and restoring various habitats. That, for me, is where the money ought to go.

Sharmeen Morrison: Let's talk more about listing. One audience member asks, what do you think about the view that FWS is reluctant to engage in listing species, as it often results in a contentious process that invites litigation but diverts funds from the goals of the ESA? Is that accurate? What can we do to address that concern without taking away the strength of the Act in allowing citizens to challenge rules or the lack of rules?

William Snape: I think it absolutely is a dynamic, but it really depends on the species. Every species has its own story. But the Services, as a general rule, have their own game plan. And if there's a species in need that's not in their game plan, often that species will suffer. I also think sometimes the Services count on outside litigation and pressure to help them do some of the hard political work.

Sharmeen Morrison: A related question about the listing process. An audience member points out that the process has gotten byzantine. It's literally designed at this point to miss the ESA's 90-day and one-year deadlines. What can FWS do to eliminate duplicative review and design a process that approaches, if not actually meets, the ESA's statutory deadlines?

Sean Skaggs: Part of it for me is the 90-day finding on a petition. And the 12-month finding, is that really all that byzantine? I mean, first of all, it is a funding issue. But also what is sometimes showing up is that the federal agency may already have put this on their list as warranted to be listed for whatever reason.

Then, you get a petition. Back at a certain point, it could just be written with a crayon. It didn't have to have any other new information. It forced FWS to reprioritize the listings even though they already knew exactly what that petition told them. That's been part of the problem, the species du jour.

Of course, the other thing is that the agencies do pay when they lose §4 listing decisions. For the longest time, these were missed deadline cases. So for organizations looking to build their capacity, it was an easy source of revenue to challenge these missed deadlines. I think that was when we finally saw an effort to do the listing priority guidance. And eventually efforts by FWS to try to get courts to force mega-settlements and to get this master list of species sequenced so we can get rid of that species du jour litigation. It was in one sense almost abusive of the process if you were really paying attention to what was already trying to happen.

J.B. Ruhl: I'll add to that. Let's say we took a group of biologists—put it completely outside of the ESA—and say go figure out the status of this species. We think it might be on the way to extinction. Figure that out in 90 days. Yes or no. And then within one year, figure it all out. I think they'd say, well, why 90 days and one year? That's not how science works. We could use more funding to move faster, but why are 90 days and one year the magic numbers we must fit listing into? I can't fault the agency if they at the end of these time frames say, we don't have an answer yet.

Yes, we want the agency to work expeditiously. But I think what happened was that science got in the way. As Derb pointed out, they have to use the best available scientific information. If they're legitimately trying to make these decisions based on that and they can't make it within 90 days and 12 months, then that's problematic if that then opens the agency up to litigation and recovery of attorney fees.

Derb Carter: I agree with that, in response to the idea that listing and recovery are where more funding is needed. Particularly implementation of recovery. I would hope that we could figure out some way to deal with situations where, if we're in a part of the country that has the richest aquatic biodiversity, and really in the world, and a river there has a mussel species that is warranted to be listed, I would put my resources there if I were making a decision in a rational way.

On the other hand, we have rivers that have not only one but two, three, four, or five listed mussels. So, we're putting a lot of effort into listing mussels in the same river, but if we put the effort into recovering the first one that was listed, we would be making a lot more progress.

It's hard to control all of this, but I think there are ways—I would hope we could figure out—to more efficiently spend the funding that is coming in to both list species that need protection, but also work to recover those that can actually turn down the faucet of those additional species that may need listing, because we're not working to recover those that are already in need of funding and work.

Let me add one thing. This gets back to Congress, too. In our region, in the Southeast, we've got a rich aquatic biodiversity. A lot of listed species are aquatic species, and there are more that warrant listing. There's a big backlog that's being worked through with just aquatic species in our region. Then, in the midst of all of this, the Supreme Court legislates a new definition of "wetlands" under the CWA. That is likely to eliminate protection of significant areas of lands, wetlands in particular, that have been protected for a long period of time.

What does this mean for the ESA? For many species, FWS has leaned on that protection as another regulatory mechanism in making listing and delisting decisions. One decision is pending to delist the wood stork in our region that's highly dependent on isolated wetlands. There's another recent decision not to list the Venus flytrap in our region, which is a plant that is highly dependent on wetlands that are probably at the most risk for this decision.

Do I expect Congress to step in and restore those wetland protections? Probably not. But it is going to have a big spillover effect in our region related to the ESA, because these species are dependent on those areas and FWS has relied on that protection for many years in making various decisions under the Act, particularly listing decisions.

William Snape: That is a really good point, Derb, because it does show, as J.B. pointed out, that there are many other reasons habitat gets destroyed and endangered species threatened, but the ESA is all that's left at that point sometimes. And public land suffers the same fate.

I want to point out, in response to something J.B. said, which I think is fair on a certain level, that the 90-day and one-year findings for some species may be fast. The agency, in the interest of best available science, does genuinely need more time. I would argue that that's actually how the process works now. Yes, there are 60-day notice letters that are filed, but they invariably result in discussions and prioritizations. Sometimes in lawsuits, but just as frequently not in lawsuits, because it opens up the dialogue and discussion of what the priorities of the Services are.

In fact, it's one of the jokes of 60-day notice letters, at least in the 21st century, that it's not as though you're usually going to resolve a lawsuit with a notice letter. But ESA listing 60-day notice letters still do sometimes serve that function of helping the potential litigants and the agency open an official dialogue about what the species priority truly is. Maybe, J.B., you've done recent research, but I'm not aware of any group anymore doing so-called cottage-style deadline lawsuits under the ESA. All those 90-day lawsuits under ESA §4, for example, are only after there's been a discussion back and forth with the agency, and the agency still refuses to move ahead despite the best science indicating it should.

I'm sure you can find one or two exceptions, but in all the cases I'm aware of, the environmental groups take the 90-day and one-year deadlines seriously, but recognize from a matter of administrative law that judges are sometimes going to let those agencies have extra time because they are (or claim to be) overworked and overloaded. And if they've got a good excuse, they often can get away with it, at least for a limited amount of time.

I agree it would be better if the Services had an actual prioritization system and scheme that everyone could buy into, but we seem not to be able to do that. If it's truly just about science, it shouldn't be that hard to do. But as it turns out, it's very hard to do.

J.B. Ruhl: I didn't mean to suggest that the kind of litigation Sean is describing is continuing at that magnitude. There was a period where it seemed to be a new lawsuit every day. My point was simply that there's nothing scientific about those time frames. They are arbitrary timelines that we're trying to wedge science into, and the agency is doing the best it can. It may be that the 60-day letter is a litigation-driven way of reprioritizing where the agency directs its resources. That's not an ideal system. More funding might make more on time 90-day and one-year findings possible for sure, but it's a scientific inquiry at the bottom.

Sharmeen Morrison: Derb talked a bit about *Sackett* and the implications of *Sackett* for species protection. One audience member asks, what are some vulnerabilities of the ESA before the Supreme Court? Do you foresee a constitutional challenge to the ESA making its way to the Supreme Court?

J.B. Ruhl: My contribution to the *Environmental Forum* debate hypothesized a world in which the *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon* opinion³² had not happened, and that the challenge to the "harm" definition arose today instead. I think if we'd seen the kind of outcome that we saw in *Sackett*, Justice Antonin Scalia would win again. I suppose, as we saw in *Sackett*, someone could challenge the "harm" definition today. Particularly after what we expect will happen in *Loper Bright*³³ with *Chevron* and whatever the post-*Chevron* world looks like.

That's the kind of precarious situation we find ourselves in today. I think that with bold action, like if the agency starts regulating big emission projects, we're going to see a major questions doctrine suit filed right away.

There's no way coherently to tailor GHG emissions under the ESA. The same way there wasn't under the Clean Air Act (CAA).³⁴ And there's very little to grab onto in the ESA to suggest that FWS can start regulating and basing decisions on GHG emissions. So there's a whole host of issues out there that the current Supreme Court jurisprudence is throwing into some precarious context.

William Snape: I think that's fair. I'm nervous about the major questions doctrine too, but what I was talking about was a jeopardy finding—a jeopardy finding that involves

ENVIRONMENTAL LAW REPORTER

^{32. 515} U.S. 687, 25 ELR 21194 (1995).

Loper Bright Enters. v. Raimondo, 45 F.4th 359 (D.C. Cir. 2022), cert. granted 598 U.S. (May 1, 2023).

^{34. 42} U.S.C. §\$7401-7671q, ELR STAT. CAA §\$101-618.

a consultation process and a jeopardy finding that has the "God Squad" at the end of it because of the *Hill* litigation.³⁵

I actually think the statute anticipates some of these hard questions. The ESA would totally still be in its lane, so to speak, to give a jeopardy opinion on a massive oil and gas project that clearly is going to harm the polar bear. I don't think that's a major question. I hear the larger policy concerns, but that doesn't mean the oil and gas industry wouldn't try that case.

J.B. Ruhl: We can go back and forth on that. What would the post-jeopardy decision world look like? Which carbon dioxide molecules are not thereafter regulated as more jeopardy? I think you're opening up a big can of worms with that, what sounds like a straightforward application of jeopardy under §7.

William Snape: It's a bigger can of worms if we don't ask these hard questions.

Sharmeen Morrison: Can the panelists speak to particular opportunities they see for additional federal partnerships and improved coordination with regional entities, state agencies, academia, and industry, and implementing conservation or recovery programs?

Sean Skaggs: We talked a bit about the importance of the public lands managed by the Forest Service and BLM. There are a lot of opportunities. There's so much public land in the West that some of the HCPs have difficulty mitigating on nonfederal lands. Clark County, Nevada, is a good example, with desert tortoise and numerous other species there. With the HCP, they're essentially developing land that gets disposed by BLM. Meaning that it's released from the federal public lands and becomes private land. But they're only disposing a certain amount of land, and that's all getting built on.

So, where do you mitigate? You're mitigating on other public lands. It requires this type of partnership with BLM, and they worked hard on that. Subsequent to that effort, the conceptual Desert Renewable Conservation Plan worked on what happens if the mitigation on public land gets undone because it's not protected in perpetuity. There are now policies to address that, and I think that's important.

But tying into where an agency like BLM is launching some conservation proposal or some new approach to managing public lands for biodiversity, that needs to be handin-glove with FWS and NMFS. Again, it may be that the connection there is §7(a)(1) funding so that there really is an ESA component to it. Maybe FWS and NMFS are part of the push to get that type of funding for BLM.

William Snape: I agree. The older I get, the more I buy into and come to understand and realize that when parties are engaging and communicating in good faith, good

things happen. Sometimes, parties do get boxed in corners

I think more communication on private land conservation, the way we've all been talking about, would help all parties. I definitely think that's a conversation still in process, and a big-picture process presently unfolding.

J.B. Ruhl: Sean has mentioned \$7(a)(1) several times. I think that's one of the big untapped potentials. And it could be a way of galvanizing federal agencies into more collaborative partnerships. There's just no obstacle to it. The case law remains as is. It has no real regulatory teeth except in very limited circumstances. But it doesn't have to have regulatory teeth to do what Sean is describing at all. In fact, that's part of the beauty of it.

I would just remind us that ChatGPT thinks collaboration and partnerships are one of the great success stories of the ESA. So, we ought to stay focused on keeping that success going.

Sharmeen Morrison: One audience member is curious about funding for and enforcement of the ESA's criminal provisions to support the goals of the statute. That's not something I hear discussed much. Do any of you want to speak to the ESA's criminal provisions?

William Snape: They're not used very often, as far as I know. I think it's a relatively rare phenomenon.

Sean Skaggs: Not only that, Bill, but it's a misdemeanor. Honestly, you go into the U.S. Attorney's Office with a misdemeanor and they're kind of busy. Even a staff attorney is not evaluated much on misdemeanors in terms of their own professional advancement. So, they're not very well-received when you try and bring them.

The more important aspect of the enforcement program is injunctive relief. There have been a handful of such occurrences over the years that made an important statement. I remember in the Southeast, it was during a period of time where there were no \$10 HCP permits. It was a fairly new concept to the Southeast. It was a matter of trying to get a culture of compliance, the notion that a permit is required. Injunctive relief is really important in that respect.

The other interesting component that sometimes causes compliance in the ESA is the threat of an injunction from the perspective of a lender. The old "bird letters" in Austin in the late 1990s—letters issued by FWS for golden-cheeked warbler that informed landowners that their project would not cause incidental take. These were "no take" letters that you had to show to your lender to get them comfortable. There was this notion that compliance was required even though nobody was knocking on the door. That's really been important for the Act.

they don't mean to be in. That being said, sometimes parties are like Cliven Bundy and just not manageable. You can't reason with some people. When that communication and cooperation works on the one hand, or when you need to just drop the hammer on the other hand, is always an interesting question.

I think more communication on private land conserva-

^{35.} Tennessee Valley Auth. v. Hill, 437 U.S. 153 (1978).

Of course, out in California, it is really hard to assume the risk of §9 because the state equivalent of NEPA, the California Environmental Quality Act, flags it. You can't move forward without somehow having addressed it in a compliance-oriented way. So, we see other laws helping compliance there.

Sharmeen Morrison: One more question, which wraps up some of the things we've been discussing. For the past 50 years, the ESA has largely functioned as a stick to prevent extinction. What opportunities do you see for the Act to become more of a carrot to incentivize recovery of endangered species and enhancement of biodiversity?

William Snape: Actually, with Bruce Babbitt, one of his many strengths was that he began that process. I think that was true up until the late 1990s. He helped change that. There are so many other private land mechanisms, including *Sackett* and the IRS, that that's where the game

is. That's where the opportunities are. It's not all going to be about sticks as part of that communication and dialogue and fixing problems, but it's not going to be easy. It will take some effort and creativity.

Sean Skaggs: So far, conservation banking is the only area where you could actually think about making money on endangered species. Banking is really difficult, so you've got to somehow make conservation banking easier. Also, what I was talking about earlier, maybe there are other forms of payment to landowners. They're not selling credits. They're not trying to bank credits. They're just going to do something good for a while, maybe as a component of a safe harbor where they get to go back to baseline later, but they get some kind of compensation for this. It's similar to Bill's examples on the Natural Resources Conservation Service easements. Get a short-term easement. Maybe there's something tangible for you in doing that. That would be a very helpful carrot.