

**A LEGISLATIVE HEARING TO EXAMINE S. 2372,
THE RECOVERING AMERICA'S WILDLIFE ACT**

HEARING
BEFORE THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

DECEMBER 8, 2021

Printed for the use of the Committee on Environment and Public Works



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COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

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**A LEGISLATIVE HEARING TO EXAMINE
S. 2372, THE RECOVERING AMERICA'S
WILDLIFE ACT**

WEDNESDAY, DECEMBER 8, 2021

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The Committee, met, pursuant to notice, at 10:02 a.m. in room 406, Dirksen Senate Office Building, Hon. Thomas R. Carper (Chairman of the Committee) presiding.

Present: Senators Carper, Capito, Cardin, Whitehouse, Merkley, Kelly, Padilla, Lummis, Boozman, and Ernst.

**OPENING STATEMENT OF HON. THOMAS R. CARPER,
U.S. SENATOR FROM THE STATE OF DELAWARE**

Senator CARPER. The hearing will come to order, please. I invite our guests to take a seat.

Senator Capito and I are delighted to be with all of you.

Martin, good morning.

Roy, good morning.

Today, we are privileged to examine an important piece of bipartisan legislation, conservation legislation, the Recovering America's Wildlife Act.

We are fortunate today to have an esteemed panel of witnesses before us: Dan Ashe, Collin O'Mara, Sara Parker Pauley, and Jonathan Wood.

We thank all of you for joining us here today.

We will also hear from two of our colleagues, Senator Martin Heinrich and Roy Blunt.

Martin, welcome.

Roy, welcome.

They are prime sponsors of this bill, and we are pleased to welcome each of you.

This morning, we thank you for joining us and for your passionate leadership on this important issue.

Our Committee has enjoyed an enviable bipartisan track record of enacting wildlife conservation legislation over the past several years, such as the WILD Act and the ACE Act. We hope that this hearing will jump start a discussion to build on that bipartisan record of success.

A recent report by the United Nations shows that nearly 1 million species may be pushed to the brink of extinction in the years ahead, 1 million. That alarming number should serve as a dire

warning for all of us to do our part to protect our planet and all of God's creations that inhabit it with us.

Biodiversity loss threatens our economy; it threatens our ecosystems; it threatens our health. That is why the Recovering America's Wildlife Act is needed, and why I am grateful, why we are grateful, for our colleagues and our friends who have put so much effort into developing this piece of legislation. We are looking forward, in fact, I think we are eager to work with you on improving this legislation.

The Recovering America's Wildlife Act aims to provide much needed resources for wildlife conservation and recovery. With that need in mind, this legislation would also provide billions of dollars to States and to Tribes for those purposes.

As a recovering Governor, I understand that States play a leading role in wildlife conservation across our country. In recent decades, my home State, the First State, Delaware—what was yesterday, the 7th? Yes, it was the 7th. I think it was 234 years ago yesterday that Delaware became the first State to ratify the Constitution, so it is a big week for us in Delaware.

In recent decades, our home State, the First State, has made great strides in recovering species like the horseshoe crab, the Del-MarVa fox squirrel, the red knot, and the piping plover. Few people understand this better than one of our witnesses today, Collin O'Mara, who is our former Secretary of the Department of Natural Resources and Environmental Control.

A warm welcome, Collin.

That success in Delaware was made possible by working side by side with the Fish and Wildlife Service and other partners. The concern that some have raised with the Recovering America's Wildlife Act, as drafted, is that it may not sufficiently support this important teamwork, but we will get into that later.

In a recent visit to Prime Hook National Wildlife Refuge in the southern part of our State, I learned that the northeast region of the Fish and Wildlife Service is spearheading an effort amongst, I think 10 States, including Delaware, to prevent the saltmarsh sparrow from reaching the brink of extinction.

In addition to playing this important coordinating role for proactive wildlife conservation, the Fish and Wildlife Service leads efforts for recovering our Nation's threatened and endangered species. That is the kind of critical work done by Federal agencies that needs our support, and I hope to find a way forward for this legislation to do just that.

Let's keep in mind that private landowners also play a central role in species conservation and species recovery. We need to ensure that the Recovering America's Wildlife Act properly recognizes and supports their contributions, as well.

Our Committee has spent a considerable amount of time over the last several years hearing from numerous experts from all across the country about wildlife management and the challenges that it faces. One common theme emerged from all those hearings and conversations, and here it is: All of the entities involved in wildlife conservation need increased financial resources to be successful.

So while we should absolutely address the funding needs of our States and Tribes, we cannot afford to ignore the legitimate needs of our Federal agencies and other partners.

Last, as our Committee contemplates all of these funding needs, we should also contemplate funding sources. The Recovering America's Wildlife Act proposes nearly \$14 billion in investment, and as drafted, the legislation identifies a funding source that may not be reliable or fully pay for the bill's spending.

As our colleagues have oftentimes heard me say, things that are worth having are worth paying for. This wildlife funding legislation is definitely worth having and worth paying for.

Again, we look forward to hearing from our colleagues and our witnesses today, and we look forward to working together toward our common goal of recovering America's wildlife.

With that, I am privileged to turn to our Ranking Member, Senator Capito, for any comments that she would like to make.

Senator Capito.

**OPENING STATEMENT OF HON. SHELLEY MOORE CAPITO,
U.S. SENATOR FROM THE STATE OF WEST VIRGINIA**

Senator CAPITO. Thank you, Senator Carper, for calling today's hearing.

I want to thank Senators Heinrich and Blunt for attending, along with our witnesses, and I look forward to hearing from each of you.

I appreciate that the Association of Zoos and Aquariums is represented today. Just recently, I toured the Oglebay Good Zoo in Wheeling, West Virginia, which is accredited by the AZA. The Good Zoo houses 20 species; I didn't realize this until I actually saw it with my own eyes, the Good Zoo houses 20 species that are deemed rare or endangered, and its staff is doing valuable work on research to inform conservation of these animals.

Speaking of zoos, here in Washington, the Administration and—did you get that? OK.

[Laughter.]

Senator CAPITO. The Administration and Congress should pursue bipartisan policies to preserve our Nation's public lands, wildlife, and ecosystems. Our environment, our natural resources, and access for sportsmen are legacies we have been entrusted with safeguarding for future generations of Americans. So today's hearing is focused on the legislation that has been introduced by Senators Heinrich and Blunt, the Recovering America's Wildlife Act, and I thank them for their advocacy.

The bill has broad support from both sides of the aisle, as well as support from the stakeholder community, including hunters and anglers, conservation organizations, and industry. I am eager to learn more about the legislation through today's hearing. As I understand it, the goal of Recovering America's Wildlife Act is to provide funding to States to cover conservation efforts that will recover species as well as prevent listing additional species under the Endangered Species Act.

As part of this discussion today, I want to emphasize for me the importance of State driven conservation. Conservation is most effective when led by State and local entities in cooperation with voluntary efforts by private landowners. These are the people that

know their habitats, their communities, and their local economies the best. Recovering America's Wildlife Act provides each State with the flexibility to tailor their conservation strategies to meet its specific needs.

West Virginia is home to 1,233 species of greatest conservation need. I don't know if I am included in one of those, but I might be. [Laughter.]

Senator CAPITO. With State driven efforts, the unique needs of each of these species can be addressed through conservation efforts that will help recover declining populations. As I do when I evaluate legislation under consideration by this Committee, my focus will continue to be providing States with the flexibility to address their unique needs and circumstances.

As introduced, the Recovering America's Wildlife Act relies on revenue collected from environmental related violations and enforcement actions to help address its cost. As I understand it, the bill will result in \$14 billion in direct, mandatory spending over a 10 year period. I think this is an issue, and Senator Carper mentioned this, that we need to consider against the background of the growth of our debt and deficit during this pandemic, and in light of the \$4 trillion package that has been recently introduced and is under consideration.

We also need to consider how effective any new conservation efforts will be if the Administration continues to pursue its rollback of sensible ESA regulations, which may serve to actually undermine investments in conservation.

In particular, I am deeply concerned with Fish and Wildlife's revisiting of changes made to the implementation of ESA under the previous Administration. These rollbacks will set us back in achieving our conservation goals by increasing costs and burdens of doing the right thing: Specifically, the decision to rescind the 2020 regulation defining the term habitat for purposes of designating critical habitat under ESA. Leaving habitat undefined creates uncertainty for private landowners on whom species recovery absolutely depends. In any discussion of conservation, I think it is important to address common sense reforms for ESA.

Cooperation with States and landowners is key for species recovery. Under the ESA, we should ensure that we balance the interests of Americans and their livelihoods with protecting species facing population declines.

I look forward to the discussion today on proactive wildlife and habitat conservation solutions. I thank you again for holding this hearing, and I thank my fellow Senators for being with us today.

Senator CARPER. Thank you, Senator Capito.

As we turn to our witnesses, we are fortunate to have the prime sponsors of the legislation before us: Senator Martin Heinrich from New Mexico, and Senator Roy Blunt, Senator from the State of Missouri.

We are delighted that you could be with us today. Thank you.

I think, Martin, we would like to hear from you first, so feel free to lead us off. Thank you.

**STATEMENT OF HON. MARTIN HEINRICH,
U.S. SENATOR FROM THE STATE OF NEW MEXICO**

Senator HEINRICH. Chairman Carper, Ranking Member Capito, and distinguished members of this Committee, thank you for allowing me to share a few words about the Recovering America's Wildlife Act, or RAWA.

I have been very proud to team up with my Republican colleague from Missouri, Senator Roy Blunt, on this bipartisan legislation, and I am grateful for the support of the 16 Republican and 16 Democratic co-sponsors, including many members of this Committee, as well as the support from the Administration on this issue, including their testimony in support of the House version of this legislation.

RAWA would establish a robust and reliable Federal funding stream for collaborative, proactive, voluntary, on the ground conservation work. Consistent funding support has long been the missing piece in scaling up the type of recovery projects that have proven effective in recovering wildlife and plant species to healthy levels.

We are just coming off of elk season in New Mexico, and I am happy to say that my freezer is full. But elk were extinct in New Mexico just a century ago. It is thanks to previous generations of conservationists, sportsmen, and sportswomen, that I have the privilege of interacting with this amazing and beautiful animal.

I am indebted to people like Aldo Leopold, Elliot Barker, and Federal, State, and tribal leaders whose actions led to the restoration of elk, mule deer, and pronghorn populations in my home State and species like wild turkey and waterfowl and white tailed deer all across our Nation.

The abundance of many species that we hunt and fish today is the direct result of collaborative work inspired by those previous generations of Americans and financed by bedrock conservation laws like Pittman-Robertson and Dingell-Johnson. Yet despite the incredible successes of these programs, particularly with game species and sportfish, and the successes of the Endangered Species Act in preventing hundreds of species from going extinct, it has been clear for decades that too many species are still declining or even headed toward extinction.

Without enough resources, our State and tribal wildlife agencies have been forced to pick and choose which species are worthy of their attention. As a result, more than 12,000 species are currently identified as species of greatest conservation need.

We have a once in a generation opportunity to change this paradigm and save thousands of species with a solution that matches the magnitude of the challenge. The Recovering America's Wildlife Act offers us a path forward. RAWA will fuel locally driven, science based projects that will restore healthy fish and wildlife habitat and robust wildlife populations.

These projects will create substantial economic benefits, including good paying jobs in rural communities. They will preserve outdoor recreation activities like hunting and fishing and wildlife viewing that support literally millions of additional jobs across our country, and they will save the Federal Government and the pri-

vate sector tens of billions of dollars by saving species before they need emergency room measures just to survive.

Before I finish, I want to emphasize just how bipartisan this issue is. This Committee has proven that we can still pass bipartisan conservation provisions within the Infrastructure Investment and Jobs Act, the American Conservation Enhancement Act, and the Water Resources Development Act.

Last year, many of us here helped to pass the historic Great American Outdoors Act into law, which is already helping us tackle the longstanding infrastructure backlog in our national parks and on our public lands. As one of the most important wildlife bills in decades, the Recovering America's Wildlife Act will allow us to make similar historic progress on species recovery and wildlife habitat.

I am proud of the coalition of sportsmen and sportswomen, conservationists, scientists, States, Tribes, and wildlife advocates who are calling on Congress to pass RAWA. I have letters of support that I would like to submit for the record representing all 50 States, numerous Tribes, and nearly 2,000 organizations across the country, such as the National Wildlife Federation, Ducks Unlimited, the Boone and Crockett Club, the Congressional Sportsmen's Foundation, NRDC, the Audubon Society, and The Nature Conservancy.

Senator CARPER. Without objection.

[The referenced information follows:]

American Bird Conservancy * Bat Conservation International
Environment America * Environment California * Environmental Defense Fund
League of Conservation Voters * National Audubon Society
National Parks Conservation Association * National Wildlife Federation
Natural Resources Defense Council * Sierra Club
The Nature Conservancy * Wildlands Network * World Wildlife Fund

June 30, 2021

The Honorable Charles Schumer
 Majority Leader
 U.S. Senate
 Washington, D.C. 20510

The Honorable Nancy Pelosi
 Speaker
 U.S. House of Representatives
 Washington, D.C. 20515

The Honorable Mitch McConnell
 Minority Leader
 U.S. Senate
 Washington, D.C. 20510

The Honorable Kevin McCarthy
 Minority Leader
 U.S. House of Representatives
 Washington, D.C. 20515

Dear Majority Leader Schumer, Minority Leader McConnell, Speaker Pelosi, and Minority Leader McCarthy:

It is time to get state, territorial and tribal wildlife managers the resources they need to realize their full potential to conserve wildlife and habitat by enacting into law the Recovering America's Wildlife Act.

In the late 1990s, leaders in the environmental community came together with leaders of state wildlife agencies to discuss strategies to address the looming wildlife crisis by leveraging the resources and expertise of the states to fulfil their role in restoring the full diversity of America's wildlife populations. Ten years later, the federal State and Tribal Wildlife Grant Programs were born out of that collaboration, and led to the creation and continuous improvement of state and territorial Wildlife Action Plans, and improvements in tribal wildlife plans, programs and projects.

On the 20th anniversary of these groundbreaking programs, they continue to play a critical role in what must be a comprehensive response to the ongoing biodiversity crisis, as the [20 year program review](#) highlights. Unfortunately, funding for State and Tribal Wildlife Grants has been extremely limited since Congress mandated these programs in 2000 and 2001 at the request of the environmental and conservation community. Funding currently stands at approximately \$66 million for all states and territories, and approximately \$4 million spread across all 574 federally recognized tribes. This falls far short of the \$1.87 billion the states and territories estimate it will cost to implement their plans each year. It also falls short of the nearly \$100 million tribes are requesting to help them address their wildlife management needs, money which will contribute to offsetting the chronic and damaging underfunding tribes experience across the board.

The current model of funding is also unpredictable, limiting the ability to undertake multi-year projects needed to reverse declines in wildlife. The bald eagle needed decades of state by state effort by federal and state agencies and many partners to achieve a phenomenal success - an increase from

417 to 71,400 estimated nesting pairs, removal from the endangered species list, and reliable and popular sightings in many parts of the country.

Since 2000, the crises facing wildlife have worsened considerably, exacerbated by climate change, evolving threats ranging from toxins to diseases, and a growing human population and footprint. States, territories, and tribes have stepped up to help address these challenges and are too central to wildlife and habitat conservation in the United States to be left out of the response to the biodiversity crisis if it is to have any chance of success.

States, territories, and tribes are essential to efforts to recover endangered and threatened species, but are uniquely capable of contributing upstream solutions that keep species from declining to the point of endangerment. However, they need far more resources to be effective at reducing the number of species and populations that warrant listing as endangered or threatened. Funding the labor-intensive work of restoring wildlife populations and habitat would also make a significant contribution to creating jobs tribes, communities, and the country need to recover from the COVID-19 pandemic. The solution is to provide permanent funding at a level to meet the task.

We urge you to pass the Recovering America's Wildlife Act this Congress. This action will commit \$1.3 billion annually to implement state and territorial wildlife action plans, and \$97.5 million annually to Tribal wildlife programs. This will provide the resources needed to maintain the species of greatest conservation need in each state and region of the country. The bill ensures at least 15% of the funding - \$215 million – will go toward recovering species listed under the Endangered Species Act. It also funds and incentivizes the conservation of imperiled plants.

We also urge you to dramatically increase funding for federal biodiversity programs. Our support for funding wildlife conservation by states, territories, and tribes is complementary to our unwavering support for the fundamental role federal agencies play in wildlife and biodiversity conservation – including maintaining federal trust species such as endangered and threatened species, migratory birds, and bald and golden eagles, and species on federal lands.

We urge Congress to increase funding for federal biodiversity programs across the board, including the Endangered Species Act, federal land wildlife and plant programs, and other federal conservation programs such as the North American Bird Conservation Initiative and Migratory Bird Joint Ventures. This can be accomplished as part of a multi-year economic stimulus, infrastructure, or similar bill, as well as through separate stand-alone bills, and increases in annual appropriations. We stand ready to assist as these policy deliberations continue.

Thank you for considering these calls for a robust response to the wildlife and biodiversity crises.

American Bird Conservancy
Bat Conservation International
Environment America
Environment California
Environmental Defense Fund
League of Conservation Voters
National Audubon Society

National Parks Conservation Association
National Wildlife Federation
Natural Resources Defense Council
Sierra Club
The Nature Conservancy
Wildlands Network
World Wildlife Fund



October 26, 2021

Dear Members of the U.S. Senate,

Our coalition of diverse organizations, businesses, professional societies, state fish and wildlife agencies, and tribal nations collectively represent millions of Americans. We are writing to respectfully **request your cosponsorship of the *Recovering America's Wildlife Act (S.2372)* introduced by Sens. Heinrich (D-NM) and Blunt (R-MO) in the 117th Congress.**

The *Recovering America's Wildlife Act* would help recover and conserve species at risk by investing \$1.3 billion annually for states and \$97.5 million for tribal nations for on-the-ground conservation projects. The legislation funds the implementation of the congressionally mandated State Wildlife Action Plans, which outline specific, science-based conservation actions necessary to recover and sustain healthy fish and wildlife populations. Similarly, Indian Tribes will be able to expand successful conservation efforts on their lands, which provide vital habitat for hundreds of fish and wildlife species, including more than 500 species that are listed as threatened or endangered. It also will support much needed investments in continued economic growth and job creation in Tribal communities. **The *Recovering America's Wildlife Act* would be the only federal conservation program that guarantees sustained funding to Indian Tribes and state agencies for the proactive conservation of at-risk species.**

This legislation represents a smart, future focused investment that will play a key role in addressing the economic crisis facing the country. The bill will create a significant number of jobs, help continue to grow the outdoor economy, and bring support to key sectors such as agriculture and forestry – all while supporting the conservation of America's fish, wildlife, and habitats. The Senate bill identifies a source of funding for the legislation to come from environmental fines and penalties that would not otherwise be allocated for a specific purpose. This common-sense, fiscally responsible solution has **28 bipartisan Senate cosponsors and more than 130 cosponsors on the House bill (H.R.2773) introduced by Reps. Dingell (D-MI) and Fortenberry (R-NE).**

One-third of the fish and wildlife species in the United States are at risk of becoming threatened or endangered. The challenges facing our nation's fish and wildlife are daunting, but this legislation provides a solution. The *Recovering America's Wildlife Act* will provide state fish and wildlife agencies and Indian Tribes with dependable, dedicated resources to address more than 12,000 species in need of proactive, voluntary conservation before a listing as endangered or threatened under the Endangered Species Act is warranted.

Taking measures to restore species before they are on the brink of extinction and ensuring healthy populations will help save taxpayer dollars and prevent these species from needing costly "emergency room" measures under the Endangered Species Act – truly an ounce of prevention is worth a pound of

cure. Rather than defaulting to regulation and litigation, this bill saves America's imperiled wildlife through collaborative and constructive voluntary partnerships. This collaborative approach to conservation is good for wildlife, good for taxpayers, good for landowners, and good for business. Further, this bill builds on the successful restoration track records of the state fish and wildlife agencies which for more than eight decades have actively managed many game species from the brink of extinction and restored them to sustainable populations across vast landscapes through the dependable, dedicated resources of the Pittman-Robertson Wildlife Restoration Program and the Dingell-Johnson/Wallop-Breaux Sport Fish Restoration and Boating Safety Trust Fund.

Increasingly, Americans from all walks of life have turned to the outdoors for physical and mental well-being during this pandemic. Creating thousands of jobs immediately, restoring natural resources infrastructure, increasing access to the outdoors, and reducing long-term costs through enactment of the *Recovering America's Wildlife Act* will serve to unify Americans and elected officials that represent these diverse constituencies.

Thank you for your consideration of our request to join this effort by becoming a cosponsor of the *Recovering America's Wildlife Act*. To sign on as a cosponsor or for any questions on the legislation, please contact Casey Suchors-Field (Casey_Suchors-Field@heinrich.senate.gov) in Senator Heinrich's office or Andrew Vlasaty (Andrew_Vlasaty@blunt.senate.gov) in Senator Blunt's office.

We thank you for your support of America's fish and wildlife and look forward to working with you to enact this groundbreaking legislation.

Sincerely,

Applegate Wildlife Pond	Arkansas Chapter, Backcountry Hunters & Anglers
Allamakee County Protectors - Education Campaign	Association of Fish and Wildlife Agencies
American Fisheries Society	Association of Northwest Steelheaders
American Sportfishing Association	Athens Fish and Game Club
American Woodcock Society	Audubon California
Anding Environmental	Audubon Connecticut
Applegate Partnership & Watershed Council	Audubon Great Lakes
Archery Trade Association	Audubon Louisiana
Arizona Chapter, Backcountry Hunters & Anglers	Audubon Mid-Atlantic
Arizona Wilderness Brewing Company	Audubon Minnesota
	Audubon Mississippi

Audubon Nebraska	Bird Watcher's Digest
Audubon New York	Black River Audubon Society
Audubon Rockies	Black Swamp Bird Observatory
Audubon Society Mahoning Valley	Blue Ridge Audubon Chapter
Audubon Society of Ohio	Boone County Conservation Board
Audubon Society of Omaha	Bronx River - Sound Shore Audubon Society
Audubon Society of Rhode Island	Brukner Nature Center
Audubon Southwest	Bucks County Audubon Society
Audubon Texas	Buffalo Nations Grasslands Alliance
Audubon Vermont	Button Brew House
Audubon Washington	Cabela's
Austin Chapter 10, Izaak Walton League of America	California Chapter, Backcountry Hunters & Anglers
Austin Science Advocates	California Invasive Plant Council
Backcountry Hunters & Anglers	Camp Fire Central Oregon
Ballard Kayak	Canton Audubon Society
Barry Conservation District	Capital Chapter, Backcountry Hunters & Anglers
Bass Pro Shops	Captina Conservancy
Bat Conservation International	Castleton University Collegiate Club, Backcountry Hunters & Anglers
Bay Mills Indian Community	Central Oregon LandWatch
Bayou Land Conservancy	Central Westchester Audubon Society
Bedford Audubon Society	Chemung Valley Audubon Society
Bexar Audubon Society	Chesapeake Conservancy
Big Bay Sportsmen Club	Choctaw Nation of Oklahoma Environmental Protection Office
Biotope Forestry	Cibolo Center for Conservation
Bird Conservancy of the Rockies	

Cincinnati Zoo and Botanical Garden	Desert Botanical Garden
Coalition of Ohio Land Trusts	Doan Brook Watershed Partnership
Colorado Chapter, Backcountry Hunters & Anglers	Downeast Salmon Federation
Columbia Slough Watershed Council	Ducks Unlimited
Columbus and Franklin County Metro Parks	Eastern Band of Cherokee Indians
Confederated Salish & Kootenai Tribes (CSKT)	Eastern Shore of Virginia Birding and Wildlife Programs, Inc.
Congressional Sportsmen's Foundation	El Paso Cactus and Rock Club
Connecticut Audubon Society	Elakha Alliance
Connecticut Land Conservation Council	Environment America
Connecticut Ornithology Association	Environment Council of Rhode Island
Conservation Community Consulting, LLC	Environmental Collaborative
Conservation Council for Hawaii	Erie MetroParks
Conservation Federation of Missouri	Fin and Fur Films
Conservation NW	First Unitarian Universalist Society of Marietta, Green Sanctuary Committee
Coquille Watershed Association	Flathead Audubon Society
Cornell Lab of Ornithology	Florida Chapter, Backcountry Hunters & Anglers
Council of Ohio Audubon Chapters	Florida Division, Izaak Walton League of America
Creekside at Beth Page Homeowner Association Garden Club	Fort Worth Audubon Society
Dakota Chapter of the American Fisheries Society	Fort Worth Zoo
Dallas Safari Club	Fossil Rim Wildlife Center
Darke County Parks	Foundation for PA Watersheds
Delaware Audubon	Four Harbors Audubon Society
Delaware-Otsego Audubon Soc. (NY)	Freeport Wild Bird Supply
Delta Waterfowl	

Freshwater Mollusk Conservation Society	Idaho Chapter, Backcountry Hunters & Anglers
Friends of the Fort Worth Nature Center & Refuge	Illinois Chapter of The Wildlife Society
Friends of the Rio Bosque	Illinois Chapter, Backcountry Hunters & Anglers
Geauga Park District	Illinois Division, Izaak Walton League of America
Genesee Valley Audubon Society	Indiana Chapter of The Wildlife Society
Georgia Audubon	Indiana Wildlife Federation
Georgia Chapter, Backcountry Hunters & Anglers	Innovative Wildlife Management Services, LLC
Georgia Ornithological Society	International Hunter Education Association - USA
Governor's Island	International Raptor and Falconry Center
Grand Valley State University	Iowa Audubon
Great South Bay Audubon Society	Iowa Wildlife Foundation
Greater Akron Audubon Society	Iowa Wildlife Center
Greater Edwards Aquifer Alliance	Iowa Wildlife Federation
Gulf Coast Bird Observatory	Izaak Walton League of America
Hawaii Department of Land and Natural Resources	JMS Natural Resource Strategies, LLC
Hawk Mountain Sanctuary Association, Kempton, PA	Kansas Chapter, Backcountry Hunters & Anglers
Haystack Rock Awareness Program (HRAP) at the City of Cannon Beach	Katy Prairie Conservancy
Hill Country Alliance	Kemp Design Services
Hill Country Conservancy	Kemp Outside
Horse & Dragon Brewing Company	Kennebunkport Climate Initiative
Houston Safari Club	Kentucky Chapter of The Wildlife Society
Houston Wilderness	Kentucky Chapter, Backcountry Hunters & Anglers
Huntington-Oyster Bay Audubon Society	

Klamath Watershed Partnership	Midwest Biodiversity Institute
Kootenai Tribe of Idaho	Minnesota Chapter, Backcountry Hunters & Anglers
Lake Erie Islands Conservancy	Minnesota Division, Izaak Walton League of America
Litchfield Hills Audubon Society	Mississippi Wildlife Federation
Local Ocean Seafoods	Missouri Breaks Chapter of the National Audubon Society
Lower Brule Sioux Tribe	Missouri Chapter, Backcountry Hunters & Anglers
Lucas County Conservation Board	Montana Audubon
Maine Audubon	Montana Wildlife Federation
Maine Chapter of The Wildlife Society	Montmorency County Conservation Club (Michigan)
Maine Coast Heritage Trust	MotoSonora Brewing Company
Maine Outdoors	Mule Deer Foundation
Maine Professional Guides Association	National Association of State Foresters
Maryland Biodiversity Project	National Audubon Society
Marys River Watershed Council	National Deer Association
Maverick Ranch-Fromme Farm	National Wild Turkey Federation
McKenzie River Trust	National Wildlife Federation
Mecklenburg Audubon Society	Native American Fish and Wildlife Society
Medina County Park District	Native Plant Conservation Campaign
MEEC	Natural Areas Association
Menunkatuck Audubon Society	NatureServe
Mesilla Valley Audubon Society	Navajo Nation Department of Fish and Wildlife
Miami County OH Pheasants Forever (676)	Nebraska Chapter of The Wildlife Society
Michigan Chapter, Backcountry Hunters & Anglers	
Michigan United Conservation Clubs	
Middle River Group, LLC	

Nebraska Division, Izaak Walton League of America	North Carolina State University Collegiate Club, Backcountry Hunters & Anglers
Nebraska Invasive Species Program	North Carolina Wildlife Federation
Neilkelly	North Central Section of The Wildlife Society
New England Chapter, Backcountry Hunters & Anglers	North Dakota Chapter, Backcountry Hunters & Anglers
New Hampshire Audubon	North Dakota Natural Resources Trust
New Hope Audubon Society	North Shore Audubon Society
New Jersey Audubon	Northeast Section, The Wildlife Society
New Jersey Chapter, Backcountry Hunters & Anglers	Northern Arizona Audubon Society
New Leaf	Northern Catskills Audubon Society
New Mexico Audubon Council	Northern New York Audubon Society
New Mexico Chapter of the Wildlife Society	Northwest Connecticut Sportsman's Council
New Mexico Chapter, Backcountry Hunters & Anglers	Ohio Bird Sanctuary
New Mexico Wildlife Federation	Ohio Biological Survey
New York Chapter, Backcountry Hunters & Anglers	Ohio Conservation Federation
New York City Audubon	Ohio Partners in Amphibian and Reptile Conservation
North American Falconers Association	Ohio Wildlife Rehabilitators Association
North American Invasive Species Management Association	Onondaga Audubon
North Carolina Bat Working Group	Orange County Audubon Society
North Carolina Chapter of The Wildlife Society	Oregon Association of Conservation Districts
North Carolina Chapter, Backcountry Hunters & Anglers	Oregon Biodiversity Information Center
North Carolina Prescribed Fire Council	Oregon Chapter of The Wildlife Society
	Oregon Chapter, Backcountry Hunters & Anglers
	Oregon Division, Izaak Walton League
	Oregon State University

Oregon Timber Trail Alliance	Rob and Bessie Welder Wildlife Foundation
Oregon Wildlife Foundation	Ruffed Grouse Society
Oregon Zoo	Salem Audubon Society
Orono Land Trust	San Bernardino Valley Audubon Society
Outdoor Industry Association	San Marcos River Foundation
PDXWildlife	Sangre de Cristo Audubon Society
Pease Environmental Consulting	Shaker Lakes Regional Nature Center
Pennsylvania Biological Survey	Sierra Club Moshannon Group
Pennsylvania Chapter of The Wildlife Society	Simple Machine Brewing Company
Pennsylvania Chapter, Backcountry Hunters & Anglers	Sinagua Malt, Inc.
Pennsylvania Division, Izaak Walton League of America	Sister of Mercy
Pennsylvania Federation of Sportsmen & Conservationists	Skagit Audubon Society
People of Color Outdoors	Sonoran Audubon Society
Pheasants Forever	South Dakota Chapter of The Wildlife Society
Pines and Prairies Land Trust	South Dakota Chapter, Backcountry Hunters & Anglers
Point Blue Conservation Science	South Dakota Wildlife Federation
Protect Geauga Parks	South Santiam Watershed Council
Put-in-Bay Township Park District	South Shore Audubon Society
Quail Forever	Southeast Chapter, Backcountry Hunters & Anglers
Rainier Audubon Society	Southeastern Bat Diversity Network
Red River Brewing Company & Distillery	Southern Appalachian Highlands Conservancy
Redband Resources, LLC	Southwest Section of the Wildlife Society
REI Co-op	Sportsmen for the Boundary Waters
RI Forest Conservator's Organization, Inc. (RIFCO)	Stag Hollow Wines LLC

Standing Rock Game and Fish Department	The Lands Council
Stocking Savvy	The Mid-Atlantic Center for Herpetology and Conservation
SUNY ESF Roosevelt Wildlife Station	The Nature Conservancy
Susquehannock Wildlife Society, Inc.	The Ohio Environmental Council Action Fund
Sustainable Northwest	The Ohio State University
Tecumseh Land Trust	The Strategic Stewardship Initiative
Tennessee Chapter, Backcountry Hunters & Anglers	The Trust for Public Land
Tennessee Wildlife Federation	The Wildlife Society
Terrestrial Wildlife Ecology Lab, Ohio State University	The Wildlife Society - College and University Education Working Group
Terwilliger Consulting Inc.	The Wilds
Texas Alliance for America's Fish and Wildlife	Theodore Roosevelt Conservation Partnership
Texas Chapter of the American Fisheries Society	Think Wild Central Oregon
Texas Chapter of the Wildlife Society	Three Oaks Engineering
Texas Chapter, Backcountry Hunters & Anglers	Toledo Zoo & Aquarium
Texas Conservation Alliance	Travis Audubon Society, Inc.
Texas Foundation for Conservation	Trout Unlimited
Texas Land Trust Council	Tucson Audubon Society
Texas Wildlife Association	U.P. Whitetails of Marquette County Inc.
The Conservation Angler	UConn Natural Resources Conservation Academy
The Conservation Fund	University of Massachusetts Collegiate Club, Backcountry Hunters & Anglers
The Delaware County Bird Club	University of Wisconsin-Stevens Point Collegiate Club, Backcountry Hunters & Anglers
The Lake Erie Islands Nature and Wildlife Center	US Shorebird Conservation Council

Valleys of the Rogue Watershed Council	Wild in Vermont
Virginia Chapter of The Wildlife Society	Wild Oceans
Virginia Conservation Network	Wildlife & Outdoor Recreation Foundation
Virginia Division, Izaak Walton League of America	Wildlife Ecology Institute
Virginia Eastern Shore Land Trust	Wildlife Habitat Council
Virginia Society of Ornithology	Wildlife Management Institute
Wachiska Audubon Society	Willistown Conservation Trust
Wake Audubon Society	Wisconsin Division, Izaak Walton League of America
Washington Chapter, Backcountry Hunters & Anglers	White River Marine Group
Washington State University Collegiate Club, Backcountry Hunters & Anglers	World Wildlife Fund
WaterWatch	Xerces Society for Invertebrate Conservation
Weed Science Society of America	
West Virginia Chapter, Backcountry Hunters & Anglers	
West Virginia Division, Izaak Walton League of America	
West Virginia Rivers Coalition	
Western Pennsylvania Conservancy	
Western Reserve Land Conservancy	

Senator HEINRICH. I will close by saying that I want my grandchildren to experience the same wonder I had as a child catching leopard frogs, watching fireflies light up the dark. And I hope that we can pass onto them the full complement of our natural heritage, from bison to bumblebees, as well as traditions like hunting, fishing, and wildlife viewing. That is what this is all about.

Thank you, Chairman.

[The prepared statement of Senator Heinrich follows:]

**Statement of Senator Martin Heinrich
Recovering America's Wildlife Act Hearing
Senate Environment and Public Works Committee
December 8, 2021**

Chairman Carper, Ranking Member Capito, and distinguished members of this Committee:

Thank you for allowing me to share a few words about the Recovering America's Wildlife Act—or RAWA for short.

I've been proud to team up with my Republican colleague from Missouri, Senator Roy Blunt, on this bipartisan legislation.

And I'm grateful for the support of the 16 Republican and 16 Democratic co-sponsors, including many members of this Committee, as well as the support from the administration on this issue, including their testimony in support of the House version of this legislation.

RAWA would establish a robust and reliable federal funding stream for collaborative, proactive, voluntary, on-the-ground conservation work.

Consistent funding support has long been the missing piece in scaling up the type of recovery projects that have proven effective recovering wildlife and plant species to healthy levels.

We're just coming off of elk season in New Mexico, and my freezer is full.

But elk were extinct in New Mexico a century ago.

It is thanks to previous generations of conservationists and sportsmen and women that I have the privilege of interacting with this amazing and beautiful animal.

I am indebted to people like Aldo Leopold, Elliot Barker, and federal, state, Tribal leaders whose actions led to the restoration of elk, mule deer and pronghorn populations in New Mexico and species like wild turkey, waterfowl, and white-tailed deer all across America.

The abundance of many species that we hunt and fish today is the direct result of collaborative work inspired by those previous generations of Americans and financed by bedrock conservation laws like Pittman-Robertson and Dingell-Johnson.

Yet despite the incredible successes of these programs, particularly with game species and sportfish, and the successes of the Endangered Species Act in preventing hundreds of species from going extinct, it's been clear for decades that too many species are still declining or even heading towards extinction.

Without enough resources, our state, local, and Tribal wildlife agencies have been forced to pick and choose which species are worthy of their attention.

And as a result, more than 12,000 species are currently identified as species of greatest conservation need.

We have a once-in-a-generation opportunity to change this paradigm and save thousands of species with a solution that matches the magnitude of the challenge.

The Recovering America's Wildlife Act offers us a path forward.

RAWA will fuel locally-driven, science-based projects that will restore healthy fish and wildlife habitat and robust wildlife populations.

These projects will create substantial economic benefits, including good-paying jobs in rural communities.

They will preserve outdoor recreation activities like hunting, fishing, and wildlife viewing that support millions of additional jobs all across our country.

And they will save the federal government and the private sector tens of billions of dollars by saving species before they need "emergency room" measures to survive.

Before I finish, I want to emphasize that this is not a partisan issue.

This committee has proven that we can still pass bipartisan conservation provisions within the Infrastructure Investment and Jobs Act, in the American Conservation Enhancement Act, and in the Water Resources Development Act.

Last year, many of us here helped to pass the historic Great American Outdoors Act into law, which is already helping us tackle the longstanding infrastructure backlog at our national parks and public lands.

As one of the most important wildlife bills in decades, the Recovering America's Wildlife Act will allow us to make similar historic progress on species recovery and wildlife habitat.

I'm proud of the coalition of sportsmen and sportswomen, conservationists, scientists, states, Tribes, and wildlife advocates who are calling on Congress to pass RAWA.

I have letters of support that I would like to submit for the record representing all fifty states, Tribes, and nearly 2,000 organizations across the country, such as the National Wildlife Federation, Ducks Unlimited, the Boone and Crockett Club, the Congressional Sportsmen's Foundation, NRDC, the Audubon Society, and the Nature Conservancy.

I'll close by saying that I want my grandchildren to experience the same wonder I had as a child catching leopard frogs and watching fireflies light up the dark.

I hope we can pass on to them the full complement of our natural heritage—from bison to bumblebees—as well as traditions like hunting, fishing, and wildlife viewing.

That's what this is all about.

Thank you.

Senator CARPER. Thank you very, very much for your testimony. Thanks for your passion for this and your leadership, not just on this issue, but on so many others we have worked on in recent years. Thank you.

Senator, you mentioned what you want for your grandchildren. My wife and I just want one grandchildren.

[Laughter.]

Senator CARPER. We will worry about the rest later.

Senator Blunt, you are recognized.

**STATEMENT OF HON. ROY BLUNT,
U.S. SENATOR FROM THE STATE OF MISSOURI**

Senator BLUNT. Thank you, Chairman Carper, and thank you and Ranking Member Capito for not only holding the hearing, but for inviting the two of us to attend as you look at this piece of legislation.

I also want to thank my colleague, Senator Heinrich, who really has worked so hard to advance this and to be sure that we had a significant group of bipartisan co-sponsors, 32 bipartisan co-sponsors. Senator Heinrich has really worked hard to put this together. We have worked hard to find a pay for we believe works. We have also worked to be sure that we had broad based support from all 50 States, including the conservation agencies in those States.

This legislation, as Martin has said, would be the most significant investment in wildlife conservation in a generation. It would fund proactive, voluntary conservation efforts to address really what is the Nation's wildlife crisis. I also think it is a perfect partner to what we did in the last Congress, as we look toward the future of restoring America's great parks system.

Enactment of this legislation into law would boost our economy, create more outdoor recreation opportunities, provide regulatory certainty to landowners across the country who otherwise are facing costly and burdensome impacts of potential threatened and endangered species listings, and conserve our national heritage for future generations.

A significant part of the goal here is to work with these State agencies so the Federal Government never has to be involved in an endangered species situation, as they work hard to do what they can to be sure that they never get into that situation.

I am also pleased to introduce one of the panel's witnesses today, Ms. Sara Parker Pauley, who is testifying on behalf of the Association of Fish and Wildlife Agencies. This is a group she served as the organization's President up until just September of this year. She currently serves as the ninth director of the Missouri Department of Conservation, a position she has held since November 2016.

Before that, she served as the Director of the Missouri Department of Natural Resources from 2010 to 2016. She began her professional career as a Policy Analyst in the Missouri Department of Conservation in 1993. A native of Columbia, Missouri, Sara received both her law degree and her bachelor's degree in journalism from the University of Missouri and did post-graduate studies in Australia as a Rotary Fellow.

Just last month, she and I did four joint events in Missouri highlighting the recovery potential of this Recovering America's Wildlife Act. This act establishes a new program, the Wildlife Conservation and Restoration Program within the U.S. Fish and Wildlife Service to promote voluntary conservation efforts to restore and protect at risk, threatened, or endangered species.

This program would provide approximately \$1.3 billion annually to States, territories, and Tribes for activities related to proactive and collaborative habitat restoration efforts to increase wildlife populations or to prevent species from becoming listed on the Endangered Species Act.

This bill would help fund critical conservation efforts in our State and our grasslands. It would help promote species like the bobwhite quail, which were pretty numerous when I was growing up in Missouri, but have almost disappeared from our landscape; meadow larks; and greater prairie chickens. The restoration efforts that Sara and others have been parts of, including everything from restoring animals who, at one time, were very present in our State, to the support of species like wood ducks and other migratory animals that come through our State, animals and birds.

This legislation would boost Missouri's outdoor recreation economy. Currently, that economy supports 93,000 jobs in our State and contributes about \$7.5 billion to the local economy and depends on healthy fish and wildlife populations. The bill would ensure more wildlife viewing opportunities, which directly contribute to millions of jobs and billions of consumer revenue.

In Missouri, based on the legislative proposal, we estimate that we would receive about \$22 million annually, including the State matching funds. That compares to about \$1 million that the State receives right now.

I haven't seen the entire list on this bill, but normally, on any distribution of money in the country, Missouri is right around 25. We are right in the middle, so every State should look at that \$22 million annual number, and you are going to be somewhere on either side of that. Obviously, \$22 million would make a lot more impact than the \$1 million currently received from the Federal Government for these funds.

I certainly look forward to working with the Chairman, the Ranking Member, and my significant co-sponsor here who has done so much work on this. This bill, as drafted, as Martin has already suggested, has broad bipartisan support in the Senate. It has a diverse group of stakeholders around the country, including the Association of Fish and Wildlife Agencies, the Congressional Sportsmen's Caucus, the National Wildlife Federation, and 1,500 or more organizations representing State fish and wildlife agencies, industry associations, and businesses.

Thank you again for holding this hearing, for looking at this bill. We appreciate the opportunity, all of the co-sponsors do, to continue to work with this Committee as you think about what would really be an exciting addition to what we do for our wildlife in the country.

Thank you, Chairman.

[The prepared statement of Senator Blunt follows:]

**Testimony of Roy Blunt
United States Senator for Missouri
Before the Senate Committee on Environment & Public Works
Hearing on S. 2372, the Recovering America's Wildlife Act
December 8, 2021**

As Prepared For Delivery

Chairman Carper and Ranking Member Capito, thank you for inviting me to participate in today's legislative hearing on critical legislation – S. 2372, the Recovering America's Wildlife Act.

I would also like to thank my colleague, Senator Heinrich, who I have partnered with to advance this legislation along with the 32 other bipartisan co-sponsors of this bill. This legislation would be the most significant investment in wildlife conservation in a generation—it would fund proactive, voluntary conservation efforts to address the nation's wildlife crisis.

Enactment of this legislation into law would boost our economy, create more outdoor recreation opportunities, provide regulatory certainty to landowners across the country facing costly and burdensome impacts to potential threatened and endangered species listings, and conserve our natural heritage for future generations.

Also, I am pleased to introduce one of the panel's witnesses testifying today, who hails from Missouri.

Ms. Sara Parker Pauley is testifying on behalf of the Association of Fish and Wildlife Agencies where she served as the organization's president until September of this year. She currently serves as the ninth director of the Missouri Department of Conservation, a position she has held since November of 2016.

Sara previously served as Director of the Missouri Department of Natural Resources from 2010 to 2016, and began her professional career as a Policy Analyst with the Missouri Department of Conservation from 1993 to 1996. A native of Columbia, Missouri, Sara received both her law degree and bachelor's degree in journalism from the University of Missouri – Columbia, and did post-graduate studies in Australia as a Rotary Fellow.

Just last month, Sara and I held events across the state of Missouri highlighting the Recovering America's Wildlife Act.

The Recovering America's Wildlife Act establishes a new program, the Wildlife Conservation and Restoration Program, within the U.S. Fish and Wildlife Services, to promote voluntary conservation efforts to restore and protect at-risk, threatened, or endangered species.

This new program would provide approximately \$1.3 billion annually to states, territories, and tribes for activities related to proactive and collaborative habitat restoration efforts to increase wildlife populations or prevent species from being listed under the Endangered Species Act.

This bill would help fund critical conservation habitat in Missouri's grasslands to help promote species like the bob-white quail, meadow larks, and greater prairie chickens. It will also help protect and restore wetlands that support species like the wood ducks.

This legislation would boost Missouri's outdoor recreation economy, which supports 93,000 jobs in our state and contributes \$7.4 billion to the local economy, and depends on healthy fish and wildlife populations. The bill would ensure more wildlife viewing opportunities, which directly contributes to millions of jobs and billions in annual consumer spending.

Based upon the legislative proposal, Missouri is estimated to receive \$22 million annually, including the state matching funds, compared to \$1 million the state receives in federal funding under current law.

I look forward to working with the Chairman and Ranking Member on advancing this bill through the Committee.

This bill, as drafted, has broad, bipartisan support in the Senate along with a diverse group of stakeholder support as well, including the Association of Fish & Wildlife Agencies, the Congressional Sportsmen Caucus, the National Wildlife Federation, and 1,500 organizations representing state fish and wildlife agencies, industry associations and businesses, conservation groups, and sportsmen and women. Thank you again and I look forward to working together to advance this important legislation.

Senator CARPER. Thank you both very, very much. Thanks for joining us. We look forward to seeing you at about 11:30 on the floor when we start voting, and thanks again for your leadership.

With that, I am going to call our second panel of witnesses, if they would take their seats. We will introduce you, and we will get started.

Senator Capito and I have welcomed each of you individually, but we welcome you now collectively, and we are delighted that you are able to join us on this important day for this important hearing.

I will just briefly introduce folks, one is Sara Parker Pauley has already gotten an introduction from Senator Blunt, but we are joined today by Dan Ashe, President and CEO of the Association of Zoos and Aquariums.

Dan, very nice to see you. You bring a world of experience to this hearing today.

Collin O'Mara, President and CEO of the National Wildlife Federation, former Secretary of the Department of Natural Resources and Environmental Control and longtime friend of many of us in Delaware.

Sara Parker Pauley, who has already been introduced by Senator Blunt, President of the Association of Fish and Wildlife Agencies, and last but not least, Jonathan Wood, Vice President of Law and Policy for the Property and Environment Research Center.

Dan, I am going to ask you if you will start us off with your testimony. Please proceed with your testimony when you are ready.

**STATEMENT OF DAN ASHE, PRESIDENT AND CEO,
ASSOCIATION OF ZOOS AND AQUARIUMS**

Mr. ASHE. Good morning, Chairman Carper and Committee members. It is good to be here again. On behalf of the Association of Zoos and Aquariums and the Defenders of Wildlife and the National Wildlife Refuge Association, I just want to start by saying thank you for everything you do to protect wildlife and wild places, I think especially the respect and dignity that you bring to these discussions, so thank you very much.

Yesterday, I enjoyed reading Bob Dole's posthumous opinion piece in the Washington Post, and if anybody hasn't seen it, I recommend it. In it, he recalls in 1951, newly elected to the Kansas House of Representatives, being asked by a reporter, what is on his agenda. And he said, "Well, I am going to sit back and watch for a few days, and then I am going to stand up for what I think is right."

When I became U.S. Fish and Wildlife Service Director, a former Director and a good friend, Lynn Greenwalt, gave me some similar advice. He said, "Dan, find time to ponder. Lots of people are going to ask you to make decisions, and they are going to tell you that those decisions are urgent, and sometimes they will be. But most of the time," he said, "it is going to be important for you to find a time and some quiet and ponder."

We are struggling against the planet's sixth mass extinction. It is driven by human existence, our economy, our ecology. It didn't begin yesterday; it won't be solved tomorrow, even if you pass the Recovering America's Wildlife Act today. How you act and the deci-

sions you make are going to set the stage and the tone. It is worth some time to sit back and ponder.

Wildlife conservation is a shared endeavor. It is not individual; it is not State or tribal or Federal. It requires commitment and funding at all of those levels.

My testimony, my written testimony includes two illustrative and real life examples: Bald eagle and California condor. Here is another, more recent one. In November 2018, I got a letter from Eric Sutton, the Executive Director of the Florida Fish and Wildlife Conservation Commission. They were encountering an unfolding disease, 95 percent fatal, destroying Florida's coral reef tract and were asking for AZA members to use their facilities to help get ahead of it and rescue and hold healthy coral in refugia until the cause and a solution could be identified. And today, 20 of our members are holding thousands of Florida coral colonies, conservation giants like Sea World and Disney, but tiny titans like Colorado's Butterfly Pavilion.

In the process, we discovered that what is now called stony coral tissue loss disease isn't limited to Florida. It is pandemic across the Caribbean. It can't be solved by the State of Florida or the Commonwealth of Puerto Rico or Sea Worlds or Butterfly Pavilions. That is all necessary, but it is going to require much larger cooperation, including Federal agencies like NOAA and international and intergovernmental efforts.

The same has been true with waterfowl; the same is true with monarch butterflies and little brown bats. If our goal is to recover America's wildlife, we need to deploy all of our tools and fund all of our tools, and certainly don't leave some of your best tools with the least and most constrained access to funding. You can do both: You can provide needed funding for tribal and State agencies, and for the Federal agencies that we know are going to be key ingredients in success.

Thank you for the opportunity to be here today. I am happy to answer any questions that you might have and help in any way as you hopefully look to find some time and some quiet and sit back and ponder and do what you think is right.

[The prepared statement of Mr. Ashe follows:]

Testimony by Daniel M. Ashe
President and CEO, Association of Zoos and Aquariums
Before the
Senate Committee on Environment and Public Works
December 8, 2021

Good morning Mr. Chairman and Committee Members. It's good to be here again, and let me start by just saying thank you for everything you do to help conserve wildlife and wild places.

I'm speaking today on behalf of the Association of Zoos and Aquariums, our accredited members and the nearly 200 million people who visit them every year, and trust them with the care of animals, in aquariums and zoos, and in nature. I'm also speaking on behalf of Defenders of Wildlife, its more than 2.2 million members and supporters, and the National Wildlife Refuge Association as the principal advocate for America's National Wildlife Refuge System, the world's largest system of lands and waters dedicated to wildlife conservation.

So, I'll begin by saying, we come in peace.

We are not here to argue against funding for State and Tribal fish and wildlife agencies. We're not here to argue about who has primacy, or who is more important. Those are the words of conflict.

Our message is simple. Conservation of wildlife is a shared responsibility. Our great successes are not individual; nor are they local, state, tribal or federal. They are the product of decades of shared effort and commitment. And my plea to you, today, as members of an institution revered as the world's greatest deliberative body, is to take some precious time and contemplate how this bill can better reflect the tradition of partnership and shared commitment that will be the keys to success. It is both possible and necessary to do this, by including funding for mandated, collaborative, and proven-successful federal agency efforts, and it will make this bill better and the results of your investment more enduring and impactful.

Let's begin by contemplating where we find ourselves today. We are living amidst our planet's sixth mass extinction event. The last was caused when a meteor struck the earth. The dinosaurs perished. Mammals evolved to fill the void. And now, one species of mammal – *Homo sapiens* – is driving this newest and escalating extinction event. It respects no political boundaries. It can't be stopped by efforts in Dorchester County, Maryland, or the State of Wyoming, or the Navajo Nation, or in national parks, forests, or wildlife refuges. It requires shared, collective and sustained commitment – and funding – at all those levels.

Knowing that I would be here, today, alongside my friend, Collin O'Mara, I studied the National Wildlife Federation website on the Recovering America's Wildlife Act. It's quite good. In fact, it makes both of our points convincingly.

It begins by highlighting the [summary conclusion](#) of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services or IPBES that worldwide, one million species are at risk of

extinction. The NWF site also notes that one-third of U.S. species are at risk of extinction. Exactly. We are battling an unprecedented human-caused extinction crisis. To recover America's wildlife, we need to fund and deploy our very best tools to slow and stop extinction.

And of course, NWF's site hits the proverbial nail squarely on the head, noting that "The Endangered Species Act is our nation's best tool to prevent species from sliding into extinction, but it has long been underfunded." [emphasis added] Exactly. Our best tool is underfunded. In fact, every study examining the funding necessary to implement congressionally mandated ESA recovery plans has determined that those plans are seriously and chronically underfunded. Those estimates put the costs for recovery implementation somewhere between \$1.6-2.3 billion annually, and the U.S. Fish and Wildlife Service 2021 annual appropriation for recovery was only \$105 million. And again, these are congressionally-mandated recovery plans, and the ESA compels federal agencies to conserve listed species and support their recovery.

NWF's website also highlights "12 Wildlife Success Stories". These stories are classic examples of how wildlife conservation is a shared responsibility across all levels of government, and how well-funded ESA recovery programs work, by bringing together partners, including landowners, local governments, states, tribes, and federal agencies. And with the exception of trumpeter swan, these are all ESA recovery success stories: bald eagle; California condor; swift fox; Fossitt speckled dace; Karner blue butterfly; Kirtland's warbler; Licking River mussels; Louisiana black bear; monito gecko; New England cottontail; Delmarva fox squirrel; and trumpeter swan. I could add brown pelican, peregrine falcon, American alligator, humpback whales, Oregon chub, and dozens more to this list.

Let's look at a couple of these in a little more depth.

Bald Eagle: Recovery of the Bald Eagle is a national success story. Many people have played important roles, including states. In cooperation with the USFWS, the New York State Department of Environmental Conservation initiated the first Bald Eagle reintroduction project in the country, using birds from Alaska and "hacking" techniques adopted from falconry. In 1982, I had the privilege to participate in a joint reintroduction effort between the USFWS and Massachusetts Division of Fisheries and Wildlife at the Quabbin Reservoir. The birds came from Michigan, Manitoba and Nova Scotia. None of these projects would have happened without state-federal cooperation, and funding.

But let's also be honest and fair. Recovery of the Bald Eagle was made possible by one major and significant action – the banning of the use of the pesticide DDT. That action was taken by the U.S. Environmental Protection Agency, under the leadership of its first Administrator, William Ruckelshaus. Protection of eagles has been accomplished primarily through enforcement of federal laws, including the Bald and Golden Eagle Protection Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the Lacey Act.

California condor: Maybe no other species demonstrates how recovering America's wildlife is a shared responsibility. By the mid-1980s, due to historic persecution, and the pervasive toxic effects of DDT and lead ammunition, the USFWS made the bold decision to capture all remaining wild condors. In 1987, the last wild bird was captured; the entire world population, 27 birds, were in human care at the Los

Angeles Zoo and San Diego Zoo Safari Park. Essentially, the entire “genetic stock” of this population came from 13 founder animals.

Long story short, skillful husbandry and captive-breeding of California condors made this recovery possible. AZA-accredited zoos played a pivotal role, but also private conservation organizations, like the Peregrine Fund. Financial support came principally from zoo visitors, from private philanthropic donations, and from ESA recovery funds. Public lands have played a critical role as release, nesting and foraging habitat, including Hopper Mountain National Wildlife Refuge, Pinnacles National Monument, Los Padres and Kaibab National Forests, Grand Canyon National Park, and Mexico’s Sierra San Pedro de Martir National Park.

In 2013, California enacted Assembly Bill 711, requiring the use of non-lead ammunition, statewide, for the taking of all wildlife. This is a key step, because lead poisoning is responsible for 50 percent of condor deaths of known cause.

This spring, we will hopefully see another giant leap forward with the Northern California Condor Restoration Program. Condors bred at the Oregon Zoo and the Peregrine Fund’s World Center for Birds of Prey will be released in a cooperative effort between the USFWS, National Park Service and Redwood National and State Parks, and the Yurok Tribe.

Today, the population of California condors stands at over 500, including over 300 free-ranging birds.

Critics of the ESA often argue that species recovery is too rare. While we are not ESA critics, we agree. It is too rare. But it’s largely because we’ve starved recovery. It is grossly and chronically underfunded. It’s like a car without fuel. When we fuel it, it runs! And here, now, you have the golden opportunity to fill the tank, and to drive an entire new generation of success. Please do it!

And candidate conservation works. That’s what happened with New England cottontail and arctic grayling and what kept those species off the endangered species list. And it’s what is happening, today, with species like Monarch butterfly. Again, you have the opportunity to provide funding that will power more and more success and reward collaborative partnerships focused on species conservation.

And cooperative efforts, like safe harbor agreements, are what has driven success for species like red-cockaded woodpecker and gopher tortoise. And habitat conservation plans or HCPs have helped make places like Austin, Texas and West Riverside County, California the economically thriving communities that they are today, while conserving species and creating open space. Funding these programs, robustly, will prevent listings, recover species, and prevent downstream conflict and gridlock. That’s not speculation; it’s proven. You can build upon that proven success.

Consultation under Section 7 of the ESA supports federal agency action and is going to be a crucial ingredient in successful and timely implementation of the recently passed, bipartisan Infrastructure Investment and Jobs Act. Again, I’m not speculating here. The U.S. Fish and Wildlife Service and NOAA Fisheries already consult on over 10,000 projects annually. That’s mandatory consultation. These two agencies are about to be hit with a literal tsunami of federal agency actions in transportation, energy

and communications infrastructure. Investing in section 7 consultation capacity will support better project design, better species conservation, and prevent downstream delay and conflict.

And our nation's federal lands are often the cornerstones of species recovery and conservation. They certainly have been with waterfowl; Blackwater National Wildlife Refuge has been a center-pivot in the story of Delmarva fox squirrel recovery; Lost Padres and Kaibab National Forests and California condors; Everglades National Park, Big Cypress National Preserve, and Florida Panther National Wildlife Refuge, and Florida Panther; Yellowstone and Grand Teton National Parks, and Bridger-Teton National Forest, and Grizzly Bear. Buffalo Gap National Grassland and Badlands National Park and black-footed ferrets. And on and on. And these land managing agencies have mandatory duties to conserve species. Federal lands are cornerstones and efforts must be expanded to conserve wildlife across our public lands.

In summary, we are already struggling in the sixth mass extinction. It is the result of human existence, economy and ecology. Wildlife conservation is a shared responsibility, requiring combined effort and funding across levels of government. As the NWF has well-stated, the ESA is our "best tool", and funding its proven-successful, cooperative elements must be a part of any effort to recover America's wildlife. And by doing this, we'll be helping our economy, because we know that ignoring these congressionally mandated responsibilities, carries significant legal consequence. And wildlife everywhere ends up losing.

Enacting legislation that would automatically spend \$14 billion on wildlife over the next 10 years while ignoring the mandated, legally binding, and consequential responsibilities of federal agencies is, in my opinion, like watching a train wreck that you have the opportunity to avoid.

And that's my main point. Congress has mandated these responsibilities. They are historically, grossly and chronically underfunded. Failure to fund them now, when you are considering spending of this magnitude, seems to border on irresponsible.

And it's not just the amount of funding, it's the way funding is provided. RAWA proposes to provide state and tribes with automatic, permanent, and direct funding from federal taxpayers. It leaves federal agencies, which have mandated, legally enforceable duties, and strict, extensive accountability, to weather the vagaries of annual appropriations. That's a fundamental and important distinction and inequity that I would ask the Committee to ponder. To use a very technical term, it seems quite topsy-turvy, that those with the clearest mandate, the most significant legal liability, and the most stringent accountability, have the most constrained access to funding.

And you can do both and we believe you must. You can provide significant and needed support for state and tribal wildlife agencies, and you can support the federal agencies to which you have given mandatory and consequential responsibilities. You can amend this legislation to reflect the American model of shared authority and responsibility for wildlife conservation. And the record shows, clearly and convincingly, that is the pathway to success.

This is not hard. You have forged compromises on much more difficult issues. And even if you think it is hard, I'll leave you with the words of the great journalist Edward R. Murrow –

“Difficulty is the excuse that history never accepts.”

Thank you for the opportunity to present this testimony. We stand ready to help this Committee in any way possible.

Senator CARPER. Dan, thank you for that timely and wise testimony.

I spend a fair amount of my time every day on the train, going back down the Northeast Corridor, and I use that time to ponder. Some people sleep on trains. I never do, but I do ponder a lot, and there is plenty for us to ponder with respect to this.

On a lighter note, Bob Dole—many of us had the opportunity to serve. He served in World War II with my dad and my uncles and all, and was a real hero, as you well know. He later married Elizabeth. I remember the day that he sat in a Senate hearing not unlike this one, in order to introduce his wife, who had been nominated to be Secretary in the Administration of George Herbert Walker Bush. He had such a wonderful sense of humor. He said, as we were just sitting here, he said, alongside of his wife that he was introducing to his colleagues, he began with these words: “I regret that I have but one wife—one wife—to give for my country.”

[Laughter.]

Senator CARPER. He gave a lot, and we miss him and love him, and are thinking of Elizabeth today, a former colleague in the Senate, as we gather here.

I am going to now turn to Collin, if I could.

Collin, welcome. We are delighted that you have joined us. Please proceed.

STATEMENT OF COLLIN O'MARA, PRESIDENT AND CEO, NATIONAL WILDLIFE FEDERATION

Mr. O'MARA. Senator Carper, Ranking Member Capito, members of the Committee, on behalf of the National Wildlife Federation, our 52 State and territorial affiliates and our nearly 7 million members, thank you for the honor of testifying before you today.

First, let me congratulate the Committee on the remarkable bipartisan infrastructure package and just thank each of you for the historic investments in clean water, habitat restoration, resilience, connectivity, environmental justice, clean energy.

Senator Carper, thank you for making sure that investments in endangered species are part of the Build Back Better Act.

Today, we have the opportunity to build upon this Committee's incredible bipartisan legacy by passing the most significant wildlife legislation in half a century, the bipartisan Recovering America's Wildlife Act.

America's wildlife are in crisis. More than one-third of all wildlife, fish, and plant species face heightened risk of extinction due to immense and interwoven threats: Increasingly fragmented and degraded habitat, invasive species, wildlife disease, landscapes ravaged by climate fueled extreme weather, wildfires, droughts, flooding, and hurricanes.

The bipartisan Recovering America's Wildlife Act is a solution that matches the magnitude of the wildlife crisis. Simply put, the Recovering America's Wildlife Act will help recover the full diversity of wildlife by saving species before they decline to the point where they need emergency room measures, and by accelerating the recovery of species already endangered. This will prevent extinctions.

It empowers States, territories, and Tribes to recover the more than 12,000 species of greatest conservation need and to partner with the Fish and Wildlife Service to recover the 1,600 species already listed as threatened and endangered. They will accomplish this by implementing the proactive and congressionally mandated strategies and the congressionally mandated wildlife action plans. This will transform the way we recover species by shifting a model that today is largely constrained to regulation and litigation to one that unleashes unprecedented collaboration and innovation.

The Recovering America's Wildlife Act does all of this without raising taxes or imposing new regulations. It leverages existing, undesignated environmental and natural resource fines and penalties and matches them with contributions from States, conservation partners, and other stakeholders. It supports well paying local jobs in the outdoor economy while reducing regulatory uncertainty for businesses and reducing costs for taxpayers.

The legislation builds upon robust existing accountability safeguards to ensure these funds are well spent. This bill also provides a historic, and frankly, long overdue investment in the essential conservation work led by tribal nations. As Elveda Martinez, the President of the Native American Fish and Wildlife Society, said, "For Tribes, the Recovering America's Wildlife Act is not just about an increase for fish and wildlife funding. It is base funding. It will be a game changer in the way Tribes operate, manage, participate, and assert self-governance in fish and wildlife stewardship."

This legislation has broad support across the full spectrum of conservation community, fish and wildlife agencies, industry associations, tribal nations. Nearly 2,000 organizations and entities have joined forces to support this critical legislation. Why? Because we all understand what happens if we don't act. Iconic and unsung species alike will continue to vanish from the landscape, and costs to business and taxpayers will continue to escalate.

Let me be clear: We are in the midst of a sixth mass extinction that is affecting all sizes and types of species. The growing number of scientific reports and field observations are a clarion call for action. Fortunately, history shows us that by investing in collaboration and science based restoration efforts, we can reverse this. We have accomplished amazing things for game species like deer and waterfowl and sportfish, and we have recovered through Pittman-Robertson and Dingell-Johnson. We have also recovered iconic endangered species like the bald eagle and the American alligator through the Endangered Species Act.

Our Nation does a remarkable job saving species when we put our mind to it and when we invest. I see it in my home State of Delaware, where we worked with Senator Carper to recover Del-MarVa fox squirrels, red knots, and piping plovers. But the reality is that we have failed to invest at scale in the vast majority of species.

Senator Heinrich's and Senator Blunt's bill is the game changer that we need to ensure the full diversity of wildlife survives and thrives. The Recovering America's Wildlife Act is bold and bipartisan; it is collaborative and proactive. It will have an immediate impact from hundreds of backyards all across America.

Let me just close with this: Inaction is the ally of extinction. Twenty years ago this very Committee came so close to dedicating resources to proactive, collaborative, and voluntary efforts to recover wildlife as part of the Conservation and Reinvestment Act, CARA. Twenty years later, 406 additional species have been listed under the Endangered Species Act; 430 more are either proposed for listing, candidates for listing, petitioned for listing; and thousands more have become species of greatest conservation need. The crisis is accelerating.

The good news is that it is not too late to save America's wildlife, but there is no time to waste. By passing the Recovering America's Wildlife Act and investing in this ounce of prevention, we can ensure that our children and grandchildren enjoy the full diversity of wildlife because the simple truth is that when we save wildlife, we save ourselves.

Please support this legislation. Thank you.

[The prepared statement of Mr. O'Mara follows:]

Testimony of Mr. Collin O'Mara
President and CEO of the National Wildlife Federation
Before the U.S. Senate Committee on Environment and Public Works
December 8, 2021

Chairman Carper, Ranking Member Capito, and members of the committee, on behalf of the National Wildlife Federation, our 52 state and territorial affiliates and our more than 6 million members, thank you for the honor of testifying before you today, as both the CEO of America's largest wildlife conservation organization and the former Secretary of Natural Resources and Environmental Control for the State of Delaware.

First, let me congratulate this committee on the passage of the bipartisan Infrastructure Investment and Jobs Act, which made historic investments in clean water, habitat restoration, reclamation, resilience and connectivity, environmental justice, and clean energy innovation. The bipartisan work of this committee provided the centerpiece of that package, and the Federation is grateful to Chairman Carper, Ranking Member Capito, and all of the members of the Committee for your tremendous leadership on the bill and its many natural infrastructure provisions.

I also want to thank you for your consistent bipartisan support of investments in wildlife recovery, especially species listed under the Endangered Species Act—whether through the Build Back Better Act, annual appropriations bills, disaster response measures, the American Conservation Enhancement Act, the Recovering America's Wildlife Act, or other legislation.

America's wildlife is in crisis. Consideration of the Recovering America's Wildlife Act could not come at a more critical time and we are incredibly grateful for the support of the 16 Senate Republicans and 16 Senate Democrats who are currently co-sponsors, including several members of the Committee.

Right now, more than one-third of species of wildlife, fish, and plants face heightened risks of extinction. Wildlife are facing intense and interwoven threats: habitats are increasingly fragmented and degraded, invasive species and wildlife diseases are spreading, new sources of pollution are emerging, and extreme wildfires, droughts, heatwaves, flooding, and hurricanes are ravaging the landscape. Climate change is only accelerating the decline of species from our backyards to the backcountry. In addition, the world is contending with a zoonotic disease that has killed nearly 800,000 Americans and more than 4 million people globally and crippled economies. It's never been a more important time to address the escalating wildlife crisis.

The Recovering America's Wildlife Act is a solution that matches the magnitude of the crisis. The bill empowers States, Territories, and Tribes to recover declining wildlife populations through proactive and collaborative implementation of Congressionally-mandated Wildlife Action Plans. By funding the full implementation of these collaboratively developed plans, we will have the best opportunity to prevent species from declining to the point where federal protections are warranted under the Endangered Species Act and increase their populations to

healthy levels, while accelerating the recovery of species already listed as endangered or threatened. Rather than raising new taxes or promulgating new regulations, the Recovering America's Wildlife Act incorporates a funding mechanism that leverages undesignated environmental and natural resource civil and criminal fines, fees, and penalties that the federal government collects and matches them with contributions from states, conservation partners, and other stakeholders. And the bill builds upon robust existing accountability practices and adds additional reporting requirements to ensure all resources are well spent.

Investments in wildlife conservation through the Recovering America's Wildlife Act will also be good for people. When we save wildlife, we save ourselves. We create well-paying local jobs across the country, support healthier communities for people, reduce regulatory uncertainty for businesses and costs for taxpayers, strengthen the nearly \$887 billion outdoor economy and support millions of jobs—all of which contributes to creating a better future and preserving our wildlife heritage for future generations.

This legislation has the support of the full spectrum of the conservation community, including hunting, fishing, conservation, and environmental organizations. It is widely supported by the relevant federal, state, and territorial fish and wildlife agencies. Importantly, it is broadly and deeply supported by Native American Tribes who have been conservation and wildlife stewards without consistent, dedicated funding. The Recovering America's Wildlife Act has the support of outdoor and natural resource businesses, and communities throughout the country. It is supported by numerous aquariums and zoos, which often work with state and federal wildlife agencies and Tribes to save and restore wildlife populations through captive breeding, re-introductions, research, responses to threats like diseases, education, and other strategies.

The Recovering America's Wildlife Act marks the best chance we have had in decades to win the race against extinction. Strong support in the Senate, strong support in the House for a companion bill (137 bipartisan cosponsors on H.R. 2773), and strong support from the Biden administration makes this Congress our best opportunity to pass this critical conservation legislation into law. The longer we wait to act, the more expensive and difficult the crisis becomes to solve. We urge all members of this Committee to lend their support and commit to passing this urgently needed bill as soon as possible.

America's Wildlife Crisis: The Sixth Mass Extinction

In 2018, the National Wildlife Federation, in partnership with The Wildlife Society and American Fisheries Society, published a report on "Reversing America's Wildlife Crisis," which explores the extraordinary richness and precarious state of America's flora and fauna. That study documented that more than one-third of U.S. plant and animal species are at heightened risk of extinction and more than 150 U.S. species already are extinct. More than 40 percent of our native freshwater fish species are rare or imperiled and more than 60 percent of America's freshwater mussels are imperiled or vulnerable with another 10 percent already extinct. Amphibian populations, which are sensitive environmental indicators, are declining at a rate of 4 percent a year, and native pollinators like butterflies and bees are experiencing precipitous declines, including the Monarch butterfly whose populations have dropped by nearly 90 percent.

The ongoing nature of this crisis was underscored earlier this year when the U.S. Fish and Wildlife Service officially declared 23 species extinct, including the iconic ivory-billed woodpecker, Bachman’s warbler, and a bevy of Hawaiian forest birds. But while extinction is the most dramatic and irreversible outcome of species declines, population numbers are falling across a broad swath of America’s wildlife, including both common and rare species. In 2019, a major study published in the journal *Science* documented dramatic declines in North American bird populations since 1970, with the loss of nearly 3 billion breeding birds, representing a nearly 30 percent decline. Unfortunately, U.S. species declines are consistent with broader global trends: a major United Nations report from 2019 estimated that an unprecedented 1 million species globally are at risk of extinction in the coming decades, compromising the vital services that natural ecosystems provide to humanity.

The reason for ongoing species declines and extinction, both in the United States and globally, are varied and include habitat loss, degradation, and fragmentation; the spread of non-native invasive species and emerging wildlife diseases; environmental contaminants and pollution; continued exploitation and overharvest of some species; and increasingly a rapidly changing climate. Indeed, climate change amplifies and exacerbates existing stressors, leading to the transformation and degradation of crucial wildlife habitats and enabling the expansion of invasive species and diseases. As an example, climate change fueled wildfires in Washington State wiped out half the remaining population of federally listed Columbia basin pygmy rabbits, while in California recent wildfires have killed a staggering 13 to 19 percent of the entire world population of giant sequoias.

Further, emerging wildlife diseases are increasingly demonstrating with deadly consequences the complex nature of the challenges facing wildlife today, as well as the urgency of ensuring wildlife professionals have the resources to effectively respond to evolving threats to not only wildlife but also human health and economies. Significant threats to wildlife today include white-nose syndrome affecting bats, Chronic Wasting Disease affecting deer, elk and other ungulates, and chytrid fungi affecting amphibians. These diseases not only threaten wildlife, they have significant economic impacts — they are costly to combat, and can shut down or diminish human activities. If state and Tribal wildlife programs had adequate resources to get on top of and out in front of these diseases as soon as they were identified, a lot of wildlife would have been saved and costs avoided.

It also bears underscoring that the global COVID-19 pandemic has not only infected tens of millions worldwide and upended how we live, but it also has directly impacted wildlife. The coronavirus most likely started as a zoonotic disease, likely leaping from a bat or pangolin to people roughly two years ago. Since then, it has jumped from people to pets and even big cats, including lions and snow leopards, at zoos. Wildlife managers are now reporting that increasing numbers of wild-living white-tailed deer are testing positive for COVID-19. This example of disease transmission from wild animals to people back to wild animals demonstrates our interconnectedness and the need for action both in the prevention of zoonotic disease transmission and preparedness response. Healthy wildlife populations and intact natural habitats are key to implementing “One Health” approaches for reducing the risk of new zoonotic diseases. Recovering America’s Wildlife Act will bolster the capacity of wildlife professionals to

work with human health experts to monitor and combat the spread of diseases that threaten human health and wildlife species survival.

Let me be clear: we are in the midst of a sixth mass extinction. It affects all sizes and types of species, across the United States. The growing number of scientific reports and field observations from hunters, anglers, and other wildlife watchers are a clarion call for action. Fortunately, history shows that with collaborative and science-based interventions and investments these declines can be reversed. The Recovering America's Wildlife Act provides the path for doing so. The United States and U.S.-based Tribes have been global leaders in wildlife conservation and management but more—and more consistent—funding is needed to address today's wildlife crisis.

The Recovering America's Wildlife Act: A Solution Matching the Magnitude of the Crisis

Inaction is the ally of extinction. If we don't act, and soon, the species we cherish will slowly but surely vanish from the landscape. The Recovering America's Wildlife Act offers us an alternative, where we can choose a different path and catalyze unprecedented collaborative conservation to put Americans to work proactively and voluntarily restoring ecosystems and recovering species in every part of the country.

The bipartisan Recovering America's Wildlife Act proposes a visionary, collaborative solution that matches the magnitude of the monumental crisis wildlife face. It is built on the recommendations of a blue-ribbon panel the Association of Fish and Wildlife Agencies convened in 2014, on which I, on behalf of the National Wildlife Federation, was proud to serve.

The Recovering America's Wildlife Act would amend the Pittman-Robertson Federal Aid in Wildlife Restoration Act to invest an additional \$1.3 billion a year for state-led and territorial-led implementation of their Wildlife Action Plans and \$97.5 million for Tribal wildlife conservation efforts. This transformative legislation would meet the management needs of the full diversity of wildlife species, the vast majority of which are not currently or consistently funded. Further, the bill is designed to leverage significant outside financial resources, while rewarding innovative solutions that are replicable and scalable.

Fully implementing the State Wildlife Action Plans to recover species of greatest conservation need and the Recovery Plans for listed species offers the best opportunity to halt the decline of species and avoid the need for additional listings Endangered Species Act, while accelerating the recovery of species already listed as endangered or threatened. Senator Heinrich and Senator Blunt's bill, S. 2372, incorporates a funding mechanism and match requirements to ensure the states, Tribes, and territories have the resources necessary to implement their Wildlife Action Plans and programs, while ensuring robust accountability.

Building upon a Successful Model

The North American Model of Wildlife Conservation includes seven foundational principles, as summed up by the Boone and Crockett Club: 1) wildlife resources are a public trust to be managed by governments for the benefit of all citizens; 2) unregulated commercial markets for

wild game that decimate wildlife populations are eliminated; 3) allocation is by law, meaning that laws are developed by citizens and enforced by government agencies to regulate the proper use and management of wildlife; 4) opportunity for all, which means that every citizen has the freedom to view, hunt and fish, regardless of social or economic status; 5) wild game populations cannot be killed casually, but only for a legitimate purpose as defined by law; 6) wildlife will be considered an international resource because wildlife migrates across political boundaries; and 7) science is the proper basis for wildlife policy and management, not opinion or conjecture, in order to sustain wildlife populations.

This model, when combined with a dedicated funding through user-pay mechanisms (excise taxes, license fees, etc.) and strong collaboration among state agencies, federal agencies, conservation partners, and landowners, has successfully recovered the vast majority of wildlife species that are hunted and fished. In many ways, this uniquely American approach was born out of crisis. In the early 20th century, forest and wetland loss decimated populations of deer, elk, and waterfowl. Dam construction had disconnected aquatic species like shad and river herring from spawning grounds. Indiscriminate timber harvest and mining had harmed upland habitat and led to rampant erosion, destroying streams and heavily impacting many aquatic species. Commercial harvest decimated populations of migratory birds and mammals alike. Many of our most iconic and well-known species were in serious trouble. Deer, elk, pronghorn, bighorn sheep, wood ducks, striped bass, wild turkey and many other species had become extremely rare, with some on the verge of extinction. The U.S. response to these conditions formed the basis of the conservation movement of the 20th century, and led to the successful restoration of these and other game and fish populations.

Conservation funding at the state level was initially derived from hunting and fishing licenses directed back into professional wildlife departments. The federal government began supplementing state license funds through the Pittman-Robertson Wildlife Restoration Act of 1937, which redirected an existing excise tax on firearms and ammunition into state wildlife management. Later, the Dingell-Johnson Sportfish Restoration Act of 1950 dedicated existing excise taxes from fishing tackle to fish conservation. A key component of the success in recovering America's game species was the creation of these dedicated funding streams, which in addition to Pittman-Robertson and Dingell-Johnson, included the Migratory Bird Hunting Stamp Act of 1934 (Duck Stamp) that funded wetland conservation.

Most U.S. species, however, are not the target of hunting and fishing, and consequently were not prioritized under these two primary dedicated funding sources. Dedicated funding for the full diversity of wildlife—what sometimes are referred to as “non-game” species—has been long regarded as the third leg of the wildlife conservation funding stool, but to date has not materialized at a commensurate level. After decades of attempts, the Recovering America's Wildlife Act will fix this and complete the funding model to support the full diversity of wildlife.

The cause and effect of robust investment is clear. In the same *Science* report that documented plummeting North American bird populations, the authors showed that, contrary to overall trends, populations of waterfowl (ducks and geese) increased by more than 56 percent in the years since 1970. This variance was a direct result of combining collaborative efforts with dedicated funding for wetland conservation through the Federal Aid in Wildlife Conservation

Act of 1937 (Pittman-Robertson), Duck Stamps, and innovative programs that leverage millions of private dollars, like the North American Wetland Conservation Act and parts of the Farm Bill, with common-sense protections under the Clean Water Act and Migratory Bird Treaty Act (by contrast, grassland bird populations plummeted by 53 percent, as there is not yet an equivalent North American Grasslands Conservation Act or other grasslands restoration funding streams). The Recovering America's Wildlife Act could replicate the same successes that we've accomplished for waterfowl across the full diversity of fish and wildlife species.

Tribal Nations

Tribes own or influence the management of tens of millions of acres, including more than 730,000 acres of lakes and reservoirs, 10,000 miles of streams and rivers, and 18 million acres of forests. These lands and waters provide habitat for fish and wildlife, including more than 500 species federally listed as threatened or endangered. Additionally, Tribes provide leadership and resources to wildlife and fish conservation efforts far beyond these lands and waters. Yet despite immense natural resources and human expertise and cultural knowledge, Tribes are currently excluded from most federal wildlife funding programs, with the primary exception of a small competitive Tribal Wildlife Grants program that allocates an average of less than \$6 million annually that is distributed on a competitive basis among all interested Tribes. The Recovering America's Wildlife Act would increase this amount to \$97.5 million through a non-competitive grant programs, providing the first significant dedicated funding for Tribal wildlife conservation in U.S. history.

When Senators Heinrich and Blunt introduced the Recovering America's Wildlife Act, Elveda Martinez, president of the Native American Fish and Wildlife Society, was clear: "For Tribes, the Recovering America's Wildlife Act is not just about an increase to fish and wildlife base funding, it is base funding. It's a game changer, in the way Tribes operate, manage, participate and assert self-governance in fish and wildlife stewardship. With the support of this legislation, the Tribes stand ready and committed to ensure that wildlife endures for all of our future generations."

The only meaningful attempt to address this inequity occurred in 2001 when Congress created the Tribal Wildlife Grant Program. The \$6 million in average funding is grossly inadequate to support the fish and wildlife management needs of all federally recognized Tribes. Further, the competitive, annual nature of this funding means that Tribes cannot create the long-term programs necessary for effective wildlife conservation because they do not know how much funding, if any, they can expect for wildlife research and management projects in any given year. Despite receiving very limited, unreliable funding, Tribes have created some of the most innovative and effective natural resource programs. There are countless stories that exemplify the importance of sustained, reliable funding for Tribal nation's fish and wildlife resource management, as outlined in the [20 Years of Conservation Success Report](#) on the State and Tribal Wildlife Grants Program. A [recent article](#) looked at the many opportunities for Tribal-led wildlife conservation, if the Recovering America's Wildlife Act passes.

Endangered and Threatened Species

America's wildlife have also benefitted from the incredible success of the Endangered Species Act. This includes the recovery of iconic species like the bald eagle, humpback whale, American alligator, brown pelican, peregrine falcon, and Louisiana black bear. More broadly, however, the Act has played a pivotal role in ensuring more than 99 percent of federally listed species have not gone extinct. As of November 2021, there are more than 1,600 U.S. species of plants and animals listed under the Act.

A 2016 report by the Ecological Society of America found that due to funding constraints, the Act has been more successful in stopping the slide of species toward extinction than in improving the conservation status and recovery of listed species. They found that the amount of funding available for species protection and recovery is one of the best predictors of recovery success but noted that not only has federal recovery spending been insufficient, it has been highly disproportionate across groups of species. Indeed, based on their analysis over 80 percent of government spending went to support just 5 percent of listed species, while 80 percent of listed species shared less than 5 percent of all recovery funds.

The Recovering America's Wildlife Act will substantially increase funding for endangered and threatened species and address the needs of many species that historically have not received robust recovery investments. Because the bill commits at least 15 percent of state, territorial, and tribal allocations to listed species recovery, listed species recovery actions would increase by at least \$170 million annually, which is more than the U.S. Fish and Wildlife Service currently receives for its endangered species recovery program (\$138 million).

Much more of the funding than the 15 percent requirement in the Recovering America's Wildlife Act will actually go toward recovering endangered and threatened species, however. First, the traditional Pittman-Robertson allocation funding formulas were specifically improved for allocations under the Recovering America's Wildlife Act to invest more in states and territories with the greatest need, such as Hawaii, which have the greatest number of federally listed endangered and threatened species. Second, much of the 10 percent dedicated under the bill to innovation grants for regional collaboration will be spent on recovering listed species and candidate species, as will much of the incentive grants for recovering at-risk native plants. Third, many state wildlife agencies already use their limited federal funding from the State Wildlife Grants program to pay for their endangered species conservation efforts, but current grant funds are not nearly enough to meet those needs. States currently include federally-listed species among their lists of Species of Greatest Conservation Need that are prioritized for attention in their State Wildlife Action Plans, and many states spend more than a quarter—and as much as half—of their annual State Wildlife Grant funds on the recovery of these listed species:

- Delaware has invested heavily in the restoration and conservation of coastal habitat for red knots, piping plovers, and other shorebirds, as well as our iconic horseshoe crab populations. The state has also partnered with Maryland on best practices to recover endangered Delmarva fox squirrel populations by restoring habitat in Redden State Forest and other public and private lands.

- Ohio spends approximately \$560,000 (of a \$1.3 million allotment) annually in State Wildlife Grant funds for federally listed species ranging from Karner blue butterflies to Northern long-eared bats, and for stream and river restoration projects to recover freshwater mussel species.
- Indiana dedicates State Wildlife Grant funds to monitor the health of the highly endangered clubshell and Northern riffleshell mussels, which were translocated from the few surviving populations in Pennsylvania. Indiana also used these funds to help recover least terns, which were successfully recovered and removed from the endangered species list earlier this year.
- Connecticut spends State Wildlife Grant dollars on roseate terns, piping plovers, puritan tiger beetles, bog turtles, Northern long-eared and Indiana bats all of which are federally listed as endangered or threatened. State Wildlife Grant funding allowed Connecticut to meet and exceed nesting pair and productivity recovery plan goals for piping plovers and to leverage other matching funds, develop a large volunteer corps, create municipal partnerships, and increase public awareness and education.
- Over the past 5 years Georgia has averaged just under \$1.4 million in annual State Wildlife Grant appropriations. Of that total, approximately \$750,000 has been spent annually on federally listed or candidate species. 95 percent or more of the work that Georgia has accomplished to increase red-cockaded woodpecker populations and advance them on a path to recovery has been funded through State Wildlife Grants, other state and federal grants, and private donations.
- Arizona spends roughly three fourths of its average annual allocation of State Wildlife Grants translocation, habitat restoration and enrolling partners in Safe Harbor agreements of a range of federally listed freshwater fish, amphibians and other species.

Across all section of the Recovering America's Wildlife Act, we anticipate that more than a quarter of the total funding will go towards listed species and candidate species (listed species currently comprise 13 percent of all species of greatest conservation need). While some have proposed a higher percentage, we believe that robust investments in proactive wildlife conservation of the full diversity of species of greatest conservation need is critical to avoid an ever-expanding train-wreck of irreversible wildlife population declines and accelerating extinctions. Just as investing in preventative medicine helps reduce the need for emergency room measures in healthcare, investing in proactive ounces of prevention can save thousands of species from ever reaching the brink of extinction, while we also work to recover listed species. The immense and interconnected challenges facing wildlife require an "all-hands-on-deck" response, with the full engagement of not just federal agencies but also States, Tribes, Territories, and other conservation partners. While we of course must fund recovery of species that are already endangered, we cannot continue to make the mistake of shortchanging the collaborative conservation of species that are already declining and at heightened risk of becoming endangered. Greater upstream investments are needed now – every year brings new evidence of further declines in wildlife populations and numbers.

Importantly, States, Tribes, and Territories are prepared to expand their collaborative work with conservation partners, landowners, and federal agencies on endangered and threatened species that are often underfunded or overlooked by current funding availability and capacity. This model of "Conservation without Conflict" is already producing measurable and durable results

across the East Coast and Southeast for species including the New England Cottontails, saltmarsh sparrows, red-cockaded woodpeckers, and some species of freshwater mussels and crawfish. Studies have estimated that nearly 80 percent of federal funding available for recovering endangered and threatened species goes to a limited number (5 percent) of high-profile species, such as salmon, sturgeon, spotted owl, and desert tortoise. Given their many competing priorities and limited capacity and funding, it can be difficult for the U.S. Fish and Wildlife Service to fulfill the recovery needs of less charismatic and lower profile species. The Recovering America's Wildlife Act will help address the needs of the full diversity of wildlife, including the full spectrum of listed species, by resourcing the States, Tribes, and Territories to collaborate in these efforts.

The Need for Reliable Wildlife Conservation Funding

As we've seen from game species like deer and waterfowl and formerly endangered species like bald eagles and American alligators, our nation does a remarkable job saving species when we put our mind to it and when we invest. For example, Delaware's populations of waterfowl, white-tailed deer, bald eagles, and peregrine falcons continue to boom. Unfortunately, we're only investing in a small number of the species in need, and we are headed for an irreversible disaster if we don't act now. Not only will we lose magnificent species that define our outdoor heritage, but we will irreparably harm our nearly \$887 billion outdoor economy and the 7.6 million jobs it supports; industries will face greater regulatory uncertainty, litigation risk, and costs; and taxpayers will face ever-growing costs.

The Recovering America's Wildlife Act can address a large part of the reason we are in a wildlife crisis: the need for reliable funding in a time of rapid change. While Congress has taken steps, it has never wholly solved the problem. In 2000, Congress created the Wildlife Conservation and Restoration Program (P.L. 106-553). This program was established as a subaccount of the Pittman-Robertson Fund, providing apportioned funding to state fish and wildlife agencies for implementing conservation programs targeted at species of greatest conservation need. However, unlike the primary Pittman-Robertson program, the Wildlife Conservation and Restoration Program (WCRP) was not set up with dedicated funding. Congress provided one year of appropriations in Fiscal Year 2001 and has not funded the program since.

In lieu of funding the WCRP, Congress appropriated funds for State Wildlife Grants for the past 20 years. Appropriations have ranged from \$50 million to \$90 million over the period of Fiscal Years 2001-2021, with an average of \$60 million provided annually to all states and U.S. territories. This level of funding represents only 5 percent of the amount needed to implement the State Wildlife Action Plans.

With the establishment of the Wildlife Conservation and Restoration Program, Congress mandated that state fish and wildlife agencies develop State Wildlife Action Plans as a way to conserve all of America's wildlife, and guide the way each state spends their programmatic dollars, but never took the next step of fully funding the federal share for implementation. These plans set clear priorities by identifying those species in greatest need of attention (termed "species of greatest conservation need"), the habitats on which they depend, and the conservation actions necessary to sustain and restore their populations. Development of these plans is led by

the state wildlife agencies, but they are crafted in coordination with a wide array of public and private partners and are intended to reflect a comprehensive and shared vision for wildlife conservation in the state.

Collectively, State Wildlife Action Plans have identified more than 12,000 species of greatest conservation need. While we have made incredible progress through the user-pay/user-benefit model (80 percent of state agency funding comes from hunters and anglers) to recover populations of species that we hunt and fish—such as deer, ducks, turkeys, and trout—the vast majority of wildlife species, including most of these species of greatest conservation need, have no stable or consistent funding, which regularly results in listings under the Endangered Species Act as the tool of last resort.

Innovation and Regional Collaboration: The bill also establishes a new Innovation Grants program to incentivize, reward, and replicate the most effective, innovative, and far-reaching collaborative wildlife conservation strategies for recovering endangered, threatened, and at-risk wildlife and their habitat. Ten percent of all state and territorial funding under this bill – over \$125 million annually – will be set aside specifically for this program. Notably, Innovation Grants may be used to fund multi-state wildlife recovery proposals, including by the regional associations of fish and wildlife agencies. Engaging all or multiple states within the range of a species together in their conservation is often the most effective way to recover wide-ranging species. States have also demonstrated the effectiveness of using State Wildlife Action Plans as the building blocks for landscape level conservation across political jurisdictions. The Northeast, Southeast, and Midwest states have collectively analyzed the state lists of species of greatest conservation need and collaborated with experts to prioritize species for conservation action and those that would benefit from multi-state approaches. The Western states have organized regional initiatives dedicated to improving sage brush ecosystems, habitat connectivity, and to prevent the spread of invasive species. States are partnering with the U.S. Fish and Wildlife Service, U.S. Geological Survey, the Nature Conservancy, the National Wildlife Federation, and other private and public partners to develop landscape conservation initiatives to identify areas for conservation and restoration. These unprecedented collaborations underscore the dedication of the states to leverage resources and work with federal agencies and private organizations to secure a place for all America's wildlife.

Native Plants: The Recovering America's Wildlife Act is also the first legislation to propose a nationwide funding solution to the growing extinction crisis facing native plants in the United States. Plants are the foundation for virtually all other lifeforms, providing indispensable value and ecosystem services to people and wildlife. Unfortunately, similar to wildlife, about one-third of plants in the United States (34 percent) are at elevated risk of extinction (imperiled or vulnerable as assessed by NatureServe and its state natural heritage partners). Nearly 60 percent of the 1,600 species federally listed as Threatened or Endangered in the United States are plants. Approximately 4,000 of the 12,000 "species of greatest conservation need" (SGCN) identified by State fish and wildlife agencies in their state wildlife action plans are plants. Yet plants receive scant conservation attention or funding - less than 5 percent of federal recovery funding; and less than half of the states currently include plants as SGCN. Given the importance of plants and their significant conservation needs, the Recovering America's Wildlife Act includes a provision to increase a state's funding allocation by 5 percent if it includes plants on its list of SGCN. This

will help those states address the management needs of their imperiled plant species, and incentivize other states to add plants to their State Wildlife Action Plans in order to access the additional funding that will then be available to them.

Leveraging matching funds: Like Pittman-Robertson and Dingell-Johnson, the Recovering America's Wildlife Act requires that states and territories provide at least 25 percent in matching funds to access the federal resources. This both leverages the federal funds so they have greater impact and requires states and territories to have skin in the game. Many states have already secured additional funds through general appropriations, lottery funds, dedicated sales taxes, real estate transfer taxes, bond sales, voluntary state tax check-off programs, sales of specialty license plates, conservation stamps, ballot measures, dedicated portion of new revenues, or even the creation of wildlife foundations to accept philanthropic donations. Further, non-profit organizations have sought to raise private funds through efforts, such as the National Fish and Wildlife Foundation, to conduct recovery efforts. Survey work by the Association of Fish and Wildlife Agencies show that states are fully confident that these combined efforts provide more than sufficient match to meet the matching requirements, as envisioned by the Recovering America's Wildlife Act.

Investing in the next-generation of conservation stewards: This legislation will also support professionally delivered conservation education that is consistent with each State Wildlife Action Plan. Allowing a small fraction of funding to go to this purpose will help engage youth with wildlife recovery efforts at a time when kids are becoming ever more disconnected from nature.

Funding Mechanism and Accountability

S. 2372 includes a funding mechanism generated from civil and criminal penalties, fines, sanctions, forfeitures, or other revenues resulting from natural resource or environmental-related violations or enforcement actions that are not deposited in another fund or otherwise committed or appropriated. This mechanism will not affect funding that is committed to other important existing programs, such as the Oil Spill Liability Trust Fund, Superfund cleanup, or Clean Water Act Violations. This is similar to the language in the Great American Outdoors Act that ensured investments in public lands maintenance would not affect the Land and Water Conservation Fund.

S. 2372 is also built on a strong foundation of federal accountability for every dollar that will be spent under it. As described by the Alliance for America's Fish and Wildlife, the Recovering America's Wildlife Act would use the same rigorous accountability standards currently used for the State Wildlife Grants program, which is arguably the most accountable federal conservation grant program in existence, plus an additional 6th layer of accountability and reporting for states and territories.

1. States are required by current law to involve other federal agencies, private conservation groups, and the public in the development of a State's Wildlife Action Plan. The plans are typically approved by a state/territorial fish and wildlife agency's governing body in a public setting.

2. Spending under Recovering America's Wildlife Act would be required to implement actions identified in State Wildlife Action Plans. These plans are approved by the U.S. Fish and Wildlife Service and require updating at least once every decade. Any significant revision to the plans must also be approved by the Service. These plans are publicly available on the state fish and wildlife agencies' websites.
3. All Recovering America's Wildlife Act grants would be administered through the Wildlife and Sport Fish Restoration Program. All funding would be distributed to the states and territories as grants that would require approval by the Fish and Wildlife Service. The states are required to comply with federal regulations and submit grant applications that clearly state objectives of a project and intended outcomes as it relates to implementation of the State Wildlife Action Plan. States are required to submit regular reports on how spending is being conducted and on project progress and performance.
4. There is an effectiveness measures framework that is being incorporated into the Fish and Wildlife Service grant reporting and tracking system to ensure that activities funded through grants to the states to implement actions in State Wildlife Action Plans meet intended outcomes. The system will be able to produce reports that roll-up activities to show accountability of projects at state, regional or national scales.
5. Each state and territory is required to undergo an Interior Office of Inspector General (OIG) audit every 3-5 years to ensure compliance with all regulations and procedures administered by the Service. All projects funded under Recovering America's Wildlife Act also would be subject to these OIG audits. These audits are posted to the OIG's website for the public review.
6. The Recovering America's Wildlife Act includes a subsection on accountability requiring each state and territory and D.C. to provide, every three years, a work plan and budget for implementing its wildlife action plan to the Fish and Wildlife Service, the Senate Committee on Environment and Public Works, and the House Committee on Natural Resources over the coming three years, along with a report on spending and activities over the prior three years.

Funds distributed to Tribes will all be subject to reporting requirements which will be determined by the Secretary of the Interior, acting through the Director of the Bureau of Indian Affairs, in consultation with Indian Tribes. S. 2372 includes ample funding to ensure this level of accountability for states and Tribes can be maintained.

The Costs of Inaction

There is also a grave cost of inaction. Twenty years ago, Congress came close to dedicating resources to proactive, collaborative, and voluntary efforts to recover the full diversity of wildlife as part of the Conservation and Reinvestment Act (CARA). Despite broad bipartisan support, CARA failed to pass and since then more than 400 additional species have been listed and another 430 are either proposed, candidates, or petitioned for listing, while only 67 species have been delisted—and thousands of additional species have joined the ranks of species of greatest conservation need. The crisis is escalating.

The costs of failing to stem this rising tide of growing threats of extinction through proactive, preventative measures are high. Defenders of Wildlife has calculated that it costs the federal

government more than [\\$19 million](#) on average to recover a species once listed under the Endangered Species Act. If an additional 2,000 species need to be listed as endangered or threatened over the next 10 to 15 years, which is not unrealistic given that states have identified more than 12,000 species in conservation need, it would cost taxpayers an estimated \$38 billion to recover these additional species. That \$38 billion would be over and above what is still needed to recover the more than 1,600 U.S. species already on federal Endangered Species Act list—and that's just the estimated cost to the federal government. States, territories, Tribal nations, would also bear some of the costs of recovering federal endangered and threatened species. There would also be significant impact on the private sector and private landowners, especially America's farmers, ranchers, forest-owners, and builders, all of whom would face greater regulatory and economic uncertainty and tens of billions of dollars in costs—all of which would be considerably higher than the costs of the ounces of prevention to maintain or recover at-risk species before listing is required.

Conclusion

The bipartisan Recovering America's Wildlife Act of 2021 is the most important wildlife legislation since the Endangered Species Act passed nearly a half century ago. Put simply, Senator Heinrich and Senator Blunt's bill is the game changer we need to ensure wildlife survives and thrives for future generations. The urgency and need are dire, with than one-third of U.S. species at heightened risk of extinction. The Recovering America's Wildlife Act is bold and bipartisan, collaborative and proactive. It will have an immediate impact all across the country. Whether you love watching wildlife at home, on a hike, or while hunting or fishing, this landmark bill will help species from the backcountry to Americans' backyards—and conserve them for future generations.

It is not too late to save America's wildlife, although there is not a moment to waste. By making a relatively modest investment by passing the Recovering America's Wildlife Act, we can ensure that our children and grandchildren inherit a full symphony of birds; streams teeming with fish; and grasslands dotted by herds of pronghorn and mule deer. We can recover wildlife populations cost effectively and conserve critically important ecosystems that provide a myriad of ecological services and economic benefits for our local communities.

Thank you for the opportunity to testify. I look forward to your questions.

Senator CARPER. Collin, thanks so much, and thank you for your service in Delaware as our Secretary of the Department of Natural Resources and for your great leadership today and for your testimony today. We are proud of you in the First State.

Sara Parker Pauley, please proceed. Welcome.

**STATEMENT OF SARA PARKER PAULEY, PRESIDENT,
ASSOCIATION OF FISH AND WILDLIFE AGENCIES**

Ms. PAULEY. Chairman Carper, Ranking Member Capito, and members of the Committee, thank you so much for the opportunity to address you in support of Senate Bill 2372, the Recovering America's Wildlife Act.

For the record, my name is Sara Parker Pauley, Director of the Missouri Department of Conservation and past President of the Association of Fish and Wildlife Agencies.

I first want to thank my Senator, Roy Blunt, for co-sponsoring this legislation with Senator Martin Heinrich. Their dedication to this country's fish and wildlife is inspirational and sincerely appreciated.

Mr. Chair, I sit before you today as an advocate for what we in Missouri hold dear. In fact, Missourians are so dedicated to conservation that in 1976, they were willing to tax themselves to guarantee they had healthy and abundant fish and wildlife and wild places to hike and fish and hunt and cherish. This dedicated funding has been a key to our conservation success in Missouri as it has allowed for long term conservation planning and implementation.

Take, for example, our prairie restoration work in northwest Missouri. Over 99 percent of the original tallgrass prairie is gone in our State, and many of the species that depend on diverse native grasslands are also imperiled. However, the Missouri Department of Conservation, landowners, and partners like Iowa DNR are voluntarily and collaboratively working to restore remnant prairies and reconstruct prairies, an ecosystem that is critical to a plethora of species, including pollinators, which in turn, are so critical to sustaining agriculture in the region.

However, these projects do not happen in 1 or 2 years. To restore a prairie ecosystem takes decades of active habitat management and the staff and financial resources to make it happen. Simply put, conservation success does not happen overnight. It requires long term planning and dedicated funding which this act will provide to State agencies, agencies with a proven track record of restoring species, like wild turkey, deer, elk, and waterfowl.

Though other States and Tribes may not have the funding model of Missouri, they each have their own success stories to tell, like West Virginia and their work on the cerulean warbler, a small and beautiful neo-tropical migrant songbird that attracts birdwatchers from across the country. By working to implement appropriate timber harvest strategies, they are creating and restoring habitat for this iconic bird species and providing economic benefits associated with the State's timber industry.

But in Missouri, West Virginia, and elsewhere, the overall to do list of restoring our wildlife far exceeds the available funding. Through the development of State fish and wildlife action plans, we know that there are over 12,000 species of greatest conservation

need, which means they are species with low, declining, or rare populations, or they are facing threats and in need of conservation attention. These State plans serve as a blueprint for conserving our Nation's fish and wildlife and preventing endangered species from being listed.

Unfortunately, current funding levels only support an estimated 5 percent of the actions outlined in the plans, and the challenges are greater today than ever before. That means 95 percent of the work is simply not getting done because the funding does not exist. The Recovering America's Wildlife Act is the 21st century funding model we need now that will direct critical funding to State fish and wildlife agencies to proactively implement their science driven wildlife action plans.

It is important to note these State plans must be approved by the Fish and Wildlife Service as a condition of receiving funding through the State and Tribal Wildlife Grants Program, and this act would use the same accountability standards currently used for that program, which is arguably the most accountable Federal conservation grant program in existence, with five levels of accountability. This act actually adds a sixth level of accountability, requiring each State agency to provide a work plan and budget for implementing its wildlife action plan to the Service, to this Committee, and the House Committee on Natural Resources every 3 years.

In 1937, President Franklin Roosevelt signed into law the Pittman-Robertson Act, which has been the monumental funding model for restoration and management of fish and wildlife spending the last eight decades. Prior to the creation of the Pittman-Robertson Act, many game species were near the point of extinction, but because of State led efforts and dedicated funding through the Pittman-Robertson Act, State fish and wildlife agencies were able to restore many of those game species.

Henry David Thoreau noted that the meeting of two eternities, the past and the future, is precisely the present moment. I wonder, in the future, will our grandchildren be heralding our vision and leadership in this present moment, like we talk about those who championed the cause in 1937? I certainly hope and believe that will be the case with the passage of Recovering America's Wildlife Act.

Thank you for your time today.

[The prepared statement of Ms. Pauley follows:]



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Testimony on S.2372, *The Recovering America's Wildlife Act*

Sara Parker Pauley – Director, Missouri Department of Conservation

Chairman Carper, Ranking Member Capito, and members of the Committee, thank you for the opportunity to address your committee in support of S. 2372 – the Recovering America's Wildlife Act. For the record, my name is Sara Parker Pauley, Director for the Missouri Department of Conservation and past president of the Association of Fish and Wildlife Agencies.

I first want to thank my Senator Roy Blunt for co-sponsoring legislation with Senator Martin Heinrich. Their dedication to this country's fish, and wildlife is inspirational and much appreciated.

Mr. Chair, I sit before you today as an advocate for what we in Missouri hold dear. Whether you're fishing for smallmouth bass in the pristine Current River, observing waterfowl at a conservation area along the Missouri River, or watching the frost melt away while deer hunting in north Missouri, one thing is clear: Missourians have a passion for and commitment to the natural resources of our state.

In fact, Missourians are so dedicated to conservation, that in 1976 they were willing to tax themselves to guarantee they had healthy and abundant fish and wildlife, places to go outdoors to hike, fish, hunt, birdwatch, or just to know these forests and rivers would be there for their grandchildren. The measure includes a 1/8 percent Conservation Sales Tax – for every \$100 taxable dollars spent, 12.5 cents goes towards conservation with no sunset. We are blessed to have the support and trust of citizens, and we do not take this for granted as stewards of these precious resources and funds. The key to Missouri's conservation success has been the dedicated conservation funding that allows for the long-term conservation planning and implementation.

Take for example, our prairie restoration work in northwest Missouri. Over 99 percent of the original tallgrass prairie is gone in our state and many of the species that depend on diverse native grasslands are consequently imperiled. However, the Missouri Department of Conservation, landowners, and partners are working collaboratively to restore remnant prairies and reconstruct prairie to the best of our abilities. The same habitat work is occurring a few

miles over the state line in Iowa by the Iowa Department of Natural Resources and partners. This voluntary and collaborative work in Iowa and Missouri is creating a landscape scale tallgrass prairie ecosystem. An ecosystem that is critical to a plethora of species, including pollinators, which in turn are so critical to sustaining agriculture in the region. However, these projects do not happen in one or two years. To restore and recreate a prairie ecosystem takes decades of active habitat management. Dedicated funding at the state level allows state fish and wildlife agencies and partners to develop landscape scale projects that help restore native habitat and the species that depend on them.

Another example is the Missouri Ozark Forest Ecosystem Project, which is a 100-year research project focused on upland forest responses to different management regimes including prescribe fire and timber harvest and the impact to songbirds, mammals, invertebrates, soils, and vegetation. Without the dedicated funding of the Conservation Sales Tax, it would not be possible to plan, implement and benefit from a 100-year research project.

And the last example of the importance of long-term dedicated funding is the restoration of Ozark and Eastern hellbenders. The hellbender is a giant aquatic salamander found in streams in the eastern United States. Since 1990, hellbenders that live in Ozark streams of Missouri have suffered greatly: their numbers have declined by more than 70% and both species are listed as endangered on the endangered species list. They are a great example of species that would benefit if the Recovering America's Wildlife Act is signed into law. In 2011, we partnered with the St. Louis Zoo to start a captive breeding program. Ten years later we are just now seeing some of the first Ozark hellbenders raised in captivity hatch the second generation of hellbenders. In fact, it takes 3 to 6 years to raise a hellbender to a size large enough that it can be successfully released into a Missouri stream. Without the dedicated funding, there would be no certainty the program would be funded long enough to ensure young hellbenders are raised to a large enough size to be released.

Simply put, Conservation success does not happen overnight. It requires long-term planning and dedicated funding which the Act will provide to state agencies -- agencies with a proven track record of restoring species like wild turkey, deer, elk, waterfowl, and many other species. While past efforts have placed a priority on game species, this Act focuses on restoring and managing native habitats to benefit all species while utilizing the same effective boots on the ground approach to accomplish the desired conservation outcomes.

While most states do not benefit from a state level dedicated funding source like Missouri, I can assure you that they all have similar conservation success stories of their own. In West Virginia for instance, I would highlight the Cerulean warbler. A small and beautiful neotropical migrant songbird that attracts birdwatchers from across the country. Despite the global population decline reported for this species, West Virginia still hosts more than 35% of the world's breeding population for the Cerulean warbler. By working to implement appropriate timber harvest strategies, they are creating and restoring habitat for this iconic bird species and

providing economic benefits associated with the state's timber industry. Unfortunately, the to-do list far exceeds the available funding.

Despite our dedicated funding and success in Missouri, we have over 680 species of conservation concern meaning populations are already rare or are in decline. Through the development of State Fish and Wildlife Action Plans, we know that there are over 12,000 species of greatest conservation need, which means they are species that are of low population, declining, rare, or facing threats and in need of conservation attention in this country. These plans serve as a blueprint for conserving our nation's fish and wildlife and preventing endangered species from being listed. Of great concern is that current funding levels only support an estimated 5% of the actions outlined in the Plans and the challenges are greater today than ever before. Ninety-five percent of the work is not getting done, because funding does not exist. The Recovering America's Wildlife Act is the 21st century funding model we need now that will direct critical funding to state fish and wildlife agencies to implement their science-driven wildlife action plans.

It is important to note, these plans must be approved by the US Fish and Wildlife Service as a condition of receiving funding through the State and Tribal Wildlife Grants program. The Act would use the same accountability standards currently used for the that program, which is already arguably the most accountable federal conservation grant program in existence, and this Act actually adds a 6th level of accountability. Under this Act each state agency is required to provide a work plan and budget for implementing its wildlife action plan to the Service, the Senate Committee on Environment and Public Works, and the House Committee on Natural Resources over the next 3 years. We have prepared a detailed description of the six levels of accountability that we will submit along with written testimony for the record. Finally, in terms of matching the federal dollars available to the states and tribes under this Act, the Association, along with our Federal partners has prepared a detailed report that describes the numerous and innovative non-federal match opportunities available, which we are happy to submit for the record.

The rapid decline of so many species of wildlife and the habitats they depend on certainly threatens our outdoor recreation economy, which contributes \$689 billion to our national economy annually, creates 4.3 million direct jobs and accounts for 1.8 of the U.S. GDP, according to the Bureau of Economic Analysis in their 2020 report. But more importantly the decline of wildlife species threatens our quality of life as humans. We are all interconnected because people, wildlife, and the environment are integrated at our very core. Aldo Leopold, considered the father of conservation, understood this connectedness when he said, "Conservation viewed in its entirety, is the slow and laborious unfolding of a new relationship between people and the land." It is critical that we come up with a solution together that matches the scope of the challenge.

To conclude, it was in 1937 that President Franklin Roosevelt signed into law the Pittman-Robertson Act which has been the monumental funding model for the restoration and improvement of wildlife habitat and wildlife management research that has spanned the last 8 decades. Prior to the creation of the Pittman-Robertson Act, many game species were near the point of extinction from overhunting and habitat loss, but because of state led efforts and dedicated funding through the Pittman-Robertson Act, state fish and wildlife agencies were able to restore many of those game species. And, just as the need was great in 1937 for many of our game species, today we still have an alarming conservation crisis in front of us with thousands of species that are in trouble. More than 12,000 species across the United States are in decline because of greater threats from invasive species, disease, habitat loss and other emerging threats. The Recovering America's Wildlife Act can be the 2021 epic conservation game changer that the landmark Pittman-Robertson Act was in 1937.

Henry David Thoreau noted that the meeting of two eternities, the past and future is precisely the present moment. Eight-four years from now, will our grandchildren be heralding our vision and leadership in conservation in this present moment, like we talk about those who championed the cause of 1937? Sometimes history repeats in positive ways, and I certainly hope and believe that will be the case with the passage of the Recovering America's Wildlife Act. Thank you for your time today.

The Association of Fish & Wildlife Agencies represents North America's fish and wildlife agencies to advance sound, science-based management and conservation of fish and wildlife and their habitats in the public interest. The Association represents its state agency members on Capitol Hill and before the Administration to advance favorable fish and wildlife conservation policy and funding and works to ensure that all entities work collaboratively on the most important issues. The Association also provides member agencies with coordination services on cross-cutting as well as species-based programs that range from birds, fish habitat and energy development to climate change, wildlife action plans, conservation education, leadership training and international relations. Working together, the Association's member agencies are ensuring that North American fish and wildlife management has a clear and collective voice.



Accountability under the *Recovering America's Wildlife Act*

States, Territories & DC: *Recovering America's Wildlife Act* would use the same accountability standards currently used for the State Wildlife Grants program, which is arguably the most accountable federal conservation grant program in existence, plus an additional 6th layer of accountability and reporting.

- **First Level of Accountability**-- States are required by current law to involve other federal agencies, private conservation groups, and the public in the development of a State's Wildlife Action Plan. The plans are typically approved by a state/territorial fish and wildlife agency's governing body in a public setting.
- **Second Level of Accountability**- Spending under *Recovering America's Wildlife Act* would be required to implement actions identified in State Wildlife Action Plans. These plans are approved by the US Fish and Wildlife Service (FWS) and require updating at least once every decade. Any significant revision to the plans must also be approved by the FWS. These plans are publicly available on the state fish and wildlife agencies' websites.
- **Third Level of Accountability**-All *Recovering America's Wildlife Act* grants would be administered through the Wildlife and Sport Fish Restoration Program. All funding would be distributed to the states and territories as grants that would require approval by the FWS. The states are required to comply with federal regulations and submit grant applications that clearly state objectives of a project and intended outcomes as it relates to implementation of the State Wildlife Action Plan. States are required to submit regular reports on how spending is being conducted and on project progress and performance.
- **Fourth Level of Accountability**-There is an effectiveness measures framework that is being incorporated into the FWS grant reporting and tracking system to ensure that activities funded through grants to the states to implement actions in State Wildlife Action Plans meet intended outcomes. The system will be able to produce reports that roll-up activities to show accountability of projects at state, regional, or national scales.
- **Fifth Level of Accountability**-Each state/territory is required to undergo an Interior Office of Inspector General (OIG) audit every 3-5 years to ensure compliance with all federal regulations and procedures administered by the FWS. All projects funded under *Recovering America's Wildlife Act* also would be subject to these OIG audits. These audits are posted to the OIG's website for public review.
- **Sixth Level of Accountability**-*Recovering America's Wildlife Act* includes a subsection on "Accountability," requiring each state, territory, and DC to provide a work plan and budget for implementing its wildlife action plan to FWS, the Senate Committee on Environment and Public Works, and the House Committee on Natural Resources over the coming 3 years, along with a report on spending and activities over the prior three years.

Tribes: Funds distributed to Indian Tribes will all be subject to reporting requirements which will be determined by the Secretary of the Interior, acting through the Director of the Bureau of Indian Affairs, in consultation with Indian Tribes.

Senate Committee on Environment and Public Works
Hearing Entitled, “A Legislative Hearing to Examine S. 2372, The Recovering America’s
Wildlife Act”
December 8, 2021
Questions for the Record for Ms. Sara Parker Pauley

Chairman Carper:

1. In your testimony, you emphasized the importance of the partnership between state fish and wildlife agencies and the U.S. Fish and Wildlife Service, saying the following: “It seems a little bit that we are pitting the States against the Fish and Wildlife Service, and I hope that that isn’t the case. We do so much amazing work with our federal partners. In the Midwest, we have such a healthy relationship where we work very collaboratively with the Fish and Wildlife Service on shared conservation priorities. So, I want to make sure that the members of this committee understand just how important that relationship is with the Fish and Wildlife Service.” On this topic of state-federal partnership, you went on to say that “conservation takes all of us.” I could not agree more.
 - a. Would you please elaborate on some of the work that the Missouri Department of Conservation has done in partnership with the U.S. Fish and Wildlife Service to recover imperiled species and/or prevent additional species from becoming requiring Endangered Species Act protections?

Response: There are numerous examples of coordination between the US Fish and Wildlife Service and the Missouri Department of Conservation (MDC), I’ll highlight three in my response, the Niangua darter, the American burying beetle, and the hellbender. I’ll also touch on additional important regional collaborations.

The federally threatened Niangua darter is a small fish found in clear Ozark creeks and small rivers in central Missouri, including its namesake, the Niangua River. The Niangua darter is found nowhere else in the world. Most of the year, they occupy shallow pools and runs that have a slight to moderate current and silt-free, gravelly bottoms. The decline of this species is due to habitat loss from the construction of reservoirs, disruption of stream channels, and runoff from livestock production. The MDC partnered with the U.S. Fish and Wildlife Service (USFWS) to propagate the Federally listed Niangua darter at the Department’s Lost Valley Fish Hatchery. In addition, the Department and USFWS have provided cost share to landowners to install streambank revetments and riparian tree plantings that help improve water quality and reduce sedimentation. In recent years the Department and USFWS have been working with counties by providing cost share for the removal of low-water crossings that prevent fish passage and are difficult for counties to maintain. The low water crossings are replaced with a span bridge that allow Niangua darters and other aquatic organisms to move upstream and repopulate new stream reaches. These projects have been completed in numerous counties where the Niangua darter is found in central Missouri.

American burying beetles, a federally endangered species, have returned to Wah'Kon-Tah Prairie in west-central Missouri as part of a well-coordinated partnership that includes the St. Louis Zoo's Center for American Burying Beetle Conservation, the USFWS, the MDC and The Nature Conservancy. These endangered beetles will be designated as part of a "nonessential experimental" population by the USFWS. This designation provides flexibility and assurance to nearby landowners that the presence of this protected species will not affect farming and other land-management activities. Up to 300 pairs of the zoo-bred beetles were released—for the first time in Missouri—in June 2012. Aside from being a large, beautifully colored species, American burying beetles have amazing habits that include parental care for their young and serving an important function of assisting with decomposition of dead animals, which they bury before consuming, which is the origin of their name.

The official endangered species of the state of Missouri, hellbenders are the largest aquatic salamanders in North America. Missouri is the only state that has both subspecies — the Ozark hellbender and the Eastern hellbender. Both are listed as state endangered in Missouri, and the Ozark hellbender also is listed as federally endangered by the USFWS. Both Ozark and Eastern hellbender populations in Missouri have declined more than 70 percent over the past 40 years. A population assessment indicated that all hellbender populations have a high risk of extinction (above 96%) over the next 75 years unless populations are bolstered. Based upon these results, zoo propagation and head-starting were deemed essential to the long-term recovery of hellbenders in Missouri. The Saint Louis Zoo, the Department and USFWS have worked together to propagate hellbenders at the Saint Louis Zoo and the MDC Shepherd of the Hills Fish Hatchery. Since 2008, 9,476 Saint Louis Zoo-raised endangered hellbenders (8,599 Ozark and 877 Eastern) have been reintroduced to the wild in Missouri. MDC biologists are monitoring the success of these released animals in the wild.

Regarding other important collaborations, the first is the Midwest Landscape Initiative (MLI). Started in 2018, the MLI is a collaboration of Midwest Association of Fish and Wildlife Agencies (MAFWA) member states, the USFWS and the U.S. Geological Survey to identify shared landscape-scale fish and wildlife conservation priorities and to work with partners, including private landowners, to develop and implement effective conservation solutions. The MLI works across boundaries to conserve shared nature through coordinated planning, actionable science, and collaborative conservation. An important recent action, the MLI completed the first phase of the Midwest Regional Species of Greatest Conservation Need (SGCN) project. This project identifies species of high Midwest regional concern and importance that will benefit from coordinated conservation delivery. With this regional list in place, multi-species and multi-jurisdictional conservation efforts can be better informed to improve the status of

currently listed species and minimize the need to list additional species as threatened or endangered. In addition, the MLI is currently working to develop a habitat inventory and assessment to understand landscape level threats and challenges to shared natural resources and identify opportunities for strategic resource investment that maximize conservation gains. Currently, Mr. Craig Czarnecki, USFWS Region 3, and I serve as co-chairs of the steering committee of this key collaborative.

The MDC and the USFWS also collaborate on Monarch butterfly conservation efforts through the Missourians for Monarchs Collaborative Steering Committee, which guides the state's efforts in meeting Missouri monarch butterfly habitat restoration goals and restore other pollinator habitats. This voluntary and collaborative work is responsible for creating a landscape scale tallgrass prairie ecosystem. An ecosystem that is critical to a plethora of species, including pollinators, which are also critical to agriculture in the region. In fact, about 35 percent of the world's food crops depend on pollinators to reproduce, and more than 3,500 species of native bees help increase crop yields.

Next, the USFWS, state conservation agencies, and other conservation partners manage migratory birds based largely on the routes that birds follow as they migrate between nesting and wintering areas. Because these routes, or flyways, span multiple states and countries, it's imperative that the conservation agencies with management responsibilities coordinate at the flyway-scale. Each flyway has a Council, consisting of representatives from each state, provincial, and territorial agency within that administrative Flyway. The Councils are advised by several technical committees consisting of biological staff from their member agencies, including the USFWS and state conservation agencies. These technical committees evaluate population and habitat information for both game and non-game migratory birds, inclusive of SGCN, and make recommendations to the Councils on matters of migratory bird conservation. MDC biologists serve on the technical committees for the Mississippi and Central Flyways and have played an active role in coordinating Flyway-scale conservation strategies for species currently and formerly listed under the ESA, such as the Post-delisting Monitoring Plan for the Bald Eagle.

Finally, MDC biologists are also involved in the Midcontinent Shorebird Conservation Initiative, a flyway-scale partnership between the USFWS, state conservation agencies, Environment and Climate Change Canada, ConocoPhillips, USDA Forest Service International Programs, and others. The Midcontinent flyway, which includes the interior portions of the USA, Canada, and South America, provides important breeding, nesting, and stopover habitat for over 16.5 million shorebirds during spring migration. However, roughly 55% of the 45 populations of Midcontinent shorebirds have shown long periods of decline, while just 9% have increased. The Midcontinent Shorebird Conservation Initiative is currently developing a hemispheric strategic plan to identify the main threats and most effective management and conservation actions to restore

and maintain shorebird populations. The development and implementation of the strategic plan is supported by a Steering Committee and several hemispheric and regional committees, of which both MDC and USFWS biologists are active participants.

Each of these examples show the importance of state-level coordination, cooperation, and collaboration. In addition to our critical and robust partnership with the USFWS, the partnerships with local zoos, NGOs and other collaborators were possible due to the relationships as the state level. We can be more efficient and effective when we leverage existing partnerships and relationships that exist at the state level.

2. In your testimony, you described that the amount of funding provided to states in the Recovering America's Wildlife Act (RAWA) – \$1.3 billion per year – is what it would cost for states to implement their State Wildlife Action Plans (SWAPs). Meanwhile, experts estimate that the federal government would need somewhere between \$1.6 billion to \$2.3 billion annually to fully implement recovery plans for threatened and endangered species, and Congress was only able to provide \$107 million in the Fiscal Year 2021 annual appropriations process.

This means if RAWA is enacted, Congress would be footing the bill for 75% of state funding needs for SWAPs and at best, providing less than 10% of what our federal agencies need to recover our nation's most imperiled species.

- a. Many states, including Missouri, currently have large budget surpluses, while the federal budget deficit has skyrocketed. That considered, why does it make sense for the Federal Government to pay for 75% of state funding needs, while only providing less than 10% of the funding its agencies need for wildlife recovery?

Response:

The sad reality is that neither the federal government, nor the states, have done a good job funding the recovery of the full diversity of wildlife and that is largely the reason we are facing a rapidly expanding biodiversity crisis. We appreciate Chairman Carper's leadership in securing \$200 million for endangered species recovery, but the difficulty in even securing that amount within a \$1.75 trillion reconciliation package and the annual difficulty within the appropriations process shows the challenges they were up against, even as the extinction crisis accelerates.

Right now, because of the incredible bipartisan support, we have a once-in-a-generation opportunity to fund state and Tribal wildlife action plan implementation. This includes a requirement that states spend at least 15% of recovering species listed as threatened or endangered (\$170+ million), which makes sense because states have more and closer relationships with local landowners with whom partnerships are necessary for success. It also includes the innovation grants program which will largely be focused on petitioned, candidate, and listed species (\$127.5 million) since those are areas where collaboration, innovation, and multi-state cooperation are most desperately needed.

We would also support adding more funds to the bill to support federal recovery efforts if the politics will allow, but we cannot afford to miss yet another opportunity after 50 years of funding failure.

As you point out, some states are experiencing short-term surpluses, largely due to funding provided by the CARES Act and the American Rescue Plan. This is not universal as nearly a dozen states are experiencing deficits. Missouri currently has a fund balance of more than \$10.5 billion, which represents 109 days of state operating expenses, the majority was provided by Congress through federal stimulus and coronavirus relief acts that carry narrow spending parameters. Many of these funds are for specific, one-time expenditures that would not allow for spending on SWAPs or conservation programs.

The reality is that many state wildlife agencies lost general fund revenues over the past dozen years as states had to balance their budgets in the face of the Great Recession and escalating costs in other areas. The MDC receives a portion of sales tax but no general revenue from the state of Missouri. Other state fish and wildlife agencies receive little or no general revenue from their state general assemblies and must make do with existing federal funding and revenues from hunting and fishing permit sales and other revenues like licenses plate sales. Because these SWAPs are to be implemented by the states, the state agencies should receive the funding under the existing accountability contained in RAWA to do the work.

That said, the legislation does require a 25% match from all the states, which will total more than \$380 million annually, so the states will have significant skin in the game. This 25% match requirement is greater than the current requirements for the Transportation Trust Fund and the Clean Water and Drinking Water State Revolving Funds.

We agree that there should be greater federal investment in recovering federal trust species and we would like to work with the committee on strategies to increase federal funding for ESA recovery in ways that can engender bipartisan support. We also think there are more opportunities for better utilizing existing funds by supporting the leadership of USFWS and NOAA to set priorities. For example, while Congress usually appropriates around \$100 million for recovery (\$107 million in FY21), the total amount spent on recovery across the federal agencies is usually 10-12X that amount. According to the *2017 US Fish and Wildlife Service Federal and State Endangered and Threatened Species Expenditure Annual Report*¹, which attempts to document state and federal expenditures made for each listed species, total expenditures reported for domestic and foreign species in FY 2017 were \$1,346,111,912 of which \$1,287,980,311 was reported by Federal agencies. This amount is closer to the right order of magnitude, but it was largely spent on a few species, like northwest salmon on half measures with limited

¹ <https://www.fws.gov/endangered/esa-library/pdf/2017-Expenditures-Report.pdf>

benefit, rather than the full diversity of listed species. In addition to more direct funding for USFWS and NOAA, we'd like to support any efforts that the committee decides to undertake.

It's also important to note that the states are spending on federal trust species as well. The same report noted that at least \$60 million was spent by the 36 states that responded, but that this is not a complete accounting of all T/E Species related expenditures. The report notes that, "This report represents a compilation of reasonably identifiable expenditures for the conservation of listed species reported independently by Federal and State agencies." For example, the Arizona Game and Fish Department has taken a lead role in managing the recovery of several federally listed species in Arizona, including the Chiricahua leopard frog. Like many other threatened or endangered species listed under the ESA, the frog has required intensive efforts for many years and has only been successful due to the combined efforts of state, federal and private partners. This effort has been driven by the State Wildlife Grant program and if it weren't for this program and state-led efforts to leverage existing partnerships, the recovery of this threatened species would not have been possible. That total expenditure for this species alone was \$4.5 million, most of which came from the state agency and other partners that they brought to the table. In Michigan, due to the efforts of the Michigan Department of Natural Resources and its many partners, Kirtland's warbler was removed from the list of federal threatened and endangered species in 2019. Again, without that expenditure of more than \$2.1 million dollars by the Michigan DNR, that conservation success and recovery would not have been possible. There are many examples like this that are not captured in expenditure reports, but the outlay of state funds and conservation successes that were made possible by those expenditures are nonetheless real. For more of these state-led conservation success stories, please refer to the *20 years of Conservation Success Report*² published in September of 2020, highlighting successes made possible by the State Wildlife Grant program.

In addition, state fish and wildlife agencies annually conserve properties through easement and fee-title acquisition, and they actively manage and restore tens of thousands of acres of habitat from wetlands to forests, savannas, prairies, and grasslands that not only benefit non-listed species but listed species as well. These efforts in the tens of millions of dollars are conducted largely through state license fees, excise taxes and state funds. Conservation fees are used to fund conservation. General tax revenues are seldom made available for conservation related work. The benefit is that these funds cannot be diverted for non-conservation related work. The drawback is

² https://www.fishwildlife.org/application/files/2616/0087/6829/STWG_2020_Report_Final.pdf

that these funds don't adequately meet the need. Thus, the need for a 21st Century model of funding.

After 50 years of insufficient funding, expecting fifty different state legislatures to shift resources from social programs, infrastructure, roads, education, and other needs that do not have a dedicated funding stream is unrealistic. Dedicated federal funding with a 25% local match requirement to state fish and wildlife agencies to carry out joint mission of conservation works.

Finally, dedicated federal funding has been instrumental in past conservation successes when you consider the success of the Wildlife and Sport Fish Restoration Programs for game species across our Nation. Other examples include the North American Wetlands Conservation Act and federal Duck Stamp that have provided dedicated funding for wetland conservation, and as a result, waterfowl populations are up 56% since 1970 providing a model for how habitat protection and restoration can reverse bird declines. Whereas nearly 30% of all other birds have disappeared from the planet since 1970 because of a lack of investments in their conservation. Dedicated federal funding provides the long-term funding mechanism states need to complete on the ground conservation work. Right now, state fish and wildlife agencies have SWAPs approved by the USFWS, the staff, partnerships, and expertise. We are only missing the funding.

- b. Recognizing your statement that "the purpose of this legislation has always been to find the funding for states to implement their State Wildlife Action Plans," do you otherwise support the idea of Congress providing robust resources to federal agencies for wildlife recovery? How might doing so improve states' abilities to partner with the U.S. and Wildlife Service on wildlife recovery?

Response: The Association of Fish and Wildlife Agencies has long supported increased appropriated funding for federal agencies to aid in the recovery of more than 1,600 federally threatened and endangered species. Accelerating threats to fish and wildlife requires urgent investment in state and federal agencies so they can each fulfil their respective roles and responsibilities under the Endangered Species Act. Funding through the Recovering America's Wildlife Act would provide states with the means to monitor more species so federal agencies have more support as well as better data to make informed decisions on listing and to track recovery. The Act would provide funding for states and their partners to use existing infrastructure to implement voluntary conservation measures with private landowners and others that are part of federal recovery efforts. Funding to support research will give state and federal agency biologists a better understanding of the threats that are driving the decline of species and the actions needed to conserve them.

State Wildlife Action Plans are collaboratively developed with input from federal agencies so they can be used to guide the work of state and federal agencies. The

Recovering America's Wildlife Act would help ensure these plans are updated with the best science needed to conserve over 12,000 species of greatest conservation need. Absent additional funding, the states can only implement a small fraction (roughly 5%) of the conservation actions identified in SWAPs, leading to slower recovery, increased federal listings and greater risk of extinction. Appropriations for State Wildlife Grants have ranged from \$50 million to \$90 million over the period of Fiscal Years 2001-2021, with an average of \$60 million provided annually to states, territories, District of Columbia, and tribes.

As history has demonstrated repeatedly over the last century, the recovery of fish and wildlife can succeed when there is collaboration between the states, federal government, and the private sector and when there is sufficient investment. When many game species populations were decimated a century ago, Congress passed the Pittman-Roberson and Dingell-Johnson Acts to spur collaboration between the states and the USFWS to recover game species. The highly successful Wildlife and Sport Fish Restoration Program was born out of these Acts and precipitated collaboration that led to the recovery of some of our nation's most iconic fish and wildlife, a success that is unparalleled in the world.

Like Pittman-Roberson and Dingell-Johnson, the Recovering America's Wildlife Act requires that states and territories provide at least 25 percent in matching funds to access the federal resources. This both leverages the federal funds, so they have greater impact and requires states and territories to make a commitment with their own financial resources. States have become innovative and experienced in finding ways to secure the 25% match under the State and Tribal Wildlife Grant program and will continue to do so under Recovering America's Wildlife Act. Private landowners, industry stakeholders and others are an important component of the existing conservation partnerships on the ground and potential sources of non-federal match. Further, non-profit organizations have sought to raise private funds through efforts, such as the National Fish and Wildlife Foundation, to conduct recovery efforts. Survey work by the Association of Fish and Wildlife Agencies show that states are fully confident that these combined efforts provide more than sufficient match to meet the matching requirements, as envisioned by the Recovering America's Wildlife Act. In addition, the 15% requirement for states to spend on the recovery of listed species will also help facilitate the federal-state partnership by aligning incentives around recovery and by increasing the total amount of money available for recovery (by at least another \$170 million annually).

3. You stated that you have “great respect for the role that the Endangered Species Act plays.”
 - a. Would you elaborate on what you mean by this?
 - b. In your view, what is the role of the Endangered Species Act in recovering America’s wildlife?

Response: As I mentioned during the hearing, I compared the Endangered Species Act to an emergency room. It is the last resort for a species that has run out of other options. The reasons for listing a species can be numerous, but one thing that can be said for certain, is that if the risks to the species and its habitat had been addressed earlier, listing or “more costly trips to the emergency room” may not have been necessary.

Congress required State Wildlife Action Plans starting in 2000 to identify those species at risk and identify actions to keep them from being listed, with the first reports due in 2005 for states to be eligible for State and Tribal Wildlife Grants. However, for the next two decades, funding to implement those plans remained elusive. For over two decades states have dutifully identified the species at risk, projects necessary to protect the species, and only 5% of the necessary funding was made available to the states to implement these plans. The results over those 20 years have been predictable. More species put at risk and more species listed.

There is also a grave cost of inaction. Twenty years ago, Congress came close to dedicating resources to proactive, collaborative, and voluntary efforts to recover the full diversity of wildlife as part of the Conservation and Reinvestment Act (CARA). Despite broad bipartisan support, CARA failed to pass and since then more than 400 additional species have been listed and another 430 are either proposed, candidates, or petitioned for listing, while only 67 species have been delisted—and thousands of additional species have joined the ranks of species of greatest conservation need. We cannot afford to go down this road again.

The costs of failing to stem this rising tide of growing threats of extinction through proactive, preventative measures are high. In a recent report, Defenders of Wildlife calculated that it costs the federal government more than \$19 million on average to recover a species once listed under the Endangered Species Act. If an additional 2,000 species need to be listed as endangered or threatened over the next 10 to 15 years, which is not unrealistic given that states have identified more than 12,000 species in conservation need, it would cost taxpayers an estimated \$38 billion to recover these additional species. That \$38 billion would be over and above what is still needed to recover the more than 1,600 U.S. species already on federal Endangered Species Act

list—and that’s just the estimated cost to the federal government. States, territories, Tribal nations, would also bear some of the costs of recovering federal endangered and threatened species. There would also be significant impact on the private sector and private landowners, especially America’s farmers, ranchers, forest landowners, and builders, all of whom would face greater regulatory and economic uncertainty and tens of billions of dollars in costs—all of which would be considerably higher than the costs of the ounces of prevention to maintain or recover at-risk species before listing is required.

We spent twenty years arguing over this same question. Rather than finding a solution to the conservation crisis we argued over who deserved it more...states or federal agencies. If we are insistent on continuing this argument, where will we be 20 years from now? That answer is predictable as well. More species listed, more species at risk and much higher costs to taxpayers.

The ESA is a necessary part of the nation’s conservation success. But, like home ownership, car maintenance or our own health, preventative maintenance is always the wiser and less expensive investment.

Senator Inhofe:

1. Ms. Pauley, I know Missourians share Oklahoman’s great pride and appreciation for the outdoors and our rich wildlife. It is often incorrectly believed that America’s sportsmen are not capable, determined or contributing to the conservation and preservation of our land, water and wildlife. The fact is wildlife conservation would not be nearly as successful without our hunters and anglers – in fact, sportsmen contribute nearly one billion dollars in excise taxes annually that go directly toward wildlife and fishery conservation nationwide. Sadly, there are efforts among anti-hunting activists to restrict hunting nationwide, which would be un-American and devastating to wildlife conservation. Will you speak to the potential impact a ban or reduction in hunting and fishing would have on states’ wildlife conservation efforts?

Response: The American System of Conservation Funding is one of the most successful conservation accomplishments, if not the most successful, that the world has witnessed. For nearly 80 years, hunters and anglers have provided critical funding for state-based fish and wildlife conservation and in partnership with state wildlife managers have enjoyed many species recovery successes on the ground. Decades of conservation efforts funded by legal, regulated hunting have led to the survival and sustainability of countless wildlife species – safeguarding biodiversity and providing associated ecosystem services in the process.

The transformational accomplishments in conservation seen throughout North America have largely been realized due to the dedication of professionals who use science to

manage our precious fish and wildlife resources and the critical habitats upon which these species depend. The research, data, and expertise that state fish and wildlife agencies need to successfully manage, conserve, and restore wildlife and habitat is primarily funded through the contributions of hunters. License fees, collected by state fish and wildlife agencies, are leveraged with excise tax dollars on firearms, ammunition, and archery equipment. In addition to this mix of federal and state funds, the contributions of non-governmental conservation organizations, give rise to a successful funding model that has fueled North America's conservation efforts and provided billions of dollars to states to accomplish their important conservation mission. In addition to the license revenues and associated excise tax dollars that flow through the Federal government back to the states, state and local economies benefit from the expenditures of those participating in these outdoor pursuits.

*"Hunting is an integral part of North American cultures, providing a powerful connection to the outdoors for millions of people and generating billions of dollars to local and national economies. The contributions of hunters serve as the fundamental foundation for a social and economic support system for conserving wildlife and habitats for future generations"*³.

We believe through the financial, advocacy, and management support of hunters and trappers, coupled with the efforts of highly trained, wildlife professionals in state and federal agencies, we have collectively developed a successful track record of wildlife recovery, habitat restoration, and disease surveillance and management. As new challenges emerge, grassroots support, cooperation among the federal and state agencies, partnerships with non-profit partners and international relationships will collectively continue to give us the best chance of success.

In terms of a vision of the future, Recovering America's Wildlife Act, provides a 21st century funding model for the conservation of our most precious natural resources, our fish and wildlife. For the first time in generations, the conservation burden would not rest solely on the shoulders of sportsmen and women. Permanent, dedicated funding would be available through Recovering America's Wildlife Act for proactive, voluntary efforts led by the states, territories, and tribal nations to prevent vulnerable wildlife from becoming endangered. It would enhance this successful funding model, provide funding for all species, and broaden the tent of those who pays for fish and wildlife conservation. This is one of the reasons why there is such broad support across the country, including my state of Missouri and your home state of Oklahoma, for the

³ Arnett, Edward B., and Rob Southwick. "Economic and social benefits of hunting in North America" *The International Journal of environmental studies* 72, no. 5 (2015): 734-745. doi: 10.1080/00207233.2015.1033944

Recovering America's Wildlife Act. There is support from the Oklahoma Department of Wildlife Conservation (ODWC) to the sportsmen's groups and industry alike. Last September a letter from 19 organizations including the National Wild Turkey Federation, Pheasants Forever, the National Wildlife Federation and The Nature Conservancy outlined the importance of Recovering America's Wildlife Act to Oklahoma.

Under the Act the ODWC would receive more than \$16 million each year to implement habitat restoration, wildlife management, research, and projects that support outdoor recreation – as outlined in the Oklahoma plan that was developed collaboratively with sportsmen, universities, ag producers, and conservation organizations. These plans allow communities to have input on how their natural resources are managed, and ensures projects are being executed in partnership with local groups and stakeholders. With the funding Recovering America's Wildlife would provide, Oklahoma could fund surveys and shed much needed light on species that may become threatened or endangered, including the alligator snapping turtle, Oklahoma salamander, longnose darter, tri-colored bat, and regal fritillary butterfly. The ODWC could use the funds to prevent the need for federal listing by implementing on-the-ground conservation measures to improve the habitats and statuses of their native wildlife. Conservation partnerships would continue to be developed with private landowners and financial assistance and incentives would be provided for improving the quantity and quality of habitat in areas of greatest importance, further benefiting our fish and wildlife.

Finally, Oklahoma's economy would also directly benefit from passage of this legislation. Oklahoma's outdoor recreation generates \$10.6 billion in consumer spending annually, creating 97,000 direct jobs. Funds from the Recovering America's Wildlife Act would ensure wildlife habitat and wildlife watching access grows in Oklahoma, further connecting people to the natural world. Additionally, numerous industries in Oklahoma (agriculture, forest product companies, and others) will benefit from the increased regulatory certainty this approach can provide.

Senator CARPER. Thank you for your time today, and thank you for that testimony. That was great.

Batting cleanup, last but not least, Jonathan Wood, you are recognized.

STATEMENT OF JONATHAN WOOD, VICE PRESIDENT OF LAW AND POLICY, PROPERTY AND ENVIRONMENT RESEARCH CENTER

Mr. WOOD. Thank you, Chairman Carper, Ranking Member Capito, for inviting me to join the Committee this morning as you consider the Recovering America's Wildlife Act.

As just introduced, my name is Jonathan Wood. I am the Vice President of Law and Policy for the Property and Environment Research Center, a conservation research institute based in Bozeman, Montana. For four decades, PERC's research has demonstrated the importance of property rights, incentives, and federalism to recovering wildlife. These values are critical to understanding RAWA and its context in broader conservation policy.

As the Biden administration's America the Beautiful Report recently observed, effective conservation depends on respecting private property rights and rewarding landowners for their voluntary conservation efforts. Frankly, private lands play an outsized role in the conservation of wildlife, including endangered and threatened species. Therefore, the key to recovering species is often to make them an asset for private landowners, rather than a liability.

Unfortunately, as Ranking Member Capito observed, we frequently get these incentives wrong. The Endangered Species Act can penalize landowners who accommodate listed species or conserve their habitats. These policies create perverse incentives that can undermine the goals of the statute and have resulted in only 3 percent of listed species recovering over the last half-century.

Partnering with landowners to solve real world challenges holds much greater promise. This year, PERC and the Greater Yellowstone Coalition partnered with rangers outside of Yellowstone National Park on Montana's first elk occupancy agreement. Under this agreement, PERC and GYC paid for a fence to separate elk and cattle, thereby reducing disease risk and competition for forage. In exchange, the ranchers will manage nearly 500 acres as winter elk habitat. Such win-win arrangements are how we will achieve our conservation goals for the long term.

Pursuing conservation through State programs, rather than a top down Federal approach, can also increase innovation and accountability while reducing conflict. Given the varying needs of wildlife, landowners, and communities, federalism's emphasis on local knowledge and flexibility is particularly valuable here. Moreover, State agencies often enjoy better reputations and more trust among landowners than does the Fish and Wildlife Service.

Unfortunately, although landowners highly value conservation, the intense regulatory conflicts that my friend Collin O'Mara mentioned that have arisen between the Service and landowners under the ESA make the agency a less desirable conservation partner for many. This highlights the need to align ESA policies to support the goals of State conservation initiatives and to encourage voluntary conservation.

PERC's 2018 report, *The Road to Recovery*, explains that one of the ESA's primary intended incentives for voluntary conservation and for State leadership was a distinction between how endangered species and threatened species are supposed to be regulated. Under the statute, Federal regulation should relax as species recover and tighten as species decline, which aligns the incentives of land-owners with the interests of listed species. Likewise, States are encouraged to develop conservation programs in exchange for the power to effectively veto Federal regulations governing the take of threatened species.

Unfortunately, these incentives have been thwarted for most of the ESA's history due to a Fish and Wildlife Service regulation known as the Blanket 4(d) rule. This regulation eliminates this distinction between endangered and threatened species regulation, and it also increases conflict over the delisting process. Under this statute, management responsibility should shift to States in stages as species move from endangered to threatened to delisted.

However, under the blanket rule, the stakes for delisting are much higher. You go from full Federal control to full State control overnight, and this can encourage a sort of endless litigation like that we have seen for the recovered Greater Yellowstone Ecosystem grizzly.

In 2019, the agency repealed this Blanket 4(d) rule, explaining that following the statute's approach could better incentivize recovery efforts, but it has recently indicated its intent to reverse that decision.

If Congress were to invest significant funds in State leadership on conservation initiatives, it should consider how to align ESA policies to ensure the success of those initiatives. For instance, it should consider whether RAWA's wildlife conservation strategies entitle States to cooperative agreements under the Endangered Species Act. It should also consider the role of Federal regulations for threatened species, encouraging conservation, rewarding State efforts, and providing a road to recovery and delisting.

Finally, thinking creatively about how to fund conservation to reflect the full range of interests that value wildlife can make programs more sustainable. Too often, conservation is dependent on a single source, such as sportsmen. But hunters and anglers are not the only people who value wildlife or who impact wildlife. A 2019 PERC report, *How We Pay to Play*, shows that recreation based fee programs can increase funding while promoting accountability.

RAWA identifies several funding sources States can use for the matching requirements. A nudge to consider other creative ways to broaden the funding base may also be helpful.

Thanks again for the opportunity to testify, and I look forward to your questions.

[The prepared statement of Mr. Wood follows:]



**Prepared Statement of
Jonathan Wood
Vice President of Law and Policy
Property and Environment Research Center (PERC)**

**U.S. Senate
Committee on Environment and Public Works
Hearing on S. 2372, The Recovering America's Wildlife Act
December 8, 2021**

Main points

- Successful wildlife conservation depends on respecting property rights and making species an asset rather than a liability to private landowners.
- State conservation programs can tap the benefits of federalism while avoiding the conflict that frequently arises under federal programs.
- The Endangered Species Act could be better implemented to encourage effective and innovative state conservation by restoring Congress' original design for the regulation of threatened species.
- To be sustainable, conservation funding should reflect the wide variety of interests that value wildlife, rather than relying too much on a single source.



Introduction

Thank you Chairman Carper and Ranking Member Capito for the invitation to participate in this committee's consideration of the Recovering America's Wildlife Act (RAWA). RAWA calls for significant federal investment in state conservation initiatives to recover endangered and threatened species and to conserve other wildlife species before they trigger listing under the Endangered Species Act. These are admirable goals, and I appreciate the opportunity to discuss how we can best pursue them.

It is important to understand RAWA in the broader context of federal and state conservation policies and what we've learned from the results of those policies. Today, I will focus on four principles that should be front of mind as this committee considers this legislation and the future of wildlife conservation. First, successful conservation begins by respecting private property rights and making wildlife an asset to private landowners rather than a liability to be avoided. Second, pursuing conservation through states can encourage innovation and accountability while avoiding the conflict that too often arises under federal policy. Third, Endangered Species Act policies may frustrate RAWA's goal of encouraging effective state conservation programs. For example, Congress should consider how the Fish and Wildlife Service has undermined one of the Endangered Species Act's key incentives for state conservation by issuing a rule that purports to overrule Congress' decision to distinguish regulation of endangered and threatened species. This rule, which was recently repealed but the agency has expressed its intent to readopt, exacerbates conflict, eliminates a key incentive for recovery efforts, and undermines state conservation. And, finally, sustainable conservation depends on broadening funding sources beyond hunters and anglers to better reflect the wide variety of interests that value wildlife.

The Property and Environment Research Center

I am the vice president of law and policy with the Property and Environment Research Center (PERC), a conservation research institute based in Bozeman, Montana, and dedicated to improving environmental quality through property rights and markets. For four decades, PERC's research has explored the critical role of private property, incentives, and innovation in successful conservation. It has emphasized the importance of making species an asset for landowners, rather than a



liability, and the dire consequences for wildlife when we get the incentives wrong.¹ And PERC has studied how policies can encourage collaboration between federal and state wildlife agencies, private landowners, and conservation organizations—or can create endless and counterproductive conflict.² In addition to research, PERC also puts its ideas into practice, by partnering with private landowners and conservation groups to develop innovative, voluntary strategies to advance conservation.³ Prior to joining PERC, I spent nearly ten years as an environmental attorney, including participation in significant litigation involving the Endangered Species Act. In that role, I saw firsthand how well-intentioned but misguided policies can encourage conflict at the expense of collaborative conservation.

I. Honor private property rights and support voluntary stewardship

Aldo Leopold famously remarked that “[c]onservation will ultimately boil down to rewarding the private landowner who conserves the public interest.” Perhaps nowhere is this more true than in the context of wildlife conservation.

Private lands play a central role in sustaining wildlife. In 2009, the Fish and Wildlife Service reported that approximately half of the species listed under the Endangered Species Act depend on private land for at least 80 percent of their habitat.⁴ But it’s not just endangered and threatened species that depend on the goodwill of private

¹ See, e.g., Jonathan Wood & Tate Watkins, *Critical Habitat’s “Private Land Problem”: Lessons From the Dusky Gopher Frog*, 51 *Env’tl. L. Rep.* 10,565 (2021); Jonathan Wood, *The Road to Recovery: How Restoring the Endangered Species Act’s Two-Step Process Can Prevent Extinction and Promote Recovery*, PERC Policy Report (April 2018), available at <https://www.perc.org/2018/04/24/the-road-to-recovery>; Jonathan H. Adler, *The Leaky Ark: The Failure of Endangered Species Regulation on Private Land*, in *Rebuilding the Ark: New Perspectives on Endangered Species Act Reform* (2011); Richard Stroup, *The Endangered Species Act: Making Innocent Species the Enemy*, PERC Policy Series (1995), <https://www.perc.org/sites/default/files/Endangered%20Species%20Act.pdf>.

² See, e.g., *The Road to Recovery*, *supra* n.1; Jonathan Wood, *A Prairie Home Invasion: How Environmental Federalism Can Lead to Real Recovery of Endangered Species*, PERC Reports (2017), available at <https://perc.org/2017/12/09/a-prairie-home-invasion/>; Terry Anderson & Reed Watson, *An Economic Perspective on Environmental Federalism: The Optimal Locus of Endangered Species Authority*, in *The Endangered Species Act and Federalism: Effective Conservation through Greater State Commitment* (2011).

³ See, e.g., PERC, *Elk Occupancy Agreements*, <https://perc.org/elk-occupancy-agreements/>.

⁴ See Fish and Wildlife Serv., *Our Endangered Species Program and How it Works With Landowners* (2009), available at <https://www.fws.gov/Endangered/esa-library/pdf/landowners.pdf>.



landowners. The Greater Yellowstone Ecosystem, which PERC calls home, has the longest intact migrations of elk, muledeer, and pronghorn.⁵ While 68 percent of the land in the Greater Yellowstone Ecosystem is public,⁶ the ecosystem's prized elk spend up to 80 percent of their winters on private land, where snows are less deep, forage is more attainable, and conditions are more favorable.⁷ And, according to the Audubon Society, more than 80 percent of the grasslands and wetlands that provide essential bird habitat are in private ownership.⁸ There is simply no way to achieve conservation goals without working with private landowners.

That's why PERC was pleased that the National Climate Task Force, in its recent *"Conserving and Restoring America the Beautiful"* report, included respect for private property rights as one of the "essential ingredients to building and maintaining broad support, enthusiasm, and trust" in conservation efforts.⁹ I fully agree with its observation that "[e]fforts to conserve and restore America's lands and waters must respect the rights of private property owners. Such efforts must also build trust among all communities and stakeholders, including by recognizing and rewarding the voluntary conservation efforts of private landowners."¹⁰

Despite broad recognition that the goodwill and cooperation of private landowners is of central importance, our environmental policies do not always reflect this basic fact. Instead, too often, regulations make wildlife a liability for landowners to avoid, rather than an asset to conserve. Such regulations get the incentives backward and send a

⁵ See Todd Wilkinson, *The Marvelous Migrations of Greater Yellowstone*, PERC Reports (2019), available at <https://www.perc.org/2019/12/06/the-marvelous-migrations-of-greater-yellowstone/>.

⁶ See Patricia Gude, Andrew J. Hansen, and Danielle A. Jones, *Biodiversity Consequences of Alternative Future Land Use Scenarios in Greater Yellowstone*, 17 *Ecological Apps.* 1004 (2007).

⁷ See Whitney Tilt, *Elk in Paradise: Conserving Migratory Wildlife and Working Lands in Montana's Paradise Valley* (2020), available at <https://www.perc.org/wp-content/uploads/2020/07/Elk-In-Paradise.pdf>.

⁸ See Nat'l Audubon Soc'y, *North American Grasslands and Birds Report* (2019), available at https://nas-national-prod.s3.amazonaws.com/audubon_north_american_grasslands_birds_report-final.pdf.

⁹ See Nat'l Climate Task Force, *Report: Conserving and Restoring America the Beautiful* (2021), available at <https://www.doi.gov/sites/doi.gov/files/report-conserving-and-restoring-america-the-beautiful-2021.pdf>.

¹⁰ See *id.*



strong signal to landowners not to conserve or restore habitat. Worse, they may even create perverse incentives, encouraging landowners to preemptively destroy habitat as the only way to avoid unwelcome and unfair burdens.

This phenomenon is perhaps best understood in the context of the Endangered Species Act, which can impose strict limits on private landowners who accommodate rare species or conserve their habitats.¹¹ Studies have shown, for instance, that the statute’s “take” prohibition can encourage landowners to preemptively destroy habitat and avoid the regulatory consequences of a listed species’ potential presence.¹² Likewise, “critical habitat” designations result in a so-called “stigma effect,” immediately lowering the value of designated land because prospective purchasers recognize the designation as a regulatory risk and lower their offers accordingly.¹³ Recent studies show that critical habitat designations can reduce land values by as much as 70 percent—a significant blow to landowners who may be relying on that land for their income, their retirement, or to send their kids to college.¹⁴ As a result of these perverse incentives, the evidence suggests that the Endangered Species Act has fared poorly at conserving habitat and encouraging restoration of habitat on private land.¹⁵

But this phenomenon is not limited to endangered and threatened species, nor to regulatory burdens. Often, wildlife impose other significant costs on landowners that they must account for when making decisions. As mentioned above, private ranches provide the vast majority of winter habitat for elk in the Greater Yellowstone Ecosystem. But elk don’t always repay the kindness of these landowners. Elk compete

¹¹ See *Critical Habitat’s “Private Land Problem”*, *supra* n.1; *The Road to Recovery*, *supra* n.1.

¹² See Daowei Zhang, *Endangered Species and Timber Harvesting: The Case of RedCockaded Woodpeckers*, 32 *Econ. Inquiry* 150 (2004); Dean Lueck & Jeffrey A. Michael, *Preemptive Habitat Destruction Under the Endangered Species Act*, 46 *J.L. & Econ.* 27 (2003).

¹³ See David J. Hayes, Michael J. Bean, Martha Williams, *A Modest Role for A Bold Term: “Critical Habitat” Under the Endangered Species Act*, 43 *Env’tl. L. Rep.* 10,671, 10,672 (2013) (commentary by Obama administration officials from the Fish and Wildlife Service acknowledging critical habitat’s stigma effect). See also *Critical Habitat’s “Private Land Problem”*, *supra* n.1, at 10,569–73.

¹⁴ Maximilian Auffhammer, et al., *The Economic Impact of Critical-Habitat Designation: Evidence from Vacant-Land Transactions*, 96 *Land Econ.* 188, 206 (2020).

¹⁵ See Adam J. Eichenwald et al., *U.S. Imperiled Species Are Most Vulnerable to Habitat Loss on Private Lands*, 18 *Frontiers Ecology & Env’t* 439 (2020); Adler, *supra* n.1, at 6–31.



with cattle for forage, damage fences, attract predators, encourage illegal trespass by hunters, and bring disease risks.¹⁶ Consequently, a PERC survey of Paradise Valley landowners found that 85 percent of those in agriculture would like to see fewer elk and other wildlife on their property.¹⁷

Reducing burdens and making wildlife an asset to private landowners, however, can avoid conflict and result in better conservation outcomes. Recently, PERC and the Greater Yellowstone Coalition (GYC) partnered with ranchers outside of Yellowstone National Park on Montana's first elk occupancy agreement.¹⁸ Under the agreement, PERC and GYC paid for a fence that will keep elk and cattle separate, and thereby reduce disease risks and competition for forage, in exchange for the landowners managing nearly 500 acres of their land as winter range for elk.¹⁹ At a time when migration corridors in the area are increasingly under threat, creative tools like this show how we can voluntarily engage landowners in conservation while avoiding conflict.

I applaud Senator Heinrich, Senator Blunt, and RAWA's other cosponsors for recognizing the importance of property rights and voluntary, collaborative conservation. Section 6, for instance, provides that funds cannot be conditioned on landowners providing public access to private lands, waters, or holdings. This makes sense. Requiring landowners to sacrifice their property rights as a condition of participating in conservation is only likely to alienate potential partners.

It may be helpful for the committee to incorporate broader protections for private property rights, rather than addressing access alone. The Blue Ribbon Panel report on which RAWA is based explained that the intent is to support "voluntary, non-regulatory measures that have been proven to prevent threatened and endangered

¹⁶ *See Elk in Paradise*, *supra* n. 9, at 18–20.

¹⁷ *See id.* at 20.

¹⁸ *See Elk Occupancy Agreements*, *supra* n.3.

¹⁹ PERC does not accept government funding, and its contribution to the elk occupancy agreement was thanks entirely to voluntary support from private donors.



species listings.”²⁰ Incorporating this intent explicitly in the legislation may provide comfort to private landowners interested in participating in conservation programs who may otherwise fear that state wildlife conservation strategies may change or be implemented to include burdensome regulation. When conservation programs depend on the voluntary participation of landowners, those programs tend to be sensitive to the costs wildlife impose on landowners. They are, therefore, more likely to make wildlife an asset to landowners and to reward them for their role in conserving the public interest.

II. State conservation programs can tap the benefits of federalism while avoiding the conflict that frequently arises under federal programs

Focusing on state conservation programs can expand the benefits of federalism to wildlife conservation. Dispersing policy making decisions among 50 states rather than concentrating them in a single national regulator can promote accountability and innovation by tapping the states’ role as laboratories.²¹ If two states adopt different approaches to conserving the same species, monitoring the results can expand our understanding of what works and what doesn’t. But under a one-size-fits-all federal model with nothing to compare results to, accountability and reflection about why an effort succeeded or failed is more difficult.

Federalism also allows policies to benefit from local knowledge and to fit local conditions. Given the varied needs of wildlife species, ecosystems, landowners, and communities, federalism is particularly valuable for wildlife conservation.²² Thus, it makes sense to prioritize wildlife conservation through state initiative and innovation, rather than federal edict.

It also makes sense for another reason. Surveys show that state conservation initiatives enjoy far greater support among voters and landowners than do federal

²⁰ Blue Ribbon Panel on Sustaining America’s Diverse Fish and Wildlife Resources, Final Report and Recommendations (Mar. 2016), available at https://www.fishwildlife.org/application/files/8215/1382/2408/Blue_Ribbon_Panel_Report2.pdf.

²¹ See Michael W. McConnell, *Federalism: Evaluating the Founders’ Design*, 54 U. Chi. L. Rev. 1484, 1491–1511 (1987). See also *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

²² See Temple Stoellinger, *Wildlife Issues are Local—So Why Isn’t ESA Implementation?*, 44 Ecology Law Quarterly 681, 723 (2017).



programs. A 2020 nationwide survey by the Duke Nicholas Institute for Environmental Policy Solutions, for instance, found that 65 percent of rural voters prefer environmental issues to be resolved by state and local governments, compared to only 25 percent support for federal regulation.²³ The survey found that urban and suburban voters similarly prefer state and local solutions.²⁴

This preference is also reflected in the extent to which landowners are willing to work with state or federal agencies. A survey of Utah landowners found that 84 percent were willing to partner with a state university and 63 percent willing to partner with the state wildlife agency.²⁵ Only 50 percent, however, were willing to work with the Fish and Wildlife Service.²⁶ A survey of North Carolina landowners shows a similar disparity between trust in state agencies and the Fish and Wildlife Service.²⁷ Another survey of forest landowners suggests that such disparities are due to the sort of Endangered Species Act conflicts discussed above.²⁸ That survey, like the others, found that landowners highly value conservation but are wary of partnering with the Fish and Wildlife Service. “The apparent contradiction between favorable views of wildlife conservation and negative views of endangered species conservation,” the authors explain, “may indicate the need for policy changes in the protection of listed species on private lands. These results point to a missed opportunity to capitalize on these landowners’ openness to wildlife conservation; attitudes toward the ESA may

²³ See Robert Bonnie, et al., *Understanding Rural Attitudes Toward the Environment and Conservation in America*, Duke Nicholas Institute for Environmental Policy Solutions 19–20 (2020), available at <https://nicholasinstitute.duke.edu/sites/default/files/publications/understanding-rural-attitudes-toward-environment-conservation-america.pdf>.

²⁴ See *id.* (62 percent preference for state and local solutions versus a 28 percent preference for federal regulation among urban and suburban voters).

²⁵ See Megan E. Hansen et al., *Cooperative Conservation: Determinants of Landowner Engagement in Conserving Endangered Species*, Center for Growth and Opportunity at Utah State University, Policy Paper No. 2018.003 (2018).

²⁶ See *id.*

²⁷ See *id.*

²⁸ See Lauren K. Ward et al., *Family Forest Landowners and the Endangered Species Act: Assessing Potential Incentive Programs*, 116 J. Forestry 529 (2018).



improve if past regulatory conflicts are set aside in favor of new voluntary incentive programs.”²⁹

Distrust between the Fish and Wildlife Service and private landowners can have other conservation costs, too. Landowners may refuse access to their property or refuse to share information about the wildlife and other environmental values it contains for fear that the agency will use this information against them later.³⁰ This can reduce our knowledge about wildlife, lead to ill-informed and errant regulatory decisions, and misallocate limited conservation resources.³¹ States can help mitigate this problem. A Texas program to conserve the dunes sagebrush lizard, for instance, was designed specifically to ensure that parcel-specific information given to the state would not be shared with the Fish and Wildlife Service to assuage landowners’ concerns about the federal agency’s potential use of such data.³²

III. Congress should ensure that the Endangered Species Act is implemented consistent with its original design to support the success of state conservation initiatives.

In considering RAWA’s proposed investment in state conservation strategies, this committee should be mindful of the relationship of state conservation efforts to existing federal policies, especially whether those policies are likely to enhance or undermine state engagement and innovation. Relevant here, the way in which the Endangered Species Act is implemented can significantly affect the flexibility states enjoy to pursue conservation and their incentives to do so.

²⁹ See *id.*

³⁰ See Critical Habitat’s “Private Land Problem”, *supra* n.1, at 10,573. See also Amara Brook et al., *Landowners’ Responses to an Endangered Species Act Listing and Implications for Encouraging Conservation*, 17 *Conservation Biology* 1638 (2003); Stephen Polasky & Holly Doremus, *When the Truth Hurts: Endangered Species Policy on Private Land With Imperfect Information*, 35 *J. Env’t Econ. & Mgmt.* 22 (1998).

³¹ Errant delistings based on incomplete or biased information have been a recurring problem under the Endangered Species Act. See, e.g., Robert Gordon, *Correcting Falsely “Recovered” and Wrongly Listed Species and Increasing Accountability and Transparency in the Endangered Species Program*, Heritage Found. Backgrounder (2018), available at https://www.heritage.org/sites/default/files/2018-04/BG3300_0.pdf.

³² See *Defenders of Wildlife v. Jewell*, 70 F.Supp.3d 183, 195–96 (D.C. Cir. 2014).



Like most federal environmental laws,³³ Congress intended the Endangered Species Act to contain a substantial cooperative-federalism component. The Endangered Species Act asserted federal authority over private and state lands and activities affecting listed species, but this was not a step taken lightly.³⁴ Senator Tunney (D-CA), the bill’s Senate floor manager, described the Endangered Species Act’s take prohibition as an unfortunate but necessary measure to prevent extinction of endangered species.³⁵ However, he explained the statute was written to “minimiz[e] use of the most stringent prohibitions.”³⁶ Indeed, he continued, “prohibitions against taking must be absolutely enforced *only* for those species on the brink of extinction.”³⁷

The statute achieved this aim by limiting the take prohibition to endangered species.³⁸ Congress also authorized the Secretary of the Interior to adopt regulations for a threatened species if “necessary and advisable” for the conservation of that species.³⁹ However, there were two significant limitations on this authority. First, as the Senate report accompanying the Endangered Species Act emphasized, take could only be regulated on a species-by-species basis after an assessment of whether it was necessary and advisable for the conservation of “*the particular threatened species*.”⁴⁰

Second, and more relevant here, federal regulations governing the take of threatened species were expected to require state approval as a means of encouraging state

³³ See Temple Stoellinger, et al., *Improving Cooperative State and Federal Species Conservation Efforts*, 20 Wyo. L. Rev. 183, 203–04 (2020); Robert L. Fischman, *Cooperative Federalism and Natural Resources Law*, 14 NYU Envtl. L.J. 179, 214–15 (2005).

³⁴ See Jonathan Wood, *Take It to the Limit: The Illegal Regulation Prohibiting the Take of Threatened Species Under the Endangered Species Act*, 33 Pace Envtl. L. Rev. 23, 25–28 (2015).

³⁵ Congressional Research Service, *A Legislative History of the Endangered Species Act of 1973, as Amended in 1976, 1977, 1978, 1979, and 1980*, at 358 (statement of Sen. Tunney) (hereinafter “ESA Legislative History”).

³⁶ *Id.*

³⁷ *Id.* (emphasis added).

³⁸ 16 U.S.C. § 1538. See *Take It to the Limit*, *supra* n. 25, at 23–24.

³⁹ 16 U.S.C. § 1533(d).

⁴⁰ S. Rep. No. 93-307, at 8 (1973), *reprinted in* ESA Legislative History, *supra* note 35, at 307 (emphasis added).



conservation efforts.⁴¹ Section 6 of the Endangered Species Act requires the Fish and Wildlife Service to enter into cooperative agreements with any state that develops a program to conserve listed species if such program satisfies five criteria.⁴² If a state obtains a cooperative agreement under this provision, Section 4(d) provides that federal regulations governing take of threatened species apply “only to the extent that such regulations have also been adopted by such State.”⁴³ By offering states this say over federal regulation, Senator Tunney explained, Congress wished to “encourage[]” states “to use their discretion to promote the recovery of threatened species” by developing their own innovative strategies.⁴⁴

This approach may sound foreign to anyone familiar with the actual implementation of the statute. This is because, soon after the statute was enacted, the Fish and Wildlife Service purported to reverse Congress’ decision to distinguish endangered and threatened species in this manner. Turning the statute’s text on its head, the service issued a rule, commonly known as the blanket 4(d) rule, prohibiting take of all threatened species (including any listed in the future) unless the agency later took steps to reduce regulation of a particular species.⁴⁵ As a result, the cooperative federalism arrangement envisioned by Congress has not been realized.⁴⁶

This departure from Congress’ design has had two significant and unfortunate consequences. First, by broadly eliminating the distinction between endangered and threatened species, the blanket 4(d) rule undermined a key incentive for landowners to recover endangered species.⁴⁷ Under the statute, regulatory restrictions are

⁴¹ 16 U.S.C. § 1533(d).

⁴² *Id.* § 1535(c).

⁴³ *Id.* § 1533(d).

⁴⁴ ESA Legislative History, *supra* n.35, at 358.

⁴⁵ See Reclassification of the American Alligator and Other Amendments, 40 Fed. Reg. 44,412, 44,414 (Sept. 26, 1975).

⁴⁶ See Temple Stoellinger, *Wildlife Issues are Local—So Why Isn’t ESA Implementation?*, 44 Ecology Law Quarterly 681, 723 (2017).

⁴⁷ See *Road to Recovery*, *supra* n.1, at 14–15. See also Fish & Wildlife Serv., *Regulations for Prohibitions to Threatened Wildlife and Plants*, 84 Fed. Reg. 44,753, 44,755 (Aug. 26, 2019) (repealing the blanket 4(d) rule to “incentivize[]” landowners “to take actions that would improve the status of



supposed to decrease as species recover and tighten if they decline. This carrot and stick approach aligns the incentives of landowners with the interests of rare species.⁴⁸ The blanket 4(d) rule, however, generally makes landowners indifferent about a species' status once the species is listed.⁴⁹

Second, the rule undermined incentives for states to develop innovative conservation programs and to secure cooperative agreements.⁵⁰ Instead of states developing comprehensive conservation programs in exchange for the power to approve species-specific 4(d) rules, the Fish and Wildlife Service has asserted broad authority over activities involving threatened species and limited states to designing species-specific programs in exchange for limited say over how federal regulations might be relaxed for the species.

Four decades of experience have shown the consequences of this approach: far too much conflict and too little conservation. While the Endangered Species Act has been successful in preventing extinction, the way it has been implemented has not succeeded in recovering and delisting species, a goal which has been met for only 3 percent of listed species.⁵¹

In 2019, the Fish and Wildlife Service repealed the blanket 4(d) rule, creating the possibility of a return to Congress' original design and the conservation incentives it presents. However, that reform may be short lived. Despite representing to courts

endangered species" through "the possibility of downlisting the species to threatened and potentially receiving regulatory relief in the resulting 4(d) rule").

⁴⁸ See *Road to Recovery*, *supra* n.1, at 14–15.

⁴⁹ See *id.* See also 84 Fed. Reg. at 44,755.

⁵⁰ See, e.g., *Swan View Coalition, Inc. v. Turner*, 824 F. Supp. 923, 938 (D. Mont. 1992) (adopting the service's argument that, notwithstanding Section 4(d)'s explicit state approval requirement, state programs are preempted to the extent they do not adopt the relevant 4(d) rule).

⁵¹ See U.S. Fish & Wildlife Serv., Delisted Species, Env'tl. Conservation Online Sys. (ECOS), <https://ecos.fws.gov/ecp/report/species-delisted>. The Endangered Species Act leaves no doubt that its goal is the recovery and delisting of species. See 16 U.S.C. § 1532(3) (defining conservation as the steps taken to bring listed species "to the point at which the measures provided pursuant to this chapter are no longer necessary").



that this reform does not interfere with its ability to conserve listed species,⁵² the service has announced its intent to restore the blanket rule anyway.⁵³

This regulatory pendulum is relevant to today's discussion because, if Congress is to invest significant sums in state conservation initiatives, it should ensure that those initiatives are set up to succeed. To the extent that implementation of the Endangered Species Act frustrates incentives for state conservation, that misalignment should be resolved.

For instance, this committee should consider the relationship between RAWA's wildlife conservation strategies and ESA cooperative agreements. Do these strategies qualify as state conservation programs for purposes of a cooperative agreement? If so, should Congress' approval and funding of those strategies entitle states to the benefits of a cooperative agreement? If not, what additional (potentially costly and time-consuming) hoops must states jump through to enjoy these benefits?

This also raises questions about the relationship between 4(d) rules, state efforts to recover endangered and threatened species, and the need to recognize and reward recovery efforts through the delisting process. Under the Endangered Species Act's original design, primary regulatory authority moves in steps from the federal government to the states as a species recovers from endangered, to threatened, to delisted.⁵⁴ And, in appropriate circumstances, the transfer may be made even more gradual by providing several intermediate steps while a species is listed as threatened.⁵⁵ This gradual approach can reduce tensions and help to build trust among states, landowners, and conservationists.

⁵² See Fed. D.'s Motion for Stay, ECF No. 150, 19 n.10, *State of California v. Haaland*, No. 19-cv- 06013 (N.D. Cal. filed Oct. 7, 2021). See also Frazer Decl., ECF No. 132-1, ¶ 9, *State of California v. Haaland*, No. 19-cv-06013 (N.D. Cal. filed August 13, 2021).

⁵³ See Fish and Wildlife Serv., *ESA Implementation: Regulation Revisions*, https://www.fws.gov/endangered/improving_esa/regulation-revisions.html (last updated June 4, 2021).

⁵⁴ See *The Road to Recovery*, *supra* n.1, at 15, 18–21.

⁵⁵ See PERC Comment on Proposed 4(d) Rule for the Lesser Prairie Chicken, Dkt. No. FWS-R2-ES-2012-0071 (Sept. 1, 2021), available at <https://www.perc.org/wp-content/uploads/2021/09/PERC-Comment-on-LPC-Rule.pdf>; PERC Comment on 5-Year Status Review of Grizzly Bear, Dkt. No. FWS-R6-ES-2019-N144 (Mar. 16, 2020), available at <https://www.perc.org/wp-content/uploads/2020/03/public-comment-grizzly-bear-status-review.pdf>.



Suppose, for instance, that the Fish and Wildlife Service had sought to encourage and reward state efforts to conserve grizzly bears by gradually ceding more and more authority to states as populations hit recovery benchmarks.⁵⁶ Under this approach, states would have had an opportunity to demonstrate their ability to manage the species and to build trust with conservation interests concerned about backsliding. And the stakes of a delisting would have been relatively lower, since states would already have been exercising a significant, independent role by that point. Instead, there's been more than a decade of conflict and litigation over grizzlies in the Greater Yellowstone Ecosystem and, despite being widely recognized as recovered, the population remains listed.⁵⁷

Such results risk discouraging state efforts to recover listed species by denying states and their partners a critical reward for successful efforts. That risk should particularly concern this committee, since the frequently expressed concern about species backsliding under state management has never materialized. No species has recovered and been successfully transferred⁵⁸ to state management only to later have to be relisted. RAWA proposes that 15 percent of funds be used to recover endangered or threatened species, as well as candidates for listing.⁵⁹ The success of such investments depend on a realistic path to recovery and delisting. Restoring the Endangered Species Act's original design to encourage state conservation and incentivize recovery efforts would help lead to more conservation successes.⁶⁰

⁵⁶ See PERC Comment on 5-Year Status Review of Grizzly Bear, *supra* n.49.

⁵⁷ See Fish and Wildlife Serv., *Grizzly Bear in the Lower-48 States: 5 Year Status Review* (2021), available at <https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/5.%20SIGNATURE%2020210226%20Five%20Year%20Status%20Review%20Grizzly%20v5.pdf>.

⁵⁸ Of course, delistings have frequently led to litigation and species being relisted because of some federal misstep. But this reflects only the Endangered Species Act's strong incentives for conflict, rather than anything about what would happen if recovered species were transferred to state management.

⁵⁹ S. 2372, § 5.

⁶⁰ See *Road to Recovery*, *supra* n.1



IV. Conservation funding should reflect the wide variety of interests that value wildlife

Another principle Congress should consider is the need to broaden the base of support for conservation funding to reflect the full range of interests that value wildlife and to enhance accountability. Too often, conservation funding is dependent on only a single source and is vulnerable to changing economic and cultural conditions.

Hunters and anglers currently fund a significant portion of wildlife conservation at the state level through user fees and excise taxes. The collective annual budgets of state fish and wildlife agencies exceed \$5 billion, and more than half of that funding comes from sources related to hunting and fishing.⁶¹ The largest portion is revenue from state sales of hunting and fishing licenses, which amounts to nearly \$1.7 billion.⁶² (The second-largest portion is federal matching funds from an excise tax on firearms, ammunition, fishing tackle, and related items.)⁶³

Asking hunters and anglers to contribute to the conservation of game species and other wildlife they value makes sense. And it can promote accountability, by making sportsmen feel invested in the results of programs they help fund. But sportsmen are not the only people who value wildlife conservation or who impact wildlife and its habitat.⁶⁴ Encouraging states to broaden their approach to include other interests

⁶¹ See Tate Watkins, *How We Pay to Play: Funding Outdoor Recreation on Public Lands in the 21st Century*, PERC Public Lands Report 24 (2019), available at <https://www.perc.org/2019/05/28/how-we-pay-to-play-funding-outdoor-recreation-on-public-lands-in-the-21st-century/>.

⁶² See U.S. Fish and Wildlife Serv., *FY2021 Hunting License Data*, <https://www.fws.gov/wsfrprograms/Subpages/LicenseInfo/Natl%20Hunting%20License%20Report%202021.pdf>; U.S. Fish and Wildlife Serv., *FY2021 Fishing License Data*, <https://www.fws.gov/wsfrprograms/Subpages/LicenseInfo/Natl%20Fishing%20License%20Report%202021.pdf>

⁶³ See U.S. Fish and Wildlife Serv., *FY2021 Pittman-Robertson Apportionment*, <https://www.fws.gov/wsfrprograms/Subpages/GrantPrograms/WR/WRFinalApportionment2021.pdf>; U.S. Fish and Wildlife Serv., *FY2021 Dingell-Johnson Apportionment*, <https://www.fws.gov/wsfrprograms/subpages/grantprograms/sfr/SFRFinalApportionment2021.pdf>.

⁶⁴ See Courtney L. Larson, et al., *Effects of Recreation on Animals Revealed as Widespread through a Global Systematic Review*, PLOS One (2016), available at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259>; Alyson B. Courtemanch, *Seasonal Habitat Selection and Impacts of Backcountry Recreation on a Formerly Migratory Bighorn Sheep Population in Northwest Wyoming, USA*, M.S., Department of Zoology and Physiology (2014), available at <https://static1>.



will make funding more sustainable, especially if the share of the adult population that engages in hunting and fishing continues to decline.⁶⁵

Interest in outdoor recreation and other means of experiencing wildlife are on the rise. Prior to the covid pandemic, the Bureau of Economic Analysis reported that outdoor recreation accounted for \$459.8 billion in economic activity in 2019.⁶⁶ Thus, there is substantial potential for other outdoor users to contribute to wildlife conservation.

In fact, revenues from recreation fees have become a significant share of some national park budgets in recent years due to increased visitation, implementation of new fees, and increases of existing fees. In total, fee revenues have risen by 40 percent over the past five years, from \$316 million to \$442 million.⁶⁷ About 70 percent of all fee revenue is generated by the National Park Service, while the Forest Service generates another 22 percent of the total.⁶⁸ Under the Federal Lands Recreation Enhancement Act, many federal sites that collect fees can retain 80 percent of the revenue to maintain and improve sites.⁶⁹ As with the use of hunting fees to fund conservation of game species, recreation fees can increase accountability by incentivizing land managers to respond to users' needs. While funding systems for state parks vary widely across the country, park users provide virtually all funding in several states, and many states rely on users for a significant portion of overall state park funding.⁷⁰

squarespace.com/static/5a3876b5bff200aa91b78b87/t/5a6680c3419202ba47c34df9/1516667087614/Cortemanch+MS+Thesis_Teton+bighorn+sheep_revised.pdf.

⁶⁵ See *How We Pay to Play*, *supra* n.55, at 25.

⁶⁶ See BEA, Outdoor Recreation Satellite Account, U.S. and States, 2019 (2020), available at <https://www.bea.gov/news/2020/outdoor-recreation-satellite-account-us-and-states-2019>.

⁶⁷ See Tate Watkins, *Enhancing the Public Lands Recreation Fee System*, PERC Policy Brief (2020), available at <https://www.perc.org/2020/11/18/enhancing-public-lands-recreation-fee-system/>.

⁶⁸ See *id.*

⁶⁹ See *id.*

⁷⁰ See *How We Pay to Play*, *supra* n.55, at 23.



Another way to expand sources of conservation funding while increasing accountability is to give contributors more choice about how their money is spent. This would encourage those who help fund conservation to be informed about the aims and results of different programs. States have already experimented with this model for many species. California, for instance, has a voluntary program for taxpayers to contribute to the state's sea otter recovery program.⁷¹ In the long run, having those who care most about wildlife approach conservation programs from the perspective of an investor is likely to contribute significantly to the success of such programs.

Section 7 of RAWA requires a state match to receive federal funds and identifies several categories of funds that states can use, including hunting and fishing license fees. It's not clear whether this is the only type of user fee permitted, but that doesn't appear to be the intent. Given the need to broaden sources of conservation funding, this committee should consider urging states to think creatively about other sources.

Conclusion

Thank you for the opportunity to provide testimony on RAWA and the importance of aligning policies to incentivize species conservation. Congress has the opportunity to conserve our nation's wildlife by advancing conservation approaches that respect property rights, promote local decision-making, and expand funding opportunities. I look forward to the discussion and answering any questions.

⁷¹ See Cal. Coastal Conservancy, *Sea Otter Recovery Fund*, <https://scc.ca.gov/grants/sea-otter-recovery-fund/>.

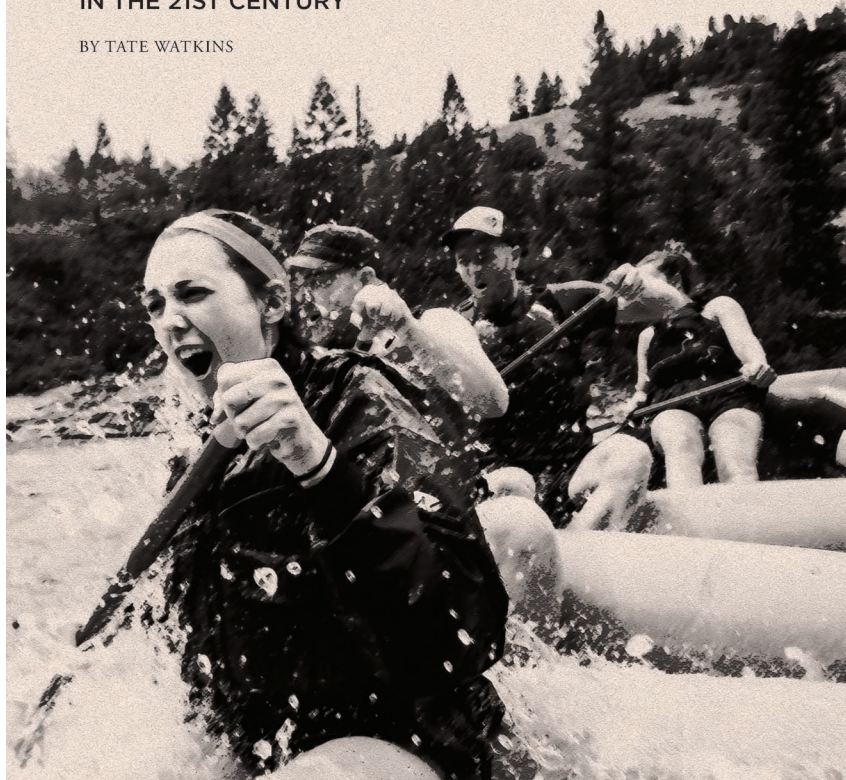


PERC PUBLIC LANDS REPORT | MAY 2019

HOW WE PAY TO PLAY

FUNDING OUTDOOR RECREATION ON PUBLIC LANDS
IN THE 21ST CENTURY

BY TATE WATKINS



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SUMMARY

The recreational demands of the 21st century are bringing new challenges for public land management. This *PERC Public Lands Report* examines some of the primary sources of funding for outdoor recreation-related opportunities on public lands, aiming to be informative rather than claiming to be exhaustive or comprehensive. It demonstrates that by many measures, inflation-adjusted recreation-related funding is stagnant or declining despite increased attention on and demand for outdoor recreation.

As public lands that provide outdoor recreation opportunities grow in importance, it's worthwhile to examine how we fund and maintain those lands. Adequate funding will not in and of itself guarantee responsible stewardship of our public recreation lands. But recent trends suggest that many sources of recreation funds have either stagnated or declined in real terms, even as visitation has been increasing over the long term. An assessment of recreation-related funding sources and their trends can provide insights about different funding strategies and, ideally, help inform and improve the future of recreation on public lands.

HOW WE PAY TO PLAY

FUNDING OUTDOOR RECREATION ON PUBLIC LANDS IN THE 21ST CENTURY

INTRODUCTION

Outdoor recreation is on the rise. Nearly half of all Americans recreate outdoors, and the sector is becoming more important on various fronts, whether socially, economically, or politically. A recent assessment by the Bureau of Economic Analysis found that outdoor recreation accounted for \$412 billion of GDP in 2016—or 2.2 percent of the entire U.S. economy.¹ The bureau estimated that the sector has grown faster than the overall national economy in three of the four years that it has analyzed.²

The participation rate in outdoor recreation has been consistent over the past decade. The Outdoor Foundation reports that 49 percent of Americans ages 6 and up participated in an outdoor recreation activity in 2017.³ Given population growth, the absolute number of Americans recreating outdoors has been on the rise, increasing from about 136 million participants a decade ago to 146 million in 2017. Some of the most popular activities today include running, fishing, cycling, hiking, and camping. In all, Americans go on nearly 11 billion recreation outings each year.

Public lands are the backdrop for much of that recreation. The Outdoor Industry Association calls public lands and waterways “the backbone of our outdoor recreation economy.”⁴ From national forests and wildlife refuges to national parks and wild and scenic rivers, some of the most prized landscapes and destinations in the country are found on public lands. National and state parks combined to host more than 1 billion visits last year. And local ball fields, recreation facilities, and public parks provide numerous weekend and after-school recreation opportunities across the nation.

The recreational demands of the 21st century are bringing new challenges for public land management. This *PERC Public Lands Report* examines some of the primary sources of funding for outdoor recreation-related opportunities on public lands, aiming to be informative rather than claiming to be exhaustive or comprehensive.⁵ It demonstrates that by many measures, inflation-adjusted recreation-related funding is stagnant or declining despite increased attention on and demand for outdoor recreation.

While the focus of this *Public Lands Report* is recreation funding, much public spending on the broader category of natural resources benefits and enhances the provision of recreational amenities. For instance, spending to improve wildlife habitat could be justified by and aimed at achieving certain conservation outcomes, yet such spending could result in more and better wildlife for sportsmen and other recreationists to enjoy. This report, therefore, examines sources of funding that relate to recreation generally, including some that support habitat restoration, wildlife management, and other conservation aims that are linked to recreation.

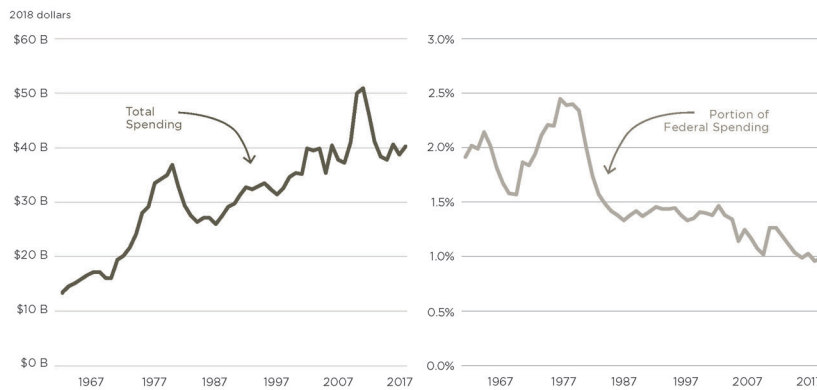
As public lands that provide outdoor recreation opportunities grow in importance, it's worthwhile to examine the way that we fund and maintain those lands. An assessment of those funding sources and

their recent trends can provide insights about different funding strategies and, ideally, help inform and improve the future of recreation on public lands.

SPENDING ON NATURAL RESOURCES, ENVIRONMENT, AND RECREATION

The Office of Management and Budget's breakdown of the federal budget into functions and subfunctions provides a snapshot of all federal spending. Function 300 concerns all programs relating to natural resources and the environment, which includes spending on environmental protection and enhancement, recreation and wildlife areas, and the development and management of land, water, and mineral resources owned by the U.S. government.⁶

FIGURE 1:
FEDERAL SPENDING ON NATURAL RESOURCES AND ENVIRONMENT



Source: White House Office of Management and Budget Historical Tables, Function 300

In real terms, spending under Function 300 has more than doubled since 1962, albeit with periods of volatility. Spending under the budget function was approximately \$13 billion in 1962 in real terms and had risen to \$40 billion by 2018.

Over time, however, that spending has represented a smaller and smaller share of total federal spending. Throughout much of the 1960s and 1970s, when the overall federal budget was significantly smaller than it is today, Function 300 accounted for roughly 2 percent of all federal spending. Today, the function accounts for less than 1 percent of all federal outlays—about \$40 billion of a \$4 trillion budget.

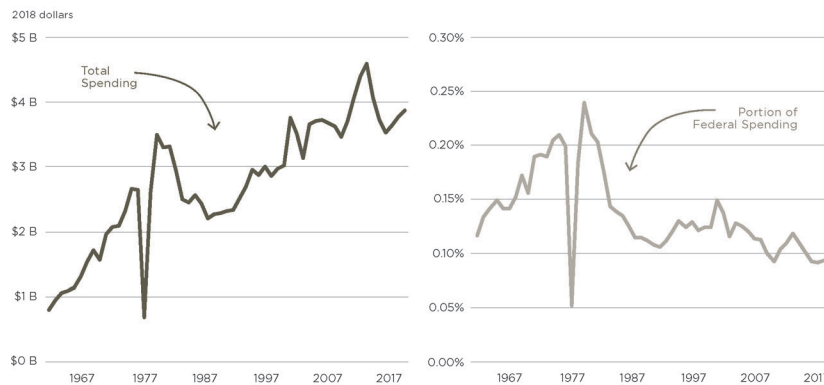
Within Function 300, Subfunction 303 covers federal outlays on recreational resources. The subfunction encompasses spending toward acquiring, operating, and improving recreational lands and facilities;

managing fish, wildlife, and parks; and preserving historic areas.⁷ In real terms, spending under Subfunction 303 has risen from approximately \$800 million in 1962 to nearly \$4 billion in 2018. As a share of overall spending, however, the subfunction comprises just 0.09 percent of the entire federal budget today, down from 0.12 percent in 1962.⁸

FEDERAL LAND MANAGEMENT AGENCIES

Most federal spending on recreation is channeled through four of the major land management agencies. Three are housed in the Interior Department: the National Park Service, the Bureau of Land Management, and the Fish and Wildlife Service. The Forest Service is housed within the Department of Agriculture.⁹

FIGURE 2:
FEDERAL SPENDING ON RECREATIONAL RESOURCES



Source: White House Office of Management and Budget Historical Tables, Subfunction 303.

National Park Service

The National Park Service manages roughly 80 million acres of federal lands across 419 park units, a figure that includes the country's 61 national parks as well as hundreds of sites within the system that have other classifications, such as national monuments and national preserves.¹⁰ Established in 1916, the mission of the National Park Service is "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."¹¹ In 2000, the agency updated that mission, tweaking the language to accept "the validity of outdoor recreation," a change that reflects the growing importance of recreation in the 21st century.¹²

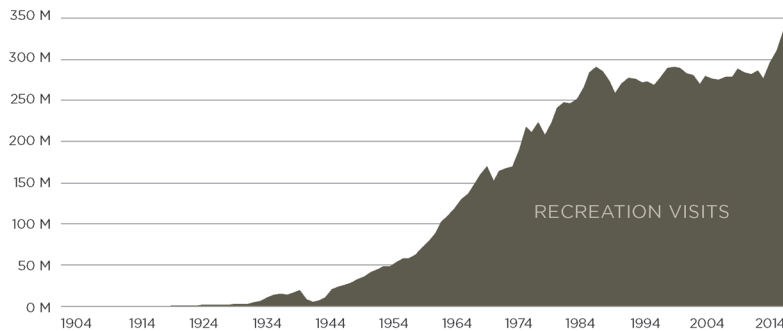
That growth is reflected in the historical trend in visitation across the National Park System. Park visitation has increased more than fourfold since 1960, when national parks and other agency-managed units received 72 million visits.¹³ More recently, after nearly three decades of relatively flat visitation that began in

the late 1980s, visits to the park system have surged since 2013, increasing by 16 percent in just five years. The uptick is likely due to various factors, including the park service's centennial celebration in 2016 as well as the rise of outdoor recreation generally. In 2016 and 2017, systemwide visitation reached all-time highs of nearly 331 million visits, before falling to 318 million visits in 2018. Even with the overall decline last year, 28 individual sites set new visitation records.¹⁴

Despite the upward trend in visitation, discretionary appropriations to the National Park Service have essentially remained flat in real terms for more than a decade. Excluding a funding spike in 2009 that was driven by an increase in federal spending in the wake of the Great Recession, the agency's appropriations have steadily hovered around \$3 billion.¹⁵

The story is largely the same when it comes to the portion of parks appropriations devoted to maintenance. According to a recent Government Accountability Office report, from 2006 to 2015 the park service received about \$1 billion each year for maintenance projects—about one-third of the agency's

FIGURE 3:
NATIONAL PARK SYSTEM VISITATION

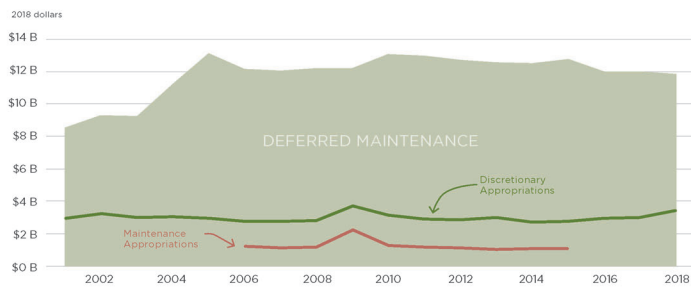


Source: National Park Service Visitor Use Statistics



Visitors enter Grand Canyon National Park. © Grand Canyon National Park.

FIGURE 4:
NATIONAL PARK SERVICE: Appropriations and Maintenance



Source: National Park Service, Congressional Research Service, and Government Accountability Office



A closed picnic area at Great Smoky Mountains National Park.

appropriations.¹⁶ This funding has not been sufficient to keep up with the maintenance needs of aging park assets and infrastructure, a factor that has contributed to the nearly \$12 billion of deferred maintenance that has accumulated across the agency's 419 units.¹⁷

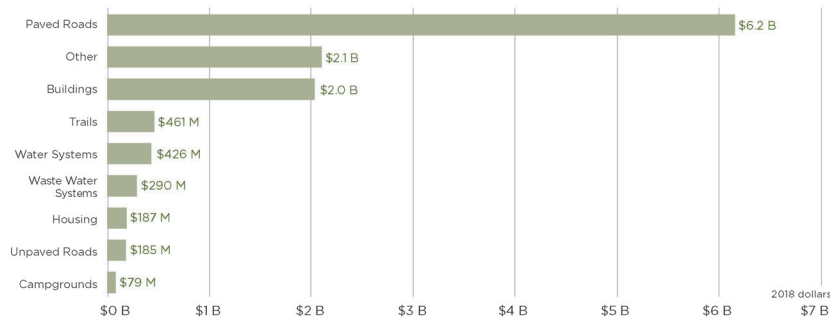
In terms of asset types, paved roads account for more than half of the maintenance backlog. About 40 percent of paved roads in national parks are considered to be in "poor" or "fair" condition.¹⁸ While the recreational access provided by roads is a crucial part of the park experience for a majority of visitors, improvements to roads and bridges in parks have historically been funded through the Department of Transportation, not the National Park Service.¹⁹

The system of trails across national parks, on the other hand, is a recreational asset whose maintenance responsibilities fall squarely to the National Park Service. Hiking trails are arguably the archetype of human-powered recreation. And throughout the national park system, thousands of miles of trails are

rated as "poor" or "seriously deficient."²⁰ The breakdown of deferred maintenance shows that across all parks nearly half a billion dollars is required for trail repairs alone.

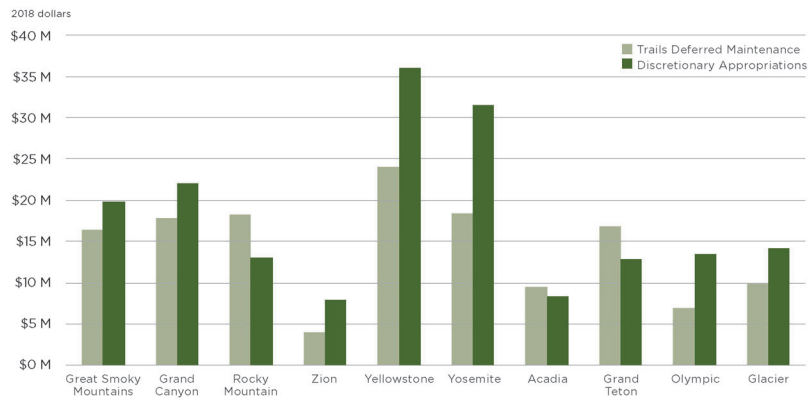
A look at the 10 most visited parks in the country gives a sense of the magnitude of the challenge facing many sites. Three out of the 10 parks have trail maintenance backlogs that exceed the amount of funding they received in discretionary appropriations last year, meaning that even if those parks devoted all of their appropriations to trails projects, they still would not fully address their trail maintenance needs. In fact, the combined trails maintenance backlog for the 10 most popular parks would equal 79 percent of their combined appropriations.²¹ The story is much the same for other recreation-related assets within the National Park System, including visitor centers, historic buildings, water and wastewater systems, and employee housing. Clearly, national parks are facing enormous and daunting maintenance challenges.

FIGURE 5:
NATIONAL PARK SERVICE: Deferred Maintenance Categories



Source: National Park Service Servicewide Asset Inventory Summary, Fiscal Year 2018

FIGURE 6:
MOST VISITED NATIONAL PARKS: Trails Deferred Maintenance and Appropriations



Source: National Park Service Asset Inventory Summary by Park, Fiscal Year 2018

Forest Service

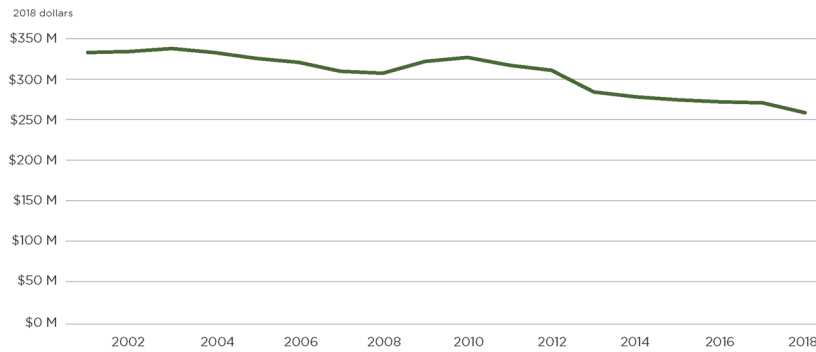
The Forest Service manages more than 190 million acres of land for multiple uses such as timber management, livestock grazing, wildlife and fish habitat, and recreation.²² National forests provide ample outdoor recreation opportunities, from hiking, biking, and horseback riding to hunting, dirt biking, and camping. The Forest Service manages approximately 30,000 developed recreation sites nationwide.²³ The agency faces a deferred maintenance backlog of its own of nearly \$5.5 billion, including \$279 million in unfunded trail repairs.²⁴

According to visitor surveys conducted by the agency, visitation to national forests has remained relatively steady over the past decade. In 2016, there

were an estimated 148 million recreation visits to national forests.²⁵

The main Forest Service account that covers recreation spending is the agency's Recreation, Heritage, and Wilderness account. The agency calls recreation “the single greatest use” of national forest lands, and expenditures from the account support various activities, including visitor center and campground operations as well as management of permits for ski areas, marinas, and lodges.²⁶ Appropriations to the account have been falling gradually in recent years, decreasing by 23 percent since 2001, after adjusting for inflation. The agency received \$258 million in appropriations to the account in 2018—less than its trail maintenance backlog and equivalent to approximately \$1.74 per recreation visit.²⁷

FIGURE 7:
FOREST SERVICE: Recreation Appropriations



Source: U.S. Department of Agriculture Budget Justifications, Forest Service: Recreation, Heritage, and Wilderness

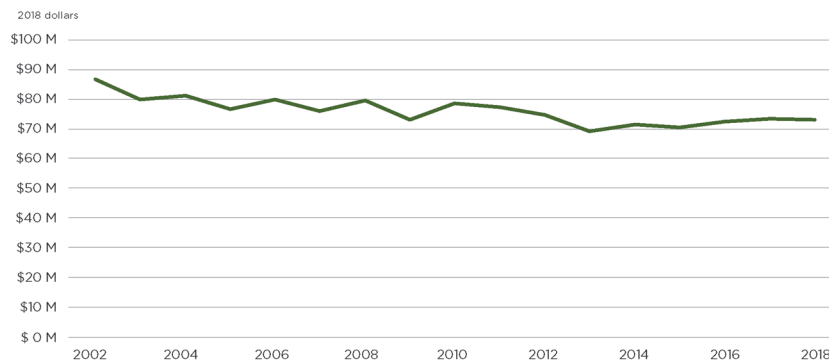
Bureau of Land Management

The Bureau of Land Management is the nation's largest landlord, managing nearly 250 million acres of federal land.²⁸ While grazing, timber, and conservation are important management responsibilities for the agency, recreation falls under its multiple-use mandate as well. The agency's deferred maintenance backlog has grown by 65 percent over the past decade in real terms and is currently estimated at \$810 million. Approximately three-quarters of the agency's deferred maintenance consists of roads, bridges, and trails.²⁹

Bureau of Land Management sites offer ample recreation opportunities, including hiking, hunting, fishing, camping, climbing, visiting cultural and historic sites, off-road vehicle driving, mountain biking, wildlife viewing, and more. The agency's 4,000 recreation sites receive approximately 67 million visits annually, an increase of about 30 percent since 2001.³⁰

After adjusting for inflation, appropriations to the agency for recreation management have fallen by 16 percent since 2001. Appropriations for recreation management totaled \$73 million in 2018, or roughly \$1.09 per recreation visit.³¹

FIGURE 8:
BUREAU OF LAND MANAGEMENT: Recreation Appropriations



Source: U.S. Department of the Interior Budget Justifications, Bureau of Land Management: Recreation Management

Fish and Wildlife Service

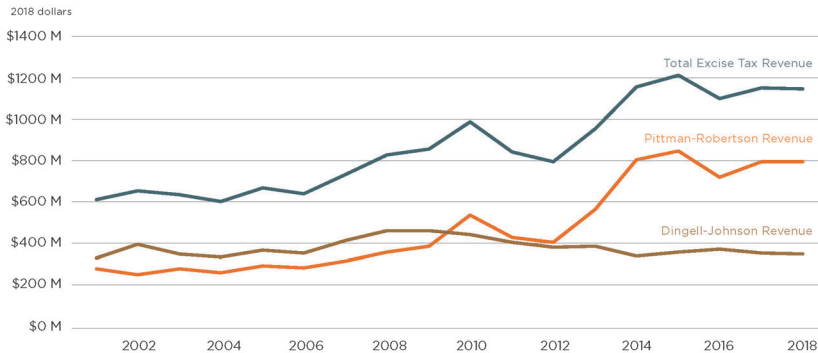
The Fish and Wildlife Service manages nearly 90 million acres of federal lands. Its primary mission is to conserve plants and animals, although other uses, including recreation, are permitted so long as they do not interfere with the primary mission.³² The agency manages 460 wildlife refuges that are open to the public.³³ It reports a deferred maintenance backlog of \$1.4 billion, a decrease of nearly 60 percent in real terms over the previous decade. “Other structures” and “buildings” combine to account for a little more than half of the agency’s backlog.³⁴

The most prominent recreation component administered by the Fish and Wildlife Service is the Wildlife and Sport Fish Restoration Program. Its goal is to “conserve and manage fish and wildlife and their habitats for the use and enjoyment of current and future generations.”³⁵ The federal program disburses

funds to states through grants, which carry out various conservation- and recreation-related activities with the funds. Those activities include habitat management and restoration, hunter education and safety, improvement of fishing and hunting access, and wildlife population management.³⁶

The Wildlife Restoration Program was created in 1937 by the Wildlife Restoration Act, more commonly known as the Pittman-Robertson Act, which established federal excise taxes on firearms, ammunition, and archery equipment for the purpose of funding state-level conservation programs. The Sport Fish Restoration Act of 1950, also known as the Dingell-Johnson Act, established a similar fishing-related program. Its funding comes from excise taxes on fishing tackle and equipment and boat fuel. Both programs apportion funds to states using a formula that takes into account the number of paid license

FIGURE 9:
WILDLIFE AND SPORT FISH RESTORATION PROGRAM: Apportionments to States



Source: Fish and Wildlife Service, Wildlife & Sport Fish Restoration Program: Historical Funding Data.
Note: Program funding comes from federal excise taxes that are apportioned to states for conservation- and recreation-related purposes.



holders, and in general, funding from the programs require a state match, which is primarily funded through hunting and fishing license sales.

Pittman-Robertson and Dingell-Johnson have a long track record of funding conservation and recreation projects. The federal excise taxes distributed by the Fish and Wildlife Department are crucial sources

of funding for state fish and wildlife agencies. In 2018, the two programs combined to apportion more than \$1.1 billion to state fish and wildlife agencies.³⁷ For more detail on the historical trends of these funds, see the State Fish and Wildlife Agencies section of this report.

Fee Revenues and Donations

There are a handful of other sources of recreation funding that do not come from congressional appropriations but are nonetheless important for several federal land agencies. The first is recreation fees. The Federal Lands Recreation Enhancement Act allows certain agencies, including the National Park Service, Forest Service, and Bureau of Land Management, to charge and collect recreation fees on federal lands and waters, either for entrance to a site or for use of an amenity such as a developed campground.³⁸ Sites that collect fees can retain and spend 80 percent of their receipts without further appropriation. Over the past decade, total revenues collected by federal agencies under FLREA have increased by 42 percent in real terms—from \$284 million in 2009 to \$404 million in 2018—and virtually all of that increase has occurred over the past five years.

The vast majority of fee receipts come from national park units, about one-quarter of which charge entrance fees. In 2018, the National Park Service accounted for 74 percent of all FLREA receipts. The Forest Service collected 17 percent of the total.³⁹

Franchise fees from concessionaires are another meaningful source of funding for certain recreation sites. Federal agencies, particularly the National Park Service and the Forest Service, outsource certain operations to private concessionaires in exchange for fees. Lodges, gift shops, and campgrounds are examples of facilities commonly operated by concessionaires. In 2018, the National Park Service generated approximately \$126 million from concessions fees.⁴⁰

Private donations are another source of funds that can help accomplish beneficial recreation projects on public lands. The nonprofit Yellowstone Forever, for example, granted \$5.9 million to Yellowstone National Park in 2018 for more than 50 projects, including fish restoration efforts, trailhead displays, and black bear research.⁴¹ And in Great Smoky Mountains National Park, a partnership with local philanthropic

organizations has yielded \$500,000 in donations that fund rehabilitation of many of the most popular and highest-priority trails in the park.⁴² In 2018, donations to the National Park Service totaled \$47 million.⁴³

While these sources of funding are important, they're a relatively small portion of the federal funds that provide recreation opportunities across public lands. In 2018, fees, concessions, and donations combined to account for approximately \$475 million, or about 11 percent of the National Park Service's total budget authority.⁴⁴

LAND AND WATER CONSERVATION FUND

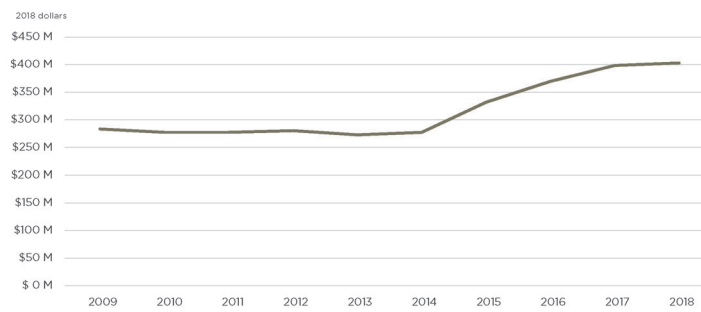
The Land and Water Conservation Fund has been a significant source of conservation and recreation funding since Congress established it in 1965. The program was created "to help preserve, develop, and ensure access to outdoor recreation facilities to strengthen the health of U.S. citizens."⁴⁵ The fund is authorized to accrue up to \$900 million annually, but the spending is not mandatory. Congress must approve any LWCF spending each year through the appropriations process. Virtually all funding for the program comes from revenue derived from offshore oil and gas leases.

Historically, the LWCF has been used for three purposes: land acquisition by federal land management agencies for outdoor recreation, grants made to states for outdoor recreation purposes, and so-called "other purposes," which includes special requests for funding made by presidents since 1998. Since the act's inception, the state-grants program has been a significant source of funding for state and local recreation, whether by providing means to repair or build trails on state lands, funding construction or renovations at local parks and sports facilities, or supporting other recreation-related projects. The level of annual spending approved by Congress each year under the fund has fluctuated greatly over time.



Donation box at Great Smoky Mountains National Park.

FIGURE 10:
FEDERAL LANDS RECREATION ENHANCEMENT ACT REVENUES



Source: Congressional Research Service

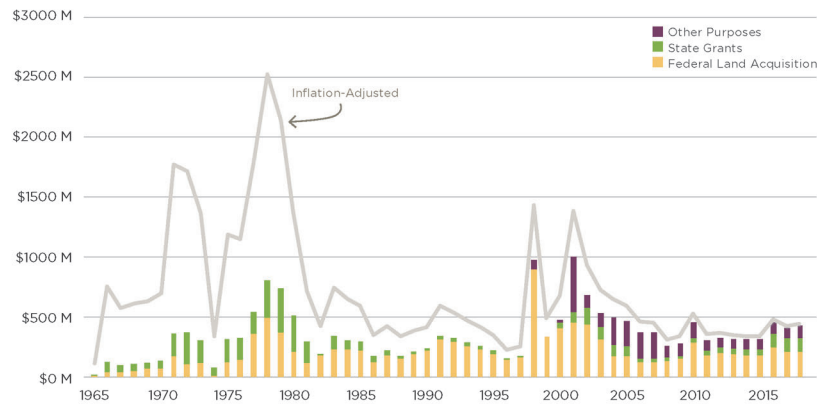
As part of a broad public lands legislation package, Congress permanently reauthorized the LWCF in 2019. The legislation did not mandate any funding under the LWCF, meaning that Congress will continue to use the annual appropriations process to approve spending under the fund. The bill did specify that for future spending approved under the program, at least 40 percent must be allocated for federal purposes and at least 40 percent must go to states.⁴⁶

Adjusting program funding for inflation over its history shows a significant decline in real terms since the peaks of the late 1970s, representing less bang for the buck going to conservation and recreation over time. Likewise, in recent decades state grants

have taken a back seat to federal land acquisition and, since 1998, to the broad “other purposes” category. In fact, states have received just 13 percent of LWCF allocations since 1998.

While the spending power of the LWCF has declined significantly over the long run due to inflation, the amount of spending actually approved by Congress has also proved to be relatively unpredictable year to year. In recent years, Congress has approved LWCF spending at roughly half of its \$900 million annual accrual level. The LWCF’s unpredictable track record reflects the uncertainty of the political process inherent to congressional appropriations decisions.

FIGURE 11:
LAND AND WATER CONSERVATION FUND



Source: Congressional Research Service

Note: Line denotes total LWCF spending in constant 2018 dollars. Bars denote breakdown of LWCF spending in nominal terms.





STATE CONSERVATION AND RECREATION FUNDING

States also provide a significant portion of government funding that supports recreation opportunities, much of which overlaps with spending on conservation. State parks and state fish and wildlife agencies are two of the most important entities devoted to recreation at the state level. In addition, some states have begun to establish dedicated offices of recreation in recent years.

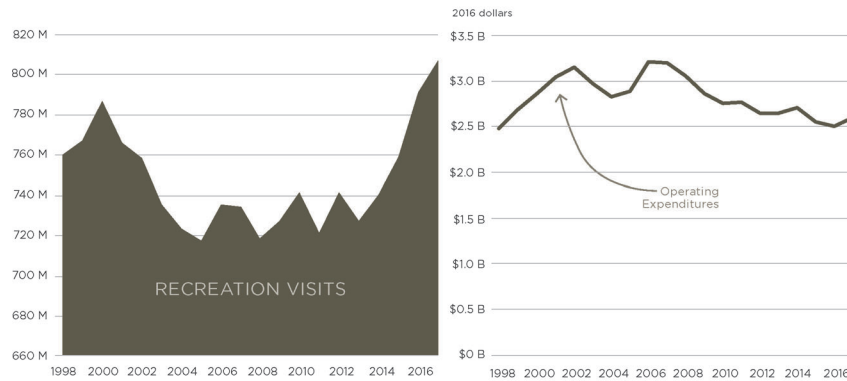
State Parks

While national parks garner many headlines and feature some of the most famous landmarks and sites in the country, state parks outnumber national park units by a factor of 20 and provide countless recreation opportunities. From Florida to Alaska, more than 8,500 state park areas offer virtually any and all types of recreation, including hiking and camping, skiing, golfing, kayaking and swimming, picnicking, and simply enjoying the outdoors.⁴⁷

After a dip in visitation around the time of the Great Recession, state parks have seen attendance grow steadily in recent years. In 2017, about 807 million people visited state parks nationwide—nearly twice as many visits as to federal parks and forests combined. The trend in operating expenditures over the past decade, however, has been a steady decline, falling from more than \$3.0 billion in 2008 to about \$2.5 billion today.⁴⁸

Operating expenditures include spending on all goods and services that go toward managing a state park system, meaning it can serve as a rough proxy for the amount of funding available to run parks. While there's wide variation in the way that state park systems are funded across the country—with some extremely dependent on state general funds and others completely funded by park users—the roughly 17 percent decrease in expenditures over the past decade is evidence that funding is being squeezed in many states.⁴⁹ The upshot is that many state park systems face the same challenge as national parks—having to serve more visitors with less funding.

FIGURE 12:
STATE PARKS VISITATION AND OPERATING EXPENDITURES



Source: National Association of State Park Directors

State Fish and Wildlife Agencies

The collective budgets of state fish and wildlife agencies total roughly \$5.6 billion. These agencies manage land, habitat, and wildlife within states. Nearly 60 percent of their funding comes from sources related to hunting and fishing, and the largest portion is revenue from state hunting and fishing licenses, which combine to equal about \$1.6 billion.⁵⁰

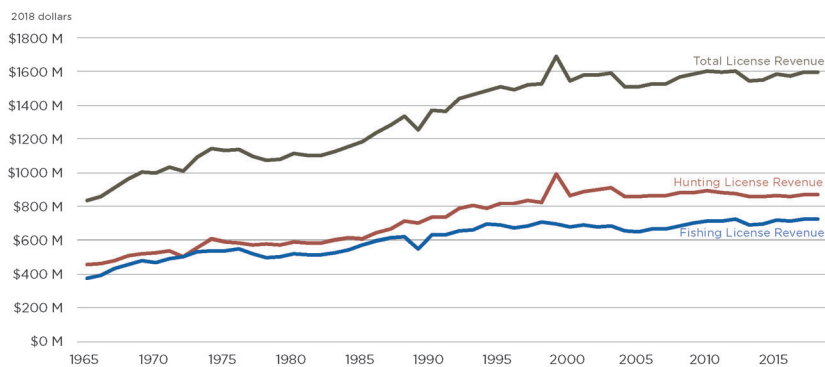
Collectively, these agencies' second-largest source of funding is revenue from federal excise taxes on firearms, ammunition, fishing tackle, and related items. These funds are distributed by the U.S. Fish and Wildlife Service through the Wildlife Restoration Program and the Sport Fish Restoration Program, created by the Pittman-Robertson and Dingell-Johnson Acts, respectively. In 2018, the two programs combined provided more than \$1.1 billion to state fish and wildlife agencies.⁵¹ The excise tax revenues collected

by the federal government are distributed based on a formula that takes into account the number of paid license holders in a state, and generally, grants under the program require states to match federal funding at a ratio of one to three.⁵²

The reliance on hunting and fishing for state funding has become cause for concern given long-term trends of those activities. The share of the adult population that are hunters peaked around 1960 at about 11 percent. That participation rate had fallen to 4 percent by 2016, or about 11 million hunters, a decrease of more than 2 million hunters over the previous five years. When it comes to fishing, participation peaked in 1975 at about 24 percent of the adult population. That rate had fallen to 14 percent by 2016, or about 36 million anglers.⁵³

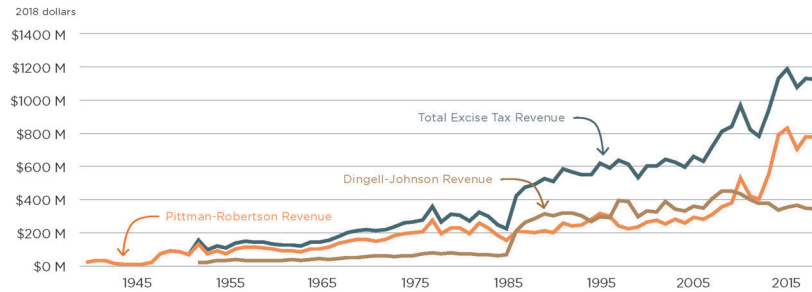
These declines in participation have thus far not been reflected in the relatively stable streams of revenue that come from state hunting and fishing licenses.

FIGURE 13:
STATE REVENUE FROM HUNTING AND FISHING LICENSES



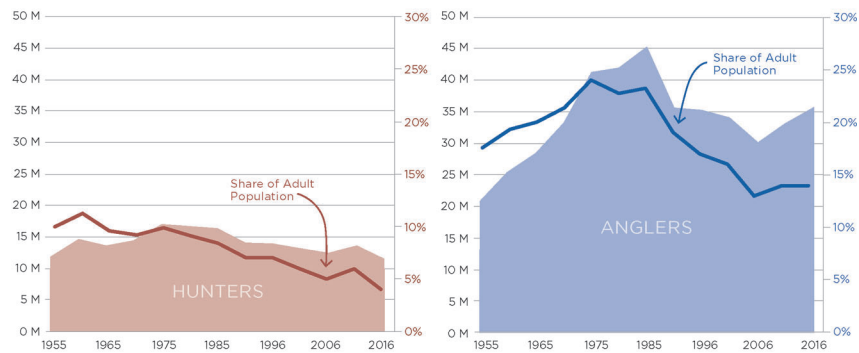
Source: Fish and Wildlife Service, Wildlife & Sport Fish Restoration Program: Historical License Data

FIGURE 14:
WILDLIFE AND SPORT FISH RESTORATION PROGRAM: Apportionments to States



Source: Fish and Wildlife Service, Wildlife & Sport Fish Restoration Program: Historical Funding Data
Note: Program funding comes from federal excise taxes that are apportioned to states for conservation- and recreation-related purpose.

FIGURE 15:
HUNTING AND FISHING TRENDS



Source: Fish and Wildlife Service and Census Bureau National Surveys of Fishing, Hunting, and Wildlife-Associated Recreation

Similarly, revenues from the excise taxes established by Pittman-Robertson and Dingell-Johnson have either remained stable or increased in recent years.

It's possible that states have become more adept at pricing hunting and fishing licenses in ways that have maintained agency revenues—such as charging more for out-of-state licenses and tags.⁵⁴ Population growth also helps offset the decline in participation rates, making it easier for states to maintain—if not grow—their license revenues. When it comes to Pittman-Robertson and funding for the Wildlife Restoration Program, it seems plausible that recent increases have been driven largely by activities not necessarily related to hunting, including growth in handgun sales, target shooting, and gun collecting.⁵⁵ Regardless, anecdotal evidence from state agencies suggests that long-term declines in hunting and fishing have become cause for concern given the significant amount of funding historically derived from hunters and anglers.⁵⁶

State Recreation Offices

In recent years, more and more states have sought to establish dedicated recreation offices separate from other state agencies.⁵⁷ These fledgling offices have been created in part to champion the benefits that stem from the outdoor recreation economy as well as to drive the legislative agenda of recreation interests. Relatedly, some states have tried to implement mechanisms to secure dedicated funding for recreation, whether by redirecting sales taxes on sporting goods, channeling a portion of lottery proceeds, or tapping into real estate tax revenues.⁵⁸ These strategies have had mixed success and, in many cases, still must prove their staying power—especially where they were enabled by statutes that require annual legislative appropriations—but there's no doubt that new sources of funding dedicated to recreation would be a boon for many states.

THE FUTURE OF RECREATION FUNDING

The sources of funding covered in this report provide an overview of federal and state resources devoted to outdoor recreation on public lands. Together, they also illuminate some of the current and future challenges of funding outdoor recreation at local, state, and federal levels.

Recent trends suggest that much of the recreation funding available to federal land management agencies has either stagnated or declined in real terms, even as visitation to many federal lands has been increasing over the long term. As a result, funding shortfalls for maintenance and other needs are substantial and growing. The Land and Water Conservation Fund remains a significant source of funds for federal- and state-level recreation projects, yet its funding levels have proven to be unpredictable year-to-year. Trends in hunting and fishing participation suggest concern for the future of funding sources tied to those activities.

Comparing the long-term trends of three funding streams reveals several important truths about historical recreation funding. After adjusting for inflation, state revenues from hunting and fishing licenses have proven to be remarkably stable over time. State licenses have not only been a significant source of funding for more than half a century, but as a point of comparison, the roughly \$1.6 billion in revenue that they yielded in 2018 was also nearly four times larger than the \$425 million appropriated from the Land and Water Conservation Fund last year.

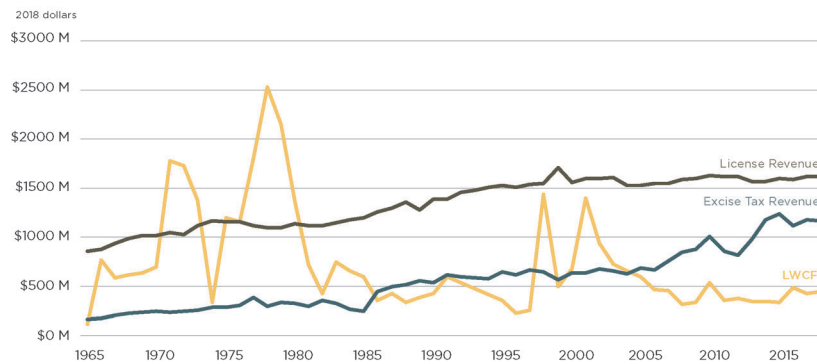
Likewise, state funding derived from federal excise taxes on equipment for hunting, shooting, fishing, and boating have proven relatively consistent and substantial as well. These sources provided more than \$1.1 billion to states in 2018.

By contrast, the Land and Water Conservation Fund has proven to be a much less stable funding source. It's clear that the fund today is yielding much less conservation and recreation—at least as measured by level of inflation-adjusted funding—than it has over much of its history. In fiscal year 1980, for instance, \$509 million was appropriated under the LWCF, or roughly 17 percent more than the \$425 million that was appropriated in 2018. Yet in real terms, the 1980 appropriation had more than three times the purchasing power of the 2018 one—roughly \$1.3 billion compared to \$425 million.⁵⁹ Clearly, the LWCF was getting a lot more bang for its conservation and recreation buck in past decades. By contrast, revenues from licenses and excise taxes are steady or even growing in real terms.

Furthermore, the ups and downs of the LWCF record even over recent decades could be interpreted as par for the course given the way the program was constructed. The uncertainty and partisanship inherent to the congressional appropriations process means that the federal and state agencies that partially rely on the fund never know how much will be approved from year to year. The funding ultimately depends on factors almost wholly unrelated to outdoor recreation, like the overall political climate, partisan priorities for government spending, and who happens to be in the White House or chair the House Natural Resources Committee.

There's an undeniable contrast between the historical record of funding from the LWCF and the two state sources that are either directly or indirectly

FIGURE 16:
THREE FUNDING STREAMS



Source: Fish and Wildlife Service and Congressional Research Service



tied to user demand for recreation. State license revenues and proceeds from federal excise taxes have proven much more reliable and significant sources of funding over time. Furthermore, the fact that these sources are tied to recreationists helps ensure that the funds promote responsible stewardship of the public lands that serve as some of our greatest recreation assets. The incentive structure created by such funding mechanisms has clear advantages. The funds are dedicated to conservation and recreation and therefore, unlike many other public revenues, cannot be siphoned away to the U.S. Treasury and diverted

to other purposes. The programs also have a clear constituency, and the accounts have proven resistant to being raided for other purposes.

The good news for Americans who enjoy recreating on public lands is that demand for outdoor recreation is healthy and potentially growing. If the enthusiasm for enjoying public lands can be better channeled into user-funded mechanisms that support the maintenance and improvement of them, then outdoor recreationists of all stripes would have much to gain.

ENDNOTES

A note on charts and data sources:

Unless otherwise noted, government spending figures within this report are for fiscal years and are adjusted for inflation using the GDP Chained Price Index from the White House Office of Management and Budget, Historical Tables, Table 10.1, "Gross Domestic Product and Deflators Used in the Historical Tables."

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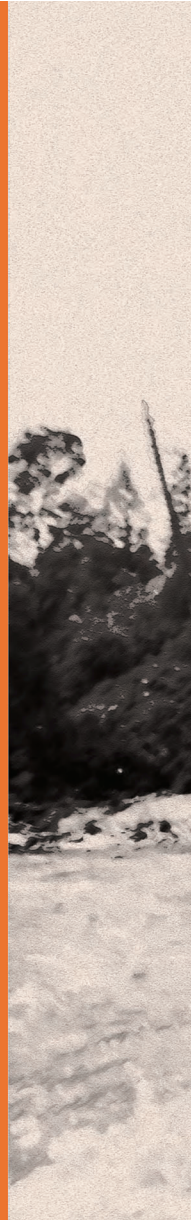
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THE ROAD TO RECOVERY

HOW RESTORING THE ENDANGERED SPECIES ACT'S TWO-STEP
PROCESS CAN PREVENT EXTINCTION AND PROMOTE RECOVERY

BY JONATHAN WOOD



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Northern Sea Otters

Summary

The Endangered Species Act has proven effective at preventing extinctions but not at promoting species recovery. Because we care about preventing extinction and recovering endangered species, the challenge is to find reforms that preserve what the Endangered Species Act does well while boosting incentives for recovering species.

The statute provides for the listing of two categories of species: “endangered” species, which are currently at risk of extinction, and “threatened” species, which are at risk of becoming endangered in the foreseeable future. When Congress passed the act in 1973, it envisioned states taking the lead to protect threatened species, with strict federal regulations against “take” reserved for endangered species. In 1975, however, the U.S. Fish and Wildlife Service issued a regulation extending the take regulation to threatened species too, eliminating the distinction between the two categories.

Take is defined so broadly that it can include activities intended to help species and can complicate state and private efforts to recover species. Under the current approach, landowners who provide habitat to listed species receive no benefit; instead, they are penalized through costly regulatory burdens such as restrictions on land use, reduced property values, and costly permitting requirements.

The Department of the Interior should restore the Endangered Species Act’s distinction between endangered and threatened species, reserving the take prohibition as a backstop to protect endangered species from extinction. If the statute’s distinction between the two categories was restored, states and landowners would be encouraged to recover threatened species before they reach endangered status. A threatened listing would serve as a signal that a species was at risk of becoming endangered, encouraging states, landowners, and other groups to recover the species.

Innovative and collaborative conservation programs would be easier to develop because landowners would have greater incentives to participate. Landowners who recover endangered species would be rewarded for their efforts by reduced regulatory burdens once a species’ status was changed to threatened, creating a powerful incentive to recover endangered species. Crucially, the Endangered Species Act’s take prohibition would continue to protect endangered species from extinction.

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Gray Wolf

Introduction

The Endangered Species Act is perhaps the United States' most popular environmental law. Despite that popularity, the statute is the subject of intense political conflicts, with supporters crediting it with saving 99 percent of listed species from extinction and critics responding that only 2 percent of those species have recovered.

What if both sides are right? In other words, what if the statute is effective at preventing extinction but not at promoting recovery efforts? Because we care about preventing extinction and recovering endangered species, the challenge is to find reforms that preserve what the Endangered Species Act does well while boosting incentives for recovering species. Fortunately, the Endangered Species Act already includes a mechanism to better accomplish both goals, if we'd only take better advantage of it.

The statute provides for the listing of two categories of species: endangered and threatened, distinguished by the seriousness of the threats they face. When Congress passed the act in 1973, it envisioned states taking the lead to develop innovative means to protect threatened species, with strict federal regulations serving as a backstop to protect endangered species from extinction. The statute would accomplish this division of labor by reserving the most burdensome federal regulations for species that are listed as endangered. By imposing heavier federal burdens when a species declines and, conversely, relaxing those burdens as a species recovers, the act would also help align landowners' incentives with the interests of species, encouraging private conservation and recovery efforts.

Unfortunately, in 1975, the U.S. Fish and Wildlife Service issued a regulation that eliminated the distinction between threatened and endangered species, blunting these incentives. However, there is good reason to think that restoring the Endangered Species Act's distinction between the two categories would provide substantial conservation benefits by encouraging states and landowners to recover threatened species. Doing so would avoid the artificial time constraint that makes it so difficult to develop collaborative conservation programs in the short window of time between a species' proposed listing and a final decision. With more time to develop innovative, market-based conservation programs, states, property owners, and environmentalists could make significant strides toward species recovery. At the same time, the act's take prohibition would continue to serve its intended function as a backstop to protect endangered species from extinction.

Consequently, a return to Congress's original design offers a means of achieving both goals: maintaining the Endangered Species Act's effectiveness at preventing extinction while boosting the incentives to recover listed species.

Restoring the Endangered Species Act's distinction between endangered and threatened species would provide substantial conservation benefits to species such as the wood stork.



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Prevent Extinction or Promote Recovery: A False Choice

Forty-five years after its enactment, the Endangered Species Act enjoys broad popularity. Public opinion surveys routinely show overwhelming support for the law, regardless of political party.¹ Despite that popularity, the act remains politically controversial, with little reason to suspect that will change anytime soon. Congressman Rob Bishop, Chairman of the U.S. House Natural Resources Committee, has proclaimed that he “would love to invalidate [it].”² He’s not alone. Every year, legislation is proposed to fundamentally change the law.³ Although broad reform legislation has not passed in decades, smaller reforms and species-specific exemptions have been routinely proposed and enacted.⁴

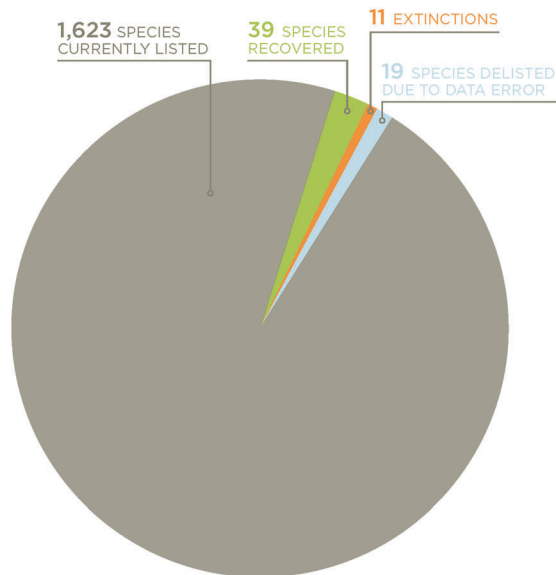
Political debate over the Endangered Species Act has focused on whether it is a success or a failure. To supporters, the Endangered Species Act is a success because it has saved 99 percent of listed species from extinction.⁵ To critics, it is a failure because only 2 percent of those species have recovered and been taken off the list.⁶ Armed with these talking points, the two sides of this political conflict have endlessly fought over which is the better metric, with little progress.

Do we have to pick one? Both statistics can be true. The Endangered Species Act can be effective at preventing extinction but ineffective at creating the necessary incentives to promote recovery efforts. Fighting over which is more important ignores that people care about achieving both goals. No one should be satisfied by species remaining at the precipice of extinction, even if they don’t fall over that cliff.

Rather than arguing about which is the better metric for judging the statute, we should look for reforms that preserve what the Endangered Species Act does well while strengthening it as a tool for promoting species recovery. Maintaining the critical protections that prevent endangered species from going extinct while looking for ways to encourage private landowners to conserve and recover species is the only way to begin achieving both goals. Fortunately, the statute provides an overlooked means of doing just that.

The Endangered Species Act is the subject of intense political conflicts, with supporters crediting it with saving 99 percent of listed species from extinction and critics responding that less than 2 percent of those species have recovered.* What if both sides are right?

Listings of Domestic Species under the Endangered Species Act



Source: U.S. Fish and Wildlife Service Environmental Conservation Online System

* Crediting the Endangered Species Act with saving 99 percent of listed species from extinction assumes that all listed species would have gone extinct but for the statute's protections. According to a widely cited study, a more accurate estimate of the number of extinctions avoided by the statute (between 1973 and 1998) was 172. See Mark W. Schwartz, The Performance of the Endangered Species Act, Annual Rev. of Ecology, Evolution, and Systematics, Vol. 39: 279-299 (2008).

The Endangered Species Act Two-Step

Prior to 1973, the federal government's role in protecting endangered species was limited to regulating federal lands and federal actions that jeopardized these species.⁷ Channeling Benjamin Franklin's witticism that "an ounce of prevention is worth a pound of cure," President Nixon called for a new endangered species law that would allow for federal intervention earlier, before a species' status became too bleak, as well as regulation of private activities that affect endangered species.⁸ Congressman Dingell, the Endangered Species Act's principal sponsor, similarly urged proactive protection of species that "are not yet on the brink of extinction."⁹

From this desire, the act's two-step process was born. The law provides for the listing of two categories of species: "Endangered" species are those currently at risk of extinction, and "threatened" species are those at risk of becoming endangered in the foreseeable future.¹⁰ The latter category is far broader than the former, providing an added measure of protection against a species' decline. For example, species can be listed as threatened if their populations are currently healthy—or even growing—if they are anticipated to decline decades from now.¹¹

These categories were intended to be more than an academic distinction. The statute provides different degrees of regulation for endangered and threatened species commensurate with the threats they face. Endangered and threatened species are both protected from federal actions that could adversely affect them or their habitat.¹² But, as an added measure of protection, the statute also prohibits private activities that affect endangered species—which the statute defines as "take"—unless authorized by

a federal permit.¹³ Applying for a permit is a costly and time-consuming endeavor that can delay projects indefinitely and, if a permit is granted, substantially increase the project's costs. The take prohibition is backed up by substantial civil and criminal penalties.¹⁴ Private parties, including environmental groups, can also enforce this prohibition through litigation to enjoin take.

When you hear the term "take," you probably think of activities that kill or harm wildlife. But the statute defines it far more broadly. Catching a protected species without a federal permit or getting too close to one is considered take. The statute has also been interpreted by the Fish and Wildlife Service to include "incidental take"—actions that unintentionally affect species—including land use activities that adversely modify habitat, such as building homes, farming, or harvesting timber.¹⁵

Take is defined so broadly that it can even include activities intended to help species. For instance, the Nigiri Project, a collaboration between U.C. Davis and conservation group California Trout, aims to recover California's salmon populations by encouraging rice farmers to allow salmon to use their flooded fields as habitat.¹⁶ Those fields mimic the floodplain habitat that salmon relied upon before modern water infrastructure. Giving juvenile salmon access to insect-rich flooded fields allows them to grow bigger before migrating to the ocean, boosting survival rates.¹⁷ Because catching salmon and moving them to these fields is considered a form of "take," the project required a federal permit. According to CalTrout senior scientist Jacob Katz, the biggest obstacle the project faced was convincing the federal and

state government to issue the required permits for them to move fish to the new habitat.¹⁸

The take prohibition can also complicate state efforts to recover species, as was recently shown in the conflict between the U.S. Fish and Wildlife Service and the state of Utah over the threatened Utah prairie dog.¹⁹ To provide for the species' long-term recovery, as well as reduce landowner animosity, Utah developed a plan to move prairie dogs from residential areas to public lands where the state had improved habitat. After a lawsuit resulted in an injunction against enforcement of the federal take prohibition for this species, the state was free to implement its plan for two years. But the state's plan ground to a halt when the injunction was overturned on appeal. Now, resuming the conservation program will require changing the federal regulation or navigating the costly and time-consuming federal permitting process.²⁰

Acknowledging that the broad take prohibition imposes significant burdens, Congress deemed it necessary as the last line of defense to protect endangered species from extinction. But Congress did not make the same judgment for threatened species. Instead, the Endangered Species Act explicitly excludes threatened species from the take prohibition.



BOX 1: Endangered or Threatened?

Endangered species may have only a few, small populations, whereas threatened species can be numerous and widely distributed. For example, recent surveys of the endangered delta smelt have found as few as six in the San Francisco Bay Delta, the only place where the species is found.²¹ In contrast, there are millions of northern long-eared bats, a threatened species found in 37 states.²²

The take prohibition can complicate state efforts to recover species, as shown in the conflict between the U.S. Fish and Wildlife Service and the state of Utah over the threatened Utah prairie dog.



© Donald Hoborn

The Utah prairie dog is a threatened species.

Senator Tunney, the floor manager of the bill that became the act, explained this was intended to allow states to experiment with efforts to recover threatened species:

The two levels of classification facilitate regulations that are tailored to the needs of the animal while minimizing the use of the most stringent prohibitions. Since most of our resources for restoring and propagating species lie with the States, they are encouraged to use their discretion to promote the recovery of threatened species and Federal prohibitions against taking must be absolutely enforced only for those species on the brink of extinction.²³

That description may sound foreign to anyone familiar with how the statute is implemented today.²⁴ Since 1975, the U.S. Fish and Wildlife has prohibited the take of all threatened species by regulation, unless it adopts another regulation relaxing that prohibition for a particular species.²⁵ Under this approach, threatened and endangered species are treated the same regardless of the degree of threats they face. That is, despite Congress's original distinction between the two categories of species, the Endangered Species Act's prohibition on take applies equally to both threatened and endangered species today. When announcing that the Florida manatee's status was being upgraded from endangered to threatened, Chuck Underwood,

of the U.S. Fish and Wildlife Service's Florida Office, underscored this reality: "People have misperceptions that we have two lists. It's one classification."²⁶ For the manatee, like many other species, news that the species' status had improved enough that it no longer needed to be classified as endangered did not come along with any regulatory relief for the affected parties. They would remain regulated just as they had been when the manatee was endangered.

Because the U.S. Fish and Wildlife Service regulation purports to overrule Congress's decision to regulate endangered and threatened species differently, some have argued that it violates the statute.²⁷ But that question has not been scrutinized by courts. Legal infirmities aside, treating endangered and threatened species the same is an ineffective means of conserving and recovering species. As the next section explains, a return to Congress's original two-step approach would provide better incentives for recovery efforts and could boost the recovery rate of endangered species. And, importantly, that improvement would not come at the expense of the statute's effectiveness at preventing extinction of endangered species.



BOX 2: Threat of Conflict

Because threatened species are usually more numerous and widely distributed than endangered species, the application of the U.S. Fish and Wildlife Service's regulation to threatened species has been the source of some of the biggest conflicts that have arisen under the Endangered Species Act. For instance, it was at the center of the conflict over the threatened listing of the northern spotted owl, which significantly reduced timber harvesting in the Pacific Northwest.²⁸

The Carrot and the Stick

Private landowners are essential to the conservation and recovery of endangered species because they provide habitat for the overwhelming majority of listed species.²⁹ Consequently, creating incentives for landowners to conserve and enhance habitat is critical to promoting species' recovery.

Unfortunately, the Endangered Species Act, as currently implemented, gets the incentives backward. Landowners who provide habitat to listed species receive no benefit; instead, the statute penalizes them by imposing costly regulatory burdens such as restrictions on land use, reduced property values, and costly permitting requirements. By making a threatened or endangered species a liability rather than an asset, the statute can encourage property owners to adopt a strategy of "shoot, shovel, and shut up"—which, as its name suggests, does not end well for the listed species.³⁰

Fears about the impact of the statute's perverse incentives are well founded. In a study of timberland owners' responses to Endangered Species Act regulations, Dean Lueck and Jeffrey Michael found that owners accelerated timber harvesting to prevent their trees from becoming habitat for the red-cockaded woodpecker.³¹ This is a rational response because, from an individual landowner's perspective, the costs of regulation exceed the benefits of conservation. Sam Hamilton, a former director of the U.S. Fish and Wildlife Service, has summed up the problem well: "If a rare metal is on my property, the value of my land goes up. But if a rare bird occupies the land, its value disappears."³²

Treating endangered and threatened species the same confounds the problem by making property owners indifferent to how vulnerable a species is once it is listed. Under the U.S. Fish and Wildlife Service's regulation, a property owner has few incentives to help recover an endangered species because she will face the same regulatory burdens even if the species' prospects improve and its status is changed to threatened. There's no reward for the landowner, unless she can recover the species to the point that it can be completely delisted, a rare occurrence—only 39 out of 1,692 listed domestic species have ever recovered and been delisted.

Likewise, once a species is listed as threatened, the same intense regulatory burdens apply to landowners regardless of whether the species is imminently at risk of extinction or faces only remote threats decades in the future. More alarmingly, as a species' status worsens, the easiest means of escaping those regulatory burdens may be for the species to go extinct.

Returning to Congress's approach of regulating endangered and threatened species differently would improve incentives by aligning landowners' interests with those of species. Recovery efforts can be difficult, expensive, and time consuming. They also often require the participation of private landowners to supply critical habitat. For property owners to bear these costs there must be some upside when a species' prospects improve. If landowners knew that success would result in reduced regulatory burdens, that would be more likely to provide a significant "carrot" to entice recovery efforts.³³

In a study of timberland owners' responses to Endangered Species Act regulations, owners accelerated timber harvesting to prevent their trees from becoming habitat for the red-cockaded woodpecker because the costs of federal regulation exceed the benefits of conservation.



The red-cockaded woodpecker was listed as an endangered species in 1970.

Similarly, returning to Congress's graduated approach to regulating listed species would likely encourage landowners to work with states and conservation groups to proactively conserve threatened species. Under Congress's original two-step approach, a threatened listing would serve as a signal that a species was at risk of becoming endangered, encouraging states, landowners, and other groups to recover the species. If recovery efforts did not occur, the

species could continue to slide, triggering increased regulatory burdens ("the stick"). Collaborations would be easier to develop because landowners would have greater incentives to participate, and no federal permit would be required if the conservation efforts require minor or incidental take. Together, these factors could dramatically reduce the costs for states and conservation groups to develop innovative partnerships with habitat owners.

Building on Obama-Era Reform

This is not the first reform proposal aimed at improving incentives by adjusting regulatory burdens. To its credit, the U.S. Fish and Wildlife Service has several discretionary programs that permit take in exchange for conservation benefits.³⁴ For instance, through habitat conservation plans, the agency authorizes some amount of incidental take in exchange for conserving and improving habitat elsewhere.³⁵

These discretionary options all have a common shortcoming: They require an uncertain, costly, and time-consuming federal pre-approval process. For instance, the Southern Edwards Plateau Habitat Conservation Plan, which was created for nine endangered species in Bexar County, Texas, took six years to negotiate and obtain federal approval.³⁶ For many projects, such a long delay is at best extremely costly and at worst a deal breaker.

The impacts of the costly and time-consuming approval process are not limited to economic development projects. Even efforts to conserve species can be discouraged or bogged down by the process. The Nigiri Project described previously, for instance, was fortunate to have the support of a premier research university, which helped navigate that process. This same problem frequently recurs for other projects. For instance, the costs and delays of federal take permits threatened to shut down hunting ranches responsible for growing large populations of three endangered antelope species until Congress passed a law exempting them from that process.³⁷

As Ya-Wei Li of Defenders of Wildlife has explained, the need for pre-approval in each of these options necessarily introduces substantial delay and uncertainty.³⁸ For example, an applicant must submit extensive application materials

and undergo an environmental review by the agency. Preparing those materials is costly, and the time spent on them takes away from other productive endeavors. And all of this must be done with little or no certainty that the permit or plan will be approved.

Overall, Li observes, these options “impose substantial workload on applicants and [the federal government], thus hindering the agencies from carrying out other conservation activities.”³⁹ The same is true for property owners. By increasing the costs of private conservation, this burdensome process can hinder private efforts to recover species. It can especially discourage conservation by property owners who are not intrinsically motivated to consider species, who may abandon projects that could otherwise incorporate environmental benefits.

Restoring the statute’s distinction between endangered and threatened species would reduce these obstacles by removing barriers to projects involving threatened species, including habitat improvement projects. The result would be greater incentives for conservation and, ultimately, faster and more widespread recovery of listed species. For instance, habitat conservation projects that involve minor incidental take would no longer need to undergo the federal pre-approval process. And, even for endangered species, landowners would be more willing to navigate the permit process if they knew that they would be rewarded by reduced regulatory restrictions if the recovery effort succeeds.

This reform would expand upon actions by the Obama administration to promote state and private conservation programs as a means of avoiding the need to list species under the Endangered Species Act.⁴⁰ The Policy for Evaluating



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BOX 3: Greater Sage Grouse

The greater sage grouse, the largest species of grouse in North America, is known for courtship displays involving dozens of male birds puffing out their chests and strutting to attract females.⁴¹ In 2010, the U.S. Fish and Wildlife Service determined that the greater sage grouse warranted listing under the Endangered Species Act but that the listing was precluded by higher priorities.⁴² A listing would have been severely disruptive because the bird's range covers 165 million acres in 11 states and overlaps with key oil and renewable energy development sites.⁴³ Responding to these concerns, the U.S. Department of Agriculture launched the Sage Grouse

Initiative in 2010, with a goal of conserving the species through partnerships with states, property owners, and conservation groups.⁴⁴ The effort brought together such disparate groups as ranchers, Conoco-Phillips, and the National Audubon Society. Buy-in from private property owners was essential because 81 percent of the species' wetland habitat is on private land. Over the next five years, the initiative enrolled landowners owning 4.4 million acres of habitat and enhanced 400,000 acres by removing invasive plant species.⁴⁵ In 2015, the U.S. Fish and Wildlife Service announced that the species no longer warranted listing due in large part to this conservation effort.⁴⁶

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BOX 4: Gopher Tortoise

The gopher tortoise, native to the southeastern United States, digs long burrows that provide habitat for more than 300 other species. Construction has fragmented the species' habitat, which led the U.S. Fish and Wildlife Service to declare that the eastern population of the species warranted listing but that it was precluded by higher-priority species.⁴⁷ Recognizing the consequences of a listing, the states of Florida and Georgia developed plans to proactively preserve the species. Florida required developers whose projects would impact gopher tortoises to relocate the animals to suitable habitat.⁴⁸ Georgia partnered with the Department of Defense, state agencies, state industry groups, and the Nature Conservancy on a \$150 million project to conserve habitat.⁴⁹

Conservation Efforts when Making Listing Decisions (PECE), a U.S. Fish and Wildlife Service policy issued in 2003 but used to great effect by the Obama administration, permits the agency to forego listing a species if state and private conservation efforts are likely to reduce threats to the species.⁵⁰ For several controversial species, the agency used this authority to work with states, industry, property owners, and environmentalists to proactively conserve species, avoiding the need to list them and the regulatory burdens that would result.

These conservation partnerships provide powerful evidence that the desire to avoid burdensome regulatory restrictions can motivate states, property owners, and conservation groups to work together to conserve and recover species. However, these partnerships still face significant obstacles that could be avoided by restoring the Endangered Species Act's original two-step approach.

Because pre-listing conservation efforts must be planned and agreed to between the time a species is proposed for listing and a final decision, they are subject to a significant and artificial time constraint. The Endangered Species Act requires listing decisions to be made in about one year.⁵¹ Due to resource constraints, that deadline is routinely missed, but listing supporters can sue to force the agency to decide whether to list a species as quickly as practicable.⁵²

Consequently, whoever is leading a pre-listing conservation effort must get everyone to the table, develop a conservation strategy, secure funding, and prove landowners' willingness to participate—all within the short span between

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BOX 5: Lesser Prairie Chicken

The lesser prairie chicken is a small species of grouse found in Kansas, Colorado, Oklahoma, Texas, and New Mexico, including areas important to energy development and agriculture. In 2012, the U.S. Fish and Wildlife Service proposed to list the lesser prairie chicken as threatened. To avoid the economic and political consequences of a listing, the Western Association of Fish and Wildlife Agencies developed a range-wide conservation plan for the species, working with the affected states, property owners, and conservation groups.⁵³ Under the plan, the lesser prairie chicken population climbed from 19,000 in 2013 to nearly 29,000 in 2015. Drought reduced the population to 25,000 in 2016 but it has surged again to more than 33,000

today.⁵⁴ In 2014, the U.S. Fish and Wildlife Service proceeded to list the species anyway, arbitrarily assuming—contrary to the PECE and its actions on several other species—that this voluntary conservation would be abandoned if the agency declined to list the species.⁵⁵ That decision was overturned by a federal court.⁵⁶ But the saga continues. After a drought reduced the population in 2016, several groups petitioned to have the species listed again.⁵⁷ The agency is expected to consider those petitions in 2018.

Once a species is listed as threatened, states, industry, property owners, and conservationists would have the flexibility to develop and implement innovative conservation strategies and build the trust needed to make them effective.



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BOX 6:
Dunes Sagebrush Lizard

The dunes sagebrush lizard lives in 650,000 acres of shinnery oak dune habitat in Texas and New Mexico, overlapping with the Permian Basin—a major source of fossil fuel and renewable energy development. Citing habitat fragmentation and invasive mesquite plants crowding out shinnery oak, the U.S. Fish and Wildlife Service proposed to list the species in 2010. To avoid economic disruption, Texas and New Mexico enlisted the help of landowners, industry, and conservation groups to develop a voluntary plan.⁵⁸ Under the Texas plan, for instance, energy developers paid fees to fund the removal of old infrastructure that fragmented habitat and mesquite plants that crowded out shinnery oak.⁵⁹ Ken Salazar, the secretary of the interior during the Obama administration, praised the effort as “a great

example of how states and landowners can take early, landscape-level action to protect wildlife habitat.”⁶⁰ Based on the plans, the U.S. Fish and Wildlife Service declined to list the species.

Because the plans had to be finalized in the mere two years between the proposed listing and final decision, the states focused on the most pressing existing threat—energy development. Five years later, sand mining has arisen as a new threat to the species.⁶¹ Incorporating sand mining into the plan will require additional creativity. However, incorporating this new threat into the plan will have to be rushed because a petition to list the species will force the U.S. Fish and Wildlife Service to make a decision on the species prematurely or face more lawsuits.⁶²

the federal agency initiating the listing process and making a final decision. If potential participants doubt that a pre-listing strategy can be completed in time—a likely concern for species that have generated conflict in the past—the effort may be abandoned in its infancy.⁶³

The mad dash to finish a pre-listing conservation plan also makes it more difficult to anticipate potential issues that may arise in the future. Focusing on immediate and easily identified threats to species may work in the short term. But as markets, technology, and land uses change, new threats may arise and the potential listing may rear its head once again, as it has in the case of the dunes sagebrush lizard. At that point, it will be another race against time, as a new conservation plan will have to be completed before the listing process concludes.

This time constraint compounds the difficulty of overcoming the substantial cost of conservation efforts and uncertainty among landowners. Depending on a species' needs, conservation efforts may cost tens of millions of dollars, including foregone productive land-use activities. Additionally, landowners may be skeptical whether the species would be listed without their cooperation or whether their efforts will succeed in avoiding a listing.⁶⁴

Returning to Congress's two-step approach would eliminate the artificial time constraint by bringing this conservation planning within the Endangered Species Act process, rather than operating outside of it. Once a species is listed as threatened, states, industry, property owners, and conservationists would have the flexibility to develop and implement innovative

conservation strategies and build the trust needed to make them effective. Participants would have the confidence that their efforts were necessary, because the species has already been declared as threatened. And conservation programs would have the time and flexibility to adapt to changing circumstances. As new threats arose, participants could incorporate measures to mitigate them, without having to rush to beat a listing decision.

The U.S. Fish and Wildlife Service would also have the benefit of watching these conservation efforts play out, rather than having to make a listing decision based on speculation. After a species is listed as threatened, the agency would not face a mandatory deadline to force premature analysis. So long as the species does not continue to slide to the point of becoming endangered, the agency could study the actual results of recovery efforts over time.

Similarly, this change would address environmentalists' concerns about the risk of backsliding under the PECE approach. According to that backsliding concern, the incentive for landowners to follow through on conservation efforts may be reduced once the decision not to list the species is announced.⁶⁵ A return to Congress's original design would solve this problem by allowing species to be listed as threatened without sacrificing state and private parties' flexibility to develop conservation plans. And because the species has been listed, the potential for species-specific regulations of take would serve as a continual incentive to follow through on these plans.

Making the Endangered Species Act's Two-Step Work

The Obama administration's pre-listing conservation efforts show that avoiding regulatory restrictions can be a powerful incentive for conservation. Thus, they suggest that a return to the statute's original approach of regulating endangered and threatened species differently would promote conservation and recovery. And because this reform will not alter the regulatory restrictions for endangered species, it will not risk the statute's effectiveness at preventing extinctions.

Although environmentalists should embrace this opportunity to boost the Endangered Species Act's recovery rate without sacrificing its effectiveness at preventing extinction, there will inevitably be healthy skepticism about any such reform proposal. After all, changing the way the law treats threatened species involves a degree of deregulation. Won't the result simply be more takes of threatened species without any corresponding conservation benefit?

There are several reasons why this is unlikely. First, under this proposal, landowners would have strong incentives to recover threatened species, not harm them. In fact, landowners would be harming themselves if they did not work to recover threatened species. If the species continues to decline, it will be listed as endangered and landowners will face far greater regulatory burdens than they would have by cooperating to conserve the species.

Second, property owners whose activities require federal funding or permitting would continue to be subject to the Endangered Species Act's consultation requirement, even if the species in question is only listed as threatened. Only by recovering the species to the point that

it can be delisted entirely can property owners avoid this regulatory burden.

Third, the statute contains a mechanism to deal with bad actors without upending the incentives to conserve and recover species. The U.S. Fish and Wildlife Service is required to reassess listed species, including threatened species, every five years.⁶⁶ If during one of these five-year reviews the agency finds that some form of intentional take is significantly undermining a threatened species, it can adopt a regulation that narrowly targets that problem without criminalizing all forms of incidental take or otherwise undermining the incentives for voluntary conservation.⁶⁷ The mere threat that an agency may adopt such a regulation could be sufficient to motivate cooperation.⁶⁸ Because these reviews occur periodically after a threatened species has been listed, they will give states, conservationists, and property owners the necessary breathing room to develop and implement innovative conservation plans.

Finally, states can intervene to ensure that threatened species are adequately protected, just as Congress intended. The form of those interventions may vary from state to state, with some states focusing on regulation while others provide positive incentives for conservation. Increasing the role of federalism in recovering species would enhance accountability, innovation, and experimentation, as states' roles in pre-listing conservation has shown.⁶⁹

States have already expressed an interest in serving this role. After a two-year initiative to study ways to improve the Endangered Species Act, the Western Governors' Association recently concluded that there should be "greater distinction

Under this proposal, landowners would have strong incentives to recover threatened species.



U.C. Davis doctoral candidate Jacob Katz points to equipment used to hold and measure salmon fingerlings, as part of the Nigiri Project, a study of salmon growth in inundated rice fields in the Yolo Bypass.

between the management of threatened versus endangered species in ESA to allow for greater management flexibility, including increased authority for species listed as threatened.⁷⁰ This interest is not limited to western states. Gordon Myers, the executive director of the North Carolina Wildlife Resources Commission and then-president of the Southeast Association of Fish and Wildlife Agencies, recently testified before a congressional subcommittee that the statute's two-step process should

be restored to give states the flexibility needed to conserve and recover threatened species. "Congress intended that the states have the opportunity to lead the management of threatened species, including the provision of 'take' as a means of conservation of the species," Myers noted. But by promulgating "a default rule" that applied the same restrictions for endangered and threatened species, the U.S. Fish and Wildlife Service "essentially eliminated the distinction between the two listing categories."⁷¹

Converting Endangered Species from Liabilities to Assets

Although a return to the statute's two-step approach will not immediately convert rare species from a liability into an asset, it would empower states and conservation groups to move in that direction. Rare species would remain a liability under federal law, with the extent of that liability varying based on whether the species is listed as endangered or threatened. But by improving landowners' incentives to participate in conservation efforts with states and conservation groups, the ultimate result could be increased importance of state- and environmentalist-led market-based conservation. Consequently, this reform would complement ongoing state efforts to promote more collaborative means of protecting species through positive incentives.

In 2014, for instance, the Association of Fish and Wildlife Agencies established a Blue Ribbon Panel consisting of business and conservation leaders to design a 21st-century model for conserving wildlife.⁷² The panel's recommendations have been incorporated into the bipartisan American Wildlife Recovery Act, a bill that would provide increased funding for state-led innovative conservation efforts from oil and gas revenues.⁷³ Returning to the Endangered Species Act's two-step approach would make such funding more effective by clearing red tape and increasing landowners' willingness to cooperate.

For the same reason, this reform would also increase the effectiveness of private environmental groups' efforts to promote collaborative conservation. Cooperative efforts between landowners and environmentalists "are the only approaches that are likely to work going forward," according to the Environmental Defense Fund's Eric Holst.⁷⁴ Restoring the Endangered Species Act's two-step approach would expand the number of opportunities for environmental groups to partner with states, industry, and landowners to pursue innovative conservation programs. It would also lower the costs of securing landowner participation, by eliminating the federal pre-approval process for threatened species and increasing the willingness of industry and property owners to contribute to the effort.

The bald eagle is often touted as an Endangered Species Act success story. Today the national bird is considered fully recovered after spending decades on the endangered species list.



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Conclusion

Since the Endangered Species Act was enacted, few species protected by it have gone extinct. That's reason for celebration. But we want the statute to do more. We want endangered species to recover as well. Achieving that goal, without sacrificing the law's success at preventing extinction, requires reform that aligns the incentives of private landowners with the interests of rare species while maintaining regulatory protections for endangered species.

Returning to Congress's original two-step approach of connecting the burdens of regulation to the degree of risks species face would accomplish that needed reform. By imposing more onerous burdens as species approach extinction, and relaxing those burdens as they recover, this reform will encourage landowners to conserve and recover species. And by maintaining the same protections for endangered species that exist today, that reform will not come at the expense of the statute's effectiveness at preventing extinction.

Recent voluntary conservation efforts provide powerful evidence that such reform would benefit species. If the incentive realignment created by this reform were reinforced by other public and private incentives to encourage proactive conservation, the benefits would be even greater.

The manatee is one species that has benefited from the Endangered Species Act's protected status. While that's reason for celebration, the statute can help achieve more.



Endnotes

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8. Richard Nixon, State of the Union Message to the Congress on Natural Resources and the Environment (Feb. 15, 1973) (transcript available at <http://www.presidency.ucsb.edu/ws/?pid=4102>).
9. Congressional Research Service, *A Legislative History of the Endangered Species Act of 1973, as Amended in 1976, 1977, 1978, 1979, and 1980*, at 72 (statement of Rep. Dingell) (henceforth "ESA Legislative History"); *id.* at 193 (describing the protection of threatened species as the Endangered Species Act's most important innovation). Congressman Dingell was not alone in stressing the expansion of protection to threatened species as the statute's core innovation. See, e.g., *id.* at 204 (statement of Rep. Clausen) ("The most important feature of the bill is the provision extending protection to animals and plants which may become endangered within the foreseeable future. In the past, little action was taken until the situation became critical and the species was dangerously close to total extinction.").
10. 16 U.S.C. § 1532(6) and 16 U.S.C. § 1532(20).
11. The polar bear, for instance, has been listed as threatened based on projected loss of sea ice due to climate change even though, at the time of listing, the Secretary of Interior estimated that the global population had doubled in the previous four decades. Rachel Weisel, *Polar Bear Population*, FactCheck.org (June 18, 2008), available at <https://www.factcheck.org/2008/06/polar-bear-population/>.
12. 16 U.S.C. §§ 1531(c)(1), 1533(a)(3), 1536.
13. 16 U.S.C. § 1538(a) (prohibiting take of "any endangered species").
14. 16 U.S.C. § 1540 (providing civil and criminal penalties for violations).
15. 16 U.S.C. § 1532(19); see *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 703 (1995) (upholding the Fish and Wildlife Service's interpretation).

16. University of California, Davis, *Nigiri Project Mixes Salmon and Rice Fields for Fifth Year on Floodplain* (Feb. 23, 2016), available at <https://www.ucdavis.edu/news/nigiri-project-mixes-salmon-and-rice-fields-fifth-year-floodplain>; California Trout, *The Nigiri Concept: Salmon Habitat on Rice Fields*, available at <http://caltrout.org/regions/central-california-region/the-nigiri-concept/>.
17. CapRadio, *A 'Floating Fillet': Rice Farmers Grow Bugs to Help Restore California's Salmon* (Jan. 23, 2018), available at <https://www.youtube.com/watch?v=Lg4ycKF6dSQ>.
18. Personal correspondence with Jacob Katz.
19. See Jonathan Wood, *A Prairie Home Invasion*, PERC Reports 36 No. 2 (Winter 2017), available at <https://www.perc.org/articles/prairie-home-invasion>. I, along with my Pacific Legal Foundation colleagues represented landowners in a challenge to this federal regulation, a lawsuit that ultimately led to the state's conservation program.
20. See Lindsay Whitehurst, *Prairie dog endangered-species plan eases rules under Trump*, Chicago Tribune (Dec. 20, 2017), available at www.chicagotribune.com/lifestyles/pets/sns-bc-ut--prairie-dogs-20171220-story.html (describing a proposed federal plan that would allow the state plan to resume).
21. Jane Kay, *Delta Smelt, Icon of California Water Wars Is Almost Extinct*, National Geographic (Apr. 3, 2015).
22. There is no single range-wide population estimate for the northern long eared bat. But the U.S. Fish and Wildlife Service acknowledges, based on several regional estimates, that the total population is at least several million. 80 Fed. Reg. 17,974 (Apr. 2, 2015).
23. ESA Legislative History at 358 (statement of Sen. Tunney).
24. The National Marine Fisheries Service, which implements the Endangered Species Act for marine species, still honors the distinction between endangered and threatened species. But that agency is responsible for less than one in ten listed species. See NOAA Fisheries, *Endangered and Threatened Marine Species*, available at www.nmfs.noaa.gov/pr/species/esal.
25. Reclassification of the American Alligator and Other Amendments, 40 Fed. Reg. 44, 412, 44,414 (Sept. 26, 1975) (codified at 50 C.F.R. § 17.31).
26. See Patricia Sagastume, *Reclassifying Florida Manatees: From Endangered to Threatened*, AL JAZEERA AM. (Aug. 8, 2014 5:00 AM) available at <http://america.aljazeera.com/articles/2014/8/8/reclassifyingfloridamanatees.html>. The decision to change the manatee's status to threatened was in response to a petition and several follow-up lawsuits filed by the Pacific Legal Foundation.
27. Jonathan Wood, *Take It to the Limit: The Illegal Regulation Prohibiting the Take of Any Threatened Species Under the Endangered Species Act*, 33 Pace Env'tl. L. Rev. 23 (2015); see Robert Gordon, *Take It Back: Extending the Endangered Species Act's "Take" Prohibition to All Threatened Animals is Bad for Conservation*, Heritage Foundation Backgrounder (Dec. 7, 2017), available at <https://www.heritage.org/sites/default/files/2017-12/BG3267.pdf>. I represent the National Federation of Independent Businesses and the Washington Cattlemen's Association on a pair of rulemaking petitions asking the U.S. Fish and Wildlife Service to withdraw this regulation.
28. See Scott Learn, *Northern spotted owl marks 20 years on endangered species list*, The Oregonian, June 25, 2010, available at http://www.oregonlive.com/environment/index.ssf/2010/06/northern_spotted_owl_marks_20.html.
29. See Richard Stroup, *The Endangered Species Act: Making Innocent Species the Enemy*, PERC Reports (1995).
30. See Ronald Bailey, *"Shoot, Shovel, and Shut Up": Celebrating 30 years of failing to save endangered species*, Reason (Dec. 31, 2003), available at <http://reason.com/archives/2003/12/31/shoot-shovel-and-shut-up>.
31. See Dean Lueck & Jeffrey Michael, *Preemptive Habitat Destruction under the Endangered Species Act*, 46 J. Law & Econ. 27 (2003). Lueck and Michael's findings have been supported by other studies. See List, et al., *Is the Endangered Species Act Endangering Species?*, NBER Working Paper 12777 (2006), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=953200; Daowei Zhang, *Endangered Species and Timber Harvesting: The Case of Red-Cockaded Woodpeckers*, 32 Econ. Inquiry 150 (2004).
32. Betsy Carpenter, "The Best Laid Plans," U.S. News and World Report, vol.115, no.13 (1993), p. 89.
33. In theory, this could happen under the status quo by the adoption of a special rule to relax those regulations for a particular species. But such rules require a costly and time-consuming rulemaking process, making them rare and thus their adoption unpredictable for landowners.

34. See U.S. Fish & Wildlife Service, *For Landowners: Safe Harbor Agreements*, <https://www.fws.gov/landowners/safe-harbor-agreements.html>; U.S. Fish & Wildlife Service, *For Landowners: Conservation Banking*, available at <https://www.fws.gov/landowners/conservation-banking.html>; and U.S. Fish & Wildlife Service, *Candidate Conservation: Candidate Conservation Agreements*, available at <https://www.fws.gov/landowners/candidate-conservation.html>.
35. U.S. Fish & Wildlife Service, *Habitat Conservation Plans*, available at <https://www.fws.gov/landowners/hcp-overview.html>.
36. See Brendan Gibbons, *Habitat plan approved to protect nine endangered species*, San Antonio Express-News (Dec. 29, 2015), available at <https://www.expressnews.com/news/local/article/Habitat-plan-approved-to-protect-nine-endangered-6721825.php>.
37. See Terry L. Anderson, *When the Endangered Species Act Threatens Wildlife*, Wall Street Journal (Oct. 20, 2014), available at <https://www.wsj.com/articles/terry-l-anderson-when-the-endangered-species-act-threatens-wildlife-1413846579>.
38. See Ya-Wei Li, *Section 4(d) Rules: The Peril and the Promise*, Defenders of Wildlife ESA Policy White Paper Series (2017). Li's report recommends administrative changes to allow for expanded use of so-called "special 4(d) rules" which exempt individual threatened species from the take prohibition to varying extents. Although Li correctly diagnoses the obstacles landowners face in seeking permits or habitat conservation plans, his proposal does not avoid them. Special 4(d) rules require an extensive notice-and-comment process that can take years, can get mired in litigation, and have no clear standards that conservationists, landowners, and states can rely on to make their case for one.
39. See *id.*
40. In addition to these collaborative efforts, the Obama administration also adopted more Special 4(d) Rules than any prior administration. See *id.*
41. Audubon, *Greater Sage-Grouse*, available at www.audubon.org/field-guide/bird/greater-sage-grouse.
42. The U.S. Fish and Wildlife Service issues a "warranted but precluded" decision if a species meets one of the definitions for listing but the agency's limited budget is better put to listing higher priority species. Once the agency clears its backlog of species waiting to be added to the list, it moves forward on listing those species deemed warranted but precluded.
43. U.S. Fish & Wildlife Service, *The Greater Sage-grouse: Facts, Figures and Discussion*, available at http://fws.gov/greatersagegrouse/factsheets/GreaterSageGrouseCanon_FINAL.pdf.
44. Sage Grouse Initiative, available at <https://www.sagegrouseinitiative.com/about/>.
45. Sec. Tom Vilsack, *New Sage Grouse Conservation Strategy Good for Cattle Ranches, Good for Birds*, [usda.gov](http://www.usda.gov) (Aug. 27, 2015), available at <https://www.usda.gov/media/blog/2015/08/27/new-sage-grouse-conservation-strategy-good-cattle-ranches-good-birds>.
46. Fish & Wildlife Service, *12-Month Finding on a Petition to List Greater Sage-Grouse as an Endangered or Threatened Species*, 80 Fed. Reg. 59,858 (Oct. 2, 2015). Coinciding with the decision not to list the species, the Bureau of Land Management and U.S. Forest Service also announced controversial land use plans to restrict federal land use to protect the sage grouse. See Department of Interior, Press Release, *Historic Conservation Campaign Protects Greater Sage-Grouse* (Sept. 22, 2015), available at <https://www.doi.gov/pressreleases/historic-conservation-campaign-protects-greater-sage-grouse>. Three years later, those plans remain divisive, with supporters claiming they are preferable to a listing and proof that the Sage Grouse Initiative worked and opponents criticizing them for inconsistency with state and private conservation efforts. Regardless of where you come down on that dispute, the state and private conservation efforts undertaken show that the desire to avoid federal regulation can be a powerful motivator for conservation.
47. 76 Fed. Reg. 45,130 (July 27, 2011).

48. Lisa Conley, *New project will require relocation of gopher tortoise*, Naples Daily News (July 1, 2016), available at <https://www.naplesnews.com/story/news/local/communities/marco-eagle/2016/07/01/new-project-will-require-relocation-of-gopher-tortoise/86632034/>.
49. Georgia Conservancy, *Gopher Tortoise Initiative*, available at <https://www.georgiaconservancy.org/gophertortoise>; Jonathan Wood, *Voluntary Conservation to the Gopher Tortoise's Rescue*, PERC.org (Feb. 7, 2018), available at <https://www.perc.org/2018/02/07/voluntary-conservation-gopher-tortoises-rescue/>.
50. U.S. Fish & Wildlife Service and National Oceanic and Atmospheric Administration, *Policy for Evaluation of Conservation Efforts When Making Listing Decisions*, 68 Fed. Reg. 15100 (Mar. 28, 2003).
51. 16 U.S.C. § 1533(b)(3).
52. See Government Accountability Office, *Environmental Litigation: Information on Endangered Species Act Deadline Suits*, GAO-17-304 (Feb. 2017), available at <https://www.gao.gov/assets/690/683058.pdf>.
53. See Hannah Downey, PERC Case Study, *Easements for Endangered Species: A Collaborative Approach to Saving the Lesser Prairie Chicken* (Dec. 2017), available at <https://www.perc.org/wp-content/uploads/old/pdfs/lesser-prairie-chicken-case-study.pdf>.
54. See McDonald, et al., Western Association of Fish and Wildlife Agencies Report: Range Wide Population Size of the Lesser Prairie-Chicken 2012 to 2017 (Sept. 5, 2017), available at <http://lpcinitiative.org/wp-content/uploads/LEPCAerialSurvey2017Report.pdf>.
55. 79 Fed. Reg. 29,974 (Apr. 10, 2014).
56. Phil Taylor, *Prairie chicken ruling casts doubt on FWS listing policy*, E&E News (Sept. 3, 2015), available at <https://www.eenews.net/stories/1060024255>.
57. 81 Fed. Reg. 86,315 (Nov. 30, 2016).
58. Kate Galbraith, *Combs, Oil Groups Applaud Decision to Keep Lizard Off Endangered List*, Texas Trib. (June 13, 2012), available at <https://www.texastribune.org/2012/06/13/texas-oil-groups-applaud-key-lizard-decision/>.
59. Terrence Henry, *How the Conservation Plan for the Dunes Sagebrush Lizard Works*, NPR (June 15, 2012), available at <https://stateimpact.npr.org/texas/2012/06/15/how-the-conservation-plan-for-the-dunes-sagebrush-lizard-works/>.
60. U.S. Dept. of Interior, News Release, *Landmark Conservation Agreements Keep Dunes Sagebrush Lizard off the Endangered Species List in NM, TX* (June 13, 2012), available at https://www.fws.gov/southwest/es/Documents/R2ES/NR_for_DSL_Final_Determination_13June2012.pdf.
61. Shannon Najmabadi, *Report: Sand miners disturbing threatened West Texas lizard's habitat*, Texas Trib. (Sept. 25, 2017), available at <https://www.texastribune.org/2017/09/25/west-texas-lizard-threatened-sand-miners/>.
62. Mella McEwan, *Comptroller warns of new efforts to list lizard*, Midland Reporter Telegraph (Sept. 21, 2017), available at <https://www.mrt.com/business/oil/article/Comptroller-warns-of-new-efforts-to-list-lizard-12219010.php>.
63. Recognizing the difficulties of overcoming this time constraint, Congressman Gardner of Colorado proposed legislation to delay a listing decision on the greater sage grouse for five years. Bruce Finley, *Cory Gardner introduces act to delay endangered decision on grouse*, Denver Post (Apr. 22, 2015), available at <https://www.denverpost.com/2015/04/22/cory-gardner-introduces-act-to-delay-endangered-decision-on-grouse/>.
64. The Service could list a species as threatened and adopt a special rule to relax the take prohibitions impacts on property owners. But, like the Service's other discretionary options, that approach is difficult for landowners to rely on, costly, and time-consuming. To issue such a rule, the Service would have to navigate the notice-and-comment rule making process, which has historically limited these rules to a handful per year.
65. See, e.g., Emily Sohn, *A Grand Experiment on the Grasslands*, Biographic.com (Mar. 13, 2018), available at <http://www.biographic.com/posts/sto/a-grand-experiment-on-the-grasslands> (quoting Ya-Wei Li of Defenders of Wildlife as asking "What incentive is there to enroll if there isn't a threat of listing?").
66. 16 U.S.C. § 1533(c)(2).
67. 16 U.S.C. § 1533(d). Adopting tailored regulations for threatened species would require the U.S. Fish and Wildlife Service to show that some form of take is having a significant adverse effect on the species. Putting this burden on the agency would have the additional benefit of channeling regulation into the areas where it is most needed.

68. That may sound like a return to the status quo, but it isn't. Under current practice, all take of threatened species, even minor instances of incidental take, is presumptively forbidden. Those restrictions can only be reduced by convincing the Service to adopt a narrower regulation for a species—a discretionary, bureaucratic process that suffers the same costs, delays, and uncertainties that have limited the impact of prior reforms.
69. In enacting the Endangered Species Act, Congress wished to encourage this federalism approach to species. In addition to relying on state innovation to protect threatened species, the statute also provides for cooperation agreements allowing the states to take over implementation of the federal agency's responsibilities. 16 U.S.C. § 1535. More recently, the Service amended the regulations for listing petitions to provide for earlier information sharing between states and federal agencies and a greater state role in the process of deciding whether to list species. 81 Fed. Reg. 23,448 (Apr. 21, 2016).
70. Western Governors' Association, *Policy Resolution 2017-11: Species Conservation and the Endangered Species Act*, available at http://westgov.org/images/editor/2017-11_Species_Conservation_and_the_ESA_for_web.pdf.
71. Testimony of Gordon Myers, Executive Director N.C. Wildlife Resources Commission, President Southeast Association of Fish and Wildlife Agencies, Before the Senate Committee on Environment and Public Works, *Oversight: Modernization of the Endangered Species Act* (Feb. 15, 2017), available at https://www.epw.senate.gov/public/_cache/files/e/6/e6a208cc-6cc8-4503-98d2-8d9a97d9065e/F9D83BCB0EA63DA51B32038D993779E3.testimony-for-gordon-myers-before-senate-epw-15-feb-2017.pdf.
72. Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources, *Final Report and Recommendations* (Mar. 2016), available at https://www.fishwildlife.org/application/files/8215/1382/2408/Blue_Ribbon_Panel_Report2.pdf.
73. H.R. 4647, Recovering America's Wildlife Act, 115th Congress (introduced Dec. 14, 2017); see also National Wildlife Foundation, *Recovering America's Wildlife Act*, available at <https://www.nwf.org/Our-Work/Wildlife-Conservation/Policy/Recovering-Americas-Wildlife-Act>.
74. Erica Good, *A Shifting Approach to Saving Endangered Species*, New York Times, (Oct. 5, 2015), available at <https://www.nytimes.com/2015/10/06/science/a-shifting-approach-to-saving-endangered-species.html>.

“Almost since its enactment in 1973, the Endangered Species Act has generated controversy and political conflict. Its supporters tout the many species saved from extinction, while its critics cite the high economic costs to landowners and business. This report proposes modest changes that will prevent extinctions and promote recovery of threatened species by enlisting the collaborative efforts of private landowners.”

—James L. Huffman

Dean Emeritus, Lewis & Clark Law School

“Jonathan Wood gets it exactly right: We could do a better job at providing incentives for species recovery. This report correctly and creatively looks at ways to use the flexibility provided by section 4(d) of the Endangered Species Act to give landowners the right incentives for threatened species conservation.”

—Timothy Male

Executive Director, Environmental Policy Innovation Center

ABOUT THE AUTHOR:



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Senator CARPER. Thank you for your testimony. Again, to each of you who have spoken, you have given us a lot to ponder, Mr. Ashe, a lot to ponder.

Senator Merkley has another pressing engagement, and he is not going to be able to stay with us for long, but I am happy to yield my time to him at this point.

Senator Merkley.

Senator MERKLEY. Thank you, Mr. Chairman. I appreciate that greatly.

I wanted to turn to you, Mr. Ashe. You pointed out that a lot of the challenges we have with endangered species across State lines, and for that matter, across national lines, and the amount of money, I believe, that we send to Fish and Wildlife for species protection is about \$120 million a year. Obviously, this would create a lot more funding.

But this says, and I have been listening to the testimony of everyone talking about kind of the 12,000 endangered species, the huge number of threatened species that haven't been listed as endangered because we don't have the money to cover them.

Why does this bill have only \$1 out of every \$7 dedicated to endangered species or threatened species, when everyone is talking about this is the big challenge, the biodiversity, the enormous number of affected species? Why are we dedicating only \$1 out of every \$7 in this bill, and should we dedicate more?

Mr. ASHE. Thank you, Senator Merkley. Obviously, based on my testimony, I think the answer to that is yes. I think that we have heard a lot of reference to kind of reduce reliance on regulation. Well, the most direct path to reducing regulation of endangered species is to get them recovered and get them off of the endangered species list.

When I was Director, we recovered and delisted more species than all previous Administrations combined. That was four decades of work. What we did was we targeted our recovery money, our available recovery money, and said, OK, we have species that we can get them that last mile. We can get them off the endangered species list. I think the record is clear. If we invest in recovery, we will get species off of the endangered species list.

I do think this bill requires a better balance between those responsibilities. That is in all of our interests, including wildlife.

Senator MERKLEY. Mr. O'Mara, in your written testimony, you go through a number of States and say, hey, a lot of States take their Federal grants and do a significant share above \$1 out of every \$7, above 15 percent, to threatened species, and that you anticipate that that will be the case here.

Again, I am going to ask a question. If we are really aimed at biodiversity, if we are really aimed at threatened species, there are really two additional things we could do. I just want your response. One is spend more than \$1 out of every \$7, on what is the mission of this bill according to everyone's testimony.

The second is to recognize, as Mr. Ashe has pointed out, that so many of these issues transcend the States, and we give so little funding, \$120 million a year, to Fish and Wildlife to take on threatened issues, endangered species.

Why don't we simultaneously say we are going to step up support for the Federal efforts when we are doing this bill? Those two thoughts.

Mr. O'MARA. Every single dollar in this bill goes toward the 12,000 species of greatest conservation need, so that is the universe you have to plan, not other species that are common, so you have to be in there. The 15 percent is for the 1,600 species that are already listed, so about 13 percent of the total number.

Actually, I anticipate it is going to be a lot higher. I mean, the 15 percent, I think, is a floor, not a ceiling. There is also another 10 percent of the money for innovation grants that is really intended to be focused on interstate collaboration.

So, for example, your Saline Lakes Great Basin Bill, or the monarch work you have been doing that transcends boundaries. That money is intended for that collaboration, and I think a lot of that is going to be spent on either candidate species that are close to being listed, or species that are already listed that folks want to recover. We would be in favor of additional funding for recovery.

I am also worried that 20 years ago, this same point was one of the things that toppled the CARA efforts. So, if there is a political will to add money to the bill to do more on the Federal side, we would be absolutely supportive. I mean, there is no one that fights harder for funding and appropriations for the Fish and Wildlife Service than the National Wildlife Federation. It has just been a sticking point for political reasons. I want to make sure we don't lose the ability to save the 12,000 species because we are fighting over one point in the bigger context.

Senator MERKLEY. So, the way the bill is constructed, you are comfortable, like, in my home State, every time I go to the coast, I see a herd of 70 elk hanging out. Our elk are very much recovered. Every time I go to rural Oregon, I see large flocks of turkeys where I used to see, where if I saw one or two on a remote road, I was astounded. Twenty years later, it is like, oh, there is a field with 70, 80 turkeys in it.

You are confident that this will not be a case that some States will say, hey, we can finally stock more lakes with more rainbow trout, and we can double our already large elk herds?

Mr. O'MARA. I am, because the species of greatest conservation need are really species that either are rare, declining, or have habitat threats. At this point, the turkeys and elk in Oregon are doing fine. They wouldn't qualify.

The Fish and Wildlife Service actually gets to review the plans and raise concerns. There has been this concern that the States will just spend it on game species. The States are hungry to be able to work on the full diversity of wildlife, but the funding tools have been so focused on hunting and fishing species that we have been unable to do that.

So I have confidence in the States to manage the money well. I also have confidence in the Fish and Wildlife Service to oversee that the dollars are spent well.

Senator MERKLEY. Thank you, Mr. Chairman.

Senator CARPER. Thank you, Senator Merkley.

Let me just mention, after Senator Capito, Senator Boozman, we will turn to you, and Senator Cardin; Senator Ernst was here; she has left; and then Senator Whitehouse.

Please go ahead.

Senator CAPITO. Thank you, Mr. Chairman.

Ms. Pauley, let me ask a question. This is a very general question. In your opinion, what is the underlying problems that Recovering America's Wildlife Act is intending to fix, besides more money?

Ms. PAULEY. Well, I think it has already been beautifully stated by both of the sponsors, and certainly by some of our other witnesses here today. We have, I think, pretty clearly identified the problem. We have 12,000 species of greatest conservation need that States have identified through their State Wildlife Action Plans that was mandated by Congress.

So for 20 years, as you have heard, we have had this mandate to inventory and develop these plans of these species that we know are in trouble or on their way. The whole focus of the Recovering America's Wildlife Act, the whole intention was to keep them out of the emergency room, to keep them off of the list. That has been the focus; that has been the intention.

The States have done their part, really, without the funding. We have, over the last 20 years, revised these plans where they are very science driven, very specific plans with clear objectives on how to keep these species of greatest conservation need off the endangered species list.

But the issue is funding. The issue is funding. We have been given this mandate; we have done our part to develop these plans. The funding hasn't come with it.

And we have other great examples. Let us talk about waterfowl in this country. Since 1970, we have seen an increase in waterfowl populations by 56 percent because they had the authority; we have had the funding through NACA, through the Federal duck stamp, through farm bill programs, et cetera. So the authority was there, the funding was there, the partnership is there, and we have seen the success. At the same time, grassland species, bird species, declining by 53 percent because the funding wasn't there.

So I would say we are looking at this window in time. I am all for pondering, but I think we have pondered this issue, personally, long enough. We have the plans. The States are ready to go, and with every day, we have seen what has happened over 20 years; 406 species now added to that list.

Senator CAPITO. Well, thank you. Obviously, resource constraints are difficult around the horn, and Fish and Wildlife has constraints, too, as well.

I think I know the answer to this question, but there has been an effort to make changes to this bill that would redirect a portion of the funding to the Fish and Wildlife Service. What kind of impacts do you think that would have on what you have just explained is the main objective of the bill?

Ms. PAULEY. The calculations of that \$1.3 billion, \$1.4 billion with the tribal moneys is really based upon what will it take for States to implement their State Wildlife Action Plans. That is

where the \$1.3 billion was devised, is what will it take for States to implement their plans.

I have great respect for the Fish and Wildlife Service. I have great respect for the role that the Endangered Species Act plays. But the purpose of this legislation has always been to find the funding for States to implement their State Wildlife Action Plans.

Senator CAPITO. All right, and as I said in my opening statement, I support that goal absolutely.

Mr. Wood, you talked about the Blanket 4(d) rule and what kind of impacts that would have. Can you elaborate on how rescinding that rule and returning to a more tailored approach, how can that benefit our private landowners in that quest of keeping species off of the list?

Mr. WOOD. Thank you for the question.

At least in two ways. The first is that it provides a direct incentive to landowners to care about whether species are recovering or declining. Under the blanket rule, from the perspective of landowners, the exact burdens fall on you, regardless of whether a species is barely threatened or on the verge of extinction. The way the statute is intended to work is regulations are reduced as species recover and tightened should species decline. That aligns the incentives better.

The other, as I mentioned in my testimony, is that it empowers States to take a greater lead on threatened species to deal with the situation that some of the other panelists mentioned, where recovering species might take a long time. The risk is that if a species gets listed while a State is working on it, what does that do to upend a State strategy that otherwise could have worked.

Senator CAPITO. Mr. O'Mara, if you were to diagnose where this legislation falls short, you already identified one of the issues, which would be redirecting money more to Fish and Wildlife, could cause political problems with this concept. Do you have any other comments on that, on where you think this legislation could run into political winds?

Mr. O'MARA. Obviously, there is concern about the fiscal impacts of anything right now. I think we don't do a good job scoring the costs of inaction. Every time we list a species, it is about \$20 million to the government, every single time, and then it is about \$80 million to \$100 million of private sector impacts. None of that scores under CBL. Yet, that is a cost that is real. It doesn't build into the baseline; it doesn't work over time.

So I think, I just worry about having kind of the space to kind of make the argument that saying this ounce of prevention is worth that pound of cure, because the alternative—imagine if the monarch butterfly ends up listed. The impact on farms all across the country is massive. Whereas if we had more collaborative tools, and Dan was doing a lot of this leadership work when he was Director, but it has always been under-resourced.

I am convinced we can save most species through proactive, collaborative work and save hundreds of billions of dollars of private sector costs.

Senator CAPITO. Thank you.

Thank you, Mr. Chairman.

Senator CARPER. You are welcome.

Next is Senator Boozman.

It is your turn. He will be recognized immediately after you.

Senator BOOZMAN. I don't want to do anything to cross Senator Cardin.

[Laughter.]

Senator CARPER. None of us do.

Senator BOOZMAN. Well, first of all, I want to thank Senators Blunt and Heinrich for working so, so very hard on this bill to try and solve a difficult problem that has plagued us for years and for all of you all being here.

Ms. Pauley, in my home State of Arkansas, I found that farmers and ranchers are some of the best stewards of our land. That is why partnerships between the Federal Government and the agricultural community are imperative to address species management and recovery.

Personally, I believe the Federal Government should be incentivizing private landowners and making voluntary conservation efforts, those who are working in that regard. It appears that under the current structure of ESA, private landowners are not getting due credit for the time, the money, and labor they spend on voluntary conservation efforts.

One of the reasons that I am really pleased to be a co-sponsor of the Recovering America's Wildlife Act is because it would provide on the ground actors such as conservation organizations, State authorities, and tribal governments with the resources they need to pursue collaborative conservation efforts in their regions.

Can you talk a little bit, share your opinion on how will these additional resources help ease the tension felt by landowners when dealing with the Endangered Species Act that we currently have?

Ms. PAULEY. Senator, I so appreciate that question, because much like Arkansas, Missouri is a State of 93 percent private landownership. That private lands piece, we cannot accomplish conservation on the ground in Missouri without the help, the assistance, the support of our private landowners. Private land, really, capacity and assistance is so important to us that we created an entire branch in our agency to add more boots on the ground, additional cost share, cooperative positions with other organizations to make sure that we have the ability to reach those landowners that either want to do proactively conservation or are in need, perhaps, of reasons of ESA.

We have an example in Missouri. We have this little aquatic species called the Niangua darter, and it needs really good water quality. So we came alongside of these landowners that farmed in these watersheds that had the Niangua darter and helped them through cost share and technical assistance with string bank protection programs and other soil health programs to ensure that we were meeting shared goals together.

I think that is where RAWA is so critical, because States have those local—those relationships with the landowners. They are our neighbors, and those State driven, local driven relationships are absolutely critical. The collaborative nature of RAWA, the voluntary nature of RAWA, is so critical. Moving forward, conservation for the future has to be collaborative, and that is what we would do with these RAWA dollars.

Senator BOOZMAN. Very good.

As a Nation, we have experienced the decline of 6 million hunting licenses purchasers in the last decade, Ms. Pauley. According to a recent study by the Association of Fish and Wildlife Agencies, an estimated 58.8 percent or \$3.3 billion of conservation funds to State wildlife agencies come from hunting and fishing related activities, either directly through the sale of licenses, tags, and stamps, or indirectly, through the Federal excise taxes on hunting, recreational shooting, and angling equipment. It is clear that hunters are a significant force behind our Nation's conservation efforts.

In your opinion, what is driving the decline in license purchases, and what are the potential ramifications of the lost revenue to the wildlife conservation efforts?

Ms. PAULEY. Senator, we could probably spend the rest of the time talking about potential reasons behind the decline in hunting. I am going to say it is everything from a society that has moved away more from rural areas and is more urbanized; they have more time commitments, so it is an issue of priority setting; just the loss of that passing down of one generation from another. Many of us grew up hunting because we had grandparents or parents who do the same. So, much of that, I think, is just related to societal changes, et cetera.

But you bring up an important point. Much of the conservation efforts over the last eight decades are because of hunters and anglers. You mentioned the percentage, very high percentage, coming either from license fees or from the excise taxes. So, hunters and anglers have done their part. They have paved the way. It is because of them that we have the conservation success stories, but the formula going forward has to be different. It has to be something picked up by all of us.

Senator BOOZMAN. Right, I agree, and that is the point. We are going to have to backfill that. Again, I think we have got a great opportunity to do that. That is what this bill is all about, is providing an opportunity.

Thank you, Mr. Chair.

Senator CARPER. Thank you.

Senator Cardin.

Senator CARDIN. Thank you, Mr. Chairman, and let me thank all of our witnesses for your commitment to our environment.

There was an article in this morning's paper about the manatee in Florida, 15 percent loss by starvation this year. That is a climate change issue. We recognized that with sea grasses and their diet. But it is a reality of a species that is certainly at risk. We could mention so many different areas where additional resources are needed.

So, I want to get this bill to the finish line. But let me ask you a couple questions on this. This is a significant increase in funds, and the capacity to use those funds appropriately is something that we all have to be concerned about. I appreciate the accountability issues that you have already mentioned that are spelled out in this legislation, and I know your intent. I trust what you are saying, that this bill could be very well implemented in that way with the supervision of the Fish and Wildlife.

But I have also seen what has happened in the previous Administration, where we thought we gave pretty direct guidance through our legislation, only to see the way it was implemented on the environmental side, totally inconsistent with the bipartisan efforts here in the U.S. Congress. That is not an attack on one party; it was on one Administration I am referring to at this point.

So, when I take a look at this bill, and I see a great deal of discretion here, I am a little bit concerned as to whether I need to be more direct in the legislation itself to make sure we don't run into an Administration that looks at this as a way of providing resources for reasons not related to the purpose of this bill. How do you alleviate that concern?

Mr. Ashe, you have been involved in this.

Mr. ASHE. Thank you, Senator. Good morning. Barbara sends her best.

Senator CARDIN. You are already warming up to me.

Mr. ASHE. She would kill me if I didn't say that.

Yes, accountability is an important issue. I would say again, for me, and realize my bias and perspective as a former Federal agency career employee and political appointee, I think when you are talking about moving money off budget, which this bill does, it severely restricts accountability. The annual appropriations process is the way that the U.S. Congress constrains and manages accountability in a very direct and real way.

I think here, the big decision for you is, when you move something off budget, you are saying it is more important than U.S. Fish and Wildlife Service funding; it is more important than National Park Service funding; it is more important than border control funding; it is more important than anything else that has to compete in the annual appropriations process and demonstrate effectiveness.

So, I think for you, as you think about accountability, that is really the threshold question that you have to reach. You are considering putting that much money off budget.

Senator CARDIN. I accept that. But what I am really asking, and maybe Mr. Wood, you can help me on this, is there more specifics that we should be directing in the legislation itself to protect against efforts made to politicize these funds not for its intended purpose?

Mr. WOOD. I think there are efforts you could do. The Blue Ribbon Panel on which RAWA is based focuses on proactive, voluntary State programs designed to protect the 12,000 species that the other panelists have mentioned. I think that is clearly the idea behind the bill, but some of that language could be incorporated to make that even more clear.

Senator CARDIN. I was going to say, this would be an ongoing process. If you have some specific suggestions, any one of the four of you, I would appreciate it.

I want to get one other point in during my 5 minutes, and that is, it is a significant increase, but it is also then going to be a higher burden on the match on the non-Federal funds. Are we confident there is enough interest out there to meet the match at the higher levels?

Mr. O'MARA. Yes, and I will defer to Sara, but I ran the Delaware agency, so we talked to the Maryland agency. I mean, like, the match resources, we do not believe are going to be a problem. There was a survey that Sara can speak to, of all 50 State agencies.

Ms. PAULEY. I would love to speak to that. The Association of Fish and Wildlife Agencies did do a survey of States. The States are very confident that they can meet these match requirements. We have a match report that we can provide to this Committee that has a host of very innovative ideas. We are RAWA ready, and I would hope that you would look through the six levels of accountability we are providing to these Committee members, too.

Senator CARDIN. OK. Mr. Chairman, I just wanted to get that on the record, because once this bill is enacted, a year or 2 later, when we get a request from our States to reduce the match, let us be clear that there is at least a commitment here that they are able to make the match that is in the bill.

Thank you, Mr. Chairman.

Senator CARPER. Thank you, Senator Cardin.

Next, Senator Whitehouse will be recognized, followed by Senator Padilla.

Welcome. Good to see you.

Senator WHITEHOUSE. Thank you, Chairman, and thank you to all the witnesses for being here.

I was an early co-sponsor of this bill, and I am happy to support it. But I do want to take this opportunity in front of Senator Padilla, from a coastal State, myself from a coastal State, Senator Cardin from a coastal State, our Chairman from a coastal State, to point out what I see as a persistent bias in conservation and wildlife measures toward inland and upland projects versus coastal projects, toward freshwater projects versus saltwater projects.

Those of you who are involved in the conservation community know that the conservation community was busy calling me when we were trying to reauthorize Land and Water Conservation Fund, strengthen Land and Water Conservation Fund, make permanent Land and Water Conservation Fund. I always said, I am for this, but the money disproportionately goes to upland and inland uses. There is a huge discrepancy between what inland States get and what coastal States get if you adjust for population. Then when you go to the coastal States and you adjust for whether it is an inland and upland use as opposed to a coastal use, the bias gets even worse.

The conservation community always says to me, yes, but you will be with us on this one, and we will remember; we will stand by you; we understand that oceans and coasts are being short changed. We will be there for you.

Well, it is getting to be time for that day to come, because the dangers to our coasts are very, very real. The environmental upheaval that is happening along our coasts is very, very real. Ask a fisherman. We have refuges in Rhode Island, and they are all coastal, and they are all subject to sea level rise. Six to 10 feet anticipated right now for Rhode Island, 6 to 10 feet. Think about that.

And you put a storm behind that, and you have added that much sea level rise, and it is piling up on the shore. It is not just 6 to

10 feet any longer; it is not just bathtub levels. Now it is blasting these refuges right off our coast.

And I just want to send the alarm signal that this has to change. I don't know how I can make that any clearer, and as we work toward getting this bill done, which I support, I think it is going to be really important for those of us from coastal States to get reassurance that this isn't just going to go to more inland, upland, and freshwater resources. I am preparing a bill to change the name of the Land and Water Conservation Fund to the Upland and Freshwater Conservation Fund. Let us at least call it what it really is, and then we can address the problem of how we protect oceans and coasts in parallel.

I don't know if that is going to get very far. I doubt it will, but it will for sure make the point that we have got to fix this. On behalf of coastal States everywhere, the days of the conservation community saying, don't worry, your day will come, someday, in the dim and distant future, someday, we will show up and help you.

This has to be that day. I have been here quite a while now, and I have been fobbed off and fobbed off and fobbed off over and over again, and I am sorry, Mr. Chairman, but enough. There is a point where even a patient man's patience is exhausted.

Mr. O'MARA. Senator.

Senator WHITEHOUSE. Go ahead, and feel free to respond, and also, you know, there has been a lot of talk about the Endangered Species Act. You might want to talk a little bit about how applying this effectively will actually head off species being listed and would actually be quite a good thing with respect to the Endangered Species Act.

Mr. O'MARA. On the point around funding, this bill actually, with your team's help, addresses two of the long standing inequities with some of the other funding programs, in that it is land and water based in terms of the landmass, but then also having the variability of listed species, which, obviously, are more coastal in their nature, right; it is places that have riparian corridors or issues. So like Rhode Island, Rhode Island actually does better under this bill than Land and Water projects, LWCF, for example.

Senator WHITEHOUSE. That is one of the reasons I am co-sponsoring it.

Mr. O'MARA. I appreciate that. My commitment to you is like, I have taken a beating for supporting the RISE Act. That has to get done this Congress, because if we don't figure out the allocation issues for the revenues coming from the new, from offshore wind and everything else, we will never get ahead of it.

So I am shoulder to shoulder with you on that. I would like to see that get done very quickly.

On the last point, we know that if we can save species before it needs—it is just like emergency medicine, if we can do that preventative medicine before you are in the emergency room, it is cents on the dollars compared to trying to do it after you are already in triage mode. A lot of the best examples are actually stuff your group has done, folks over the years trying to save species before they are at that point, and I think that is the whole premise of this whole model, that an ounce of prevention is worth a pound of cure.

Senator WHITEHOUSE. Well, thank you, Chairman. I hope I have made my point.

Senator CARPER. You have. You haven't disappointed. Thank you.

We have been joined by Senator Lummis, and Senator Lummis, after you, Senator Kelly.

Senator Kelly has a special guest today. It is bring your brother to work day. I hope he will introduce his brother, who is almost as distinguished as you, Mark. Then we will turn to Senator Padilla.

Senator Lummis, you are recognized.

Senator LUMMIS. Thank you, Mr. Chairman. I am glad we are having this hearing on RAWA because it gives us an opportunity to discuss one of the most important pieces of legislation in our Committee's jurisdiction, the Endangered Species Act. From grizzlies, wolves, sage grouse, and more, this act impacts virtually every person who lives, works, or recreates in Wyoming.

With only a 2 to 3 percent recovery rate for species listed under the act, the ESA's implementation is in need of a major overhaul. There are several pieces of legislation pending before our Committee, including one I introduced this week that would bring much needed transparency and accountability to the act. I hope it is something that we would consider going forward.

My first question is for Mr. Wood. In your testimony, you observed, and did a great job of expressing it, the importance of the constitutional principle of federalism. It is something that I talk about almost every single time we have a hearing in this Committee, in some form or fashion.

Federalism is the unique separation between the Federal Government and the States with regard to powers and responsibilities. You have talked about it, I think, in very appropriate terms.

Mr. Wood, can you speak to how Congress intended the Endangered Species Act to reinforce federalism when it comes to wildlife management?

Mr. WOOD. Absolutely. If you go back to the original debates, it is really quite clear. Many of the most controversial parts of the Endangered Species Act were really looked at as a last line of defense to prevent extinctions. They weren't supposed to apply to every single listed species, and it was precisely to create the right incentives for States and private landowners to take the leadership.

The things we have talked about doing under RAWA to conserve species before they are listed also work for species that are listed. If you get the incentives right, if landowners are encouraged to conserve and restore habitat and recover species, that is what you will get. The problem is, unfortunately, too often, under ESA regulations, we penalize those landowners. Their land is worth less because they accommodate a rare species or they conserve habitat.

Senator LUMMIS. Well, I am so proud of Wyoming's Game and Fish and its efforts in sage grouse.

You all know, Dan Ashe, when you were Director of U.S. Fish and Wildlife Service, what a great job Wyoming did on sage grouse. So we have a longstanding commitment to recover species, and in fact, even have a wildlife trust fund that we use to leverage opportunities to conserve species.

Mr. Chairman, a few weeks ago, I and several Senate colleagues wrote a letter to you and Subcommittee Chair Duckworth asking for a hearing on a bill that would delist the Yellowstone grizzly. Since writing that letter, the Interagency Grizzly Bear Study Team, made up of the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and others have revised the population numbers from about 750 grizzly bears to 1,070. So this is more evidence that the Greater Yellowstone ecosystem grizzly has recovered and has been recovered for a long time.

Mr. Wood, and Ms. Parker, how important is prompt delisting under the ESA to maintain good relationships with States and landowners?

Mr. WOOD. I will be quick to reserve some of the time. It is absolutely critical. If you are a landowner, if you are a State, you have probably worked years or decades to get to that point. Delisting is the reward for you, and if we deny that to landowners, we discourage efforts to recover other species down the road.

Ms. PAULEY. Thank you, you said it beautifully, that that transparency and just the dependability of what the act is intended to do, so people can have that assurance going forward.

But Senator, you mentioned the example, and I just have to use this little bit of time to mention that, again, the value of the States and their boots on the ground is oftentimes, when a species is potentially listed, States can go back in and do additional inventory and monitoring, and in Missouri and many other States, determine that there actually are healthier populations, more abundant populations than originally thought, and actually keep species off of the list.

So again, the value of those additional boots on the ground and the great role that the States play.

Senator LUMMIS. I remember going out and helping inventory Wyoming toad at some of our high plains fishing areas. So you are right, boots on the ground make a difference.

I want to thank you all for your testimony, and Mr. Chairman, I yield back.

Senator CARPER. Thank you. Thanks for those questions, and thanks for joining us today.

I am not sure if I have the right Kelly over here, but sitting next to Senator Padilla is, I think it is Senator Mark Kelly, but I would be delighted if you would introduce your special guest.

Senator KELLY. Mr. Chairman, you never know.

Senator CARPER. We have all had experiences, I suspect, in school, the years gone by where we were in a classroom in school and somebody had an identical twin.

Senator KELLY. We did that on a space flight once. I went into space instead of him. It all worked out fine.

[Laughter.]

Senator KELLY. Thank you, Mr. Chairman. I want to begin by discussing the potential benefits that the Recovering America's Wildlife Act provides the tribal communities.

Mr. O'Mara, good seeing you again, and this question is for you. I want to start by asking for unanimous consent on a couple of letters. Mr. Chairman, asking for unanimous consent to enter into the record a statement from Ms. Gloria Tom, she is the Director of the

Navajo Nation's Department of Fish and Wildlife, highlighting the benefits that this bill would provide to the Navajo Nation.

Senator CARPER. Without objection, so ordered.

[The referenced information follows:]

**Written Testimony of Gloria Tom, Director of the Navajo Nation's Department of Fish and Wildlife
In support of the *Recovering America's Wildlife Act* (S. 2372 H.R. 2773)**

Chairman Carper, Ranking Member Capito, and Members of the Committee, my name is Gloria Tom and I am the Director of the Navajo Nation's Department of Fish and Wildlife. I am writing today to share my support for the bipartisan *Recovering America's Wildlife Act* (S. 2372, H.R. 2773), and to encourage members of this committee to support and pass this historic legislation.

The Navajo Nation is located in the Southwest and encompasses nearly 18 million acres, making us the largest Indian Tribe in the United States. The Navajo Nation's Department of Fish and Wildlife (NNDFW) consists of a well-established, comprehensive wildlife management program that encompasses big game management, recreational and native fish management, wildlife law enforcement and endangered species management. NNDFW also owns and operates the only Tribal Zoo in the country where injured/orphaned animals are cared for and the facility serves as a great educational tool for our people. In addition to managing wildlife for biological and scientific purposes, we also manage our wildlife resources for the Navajo people, as many Navajos rely on these resources for spiritual, cultural and traditional uses. A large part of the Navajo way of life is centered on wildlife, the land and other natural resources.

Like the Navajo Nation, other Tribal nations have some of the most accomplished natural resource programs in the nation, and Tribes protect hundreds of wildlife species and their habitat. Proper preservation and enhancement of species are critical to Tribal culture, sustenance, and exercise of treaty rights. Treaty-reserved rights to fish, hunt, and gather are of central spiritual, cultural, subsistence, and economic importance to Tribal nations. In fact, they are central to our identity. We cannot practice our religion and culture, we cannot properly teach our children and support their intellectual growth, we cannot fish, hunt and gather forever if there is no longer abundant and healthy fish, wildlife, and plants, no longer clean air, and no longer healthy habitats for our sacred lands.

As such, Tribes have taken intelligent, creative, and responsible co-management of our fish, wildlife, and plant resources very seriously. There are countless stories that exemplify excellent fish and wildlife resource management, a few of which are outlined below.

SUCCESES IN WILDLIFE MANAGEMENT

- *The Navajo Nation* – NNDFW and the U.S. Fish and Wildlife Service joined efforts to secure convictions of individuals poaching bald and golden eagles on Navajo land for illegal selling of feathers and eagle parts. These convictions were in U.S. District Court and is significant because one conviction resulted in the individual sentenced to serve 6 months in jail. This was the first time a Native American served jail time for violations to federal laws protecting Eagles. The eagle poaching issue has led to the creation of the Navajo Nation Eagle Sanctuary where feathers naturally molted from captive, non-releasable eagles are distributed to Navajo tribal members for spiritual, cultural and traditional uses. This somewhat alleviates the need for black market feathers and eagle parts and aids in the conservation of Bald and Golden Eagles. Other aggressive management efforts have resulted in a viable Desert bighorn sheep population that grew from less than 30 animals to well over 300 animals in 20 years. The Navajo Nation also has the first and only Natural Heritage Program associated with an Indian tribe that manages, monitors and protects rare, sensitive plant and animal populations on the Navajo Nation and serves to maintain the Navajo Endangered Species List. The NNDFW's Native Fish Management Program was created as part of the San Juan River Recovery Implementation Program (RIP), which is responsible for recovering endangered fish species in the River. Our program operates a fish monitoring station on the river and raises endangered Razorback Suckers for release

into the San Juan River system. The Navajo Nation collaborates with the U.S. Fish and Wildlife Service and the Bureau of Reclamation and other Tribes and state agencies on this project. Finally, the Navajo Nation has recently kickstarted a Black-footed Ferret Pre-Introduction Program to help lay the groundwork for ferret conservation on our lands. This effort is ongoing and is managed in coordination with the Navajo Natural Heritage Program.

- *Confederated Salish and Kootenai Tribes (CSKT)* – Based in Montana, the CSKT’s Tribal Wildlife Management Program (TWMP) has focused many of its efforts on the restoration of degraded wildlife habitats to help recover healthy populations of endangered, threatened, and extirpated species of native wildlife. To date, Tribal wildlife biologists have aided in the recovery of federally-listed wildlife species including bald eagles, peregrine falcons, northern gray wolves, grizzly bears, Canada Lynx, trumpeter swan, and northern leopard frogs. Reintroduction of peregrine falcons, trumpeter swans, and northern leopard frogs has assisted in the current increasing populations of each of these species on the reservation. The TWMP also led and directed efforts to achieve wildlife and wetland mitigation on the reconstruction of the main highway route through the center of the Reservation, resulting in the construction of 43 wildlife underpass crossing structures and one large overpass named “The Animals Bridge” on U.S. Highway 93. These state-of-the-art wildlife crossings provide critical wildlife habitat connectivity and improve public/wildlife safety from the thousands of animal crossings occurring each year.
- *Eastern Band of Cherokee Indians (EBCI)* – The EBCI Natural Resources Department is working to build upon generations of Cherokee stewardship and manage terrestrial and aquatic species of concern through an EBCI Wildlife Action Plan. Modern-day Cherokee lands located in the southern Appalachians harbor tremendous biodiversity and rare species that receive focused population monitoring and habitat protection efforts from EBCI biologists. These species include three ESA listed bat species, the federally endangered Carolina northern flying-squirrel, the eastern elk, and many neo-tropical birds and salamanders. The EBCI is also successfully working with multiple government and non-profit partners to restore native aquatic species to EBCI watersheds such as the eastern hellbender, sickelfin redhorse, and multiple freshwater mussels. Sustained wildlife conservation efforts within the EBCI aboriginal landscape are critical to preserving ecosystem services, economic resources, and cultural values for future generations.
- *Western Washington’s 20 treaty Tribes* actively manage wildlife to protect, conserve, and restore many of the Pacific Northwest’s most iconic species. The tribes’ management efforts include a wide array of activities, including protecting ESA-listed salmon species through habitat restoration, ensuring science-based conservation of important biological and cultural resources, and conducting research to better inform wildlife management. Examples include:
 - In partnership with Washington State, Tribes returned the Nooksack elk herd to a sustainable population through a large-scale elk translocation project.
 - Tribes are also establishing baseline ecological information of the elk herds in the Indian and Elwha valleys prior to removal of two fish-blocking dams on the Elwha River from 2011-14.
 - On the Olympia Peninsula, Tribes are collecting data to provide a detailed understanding of cougar and bobcat populations. Data on habitat use patterns, home range size, relative abundance, productivity, prey selection and survival rates are essential to understanding wildlife health in the ecosystem. Across Puget Sound and the Washington Coast, the tribes are collaborating with numerous partners to restore, enhance and protect estuarine and riverine habitats to increase natural productivity of salmon stocks, including those that are ESA-listed. These projects often have multiple benefits for a wide range of species.
- *Lower Brule Sioux Tribe* – The Lower Brule Sioux Tribe of South Dakota has a long track record of restoring native species to its Tribal lands. Perhaps the most notable effort has been the restoration of black-footed

ferrets. Ferrets were first released in 2006 and a population was quickly established. Since becoming involved in ferret recovery, the Tribe has been a leader in several aspects of ferret recovery. The Tribe was the first to request and receive a scientific recovery permit for the reintroduction of ferrets, which has since been used by other Tribal, federal, and private land sites. The Tribe is an active member of the Black-footed Ferret Recovery Implementation Team and the Black-footed Ferret Friends Group. The Tribe has drafted and implemented a management plan for black-footed ferrets and designated ferrets as a priority species in the Tribe's multi-year Wildlife Conservation Plan for its Tribal lands. When plague outbreaks created serious challenges to the Tribe's ferret recovery program, the Tribe stepped up and became the only Tribal partner in a study that occurred across 7 western states that tested an experimental plague vaccine that one day might prevent plague outbreaks from occurring.

This is just a sliver of all the incredible work Tribal nations are doing to conserve fish and wildlife, despite a long history of being underfunded and excluded from federal funding opportunities.

HISTORY OF UNDERFUNDED TRIBAL WILDLIFE CONSERVATION EFFORTS

Tribal nations proudly carry the responsibility, and bear the financial burden of conserving and managing wildlife on Tribal lands, and participating in collaborative and co-management processes and activities to conserve and manage wildlife on private, state, and federal lands throughout ceded lands and beyond. Yet, Tribes often lack access to revenue streams necessary to support the level of engagement needed. For example, Tribes are not eligible to receive state hunting and fishing license revenues and federal excise tax revenues, where our counterparts in the state fish and wildlife agencies do receive revenues through state hunting and fishing activities and through the Federal Aid in Wildlife Restoration and Sport Fish Restoration programs (Pittman-Robertson/Dingell-Johnson). This is despite the fact that Tribal lands and waters are used to justify state allocations, Tribal members hunt and fish too and pay the taxes that fund these programs, and many non-Tribal recreationists visit Tribal lands and communities to hunt and fish.

In 2000, Congress created the State and Tribal Wildlife Grants Program (STWG) to fund state wildlife agencies and Tribal wildlife conservation program's working to prevent fish and wildlife from becoming endangered, and to support the recovery of species already listed threatened and endangered under the Endangered Species Act. The Tribal Wildlife Grant Program receives a mere fraction of the funding needed with Congress appropriating about \$5 million - \$8 million annually for the 574 federally-recognized Tribes eligible for this funding. In addition to low funding levels, Tribes have to participate in a highly competitive process to secure funding, and oftentimes Tribes are reluctant to apply for funding that may be one-time funding for long term projects. Management of wildlife requires long-term stable funding. Successful wildlife management cannot be carried out one piece-meal project at a time. Development and implementation of wildlife management plans and regulations requires programmatic resources. Wildlife management is a long-term commitment to stewardship, not a one-time project, and stewardship requires resources. Tribes need funding to develop and implement management plans, study population trends, and to monitor those strategies and adaptively manage them while coordinating with our state and local partners and ensuring compliance.

On the Navajo Nation, the NNDFW is responsible for managing wildlife on 18 million acres of trust land. In FY19, our wildlife department received approximately \$0.20/acre (see table below). In comparison, the state of West Virginia, which has a comparable land base of 15.5 million acres, received about \$2.86/acre. Our Department is underfunded and understaffed, and this has real impacts on-the-ground.

Funding Source	Dollar Amount
Navajo Nation General Funds	\$1,646,503

Fish and Wildlife Enterprise Funds (Revenues)	\$800,000
BIA PL 93-638 Contract Funds	\$552,567
BOR San Juan River Native Fish Management	\$511,089
TOTAL	\$3,510,159

TRIBAL NATIONS AND THE RECOVERING AMERICA'S WILDLIFE ACT

The Recovering America's Wildlife initiative presents tremendous opportunities for all Tribes, including the Navajo Nation. The Tribal Title in Recovering America's Wildlife Act would provide \$97.5 million in dedicated funding for Tribal nations. With the passage of Recovering America's Wildlife Act, Tribes will improve capabilities to:

- Manage wildlife and habitat on their lands as well as collaborate across jurisdictions (e.g., with states, private landowners, etc.) to protect migrating wildlife.
- Assist in the recovery of threatened and endangered species.
- Manage, control and prevent invasive species and diseases.
- Improve wildlife management capabilities to protect, manage and conserve wildlife resources on tribal lands.

Through Recovering America's Wildlife Act, the Navajo Nation will:

- Establish an Invasive Species Management Program that would monitor and manage invasive plant and animal species. Big game monitoring indicates animal diseases are being transmitted from domestic livestock to big game species such as bighorn sheep, mule deer and elk.
- Establish an Information and Education Program that includes conservation education and public information. In comparison to state wildlife agencies, the Navajo Nation severely lacks a comprehensive conservation education program.
- Improve outdoor recreation facilities for tribal and non-tribal outdoor recreationists who hunt/fish or engage in other outdoor recreation activities on the Navajo Nation.
- Expand our Wildlife Law Enforcement program and our technical wildlife management program by employing additional Wildlife Conservation Officers, Wildlife and Fish Biologists, Wildlife and Fish Technicians, Botanists, Zoologists, Public Information Officers/Educators and other technical staff.
- Expand much needed wildlife conservation programs and research opportunities to enhance wildlife populations and habitats on the Navajo Nation.

Tribal nations have worked for years to ensure a Tribal Title was added to this legislation, and now that it is included, Tribes are enthusiastically supporting its passage. The Tribal title was developed with the support of numerous Tribes across the United States. As such, it reflects critical issues facing tribes, such as ensuring long-term, stable and consistent funding that acknowledges Tribal sovereignty and Indian self-determination. Hundreds of Tribes have endorsed this legislation by passing resolutions, writing letters, and these numbers continue to grow as more and more sovereign tribes learn more about this opportunity to finally secure much-needed resources for wildlife conservation that has been virtually been non-existent. Tribes have also received support from the Association of Fish and Wildlife Agencies and numerous other environmental and conservation organizations.

CONCLUSION

In conclusion, passage of this legislation will be a game-changer for the Navajo Nation, and for Tribes across the United States. It is clear the Pittman Robertson/Dingell Johnson Act has benefited all 50 states since its adoption.

With the Recovering America's Wildlife Act, Congress now has the opportunity to provide much needed funding to the 574 federally-recognized Indian tribes across the country that have wildlife management responsibilities on Tribal lands. The development of the Tribal Title is not only evidence of the need, but also evidence of the collaboration and solidarity of Tribes on this issue and the critical role that sovereign Tribes have in protecting this nation's wildlife and wild places. Tribes, including the Navajo Nation, view this Act as one of the best opportunities to begin to address the historical inequities of minimal funding for Tribal wildlife management.

With its broad range of support, including mutual support from states and Tribes, the Recovering America's Wildlife Act can foster improved coordination and collaboration and elevate wildlife management across the nation – with the goal of more abundant fish, flora and fauna for both Tribal and non-Tribal members for many future generations to come. I urge the Senate Environment and Public Works Committee, and the 117th Congress to support and pass this important legislation.

Senator KELLY. And I would also like to ask for unanimous consent on another letter signed by more than 100 tribal nations urging Congress to support the passage of this bill.

Senator CARPER. Without objection, so ordered.
[The referenced information follows:]

December 7th, 2021

Dear Members of the U.S. Senate,

The undersigned Tribal Nations and Tribal organizations, representing a total of 112 Tribal Nations, are writing to respectfully request you support passage of the bipartisan *Recovering America's Wildlife Act* (S. 2372, H.R. 2773).

Fish and wildlife are at a point of crisis with an estimated one-third of all wildlife species in North America – more than 12,000 in total – in need of proactive conservation attention. Many of these species are intertwined with Tribes' social, cultural and economic wellbeing, and we have coexisted with these resources since time immemorial. As sovereign entities, Tribal Nations manage these resources in partnership with state and federal authorities. We are ready to address the many challenges that are threatening our wildlife heritage, but need resources to do so.

The *Recovering America's Wildlife Act* would annually dedicate \$97.5 million to Tribal Nations and \$1.3 billion for state and territorial conservation to restore species populations and prevent fish and wildlife from becoming endangered. Tribal lands, water, and knowledge are vital for conservation, and Tribes own or influence the management of tens of millions of acres. These lands and waters provide essential habitat for fish and wildlife, including more than 500 species already listed as threatened or endangered.

Despite the enormous role Tribes have to manage fish and wildlife, and the enormous role our lands and waters play in providing habitat for species of national importance, this bill would be the first and only federal conservation program that guarantees sustained funding to Tribal Nations for fish and wildlife conservation.

Importantly, the Tribal title in the *Recovering America's Wildlife Act* was developed by Tribes across the country, ensuring sovereignty and government-to-government consultation on critical decision making should the legislation become law. Two critical problems with the majority of federal fish and wildlife programs are also addressed in this legislation – lack of consistent funding and a reliance on competitive grant programs.

The State and Tribal Wildlife Grants program, created by Congress more than twenty years ago, provide funds to Tribal conservation programs aimed at improving fish and wildlife management. While helpful, it has been perennially underfunded, and Tribes have to participate in a highly competitive process that pits nations against each other to receive limited funding for their projects, with grants capped at a woefully inadequate \$200,000. In FY21, just 37 of the 574 federally recognized Tribal Nations – about 6 percent – received funding from this program. On the other hand, states and U.S. territories are guaranteed State Wildlife Grant funding through a formula that considers each state and territories' population and total geographic land area (Tribal lands included), and they are provided an opportunity to access additional funding of up to \$1,000,000 through the program's state competitive grants.

This difference has a real impact on-the-ground. Tribes are often reluctant to apply for competitive funding because it may only be available one-time, even when the funding need or project is long-term. In other cases, Tribes may need to secure wildlife management capacity before they can plan for project-based wildlife grants like those funded through TWGs. Regardless of the reasons, we know that successful wildlife management cannot be carried out one piece-meal project at a time.

Despite these challenges, Tribes have still created some of the most effective conservation programs in the nation, and innovative, collaborative partnerships with other agencies and partners to conserve wildlife. However, proactive fish and wildlife management requires stable financial resources to study population trends and develop science-based management strategies. It also requires capacity to coordinate across jurisdictional boundaries with state, local, and federal governments, as well as private landowners. Without adequate and sustained funding, it becomes increasingly challenging to execute the types of projects that are needed to support healthy wildlife populations.

For Tribal Nations, the *Recovering America's Wildlife Act* is not just an opportunity to increase fish and wildlife funding, it is core funding for our conservation programs and a necessity of the United States federal trust responsibility. Steady, reliable funding will help Tribes expand existing fish and wildlife efforts, while also supporting Tribes still in the process of planning and developing key programs and species conservation priorities. Investing in fish and wildlife management will grow Tribal economies and create near-immediate jobs. It will also increase our capacity to work with state and federal partners to ensure important Native American cultural values are integrated with western science when state and federal conservation plans are being drafted or when new programs are developed. Tribes deserve a full seat at the table, and all wildlife management efforts will benefit from a diversity of perspectives working together towards our shared goal of protecting fish and wildlife for future generations.

Because this bipartisan legislation presents an historic opportunity for Tribes, the states, and the federal government it enjoys broad support from the Native American Fish and Wildlife Society, National Congress of American Indians, United South and Eastern Tribes, and the Affiliated Tribes of Northwest Indians, along with other Tribal consortia, and numerous individual Tribal Nations.

We thank you for considering our request to support the *Recovering America's Wildlife Act*, and would welcome the opportunity to talk with you more about this groundbreaking legislation.

Sincerely,

[1854 Treaty Authority \(MN\)](#)

Bad River Band of Lake Superior Chippewa Indians (WI)

Bay Mills Indian Community (MI)

Bear River Band of Rohnerville Rancheria (CA)
Blackfeet Nation (MT)
Bois Forte Band of Chippewa (MN)
Cheyenne River Sioux Tribe (SD)
Chickaloon Native Village (AK)
[Chippewa Ottawa Resource Authority \(MI\)](#)
[Chugach Regional Resources Commission \(AK\)](#)
Eastern Band of Cherokee Indians (NC)
Estom Yumeka Maidu Tribe of the Enterprise Rancheria (CA)
Fond du Lac Band of Lake Superior Chippewa (MN)
Fort Belknap (MT)
Grand Portage Band of Lake Superior Chippewa (MN)
Hopi Tribe (AZ)
Hualapai Tribe (AZ)
[Inter-Tribal Council of Michigan, Inc. \(MI\)](#)
Jamestown S'Klallam Tribe (WA)
Keweenaw Bay Indian Community (MI)
Knik Tribe (AK)
Knikatnu Corporation (AK)
Kootenai Tribe of Idaho (ID)
Lac Courte Oreilles Band of Lake Superior Chippewa (WI)
Leech Lake Band of Ojibwe (MN)
Little Traverse Bay Bands of Odawa Indians (MI)
Lower Brule Sioux Tribe (SD)
Lower Elwha Tribal Community (WA)
Makah Tribe (WA)
Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians (MI)
Menominee Indian Tribe of Wisconsin (WI)
Mille Lacs Band of Ojibwe (MN)
Minnesota Chippewa Tribe (MN)
Mississippi Band of Choctaw Indians (MS)

[Native American Fish and Wildlife Society \(National\)](#)

Native Village of Kotzebue (AK)

Navajo Nation Department of Fish and Wildlife (AZ, NM, UT, CO)

Northern Cheyenne Tribe (MT)

[Northwest Indian Fisheries Commission \(WA\)](#)

Oglala Sioux Tribe (SD)

Oneida Nation (WI)

Osage Nation (OK)

Pala Band of Mission Indians (CA)

Point No Point Treaty Council (WA)

Pokagon Band of Potawatomi Indians (MI)

Port Gamble S'Klallam Tribe (WA)

Prairie Island Indian Community (MN)

Pueblo of Jemez (NM)

Pueblo of Laguna (NM)

Pueblo of Santa Ana (NM)

Pueblo of Taos (NM)

Pueblo of Tesuque (NM)

Pyramid Lake Paiute Tribe (NV)

Rappahannock Tribe (VA)

Red Cliff Band of Lake Superior (WI)

Red Lake Band of Chippewa Indians (MN)

Round Valley Indian Tribes (CA)

Sac and Fox Tribe of the Mississippi (IA)

San Carlos Apache Tribe (AZ)

Santa Clara Pueblo (NM)

Saulte Ste. Marie Tribe of Chippewa Indians (MI)

Shakopee Mdewankanton Sioux Community (MN)

Stillaguamish Tribes of Indians (WA)

Southern Ute Indian Tribe (CO)

[Southwest Tribal Fisheries Commission \(AZ, CA, CO, NM, NV, UT\)](#)

Squaxin Island Tribe (WA)
 St. Croix Chippewa Indians of WI (WI)
 Standing Rock Sioux Tribe (SD/ND)
 Stockbridge-Munsee Community (WI)
 The Choctaw Nation of Oklahoma (OK)
 The Confederated Salish and Kootenai Tribes of Flathead Nation (MT)
 The Grand Traverse Band of Ottawa and Chippewa Indians (MI)
 The Penobscot Nation (ME)
[Upper Columbia United Tribes \(ID, WA\)](#)
 Upper Sioux Community (MN)
 Ute Mountain Ute Tribe (UT, CO)
 Walker River Paiute Tribe (NV)
 White Earth Nation (MN)
 Wind River - East Shoshone Tribe and Northern Arapaho Tribes (WY)

Senator KELLY. Thank you.

Mr. O'Mara, Arizona is home to 22 Tribes who all play a role in wildlife management on their tribal lands. Yet many of the Federal programs, which fund wildlife conservation efforts, are only allocated to States, not to Tribes, even when species needing conservation assistance are exclusively located on tribal land.

Mr. O'Mara, could you provide a brief overview of what current Federal resources are available to Tribes to help fund conservation efforts, and if enacted, how could RAWA help support tribal conservation efforts in ways that the existing Federal programs cannot?

Mr. O'MARA. Right now, thank you, Senator Kelly, Tribes are responsible for the management of almost 140 million acres across the country, and many are lands that have faced disproportionate climate impacts: Drought and extreme fire conditions. Yet the entire allocation through the appropriations process is about a \$6 million competitive grant program that they all have to compete for every single year.

So, there is no base funding. They have been systematically excluded from Pittman-Robertson and Dingell-Johnson and the other major wildlife funding for years. It is one of the great injustices, frankly. This bill would have \$97.5 million available every year through a non-competitive grant program that the Tribes want to work out directly with BIA, and it is a game changer.

Frankly, the cultural knowledge, the knowledge that they will bring to conservation, what we can learn from that, I think, is going to be transformative. But I can't say it better than Gloria Tom's testimony or the testimony from the Native American Fish and Wildlife Society. So I would just encourage your colleagues to read the testimony from Gloria, because she is amazing.

Senator KELLY. OK, I will take a look at that. I want to, kind of on a similar note here, talk a little bit about the metrics that are used in RAWA to determine how this funding is going to be allocated even outside of the Tribes.

Every State has different geography, different climate, different conservation needs. It is important that the Federal formula that is used takes these differences into account.

In Arizona, we have the third highest species diversity of any State in the country. Yet because of the many different ecosystems within Arizona, and because we have a large share of Federal, State, and tribal land, it is often difficult for our State to benefit from Federal wildlife conservation programs, which focus on specific types of ecosystems, species, and land management practices.

Mr. O'Mara, how does RAWA try to address the geographic diversity within and among States when providing funding for conservation assistance, and what factors does the bill use to determine the share of wildlife funding that each State and Tribe will receive?

Mr. O'MARA. The traditional formula has been kind of population and land, which is just insufficient. It doesn't get at need. So negotiations in the House actually had this idea of having an additional variable of the number of listed species that are either threatened, endangered, or candidate species as a proxy for States that have particularly distressed ecosystems that need help.

Under that formula, Arizona does better, because it has more species that are in trouble than other States than before. I think this is where the iterative process in the House has been constructive because it is the first time a need variable, as opposed to just a size or people variable, which isn't necessarily the greatest proxy, has been used.

And I do think it is going to make a big difference, to make sure that money winds up in the right places. When you add that to the accountability and some of the other innovation grants from multi-State collaboration, all of a sudden a State like Arizona that has been disproportionately unsuccessful in some of those funding allocations all of a sudden would do well.

Senator KELLY. Then, does that or a similar formula apply to the non-competitive grant money that Tribes can receive as well?

Mr. O'MARA. Yes. So, the Tribes have requested that they be able to have those consultations with BIA and to figure out that system, but yes, need with be a portion of that conversation.

Senator KELLY. Well, thank you, and thank you, everybody, for testifying today.

Senator CARPER. For the record, I just note, Senator Kelly, that your brother is sitting back over my right shoulder, and his lips were moving when you were speaking, and I don't—you guys have perfected this to quite an extent.

[Laughter.]

Senator CARPER. We welcome the both of you today to the hearing. Thanks for those questions.

Senator Padilla, Senator Padilla is next.

Senator Padilla, I am going to ask you to hold the gavel. I am going to send it right over to you. I am going to step out for a minute. I will be right back, OK? So, you can just, anything you want to pass, get done, unanimous consent, be careful.

Senator PADILLA [presiding]. Shifting resources to California this morning, thank you very much.

Thank you, Mr. Chairman. I am glad to be here today. Before I jump into my questions, just a quick commentary about how thrilled I am we are talking about wildlife conservation. The biodiversity crisis, not just in California, but across the country and around the world, is absolutely here. Wildlife managers and their partners are faced with the intertwined emergency of the climate crisis. I am grateful we are able to have this conversation about how we can best conserve wildlife.

Let me start with a California success story. California has demonstrated how we can conserve species, with one example being the southern sea otter recovery work, which is led in part by the Monterey Bay Aquarium, a world renowned institution.

But perhaps the proudest example is the California condor, which, as many of you know, was once at significant, significant risk. A whole bunch of groups working together, starting with the U.S. Fish and Wildlife Service, a number of State agencies, the San Diego Zoo Wildlife Alliance, the Peregrine Fund, Oregon Zoo, Los Angeles Zoo, a ton of wildlife societies and several other prominent, non-profit partners provided critical genetic management, breeding, rearing, and releases into the wild to aid the recovery of this iconic California condor.

I lay all that out just to show how simple it is not, right? It is a process. It is complex. There are many elements to it, and a role for so many to play. But from a population low of 22 birds, a handful of years ago, the species is now being downlisted with a population of more than 500 California condors, more than 300 of which are living in the wild. The assistance provided by our Federal agencies helped make this recovery success story possible.

I am supporting this bill today because I believe we need to increase funding for wildlife conservation, and because I understand that there is a shared responsibility among the many partners.

Question. Mr. Ashe, how are AZA accredited aquariums and zoos situated to help advance species recovery programs in collaboration with State, Federal, and tribal agencies, as well as other partners?

Mr. ASHE. Thank you, Senator, and the California condor is kind of a perfect example. In my oral testimony, I spoke about a partnership that we have started with Florida Fish and Wildlife Conservation Commission to help save Florida's reef track from an emerging disease. In Sara's home State of Missouri, the St. Louis Zoo is working with the Missouri Department of Conservation on hellbender and American burying beetle and other species.

Unfortunately, I think the extinction crisis means that our members are going to be called on more often to jump in. And I know in California, I have recently had conversations with Chuck Bonham and with Paul Souza, the Regional Director for the Fish and Wildlife Service, about how we can bring our members together to have specific conversations about how we can prepare for these, what are almost certain to be emergency situations where species have to be taken into human care.

So, our members are ready. Certainly, the funding provided through this bill will help, because space and infrastructure and human capacity are what is going to be important to duplicate the successes we have seen like the California condor.

Senator PADILLA. Thank you. Just to follow up on that, what are some of the ways in which Federal partners, the Federal Government, a number of departments and agencies, can support the work of aquariums and zoos? Certainly, there is always a desire for additional resources and funding, but other strategies that you would like for this Committee to consider, in both the measure before us, but also just broadly and ongoing relationship and partnership.

Mr. ASHE. Of course, my main point today is a better balance and a better reflection of the kind of interdependence in conservation, and that the Federal role is absolutely essential. The condor success wouldn't have happened if the Fish and Wildlife Service didn't have the funding to support organizations like the Los Angeles Zoo and the Peregrine Fund. So that Federal funding is absolutely essential.

Looking forward, I think there needs to be some specific recognition and infrastructure support for our members, like the Monterey Bay Aquarium. They are kind of holding southern sea otters. I also quite honestly think there needs to be some kind of relaxation of certain regulation, like the southern sea otter. Monterey Bay Aquarium is put in the position of having to euthanize young sea otters, because they don't have the space for them. So they are rescued, but they don't have the ability to care for them, because they

don't have the space. They can't be exported because of restrictions in the Marine Mammal Protection Act.

But we have participating zoos in Europe and Australia and other places that could, that would be anxious to hold those animals if we could export them. So I think to some extent, looking at existing regulations and how we might be able to change them, I think, is important.

Senator PADILLA. I look forward to following up with you on that.

Mr. Chairman, I know my time is about up, but I do want to ask just one question that our colleague Senator Kelly brought up, unique dynamics and concerns as it pertains to tribal governments. A big part of mine is more than 100 federally recognized Tribes in California alone, and I want to make sure that the Federal Government upholds its trust responsibility and respects tribal sovereignty and governance.

In many contexts, it means ensuring that tribal governments don't have to go to the States to compete for funding, as Senator Kelly laid out, but instead are able to receive or access funds directly from the Federal Government. We know that in California, a number of examples, tribal nations carry out important conservation work, leveraging their historical and cultural knowledge.

I commend the authors of the bill that is before us today for understanding that unique and important role that Tribes play in natural resource preservation and providing dedicated funding for tribal wildlife conservation.

I did, for the record, want to ask Mr. O'Mara, your written testimony includes a quote calling the bill a game changer for Tribes. Can you spend a minute just talking about the importance of this bill for tribal sovereignty and respect?

Mr. O'MARA. Thank you, Senator Padilla, and thank you for your leadership on this and being one of the earliest co-sponsors.

Tribes, as you said perfectly, their historical knowledge, cultural knowledge, the scientific knowledge, is incredible, and the fact that that has not been resourced other than a small \$6 million competitive grant program is one of the greatest failings of wildlife recovery in this country. I think the \$97 million annually is a great start to begin to address the historical inequities.

But when you look at the landscapes and you look at, also, where most of the tribal nation lands are, they are lands that are facing disproportionate impacts from drought and fire and other concerns. So the species, many of which are uniquely on tribal lands, to have the ability to actually have resources for the first time, for them to engage in conservation on their own lands, but also in partnership is transformative. So I appreciate your compliment that respecting the sovereignty is so important.

I will say that one of the reasons I think that it makes sense, and one of the reasons you had a letter from 100 different Tribes is that the Tribes actually wrote a big part of that section. It wasn't folks assuming, but again, having those authentic consultations. I cannot say enough about the Native American Fish and Wildlife Society. Their leadership, and having conversations across all different jurisdictions, with all different sovereign nations, has been spectacular, so their leadership is just amazing.

Senator PADILLA. Wonderful. Definitely a solid foundation to build on. I look forward to supporting this measure.

Thank you, Mr. Chairman.

Senator CARPER [presiding]. Thanks so much for joining us. Thanks for those questions, and thank you for taking the gavel for a few minutes and giving me a break. Thanks.

I have about three or four more questions I want to ask. I am going to finish up around 1 o'clock, and no, it won't take quite that long.

I want to start off with Dan Ashe and talk a little bit about the importance of the Federal Recovery Plan. Considering the collaboration that is necessary across not just State or local levels, but across all levels of government, would you elaborate on the on the ground implications of providing sufficient resources only to States and Tribes, and not to Federal agencies? Particularly, let me just say, in particular, how might lack of funding for recovery planning impact States' efforts to recover threatened and endangered wildlife under the Recovering America's Wildlife Act?

Mr. ASHE. Sure. I think reference was made earlier several times to waterfowl conservation, and I think that is a prime example of where we have achieved tremendous success in conservation of waterfowl. It has been led by the U.S. Fish and Wildlife Service, and it has been driven by the Migratory Bird Treaty Act. So I think that is the type of example.

When we are talking about monarch butterfly conservation, you can't conserve monarch butterflies from Iowa or North Dakota or Minnesota; it requires cooperation with Canada and Mexico, in particular. Because if we don't protect the wintering grounds and reserves in Mexico, all of the conservation effort in the United States is meaningless.

So, it is absolutely essential to have a strong, effective capacity within the U.S. Fish and Wildlife Service. Senator Whitehouse mentioned the coasts and NOAA fisheries, if we are going to drive ocean and coastal conservation. So that leadership is essential. I would say we are talking a lot about proactive, voluntary, incentive based conservation.

Senator Cardin opened up talking about manatee. The issues around conservation of manatee are full of conflict because it is going to involve issues of runoff, and what is driving the loss of seagrass beds in Florida. So the States have their own politics.

The presence of Federal agencies often, in my experience, is a benefit to our State agencies, because the Fish and Wildlife Service becomes the heat shield on some of these really significant political issues that are difficult for them to deal with in wildlife conservation. So that role is absolutely essential. Thank you.

Senator CARPER. Thanks very much for that response.

I am told that the Senate is going to be, if they are not already voting they are going to start voting very soon, so I thank you for that response. I am going to ask our witnesses not to linger too long in your responses but cut right to the chase. Thank you.

All right, Collin, please. With your exception, Collin.

Mr. O'MARA. I always talk quick, so I will try to be brief.

Senator CARPER. He is the fastest talker, ladies and gentlemen, I have ever met. When he first came to Delaware to become our

Secretary of the Department of Natural Resources and Environmental Control, I think he might have been 30 years old, and he was a fast talker then. He has slowed down a little bit since.

Let me ask a question. Maybe you are reading my mind; who knows. Consultation is a process that Federal agencies undertake in order to ensure that Federal actions like infrastructure development, for example, will not harm threatened and endangered species. We actually have some great provisions in the infrastructure bill, as you know, to protect them and their habitat.

If Federal actions may harm an imperiled species, agencies use, as you know, the consultation process to minimize and try to mitigate that harm.

The question would be, do you believe that the U.S. Fish and Wildlife Service currently receives sufficient funding to undertake these consultative activities, which are critical to the survival of imperiled wildlife? And would you elaborate on the importance of ensuring that the Fish and Wildlife Service receives sufficient resources for these activities, please?

Mr. O'MARA. In Delaware, when we were dealing with the Recovery Act money, or the Sandy Supplemental Resource that you provided, the partnership with Wendi Weber and the Fish and Wildlife Service was essential. To get those projects done, the restoration in Mispillion Harbor, the improvements in so many places. So no, there are vastly insufficient resources for consultation. I was disappointed.

I was excited, both in your work and the House's work in trying to have more resources in the Build Back Better Act. I am grateful for the resources you were able to put in the bipartisan infrastructure package. But it does concern me that we are not going to have sufficient resources, and that could be an impediment to the infrastructure work we want to do.

I think when it relates to recovery that having resources, as long as it doesn't upend the balance of the bill, I also worry that the delay is deadly, and so trying to figure out a way to do that in a bipartisan way is going to be important. But from my experience as Secretary, the benefits of having that partnership were incredibly important.

Senator CARPER. OK, thank you for that. Thank you for that response.

Dan, I am going to come back to you for another question, and that is, Partners for Fish and Wildlife. The Partners for Fish and Wildlife Program, which this Committee successfully reauthorized, I think, about 2 years ago in 2019, is one of the most popular Federal programs for working with landowners to conserve wildlife.

Over the last 5 years in our State, in Delaware, this program has delivered something like 26, 27 habitat restoration projects over 600 acres. In some States, that might not sound like a lot of land, but in Delaware, that is a lot of land.

For every dollar the Fish and Wildlife Service invests, non-Federal partners contribute approximately \$7.50, an impressive ratio. These projects have supported species like the American eel, the woodland box turtle, wood frog, and many migratory songbirds. Despite the success of this program and its ability to leverage non-Federal funding, there is substantial unmet financial need for it.

Having worked to administer this program as the Director of Fish and Wildlife Service, would you elaborate based on your experience on the importance of this program and others like it to work with private landowners to conserve wildlife?

Mr. ASHE. Thank you, Senator. A lot has been said here today about incentive based conservation and cooperative conservation. I would say the Partners for Fish and Wildlife Program in the Fish and Wildlife Service is a model for that. I certainly applaud State colleagues for the work that they do, but it is not just a province of State and tribal agencies.

The Fish and Wildlife Service was a pioneer with their Partners for Fish and Wildlife Program in working with private landowners on incentive and voluntary based conservation and working with and through the Natural Resource Conservation Service on the Working Lands for Wildlife Program.

Our Partners for Fish and Wildlife Program has been a principal agent there in building a relationship with NRCS that then builds a relationship with private landowners.

So that is not a province of State or Federal or tribal or local government. It is a bedrock principle in conservation. And I think the Partners for Fish and Wildlife Program in the Fish and Wildlife Service embodies that and deserves equal access to funding to support it.

Senator CARPER. Thank you.

I don't mean to pick on Collin O'Mara, but I am going to ask you maybe one more, Collin. As you may recall, when I was privileged to serve as Governor for our State, we had eight balanced budgets in a row. The Governors before me had significant success in terms of fiscal management. The ones that succeeded me, as well. That is something that we take great pride in.

Recovering America's Wildlife Act identifies unobligated environmental penalties as its funding source. This appears to include some Superfund cleanup recovery dollars and criminal fees. Because these dollars currently go to the Treasury, a funding source may not effectively pay for this legislation. At least, that is a concern that we have heard.

Your testimony also states that this funding source will not draw from funding committed to other important funding programs. However, this funding source does seem to allocate penalties derived from Superfund disasters for wildlife protection. That is a concern, especially because those Superfund fees reimburse the government for cleanups that may have already occurred where a third party was found liable. In addition, there are sufficient unmet funding needs related to Superfund cleanups.

Question. Have proponents of the Recovering America's Wildlife Act thought about any funding source that would fully pay for the legislation and that might address this policy concern that I just touched upon? Would you commit to working with us on this aspect?

Mr. O'MARA. Thank you for the question. The intent is not to touch any funds that are directed for any current purpose, so if there are improvements to the language, we would like to work with you on that. I have been searching, and actually, we have been searching for an elusive kind stable pay for that both sides

of the dais can agree on for 4 years. It has been incredibly difficult. If there is an idea that you and your team have, I think this is an idea that Senator Blunt, with his leadership, saw as something that had a nexus, had a point.

If you look over the historical amount going into the Treasury over the last 10 years, if you kind of define it broadly, it well more than covers the 10 year score. But it is uneven year to year, and it is unpredictable in some ways. But the 10 year average is good.

What I want to make sure is that this doesn't become the reason that the bill doesn't pass, because as I said in my testimony, I just think the inaction is the greatest ally of extinction right now. So if there is a better mousetrap, we would love to discuss it.

Senator CARPER. Thank you.

Dan, would you just follow up to the question that I just asked Secretary O'Mara; do you have any concerns about the funding source that is identified in RAWA? Do you have any concerns?

Mr. ASHE. My concern is a little bit—I think I have the same concern that you do. As I looked at it, I immediately thought about the Deepwater Horizon settlement, and \$5.5 billion in Clean Water Act penalties went to restoration.

They are not directed to go there by law. They are normally deposited into the Treasury, and they were directed through the settlement agreement to go to restoration.

So when I read this, my immediate concern was, is that going to short circuit that process and require these funds to be deposited to support this bill? And so my recommendation would be, talk to somebody at the Department of Justice, maybe somebody like John Cruden, the former Associate Attorney General for Environment and Natural Resources, who worked on that settlement, and get some advice from those people.

Senator CARPER. All right; thank you.

I don't have a specific question for either Ms. Pauley or Mr. Wood, but each of you take maybe a minute apiece, with just a quick closing thought that you would like to share with us before I go vote.

Ms. Pauley, 1 minute.

Ms. PAULEY. Thank you so much, Senator. I think I want to hit just some of the points in the questions that have come up more recently. It seems a little bit that we are pitting the States against the Fish and Wildlife Service, and I hope that that isn't the case. We do so much amazing work with our Federal partners.

In the Midwest, we have such a healthy relationship where we work very collaboratively with the Fish and Wildlife Service on shared conservation priorities. So I want to make sure that the members of this Committee understand just how important that relationship is with the Fish and Wildlife Service.

Again, I will hit the point that, from the Blue Ribbon Panel and their focus, to the development of this legislation, the intent of this legislation has been to, at long last, provide critically important funding to State fish and wildlife agencies to actually, and at long last, implement those State wildlife action plans. That, to date, has been the focus of this legislation, so I just want to make sure that we are all clear that conservation takes all of us. Those Federal partners are critically important.

The last point I would make is just, as a director of a fish and wildlife agency, such a key piece of this legislation is the long term dedicated funding nature of this so that we can actually make decisions of a long term nature. We talked about in the beginning, conservation doesn't happen overnight. There are no easy decisions. By the time they get to me, just like you, there are no easy decisions. It takes the long view and that dedicated, sustainable funding source is so critical to make these key management decisions to be able to provide additional staffing capacity.

So I would call upon the Committee to keep that under consideration. Thank you so much for your time.

Senator CARPER. Thank you for yours, and for your leadership over the years.

Mr. Wood, try to hold it to about a minute, if you could.

Mr. WOOD. Absolutely. I want to echo my thanks for inviting me and pick up on that similar point. I think there are really important reasons to focus conservation work through States, rather than the Federal Government. Because States have that flexibility; they have buy in.

But one point we haven't emphasized so much that I go into in my written testimony is landowners are more comfortable working with States, because most of their interactions with the Fish and Wildlife Service begin with regulation or a listing before you get to the how can we collaborate. That can alienate landowners.

So you are more likely to get buy in from landowners and actual, on the ground conservation if it starts in that dialogue with the States, of how can we solve problems, rather than how can we impose regulations to try to control that you might do.

Senator CARPER. Thank you very, very much for taking this time, for preparing and for joining us and responding to our questions.

I would just mention something that had been shared with us. We are folks from all over the country, folks with different kinds of opinions on these issues and all. But someone has raised the issue, and I will just share what they have brought to us. They said while some States have had to dramatically tighten their belts and cut spending to address this pandemic, we have also found that overall, the impacts of COVID-19 on State budgets were not as severe as we had feared earlier in the crisis.

They went on to say, in fact, according to the National Association of State Budget Officers' fiscal survey of States published in spring of this year, State total balance levels, in other words, that is your State rainy day funds, add that to their general funds year ending balances, reached \$126 billion in fiscal year 2021, the year that, I think, for most States, ended on June 30th. This is up from about \$122 billion before the pandemic. They are actually in better shape fiscally after than they were going into the pandemic, which was a surprise to me.

By contrast, Federal deficits have increased, as you know, as the Federal Government has jumped in and injected badly needed COVID relief and stimulus funds into the economy.

In fact, in 2019, the total Federal deficit for that year was \$992 billion, \$992 billion, in 2019. In fiscal year 2021, the Federal deficit, its immediate past year ended on September 30th, the Federal Government ran a deficit of \$2.77 trillion, due in large part to try

to address the pandemic and really to help State and local governments to meet their responsibilities. The person who is raising these concerns said that the States, in terms of their fiscal positions, are not that bad right now.

The Federal Government is running a deficit in the current year of almost \$3 trillion, which is just, maybe except for wartime, it is just unheard of. And the question is, this is shared responsibility. This is a team sport. We need States; we need the Federal Government; we need other shareholders, stakeholders.

I just would have us and whatever person shared these comments with me, just that we need to keep that in mind. The Federal Government has the ability not to print money, but to really spend until the cows come home. That is what we are doing to try to get COVID behind us in the rearview mirror.

But someday, there is going to be a time when we are going to have to be fiscally responsible, and look at the federalism, the sharing of responsibilities with the States and make sure that our contributions are appropriate, both at the Federal level, State, and local level, and with respect to other sources, too.

I am just going to close with that. It has been a great hearing. It has been a great hearing, and I applaud the leadership provided for us by Senators Heinrich and Blunt and those who joined them in this cause.

Just a quick closing statement. I said earlier that the Committee has a great track record of enacting bipartisan conservation legislation. You all have been a part of that. And at a time when the future of any species in our planet is uncertain, we need to act. We know that.

Right now, the Recovering America's Wildlife Act is, I think, a good piece of legislation. Obviously, you do, too, and I think we can make it great. I look forward to working with members of this Committee, with our other colleagues, certainly with the sponsors of the legislation and with our conservation partners to do that, and make it great.

Before we adjourn, a little bit of housekeeping. I would like to ask unanimous consent—I love to ask unanimous consent when I am the only one here. It is one of my favorite things. I want to ask unanimous consent to submit for the record a variety of materials that include letters from stakeholders and other materials that relate to today's hearing.

[The referenced information follows:]



Animal Welfare Institute

900 Pennsylvania Avenue, SE, Washington, DC 20003
awionline.org phone: (202) 337-2332 fax: (202) 446-2131

December 8, 2021

Dear Chairman Carper, Ranking Member Capito, and Members of the EPW Committee:

On behalf of the Animal Welfare Institute (AWI), I am writing to express concerns with the Recovering America's Wildlife Act (RAWA; S. 2372) as it is currently written. One of AWI's core missions is to protect imperiled species, and I commend the underlying purpose of the bill. However, investing a large sum of money in state and tribal conservation efforts without a commensurate investment in federal efforts, and without adequate directives, is imbalanced and may not be the most effective way to ensure strategic wildlife protection.

Coordination of species protection efforts under a federal framework is a proven approach to preventing extinction, yet the programs through which the US Fish and Wildlife Service implements the Endangered Species Act are profoundly and chronically underfunded. Programs such as listing, recovery, consultation, and habitat conservation planning are successful at identifying and protecting species using robust scientific measures, and should be provided with sufficient resources. Yet, RAWA only directs 15 percent of total funding in the bill toward species listed as threatened or endangered under federal or state law. In addition, unlike the ESA, RAWA does not outline sufficient accountability measures or performance criteria for the use of funds. For instance, it does not create specific criteria for identifying species of concern.

Strategic cooperation between federal, state, and tribal governments, driven by the best available science, is necessary to confront the current extinction crisis and recover America's wildlife. I hope the Committee will consider these concerns and strengthen RAWA as it moves forward.

Thank you.

Sincerely,

Nancy Blaney
Director, Government Affairs
Animal Welfare Institute



314 Unquowa Road
Fairfield, CT 06824
(203) 259 0416
www.ctaudubon.org

January 5, 2021

The Honorable Thomas R. Carper, Chairman
The Honorable Ben Cardin, Member MD
The Honorable Edward Markey, Member MA
The Honorable Sheldon Whitehouse, Member RI
The Honorable Bernard Sanders, Member VT
The Honorable Tammy Duckworth, Member IL

Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
United States Senate
Washington, DC, 20510

Dear Mr. Chairman and Members,

As Executive Director of the Connecticut Audubon Society (CAS), I am respectfully submitting the following comments on behalf of CAS and eight additional independent Audubon organizations (listed as signatories) and the Alliance for America's Fish & Wildlife to request approval of S. 2372, a bill to authorize funding for the Recovering America's Wildlife Act. Please incorporate these comments into the record of the hearings.

The signatories represent more than 200,000 residents in our respective states of Connecticut, Illinois, Massachusetts, Maine, Maryland, Montana, New Hampshire, New Jersey, and Rhode Island.

The Recovering America's Wildlife Act (RAWA) **is the most important** fish and wildlife legislation to come before Congress in the last 30 years. RAWA, combined with enactment of the Land and Water Conservation Fund of 2020, the Infrastructure Investment and Jobs Act of 2021, and funding for regional conservation issues, will usher in a new golden age of conservation in the country and will cement a commitment to conserve this nation's wildlife heritage for future generations. It will fund protections for more than **12,000 species** in greatest conservation need nation-wide.

Currently, Congress appropriates a total of only \$61 million annually to the 56 states, territories, and the District of Columbia to implement their congressionally mandated and approved State Wildlife Action Plans. However, as reported by the US Fish & Wildlife Service, \$1.3 billion is needed annually to fully implement these plans. Current funding is inadequate to address the critical need - to address threats to species before they decline to threatened or endangered status. RAWA will benefit our nation's fish and wildlife and habitats on land, in freshwater, and in the ocean by providing the much-needed \$1.3 billion annually in mandatory funding for states to conserve species identified in each state's Wildlife Action Plan. RAWA funding will ensure the protection of habitat, which is the greatest threat to our nation's wildlife and especially so in states like Connecticut, Maryland, and New Jersey where habitat loss is severe. Protecting species and land on the Connecticut River, Delaware River watershed, Chesapeake watershed, Long Island Sound and its watershed, the Kootenai Forestlands of Montana, the prairies of Illinois, the Highlands and other important regional projects.

The funding enabled by RAWA will go directly to state wildlife agencies to implement their State Wildlife Action Plans which will also lead directly and indirectly to job creation and will be directed to the areas most needed by the people who know their states the best. The proposed funding will also support better understanding of the spatial distribution of our important wildlife resources so that we can both be more effective at conservation and also expedient in the review of proposed projects such as renewable energy development.

Investment in wildlife will pay multiples as a return on the initial investment. If simply for the fact that wildlife associated recreation is a multi-billion-dollar industry of the utmost importance to states and their unique juxtaposition of wildlife and population. A study by the U.S. Fish and Wildlife Service in 2016, showed that more than 103 million Americans—a staggering 40 percent of the U.S. population 16 years and older—participated in some form of fishing, hunting, or other wildlife associated recreation such as birdwatching or outdoor photography. And in doing so, we spent an estimated \$156.9 billion on equipment, travel, licenses, and fees. According to the US Dept. of Commerce, Bureau of Economic Analysis, the new U.S. data (2020) show that the outdoor recreation economy accounted for 1.8 percent **(\$374.3 billion)** of current-dollar gross domestic product (GDP) for the nation in 2020. Additionally, the National Shooting Sports association estimates that from hunting revenues alone: comparing Sport Fish Restoration excise tax collections and angler purchases of tax-related equipment items for the last twelve cycles of the National Survey (conducted every five years between 1955 and 2016), the estimated Excise Tax-Related ROI to the Sport Fish Restoration Program (alone) ranges between a low of 1,459% in 2001 to a high of 2,643% in 1980.

RAWA is a proactive solution to our nation's fish and wildlife conservation challenges. One of the essential objectives of RAWA is to enable states to address species and habitat issues before they require action under state or federal endangered and threatened species laws. To achieve these ends the proposed legislation aims to enable states to conserve both listed endangered/threatened species and species of greatest conservation need that are not yet listed (as identified in State Wildlife Action Plans), and their critical habitats. This monumental effort will need to involve a host of conservation partners including state agencies, federal partners, NGOs, and academia, and will require regional collaboration and local implementation. RAWA will provide sufficient resources to enable states to build the necessary coalitions and partnerships and to accomplish essential on-the-ground conservation. An important premise, which we strongly support, is that state natural resource professionals are best positioned to understand and address conservation needs within their home state. We also understand that this premise is central to the strong bipartisan support this legislation enjoys and to the broad support it has among both conservation and economic development interests.

The Connecticut Audubon Society and the signatories below strongly recommend action to approve S. 2372, the Recovering America's Wildlife Act.

Thank you for the opportunity to submit our views on this critical legislation that will truly ensure that America's rich wildlife heritage is sustained for all future generations.

Respectfully submitted,



Patrick M. Comins, Executive Director
Connecticut Audubon Society

Lisa Alexander, Executive Director
Audubon Naturalist Society



Lawrence J.F. Taft, Executive Director
Audubon Society of Rhode Island



Craig Repasz, Conservation Chair
Connecticut Ornithological Association



Jim Herkert, Executive Director
Illinois Audubon Society



Andrew Beahm, Executive Director
Maine Audubon



David O'Neill, President
Mass Audubon



Larry Berrin, Executive Director
Montana Audubon Staff



Doug Bechtel, President
New Hampshire Audubon



Eric Stiles, President and CEO
New Jersey Audubon



Alliance for America's Fish & Wildlife



Founded in 1898, the Connecticut Audubon Society is an independent organization that conserves Connecticut's environment through science-based education and advocacy focused on the state's bird populations and habitats. We own and manage 20 preserves covering almost 3,300 acres in all areas of the state, and we work with landowners to help them manage their land for the benefit of birds and other wildlife.

December 6, 2021

The Honorable Tom Carper
Chair
Committee on Environment and Public Works
U.S. Senate
Washington, DC 20510

The Honorable Shelley Moore Capito
Ranking Member
Committee on Environment and Public Works
U.S. Senate
Washington, DC 20510

Dear Chairman Carper, Ranking Member Capito, and Members of the Committee,

Thank you for bringing the bipartisan *Recovering America's Wildlife Act*, S. 2372, before the Senate Committee on Environment and Public Works for a hearing. On behalf of the millions of hunters, anglers, recreational target shooters, professional scientists, and outdoor enthusiasts our organizations represent, we write to encourage your support, and that of all Committee Members, for passing S. 2372 out of the Committee.

We also thank Senators Heinrich and Blunt for introducing and promoting this important bill. A House companion bill, H.R. 2773, already has over 135 very bipartisan cosponsors, and has been heard by the House Natural Resources Committee.

Wildlife conservation efforts are at a critical point, with more than one-third of American species at-risk and in need of proactive recovery. State Wildlife Action Plans, developed with the best available science in collaboration with federal, local and tribal agencies, collectively identify more than 12,000 "Species of Greatest Conservation Need." The *Recovering America's Wildlife Act* would provide necessary funding to implement these congressionally mandated plans, as well as critical Tribal and Territorial wildlife conservation programs, conserving wildlife populations before they become threatened or endangered, while helping to recover those that already are.

For over 80 years, state, territorial, and tribal conservation efforts have proven to be incredibly effective at restoring species, some of which were once on the brink of extinction -- from national symbols such as the American bald eagle to vital game animals like white-tailed deer, waterfowl, and striped-bass. Today, we face a new wildlife crisis; one in which the magnitude of the solution must match the magnitude of the challenge. By prioritizing passage of the *Recovering America's Wildlife Act*, this Congress will ensure that our fish, wildlife and outdoor recreation traditions and their associated national economic benefits will endure for the benefit of future generations. The *Recovering America's Wildlife Act* represents an historic opportunity to simultaneously benefit wildlife, conservation, sportsmen and women, the economy and taxpayers.

The collaborative, non-regulatory approach of this bill will empower conservation for the full diversity of America's wildlife as well as critical natural resources. Failure to fund these conservation efforts will not only endanger many more at-risk species, but threaten the local, state, and federal economies bolstered by the \$788 billion outdoor industry, which employs 5.2 million Americans. Without healthy habitats and thriving species, more than 140 million outdoor enthusiasts, including nearly 55 million sportsmen and women, would not be able to fuel this important sector.

Recovering America's Wildlife Act is needed to secure the future of America's wildlife and our nation's outdoor and hunting heritage. We urge you to support wildlife, sportsmen and sportswomen, the economy, and the American taxpayer by advancing the *Recovering America's Wildlife Act* through the legislative

process and supporting its passage.

Thank you for your consideration, and support for conservation.

Sincerely,

Archery Trade Association
American Woodcock Society
Association of Fish and Wildlife Agencies
Backcountry Hunters & Anglers
Boone and Crockett Club
California Waterfowl Association
Camp Fire Club of America
Catch-A-Dream Foundation
Congressional Sportsmen's Foundation
Conservation Force
Council to Advance Hunting and the Shooting Sports
Dallas Safari Club
Delta Waterfowl
Ducks Unlimited
Houston Safari Club
Izaak Walton League of America
National Association of Forest Service Retirees
National Deer Association
National Bobwhite Conservation Initiative
National Shooting Sports Foundation
National Wild Turkey Federation
National Wildlife Federation
National Wildlife Refuge Association
North American Falconers Association
North American Grouse Partnership
Mule Deer Foundation
Orion: The Hunter's Institute
Pheasants Forever
Pope & Young Club
Quail Forever
Ruffed Grouse Society
Sportsmen's Alliance
The Conservation Fund
The Wildlife Society
Theodore Roosevelt Conservation Partnership
Whitetails Unlimited
Wild Sheep Foundation
Wildlife Forever
Wildlife Management Institute
Wildlife Mississippi

Cc: Members of the Senate Committee on Environment and Public Works



December 7, 2021

The Honorable Tom Carper
Chairman
Committee on Environment and Public Works
United States Senate
410 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Shelley Moore Capito
Ranking Member
Committee on Environment and Public Works
United States Senate
456 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Carper and Ranking Member Capito,

On behalf of the Center for Biological Diversity and our 1.7 million members and activists, we offer this written testimony on the Recovering America's Wildlife Act of 2021, which we support passage of.

The United States and the world face an extinction crisis. In 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) warned in a landmark global assessment that already "one million species already face extinction, many within decades, unless action is taken to reduce the intensity of drivers to biodiversity loss."¹ This massive extinction crisis is being driven by climate change, habitat destruction, direct exploitation of species, invasive species, and pollution. Without swift action to reverse these trends, our natural heritage as we know it could disappear forever.

Unfortunately, the United States has severely underfunded conservation of its natural heritage at the federal, state and tribal levels. Based on the recovery plans that Congress itself requires the U.S. Fish and Wildlife Service to complete, funding for endangered species recovery efforts should be at least \$1.6-\$2.3 billion per year. Unfortunately, Congress only allocates a tiny fraction of this amount — most recently, just \$105 million in FY 2021 — for the recovery of endangered species. At the state level, funding disproportionately is allocated for the management of "game" species, with little attention provided to the full diversity of plants and animals found throughout the country. As a result, hundreds of species continue to decline towards extinction, many of which will need protection under the Endangered Species Act as state agencies continue to fail in meeting their conservation trust responsibilities.

While somewhat flawed, the Recovering America's Wildlife Act ("RAWA") would represent a sea-change in how wildlife and plants are conserved across this country and could greatly help stem the extinction crisis in the United States. RAWA would provide \$1.4 billion per year to the states and would ensure the states with the most difficult conservation challenges receive the greatest funding. Tribal Nations would be given funding to manage biodiversity on their lands, and significant funding would be allocated for the recovery of endangered species and plants.

For example, Hawaii is one of the smallest states, but has more endangered species and faces more difficult conservation challenges than almost anywhere on the planet. Under RAWA,

¹ S. Diaz, J. Settele, E. Brondizio. 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

Hawaii will receive \$60 million per year, the largest share that a state may receive. In comparison, Alaska is a much larger state, but with far less biological diversity and less complex management challenges. Under the 2021 version of RAWA, Alaska will not receive an undeserved windfall in funding.

We also appreciate that listed threatened and endangered species will receive dedicated funding — approximately 15% of the yearly total provided by RAWA — while plant conservation will be eligible for 5% of the total funding. This will help ensure the conservation of species that are too-often overlooked by state fish and game agencies. As such, RAWA represents a significant down-payment to address the conservation needs of listed threatened and endangered species, and we look forward to working with you to secure additional funding for listed species through other means.

We believe that three changes to S. 2372 could strengthen this legislation without compromising its core framework and principles.

- 1) Increase funding of already-listed species under the Endangered Species Act to 23% from 15%. Of the approximately 7,800 species in the United States ranked as either G1 (critically imperiled) or G2 (imperiled) by NatureServe, approximately 23% of them are listed under the Endangered Species Act, while 77% are unprotected. To the best of its ability, Congress should ensure that imperiled species receive relatively equivalent levels of funding regardless of their status under the Endangered Species Act.
- 2) Develop a clear accountability mechanism that allows the U.S. Fish and Wildlife Service to ensure funding is spent appropriately. This could be accomplished by including the same requirement already found in the Federal Aid in Wildlife Restoration Act that prevents any diversion of funds away from wildlife management purposes.²
- 3) Delink funding for RAWA from the revenues resulting from civil or criminal violations of environmental-related laws. Congress should provide robust funding for our nation's wildlife because it is the correct policy to advance, not because a clever accounting gimmick is available that appears to fully offset this spending.

While we hope that you will incorporate these modest changes, we want to emphasize the dire needs of imperiled wildlife and plants across this nation, which cannot wait any longer for these desperately needed funds. We support the passage of the House version of RAWA (H.R.2773), and hope that the 117th Congress be the one that begins to turn the tide on the extinction crisis.

Sincerely,



Brett Hartl
Government Affairs Director
Center for Biological Diversity

² 16 U.S.C. § 669.



December 6, 2021

The Honorable Tom Carper
Chairman
Committee on Environment and Public
Works
U.S. Senate
Washington, DC 20510

The Honorable Shelley Moore Capito
Ranking Member
Committee on Environment and Public
Works
U.S. Senate
Washington, DC 20510

Dear Chairman Carper, Ranking Member Capito, and Members of the Environment and Public Works Committee,

The Congressional Sportsmen's Foundation (CSF) would like to express its appreciation for the Committee holding a hearing on Wednesday, December 8 exclusively on S. 2372, the Recovering America's Wildlife Act, which is strongly supported by CSF.

For over 80 years, America's hunters, anglers, target shooters, and boaters have been the primary funders of fish and wildlife conservation in the United States through a "user pays – public benefits" structure known as the American System of Conservation Funding. Through the funds generated from the Federal Aid in Wildlife Restoration Act of 1937 (or more commonly known as the Pittman-Robertson Act) and the subsequent Federal Aid in Sport Fish Restoration Act of 1950 (known as the Dingell-Johnson Act and Wallop-Breaux amendment), and associated sporting license purchases, sportsmen and women have contributed over \$71 billion to state fish and wildlife agencies for on-the-ground conservation efforts. In recent years, this number exceeds \$3 billion annually. As a result of this "user pays – public benefits" system, iconic species such as wood ducks, elk, pronghorn antelope, striped bass, and other species that once faced grave uncertainty are now thriving.

However, America's wide array of fish, wildlife, and plants face unprecedented modern-day challenges that go beyond the financial contributions of sportsmen and women and threaten the long-term viability of our diverse ecosystems. These challenges have resulted in nearly 12,000 species being identified as "Species of Greatest Conservation Need," many of which are well-known to us all such as northern bobwhite quail, brook trout, diamondback terrapins, monarchs, and countless waterfowl and songbird species, to name a few. Nevertheless, thanks to the leadership of Congressional Sportsmen's Caucus (CSC) Co-Chair Senator Martin Heinrich and CSC Member Senator Roy Blunt, there is a solution provided by the Recovering America's Wildlife Act.

Recovering America's Wildlife Act will provide \$1.3 billion annually in permanent and dedicated funding – a funding structure that is necessary to yield meaningful results – to conserve the nearly 12,000 "Species of Greatest Conservation Need" identified in

Congressionally-mandated State Wildlife Action Plans (SWAPs). SWAPs serve as a roadmap to each state's unique conservation needs and are ultimately approved by the U.S. Fish and Wildlife Service (USFWS). Specifically, S. 2372 will provide \$1.3 billion annually to the authorized, but severely underfunded Wildlife Conservation Restoration subaccount included in the Pittman-Robertson Act, which would then be directed to state and territorial fish and wildlife agencies to carry out the conservation measures identified in their respective SWAPs. S. 2372 requires that state fish and wildlife agencies contribute a 25% non-federal match – a sign that state fish and wildlife agencies are willing to having skin in the game.

It is important to note that Recovering America's Wildlife Act has numerous levels of accountability for state and territorial agencies. In addition to the federal approval process for State Wildlife Action Plans that is already in place, each state, territory, and the District of Columbia would be required to submit a work plan and budget every three years that includes a report on spending and conservation activities over the previous three years. Additionally, all funding provided by S. 2372 would be administered by the Wildlife and Sport Fish Restoration Program, which is managed by the USFWS. Recovering America's Wildlife Act also requires that states and territories spend at least an average of 15% of the funds apportioned to them over a 5-year period on the recovery of federally threatened or endangered species.

Furthermore, the Recovering America's Wildlife Act recognizes the important role of Tribal fish and wildlife agencies by providing \$97.5 million annually to conserve the 500 species of fish, wildlife, and plants listed as threatened or endangered that reside on the 140 million acres of lands and water managed by Tribes. Despite their important role in conservation, Tribes have been left out of federal fish and wildlife conservation funding programs. Put simply, S. 2372 is a landmark piece of legislation for Tribal fish and wildlife managers.

Providing much-needed funding to state, territorial, and Tribal fish and wildlife agencies through Recovering America's Wildlife Act would mark a historic step toward addressing biodiversity loss and ultimately reducing uncertainty for a variety of stakeholders before more costly legal and regulatory measures are necessary. This bill is good for sportsmen and women, good for fish and wildlife, good for business, and good for the American public.

Again, we thank the committee for holding a hearing on this important legislation and we thank Senators Heinrich and Blunt for their efforts to champion the most significant fish and wildlife legislation in a lifetime.

Sincerely,



Jeff Crane
President and CEO



HUMANE SOCIETY
LEGISLATIVE FUND™



THE HUMANE SOCIETY
OF THE UNITED STATES

January 5, 2022

The Honorable Thomas R. Carper
Chairman, U.S. Senate Environment and
Public Works Committee
410 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Shelley Moore Capito
Ranking Member, U.S. Senate
Environment and Public Works Committee
456 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Carper and Ranking Member Capito,

On behalf of our millions of members, we thank you and the U.S. Senate Committee on Environment and Public Works for holding a hearing on S. 2372, the Recovering America's Wildlife Act (RAWA). We also thank you for the opportunity to submit this testimony. As you know, the natural world is in crisis. In 2019, the most comprehensive worldwide assessment ever conducted of biodiversity and ecosystem services found that species and ecosystems are declining more rapidly than ever, with one million plant and animal species presently facing extinction.¹ With no end in sight to threats such as climate change and habitat loss, we must act now to protect the wild animals and plants that join us in making their home on Earth.

Unfortunately, government agencies at all levels across the United States are hampered at this task by funding shortages. We thank Senators Heinrich and Blunt for recognizing this and for leading RAWA to address the problem. We applaud the intent of providing general funds to states for needed conservation activities. We are especially enthusiastic about possible opportunities for these monies to support wildlife conservation in ways that benefit all Americans, and to foster in a broader range of stakeholders an appreciation for the wealth of natural life with which we Americans are blessed.

Our review of the S. 2372 text, however, combined with our knowledge of state wildlife agency decision-making, led us to identify a number of concerns in the bill, outlined below and followed by our recommendations for addressing them. Contrary to its framing as conservation legislation, RAWA is, simply put, wildlife-management legislation. We encourage the Committee on Environment and Public Works to continue moving S. 2372 through the regular committee process to maximize deliberation and negotiation of the bill in order to achieve legislation that is up to the task of meeting the manifold conservation challenges facing America's biodiversity in the 21st century.

Lack of accountability

RAWA provides a sizeable sum of taxpayer money to states every year via the U.S. Fish and Wildlife Service (FWS) but establishes little-to-no oversight of its expenditure. State agencies would have nearly unbounded discretion over how to spend the funds and over which species are considered "of greatest conservation need." RAWA monies, as dedicated federal funding, would not even be subject to the scrutiny of the appropriations process.

The lack of federal checks is particularly troubling because S. 2372 does not require states to expend these funds on projects with meaningful conservation value. For example, the

¹ IPBES. 2019. *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Brondizio ES, Settele J, Díaz S, and Ngo HT (eds). Bonn, Germany: IPBES secretariat.

legislation could allow states to use up to 85% of this new funding stream for “wildlife-associated recreation.”² The bill does not require these funds to target species of greatest conservation need, and it expressly exempts recreation spending from planning requirements.

The sheer volume of RAWA funding, year upon year, itself exacerbates the bill’s lack of accountability. As a funding stream more than two times greater than that awarded through the Pittman-Robertson Act and larger than any other FWS funding stream, there would be more opportunity for its misuse. Further, RAWA funds would dwarf appropriations to FWS for administering the Endangered Species Act, yet in its current form S. 2372 would do nothing to address the chronic underfunding of existing programs to list and recover threatened and endangered species—and could even undermine wildlife conservation within states, particularly for species facing extinction.

Agency disconnect with broad state constituencies

State wildlife agency values are increasingly out of sync with those of the American public.³ The disparity threatens the future of U.S. wildlife conservation because sustained and possibly increased public support in coming decades will be necessary to address the ever-multiplying threats to America’s wildlife. In their publication [Fish and Wildlife Relevancy Roadmap](#), the Association of Fish and Wildlife Agencies and the Wildlife Management Institute explore this disconnect and suggest ways to remedy it. It is therefore ironic and unfortunate that the huge influx of accountability-free RAWA dollars has the potential not to help solve this problem but rather to worsen it by allowing state wildlife agencies to maintain status-quo activities and by reducing the agencies’ need to better reflect and engage with broader state constituencies to earn funds.

A 2018 study found that 68% of state wildlife agency staff hold “traditionalist” value orientations, believing wildlife should be used and managed for people, while 8% of agency staff hold “mutualist” value orientations, believing people should coexist with wildlife. By contrast, 34% of the U.S. public hold mutualist value orientations while 30% hold traditionalist value orientations.⁴ As an example of the latter statistic, only 5% of the American public hold hunting licenses.⁵ This divergence will continue to grow, because traditionalist values are on the decline while mutualist values are increasing.⁶

² As presently drafted, RAWA does not appear to contain any cap on the use of funds for wildlife-associated recreation other than the 15% minimum required spending for imperiled species recovery inserted at 16 U.S.C. 669b(c)(5). The text does amend Section 4 of the Pittman-Robertson Act to raise an existing cap on the use of Wildlife Conservation and Restoration Account funds, established at 16 U.S.C. 669c(e)(4)(B), from 10% to “15% over a 5-year period.” However, that cap only applies to funds “apportioned...for a wildlife conservation and restoration program.” Developing and implementing wildlife and conservation programs represent only a subset of the funding uses that RAWA would authorize, and the existing cap may not reach the other authorized uses RAWA would add to 16 U.S.C. 669b(c)(4).

³ Manfredo MJ, Sullivan L, Don Carlos AW, Dietsch AM, Teel TL, Bright AD, and Bruskotter J. 2018. *America’s Wildlife Values: The Social Context of Wildlife Management in the U.S.* Fort Collins, CO: Colorado State University, Department of Human Dimensions of Natural Resources.

⁴ Ibid.

⁵ <https://www.fws.gov/wsfrprograms/subpages/licenseinfo/hunting.htm>

⁶ Association of Fish and Wildlife Agencies and The Wildlife Management Institute. 2019. *Fish and Wildlife Relevancy Roadmap: Enhanced Conservation Through Broader Engagement (v1.0)*. Dunfee M, Forstchen A, Haubold E, Humpert M, Newmark J, Sumners J, and Smith C (eds). Washington, DC: AFWA.

State wildlife management commissions, which formulate and approve wildlife management policy, epitomize this disconnect. In most cases commissions are composed almost entirely of traditionalist interests such as trophy hunting, trapping, angling, and agriculture, a representation disproportionately higher than in general state populations. Commissioners are appointed, not elected, thereby decreasing their accountability to state residents. As a result, commission wildlife management decisions often contradict the wishes of the vast majority of state residents, even though according to law a state's wildlife is held in trust for commissions to manage for the benefit of all citizens equally.

Agency consumptive-use bias

Because of their value orientations, many state wildlife agencies and their commissions prioritize the consumptive use of wildlife and the management of game species, usually at the expense of imperiled species, nongame species, and native carnivores such as wolves, mountain lions, and bears. In particular, agencies facilitate extensive hunting of native carnivores, purportedly to reduce predation on deer, elk, and other game animals that hunters themselves want to kill. Such hunting flies in the face of scientific knowledge: extensive and conclusive research has found that persecution of native carnivores does not cause long-term population growth of prey species, the primary limiting factors for which are not predators but instead habitat, migration corridors, or changes in food availability due to climate change.⁷

The 2021 Wisconsin gray wolf hunt is a case in point. Despite the fact that three out of four Wisconsin residents do not support wolf trophy hunting⁸ and that well over two-thirds of Wisconsinites recognize wolves' right to exist and ecological value,⁹ the Wisconsin Natural Resources Board gave the green light to a wolf hunt in February 2021 with a quota of 119 wolves. Hunters and trappers blew past the quota by 83%, killing 218 wolves before the hunt was called off less than 60 hours after it had started. Although the recorded tally represents 21% of the 2020 estimated minimum gray wolf population in Wisconsin, the actual loss could be at least 27–33% due to factors such as poaching that occurs under cover of hunting, disruption to family units from the killing of key pack members, and the fact that the hunt took place during wolf breeding season.¹⁰

The Colorado Parks and Wildlife Commission unanimously approved a plan in 2016 for Colorado Parks and Wildlife to use Pittman-Robertson Act funds for the killing of dozens of black bears and mountain lions, vital top carnivores native to Colorado, in a scientifically

⁷ Hurley MA, Unsworth JW, Zager P, Hebblewhite M, Garton EO, Montgomery DM, Skalski JR, and Maycock CL. 2011. Demographic Response of Mule Deer to Experimental Reduction of Coyotes and Mountain Lions in Southeastern Idaho. *Wildlife Monographs*:1-33; Forrester TD and Wittmer HU. 2013. A review of the population dynamics of mule deer and black-tailed deer *Odocoileus hemionus* in North America. *Mammal Review* 43:292-308; Bishop CJ, White GC, Freddy DJ, Watkins BE, and Stephenson TR. 2009. Effect of Enhanced Nutrition on Mule Deer Population Rate of Change. *Wildlife Monographs*:1-28; Monteith KL, Bleich VC, Stephenson TR, Pierce BM, Conner MM, Kie JG, and Bowyer RT. 2014. Life-history characteristics of mule deer: Effects of nutrition in a variable environment. *Wildlife Monographs* 186:1-62.

⁸ Remington Research Group. 2021. Wisconsin public opinion June 2021. https://www.humanesociety.org/sites/default/files/docs/WI%20Statewide%20Public%20Opinion%20Survey%2060821.pdf?fbclid=IwAR2sAOA1uL8f7-kpyohI9oopZ9kEcVvcGxHUFPIlcLF6QjPwyrThFAryqyE&credit=blog_post_111921_id12603

⁹ Public Attitudes towards Wolves and Wolf Management in Wisconsin. 2014. Wisconsin Department of Natural Resources. August 2014. <https://p.widencdn.net/xyz97t/WolfAttitudeSurveyReportDRAFT>

¹⁰ Treves A, Santiago-Ávila FJ, and Putrevu K. 2021. Quantifying the effects of delisting wolves after the first state began lethal management. *PeerJ* 9:e11666.

unfounded attempt to boost mule deer populations for paying hunters. Multiple conservation biologists decried the plan, but it did not affect the commission's decision.¹¹ It was only through a federal court decision, pursuant to litigation by the Humane Society of the United States (HSUS) and other NGOs, that federal funding of the plan was halted.

Without meaningful accountability mechanisms or mandates guiding expenditure of RAWA funds, states will very likely use them to continue the status quo of consumptive use and game-species management at the expense of other animals. The undefined and requirement-free "wildlife-associated recreation" category can pave the way to such actions, undercutting RAWA's touted conservation purpose.

Shift of authority over federal lands and waters

RAWA adds a savings clause to the Pittman-Robertson Act that provides:

Nothing in this Act shall be construed to enlarge or diminish the authority, jurisdiction, or responsibility of a State to manage, control, or regulate fish and wildlife under the law and regulations of the State on lands and waters within the State, **including on Federal lands and waters**. (Emphasis added. Section 13, lines 1-7; p.18.)

We are extremely concerned about language suggesting that states have ultimate jurisdiction over actions on federal lands and waters, as it could serve as an argument for shifting authority from the federal government to the states under the Property Clause of the U.S. Constitution. Were this to occur, it could broadly open to states the use of federal resources relating to fish and wildlife.

The clause could allow a state to remove native carnivores from federal land with the scientifically dubious justification of increasing populations of game species of interest to hunters, including on federal lands where hunting is currently prohibited. This occurred in Alaska, where in the last decade the state gained the right to facilitate heavy-handed killing of wolves, bears, and other carnivores in National Park Service preserves and in National Wildlife Refuges in a vain attempt to grow caribou, moose, and other ungulates for hunters. Regulations adopted during the Obama Administration prohibited these activities, but they were repealed during the Trump Administration. Consequently, game animal populations in these sites will grow to exceed the land's carrying capacity, resulting in mass starvation or other detrimental outcomes.

Ceding authority for wildlife on federal lands to states can also jeopardize the protection of imperiled species by thwarting the administration of statutes such as the Endangered Species Act. Releasing captive Mexican gray wolves into wild Mexican gray wolf populations is essential to maintaining genetic viability of and recovering this critically endangered subspecies, which numbers fewer than 200 individuals in the wild. In 2015, however, the New Mexico Department of Game and Fish, hostile to the recovery effort, sought to block FWS from releasing captive wolves in National Forests in the state by denying permits and moving for an injunction in federal court. The effort ultimately failed but demonstrates the risk of elevating state authority over federal authority to manage federal lands.

Recommendations

In light of these concerns, we make the following recommendations.

¹¹ <https://www.denverpost.com/2016/12/13/colorado-predator-control-killing-lions-bears/>

Lack of accountability

- Planning and reporting requirements
 - Make RAWA work plans and project proposals available for public review and comment before approval and disbursement of funds. This requirement mirrors the proposal put forward with respect to existing Pittman-Robertson Act funds in a recent petition filed by Public Employees for Environmental Responsibility (PEER), HSUS, HSLF, and other conservation and tribal organizations.
 - Require that fund recipients report annually to FWS on use of RAWA funds, and that FWS publish comprehensive reports for Congress and the public.
- Predicate state eligibility for RAWA funds on use of previous funds consistent with the conservation purposes of RAWA and the Pittman-Robertson Act, including an express prohibition on the use of funds for lethal predator control intended to artificially inflate game species populations. As above, this mirrors the proposal presented in PEER, HSUS, HSLF, *et al.*'s pending rulemaking petition, which asked FWS to use existing authority under the Pittman-Robertson Act to declare states ineligible for federal funding if they engage in such predator control activities.
- Require that a minimum of 85% of RAWA funds, rather than the 15% designated in the current S. 2372 language, be directed to recovering species listed as endangered or threatened at the state or federal level.
- Clarify that Section 4(e)(4)(B)'s cap on the use of funds for wildlife-associated recreation applies to all Wildlife Conservation and Restoration Account funds, without qualification, and revert that cap to the existing 10%.

Agency disconnect with broad state constituencies

- Require, as a condition of eligibility, that state wildlife commission memberships proportionately represent their respective states' population demographics—e.g., by geography, gender, and race—and wildlife-values orientation.

Agency presumptive-use bias

- Require, as a condition of eligibility, that states have granted RAWA-recipient agencies the statutory authority to undertake regulatory and management actions for all native wildlife species.
- Prohibit use of RAWA funds for lethal methods to control native carnivore populations.
- Prohibit use of RAWA funds to expand hunting or trapping on federal lands.

Shift of authority over federal lands and waters


- Strike "including on Federal lands and waters" from Section 13.

We thank you for your consideration of our testimony. We would be pleased to contribute to any of the Committee's further actions on S. 2372. Should you desire further information or wish to discuss any of the points we raised, please do not hesitate to contact us.

Sincerely,



Sara Amundson, President
Humane Society Legislative Fund



Kitty Block, President and CEO
The Humane Society of the United States



2005 Market Street, Suite 1700 Philadelphia, PA 19103-7077	215.575.9050 Phone 215.575.4939 Fax
901 E Street NW, 10th Floor Washington, DC 20004 www.pewtrusts.org	202.552.2000 Phone 202.552.2299 Fax

December 10, 2021

Sen. Thomas R. Carper
Chairman
Environment and Public Works Committee
410 Dirksen Senate Office Building
Washington, D.C. 20510

Sen. Shelley Moore Capito
Ranking Member
Environment and Public Works Committee
456 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Carper and Ranking Member Capito:

The Pew Charitable Trusts supports the Recovering America's Wildlife Act (RAWA), S. 2372, introduced by Sens. Martin Heinrich (D-NM) and Roy Blunt (R-MO). The bill has substantive connections to Pew's work to promote science, mapping, prioritization, and conservation of wildlife migration and movement corridors and habitat connectivity.

RAWA would result in a significant increase in state wildlife agency funding, specifically for implementing state wildlife action plans (SWAPs). SWAPs provide states with the ability to conduct research and management of wildlife migration and movement corridors, complementing the work being done by other key wildlife corridor stakeholders, including federal agencies, tribes, and private landowners, among others.

Pew, like many conservation, wildlife, and sportsmen organizations commends the senators cosponsoring this important bipartisan legislation and urge the committee to move the bill forward through the legislative process.

Sincerely,

Marcia Argust
Director
U.S. Public Lands and Rivers Conservation
The Pew Charitable Trusts



December 22, 2021

Thomas R. Carper
Chair, Committee on Environment and Public Works
United States Senate
410 Dirksen Office Building
Washington, DC 20510

Shelly Moore Capito
Ranking Member, Committee on Environment and Public Works
United States Senate
456 Dirksen Office Building
Washington, DC 20510

Re: S.2372, Recovering America's Wildlife Act

Chair Carper and Ranking Member Capito:

Thank you for holding a hearing on S.2372, Recovering America's Wildlife Act (RAWA). On behalf of ConservAmerica, a nonprofit dedicated to promoting commonsense, market based and fiscally responsible solutions to today's environmental, conservation, and energy challenges, I write in support of this bipartisan bill. We urge the Committee to move forward with a mark-up.

Helping to reform, strengthen, and improve the protection and recovery of species ranks among ConservAmerica's highest priorities. RAWA fits squarely into that priority as it brings together both sides of the political spectrum to help the full diversity of fish and wildlife species. The legislation would amend the Wildlife Restoration Act to invest an additional \$1.3 billion per year for states and territories to implement their Wildlife Action Plans and \$97.5 million for tribal wildlife conservation efforts.

While the Endangered Species Act (ESA) has been an important tool to stop extinction, it has largely been ineffective in keeping species off the ESA list. Moreover, the costs for recovering species under the ESA have been significant. S.2372 gives states, territories, and tribes the resources they need to help restore and maintain species' health and prevent the need for federal protections under the ESA.

Recognizing the scarcity of taxpayer resources, the bill includes strong fiscal safeguards. First, it requires states and territories to match federal funding by 25 percent. Not only does this matching fund requirement demonstrate "skin in the game," it also brings additional capital

alongside federal resources to accelerate the species recovery. Moreover, S.2372 includes robust accountability mechanisms, including reporting, tracking and audit requirements subject to congressional, agency, Interior Office of Inspector General, and public review. Finally, the legislation is partially funded through resources generated from civil and criminal penalties, fines, or other revenues resulting from natural resource or environmental-related violations or enforcement actions that are not otherwise committed or appropriated. This provides an important revenue stream for the bill and makes a rational connection between violations of natural resource policy and our conservation objectives.

Although outside the scope of this legislation, we continue to support reforms to the ESA that would give a greater role to state resource agencies in providing input on listing, recovery goals, and habitat objectives. We also support the use of candidate conservation and safe harbor agreements to incentivize landowners and third parties to voluntarily enter into agreements to enhance habitat for protected species. With 71 percent of the American landscape under private ownership and 80 percent of endangered species inhabiting private lands, collaboration with private landowners is critical to achieving sustainable and cost-effective protections. Without such incentives, wildlife habitat can often become a liability rather than an asset.

What is clear is that species are best protected when the federal-state relationship is strong, and federal, state, local governments, and landowners work together to achieve a common goal. While Congress mandated that state fish and wildlife agencies develop State Wildlife Action Plans to protect wildlife, it has never fully funded their implementation. By providing stable and consistent funding, S.2372 would live up to the vision of the Wildlife Restoration Act by strengthening the federal-state partnership that is essential not only for species recovery but also for keeping species from being listed in the first place.

We applaud Senators Heinrich and Blunt and their respective staffs for their work on this bill and we urge the Committee to move forward with its consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "T Johnston", with a stylized flourish at the end.

Todd Johnston
Vice President



December 7, 2021

The Honorable Thomas Carper
Chair, U.S. Senate Environment and Public
Works Committee
410 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Shelley Moore Capito
Ranking Member, U.S. Senate Environment and
Public Works Committee
456 Dirksen Senate Office Building
Washington, D.C. 20510

Re: Joint Request from Tribes and Washington Dept. of Fish and Wildlife to Support and Swiftly
Pass S.2372 – Recovering America’s Wildlife Act

Dear Chairman Carper and Ranking Member Capito:

The Northwest Indian Fisheries Commission¹ – composed of the 20 treaty tribes in western Washington – and the Washington Department of Fish and Wildlife are jointly writing to express our unified support for the current version of S. 2372 – Recovering America’s Wildlife Act (RAWA). This is a moment of historic significance for the state and tribes, and it is a testament to the importance of the legislation. S. 2372, in its current version, is a product of many years of bipartisan and collaborative negotiations that we believe culminate in a balanced approach to protecting, conserving, and recovering species and habitats of greatest conservation need. We respectfully request your support of the current version of S. 2372 and its timely passage.

Washington is home to more than 1,900 species of animals, including at least 40 that are found nowhere else on earth. Fish and wildlife are deeply interwoven into the cultural and economic fabric of both Washington and tribal citizens. Our quality of life, outdoor traditions, and prosperity are tied to the health and sustainability of our natural heritage. The treaty tribes and the state of Washington actively co-manage many of these collective resources. We often collaborate on population surveys, management plans, disease studies and habitat projects in

¹ The NWIFC member tribes are the Hoh, Jamestown S’Klallam, Lower Elwha Klallam, Lummi, Makah, Muckleshoot, Nisqually, Nooksack, Port Gamble S’Klallam, Puyallup, Quileute, Quinault, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Swinomish, Tulalip, and Upper Skagit.

December 7, 2021

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an effort to ensure healthy sustaining populations of fish, flora and fauna for generations to come. Yet, despite our best efforts to pool resources and form unique partnerships, we face common problems that are putting huge numbers of species at risk of becoming endangered.

In Washington alone, we have 268 species and 30 habitats of greatest conservation need. Nationally, one-third of all U.S. wildlife species are already imperiled or are vulnerable—and nearly one million species worldwide are at risk of extinction. States and tribes need adequate and stable resources to carry out our protection, conservation and restoration work. RAWA provides a unique opportunity to fill this perpetual void. The bipartisan bill provides states and tribes with dedicated and sustainable funding to protect and restore our most vulnerable species to ensure their long-term persistence on the landscape.

For states, the bill would replace State Wildlife Grants and utilize remaining natural resource or environmental-related violation revenues to dedicate \$1.3 billion in funding to the Wildlife Conservation Restoration Program, an authorized subaccount under the Pittman-Robertson Wildlife Restoration Program. States would use these funds to implement their congressionally required State Wildlife Action Plans (SWAP) – proactive, comprehensive conservation strategies tailored to Washington and developed with participation from the public. Through the full implementation of their SWAPs, states will work to prevent fish and wildlife from becoming endangered and enhance the outdoor benefits that millions of Americans enjoy. Working closely with tribes, local government, business and conservation partners here in Washington, we envision directing the state's allocation of approximately \$20 million (of the \$1.3 billion) towards conservation, outdoor recreation and education programs that will dramatically improve the state's ability to successfully maintain thriving human communities and healthy wildlife populations.

RAWA would also utilize remaining natural resource or environmental-related violation revenues to dedicate \$97.5 million in funding to the Tribal Wildlife Conservation and Restoration Account and distributed through a Department of Interior allocation process to be developed in consultation with tribes. These resources are essential for tribes to manage wildlife and habitat on their lands as well as collaborate across jurisdictions to protect migrating wildlife; assist in the recovery of threatened and endangered species; manage, control and prevent invasive species and diseases; and to ensure that tribes have the staff capacity to do all they can do to protect wildlife. For the tribes, protecting and conserving wildlife is about preserving culture and traditions for future generations. It is also about ensuring that tribes can continue to fish, gather, and hunt, as reserved by the treaties, to provide access to traditional foods, economic opportunities, and ultimately a way of life. However, tribes need long-term dedicated resources to accomplish these goals, and RAWA represents one of the most significant opportunities to provide some of that support. That is why the Affiliated Tribes of Northwest Indians (ATNI) and the National Congress of American Indians (NCAI) passed resolutions calling on Congress to support and pass RAWA (see enclosed).

December 7, 2021

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As individual sovereigns, Washington and the tribes do not often undertake joint correspondence. However, in this instance we wanted to demonstrate that RAWA is fundamentally about collaboration and partnerships to protect and conserve our collective wildlife resources. To that end, we have come together to respectfully request your support and the timely passage of Recovering America's Wildlife Act in its current version.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin R. Parker".

Justin R. Parker, Executive Director
Northwest Indian Fisheries Commission

A handwritten signature in blue ink, appearing to read "Kelly Susewind".

Kelly Susewind, Director
Washington State Department of Fish and Wildlife

Enclosure: ATNI and NCAI Resolutions Calling on Congress to Support RAWA

Cc: The Honorable Patty Murray
The Honorable Maria Cantwell

AMERICAN FISHERIES SOCIETY • THE WILDLIFE SOCIETY

07 December 2021

Senator Tom Carper, Chair
Environment and Public Works Committee
U.S. Senate
410 Dirksen Senate Office Building
Washington, D.C. 20510

Senator Shelley Moore Capito
Environment and Public Works Committee
U.S. Senate
456 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Carper and Ranking Member Capito,

The Wildlife Society and the American Fisheries Society thank you for holding a hearing on the **Recovering America's Wildlife Act (S. 2372)** - groundbreaking legislation that would empower our nation's fish and wildlife professionals to proactively and cost-effectively conserve at-risk species.

Our organizations are dedicated to development of natural resource professionals, advancing science, and conserving fish and wildlife. We work to promote science-based policies that empower fish and wildlife professionals to hold our nation's fish and wildlife in the public trust for generations to come.

With more than 200,000 species of plants and animals across America, our nation's fish and wildlife professionals are working on the front lines of species diversity and conservation. The *Reversing America's Wildlife Crisis* report (attached), released by the American Fisheries Society, The Wildlife Society, and the National Wildlife Federation, documents how the diversity of native species face alarming declines from threats such as habitat loss, invasive species, disease, and the accumulating problems caused by a changing climate. As detailed in the report, up to one-third of U.S. species need immediate conservation action, including 40 percent of freshwater fish species and 42 percent of amphibian species.

As relayed by the more than 1,700 natural resources scientists in a 2019 letter to Congress (attached), reversing these staggering declines requires a proactive and cooperative approach that will empower state and tribal natural resource managers to work directly with stakeholders, creating buy-in at all levels of governance. The Recovering America's Wildlife Act would help achieve this goal by providing nearly \$1.4 billion in dedicated funding annually for the more than 12,000 species determined by state fish and wildlife agencies to be at-risk.

Specifically, the legislation would provide funding for implementation of states' wildlife action plans. These congressionally mandated action plans provide a roadmap for full implementation

of at-risk species recovery efforts by state agencies alongside federal and non-government partners. The bill would also provide \$97.5 million in dedicated funding annually for tribal fish and wildlife agencies to work on at-risk species recovery.

Unfortunately, years of inadequate federal funding has not allowed for the goals of state wildlife action plans or tribal species recovery efforts to be realized. Tribes have continuously been left out of federal funding opportunities for conservation. At present, no federal fund exists that tribal agencies can utilize annually for long-term conservation planning.

By rewriting this narrative and investing in state and tribal species conservation, our public trust wildlife will have a chance at recovery, saving the federal government significant funds by avoiding future species listing under the Endangered Species Act (ESA). For species that have already reached the point of ESA listing, natural resource professionals will have the ability to prioritize listed species conservation efforts thanks to 15 percent of funds targeted at multistakeholder conservation efforts for listed species.

We strongly encourage the committee to favorably consider this legislation in order to provide fish and wildlife professionals with a stable and predictable funding source to combat the growing biodiversity crisis and maintain native species for the enjoyment of all Americans.

Sincerely,



Douglas J. Austen, Ph.D.
Executive Director
American Fisheries Society



Gordon R. Batcheller, CWB®
President
The Wildlife Society

Founded in 1937, TWS and its network of affiliated chapters and sections represents more than 15,000 professional wildlife biologists, managers, and educators dedicated to excellence in wildlife stewardship. TWS' mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitat through science-based management and conservation.
wildlife.org

Founded in 1870, the American Fisheries Society (AFS) is the world's oldest and largest fisheries science society. The AFS mission is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. With its renowned journals, books and conferences, AFS is the leading source of fisheries science and management information in North America and around the world.
fisheries.org

REVERSING AMERICA'S WILDLIFE CRISIS

SECURING THE FUTURE OF OUR FISH AND WILDLIFE



MARCH 2018



REVERSING AMERICA'S WILDLIFE CRISIS

SECURING THE FUTURE OF OUR FISH AND WILDLIFE

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Lead Authors: Bruce A. Stein, Naomi Edelson, Lauren Anderson, John J. Kanter, and Jodi Stemler.

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Acknowledgments: This report is a collaboration among National Wildlife Federation (NWF), American Fisheries Society (AFS), and The Wildlife Society (TWS). The authors would like to thank the many individuals from these organizations that contributed to this report: Taran Catania, Kathleen Collins, Patty Glick, Lacey McCormick, and David Mizejewski from NWF; Douglas Austen, Thomas Bigford, Dan Cassidy, Steve McMullin, Mark Porath, Martha Wilson, and Drue Winters from AFS; and John E. McDonald, Jr., Darren Miller, Keith Norris, Bruce Thompson, and Gary White from TWS. We are especially grateful to Maja Smith of MajaDesign, Inc. for report design and production.

Cover image: Swift fox (*Vulpes macrotis*), North America's smallest wild canid, has disappeared from about 60 percent of its historic Great Plains range. Once a candidate for listing under the Endangered Species Act, collaborative state and federal conservation efforts have stabilized the species across much of its remaining range. Photo: Rob Palmer

Reversing America's Wildlife Crisis is available online at: www.nwf.org/ReversingWildlifeCrisis



National Wildlife Federation
1200 G Street, NW, Suite 900
Washington, D.C. 20005
www.nwf.org

FOREWORD



The United States harbors an extraordinary diversity of wildlife, like this striking 'I'iwi (Vestiaria coccinea) from the island of Kauai. More than 150 U.S. species already have gone extinct—including many related Hawaiian forest birds—and the 'I'iwi itself has suffered dramatic population declines. Photo: Jim Denny

America is blessed with an extraordinary diversity of wildlife, ranging from large and charismatic animals to minute and secretive creatures. Unfortunately, many of America's wildlife species are in serious decline. While many formerly scarce species, like wood duck, elk, and wild turkey, have flourished over the past several decades, these conservation successes mask a far broader pattern of declines, especially among species that are neither hunted nor fished. Indeed, an assessment of the best-known groups of U.S. plants and animals indicates that as many as one-third of America's species are vulnerable, with one in five imperiled and at high risk of extinction. Concerns about species decline and loss are not hypothetical: more than 150 U.S. species already have gone extinct, while another 500 are "missing in action" and may also be extinct.

America's wildlife crisis extends well beyond rare and endangered species, and now affects many widespread and previously abundant creatures, such as the little brown bat and monarch butterfly. These declines are also affecting many of our most beloved songbirds—from eastern meadowlarks to cerulean warblers—and fully a third of North America's bird species require urgent conservation attention. More broadly, state wildlife agencies have identified nearly 12,000 species

Concerns about species decline and loss are not hypothetical: more than 150 U.S. species already have gone extinct, while another 500 are "missing in action" and may also be extinct.



Amphibians like the northern leopard frog (*Lithobates pipiens*) are sentinels of broader environmental conditions. With U.S. amphibian populations declining on average four percent a year, there is an urgent need to dramatically increase conservation efforts for these and other native species. Photo: Ted Lee Eubanks/Fermata, Inc.

nationwide in need of conservation action. Without concerted attention, our growing wildlife crisis will almost certainly lead to many more species qualifying for protection under federal and state endangered species laws.

The decline of America's wildlife can be stopped—and even reversed. A growing body of research demonstrates that when we focus on and invest in conservation we can make a difference. Congressionally mandated state wildlife action plans offer a science-

An investment of this magnitude should significantly reduce the number of species in decline, and decrease the number of species requiring protection under the Endangered Species Act.

based blueprint for sustaining and recovering the nation's fish and wildlife heritage. States, together with their federal, tribal, local, and private partners, have had many conservation successes that simply would not have been possible without the vision and conservation actions made possible through these wildlife action plans and the federal funds supporting their implementation. These successes also build on a strong and growing foundation of science. That's why the National Wildlife Federation was proud to develop this report in collaboration with the American Fisheries Society and The Wildlife Society, the nation's preeminent professional societies for America's leaders in fish and wildlife science, management, and conservation.

Recovering our broad and diverse wildlife species will require a dramatic increase in funding for proactive and collaborative conservation. I had the privilege of serving on a Blue Ribbon Panel, consisting of a diverse group of 28 business and conservation leaders, who worked together for more than a year to look for innovative ways to increase funding for wildlife conservation. The panel ultimately recommended the creation of a dedicated funding stream at a scale commensurate with the challenge of conserving the full breadth of our nation's fish and wildlife. The Panel's recommendations have been incorporated into the recently introduced **Recovering America's Wildlife Act**, which would dedicate \$1.3 billion annually for implementing state-based wildlife action plans. An investment of this magnitude should significantly reduce the number of species in decline, and decrease the number of species requiring protection under the Endangered Species Act.

The **Recovering America's Wildlife Act** offers a once in a generation opportunity to ramp up the nation's conservation efforts in a way that matches the scale of threats to our wildlife heritage. Now is the time to build on the successes of the past to ensure that our hard-fought conservation legacy has a bright future.

Collin O'Mara
President and CEO
National Wildlife Federation



Sandhill crane (Grus canadensis) populations have rebounded thanks to strong wildlife laws and decades of collaborative conservation work by state and federal agencies in partnership with landowners and non-profit organizations. Photo: Marjakk Willis

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*The southeastern United States is the global center of diversity for salamanders, such as this frosted flatwood salamander (*Ambystoma cingulatum*). Although often inconspicuous, salamanders are the most abundant vertebrate animals in many eastern forests.*
Photo: Pierson Hill

Wildlife is central to our identity as a nation and strongly defines our sense of place. The distinctive character of America's regions is closely tied to such emblematic species as salmon in the Pacific Northwest, bison across the Great Plains, and moose in the great north woods, as well as alligators along the Gulf Coast, and road runners in the desert Southwest. Such iconic species, however, represent just a tiny fraction of the nation's overall diversity of life. Indeed, America is blessed with an extraordinary array of plants and animals, and scientists have documented more than 200,000 species across the United States.¹ Ranging from large and charismatic animals to minute and secretive organisms, each represents an essential thread in the fabric of the American landscape.

Although the term "wildlife" can broadly apply to the full array of wild species, both fauna and flora, most people associate the word with vertebrate species, such as birds, mammals, and fish. The United States is home to more than 2,500 native species of vertebrates, including nearly 800 species of birds, more than 400 mammals, about 800 freshwater fishes, almost 300 reptiles, and about 250 species of amphibians.² Some groups of U.S. vertebrates stand out even from a global perspective. For example, more species of salamanders are found in the United States than in any other country on Earth, and the southeastern U.S. is recognized as the global center of diversity for these amphibians. The

AMERICA'S EXTRAORDINARY WILDLIFE LEGACY

United States also harbors an exceptional diversity of freshwater fishes, many of which are similarly clustered in the Southeast. In contrast, mammal diversity is highest in the arid western U.S. with California alone home to nearly 200 species.^{3,4} And while there are more bird species in Texas than any other state, making it a popular bird-watching destination, Hawaii has the most distinctive avifauna. Most of Hawaii's native birds are found no place else on Earth, and are the result of an evolutionary radiation surpassing the famous Galapagos Islands.

America's extraordinary diversity of wildlife extends to its many species of invertebrate animals, which include organisms such as bees, butterflies, beetles, and bivalves. Although many insects and other invertebrates are inconspicuous and poorly known, they are essential to the healthy functioning of natural ecosystems and agricultural productivity. Indeed, Harvard biologist E.O. Wilson has referred to invertebrates as "the little things that run the world."⁵

Certain groups of invertebrates display exceptional levels of diversity in the United States. For example, America has the largest number of freshwater mussels in the world, with nearly 300 species.⁶ And as many fly fishermen know from trying to "match the hatch," there is an extraordinary variety of aquatic insects in American rivers and streams. With more than 600 species of stoneflies,⁷ the United States is the global center of diversity for that insect group, and for several other aquatic invertebrates important for fly fishing, such as caddisflies and mayflies. Native bees, so important for pollinating crops and wild plants alike, are another highly diverse U.S. group of invertebrates with roughly 4,000 species.



Cerulean warbler (Setophaga cerulea), a beautiful bird inhabiting treetops of eastern deciduous forests, is emblematic of America's growing wildlife crisis. Over the past several decades the species has suffered a 74 percent population decline, among the most severe of any migratory songbird. Photo: D. J. McNeil

THE GROWING WILDLIFE CRISIS

Unfortunately, many wildlife species are in serious decline in America despite its remarkable diversity. Although populations of many formerly scarce species, like white-tailed deer, elk, and wild turkey, have been successfully rebuilt over the past several decades, these conservation accomplishments mask a far broader pattern of population declines, especially among species that are neither hunted nor fished. Emblematic of these declines, more than 1,600 U.S. species are now receiving protection under the federal Endangered Species Act, of which 442 are vertebrate animals, 272 are invertebrates, and 947 are plants.⁸ Listings under the Act are not an accurate barometer of the overall conservation status of U.S. species, however, and the number of species of conservation concern is far higher

than what is formally listed as federal threatened and endangered species. Indeed, an assessment of the best-known groups of U.S. plants and animals indicates that as many as one-third of America's species are vulnerable, with one in five imperiled and at high risk of extinction.⁹

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Concern about species extinction is not just hypothetical. More than 150 U.S. species already have gone extinct,¹⁰ representing a permanent loss of the nation's wildlife heritage. Extinct U.S. species include some that previously were common, widespread, and abundant, such as the passenger pigeon and Carolina parakeet (both of which went extinct in 1914). Others, like the Las Vegas leopard frog (last seen in 1942) or Scioto madtom (a fish not observed since 1957), were probably always rare. Documenting extinction is notoriously difficult because "absence of evidence is not evidence of absence." As a result, a determination to classify a species as "presumed extinct" is made only after a considerable time has elapsed and exhaustive searches of suitable habitat carried out. Nearly 500 additional U.S. species have not been seen in recent decades and are regarded as "possibly extinct."¹¹ Taken together, then, roughly 650 U.S. species have already disappeared or are "missing in action."

America's freshwater animals have been particularly hard hit and approximately 40 percent of the nation's freshwater fish species are now rare or imperiled.¹² Similarly, nearly 60 percent of the nation's freshwater mussel species are imperiled or vulnerable, and an additional 10 percent of these globally significant species are already extinct.^{13,14}

These declines extend well beyond species historically considered to be rare, threatened, or endangered. Common birds, like eastern meadowlark and common night-hawk, once abundant and easy to spot, have become increasingly scarce, and fully one-third of North American bird species now are in need

of conservation attention.¹⁵ Similarly, pollinators like bees and butterflies that once filled yards are experiencing pervasive declines. Monarch butterfly populations, for instance, have dwindled by 90 percent over the past two decades. Bats, which play an important role in controlling agricultural pests, have also suffered steep losses over the past twenty years, with 30 percent of North America's bat species showing significant declines in conservation status.¹⁶

Conservationists increasingly are concerned not just about the loss of entire species, but also about sharp drops in the number of individual wild animals. Based on a compilation of population monitoring data from around the world, researchers estimate that approximately half of the world's wild animals have been lost over the past 40 years.¹⁷ These sobering global trends are evident here in the United States as well, as illustrated by declines in amphibian populations. The U.S. Geological Survey has documented that on average populations of U.S. amphibians are disappearing from their known localities at a rate of 4 percent each year, with some of the most threatened species showing annual declines of nearly 12 percent.¹⁸

Without concerted attention, our growing wildlife crisis will almost certainly lead to many more species qualifying for protection under federal and state endangered species laws, or, in the worst cases, joining the growing list of extinct and missing U.S. species. Indeed, state wildlife action plans collectively have identified nearly 12,000 species nationwide that need conservation attention and action.¹⁹

America's aquatic organisms, like these freshwater mussels, exhibit especially high levels of imperilment. Although the United States leads the world in diversity of freshwater mussels, nearly 70 percent of U.S. species are at risk or already extinct. Photo: VA Department of Game and Inland Fisheries



Tricolor blackbird (Agelaius tricolor) is a highly social and gregarious species that breeds in colonies of up to 50,000 birds. Loss of wetland habitat and other factors have contributed to a population decline of more than 80 percent in this California native. Photo: Teddy Llovet

WHAT'S THREATENING AMERICA'S FISH AND WILDLIFE?

The threats to America's fish and wildlife have evolved over time, and a careful understanding of historical, current, and future threats is key to creating an effective response. Currently, the leading threats to wildlife are loss and degradation of habitat, invasive species, disease, and chemical pollution.²⁰ A rapidly changing climate is amplifying the effects of these existing threats and posing new challenges for our native wildlife.

HABITAT LOSS AND DEGRADATION

The American landscape has changed dramatically, with major consequences for wildlife. Nearly a quarter of the lower 48 states is now in agriculture and another six percent of the landscape has been developed for housing and other uses.²¹ More than



White nose syndrome, a fungal disease of bats, is infecting and killing millions of hibernating bats, such as this little brown bat (*Myotis lucifugus*) in New York State. Photo: Ryan Von Linden

half of the nation's wetlands have been lost,²² and by some estimates quality natural habitat remains on only about one-third of the land area in the conterminous U.S.²³ Loss of habitat remains a continuing problem. For example, more than seven million acres of prairie, rangeland, forests, and other natural habitats have been converted to crop production as an unintended consequence of policies promoting the use of food-based fuels in the nation's fuel supply.²⁴ The effect of land cover changes on wildlife can be complex, since some species can thrive even in urban environments, while others are highly sensitive to virtually any human disturbances. Nonetheless, the large-scale conversion of natural lands to human-dominated uses has severely reduced suitable habitat available for many species.

Even lands and waters that remain in natural or semi-natural condition can be highly altered, with profound consequences for wildlife. Longstanding fire suppression policies, for instance, have changed the natural fire cycle in many forests, often degrading their habitat value and increasing the risk of severe "megafires."²⁵ Similarly, most of our nation's rivers have been dammed and are managed in ways that divert water and alter natural hydrologic cycles, to the detriment of fish and other aquatic wildlife. Fragmentation of the nation's landscapes and waterways is an increasingly significant problem, as human developments impede the movement of wildlife to migrate, forage, breed, or seek shelter.

WILDLIFE DISEASES

The emergence of new diseases poses a particularly dire threat to U.S. wildlife. White-nose syndrome, a fungal disease that affects hibernating bats, has killed more than seven million bats in the East and Midwest, and in 2016 was discovered in the western United States.²⁶ White-nose syndrome already has led to listing of the northern long-eared bat under the federal Endangered Species Act. Another fungal disease, chytrid fungus or "Bd," has caused the decline of numerous U.S. frog species,²⁷ while the potential arrival of a related salamander disease ("Bsal"), recently found in Europe, would be catastrophic for the United States' enormous diversity of salamanders.²⁸ Chronic wasting disease is a contagious neurological disease affecting some of America's most iconic large-game species, including mule deer, white-tailed deer, moose, and elk. First noticed in captive deer in the late 1960s, the disease—which is related to mad cow disease and Creutzfeldt-Jakob disease in humans—has now been found in more than 23 states.

INVASIVE SPECIES

Another growing threat is the spread of non-native invasive species. Without natural predators or controls, these non-native pests can flourish unchecked, degrading habitat and competing with or preying on native wildlife. For example, the emerald ash borer, a native of Asia, was first found in the United States in 2002. This beetle already has spread to 30 states, killing hundreds of millions of ash trees and precipitating a major transformation of forests in the East and Upper Midwest. Similarly, non-native cheat grass is leading to the conversion of large swaths of wildlife-rich sagebrush habitat across the Great Basin. Feral hogs also are highly destructive invasives that are degrading wildlife habitat across the South and in California. The nation's aquatic systems have been greatly affected by invasive organisms, such as zebra and quagga mussels, which having wreaked havoc in the Great Lakes are now spreading into many western water bodies. Meanwhile, Asian carp are now in much of the Mississippi River drainage, and poised to enter the Great Lakes with potentially catastrophic consequences for fisheries in those water bodies.



The widespread use of neonicotinoid pesticides poses a growing risk to pollinators, including these native sweat bees. These "systemic" chemicals permeate every part of the plant, making pollen and nectar toxic to bees, butterflies, and other beneficial insects. Photo: Tom Potterfield

POLLUTION

Chemical pollution still represents a threat to fish and wildlife, but the nature of this danger has changed over time. Rachel Carson famously sounded the alarm over the use of the pesticide DDT and related compounds, which causes eggshell thinning in many birds. Banning DDT set the stage for the successful recovery of previously endangered birds, such as bald eagle and brown pelican. Similarly, the nation has made profound progress in reducing many forms of water pollution since the 1960s thanks to aggressive implementation of the Clean Water Act. Nonetheless, nutrient and chemical contamination of waterways

is still a problem, often coming from more diffuse "non-point" sources. And new classes of chemicals and synthetic compounds pose emerging threats to fish and wildlife. As an example, the introduction of neonicotinoid pesticides was intended to provide a safer alternative to some of the pesticide classes that Rachel Carson fought against. Unfortunately, research is revealing that these widely used pesticides are causing mortality and declines among many native insect pollinators, including bees, bumblebees, and butterflies,²⁹ and are even affecting vertebrates such as birds.³⁰

A CHANGING CLIMATE

Numerous scientific studies show that America's wildlife already is being affected by observed changes in climate. Average temperatures across the United States have increased over the last century by nearly 2°F, although there is significant regional variation in this warming.³¹ Alaska, for example, has experienced increases of more than twice the national average, leading to thawing permafrost and other significant ecological changes.³² Sea levels have risen by up to one foot in some regions, leading to wetland losses and saltwater intrusion into upland habitats. And precipitation patterns are changing rapidly, with some regions, such as the Northeast, experiencing dramatic increases in heavy downpours while other regions, like the Southwest, are subject to more prolonged drought conditions. Across the country increased climate variability and extreme weather is becoming the new normal.

These climatic shifts are contributing to the decline of species across the country. Researchers have documented climate-related shifts in species ranges, shortening of breeding seasons, disruptions to the interactions among interdependent species, and changes in habitat availability.³³ As an example, earlier snowmelt in the Yellowstone region is leading to hybridization of prized cut-throat trout with invasive rainbow trout, two species whose breeding previously was separated in time.³⁴ Climate-related impacts already appear to be causing the disappearance or extirpation of local populations in wildlife ranging from mammals and bumblebees to butterflies.³⁵ In the face of these rapid changes, wildlife and fisheries managers are beginning to craft adaptation strategies designed to reduce climate-related risks to vulnerable species and habitats.^{36,37,38}



*As climatic shifts alter the timing of snow melt and river levels, the spawning of native Westslope cutthroat trout (*Oncorhynchus clarki lewisi*) is starting to overlap with that of invasive rainbow trout (*O. mykiss*). Resulting hybridization now threatens the genetic purity of the highly prized sport fish. Photo: Alec Underwood*

INVESTING IN CONSERVATION MAKES A DIFFERENCE

The road to recovery for many species is steep, but the decline of America's wildlife can be stopped—and even reversed. We have done it before with species like the bald eagle, and we can do it again. Although the Endangered Species Act (ESA) is in place to prevent U.S. species from going extinct, more needs to be done to prevent the decline and endangerment of wildlife in the first place. Addressing these declines before ESA listing is warranted not only results in more successful conservation outcomes but saves money and reduces possible impacts to other sectors of society. Evolving threats and insufficient funds, however, have limited the ability of state and federal agencies to halt the decline of many species and adequately address the wildlife crisis.

Unregulated commercial hunting, including to supply wild game to burgeoning urban markets, was among the earliest pressures on U.S. wildlife. This threat was successfully tackled through passage of landmark wildlife protection laws, like the Lacey Act of 1900, and establishment of professional wildlife management agencies to regulate harvest and scientifically manage fish and game populations. Key to the success of what would become known as the North American Model of Wildlife Conservation³⁹ was creation of robust and dedicated funding streams based on a user-pay/user-benefit model, initially through the Pittman-Robertson Act of 1937 and later for sport fish through the Dingell-Johnson Act of 1950. These efforts led to the successful recovery of many of the species on which our hunting and fishing heritage and economy depend. These funds have been used to secure and manage millions of acres of habitat for the benefit of fish and wildlife. By the 1960s, however, it became increasingly clear that many species, especially those not the focus of hunting and fishing, were seriously declining and at risk of disappearing.



*Once on the verge of extinction in the continental United States, bald eagles (*Haliaeetus leucocephalus*) have made a dramatic recovery thanks to a ban on the pesticide DDT and major investments in eagle protection, habitat conservation, and reintroductions. Photo: FWS*

With passage of the Endangered Species Preservation Act of 1966, and later the Endangered Species Act of 1973, the nation began a concerted effort to address the important task of working to prevent species of all types from becoming extinct. The ESA has been extremely successful at doing just that: 98 percent of species that have received protection under the Act continue to survive, and scientists estimate that the Act has directly prevented the extinction of more than 200 species.⁴⁰ Yet despite the recovery of a few iconic wildlife species—from peregrine falcon and American alligator to Steller sea lion—limited funding has hampered overall recovery efforts. Researchers estimate that total spending over the past 15 years has covered only about one-third of species' recovery needs. Furthermore, the amounts spent on recovery of individual species vary enormously. Just five percent of listed species—mostly salmon and sturgeon—receive more than 80 percent of recovery funding, while 80 percent of listed species receive just

five percent of the funding.⁴¹ For listed species managed solely by the U.S. Fish and Wildlife Service, average annual expenditures totaled just \$2,686 per species!⁴²

During the 1970s and 1980s, the need for additional wildlife funding became increasingly apparent. While game species received the majority of funds derived from hunting and fishing license dollars and federal excise taxes on related equipment, and endangered species received at least limited federal recovery funds, the majority of wildlife species had no stable or consistent funding. Various states tried different approaches to fill that gap, ranging from voluntary state tax check-off programs and sale of specialty license plates, to allocation of lottery funds and passage of sales or real estate transfer taxes for conservation purposes. These creative efforts benefited many species, but the amount of money raised from these piecemeal sources fell well short of the need. To bolster these individual state efforts, in the 1990s more than 3,000 businesses

and organizations formed the Teaming with Wildlife coalition to urge the U.S. Congress to provide additional federal funds to support state-based efforts to prevent wildlife from becoming endangered.

To help fill this disparity in funding, in 2000 Congress created the State and Tribal Wildlife Grants program. This program is intended to serve as the nation's core effort to prevent wildlife species from becoming so rare and endangered that they require costlier "emergency room" conservation and recovery efforts. Since the program was created, an average of about \$60 million dollars has been provided annually through this program, distributed across all states and U.S. territories. This funding has spurred increased attention to many previously neglected wildlife species. Nevertheless, \$60 million dollars a year falls far short of the need given the thousands of species identified by states and territories as being in need of urgent conservation attention. Even with these limited funds, states have demonstrated that by strategically targeting conservation and engaging in private and public partnerships, wildlife can be put on a path to recovery before they reach the point of requiring protection under the Endangered Species Act.

This experience is consistent with a growing body of research demonstrating that when we focus on and invest in collaborative conservation we can make a difference. For instance, a global review of the status of vertebrate animals found that targeted and strategic conservation actions have been successful in reducing rates of species declines.⁴³ Similarly, a study looking at conservation investments made by countries around the world documented that those investments reduced expected declines in biodiversity by nearly a third.⁴⁴ By dramatically ramping up investments in proactive state-based conservation, the United States can not only reduce ongoing species declines, and the need for future endangered species listings, but actually recover and conserve America's extraordinary wildlife heritage for future generations.



Pronghorn (Antilocapra americana) are the fastest North American land mammal, but their speed was no match for 19th century market hunters. Recovery of this uniquely American animal was made possible by enacting hunting regulations and conserving habitat. Maintaining migratory corridors across an increasingly fragmented landscape is a 21st century challenge for conserving the species. Photo: B.G. Smith/Getty

STATE WILDLIFE ACTION PLANS: BLUEPRINTS FOR CONSERVATION

In establishing the State and Tribal Wildlife Grants Program in 2000, Congress mandated that state fish and wildlife agencies develop State Wildlife Action Plans to guide the expenditure of these funds. These plans are intended to set clear priorities for conservation by identifying those species in greatest need of attention, the habitats on which they depend, and the conservation actions necessary to sustain and restore their populations. Wildlife conservation depends on strong collaboration and partnership, particularly between state and federal fish and wildlife agencies. Although development of these plans is led by state wildlife agencies, they are crafted in coordination with a wide array of public and private partners and intended to reflect a comprehensive and shared vision for wildlife conservation in the state. By laying out such a vision for sustaining fish and wildlife in every state and territory, wildlife action plans collectively offer a national blueprint for sustaining and recovering our fish and wildlife.

The first generation of plans were completed in 2005, and by 2015 all states had revised and updated the original versions. Each plan is required to address eight common elements, but the states were given wide latitude to use methods and approaches that conform to each state's individual needs and capacities, and to allow for innovation.⁴⁵ As part of the planning process, experts assess available scientific information about the distribution, abundance, and trends for the species found within their states. These assessments inform the development of state-based lists of "species of greatest conservation need" (SGCN), which in turn are eligible for funding under the federal grants program. In the most recent (2015) plans, approximately 12,000



State Wildlife Action Plans, like this plan from Nebraska, have been crafted by all U.S. states and territories and represent a shared vision for conservation action and investment.

species and subspecies were identified by one or more states as needing conservation attention.⁴⁶ Encompassing terrestrial, freshwater, and marine species, this includes approximately 2,500 vertebrate species and 5,000 invertebrates that range from familiar species, like mule deer, to less well-known ones like the regal fritillary butterfly. About 4,000 plant species are also included, but because flora is treated differently than fauna under this federal grants program, just 15 states incorporated plants in their priority species lists.

State Wildlife Action Plans have proven to be an effective means for states and their partners to target science-based conservation actions on behalf of the nation's declining wildlife resources. Coupled with investments from other state, federal, and private initiatives, funding from the State and Tribal Wildlife Grants Program has brightened the prospects for many species of concern.

Wildlife conservation depends on strong collaboration and partnership, particularly between state and federal fish and wildlife agencies.

PUTTING CONSERVATION PLANS INTO ACTION



Fisher (Pekania pennanti), a forest-dwelling member of the weasel family, was extirpated from Washington State by the mid-1900s. Reintroduction of fisher to the state, identified as a priority in its wildlife action plan, began in 2008 thanks to a broad collaboration among state, federal, tribal, and non-profit partners. Photo: Paul Bunnick

Wildlife action plans have provided states with a greater understanding of the condition and conservation needs for the species in their states, along with a clear path toward tackling those needs. Conservation in the 21st century is a complex endeavor that must consider not only wildlife biology, but a host of social and economic factors that can either hinder or enhance the recovery of species and habitats. To that end, wildlife action plans are designed to promote the use of effective conservation tools and actions for stabilizing and recovering targeted species and populations. These actions can include species management techniques, such as reintroducing species to areas

where they have been lost, habitat restoration and enhancement practices, as well as research and inventory to improve understanding of species condition, distribution, and needs. These actions can also involve regional collaborations that promote shared priorities and help ensure that the needs of wildlife are taken into account in both conservation and development decisions.

Over the past decade there has been considerable effort in putting these plans into action. As a result, states and their partners have had many conservation successes that simply would not have been possible without the shared vision, targeted actions, and funding made possible

through this program. The examples that follow spotlight how conservation funding has allowed states and their partners to reverse the decline of species in need. As these profiles of conservation action make clear, effectively deploying the wildlife conservation toolbox—with dependable funding—can make a difference for our nation's wildlife.

"There is no bigger thrill than watching fisher return to Washington State after such a long absence. Their reintroduction is a prime example of an innovative public-private partnership to restore and conserve our region's imperiled wildlife!"

—Dave Werntz, Conservation Northwest

RECOVERING SPECIES

At the heart of state wildlife action plans are strategies to stabilize and recover declining species, employing a wide array of species management techniques. This not only includes rebuilding populations in areas where they have declined, but also reintroducing valued species to areas where they previously existed but were lost.

The No Longer Missing Lynx

By the late 1970s, not a single Canada lynx—the elusive tufted-eared cat of the high country—was found in Colorado. This had larger implications for Colorado's wildlife, as the solitary cats play an important ecological role, balancing the populations of snowshoe hares, voles and other smaller mammals.

In 1999, Colorado Parks and Wildlife began to reintroduce lynx into the San Juan Mountains in the southwestern part of the state.¹⁷ Over time, the lynx established breeding populations in the San Juan Mountains and expanded their range into Summit County and other parts of Colorado's high country. Based on surveys, the state wildlife agency declared the lynx reintroduction effort a success in 2010.¹⁸ An estimated 150-250 of the cats now roam Colorado's backcountry.

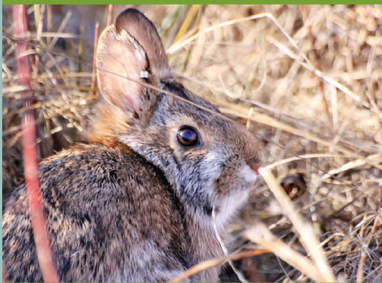


Canada lynx (Lynx canadensis) has been successfully reintroduced to its high-country habitat in the state of Colorado. Photo: Eric Kilby

Canada Lynx has also benefited from conservation efforts in other states, including the permanent protection of private working forests in Maine, and lynx-friendly conservation provisions in federal forest management areas. Growth of lynx populations has been promising enough that in January 2018 the U.S. Fish and Wildlife Service announced it was considering the delisting of Canada lynx as a threatened species. Despite these positive signs, however, lynx populations remain far lower than historical levels and the species continues to face an uncertain future as climate change affects availability of the snow pack it depends on.

Bringing Back the Cottontail

While people in the northeast see rabbits often, typically they are seeing an introduced species, the eastern cottontail. The northeast's native rabbit, the New England cottontail, is about 20 percent smaller, and, unlike its more open-country cousin, requires dense shrubs and thickets of young trees.



New England cottontail (Sylvilagus transitionalis) is making a recovery in the Northeast thanks to a multi-state collaboration to restore its young forest habitat, and through the reintroduction of captive-bred rabbits. Photo: NH Fish and Game

Over the last century, the young forests that New England cottontails prefer have dwindled, either lost to development or maturing into older, less-dense forests. While regrowth and maturation of forests benefit some species, they offer little for the New England cottontail. As a result, in recent years, states, federal agencies, tribes, and non-profit organizations have worked together to re-create the mix of mature forests, open meadows, and shrubby fields favored by New England cottontails.⁴⁹

With new habitat available, the partners have turned to reintroducing captive-bred rabbits. The Roger Williams Park Zoo in Providence, Rhode Island has been breeding New England cottontails in captivity since 2010, and in 2015 was joined by the Queens Zoo in New York. Together, the partners have successfully released over 200 captive-bred cottontails in designated focus areas. These collaborative conservation efforts are paying dividends—in September 2015, the U.S. Fish and Wildlife Service removed the New England cottontail as a candidate for listing under the Endangered Species Act.⁵⁰

Reintroducing Alaska's Wood Bison

The wood bison—a subspecies of the American bison—is the largest land animal in North America and was once a common resident of the vast boreal forests in Alaska and much of northwestern Canada. By the early 1900s, however, unregulated hunting and habitat changes had extirpated the wood bison in Alaska—and just a few small herds remained in Canada.⁵¹ The Canadian federal government spent decades recovering the species from the brink of extinction.



Wood bison (*Bison bison athabascæ*), a distinct northern subspecies, was extirpated from Alaska by the early 1900s. In 2015, these magnificent animals were reintroduced to the southwestern portion of the state and are now thriving. Photo: Michelle Holihan/Getty

In 2008, Canadian wildlife authorities agreed to transfer a small population of wood bison to the United States for reintroduction in Alaska. The Alaska Department of Fish and Game used State Wildlife Grant funding to feed and house these bison until they could legally be released. In 2015,

"Today, after many years of effort and thanks to the dedication of countless individuals, Alaska is finally home to a population of wood bison once again. With a little luck, they will prosper and rejoin the ecosystem of Alaska and the culture of the people who live here."

—Tom Seaton, Alaska Department of Fish & Game

the agency was finally able to release 130 wood bison into the wild along the Innoko River near the community of Shageluk in Southwest Alaska. That same year, 16 calves were born, the first wild-born wood bison on America soil in over a hundred years. Today, this herd appears to be thriving in its new Alaskan home, with the members of the herd appearing healthy and breeding well.²³

Restoring Riffleshells, Lilliputs, and Dartersnappers

Native mussels are the mini-workhorses of freshwater ecosystems, helping to clean our river systems and provide an important food source for many other species—but freshwater mussels are in deep trouble. Dams, pollution and



*Biologists releasing captive-reared golden riffleshell mussels (*Epioblasma florentina aureola*) in Indian Creek of southeast Virginia. This 2017 release comes nearly two decades after this extraordinarily rare species was wiped out from the nearby Clinch River by a chemical spill. Photo: Gary Peoples/FWS*

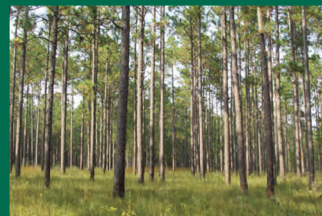
invasive species are taking their toll and overall, 70 percent of North America's freshwater mussels are imperiled or already extinct.³¹ States in the Upper Tennessee River Basin have been working together with a variety of partners to turn the tide. The Alabama Department of Conservation and Natural Resources and Tennessee Wildlife Resources Agency, working closely with the Tennessee Valley Authority, U.S. Fish and Wildlife Service and a number of non-profit organizations, has propagated pale lilliput mussels and Duck River dartersnapper mussels for reintroduction into the Duck River and Bear Creek. Similarly, the Virginia Department of Game and Inland Fisheries has raised and released golden riffleshell mussels in the Clinch River, a national hotspot of aquatic diversity. Combined with other propagation and release programs across the Midwest and Southeast, states and their partners are working to restore our globally significant native freshwater mussel populations.

RESTORING AND ENHANCING HABITAT

Fish and wildlife depend on healthy habitat to survive. With native grasslands, forests and wetlands being lost to development and other threats, restoring and enhancing habitat is among the most important and effective conservation strategies.

Restoring the Longleaf Ecosystem

Longleaf pine forests once dominated the southeastern United States. These pine woodlands and savannas are noted for their open canopy and highly diverse understories of grasses and herbs. This high value timber tree was lost from most of the Southeast due to logging, and conversion to agriculture, plantation forestry, other forest types, and urban development. As this biologically rich habitat declined, so too did many of the native plant and animal species that use



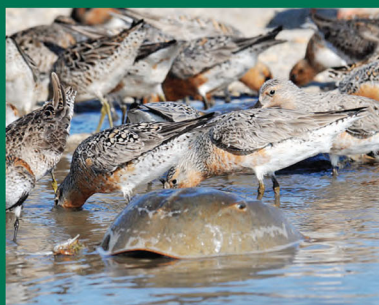
Longleaf pine forests are among the most biodiverse habitat types in the nation and characterized by a particularly rich and open understory. Collaborative efforts are underway to restore this uniquely southeastern ecosystem, to the benefit of the many wildlife species that depend on this system. Photo: Randy Browning/FWS

these open pine forests. Declining or endangered species associated with these forests include red-cockaded woodpecker, Bachman's sparrow, indigo snake, and gopher tortoise.

Stands of longleaf rely on periodic, low intensity fires to keep their canopy open and maintain a variety of grasses and forbs in the understory. Well planned prescribed fire can mimic the natural processes that maintain southern pine forests and savannas. Longleaf restoration has been a major collaborative effort among southeastern states, private landowners, and federal agencies, and these partners have identified priority areas for restoration across the ecosystem's former range.⁵⁴ These collaborations have included some unlikely conservation allies, including the Department of Defense, whose installations contain some of the best remaining longleaf stands, and whose managers have become expert at combining longleaf restoration with maintaining military readiness.⁵⁵ Partners across the southeast have restored or protected hundreds of thousands of acres of longleaf woodland and savanna, efforts that are helping red-cockaded woodpecker and many other species that rely on these stately southern pines.

"I have brought hundreds of people to the shores of the Delaware Bay to view this incredible migratory bird phenomenon. Witnessing natural spectacles around us gives people personal hope and meaning in a sometimes depressing and dangerous world."

—Joe Sebastiani, Delaware Nature Society



Delaware Bay is a critical stop for migrating red knots (*Calidris canutus rufa*), which consume massive amounts of horseshoe crab eggs to fuel their journey to arctic breeding grounds. In the aftermath of Hurricane Sandy, states and their partners quickly mobilized to restore crab spawning habitats along the bayshore. Photo: Greg Breese/RWS

Restore the Shore

The Delaware Bay's sandy beaches serve as a critical stopping point for migrating shorebirds that feed on the eggs of horseshoe crabs every spring. Unfortunately, coastal erosion has resulted in the significant loss of the sandy beach habitat where horseshoe crabs spawn. About 70 percent of spawning habitat was destroyed by Superstorm Sandy in 2012 when storm surge stripped away sand and deposited rubble. After the storm, very little sandy shoreline remained for horseshoe crabs to spawn and the rubble created obstacles that trapped crabs or otherwise prevented them from reaching spawning areas above the high tide line. The potential impact was catastrophic to horseshoe crabs—and to the shorebirds that depend on crab eggs for the nourishment they need to continue on to their Arctic nesting grounds.



Well-designed research and monitoring efforts are key to understanding the changing condition and conservation needs of our fish and wildlife species, such as this green sea turtle (Chelonia mydas) in Florida. Photo: Andy Wraithmell/FWC

In response to this crisis, states around the Delaware Bay sprang into action. In New Jersey, a coalition of conservation organizations and government agencies quickly managed to raise over \$1.4 million to restore the beaches. Together the partners removed over 80 tons of debris and restored vital beach habitat by depositing 40,000 tons of sand before the next spawning season.⁵⁶ In Delaware, the state agency worked with conservation partners to secure more than \$5 million to restore important beach habitat for spawning crabs, as well as coastal wetland habitats used by shorebirds for safe roosting between feeding bouts. These rapid actions ensured that when red knots, ruddy turnstones and other shorebirds reached the Delaware Bay the next spring, they found plenty of eggs around the bay to eat and safe places to rest at this critical migratory stopover. Yet, much more restoration and protection work needs to be done to ensure the long-term resilience of Delaware Bay habitats that support migratory shorebirds and horseshoe crabs.

IMPROVING THE SCIENTIFIC BASIS FOR CONSERVATION ACTIONS

Stabilizing and recovering declining wildlife species depends on a firm understanding of how the species is faring, where they are found, the reasons for its declines, and opportunities for its conservation. Scientific research and inventory efforts are essential for crafting and deploying effective conservation actions. Additionally, inventory and monitoring efforts often reveal that little-known species may be more abundant and secure than previously thought, resulting in the need for fewer endangered species listings.

Protecting Relicts of the Prehistoric Past

With their armor-like shell, turtles might seem capable of protecting themselves from the challenges thrown at them. But due to their slow rate of maturity, collection for the pet trade, and increasingly fragmented habitats, turtles are in decline across much of the country. The northeastern states have been working together to conduct surveys and better understand the status, distribution, and conservation needs of turtles—including Blanding's, spotted, and wood turtles, and northern diamondback terrapin—to keep them from being added to the endangered species list. With the results of these surveys, states across the northeast have been in a better position to identify priority areas for turtle conservation and strategically target limited conservation dollars. Because much of the habitat needed for nesting

is on private lands, states are working with landowners to encourage voluntary stewardship using state and federal cost-share programs to pay for habitat restoration.

Another risk to turtles is ending up as road kill, since they often must cross roads between their wetland homes and nesting areas. By tracking the detailed movements of individual turtles, scientists can identify when and where the risk from road crossings are the highest. Armed with this detailed spatial data, it is possible to target public outreach efforts by making residents and landowners aware of their movement patterns, and in places even install seasonal turtle crossing signs or road access restrictions. With increasingly accurate scientific information, state agencies and their partners are thus able to help ensure that these relicts from our prehistoric past continue to survive and thrive.

Researchers in the Northeast are exploring the genetic variation of Blanding's turtle (Emydoidea blandingii) populations across the region. Such insights will allow state agencies and their partners to better design conservation strategies for this species of regional concern.
Photo: Robert Scholl/Alamy



Keeping the Mountains on the Prairies

Mountain plovers make their home in the shortgrass prairies, nesting in open fields and pastures. These birds were once a candidate for listing under the Endangered Species Act and in 2000 there were only two documented breeding pairs in the panhandle of Nebraska. The state began intensive surveys using federal State Wildlife Grant funding and soon found that there were 200-400 nesting pairs in Nebraska. Similar status assessments in Colorado, Wyoming and Montana revealed more robust populations than previously thought. These discoveries helped to keep the mountain plover off the endangered species list in 2002, and the various states have continued work to conserve the species. Much of the mountain plover's nesting habitat is on private property and states and their partners have actively engaged ranchers in the conservation efforts. Landowners have become engaged in monitoring efforts as well as implementing new management practices to avoid destroying plover nests during cultivation. In celebration of the bird, the town of Karval, Colorado even hosts an annual Mountain Plover Festival where local ranchers host birdwatchers seeking to spot this ghost of the prairie.

Help for Hellbenders

The eastern hellbender is the largest fully-aquatic salamander in the United States, averaging about 15 inches long. Hellbenders rely on clean, clear rivers and streams and they are highly sensitive to fungal infections. In addition, these amphibians nest under rocks and much of their nesting habitat has been reduced through sedimentation from unsustainable land use practices. As a result, their cousin the Ozark hellbender is federally listed as an endangered species, and the eastern hellbender population is feared to also be in steep decline.

States and their partners are working together to halt that decline and conserve this unique salamander. To better assess the status of the hellbender population, researchers are conducting stream surveys, including through deploying high tech methods, such as environmental (or "e") DNA assays, for detecting the species in streams where they might be found. With this more precise distributional and status information, fish and wildlife managers will be able to implement targeted actions including stream bank restoration, conservation of key land parcels, and species reintroductions.



*New survey techniques that detect DNA traces in water are allowing researchers to dramatically increase their understanding of where populations of secretive species like the eastern hellbender (*Cryptobranchus alleganiensis*) still exist and how to help them. Photo: Brian Grutwicke*

PROMOTING REGIONAL COLLABORATIONS

Wildlife do not respect political boundaries, and to be successful conservation should be coordinated across state boundaries. State wildlife agencies are engaged in a number of regional collaborations designed to identify and act on shared conservation responsibilities.

Saving the Brook Trout

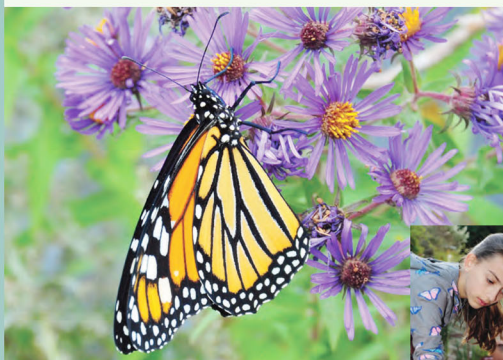
Brook trout are the only native trout inhabiting most eastern states, and are highly prized by anglers. So central are these fish to the culture of many places across this region that brook trout have been adopted by multiple states—including Virginia, New Hampshire, and Michigan—as the official state fish. Brook trout depend on cold, clear streams and are indicators of clean water and healthy aquatic systems. Unfortunately, these trout have been lost from much of their historic range due to a lethal combination of threats—urbanization, agriculture, mining, and competition with non-native species—stresses to which we can now add rapidly warming waters. Researchers estimate that across the fish's 17-state eastern range, wild brook trout remain in just 22 percent of the watersheds where they previously existed, and healthy trout populations exist in less than 10 percent of historic drainages.^{57,58}

A broad conservation partnership has emerged, however, to fight for the continued survival of this revered fish and to restore fishable populations. From Georgia to Maine, the Eastern Brook Trout Joint Venture is promoting a broad, cross-state



Eastern brook trout (Salvelinus fontinalis) are the focus of a 17-state regional conservation effort designed to sustain the fish in the face of multiple threats, including warming waters, and to restore fishable populations where possible. Photo: J. and K. Hollingsworth/FWS

collaboration designed to protect and restore brook trout and their diminishing habitat. In partnership with 17 state fishery agencies, the joint venture has assessed the status of brook trout across more than 11,000 drainages, and has developed a comprehensive conservation strategy that identifies regionally appropriate goals for protecting and restoring the species.⁵⁹ Regional strategies range from reducing habitat fragmentation and mitigating acid mine drainage to reducing competition from invasive species. Such conservation practices as restoring streamside buffers, done in collaboration with willing and engaged landowners, are intended to create habitat, provide shade, and protect water quality. Other practices, like replacing antiquated culverts and reconnecting habitat, are being carried out in coordination with local and state governments to improve the flood resilience of roadways and enhance fish habitat. This regional effort illustrates the power of collaborative planning and action, and is leading to better future for the brook trout.



In response to dramatic declines in monarch butterfly (Danaus plexippus) populations, the 16-state Mid-America Monarch Conservation Strategy aims to plant more than 1.3 billion milkweed stems over the next two decades. Photo: Jason and Kimberlee Leroux

"I've always liked butterflies, so when I read they were in trouble, I wanted to do something to help."

—Genevieve Leroux, 12-year-old butterfly gardener



Genevieve Leroux sowing milkweed seeds to plant and give away. Photo: Jason Leroux

Monarchs Matter

Children and adults alike delight in the flight of monarch butterflies, and their long distance, multi-generational migration is a wonder of the animal world. The eastern population of monarchs breed in the United States and Canada with later generations migrating south to overwinter in a small patch of coniferous forests in the mountains of Mexico. Unfortunately, the conversion of native prairies to agricultural crops along with increased use of herbicides and pesticides has provided a one-two punch, and the species is reeling. Populations of the monarch butterfly east of the Rockies have declined by an estimated 90 percent in the last two decades.⁴⁰ In 2014, the U.S. Fish and Wildlife Service was petitioned to protect the monarch butterfly under the Endangered Species Act and a final listing decision is anticipated in June 2019.

To reverse these declines, a broad array of state, federal, and private partners are collaborating to restore habitat and reduce mortality. State fish

and wildlife agencies, the Monarch Joint Venture, the U.S. Fish and Wildlife Service, private conservation organizations and other partners have collaboratively developed the Mid-America Monarch Conservation Strategy.⁴¹ The 16-state plan maps out specific habitat protection, restoration, and enhancement needs, together with expanded population monitoring.

A key goal is to increase native milkweed species—the plants monarchs depend upon to lay their eggs—by 1.3 billion additional stems over the next 20 years. In addition, partners are working to expand nectar sources by increasing floral diversity throughout the region, and to increase awareness of best practices for insecticide use. With coordinated action—from backyard gardens to continental scale corridors—restoring the monarch presents an opportunity to showcase how coordinated conservation can make a difference for even the smallest of species.

Let's CHAT: Crucial Habitat Assessment Tool

Western states, at the direction of their governors, developed a mapping tool to provide greater certainty and predictability to development and infrastructure planning efforts. The Crucial Habitat Assessment Tool (CHAT) identifies the overlaps between important wildlife habitat and areas identified for possible development.⁶² Most states used their State Wildlife Action Plan's Species of Greatest Conservation Need as the foundation for species

included in CHAT. States agreed to common definitions of crucial wildlife habitat and corridors and issued guidelines to help each state prioritize habitat within its boundaries to meet its specific conservation objectives. Managed by the Western Association of Fish and Wildlife Agencies, this regional tool is designed to reduce conflicts and surprises for businesses while ensuring wildlife values are better incorporated into land use planning.

By making information on the location of sensitive wildlife areas easily accessible, the Crucial Habitat Assessment Tool ensures that the needs of mule deer (Odocoileus hemionus) and other western species can be considered in land use decisions. Photo: Jeremy Maestas/NRCS



"Release of the Western Governors' CHAT shows the Governors' commitment to responsible development of Western resources, while at the same time protecting the environment"

—John Hickenlooper, Colorado Governor and WGA chair



Reversing America's wildlife crisis will require a dramatic increase in funding for proactive conservation. The Recovering America's Wildlife Act offers a once-in-a-generation opportunity to conserve our nation's extraordinary diversity of wild species, such as these black skimmers (Rynchops niger) along the Gulf Coast. Photo: Clarence Holmes/Alamy

RECOVERING AMERICA'S WILDLIFE: THE NEED FOR DEDICATED FUNDING

Despite the dire condition of America's wildlife, the research is clear that collaborative conservation actions can make a difference, and can ensure that the nation's species not only survive but thrive. These successes depend on a variety of factors, including clear priorities, good science, strong partnerships, and, perhaps most importantly, adequate resources and funding. Fortunately, state wildlife action plans provide a solid path forward for setting strategic

priorities for conservation action. The development of increasingly sophisticated scientific approaches and the application of advanced technology is dramatically improving our understanding of species and their habitats, and enabling truly 21st century approaches to wildlife management. And broad-scale partnerships and collaborations, often at regional or landscape scales, are improving the delivery and effectiveness of conservation and restoration across public and private lands and waters.

Yet while we now have a firm grasp of the scale of the problem as well as plans in place to turn the situation around, the amount of funds currently available for wildlife conservation are only capable of meeting a small fraction of the need. Annual appropriations for the State and Tribal Wildlife Grant program, the nation's primary program for keeping species from becoming endangered, have fluctuated between \$50 and \$100 million over the life of the program. In fiscal year 2017, \$52 million was allocated, meaning that most states received less than \$1 million to implement their State Wildlife Action Plans, a sum that falls far short of the funding needed. Indeed, estimates are that current funding levels for this program are less than five percent of what is necessary to conserve the full complement of species identified by the states as being "of greatest conservation need."

"Conservation means balancing the sustainability of fish and wildlife with the many needs of humans. It is our responsibility to lead the way so our state fish and wildlife agencies have the resources they need to conserve species and manage our natural resources—the future of our industry and the outdoor sports we love depend on this investment."

—Johnny Morris, founder of Bass Pro Shops

There is a clear gap between what states collectively have identified as being necessary to put America's fish and wildlife on the path to recovery, and what they currently are able to carry out. The result is that states are forced to target a limited set of species in need, leaving many others unattended. Unfortunately, without proactive attention many of the species falling through this funding gap may end up declining to the point where they become eligible for listing as threatened or endangered. To more fully execute these state-based conservation blueprints, and avoid or reduce the need for such listings, will require a dramatic increase in funding for proactive conservation. The Association of Fish and Wildlife Agencies estimates it would cost approximately \$1.3 billion annually to implement three-quarters of every state's wildlife action plan.



Wildlife watching, such as at this shorebird festival near Cordoba, Alaska, is a major contributor to the U.S. economy. Outdoor recreation overall generates \$887 billion annually, supporting 7.6 million American jobs, and many of those outdoor experiences depend on healthy fish and wildlife populations. Photo: Jim Kohl/Alaska Stock

RECOVERING AMERICA'S WILDLIFE ACT

In 2016, the Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources announced their recommendations on providing secure funding for all our nation's fish and wildlife.⁶³ This panel of 26 leaders from outdoor recreation retailers and manufacturers, the energy industry, sportsmen's groups, and other conservation organizations spent two years assessing many potential funding options. In the end, the group determined that using existing federal revenues from non-renewable natural resources, such as oil and gas, was a pragmatic and logical solution that would benefit the economy and our nation's fish and wildlife heritage.

The Blue Ribbon Panel recommendations have been encompassed in federal legislation—the Recovering America's Wildlife Act—that would dedicate \$1.3 billion annually for state fish and wildlife agencies to implement their wildlife action plans. This allocation would come from existing revenues the government receives from the leasing of energy and mineral resources on federal lands and waters. This amount of funding is just a fraction of total leasing revenues, and would leverage additional funds from the required 25 percent state match. This should significantly reduce the number of species in decline, and decrease the number of species that may require protection under the Endangered Species Act.

ENSURING THE FUTURE OF OUR FISH AND WILDLIFE

Recovering and conserving the wealth of America's fish and wildlife will be no easy task. Halting and reversing the current trend will require significant investment in widespread on-the-ground efforts by state and federal agencies along with local and private partners. But it can be done.

Fish and wildlife conservation in the United States began in earnest more than a century ago when hunters, anglers and other conservationists came together to restore decimated game populations, but it has grown to encompass so much more than that—and it is time to plan for science-based wildlife management and conservation for the next century. The National Wildlife Federation, The American Fisheries Society, and The Wildlife Society believe in a 21st century model of science-based wildlife management and conservation. One that follows the blueprints developed by state fish and wildlife agencies to recover all wildlife, from mammals, fish, and birds to salamanders and monarch butterflies. The **Recovering America's Wildlife Act** offers a once in a generation opportunity to ramp up the nation's conservation efforts to match the scale of the threats to our wildlife heritage. Now is the time to build on the successes of the past to ensure that our hard-fought conservation legacy has a bright future.



Members of the Blue Ribbon Panel present their recommendations, which call for dedicating an additional \$1.3 billion annually to enhance wildlife conservation efforts across the nation. Photo: Anne Bolen/NWFF



Abundant and accessible fish and wildlife are key to providing opportunities to connect kids with nature, such as this father and son fly fishing along Oregon's Deschutes River. Investing in the future of wildlife in America is, in turn, an investment in the next generation of conservation-minded citizens. Photo: Kevin Schafer/Alamy

"For me, like many children, Oregon's coastal cutthroat trout was our 'gateway drug' to sea-running salmon and trout—it was a catchable and admirable prize, but still required a lot of effort. The fishery closed in the mid-1990s, but thankfully has re-opened with limited harvest. If we lose those species most accessible to beginner enthusiasts, we lose the next generation of conservationists."

—Bob Rees, Association of Northwest Steelheaders

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Dramatically increasing investments in conservation will benefit the full array of America's wildlife, including invertebrates such as this jewel-like seaside dragonlet (*Erythrodiplox berenice*). Photo: Brian E. Kushner/Getty



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Northern bobwhite quail (*Colinus virginianus*). Photo: Steve Maslowski/USFWS

"My love of the outdoors stems from early morning walks into the woods with my dad as we went to hunt. As I grew older, my grandfather and dad would talk for hours about that prince of game birds, the bobwhite quail. But even in the 70s the call of the wild quail grew more and more rare. They're still out there, but oh so few. It's one of the reasons I work in conservation—I want my grandkids to know the thrill of a bobwhite call at evening time...and I selfishly want that thrill again myself."

—Mike Worley, Georgia Wildlife Federation



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Scientists Support for Dedicated At-Risk Species Funding

The undersigned natural resource scientists and managers working in partnership with state and tribal fish and wildlife agencies stand in support of dedicated funding for the conservation of America's at-risk fish and wildlife. We urge Congress to take up measures that work towards this goal, including **the Recovering America's Wildlife Act**.

America harbors a remarkable array of fish and wildlife species, many of which face increased risk of extinction due to threats such as habitat alteration, invasive species, disease, and other problems exacerbated by the impacts of a changing climate. Over one third of these species are in need of immediate conservation action from these human-induced threats, including up to 40 percent of freshwater fish species, 42 percent of amphibian species, and 18 percent of bat species. On a global scale, a recent United Nations report detailed over 1 million species at risk of extinction, with approximately 680 vertebrate species already having gone extinct since the 1500s.

State fish and wildlife agencies operating on the front lines of this crisis have spent the past several years working to identify at-risk species and define appropriate conservation strategies to address their declines through the creation of State Wildlife Action Plans. Unfortunately, since first mandated by Congress nearly two decades ago, State Wildlife Action Plans have remained chronically underfunded. Today, nearly 12,000 species are in need of urgent action in order to avoid costly scenarios such as Endangered Species Act listing.

Sufficient, dedicated funding for Wildlife Action Plans would provide states and tribes with the resources and certainty needed to plan long-term conservation and monitoring. This problem is exacerbated in tribal agencies, where tribal professionals have no reliable funding mechanism to work with partners on at-risk species conservation or the creation of action plans.

The passage of the Recovering America's Wildlife Act would dramatically change this dynamic by providing state and tribal agencies with the funding needed to promote voluntary and cost-effective on-the-ground conservation work. By providing states, tribes and partner biologists funds to conserve these species today, we can avoid Endangered Species Act listings tomorrow.

Sincerely,

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 Kim Tisdale - Fisheries Biologist Supervisor - Nevada Department of Wildlife
 Matt Maples - Wildlife Staff Specialist - Nevada Department of Wildlife
 Joseph Graham Barnes - Wildlife Staff Specialist - Nevada Department of Wildlife
 Daniel Thomas Huser - Forestry/Wildfire Representative of Nevada Sagebrush Ecosystem
 Technical Team - Nevada Division of Forestry
 Carl Lackey - Game biologist - Nevada Dept of Wildlife
 Wayne Bull - Wildlife Area Technician 3 - Nevada Department of Wildlife
 Jessica Heitt - Wildlife Educator - Nevada Department of Wildlife

New Hampshire

Amy Villamagna - Associate Professor - Plymouth State University
 Brett Amy Thelen - Science Director - Harris Center for Conservation Education
 Carol R Foss - Senior Advisor for Science and Policy - New Hampshire Audubon
 Catherine Callahan - GIS Coordinator - TWS Member
 Christian J. Martin - Senior Conservation Biologist - New Hampshire Audubon
 Jaclyn Comeau - Wildlife Scientist II - Vermont Fish and Wildlife Department
 Jared Lamy - Graduate Student - Plymouth State University
 John A. Litvaitis - Emeritus Professor of Wildlife Ecology - University of New Hampshire
 John Kanter - Senior Wildlife Biologist - National Wildlife Federation
 Rebecca Suomala – Biologist – New Hampshire Audubon
 Scott R Decker - Inland Fisheries Program Supervisor - American Fisheries Society
 Rick Van de Poll - Principal, Ecosystem Management Consultants - NH Wildlife Coalition
 Weldon Bosworth Ph.D. - NH Wildlife Coalition
 Christine Schadler - Co-Founder - New Hampshire Wildlife Coalition

New Jersey

Allison Shaw - GIS and Data Manager
 Jena Moon - Zone Biologist – US Fish and Wildlife Service
 Juan Guerra - Senior Horticulturist - Municipality
 Kathleen Clark - Supervising Biologist - NJ Dept of Environmental Protection
 Kennet Able - Distinguished Professor Emeritus - Rutgers University
 Kurt Sigler – Student - The Wildlife Society
 Zoe Lieb – MSc - University of Kent
 Bonnie J. McCay - Distinguished Professor Emerita - Rutgers University
 John Cecil - Vice President for Stewardship - New Jersey Audubon
 John Szczepanski, PhD - Senior Aquatic Ecologist - Princeton Hydro, LLC

Garrett D Temples - Undergraduate Student - American Fisheries Society
James Kurtenbach - Aquatic Biologist Retired - USEPA

New Mexico

Brent E. Thompson - Wildlife Biologist – Member, The Wildlife Society
Casey Cardinal - Wildlife Biologist - TWS Southwest Section
James M. Ramakka - Certified Wildlife Biologist - Retired-Bureau Land Management
Jenna Stanek – Ecologist - Los Alamos National Laboratory
Jessica Fort - Wildlife Biologist - Navajo Nation Dept of Fish and Wildlife
Kristine Johnson - Research Associate Professor - University of New Mexico
Nelson Luna - Director/Biologist, Pueblo of Zuni Fish and Wildlife Department - Native American Fish & Wildlife Society
Stephen Andersen - Biological technician - Bureau of Land Management
Virginia Seamster - Zoologist/Wildlife Biologist – Member, The Wildlife Society
Walter Haussamen - Retired Wildlife Biologist - Retired New Mexico Dept. of Game and Fish
Kathy Lang – Curator - American Fisheries Society
Elise Goldstein - Assistant Chief, Wildlife - New Mexico Department of Game and Fish
Lawrence Clyde Abeita - Wildlife Biologist - Native American Fish & Wildlife Society
Charles Hayes - Adjunct Assistant Professor - University of New Mexico

New York

Alex Wolf - Conservation Scientist - Conservation non-profit
Asante Crews – Student - Brown University
Brady L. Simmons - Urban ecologist - NYC Dept of Parks and Recreation
Brooke Bateman - Senior Scientist, Climate - National Audubon Society
Cole Scrivner - Ecologist/Wildlife Biologist - The Wildlife Society
David Strayer - Distinguished Senior Scientist Emeritus - Cary Institute of Ecosystem Studies
Georgina Cullman – Ecologist - NYC Parks
Gerald P. Rasmussen - Supervisor of Natural Resources (retired) – Member, The Wildlife Society
Isabel Hannes - Research Scientist - University at Buffalo
Jacques Rinchar - Associate Professor - The College at Brockport
Kenneth V. Rosenberg - Senior Research Associate - Cornell University Lab of Ornithology
Meriel Brooks, Ph.D. - Program Director, MS Environmental Studies - Prescott College
Michelle L. Stantial - Ph.D. Candidate - SUNY-ESF
Nicole Madden - Fish and Wildlife Tech 1 - NYS DEC
Norman Budd Veverka - Director of Land Management - Mianus River Gorge, Inc./TWS
Timothy Demers - Wildlife Technician - NYS Dept. of Environmental Conservation
Timothy Watson - Wildlife Biologist - New York State Department of Environmental Conservation
Viviana Ruiz-Gutierrez - Research Associate - Cornell Lab of Ornithology
Catherine Gumtow - Laboratory Technician - SUNY ESF Alumni, fisheries professional
John E. Cooper -PhD – American Fisheries Society
Joseph Gorsuch - Sr. Environmental Toxicologist & Consultant - Retired
James Haynes - Professor of Environmental Science & Ecology - The College at Brockport, State University of New York
Doug Little - Director of Conservation Operations (Northeast) - National Wild Turkey Federation
Norma A. Polizzi - Environmental Attorney and Professor - SUNY College at Brockport
Melvin Samson - M.Sc. - SUNY-ESF
Thad Yorks – Professor - Cazenovia College

Kathryn Amatangelo - Associate Professor - The College at Brockport, SUNY
 Yelena Jaquith - Undergraduate Student - Paul Smith's College

North Carolina

Aimee Tomcho - Conservation Biologist - National Audubon Society
 Andy Wood - Conservation Ecologist - Coastal Plain Conservation Group
 Ann Berry Somers - Senior Lecturer in Biology - University of North Carolina at Greensboro
 Anna Prinz - Wildlife Biologist - The Wildlife Society
 Bryn H. Tracy - Retired Fishery Biologist - North Carolina Chapter of AFS
 Carson Wood - Natural Resource Manager - Non-profit
 Christopher Moorman – Professor - North Carolina State University
 Colleen Olfenbuttel - Black Bear and Furbearer Biologist - The Wildlife Society
 Dan Hannon - Wildlife Data Manager - North Carolina Natural Heritage Program
 David Dudek - Certified Wildlife Biologist, Retired College Instructor -Haywood Community College
 Falyn LeAnn Owens - Extension Wildlife Biologist - North Carolina Wildlife Resources Commission
 Frederick S. Scharf - Professor - UNCW
 Gerald Pottern - senior biologist - Mogensen Mitigation Inc, environmental consulting
 Heather Maguire - Environmental Educator - Cradle of Forestry
 Henry Veggian - Assistant Professor of Teaching - University of North Carolina Chapel Hill
 Ileana E. Clavijo - Associate Professor of Biology, Retired - Retired from Univ. NC Wilmington
 Jamie Harrelson - Private Lands Technician - Audubon
 Jeff Hall - Wildlife Biologist - NC Wildlife Resources Commission
 Jeffrey Marcus - NC Longleaf Applied Scientist - The Nature Conservancy
 John Caveny - Natural Resource Management Specialist - Grandfather Mountain Stewardship Foundation
 Joseph Folta - PhD Candidate - SUNY College of Environmental Science & Forestry
 Keith Ashley - Fisheries Scientist - Retired NC Wildlife Resources Commission
 Kerrick W Robinson - Social Scientist - North Carolina Wildlife Resources Commission/AFS Member
 Lauren Danielle Pharr -Ms. – Member, The Wildlife Society
 Lincoln Larson - Assistant Professor - North Carolina State University
 Matthew Florez - Associate Wildlife Biologists - The Wildlife Society
 Michael J Baranski - Emeritus Professor of Biology - Catawba College
 Michael LaVoie - Natural Resources Manager - Eastern Band Cherokee Indians
 Michael M Gangloff - Associate Professor - Appalachian State University
 Nicholas Andrew Shaver - Conservation Technician Supervisor - NC Wildlife Resources Commission
 Nils Peterson – Professor - NC State University
 Noelle Rizzardi - Natural Resources Assistant – Member, The Wildlife Society
 Rainee Tetreault - Lead Environmental Lab Tech - Eastern Band of Cherokee Indians
 Russell M. Oates - Chief, Division of Migratory Bird Management - US Fish and Wildlife Service, Alaska Region (retired) USFWS (retired)
 Ryan Bollinger - Longleaf Implementation Team Consul - The Longleaf Alliance
 Sean Bloom - Biologist and GIS Director - Catawba Lands Conservancy
 Trevor Gage Walker - Wildlife Resources Technician - NC Wildlife Resources Commission

Peter H. Fricke – PhD - American Fisheries Society
 Peter Wesley Perschbacher - Retired Associate Professor - Retired from university of Arkansas
 Micky Clemmons - Senior Environmental Scientist - American Fisheries Society
 Nicholas Andrew Shaver - Angler R3 Specialist - NC Wildlife Resources Commission
 Marla Chambers - Fish and Wildlife Biologist – NC Wildlife Resources Commission
 Anne-Marie Knoebel - Wildlife and Fisheries Management - Post-Baccalaureate Student
 Joseph E. Folta - Certified Wildlife Biologist, PhD Candidate - The Wildlife Society
 Kelly Douglass Member - N.C. Chapter of The Wildlife Society
 Jeff Hall - Wildlife Biologist II - NC Wildlife Resources Commission
 Roland Kays – Biologist – NC State University
 Kevin Parker - Mountain Wildlife Diversity Technician - North Carolina Wildlife Resources Commission
 Lori A. Williams - Conservation Biologist II - NC Wildlife Resources Commission
 Matthew Florez - Associate Wildlife Biologist - The Wildlife Society
 Michael Martin - Wildlife Diversity Technician - NC Wildlife Resources Commission
 Christopher Coxen - District Biologist, North Carolina - National Wild Turkey Federation
 Krishna Pacifici - Assistant Professor - North Carolina State University
 David M. Dudek - Certified Wildlife Biologist, TWS - N.C. Chapter of The Wildlife Society
 Dr. W. Gregory Cope - William Neal Reynolds Distinguished Professor of Applied Ecology - North Carolina State University
 Kenneth Bradsher Knight - Supervising Wildlife Biologist - State Agency
 Anne Burroughs - Environmental Scientist – NC Dept of Transportation/Dewberry Engineers Inc
 Albert Clifford Henry JR - Retired East Region USDA/NRCS Regional Wildlife Biologist - The Wildlife Society
 Allison Medford - Wildlife Diversity Biologist - The Wildlife Society, NC Chapter
 Ann Berry Somers - Associate Director of Environment and Sustainability Program - University of North Carolina at Greensboro
 Jeffrey Marcus - NC Longleaf Applied Scientist - NC State Chapter of The Wildlife Society
 Robert Cherry - Wildlife Biologist – NC Chapter of The Wildlife Society
 Ileana E. Clavijo - Associate Professor, Retired - University of North Carolina Wilmington
 Cathryn Greenberg - Ecologist - North Carolina chapter of The Wildlife Society
 Stanley Crownover - Soil Scientist - Soil Science Society of America
 Michael J. Baranski - Emeritus Professor of Biology - Catawba College
 Judith Ratcliffe - Zoologist/Aquatic Ecologist - NC Natural Heritage Program
 Elizabeth Hillard - Wildlife Scientist - Wildlands Network
 Lindsay Addison - Coastal Biologist - Audubon North Carolina
 Sarah Finn - Wildlife Diversity Biologist – NC Wildlife Resources Commission
 John R. Spruill - Director - Spruill Farm Conservation Project
 Michael Douglas Martin - Wildlife Diversity Technician, Herpetologist - North Carolina Wildlife Resources Commission
 David J. Moscicki - Graduate Research Associate - North Carolina State University
 Andy Van Lanen – Biologist - Sandhills Ecological Institute
 Jennifer Archambault - Research Associate - North Carolina State University
 Kendrick Weeks - Wildlife Biologist Supervisor - The Wildlife Society
 Aranzazu Lascrain - Assistant University Director - NC State University
 Jesse Edward Corey III - Inventory Biologist - NC Division of Parks and Recreation

North Dakota

Kaylan Kemink - Manager of Conservation Planning - Ducks Unlimited Inc.
 Jesse Kolar - Upland Game Management Supervisor - North Dakota Game and Fish Department
 Bailey Gillis - Student - North Dakota State University
 Mason Sieges - Research Scientist - Ducks Unlimited
 Gary E. Erickson - National Wildlife Refuge Manager (retired) - North Dakota Chapter of The Wildlife Society
 Robert Ford - Biologist - North Dakota Chapter of the Wildlife Society
 Fintan L. Dooley - Natural Resource Attorney - ND Bar Association
 Robert Newman - Professor - University of North Dakota
 Elisha Mueller - Conservation Biologist - North Dakota Game and Fish Department
 Alex Dohman - Biologist - North Dakota Chapter of Wildlife Society

Northern Mariana Islands

Dr. Rebecca Hamner - Conservation Genetics Program Manager - CNMI Division of Fish and Wildlife

Ohio

Ashley Hansen - Environmental Resident - The Dawes Arboretum
 Curtis Wagner - Fisheries Management Supervisor - American Fisheries Society, Ohio
 David J Berg - Professor of Biology - Miami University
 Dr Ashley Walters - Research Geneticist - Government
 Gabriel Ryan Karns - Visiting Assistant Professor - The Ohio State University
 Gregory Lipps - Amphibian & Reptile Conservation Coordinator - Ohio State University
 Harold Lisle Gibbs - Professor of Evolution, Ecology and Organismal Biology - Ohio State University
 Ieva Roznere - Research associate - The Ohio State University
 Lara Mengak - Research Associate - The Ohio State University
 Macey Rowan - Student - Member, American Fisheries Society
 Paul J. Pira - Biologist - Geauga Park District
 Richard Phillips - Associate Professor of Biology - Wittenberg University
 Taisa Dzindo - AmeriCorps member - Rural Action
 Tyler Plum - Research Assistant - Nova Southeastern University
 William Peterman - Assistant Professor - The Ohio State University
 Jordan Thompson - Forester - Stakeholder
 Brian J. MacGowan - Wildlife Extension Specialist - Wildlife Society Member
 Erin B. Cashion - Curator of Natural History - Ohio History Connection
 Sarah Carter - Graduate Research Assistant - University of Toledo

Oklahoma

Alin Gonzalez - Senior Research Specialist - Oklahoma State University
 Ashley Knoch - PhD Candidate, ABD - Oklahoma State University
 Dan Shoup - Associate Professor of Fisheries Ecology - Oklahoma State University
 Landon Neumann - Graduate Student - Oklahoma State
 Matt Fullerton - Wildlife Biologist - Oklahoma Department of Wildlife Conservation
 Michael D. Porter - Senior Wildlife & Fisheries Consultant - Member, Wildlife Society
 Scott R. Loss - Associate Professor - Oklahoma State University
 Timothy J. O'Connell - Associate Professor - Oklahoma State University

Dusty Swedberg - Master's Student - American Fisheries Society

Oregon

Brent Barry - Wildlife Biologist - Confederated Tribes of Grand Ronde
 Brian C. Jonasson - Fisheries Biologist - American Fisheries Society
 Carmen Leguizamon - Fisheries Habitat Biologist - Confederated Tribes of Warm Springs
 David J. Shepherdson - Dep. Conservation Manager – Member, The Wildlife Society
 David Ward - Senior Fisheries Biologist – Member, American Fisheries Society
 Derek Broman - Wildlife Biologist - Oregon
 Dr. Judith Li - Associate Professor, Retired - Oregon State University
 Elizabeth Gilliam - Senior Geomorphologist - Non-profit
 Gary Ivey - Research Associate - International Crane Foundation
 Henry G. Lazauski - Asst. Chief Marine Biologist, Retired - AFS, Retired member
 Hugh Black Jr - Director of Fish and Wildlife – Retired US Forest Service
 Justin Brice - GIS Analyst - Conservation Biology Institute
 Kathryn Boula - Terrestrial Ecologist/Archaeologist - Private Contractor
 Kay Brown – Retired – Member, American Fisheries Society
 Keith Norris - Director of Wildlife Policy & Communications - The Wildlife Society
 Kenneth J. Reinecke - Ph.D., Certified Wildlife Biologist - Retired (U.S. Geological Survey)
 Leah Hough - Wildlife Biologist - Oregon Chapter of the Wildlife Society
 Mark Henjum - Certified Wildlife Biologist - Oregon Dept Fish&Wildlife/USFS (retired)
 Meghan Sue Martin - Postdoctoral Researcher - PDXWildlife
 Nancy Renison - Retired Biologist – Arizona Game and Fish Department
 Nicole Michel - Senior Quantitative Ecologist - National Audubon Society
 Patricia L. Kennedy - Professor Emeritus - Oregon State University
 Robert M. Hughes – Regional Aquatic Ecologist –Member, American Fisheries Society
 Sarina Jepsen - Director of Endangered Species - The Xerces Society for Invertebrate Conservation
 Tavis Forrester - Wildlife Research Biologist - Oregon Dept. of Fish and Wildlife
 Kirk T. Beiningen – Retired - American Fisheries Society
 David Hohler - Fisheries Biologist - American Fisheries Society
 Douglas C. Larson Jr. - District Fish Biologist - US Forest Service
 Troy Brandt - Principal Biologist - River Design Group, Inc.
 Emily Dziedzic - Master's Student - Oregon State University
 Melissa Brown - Environmental Specialist - Oregon Chapter AFS
 Stacy Strickland - Fish Health Specialist - American Fisheries Society member
 David T. Banks - District Fish Biologist - Oregon Department of Fish and Wildlife
 James Ruzyski - Fisheries Program Director - American Fisheries Society
 Ronald Joseph Constable - NRS-2 Assistant Project Leader - Oregon Department of Fish and Wildlife
 Jordan Gold - Owner, Founder - Mari-Gold Environmental Consulting, Inc.
 Thomas C. Wainwright – PhD - Self-employed
 Julie Hulbert - Executive Administrator - The Freshwater Trust
 Howard Schaller - Retired Fisheries Biologist - Sandy River Watershed Council
 Steven Novotny - Principal Scientist - American Fisheries Society
 Jeremy C. Jennings - Research Assistant - Oregon State University
 Mac Barr - Fish Biologist – Oregon Department of Fish and Wildlife
 Robert M. Hughes Regional Aquatic Ecologist - Amnis Opes Institute
 Natalie Scheibel - Fish Biologist - American Fisheries Society

Pennsylvania

Aaron Haines - Associate Professor of Biology - Millersville University
 Andrew Wilson - Associate Professor - Gettysburg College
 Byron Buckley - Wildlife Biologist
 Calvin W. DuBrock - Professor (retired) - Pennsylvania State University
 Diana M. Day – Biologist - American Fisheries Society
 Dr. Menka Bihari – PhD - Sierra Club
 Elizabeth Crisfield – Biogeographer - Strategic Stewardship Initiative
 George T. Merovich, Jr. - Associate Professor - Juniata College
 Grant E. Haines - PhD candidate - McGill University
 James A. Hart – Mammalogist - Wildlife Specialists
 Jerry Hassinger - Wildlife Biologist - PA Biological Survey
 Jerry Hassinger - Wildlife Biologist - PA Biological Survey
 Laurie Jean Goodrich - Director of Conservation Science - Hawk Mountain Sanctuary Association
 Melissa Althouse - Wildlife Biologist – Federal Government
 Reginald Hoyt - Associate Professor/Co-Chair - Delaware Valley University
 Richard Jacob - PA Mycological and Protists Technical Committee
 Shawn Crouse - Principal Fisheries Biologist – Member, American Fisheries Society
 Susan Underkoffler – Professor - University of Florida
 Tammy Colt - Wildlife Biologist – Member, The Wildlife Society
 Robert F Carline - Fisheries Biologist - U.S.Geological Survey - retired
 Leslie G Leckvarcik - Director of Science Outreach - American Fisheries Society member
 David José Nachón García - PhD in Biology - Universidade de Santiago de Compostela (USC)
 Sean Murphy - Ornithologist - Waterbird Society
 Catherine D. Haffner - Wildlife Biologist - The Wildlife Society
 Justin Kent Vreeland - Regional Wildlife Management Supervisor - Pennsylvania Game Commission
 Kyle McCarthy - Associate Professor of Wildlife Ecology - University Faculty
 Matt Marshall - Adjunct Assistant Professor - Penn State University
 Kevin Wenner – Wildlife Biologist – The Wildlife Society
 Richard Fritsky - Wildlife Diversity Biologist - PA Game Commission
 Dr. Douglas Tallamy – Professor - University of Delaware
 Jeffrey A. Stratford - Associate Professor of Biology - Wilkes University
 Laken Samantha Ganoë - Wildlife Biologist - The Pennsylvania State University
 David Munoz - Research Fellow - Penn State University
 Patrick Oelschlager - Conservation Stewardship Assistant - Wissahickon Valley Watershed Association

Puerto Rico

Sheila Ward – Ecologist - Affiliated Researcher, Dept. Environmental Sciences, University of Puerto Rico-Rio Piedras

Rhode Island

Brett Still, PhD – Faculty - Natural Resources Science Dept. URI
 Christian H Floyd - Teaching Professor - University of Rhode Island
 Nancy E. Karraker - Associate Professor - University of Rhode Island
 Peter Paton – Professor - Dept. of Natural Resources Science, Univ of Rhode Island
 Scott McWilliams – Professor - University of Rhode Island

Tracy A Silvia - Sr. Environmental Scientist - TWS Member New England/Northeast
 Robert Wildermuth - Graduate Student, PhD Candidate - University of Massachusetts Dartmouth
 Kathleen Donnellan - Fisheries Observer - AIS
 Scott W. Buchanan – Herpetologist – Rhode Island Department of Environmental Management
 Shilo Felton - Wildlife Biologist - American Oystercatcher Working Group
 Clara Zeder - Fisheries Biologist – National Marine Fisheries Service
 Jennifer Dee White - Dr. - American Ornithological Society
 Nancy E. Karraker - Associate Professor - University of Rhode Island

South Carolina

Amanda Avildsen - Fisheries Technician – Member, SC AFS
 Anna H. Smith - Certified Wildlife Biologist - The Wildlife Society
 Arnold G. Eversole - Professor emeritu - Clemson University
 Beau Bauer - Wildlife Biologist - Nemours Wildlife Foundation
 Catherine Bodinof Jachowski - Assistant Professor - Clemson University
 Charlie Davis - Forest Ecologist - USDA -Forest Service
 David Hood - Fresh Water Biologist - South Carolina Department of Natural Resources
 Dr. David Jachowski - Assistant Professor of Wildlife Ecology - Clemson University
 Elizabeth Courtenay Miller - Wildlife Biologist III – Member, AFS
 Jason C Doll - Assistant Professor of Fisheries - Francis Marion University
 Jennifer Kindel - Wildlife Biologist – Member, The Wildlife Society
 John Quinn - Associate Professor of Biology - Furman University
 José Luis Rangel Salazar, PhD - The College of the Southern Frontier, Chiapas, Mexico
 Joseph Charles Ballenger - Assistant Marine Scientist – Member, American Fisheries Society
 Joseph Evans - Wildlife Biologist 2 – Member, South Carolina AFS
 Kyle Barrett - Associate Professor of Wetland Ecology - Clemson University
 Kyle Brumm - Graduate Student - Clemson University
 Lisa Lord - SC Field Project Coordinator - The Longleaf Alliance
 Maggie Smith - physician assistant - Prisma health
 Mark C. Scott, Ph.D. - Wildlife Biologist - South Carolina Department of Natural Resources and Clemson University
 Matt Perkinson - Wildlife Biologist - Florida Atlantic Coast Telemetry Network
 Patrick Cloninger - Wildlife Biologist - South Carolina Department of Natural Resources
 Raymund Geroso - Wildlife Biologist - U.S. Forest Service
 Richard Kaminski, Ph.D. – Director - J.C. Kennedy Waterfowl & Wetlands Conservation Center
 Clemson University
 Tanya Darden, Ph.D - Senior Marine Scientist - American Fisheries Society
 Troy Farmer - Assistant Professor - Clemson University
 Matthew Larsen - Adjunct Professor - Coastal Carolina University
 Joel Pedersen - Director of Government Affairs, Certified Wildlife Biologist - National Wild Turkey Federation
 William Anderson - Dr. - Grice Marine Biological Laboratory
 Morgan Kern - Wildlife Biologist III – SC Department of Natural Resources
 Ross Melinchuk - Chief Conservation Officer - National Wild Turkey Federation
 Wallace E. Jenkins - Assistant Director Marine Fisheries Management - American Fisheries Society
 Daniel Farrae - Wildlife Biologist - American Fisheries Society
 Michelle Pate - Wildlife Biologist - Natural Resources Sector
 Andrew Tweel - Marine Scientist - Coastal and Estuarine Research Federation

Eric M Hiltz - Wildlife Biologist - American Fisheries Society
 Katie Anweiler - Wildlife Biologist - South Carolina chapter of the American Fisheries Society
 Kayla Rudnay - Wildlife Biologist - American Fisheries Society
 Charlotte Pope Hope - Wildlife Biologist - Coastal Conservation League
 David M. Wyanski - Fisheries Biologist - American Fisheries Society
 Danielle Carty - Wildlife Biologist - American Fisheries Society
 Catharine Parker - Wildlife Biologist II - The Wildlife Society
 Christopher McDonough - Fisheries Biologist - American Fisheries Society
 Trent Austin - Wildlife Biologist - The Wildlife Society
 Tara Moon - Grant & Finance Manager - National Wild Turkey Federation
 Elizabeth Vinyard - Wildlife Biologist - American Fisheries Society
 Aaron Bunch - Lab Specialist - American Fisheries Society
 Jamie Dozier - Certified Wildlife Biologist - SC Department of Natural Resources
 Homer Thomas Hiers - Wildlife Biologist - South Carolina Department of Natural Resources
 Maggie Jamison - Wildlife Biologist - South Carolina American Fisheries Society
 Mark A McAlister - Wildlife Biologist - South Carolina Department of Natural Resources
 Joseph Lemeris Jr. - Data Manager/GIS Analyst - South Carolina Department of Natural Resources/Natural Heritage Program
 Richard Marvin Kaminski - Director - Kennedy Center, Clemson University
 Christine Hand - Wildlife Biologist
 Robert W. Gooding - Certified Wildlife Biologist – SC Department of Natural Resources - Retired
 Stacy Scherman - Resource Management Biologist - The Wildlife Society
 Karen Beatty - Natural Resource Consultant - The Wildlife Society member
 Sammy W. Stokes Jr. - Wildlife Coordinator - South Carolina Department of Natural Resources
 Stacey Lance - Associate Research Scientist - University of Georgia Savannah River Ecology Laboratory
 Holly Catherine Sommers - Natural Resource Tech. II – SC Department of Natural Resources
 Caroline Causey - Wildlife Biologist - TWS member

South Dakota

Alessandra Higa – Instructor - Oglala Lakota College
 Amanda Hegg – Biologist - American Ornithological Society
 Cassandra Heimerl - Wildlife Biologist - South Dakota Department of Game, Fish and Parks
 David Swanson - Professor and Director, Missouri River Institute - University of South Dakota
 Donovan J Grass Rope - Conservation Officer - Lower Brule Sioux Tribe/Lower Brule Wildlife, Fish & Rec
 Eileen Dowd Stukel - Senior Wildlife Biologist - Certified Wildlife Biologist, The Wildlife Society
 Gary C Brundige - Natural Resources Program Manager - The Wildlife Society
 Hugh Britten - Professor of Biology - U of South Dakota
 James B. Stengle - Wildlife Biologist (CWB®) – Member, American Fisheries Society
 Joanna Studt - Biological Consultant - Great Plains Wildlife Consulting
 Joel Tigner - Biological Consultant - South Dakota Bat Working Group
 Paul Coughlin - Wildlife Program Administrator - South Dakota Game, Fish & Parks
 Randy Johnson - Wildlife Resource Biologist - South Dakota Department of Game Fish and Parks
 Shaun M. Grassel, PhD - Wildlife Biologist - Lower Brule Sioux Tribe
 Julie Thorstenson, PhD - Executive Director - Native American Fish and Wildlife Society
 Mark Norton - Wildlife Biologist - South Dakota Chapter of the Wildlife Society
 Kristel Bakker - Professor of Biology - Dakota State University

Tennessee

Carla R. Hurt - Associate Professor - Tennessee Tech University
 Chris Brown - Associate Professor and Chairperson - Dept. of Biology, Tennessee Tech University
 David Aborn - Associate Professor - University of Tennessee at Chattanooga
 Ellen R. Herbert - Ecosystem Scientist - Ducks Unlimited
 Greg Wathen - Special Assistant to the Director - Tennessee Wildlife Resources Agency
 Henriette Jager - Joint Faculty Associate - University of Tennessee, Knoxville
 Herbert Joseph Roberts - Vice President Pacific Bird Conservation - Pacific Bird Conservation
 Justin Murdock - Associate Professor - Tennessee Tech University
 Kathryn Martin - Former Malacologist and Water Quality Scientist
 Katrina I Twing - Assistant Professor of Biology - Tennessee Tech University
 Lee Neighbors - Wildlife Biologist - The Wildlife Society
 Michael G. Brasher - Waterfowl Scientist - Ducks Unlimited, Inc.
 Stefan Woltmann - Associate Professor - Austin Peay State University
 W. Alan Wentz - Chief Conservation Officer (retired) - Ducks Unlimited Inc

Texas

Adam Mitchell - Assistant Professor - Tarleton State University
 Alexander Toder - Graduate Student – Member, The Wildlife Society
 Amanda Jackson - President, Texas State University Chapter of The Wildlife Society
 Amy Kresta - Assistant Professor of Biology - The Wildlife Society
 Annie Farrell - Wildlife Biologist - Texas Chapter of The Wildlife Society
 Avery M Smith - Research Technician - Student Researcher
 Ayla Ryan - Graduate Research Assistant - Texas Tech University
 Blake Murden - COO & Director of Land Stewardship - Shield Ranch
 Brandon Joseph Palmer - Wildlife Conservationist
 Brett Johnson - Senior Environmental Coordinator – Member, The Wildlife Society
 Carly Rotzler - Graduate Student - UTSA
 Caroline Ellison - Wildlife Biologist - Texas Parks and Wildlife Department
 Carolyn Jane Anderson - Assistant Professor of Research - Caesar Kleberg Wildlife Research Institute, Texas A&M University - Kingsville
 Chris Farrell - Natural Resource Specialist - Texas Chapter of the Wildlife Society
 Christina Farrell - Wildlife Biologist - Michigan State Bird Observatory
 Christopher R. Peterson - Graduate Research Assistant - The University of Texas at Austin
 Cindy Jones - Graduate Student Teaching - Texas A&M- Commerce
 Clifton Ladd - Wildlife Biologist, CWB – Member, The Wildlife Society
 Clinton Faas - Natural Resource Specialist - Texas Parks and Wildlife
 Cord B. Eversole - Assistant Professor - Texas A&M International University
 Cory O'Brien - Geologist
 Craig Hensley - Texas Nature Trackers Biologist - Texas Parks & Wildlife Department
 Dale Prochaska - Wildlife Regional Director - Texas Chapter of The Wildlife Society
 Daniel Moulton – Retired – Member, The Wildlife Society
 Diana Doan-Crider - Animo Partnership in Natural Resources
 Diane Dancer - Commercial Credit Manager (Retired) - Green Sanctuary Supporter
 Don Steinbach - Executive Director - Texas Chapter of The Wildlife Society
 Drew R. Davis - Associate Research Scientist - University of Texas Rio Grande Valley
 Dustin McBride - Wildlife Biologist - Private Consulting

Eric Daniel Grahmann - Habitat Specialist – Member, Texas Chapter of the Wildlife Society
 Erin McFarland - Student - Humboldt State University
 Fernando Gutierrez - Wildlife Tech III - Texas Chapter of the Wildlife Society
 Garrett Fannin - Natural Resource Technician – Member, The Wildlife Society
 Gene Miller - District Wildlife Biologist - National Wild Turkey Federation
 Geron Gowdy - Graduate Assistant - TAMUK
 Grant Lawrence - Private Ranch Land Steward - Texas Chapter of The Wildlife Society
 Greg K. Hammer - Natural Resources & Environmental Manager
 Heather Mathewson - Assistant Professor – Member, The Wildlife Society
 Howell Pugh - Assistant Graduate Researcher - The Wildlife Society
 Howell Pugh - Assistant Graduate Researcher - The Wildlife Society
 Jacob Sterling Hill - Forest-Wildlife Management Student - Vice-President of the SFASU Student Chapter of The Wildlife Society
 Jacob Wright - Regulatory Specialist - Texas Tech University
 James Hoskins - Natural Resources Specialist - Texas Parks and Wildlife Department
 James Strong - NRSC Lab Technician - Texas State University
 Jamie Killian - Wildlife Biologist - Texas Parks & Wildlife
 Jared Hall – Ecologist - Texas Chapter of The Wildlife Society
 Jean Solana - Wildlife Biologist - Texas Master Naturalist
 Jennifer Blair, CWB - Principal Scientist
 Jeremy Baumgardt - Associate Professor for Research - Caesar Kleberg Wildlife Research Institute, Texas A&M University
 Jesús Franco - Conservation Biologist - NGO
 Jim Mullen – Owner - Quailpro, LLC
 Johanna Delgado Acevedo - Assistant professor - Texas A&M University-Commerce
 John D Cornelius - Wildlife Biologist - US Department of Defense (Ret)
 John Kinsey - Natural Resource Specialist – Member, Texas Chapter of The Wildlife Society
 Jon Purvis - Research Analyst - Texas Parks and Wildlife Department
 Jonah Evans – Mammalogist - Texas Parks and Wildlife
 Jonathan Kirk Warner - Alligator Program Leader - Texas Parks and Wildlife Department
 Joseph Hopkins – Student - Tarleton State University
 Joshua Wright - College Student - Texas A&M Chapter of The Wildlife Society
 Judd Curtis - Associate Research Scientist - Texas A&M University
 Judy Brupbacher - Educator
 Julia York - PhD Candidate - University of Texas at Austin
 Kaitlin Will - Environmental Scientist – Member, The Wildlife Society
 Kameryn Strickland – Student - SFA student chapter of The Wildlife Society
 Kasey Clarke - Environmental Scientist - The Wildlife Society Member
 Kelcee Smith - PhD Candidate - Louisiana State University
 Kelly Conrad Simon - Urban Wildlife Biologist, Natural Resource Specialist - Texas Parks and Wildlife Dept.
 Ken Kurzawski - Fisheries Program Manager - American Fisheries Society Fisheries Administration Section
 Kyle Brunson - Natural Resources Specialist - Texas Parks and Wildlife Department
 Landon Robert Schofield - Range and Wildlife Biologist - East Foundation
 Lee Ann Linam - Science teacher - One Day Academy
 Lee Marlowe - Sustainable Landscape Ecologist - Texas Society for Ecological Restoration & Native Plant Society of Texas

Linda S Campbell - Wildlife biologist - Texas Parks and Wildlife (retired)
 Madilyn Jarman - Graduate Student
 Mallory Eastland - Research Associate - Texas Chapter of the Wildlife Society
 Mandy Corso Krause - Ranch Consultant - Parker Creek Ranch
 Marjorie Dixon - PhD Candidate - University of Texas at Austin
 Mark C Wallace - Professor - Texas Tech University
 Marsha G Williams - Research Associate III - The University of Texas at Tyler
 Marsha May - Adjunct Biology Professor - Temple College
 Mary O'Hara - Certified TX Master Naturalist - Texas Parks and Wildlife Department
 Matt Wagner - Land and Wildlife Consultant, Adjunct Faculty - Texas A&M, Texas State University, Texan by Nature, Weston Ranch
 Matthew Hewitt - Sul Ross State University
 Matthew Johnson - Natural Resources Team Lead - Freshwater Mollusk Conservation Society
 Matthew Parker - Master's Candidate - Texas State University
 Matthew Ward - Fishery Biologist - Lochow Ranch Pond and Lake Management
 Michael D Panasci - Graduate Student - Texas Tech University
 Michelle Haggerty - Certified Wildlife Biologist - Member, Texas Chapter of The Wildlife Society
 Molly Moroz - Graduate Research Assistant - University of Texas at Austin
 Neal Wilkins - President & CEO - East Foundation
 Nicholas Fisher - Wildlife Services Technician - Plateau Land and Wildlife Management
 Nicholas Ivers - PhD Student - University of Texas at Austin
 Olivia Schmidt - Outreach Specialist - Texas Parks and Wildlife Department
 Philip Queller - PhD Student - University of Texas at Austin
 Rachael L. Connally - Associate Wildlife Biologist - Texas A&M University
 Rachel Richter Urban - Wildlife Biologist - Texas Chapter of the Wildlife Society
 Ray C. Telfair II, Ph.D. - Certified Wildlife Biologist - The Wildlife Society
 Rebecca A. Svoboda - District Conservationist - USDA
 Reid Casey - undergraduate student
 Richard Heilbrun - Wildlife Biologist - Texas Chapter of The Wildlife Society
 Romey Swanson - Director of Conservation Strategies - Audubon Texas
 Ross Couvillon - Biology Professor - Member, Texas Chapter of the Wildlife Society
 Roy Leslie - Managing Partner - Leslie Ranch
 Russell Lewis Martin Jr - Wildlife Diversity (Nongame) Biologist/NRS IV - Texas Parks and Wildlife Department
 Sam Kieschnick - CitSci Association
 Samantha Kahl - Assistant Professor of Natural Resource Management - Texas Tech University
 Sara Miller - Wildlife Biologist - Member, The Wildlife Society
 SaraBeth Boggan - Student - Tarleton State University
 Scott T. Walter - Senior Lecturer in Wildlife Biology - Texas State University
 Selma Glasscock - Assistant Director - Welder Wildlife Foundation
 Shane J. Kiefer - Certified Wildlife Biologist & Director of Ecological Services - Plateau Land & Wildlife Management
 Shelby McCay - Project Coordinator - TAMU NRI
 Sonia Elizabeth Duran - Wildlife Biologist - Member, The Wildlife Society
 Spencer R Keyser - Graduate Student - University of Texas at Austin
 Stennie Meadours - Retired Environmental Emergency Response Manager - Birder and environmental advocate
 Stephanie Parker - Graduate Research Assistant - Texas A&M University

T. Wayne Schwertner - Associate Professor and Department Head - Tarleton State University
 Tam H. Tran - Environmental scientist - Freese & Nichols
 Tania Homayoun - Natural Resources Specialist - Texas Chapter of The Wildlife Society
 Tara Korzekwa - Biology Lecturer - University
 Thomas J Lang - Past-President - AFS Fish Habitat Section
 Thomas L. Marshall - NSF Graduate Research Fellow - University of Texas at Austin
 Thomas Wayne Schwertner - Associate Professor - Tarleton State University
 Tiffany Leitner - Student Chapter of the Wildlife Society
 Tio Kleberg – Director - East Foundation
 Tony Blair - Certified Wildlife Biologist - TWS Member, Owner of wildlife consulting firm
 Tyler Campbell - Chief Program Officer & Principal Scientist - East Foundation
 William Bartush - Partnership Coordinator - American Bird Conservancy
 William Rufus Stephens - Certified Wildlife Biologist – Member, The Wildlife Society
 William Thompson – Student – Member, The Wildlife Society
 Zoe Carroll - Graduate Research Assistant - Sul Ross State University
 Alison Northup - PhD Candidate - University of Texas at Austin
 Robert A. Deans - Doctor of Philosophy - The University of Texas at Austin
 Meredith Longoria - Nongame & Rare Species Program Leader - Texas Parks & Wildlife Department
 Ross Winton - Invertebrate Biologist - Texas Parks and Wildlife
 John Davis - Wildlife Biologist - Texas Chapter of The Wildlife Society
 Karen Hardin - Natural Resource Specialist - Texas Parks and Wildlife Department
 Laura Zebehazy - Program Leader - Texas Parks and Wildlife Department
 Allison E Scott - M.S. Student/Contractor Biologist - Texas State University
 Laura Dugan, PhD - Spatial Analyst/Data Manager - Texas Parks and Wildlife Department
 Trey Barron - Natural Resource Specialist - Texas Chapter of the Wildlife Society
 Thomas R. Simpson - Emeritus Associate Professor of Biology - Texas State University
 Jessica Schmerler - Habitat Assessment Biologist - Texas Parks and Wildlife Department
 Victoria Makar - Adjunct Faculty –The University of Texas at San Antonio
 Caitlyn Harlan - Student – Texas A&M University
 Brandon Palmer - Wildlife Professional - The Wildlife Society
 Annaliese Scoggin - District Biologist - Texas Parks & Wildlife Department
 Steven P. Riley - Certified Wildlife Biologist/Conservation Delivery Specialist - Texas Parks and Wildlife Department
 Ursula Alvarado-Miller - Lecturer I - The University of Texas at San Antonio
 Gwen Young, PhD - Professor - The University of Texas at San Antonio
 Katelyn Conley - College Student - Texas Tech University
 Jennifer Matthews - Student - The Wildlife Society
 David Riley - Staff Biologist - Texas Chapter of the Wildlife Society
 John M Tomeček - Assistant Professor - Texas A&M University
 Erin Swanson - Regulatory Compliance Specialist - Texas Chapter of the Wildlife Society
 Daniel J Kunz - Natural Resource Specialist IV - Texas Parks & Wildlife Department
 Caroline Skidmore - M.S Candidate - Texas Tech University
 Megan Granger - Student - Texas A&M university kingsville
 Robert Denkhaus - Nature Center Manager - City of Fort Worth, Texas
 Brandon Consalus - Undergraduate Student - Tarleton State University
 Roy E. Saffel – Retired/Grad Student - Sul Ross State University
 Elizabeth Cary Mungall - Science Officer - Second Ark Foundation

Courtney Ramsey - Graduate Research Assistant - Texas Tech University
 Dr. Kerry Griffis-Kyle - Associate Professor - Texas Tech University
 Kaylee Dawn Read – Student – The Wildlife Society
 Lorena Moore - Customer Service Representative - Fort Worth Park and Recreation Dept.
 Cody Dunagan - Natural Resources Specialist - Texas Parks and Wildlife Department
 Dale Prochaska - Regional Director - Texas Chapter of The Wildlife Society
 Wade Alan Ryberg - Research Scientist - Texas A&M University Natural Resources Institute
 Terry Blankenship - Director - Welder Wildlife Foundation
 Chandler Larson - Student - TWS Student Chapter
 Brittany Wegner - Communications Specialist - Natural Resources Institute
 Deborah Holle - National Wildlife Refuge Manager (retired) - U.S. Fish & Wildlife Service (retired)
 John McLaughlin - West Texas Quail Program Leader - Texas Parks and Wildlife Department
 Wayne Simoneau - Biogeographer - Parsons
 Julie Westerlund – Professor - Texas State University
 Anica Lee - Dr. - Texas State University
 Jason Martina - Assistant Professor - Texas State University
 Kavita Kakirde - Senior Lecturer - Texas State University
 Michele Reynolds - Biology Lecturer - Texas State University
 Benjamin Schwartz - Associate Professor - Texas State University
 Caitlin Gabor - Professor of Biology - Texas State University
 Daniel Price - Natural Resource Manager - Fort Worth Nature Center & Refuge
 Jonah Gula - Research Assistant - Texas State University

Utah

Allison Pease - Adjunct professor - Dept of Natural Resources Management, Texas Tech University
 Brianna Johnson - Graduate Researcher - Utah State University, UT Division of Wildlife Resources
 Chris Frauenhofer - Wildlife Biologist- State of Utah
 Cole Bleke - Graduate Student - Utah State University
 Doris Zemlicka - Wildlife Biologist - Retired USDA
 Jackie Watson - Blue Ribbon Fisheries Biologist - Utah Division of Wildlife Resources
 Ronald B Kegerries III - Fisheries Biologist - Private Consulting
 Scott Tolentino - Fisheries Biologist & project leader - Utah Division of Wildlife Resources
 Stephanie Landry - Graduate Research Assistant - Utah State University
 Trina Hedrick - Regional Aquatics Manager - State Wildlife Agency
 Thomas Keith Mendenhall - Senior National Fish Program Leader (ret) - Bureau of Land Management
 Michael Fiorelli - Uinta Basin Project Leader - Trout Unlimited
 Dr. Theresa Pope – Wildlife Biologist - The Wildlife Society
 Reed Sanderson – Wildlife Biologist - U.S. Forest Service Research Science; Univ. Arizona
 Dr. Daniel MacNulty - Associate Professor of Wildlife Ecology - Utah State University

Vermont

Kent McFarland - Conservation biologist - Vermont Center for Ecostudies
 Amy Alfieri - Fish and Wildlife Scientist III - Vermont Fish and Wildlife Department
 Alyssa Bennett - Small Mammals Biologist - Vermont Fish and Wildlife Department
 Katherina Gieder - Fish and Wildlife Scientist IV - Vermont Fish and Wildlife
 Matthew Futia - Graduate student - University of Vermont
 Christopher C Rimmer - Executive Director - Vermont Center for Ecostudies

Virginia

Carola A. Haas – Professor - Virginia Tech
 Colin Chapman - Research Professor - George Washington University
 Daniel P. Michaelson - Fisheries Biologist - VA Dept. of Game & Inland Fisheries
 Dr. Catherine Hulshof - Assistant Professor - Virginia Commonwealth University
 Jason Hallacher - Asst Fisheries Biologist - VA Chapter American Fisheries Society
 Joan Blankenship - Conservation Director Virginia BASS Nation - Virginia BASS Nation
 John Copeland - Fisheries Biologist - Virginia Department of Game and Inland Fisheries
 John Rogers Copeland - Fisheries Biologist 3 - American Fisheries Society
 Katherine Hamedani - Natural Resource Specialist II - Virginia Tech
 Sandra Schwartz - Former employee of the national biological survey
 Christian H Hager – Owner - Chesapeake Scientific LLC
 Daniel P. Michaelson - Fisheries Biologist - VA Department of Game and Inland Fisheries
 Julie Gross - Graduate Student - Virginia Institute of Marine Science
 Troy Tuckey - Associate Research Scientist - Virginia Institute of Marine Science

Washington

Bruce C. Thompson - Wildlife Scientist (Retired) - Past President (The Wildlife Society)
 Ed Henry – Biologist – Member, American Fisheries Society
 Ed Styskel - Certified Wildlife Biologist - Retired
 Edward W Styskel - Certified Wildlife Biologist – Member, The Wildlife Society
 Eleanor P. Gaines – Director - Oregon Biodiversity Information Center
 Felipe Amezcua – Professor - EcoWB
 Gail Olson – Member, The Wildlife Society
 Gary J. Wiles - Wildlife Biologist - Retired
 George R Carlson - Wildlife Biologist - Retired
 Heidi Newsome - Certified Wildlife Biologist – Member, The Wildlife Society
 Hope Rieden - Fish and Wildlife Biologist
 Jesse Brunner - Associate Professor - Washington State University
 John F. Lehmkuhl - Research Wildlife Biologist (retired) - USDA Forest Service
 Kelsey King - Graduate student - Washington State University
 Kevin White - Certified Wildlife Biologist - Whitetail Environmental, LLC
 Laura Heironimus - Fish and Wildlife Biologist - Washington Department of Fish and Wildlife
 Leslie Parks - Wildlife science technician - Swinomish tribe
 Lynda Hofmann - Fish and Wildlife Biologist - Washington Department of Fish and Wildlife
 Matt Betts – Professor - Oregon State University
 Michael Saxton - Wildlife Biological Technician - Katmai National Park
 Neala Kendall - Research Scientist - Washington Department of Fish and Wildlife
 Nikolas Novotny - Fisheries Biologist - American Fisheries Society
 Patricia Townsend - Assistant Professor - University
 Rebecca Windell - Graduate Research Assistant and PhD Student - University of Washington
 Staci Amburgey - Postdoctoral researcher - University of Washington
 Stefanie Bergh - Wildlife Biologist - Member of The Wildlife Society
 Steve Desimone - Wildlife Ecologist - Washington Dept of Fish and Wildlife
 Susan Waters - Rare Species Ecologist
 Steven Errede - Emeritus Professor of Physics - University of Illinois at Urbana-Champaign
 Larry G. Brown - Fisheries Professional Emeritus – American Fisheries Society

James Faulkner - Mathematical Statistician - National Oceanic and Atmospheric Administration
 Kristen-Marie Kirkby - Fisheries Biologist, Project Manager - Cascade Columbia Fisheries Enhancement Group
 Eleanor P. Gaines - Director, Oregon Biodiversity Information Center - Portland State University

West Virginia

Susan Olcott - WV Project Leader for Monarch and Lepidoptera Conservation - WV Div Natural Resources
 Frank Jernejcic - District Fishery Biologist – Retired
 Thomas Jones - Ast. Professor of Environmental Science - Marshall University
 Zachary Loughman - Associate Professor - West Liberty University

Wisconsin

Adrian P. Wydeven - Certified Wildlife Biologist - Wisconsin Green Fire, Timber Wolf Alliance
 Benjamin Olsen - Wildlife Biologist – Member, The Wildlife Society
 Bob Wright - Wildlife GIS Specialist - Minnesota IT Services
 Bradley Ray - Fisheries Team Supervisor – Member, American Fisheries Society
 Bruce R. Bacon - Wildlife Biologist – retired WI Dept. Natural Resources
 Cassandra Graikowski - Tribal Historic Preservation Officer - Sokaogon Chippewa Tribe
 Charles M. Pils - Wildlife Biologist-Wisconsin DNR (Retired)
 Christopher D. Tyrrell - Research Curator & Dir. of Informatics - Milwaukee Public Museum
 Daniel Robert Dessecker - Certified Wildlife Biologist - Retired
 Darren M Ladwig - Wildlife Biologist - Wisconsin Department of Natural Resources
 Donald M. Waller - former Professor of Botany & Environmental Studies - University of Wisconsin - Madison
 Elise Couillard - Science Communicator - Ducks Unlimited
 Fred Strand - Wildlife Biologist - Private Consultant
 Jonathan Gilbert - Director, Biological Services Division - Great Lakes Indian Fish and Wildlife Commission
 Karl Martin - Dean, Division of Extension - University of Wisconsin-Madison
 Keith R. McCaffery - Natural Resource Scientist - Wis Dep Nat Resour (retired)
 Mark Martin - Manager Goose Pond Sanctuary - Madison Audubon Society
 Michael D. Samuel - Emeritus Professor - University of Wisconsin-Madison
 Nathaniel LaHue DVM, MPVM – Member, The Wildlife Society
 Nick Jaeckels - Water Resources Engineer
 Ollie Torgerson - Executive Secretary - Midwest Assn. of Fish & Wildlife Agencies
 Pat Conrad - Watershed Planner - Emmons & Olivier Resources
 Ronald G. Eckstein - Wildlife Biologist (retired) - Wisconsin Chapter, The Wildlife Society
 Rosalind Russell - Environmental Scientist - Emmons and Olivier Resources
 Samantha Hauser - Postdoctoral Fellow - University of Wisconsin-Milwaukee
 Thomas M Hauge - Retired Wildlife Management Program Director - Wisconsin Department of Natural Resources
 Timothy Van Deelen - Professor of Wildlife Ecology - University of Wisconsin at Madison
 Tom Howard - Certified Wildlife Biologist - Wisconsin Chapter TWS
 William T Route - Ecologist (retired) - Certified wildlife biologist, The Wildlife Society
 Jonathan Zellmer - Natural Resources Management, Grad. - Independent Study

Wyoming

Embere Hall - Adjunct Assistant Professor - Wyoming Chapter of The Wildlife Society
 Jeffrey Baldock - Graduate Research Assistant - Wyoming Cooperative Fish and Wildlife Research Unit
 Dr. Anna Chalfoun - Associate Professor - University of Wyoming
 Robert P Lanka - Wildlife Biologist - Wyoming Game and Fish Department - Retired
 Tony Mong - Wildlife Biologist - Wyoming Chapter of the Wildlife Society
 Charles R. Neal – Ecologist - US Dept. of Interior (retired)
 Dana Nelson - Nongame Biologist - Wyoming Game and Fish Department
 Andrea Orabona - Nongame Bird Biologist - The Wildlife Society Central Mountains and Plains Section
 James F. Wright - Wildlife Biologist – Member, The Wildlife Society
 Gwyn McKee - President/Principal Biologist - Great Plains Wildlife Consulting, Inc.
 Jennifer Feltner - PhD Candidate/Grad Student Researcher - University of Montana
 David Gustine - Supervisory Wildlife Biologist - Grand Teton National Park, National Park Service
 Laura Burckhardt - Aquatic Habitat Biologist - American fisheries society
 Richard Guenzel - Certified Wildlife Biologist - Wyoming Game and Fish Dept. (Retired)
 Rhiannon Jakopak - Graduate Student - University of Wyoming



American Sportfishing Association

Testimony on Legislative Hearing on S. 2372

**Committee on Environment and Public Works Committee
United States Senate
December 8, 2021**

On behalf of the American Sportfishing Association (ASA), we thank the Committee for discussing S. 2372, The Recovering America's Wildlife Act, which will support healthy fish and wildlife through conservation and restoration efforts. For nearly 90 years, ASA has been leading the way for sportfishing's future. We look out for the interests of the sportfishing industry and the entire recreational fishing community. Our over 900 members include manufacturers, retailers and allied organizations that comprise the \$125 billion recreational fishing economy. We provide a unified voice for the industry and anglers when emerging laws and policies could significantly affect business or sportfishing itself. ASA works to ensure the industry stays strong by safeguarding and promoting the enduring economic, conservation and social values of sportfishing in America.

The recreational fishing community depends on healthy fisheries for fishing opportunities, and therefore has a vested interest in habitat restoration and conservation of sportfish species. Our fisheries resources are held in the public trust and conserved through sound laws and policies. Fishing activity across the nation supports the economy, connects people to the outdoors and provides substantial funding for conservation. Through fishing license purchases, excise taxes and direct donations, the recreational fishing community contributes approximately \$1.7 billion toward aquatic resource conservation each year. No other user group contributes nearly as much toward ensuring our nation's waterways and fisheries are healthy and accessible to the public.

The decline of our fish and wildlife and loss of natural habitat is one of America's greatest threats. Scientists estimate that one-third of fish and wildlife species in the United States are at risk of becoming threatened or endangered. Introduced by Sens. Heinrich (D-NM) and Blunt (R-MO), the Recovering Americas Wildlife Act (RAWA) (S. 2372) would support conservation of America's fish and wildlife by investing in proactive conservation of at-risk species. With wide bipartisan support in the Senate, as well as the House (H.R. 2773), this legislation would provide guaranteed funding to Native and state agencies for conservation of at-risk species. Annually states would receive \$1.3 billion and \$97.5 million would be allocated to Native nations. Funding could come from environmental fines and penalties that have not been earmarked for a specific use.

States are mandated by Congress to have State Wildlife Actions Plans, which in effect are fish and wildlife plans, as aquatic species are included in addition to terrestrial species. Although

progress is being made, many species of fish and wildlife continue to decline because funding is inadequate. By offering consistent and significant federal funding, RAWA ensures the implementation of these science-based plans are carried out to the best of the state agencies' abilities. Native nations will be able to expand their conservation efforts and improve critical habitat and conserve fish and wildlife species. Collectively, these conservation and restoration efforts will help ensure fish and wildlife species do not become endangered. In the process, cleaner waters and healthier fish habitat will be generated, ultimately benefitting fishing opportunities.

This legislation is future thinking, attempting to save species before they become endangered or extinct. By prioritizing a proactive approach, this bill avoids defaulting to regulation to rescue species at the brink through the Endangered Species Act. For recreational fishing, this advanced planning will help conserve more fish species, providing healthier aquatic ecosystems that support fishing opportunities. Additionally, this legislation would benefit the outdoor recreation economy by creating more jobs and sustaining and establishing new recreation opportunities.

During the COVID-19 pandemic more Americans than ever before flocked outdoors. For centuries, Americans have benefited from access to public lands and waters, yet legislation has lagged to account for the importance of fish and wildlife. Now is the time for Congress to ensure that federal policies reflect Americans' growing interest in outdoor recreation and expectation for vibrant habitats and healthy fish and wildlife populations.

Thank you again for the opportunity to provide the sportfishing industry's perspective on this important bill. We are grateful for the ongoing work of the Senate Environment and Public Works Committee to advance legislation that will benefit fish, wildlife and the American people. We look forward to working with the Committee on this and other important measures that impact the recreational fishing industry and America's anglers.

Sincerely,



Mike Leonard
Vice President of Government Affairs

Business and Conservation Interests Support Dedicated Funding to Recover America's Fish and Wildlife

We, the undersigned, support preventing fish, wildlife, and plants from becoming endangered by creating a dedicated federal fund for proactive conservation efforts, led by the states, territories, and tribal nations, to address the nation's looming wildlife crisis. We support this concept as initially recommended by the Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources, comprised of national business and conservation leaders.

Our nation has been blessed with a diverse array of flora and fauna. While some of these species are thriving, many more are facing increasing challenges and are in steep decline – increasing their possibility of becoming endangered. State fish and wildlife agencies have identified 12,000 species nationwide in need of proactive conservation action.

At the request of Congress, every state has developed a State Wildlife Action Plan to assess the health of their state's fish and wildlife and outline conservation actions necessary to sustain them. Collectively, these action plans have identified these 12,000 species and formed a nationwide strategy to prevent them from becoming endangered. However, the current federal State and Tribal Wildlife Grants program is funded at only a fraction of what states need to conserve these species. State fish and wildlife biologists estimate that it would cost \$1.3 billion annually to implement 75 percent of these actions. In addition, our nation's tribes need similar funds (\$97.5 million/annually) to address the hundreds of species and millions of acres of lands they steward. The magnitude of the solution must match the magnitude of the challenge.

America has a proud history of bringing fish and wildlife back from the brink of extinction through professional wildlife management. A century ago, prized game species like elk, wood ducks, pronghorns, and striped bass were at risk of extinction—now they are thriving due largely to user fees provided by hunters and anglers. Today we face a new conservation crisis as emerging diseases, invasive species, habitat loss, and extreme weather threaten many wildlife and plant populations at a scale inconceivable just a few decades ago.

This growing wildlife crisis poses a threat to America's vibrant outdoor economy. Hunters, anglers, birders, hikers, campers, gardeners, and backyard wildlife watchers have created a fast growing outdoor consumer base that depends on healthy wildlife populations. Today, the outdoor economy contributes \$887 billion to our national economy annually, creates 7.6 million direct jobs, and generates \$124.5 billion in federal, state, and local tax revenue.

Further, by preventing the decline of species so that they do not require the stricter protections of the Endangered Species Act (ESA), other businesses will be able to operate with more regulatory certainty and reduced risk. As the decline of numerous species and their habitats across the country worsens, preemptive action can reverse this trend and keep species from the critical, yet often costly, "emergency room" measures required by the ESA. Proactive conservation is good for wildlife, good for taxpayers, and good for business. We support the protection of our nation's precious natural heritage by supporting efforts to direct dedicated funding into the Wildlife Conservation and Restoration Program as well as a Tribal program

Sincerely,

National and Regional

Allegheny Highlands Alliance	National Audubon Society
American Bird Conservancy	National Bobwhite Conservation Initiative
American Birding Association	National Parks Conservation Association
American Fisheries Society	National Wildlife Federation
American Fly Fishing Trade Association	National Wild Turkey Federation
American Institute of Biological Sciences	Native American Fish and Wildlife Society
American Littoral Society	Nature Abounds
American Society of Ichthyologists and Herpetologists	Natural Areas Association
American Ornithological Society	NatureServe
Artemis Sportswomen	North American Bluebird Society, Purple Martin Conservation Association
Association of Field Ornithologists	North American Grouse Partnership
Association of National Estuary Programs	Northeastern Division of the American Fisheries Society
Backcountry Hunters and Anglers	Northeast Section of The Wildlife Society
Bass Pro Shops	Northwest Section of The Wildlife Society
Bat Conservation International	Pheasants Forever
BookKeeping Express	Ramseur Records
Born Free USA	Ruffed Grouse Society
Cardno	Society for Conservation Biology North America
Central Mountains & Plains Section of The Wildlife Society	Southern Environmental Law Center
Congressional Sportsmen's Foundation	Southeast Section of The Wildlife Society
Cornell Lab of Ornithology	Southeastern Fishes Council
Delta Waterfowl Foundation	Southeastern Grasslands Initiative
Desert Fish and Habitat Partnership	The Avett Brothers
DJ Case & Associates	The Raptor Trust
E2, Environmental Entrepreneurs	The Conservation Fund
Environment America	The Longleaf Alliance
Environmental Defense Fund	The Nature Conservancy
Greater Yellowstone Coalition	The Wildlife Society
HECHO	Theodore Roosevelt Conservation Partnership
Izaak Walton League of America	Trout Unlimited
Mule Deer Foundation	Quail and Upland Wildlife Federation

*National organization

www.nwf.org •

Quality Deer Management
 Western Landowners Alliance
 Western Section of The Wildlife Society
 Wildlands Network
 Wildlife Forever
 Wildlife Habitat Council
 Wildlife Management Institute
 World Wildlife Fund
 Yellowstone to Yukon Conservation Initiative

National Wildlife Federation Affiliates

Alabama Wildlife Federation
 Arizona Wildlife Federation
 Arkansas Wildlife Federation
 Association of Northwest Steelheaders
 Colorado Wildlife Federation
 Connecticut Forest & Park Association
 Conservation Coalition of Oklahoma
 Conservation Council for Hawai'i
 Conservation Federation of Missouri
 Conservation Northwest
 Delaware Nature Society
 Earth Conservation Corps
 Environmental Council of Rhode Island
 Florida Wildlife Federation
 Georgia Wildlife Federation
 Idaho Wildlife Federation
 Indiana Wildlife Federation
 Iowa Wildlife Federation
 Kansas Wildlife Federation
 Kentucky Waterways Alliance
 Louisiana Wildlife Federation
 Michigan United Conservation Clubs
 Minnesota Conservation Federation
 Mississippi Wildlife Federation

Montana Wildlife Federation
 National Aquarium
 Nebraska Wildlife Federation
 Nevada Wildlife Federation
 New Hampshire Audubon
 New Jersey Audubon
 New Mexico Wildlife Federation
 North Carolina Wildlife Federation
 North Dakota Wildlife Federation
 Ohio Conservation Federation
 PennFuture
 Planning and Conservation League (CA)
 Prairie Rivers Network
 Sociedad Ornitológica Puertorriqueña Inc.
 South Carolina Wildlife Federation
 South Dakota Wildlife Federation
 Southeast Alaska Conservation Council
 Tennessee Wildlife Federation
 Texas Conservation Alliance
 Vermont Natural Resources Council
 Virgin Islands Conservation Society
 West Virginia Rivers Coalition
 Wyoming Wildlife Federation
 Wisconsin Wildlife Federation

Alabama

Alabama B.A.S.S. Nation
 Alabama Wildlife Federation
 AU Davis Arboretum
 Auburn University
 National Speleological Society
 Pelican Coast Conservancy
 Pritchett Environmental & Property Law LLC
 The Longleaf Alliance*

*National organization

Alaska

American Fisheries Society, International Association of Great Lakes Research
 Alaska Nature Guides
 Alaska Survival
 Alaska Wild Harvest, LLC
 American Fisheries Society, Alaska Chapter
 Audubon Alaska
 City of Whittier Alaska
 Paper Gold Publishing
 Southeast Alaska Conservation Council
 Susitna River Coalition
 Talkeetna Spinach Bread
 The Wildlife Society, Alaska Chapter
 University of Alaska, Anchorage
 University of Alaska, Fairbanks
 West Hair Studio

Arizona

American Fisheries Society, Arizona Chapter
 American Fisheries Society, Arizona-New Mexico Chapter
 Arizona Antelope Foundation
 Arizona Backcountry Hunters & Anglers
 Arizona Council of Trout Unlimited
 Arizona Elk Society
 Arizona Mule Deer Organization
 Arizona Wilderness Brewing Company
 Arizona Wildlife Federation
 Audubon Arizona
 Borderlands Brewing Company
 Bulton Brew House
 Catalina Brewing Company
 Coconino Sportsmen
 Desert Fish Habitat Partnership*

*National organization

Desert Rivers Audubon Society
 Navajo Nation Dept. of Fish and Wildlife
 Northern Arizona Audubon Society
 Northern Arizona University
 O.S.H.O Brewing
 Prescott Audubon Society
 Prison Hill Brewing Company
 Sahara Painting, Inc
 Sonoran Audubon Society Chapter
 Sprague's Sports LLC
 Strategic Planning Consultants, LLC
 Town & Country General Contractors
 Trout Unlimited Zane Grey Chapter
 Tucson Audubon Society
 Ware Farms, LLC
 Wren House Brewing Company
 Yuma Rod & Gun Club

***Arkansas**

The following organizations were also included in a state-specific letter.

American Fisheries Society, Arkansas Chapter
 AR Sierra Club
 Arkansas Interfaith Power & Light
 Arkansas Master Naturalists
 Arkansas Natural Sky Association
 Arkansas Public Policy Panel
 Arkansas State Chapter National Wild Turkey Federation
 Arkansas State University
 Arkansas Wildlife Federation
 Audubon Arkansas
 Beaver Watershed Alliance
 Best Pallets, Inc.
 Black OPS Calls
 Branded Branos

Building Plastics Inc.	California Chapter of Backcountry Hunters & Anglers
Byrd's Adventure Center	California Department of Water Resources
Charles S. Buckner Real Estate Appraisals	California Invasive Plant Council
Cornerstone Club, LLC	California Oaks
Creative Ideas	California Waterfowl Association
Entegrity	California Wildlife Foundation/California Oaks
Friends of White River National Wildlife Refuge	Coarsegold Resource Conservation District
Fowl Smokin' Swine Catering	Desert Fish Habitat Partnership*
Ozark Society	ECOSLO-Environmental Center of San Luis
Ozarks Water Watch	Obispo
Pine Ridge Gardens	Endangered Habitats League
Quail Forever, Arkansas Chapter	Environment California
Quality Deer Management Association	Foothill Conservancy
River Valley Mulch, Inc.	Giving Tree Club
RNT Calls	Gold Ridge RCD
Robert Huston Productions	Highway Safety Stewards
RW Standage Fisheries Services	Humboldt State University
Sinagua Malt, Inc.	ICF
Sonoran Audubon Society	Institute for Bird Populations
The Arkansas Fly Fishers	Kern Audubon Society
The Wildlife Society, Arkansas Chapter	Lawrence Hall of Science
Van Buren School District	National University
Westark Wildlife Conservation Club	Natural Solutions for Advocacy
White River Waterkeeper	Oakland Zoo and Environmental Conditions
California	Consultant
Alpine Historical Society	Print and Pixel Books
American Fisheries Society, California-Nevada Chapter	Planning and Conservation League
American Fisheries Society, Santa Cruz-Monterey Bay Area Subunit	Plumas Corporation
Audubon California	Point Blue Conservation Science
California Association of Resource Conservation Districts	River Partners
	Sacramento River Watershed Program
	Sacramento Zoo
	Santa Ana Watershed Association
	Santa Barbara Botanic Garden

*National organization

Save the American River Association
 Sierra Nevada Alliance
 State Education and Environment Roundtable
 Tahoe RCD
 Ten Strands
 The Wildlands Conservancy
 The Wildlife Society, Bay Area Chapter
 TL Surf
 University of California, Berkeley
 University of California, Davis
 University of California, Merced
 Waymo
 Western Sonoma County Rural Alliance

Colorado

American Fisheries Society, Colorado/ Wyoming Chapter
 Anglers Covey
 Black Canyon Audubon Society
 Butterfly Pavilion
 Colorado Chapter of The Wildlife Society
 Colorado Native Plant Society
 Colorado Natural Heritage Program
 Colorado Parks and Wildlife
 Colorado State University
 Colorado Tackle Pro
 Colorado Trout Unlimited
 Colorado University Birding Club
 Colorado Wildlife Federation
 Desert Fish Habitat Partnership*
 DVK Expeditions
 Global Choices
 Horse & Dragon Brewery
 Larval Fish Laboratory, Colorado State University

Muley Fanatic Foundation of Colorado
 Native American Fish and Wildlife Society*
 One Earth Future
 Pierce Lending, LLC
 Pikes Peak Outfitters
 Pikes Peak Recreation Alliance
 RepYourWater
 University of Colorado – Boulder
 Vet Voice Foundation
 Western Native Trout Initiative
 Wild Zora Foods, LLC
 Wilson Associates, Inc

Connecticut

Audubon Connecticut
 Branford Land Trust
 City of Stamford
 Connecticut Audubon Society
 Connecticut Bass Nation
 Connecticut Fisheries Advisory Council
 Connecticut Forest & Park Association
 Connecticut Land Conservation Council
 Connecticut Ornithological Society
 International Dark-Sky Association
 Litchfield Hills Audubon Society
 Menunkatuck Audubon Society
 New Haven Bird Club
 Northwest CT Sportsman's Council
 Northwest Connecticut Sportsman's Conservation Land Trust
 Park Watershed
 University of Connecticut
 Woodcock Nature Center
 Wood River Fly Fishing Club
 Wildlife in Crisis

*National organization

Delaware

American Fisheries Society, Mid-Atlantic Chapter
 Anchor QEA LLC
 Brandywine Red Clay Alliance
 Citizens' Climate Lobby, Lower Delaware
 Delaware Center for Horticulture
 Delaware Center for the Inland Bays
 Delaware Interfaith Power & Light
 Delaware Nature Society
 Delaware's Statewide Ecological Extinction Task Force
 Delaware Water Resources Center
 Delaware Wild Lands
 Delmarva Ornithological Society
 Green Watch Institute Foundation
 Inland Bays Foundation
 Kash Srinivasan Group LLC
 League of Women Voters of Sussex County, DE
 Marine Education, Research & Rehabilitation Institute, Inc.
 Maryland-Delaware Chapter of The Wildlife Society
 Protecting our Indian River
 The Nature Conservancy in Delaware
 University of Delaware

Florida

American Fisheries Society Florida Atlantic University
 Alachua Conservation Trust
 Audubon Florida
 Bluewater Bay Community Wildlife Habitat
 Bream Fisherman Association
 Citizens for a Scenic Florida

Deland Wildlife Rescue and Education Center
 Emerald Coastkeeper, Inc.
 Environmental Consulting
 Florida Fish and Wildlife Conservation Commission
 Florida International University
 Florida Wildlife Corridor
 Florida Wildlife Federation
 Guy Harvey Magazine
 Kemp Design Services
 Oona Seas LLC
 Panhandle Watershed Alliance
 Smithsonian Tropical Research Institute
 The Wildlife Society, Florida Chapter
 University of Florida
 University of South Florida

Georgia

Altamaha Riverkeeper
 Atlanta Botanical Garden
 Beech Hollow Wildflower Farm
 Bridgestone Golf
 Center for Invasive Species & Ecosystem Health, UGA
 Coosa River Basin Initiative/Upper Coosa Riverkeeper
 Flint Riverkeeper
 Fort Valley State University
 Gaskins Forest Education Center
 Georgia Audubon
 Georgia Bat Working Group
 Georgia Department of Natural Resources
 Georgia Plant Conservation Alliance (52 organizations)
 Georgia River Network

*National organization

Georgia State University Perimeter College
 Georgia Wildlife Federation
 Johns Creek Community Wildlife Habitat
 Kennesaw State University
 MidSouth Lake Management
 Monarchs Milkweed & More, LLC
 Municipal Development Services, LLC
 North American Land Trust
 Ogeechee Riverkeeper
 Southeastern Plant Conservation Alliance
 Terra-Ignea Botanical Garden
 The Nature Conservancy, Georgia
 The Wildlife Society, Georgia Chapter
 The Wildlife Society, UGA Student Chapter
 Turner Foundation

Guam

University of Guam Marine Laboratory/American Fisheries Society member

Hawaii

‘Āina Momona
 Conservation Council for Hawai‘i
 Conservation Dogs of Hawaii
 Dark Horse Photography
 Highness Hawaii Collection
 Hiki Nō Native Plants
 Hiki Ola
 Homesteady
 Invasive Species Committees of Hawaii
 Kānaka Climbers
 Kilo Books Hawai‘i
 Kipuka Kai
 Laulima Conservation
 Makapuu Pool & Spa Service LLC

Malama Kioea
 Mauna Kea Forest Restoration Project
 Oahu Army Natural Resources Program
 Oahu Cohousing Community
 Small House Growers
 Teanri Designs
 The Kohala Center
 The Wildlife Society Hawaii Chapter
 Ulana, Inc
 United Islands
 Waimea Herb Company

Idaho

Ada County Fish and Game League
 American Birding Association*
 American Fisheries Society, Idaho Chapter
 American Fly Fishing Trade Association*
 Archery Idaho
 Attorney at Law
 Big Creek Ranch
 Desert Fish Habitat Partnership*
 First Lite Performance Hunting Apparel
 Friends of MK Nature Center
 Golden Eagle Audubon Society
 Idaho Backcountry Hunters and Anglers
 Idaho Chukar Foundation
 Idaho Deer Alliance
 Idaho Department of Fish and Game
 Idaho Fish & Wildlife Foundation
 Idaho Hunters Education Association
 Idaho Outdoor Business Council
 Idaho State Bowhunters
 Idaho State University
 Idaho Trappers Association
 Idaho Wild Sheep Foundation

*National organization

Idaho Wildlife Federation
 JD High Country Outfitters
 North Americans Falconers Association
 North American Grouse Partnership*
 Palouse Land Trust
 Portneuf Resource Council
 Portneuf Valley Audubon Society
 RIO Products
 Safari Club International Idaho Chapter
 Southwest Idaho Fishing
 The Wildlife Society, Idaho Chapter
 Trout Hunt
 University of Idaho
 Waterworks-Lamson
 Western Bear Foundation
 Yellowstone to Yukon Conservation Initiative*

Illinois

American Fisheries Society, Illinois Chapter
 American Ornithological Society
 Anita Purves Nature Center, Urbana Park District
 Bird Conservation Network
 Blue Boutique
 Champaign County Forest Preserve District
 Chicago Zoological Society - Brookfield Zoo
 Citizens' Greener Evanston
 Douglas-Hart Nature Center
 Eastern Illinois University
 Forest Preserve District of DuPage County
 Fox River Ecosystem Partnership Inc.
 Illinois Environmental Council Education Fund
 Illinois Humane
 Illinois Ornithological Society
 Finest Home Inspection

*National organization

Fisheries Conservation Foundation*
 Lincoln Park Zoo
 Little River Research & Design
 Natural Land Institute
 Openlands
 Peoria Audubon Society
 Prairie Land Conservancy
 Prairie Rivers Network
 Southern Illinois University
 Sterling Grey LLC
 Techline
 The Conservation Foundation
 The Friends of Volo Bog State Natural Area
 The Wetlands Initiative
 The Wildlife Society, Illinois Chapter
 University of Illinois Urbana-Champaign

Indiana

American Fisheries Society, Ball State Chapter
 American Fisheries Society, Indiana Chapter
 Amos Butler Audubon Society
 Central Indiana Land Trust
 Coal Creek Chapter of Pheasants Forever
 DJ Case & Associates*
 Empower Results
 Endangered Species Chocolate
 F.C. Tucker Company, Inc.
 Friends of the White River, Inc.
 Hoosier Environmental Council
 Indiana Audubon Society, Inc.
 Indiana Department of Natural Resources
 Indiana Native Plant Society
 Indiana Parks Alliance
 Indiana University
 Indiana Wildlife Federation

www.nwf.org *

Listening Heart LLC

Mark Stevens MD, PLLC/Mark Stevens Family Farms, LLC

New Alsace Conservation Club, Inc.

Nina Mason Pulliam EcoLab at Marian University

Nose No Limit

Nspire Lighting

Porter County Chapter Izaak Walton League

Purdue University

Southern Indiana Cooperative Invasives Management

Tallgrass Associates

White River Alliance

Wild Birds Unlimited, Inc.

Iowa

Allamakee County Protectors - Education Campaign

American Fisheries Society, Iowa Chapter

Blank Park Zoo

Bur Oak Land Trust

Iowa Audubon

Iowa Conservation Education Coalition

Iowa's County Conservation System

Iowa National Wild Turkey Federation

Iowa Raptor Project

Iowa Wildlife Federation

Iowa Young Birders

Page County Conservation Board

Raptor Resource Project

Tallgrass Prairie Audubon Society

Ty Smedes Nature Photography

Upper Iowa Audubon Society

Kansas

American Fisheries Society, Kansas Chapter

Audubon of Kansas

City of Arkansas City

Grassland Groupies

Honey Bunny Ranch

Jayhawk Audubon Society

Kansas Alliance for Wetlands and Streams

Kansas Chapter of The Wildlife Society

Kansas State University

Kansas Wildlife Federation

Smoky Hills Audubon Society

Topeka Audubon Society

University of Kansas

Kentucky

Fisheries and Oceans Canada

Kentucky Waterways Alliance

The Wildlife Society, Kentucky Chapter

Louisiana

American Society of Ichthyologists and Herpetologists*

American Sportsmen Against Poachers

Audubon Louisiana

Avoyelles Wildlife Federation

Bayou Vermilion Preservation Association

Bill Lewis Lures

Biological Surveys, Inc.

Black Bear Conservation Coalition

Cajun Catch Seafood

Cajun Fishing Adventures

Catch Dat Charters

Center for Sustainable Engagement and Development

*National organization

Creative Cajun Cooking
 Commission on Stewardship of the Environment of the Louisiana Interchurch Conference
 Common Ground Relief
 Diez Signs LLC
 East Ascension Sportsman's League
 Faulks Game Calls
 First Grace United Methodist Church
 Friends of Black Bayou Lake, NWR
 Gorman Brothers Appliances
 Grant Ridge Golf Course
 Gulf Restoration Network
 Haydel Calls
 LA Marsh Guide Service
 Lake Pontchartrain Basin Foundation
 Levees.org
 Louisiana Lost Lands Environmental Tours
 Louisiana State University
 Louisiana Wildlife Federation
 Mansura Volunteer Fire Department
 Marsh Rat Guide Service
 Meraux Foundation
 MQVN Community Development Corporation
 Orleans Audubon Society
 Rapides Wildlife Association
 Salter's Jiggin Pole
 Southwings
 Spot On Fishing Adventures
 Tagging Memories
 The Outdoor Kitchen Show
 The Shreveport Society for Nature Study, Inc.
 Bird Study Group
 Venice Charters
 Zion Travelers Cooperative Center

Maine

American Fishery Society-Administrative Section
 Native Fish Coalition
 Natural Resource Council of Maine
 Maine Audubon
 The Wildlife Society, Maine Chapter
 University of Maine
 Wildlife Consulting, LLC, COO

Maryland

American Chestnut Land Trust, Inc.
 Anacostia Watershed Society
 Assateague Coastal Trust
 Audubon Maryland-D.C.
 Audubon Mid-Atlantic
 Audubon Naturalist Society
 Audubon Society of Central Maryland
 Baltimore Trees Trust
 Biohabitats
 Blue Water Baltimore
 Cecil Land Use Association
 Central Maryland Beekeepers Association
 Chesapeake Conservancy
 Chesapeake Wildlife Heritage
 Cleanwater Linganore Inc
 Delmarva Birding Weekends
 Eastern Shore Land Conservancy
 Elk Creeks Watershed
 Entomological Society of America
 Friends of Lower Beaverdam Creek
 Friends of Sligo Creek
 Friends of St Clements Bay
 Friends of the Nanticoke River
 Hazel Outdoor Discovery Center

*National organization

Izaak Walton League of America*
 Lower Shore Land Trust
 Maryland Biodiversity Project
 Maryland Conservation Council
 Maryland-Delaware Chapter of The Wildlife Society
 Maryland National Capital Parks and Planning commission
 Maryland Native Plant Society
 Maryland Ornithological Society
 Maryland Science Center
 The Mattawoman Watershed Society
 MD Campaign for Environmental Human Rights
 MOM's Organic Market
 National Aquarium
 Patuxent Tidewater Land Trust
 Rock Creek Conservancy
 Safe Skies Maryland
 Savage River Watershed Association
 Scenic Rivers Land Trust
 Southern Maryland Audubon Society
 St. Mary's River Watershed Association
 The Wildlife Society, Maryland Chapter
 Urban Ecosystem Restorations
 Waterfront Partnership
 Waterkeepers Chesapeake
 WISE

Massachusetts

American Fisheries Society, Massachusetts
 American Fisheries Society, Southern New England Chapter
 American Fisheries Society, UMass Amherst Student Sub-unit

Ashby Land Trust
 Association of Field Ornithologists*
 Campaign for Environmental Literacy
 Jewish Climate Action Network
 HealthLink
 Mass Audubon
 Meadowsclaping for Biodiversity
 The Polly Hill Arboretum
 University of Massachusetts, Dartmouth
 Wetland Strategies and Solutions, LLC

Michigan

American Fisheries Society, Michigan Chapter
 Anglers of the Au Sable
 Audubon Society of Kalamazoo
 Backcountry Hunters & Anglers, Michigan Chapter
 Barry Conservation District
 Barry County Parks and Recreation
 Bay Mills Indian Community
 Big Bay Sportsman Club
 Blue Water Conservation District
 Bowfishing Association of Michigan
 Branch Conservation District
 Buckleys Mountainside Canoes
 Buist Electric
 Cadillac Sportsman's Club
 Central Michigan University
 Central Michigan University – Institute for Great Lakes Research
 Charlevoix Conservation District
 Clinton Conservation District
 Coldwater River Watershed Council
 Community Recycled
 Detroit Audubon

*National organization

Dickinson Conservation District	Professional Development for Good
Frankenmuth Conservation Club	Renegade Brittanys
Genesee Conservation District	Rogue River Watershed Partners
Gladwin Conservation District	Southwest Michigan Land Conservancy
Grand Traverse Conservation District	Saginaw Field and Stream Club
Grand Valley Metro Council	Sterling Sportsman's Association
Grand Valley State University Annis Water Resources Institute	The Phycological Society of America
Huron Pines	Trout Unlimited, Michigan Chapter
Huron Valley Conservation Association	Trout Unlimited Schrems West Michigan
Island Charters Mi, LLC	True NORTH Trout Guide Service
Island View Resort Cedarville	Tomahawk Archers
Jackson County Conservation District	University of Michigan-Flint
Kent Conservation District	U.P. Whitetails of Marquette County
Lake St. Clair Walleye Association	Upper Black River Council
Lenawee County Conservation League	
Lifestyle Lost	Minnesota
Little Traverse Bay Bands of Odawa Indians	American Fisheries Society, Minnesota Chapter
Littlest Sidekick Outfitters	Archery Trade Association
LSSU Fish and Wildlife Club	Audubon Minnesota
Manistee Conservation District	Climate Generation: A Will Steger Legacy
MI BASS Nation	K-M Regional Veterinary Hospital
Michigan Bow Hunters Association	Minnesota Chapter of Backcountry Hunters & Anglers
Michigan Department of Natural Resources	Minnesota Conservation Federation
Michigan Department of Natural Resources – Fisheries Division	Minnesota DNR
Michigan Resource Stewards	Minnesota Ornithologists' Union
Michigan State University	Minnesota Sharp-tailed Grouse Society
Michigan United Conservation Clubs	The Wildlife Society, Minnesota Chapter
Michigan Steelhead and Salmon Fishermen's Association	University of Minnesota-Twin Cities
Muskegon River Watershed Assembly	Wildlife Forever*
Oceana Conservation District	
Ottawa Conservation District	Mississippi
Presque Isle Conservation District	American Fisheries Society, Mississippi Chapter
	Audubon Mississippi

*National organization

Mississippi Wildlife Federation
 Rural Property Rights Association of Mississippi
 The Wildlife Society, Mississippi Chapter

Missouri

American Fisheries Society, Missouri Chapter
 American Wolf Foundation
 Audubon Missouri
 Bass Pro Shops*
 Burroughs Audubon Society of Greater Kansas City
 Conservation Federation of Missouri
 Forest & Woodland Association of Missouri
 Mississippi Valley Duck Hunters Association
 Missouri Bird Conservation Initiative
 Missouri Botanical Garden
 Missouri Chapter, Walnut Council
 Missouri Conservation Heritage Foundation
 Missouri Conservation Pioneers
 Missouri Hunter Education Instructor's Association
 Missouri Native Seed Association
 Missouri Outdoor Communicators
 Missouri Prairie Foundation
 Missouri River Bird Observatory
 Missouri Sierra Club
 Missouri Stream Team Watershed Council
 Missouri Trappers Association
 Mo Grouse Chapter of QUWF
 Mockingbird Hill Farm
 Quail and Upland Wildlife Federation*
 River Bluffs Audubon Society
 Shaw Nature Reserve
 St. Louis Audubon

University of Missouri Fisheries & Aquatic Science Society
 University of Missouri Wildlife and Fisheries Science Graduate Student Organization
 Wild Bird Rehabilitation

Montana

American Fisheries Society, Montana Chapter
 Artemis*
 Bear Creek Council
 Big Sky Build, Inc.
 Bitterroot Audubon
 Five Valleys Audubon Society
 Flathead Wildlife Inc.
 Gallatin Wildlife Association
 Greater Yellowstone Coalition
 Headwaters Montana, Inc.
 Hellgate Hunters and Anglers
 HydroSolutions
 Last Chance Audubon Society
 Laurel Rod & Gun Club
 MeatEater, Inc.
 Montana Audubon
 Montana Bowhunters Association
 Montana Conservation Voters Education Fund
 Montana Trout Unlimited
 Montana Wilderness Association
 Montana Wildlife Federation
 Northern Rocky Mountain Grotto
 Pintler Audubon Society
 Park County Environmental Council
 Public Land Water Access Association
 Raptors of the Rockies
 Sacajawea Audubon Society
 Sweetwater Travel

*National organization

The Trail Less Traveled
 The Wildlife Society, Montana Chapter
 Turner Endangered Species Fund
 University of Montana
 Upper Missouri Breaks Audubon
 Western Landowners Alliance*
 Wildlife Ecology Institute
 Winter Wildlands Alliance
 Yellowstone to Yukon Conservation Initiative*
 Yellowstone Valley Audubon Society

Nebraska

American Fisheries Society, Nebraska Chapter
 Audubon Nebraska
 Audubon Society of Omaha
 Nebraska Alliance for Conservation and Environmental Education
 Nebraska Master Naturalist Program
 Nebraska Wildlife Federation
 The Wildlife Society, Nebraska Chapter
 University of Nebraska-Lincoln
 Wachiska Audubon Society

Nevada

American Fisheries Society, Nevada Chapter
 Desert Fish Habitat Partnership*
 Equine Legacy Ranch
 Farmily 501c3
 Friends of Nevada Wilderness
 Nevada Chapter of The Wildlife Society
 Nevada Wildlife Association
 Nevada Wildlife Federation
 NoBearHuntNV.org
 Pyramid Lake Fisheries, Pyramid Lake Paiute Tribe

New Hampshire

Bear-Paw Regional Greenways
 Ecosystem Management Consultants
 ErgoSoft Americas, Inc.
 Ibis Wildlife Consulting
 Loon Preservation Committee
 Moosewood Ecological LLC
 New Hampshire Audubon

New Jersey

American Littoral Society*
 Archeological Society of New Jersey
 Citizens United to Protect the Maurice River and Its Tributaries, Inc.
 Cohansey Watershed
 Conserve Wildlife Foundation of New Jersey
 Essex County Beekeepers Society
 Friends of Hopewell Valley Open Space
 Fyke Nature Association
 New Jersey Audubon
 New Jersey Conservation Foundation
 New Jersey Outdoor Alliance
 New Jersey State Federation of Women's Clubs of GFWC
 New Jersey Bluebird Society
 New Jersey Division of the Allegheny Society of American Foresters
 North American Bluebird Society, Purple Martin Conservation Association*
 North Jersey RC&D
 NY/NJ Baykeeper
 Raritan Headwaters
 Retired Fisheries
 Ruffed Grouse Society New Jersey Chapter
 Rutgers the State University

*National organization

Save Barnegat Bay
 Pheasants Forever, South Jersey Chapter
 South Jersey Land & Water Trust
 South Jersey Wheelmen
 The Raptor Trust*
 Trout Unlimited, Central New Jersey Chapter
 Trout Unlimited, Fred S. Burroughs North Jersey Chapter
 Wildlife Center Friends, Inc

New Mexico

American Fisheries Society, Arizona-New Mexico Chapter
 American Fisheries Society, New Mexico State University
 Audubon New Mexico
 Desert Fish Habitat Partnership*
 Design 2211 Graphic Arts
 First Presbyterian Church
 JACO Outfitters, LLC
 Las Cruces Green Chamber of Commerce
 Matkat Pottery
 Mesilla Valley Audubon Society
 New Mexico Audubon Council
 New Mexico Chapter of Backcountry Hunters & Anglers
 New Mexico Interfaith Power and Light
 New Mexico Sportsmen
 New Mexico Wilderness Alliance
 New Mexico Wildlife Federation
 Nuestra Tierra Conservation Project
 Pueblo of Santa Ana
 RESULTS-Santa Fe and Health Action NM
 Sangre de Cristo Audubon Society
 Santa Clara Pueblo Forestry

Sierra Club, Northern New Mexico Group
 Simple Machine Brewing Company
 Southwest Environmental Center
 Taos Mesa Brewing
 TNRC, LLC
 Trout Unlimited, New Mexico Chapter

New York

American Fisheries Society, New York Chapter
 Audubon New York
 Audubon Society of the Capital Region
 Aytzim: Ecological Judaism
 Basha Kill Area Association
 Bedford Audubon Society
 Binghamton University
 Bronx River-Sound Shore Audubon Society
 Central Westchester Audubon Society
 Climate Psychology Alliance North America
 Cornell Lab of Ornithology*
 Delaware-Otsego Audubon Society
 Environmental Advocates of New York
 Environmental Consulting
 E2, Environmental Entrepreneurs
 Feminist Bird Club
 Four Harbors Audubon Society
 Genesee Valley Audubon Society
 Great South Bay Audubon Society
 Hudson River Audubon Society
 Hudson River Audubon Society of Westchester
 New York Audubon
 New York Chapter of Backcountry Hunters & Anglers
 New York Chapter of the Wildlife Society
 New York City Audubon
 New York League of Conservation Voters

*National organization

New York State Ornithological Assoc., Inc.
 Northern Catskills Audubon Society
 Northern New York Audubon Society
 North Shore Audubon Society
 Onondaga Audubon
 Orange County Audubon Society, Inc.
 Quaker Boys, Inc.
 Saw Mill River Audubon
 Stony Brook University
 SUNY Brockport
 SUNY-ESF
 The City University of New York
 United University Professions

***North Carolina**

The following organizations were included in a letter sent to North Carolina's congressional delegation. The full letter can be viewed, [here](#).

Asheville GreenWorks
 Alamance County Wildlife Club
 Albermarle Conservation and Wildlife Chapter (Elizabeth City)
 Albemarle Sound Delta Waterfowl (Elizabeth City)
 American Fisheries Society, North Carolina Chapter
 Arts & Science Council of Charlotte-Mecklenburg
 Audubon North Carolina
 Avocet Investments, LLC
 Bird House on the Greenway
 Box Turtle Collaborative
 Cabarrus Brewing Company
 Carolina Raptor Center
 Carolina Thread Trail
 Carolina Wetlands Association

Charlotte Reconnecting Ourselves with Nature
 Coco F.A.R.M
 Concord Engineering & Surveying, Inc.
 Concord Wildlife Alliance
 Coastal Carolina Delta Waterfowl (Bayboro)
 Coastal Carolina Riverwatch
 Coastal Carolina University
 Coastal Wildlife Refuge Society
 Community Alliance for Wildlife (Charlotte)
 Cornerstone Cabarrus, LLC
 Criterion Investors
 Crystal Coast Waterkeeper
 Discovery Place Nature
 Discovery Place Science Edgemont, Ltd.
 Duke Energy
 Fish & Wildlife Conservation Council
 Field to Cottage Nursery
 Friends of Pocosin Lakes National Wildlife Refuge
 Gaston County Piedmont Area Wildlife Stewards
 Grandfather Mountain Stewardship Foundation
 Greathorn Development
 Green Acres Family Farms, LLC
 Hygeia Marketing Corp.
 Habitat and Wildlife Keepers (Matthews)
 HoneyBee Realty
 Johnston County Wildlife Association
 Julie Jones Team, Realtors (Cornelius)
 Karen Beasley Sea Turtle Hospital
 Kirk Palmer & Thigpen, P.A.
 Lake Brandt Development, LLC
 Lake James Area Wildlife and Nature Society
 Lake Norman Delta Waterfowl
 Lake Norman Rod and Gun Club

*National organization

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Lake Norman Wildlife Conservationists	Rocky Pee Dee, LLC
Law Offices of Robert M. Critz, P.A.	Rocky River Trout Unlimited
Lee County Wildlife Club	Sandhills Ecological Institute
Magnolia Coffee Company	Sandhills Rod and Gun Club
Mecklenburg Audubon Society	Smokey Mountain Sportsmen Association
Middle Neuse River Delta Waterfowl (Smithfield)	Solace Salon & Spa (Concord)
Moccasin Gap Delta Waterfowl (Roxboro)	South East NC Delta Waterfowl (Wilmington)
Mountain Wild! (Asheville)	South Wake Conservationists (Holly Springs)
NC Delta Waterfowl Foundation	Southern Piedmont Delta Waterfowl (Albemarle)
NC Falconers Guild	Stallings Nature and Wildlife Chapter
NC Herpetological Society	StreetFare Farm
NC Hunters for the Hungry	T. Gilbert Pearson Audubon Society
NC National Wild Turkey Federation	Table Rock Trout Unlimited
NC Wildlife Resources Commission	Team Honeycutt, Realtors
NC Partners for Reptile and Amphibian Conservation	Tesh-Troxler Landscapes & Designs, Inc.
NC State Advisory Council Quality Deer Management Association	The Avett Brothers*
North American Land Trust	The Carolina Hawking Club
North Carolina BASS Nation	The Conservation Fund
North Carolina Camouflage Coalition	The Land Trust for Central North Carolina
North Carolina Ducks Unlimited	The North Carolina Chapter of The Wildlife Society
North Carolina State University Student Fisheries Society	The Sedgfield Hunt
North Carolina Wildlife Federation	The Woodlands at Davidson Development Company
North Central Branch QDMA (Roxboro)	Town Creek Delta Waterfowl (Tarboro)
Neuse River Hawks	Triad Delta Waterfowl (Winston Salem)
Pamlico Albemarle Wildlife Conservationists (Washington)	Triangle Delta Waterfowl
Piedmont Bird Club	Triangle Fly Fishers
Plastic Ocean Project, Inc.	Trips for Kids Charlotte
Quail and Upland Wildlife Federation	Twenty-six Acres Brewing Company
Ramseur Records*	Union County Wildlife Federation
Ridgeline Development Corporation	Wake County Wildlife Club
	WakeNature Preserves Partnership
	Watery Swamp Hunt Club

*National organization

Wild Horse Adventure Tours

Woodbridge Company

North Dakota

Audubon Dakota

Badlands Conservation Alliance

Cass County Wildlife Club

North Dakota Chapter of Backcountry Hunters
& Anglers

North Dakota Chapter of The Wildlife Society

North Dakota Wildlife Federation

Stutsman County Wildlife Federation

Ohio

American Fisheries Society, Ohio Chapter

Appalachia Ohio Alliance

Arc of Appalachia

Black Swamp Bird Observatory

Brukner Nature Center

Buckeye Trail Association

Canton Audubon Society

Case Western Reserve University

Cincinnati Nature Center

Cincinnati Wild Flower Preservation Society

City of Dayton, Dept. of Water

Cleveland MetroParks

Cleveland Museum of Natural History

Columbus and Franklin County MetroParks

Columbus Zoo and Aquarium

D & D Linkhart Farm

Dayton Area Wild Ones

Dayton Society of Natural History

Delaware County Ohio Bird Club

Doan Brook Watershed Partner

Earth Expressions

Five Rivers MetroParks

Friends of the Ravines

Friends of the Scioto River

Gardenopolis Cleveland

Geauga Park District

Genus Loci, Inc.

Greater Dayton Partners for the Environment

Izaak Walton League, Ohio

Jeffrey G Davis, LLC

Lake Erie Islands Conservancy

Lake Metroparks

League of Ohio Sportsmen

Linkhart Group

Little Miami River Kleeners

Little Miami Watershed Network

Lonetree Consulting

Miami County Park District

Miami Soil & Water Conservation District

Muskingum University

Ohio Biodiversity Conservation Partnership,

The Ohio State University

Ohio Biological Survey

Ohio Bird Conservation Initiative

Ohio Conservation Federation

Ohio Environmental Council

Ohio History Connection

Ohio State University-Ohio Biodiversity Con-
servation Partnership

Ohio Wildlife Management Association

Olmsted Falls Garden Club

Parrot Promo Essentials

Ross County Park District

Society for the Study of Amphibians and Rep-
tiles

Sugarcreek Township Trustee

*National organization

Summit Metro Parks
 Tecumseh Land Trust
 The College of Wooster
 The Lake Erie Islands Nature and Wildlife Center
 The Ohio State University Aquatic Ecology Lab
 The Toledo Zoo
 The Wilds
 Wittenberg University

***Oklahoma**

The following organizations were also included in a state-specific letter.

2101 Strategies
 Abuelita's Restaurant
 Antioch Energy
 Burgess Company
 Caddo Creek Energy
 CG Printing
 Chapter 2 Hoke's Designs
 Conservation Coalition of Oklahoma
 Core Extreme Sports
 Eastside Quick Mart
 GG Printing
 Griffin and Associates
 Guyutes
 Hoey Construction
 Indian & Environmental Law Group, PLLC
 Kids Club
 Krown Carpet Cleaning LLC
 Latham Consulting Group
 Lawrence Capital
 Lazer Ops OKC
 Moon River Studio Art Gallery
 Native Boy Productions
 Oklahoma Automatic Door

*National organization

Oklahoma State University
 Quick Mart
 Red Clay Capital
 Six Mile Line Winery
 Straight from Heavenly Bakery
 Summerside Vineyard and Winery
 Talents Group
 Tulsa Bird Dog Association
 Twisted Cork
 Uniform Experts
 Vero's Bounce House Rentals

Oregon

Adventures Without Limits
 Audubon Society of Lincoln City, Oregon
 American Fisheries Society, Oregon Chapter
 Anderson's Outdoors
 Association of Northwest Steelheaders
 Astoria Sportfishing
 BC Angling Supply
 Bill Monroe Outdoors
 Blue Mountain Forest Partners
 Bob Rees' Fishing Guide Service
 Coalition of Oregon Land Trusts
 Daric Moore Building Arts
 David Johnson's Guide Service
 Day One Outdoors
 Desert Fish Habitat Partnership*
 Double G Guide Service
 Elakha Alliance
 Environment Oregon
 Ferris Landscaping
 Fight Club Guide Service
 Fish the Swing Guide Service
 FishEng Products

Flying Fish Co.	Oregon State University
Grant's Outdoor Adventures	Oregon Wildlife Foundation
In the Zone Sportfishing	Oregon Zoo
It's All Good Guide Service	Outdoor Project
Joe Domenico Insurance Agency	Pacific Coast Federation of Fishermen's Association
JT's NW Guide Service	Paradise Guide Service
Kalmiopsis Audubon Society	PDXWildlife
Kevin Hendrickson Music	Peck's Guide Service
Lane County Audubon Society (Oregon)	Portland State University
McKenzie River Trust	Public Purposes, LLC
Nancy Slavin, LLC	Ritchie Services
National Project for Excellence in Environmental Education	River Trail Outfitters
Necanicum Watershed Council	Ron Chamness Auctions
Neil Kelly Remodeling	Salem (OR) Audubon Society
North Coast River Guides	SandC Rod Racks
Northwest Angling Experience	Sasquatch Outdoors
Northwest Fishing Adventures	Save Our wild Salmon Coalition
Northwest Guides and Anglers Association	Skysten Freet Guided Sportfishing, LLC
Northwest Sportfishing Industry Association	South Santiam Watershed Council
Protect Animal Migration (PAM)	Steel Deals, LLC
Representative Ken Helm, Oregon State Legislature	Surfrider Foundation, OR
Okulitch and Associates	T & S Guide Service
Organic Earthly Delights	The Conservation Angler
Oregon Association of Conservation Districts	The Crest
Oregon Chapter of The Wildlife Society	The Trust for Public Land, OR
Oregon Coast Alliance	Theodore Roosevelt Conservation Partnership, OR
Oregon Coast Aquarium	Think Wild Central Oregon
Oregon Council Trout Unlimited	Tim Wilson Sells Homes, LLC
Oregon Department of Fish and Wildlife	Tom Kelly, Labor Commissioner, State of Oregon
Oregon Desert Land Trust	Umpqua Valley Audubon Society
Oregon Fish and Wildlife Commission	Xerces Society for Invertebrate Conservation
Oregon League of Conservation Voters	Wallowa Wolverine Project
Oregon State Legislature	

*National organization

We Win, LLC
 West Multnomah Soil & Water Conservation District
 Western Fishing Adventures
 Western Rivers Conservancy
 Wild Salmon Center
 World Class Fishing

Pennsylvania

American Public Gardens Association
 Audubon Pennsylvania
 Aquashicola/Pohopoco Watershed Conservancy
 Bucks County Audubon Society
 Conococheague Audubon Society
 Delaware Highlands Conservancy
 Delaware Valley University
 Elk Creeks Watershed Association
 Guardians of the Brandywine
 Greater Wyoming Valley Audubon Society
 Hawk Mountain Sanctuary Association
 Heritage Conservancy
 Lehigh Valley Audubon Society
 Mehoopany Creek Watershed Association
 Natural Areas Association*
 PennFuture
 Penn State University
 Pennsylvania Chapter of Backcountry Hunters and Anglers
 Pennsylvania Chapter of The Wildlife Society
 Pennsylvania Council of Churches
 Pennsylvania Federation of Sportsmen's Clubs
 Pennsylvania Wildlife Federation
 Seven Mountains Audubon

Southeast Montgomery County Trout Unlimited #468
 Trout Unlimited, Valley Forge Chapter
 Trout Unlimited, Western Pocono Chapter
 Quality Deer Management*
 WCGM
 Quittapahilla Audubon Society
 Wyncote Audubon Society

Puerto Rico

Puerto Rico DNER
 Sociedad Ornitológica Puertorriqueña Inc.
 University of Puerto Rico, Rio Piedras Campus

Rhode Island

Audubon Society of Rhode Island
 Environmental Council of Rhode Island
 Friends of the Moshassuck and Moshassuck-critters
 Grow Smart RI
 Mercy Ecology
 Rhode Island College
 Rhode Island Environmental Education Association
 Rhode Island Fish and Wildlife
 Rhode Island Land Trust Council
 Thrive Outside

South Carolina

American Fisheries Society, South Carolina Chapter
 Audubon South Carolina
 Callawassie Island Ecology Committee
 Clemson University
 Five Forks Area Plan Committee

*National organization

Nomad Clothing
 South Carolina Department of Natural Resources
 South Carolina Wildlife Federation
 The Wildlife Society, South Carolina Chapter
 University of South Carolina Beaufort

South Dakota

29-90 Sportsman's Club
 American Fisheries Society, South Dakota Chapter
 Brookings Wildlife Federation
 Dakota Sportsman Inc.
 Friends of the Big Sioux River
 High Plains Wildlife Association
 Northern Prairies Land Trust
 Paha Sapa Grotto
 Prairie Hills Audubon Society of Western South Dakota
 South Dakota Wildlife Federation
 Sportsman's Club of Brown County

Tennessee

American Fisheries Society, Tennessee Chapter
 Austin Peay State University Student Chapter of The Wildlife Society
 Avery Outdoors
 BirdWorks Consulting
 Charlie's Garage
 Conservation Fisheries, Inc.
 Delta Waterfowl Foundation*
 Final Flight Outfitters, Inc.
 Greg A. Vital Center for Natural Resources and Conservation at Cleveland State
 Harpeth River Watershed Association

Houston High School Trap Team
 K Gregg Consulting
 McMinnville-Warren County Chamber of Commerce
 Miami University
 Middle Tennessee State University Center for Environmental Education & Center for Cedar & Glades Studies
 Mill Creek Watershed Association
 National Bobwhite Conservation Initiative*
 Obed Watershed Community Association
 R&R Fly Fishing
 Richland Creek Watershed Alliance
 Rough Country Outdoors Hunting Club
 South Chickamauga Creek Greenway Alliance
 Southern Environmental Law Center*
 Southern States Electric Company, Inc.
 Southeastern Avian Research
 Stephens Seed and Supply
 Strikes King Lures
 Tennessee Chapter of The Wildlife Society
 Tennessee Chapter Sierra Club
 Tennessee Citizens for Wilderness Planning
 Tennessee Clean Water Network
 Tennessee Conservation Voters
 Tennessee Division of Natural Areas, Department of Environment and Conservation
 Tennessee Environmental Council
 Tennessee Interfaith Power and Light
 Tennessee Ornithological Society
 Tennessee Parks and Greenways Foundation
 Tennessee Tech University
 Tennessee Wildlife Federation
 The Conservation Fund, Tennessee Chapter
 The Wolf River Conservancy

*National organization

Towhee Boat	Friends United for a Safe Environment (FUSE, Inc.)
University of Tennessee Martin Student Chapter of The Wildlife Society	Fort Worth Audubon Society
University of Tennessee Student Chapter of the Wildlife & Fisheries Society, Knoxville	Fortis International Automotive, Inc.
	Fortis International Energy, Ltd.
	Fortis International, Inc.
	Fortis International Management, Inc.
Texas	Galveston Bay Foundation
American Fisheries Society, Texas A&M University Corpus Christi Student Subunit	Galveston Island Nature Tourism Council
American Fisheries Society, Texas Chapter	Greater Edwards Aquifer Alliance
Arlington Conservation Council	Hill Country Alliance
Audubon Texas	Houston Audubon
Bat Conservation International*	Houston Safari Club
Bayou City Waterkeeper	Houston Wilderness
Bexar Audubon Society	Houston Zoo
Big Thicket Association	Klay
Borderlands Research Institute	Memorial Park Conservancy
Caesar Kleberg Wildlife Research Institute	Native Plant Society of Texas
Cagle-Shaw Industries, Inc.	Native Plant Society of Texas, San Antonio Chapter
Coastal Prairie Partnership	People & Animal Land Sharing Organization
Crosstimbers Ranch Wildlife Center	Pharr- San Juan- Alamo Independent School District
Dallas Down River Club	Pines and Prairies Land Trust
Dallas Safari Club	Riverside Nature Center Association
Desert Fish Habitat Partnership*	San Antonio Conservation Society
DFW Wildlife Coalition, Inc.	San Antonio Interfaith Environmental Network
Deuelduke, Ltd	Save Barton Creek Association
East Texas Woods & Waters Foundation	Student Chapter of The Wildlife Society
Environmental Survey Consulting	TAMU-CC AFS Student Subunit
Fins and Fluke	TAMU Rangeland, Wildlife and Fisheries Management
Friends of the Rio Bosque Wetlands Park	Tarleton State University
Friends of the Brazos River	Tarleton State University Student Chapter of The Wildlife Society
Friends of the Fort Worth Nature Center and Refuge	
Friends of the Neches River	

*National organization

Texas Alliance for America's Fish and Wildlife
 Texas Chapter of Backcountry Hunters & Anglers
 Texas Chapter of the Wildlife Society
 Texas Conservation Alliance
 Texas Foundation for Conservation
 Texas Land Trust Council
 Texas League of Conservation Voters
 Texas Native Cats
 Texas Society for Ecological Restoration
 Texas Tech University
 Texas Wildlife Association
 The National Bobcat Rescue and Research Center
 Travis Audubon Society, Inc.
 Turtle Island Restoration Network
 Welder Wildlife Federation
 West Texas A&M
 Wild Oasis
 Wimberley Valley Watershed Association

United States Virgin Islands

Virgin Islands Conservation Society

Utah

American Fisheries Society, Utah Chapter
 Conserve Southwest Utah
 Desert Fish Habitat Partnership*
 Grand Staircase Escalante Partners
 Mule Deer Foundation*
 Tooele County Wildlife Federation
 Utah Chapter of Backcountry Hunters & Anglers
 Utah Division of Wildlife Resources
 Utah State University

Wild Utah Project

Vermont

Audubon Vermont
 Vermont Natural Resources Council

Virginia

American Institute of Biological Sciences*
 American Fisheries Society*
 American Fisheries Society, Virginia Chapter
 Bayside Researchers
 Friends of Accotink Creek
 IUCN Tuna and Billfish Specialist Group
 Mid-Atlantic Invasive Plant Council
 National Science Teaching Association
 National Wildlife Federation
 NatureServe*
 Radford University
 Rappahannock Tribe
 Richmond Audubon Society
 The Conservation Fund*
 The Wildlife Society, Virginia Chapter
 Trout Unlimited*
 Virginia Commonwealth University
 Virginia Department of Natural Resources
 Virginia Eastern Shore Land Trust
 Virginia Society of Ornithology
 Virginia Tech
 Wild Virginia

Washington

American Fisheries Society Washington
 Audubon Washington
 Black Hills Audubon Society
 Brandon's Guide Service

*National organization

Central Basin Audubon
 Colville Confederated Tribes
 Conservation Northwest
 Dan Ponciano Guide Service
 Desert Fish Habitat Partnership*
 EarthCorps
 Formwest Architecture, Inc
 Friends of Grays Harbor
 Heavy Hitter Guide Service LLC
 Kittitas Audubon
 Mt. Baker Group WA Chapter Sierra Club
 Obsession Fishing Guide Service
 Olympic Peninsula Audubon Society
 Oregon State University
 Pilchuck Audubon Society
 Polly Dyer Cascadia Great Old Broads for Wilderness
 Puget Sound Bird Observatory
 Rainier Audubon Society
 Save Our Wild Salmon Coalition
 Seattle Aquarium
 Seattle Parks and Recreation
 Sierra Club – Loo Wit Group
 Skagit Audubon Society
 South Fork Research, Inc.
 The Guide's Forecast
 The Lands Council
 The Trail Posse
 University of Washington
 Vancouver Audubon
 Washington Chapter of Backcountry Hunters and Anglers
 Washington Chapter of The Wildlife Society
 Washington Environmental Council

Washington State Department of Fish and Wildlife
 Washington Wildlife Federation
 Weed Warriors Nature Stewards Program
 Wild Steelhead Coalition
 Wolf Haven International
 Woodland Park Zoo

Washington, DC

American Bird Conservancy*
 American Fisheries Society*
 Audubon Naturalist Society
 Center for Green Schools at USGBC
 Designgreen, LLC
 Earth Conservation Corps
 EarthEcho International
 Interfaith Power & Light (Washington, DC, Maryland, and Northern Virginia)
 National Alliance of Forest Owners
 North American Association for Environmental Education
 Northwest Trek Wildlife Park- Metro Parks Tacoma
 Point Defiance Zoo & Aquarium- Metro Parks Tacoma
 Theodore Roosevelt Conservation Partnership*

West Virginia

American Fisheries Society, West Virginia Chapter
 Friends of the Cheat, Inc.
 West Virginia Highlands Conservancy
 West Virginia Rivers Coalition
 West Virginia University

*National organization

Wisconsin

Abbotsford Sportsmen's Club	Carter Creek Sportsmen's Club
Adell Sportsman Club	Cataract Sportsman Club
Aldo Leopold Foundation	Central WI Shoot To Retrieve
Almond Rod And Gun Club	Central Wisconsin Gun Collectors Assoc.
American Wild Turkey Hunting Dog Assoc	Central Wisconsin Sportsmen's Club
Apostle Islands Sport Fishermen's Association	Chain O'Lakes Conservation Club
Art by Amanda Zehren	Challenge The Outdoors Inc
Ashland/Bayfield County Sportsmen	Chaseburg Rod N Gun Club
Assoc of Conservation Clubs of Trempealeau Co	Chippewa Rod and Gun
Association Of Conservation Clubs Of Trempealeau County	Colfax Sportsmen's Club
Augusta Area Sportsmen's Club	Columbia County Sporting Alliance
Badger Dachshund Club Inc	Columbus Sportsman's Association
Bangor Rod & Gun Club	Coon Valley Conservation Club
Beaver Dam Conservationists Inc	Crystal Lake Sportsmen Club
Beloit Rifle Club, Inc.	Dan Small Outdoors, LLC
Berlin Conservation Club	Dane County Conservation League
Big 4+ Sportsmen's Club	Daniel Boone Conservation League Inc
Big Oaks Hunting Club Inc	De Pere Sportsman's Club
Bird City Wisconsin	Delton Sportsmen Club
Bloomer Rod & Gun Club	Department of Natural Resources Wisconsin
Blue Hills Sportsmen's Club, Inc.	Dodge County Sporting Conservation Alliance
Boscobel Area Sportsmen's Inc	Dog Federation Of Wisconsin
Boxhorn Gun Club	Door County Fish Farm & Game Club
Breed Sportsman Club	Door County Rod & Gun Club Inc
Brice Prairie Conservation Association	Door Creek Orchard
Brill Area Sportsmen's Club, Inc.	Douglas County Fish & Game League
Brown County Conservation Alliance	Dousman Gun Club
Brown County Sportsmen's Club	Dunn Co Fish & Game
Brule River Sportsmen's Club	Durand Sportsman's Club
Buck Lake Sportsman's Club	Eau Claire Rod & Gun Club
Buffalo County Conservation Alliance	Ettrick Rod & Gun Club, Inc
Butte Des Morts Conservation Club	Farmers & Sportsmen's Club
Calumet Co Sportman's Alliance	Field & Stream Sportsmen's Club
	Fin N Feather Sportsman's Club
	Fishing Has No Boundaries Inc.

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Forest County Assoc Of Lakes Inc	Lafayette County Sportsmen's Alliance
Fort Atkinson Wisconservation Club	Lake Poygan Sportsmen's Club
Friends of Poynette Game Farm	Lakeview Rod and Gun Club
Friends of the MacKenzie Center	Land O' Lakes Fish and Game Club, Inc
Friends of the St. Croix Wetland Management District	Larrabee Sportsman's Club Inc
Friends of Vernon Marsh Inc	LaValle Sportsmen's Club
Gathering Waters	Law Office of Peter E McKeever
Grant County Outdoor Sport Alliance	Lincoln County Sports Club
Great Lakes Sport Fisherman - Milwaukee Chapter	Lincoln County Youth Turkey Hunt
Great Lakes Sport Fishermen Ozaukee Chapter	Little Wolf River Houndsmens Club
Green Bay Area Great Lakes Sport Fishermen	Madison Area Dachshund Club
Green Bay Duck Hunters Association	Madison Audubon Society
Grelton Conservation Club	Manitowoc Cty Fish & Game Protective Association
Hancock Sportsmen's Club	Manitowoc Gun Club
Hartford Conservation & Gun Club	Maribel Sportsman's Club
Hayward Rod & Gun Club	Mark LaBarbera & Associates Inc
Hmong American Sportsmen Club	Midstate Metal Detector Club
Hope Rod & Gun Club	Mill Creek Education & Gun Club
Horicon Marsh Sportsmen's Club aka: Mayville Gun Club	Millston Knapp Sportmans Club
Hudson Rod Gun & Archery	Milwaukee Casting Club
Ice Age Trail Alliance, Inc	Milwaukee Police Officers Conservation-sportsman Club
Iola Conservation Club	Mishicot Sportsmen Club
Izaak Walton League of America - Bill Cook Chapter	Monches Fish & Game Club
Izaak Walton League of America - Southern Brown Conservation	Mosinee Sportsmen's Alliance
Izaak Walton League of America Wisconsin Division	Muskies Inc./Between the Lakes Chapter
Jefferson Sportsmen's Club	National Deer Alliance, Wisconsin Chapter
Johnsonville Rod and Gun	Natural Resources Foundation of Wisconsin
Kids and Mentors Outdoors	Nekoosa Conservation League
Koenigs Conservation Club	North Bristol Sportman's Club
	North WI Rod & Gun Club Inc
	Northern Wisconsin Houndsmen Association
	Northwest Rod & Gun Club
	Oakland Conservation Club

Oconomowoc Sportsman's Club Inc	Shadows On The Wolf, Inc.
Oconto County Sportsmen's Alliance	Sheboygan Area Great Lakes Sport Fishermen
Oconto River Watershed Trout Unlimited	Sheboygan County Conservation Association
Osseo Rod and Gun Club	Shoto Conservation Club
Outagamie Conservation Club	Silver Lake Sportsman's Club
Outdoor Heritage Education Center	Slinger Sportsman Club
Outdoors Inc of New Holstein	Smerkes Sportsmen's Club
Padus Nicolet Gun Club, Inc.	South Milwaukee 1400 Fishing & Hunting Club
Pecatonica River Valley Coon Hunters Club	Southeastern Rod & Gun Club
Pheasants Forever, Wisconsin Chapter	Southern Clark County Sportsman's Club
Polk County Sportsmen Club	Sparta Rod & Gun Club
Portage Rod and Gun Club	Stanley Sportsman's Club & Foundation
Pumpkin Center Sportsmen's Club	Star Prairie Fish & Game Association
Racine Co. Conservation League Inc.	Sturgeon For Tomorrow North Chapter
Racine County Line Rifle Club Inc	Sugar River Coon Hunters
Raptor Services, LLC	Suscha-fale Sportsmen's Club
Red Arrow Camp	Tainter Menomin Lake Improvement Assoc
Retreat Sportsmen's Club	TMLIA
Rhine-Plymouth Field & Stream Inc.	The Prairie Enthusiasts
Rice Lake Rod & Gun Club	The Wildlife Society - UWSP
Richfield Sportsmen's Club	Tomorrow River Valley Conservation Club, Inc.
Rio Conservation Club	Trempealeau Sportsman's Club
Robert Monk Gardens, Inc.	Tri-County Sportswomen's Club, LLC
Rock River Rescue Foundation	Triangle Sportsmen's Club
Rolling Hills Sportsman's Club	Trout Unlimited Green Bay Chapter
Ruffed Grouse Society	Twin City Rod & Gun Club
Sauk County Conservation Alliance	Underhill Sportsman's Club
Sauk County Sportsman's Alliance	University of Wisconsin- Madison
Sauk Prairie Trap & Skeet Club	Van Dyne Sportsman's Club
Sauk Trail Conservation Club	Viking Bow & Gun Club
Sayner-St. Germain Fish & Wildlife Club	Waldo Pond Improvement Association
SCI Badgerland Chapter	Wales Genesee Sportsman Club
SCI Northeast Wisconsin Chapter	Walleyes For Tomorrow Inc
SCI Southeast Wisconsin Bowhunters Chapter	Watertown Archers Inc.
SCI Wisconsin Chapter	Watertown Conservation Club

*National organization

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Waukesha County Conservation Alliance	Wisconsin Metro Audubon Society
Waupaca Conservation League	Wisconsin Sharp-tailed Grouse Society
West Bend Barton Sportsman Club	Wisconsin Society for Ornithology
Western Great Lakes Bird and Bat Observatory	Wisconsin Trappers Association
Westgate Sportsman Club Inc.	Wisconsin Trapshooters Association
WI Association Of Beagle Clubs	Wisconsin Waterfowl Association
WI Council Of Sportfishing Org	Wisconsin Waterfowl Association
WI Deer Hunters Inc	Wisconsin Wetlands Association
WI Federation Of Great Lake Sport Fishing Clubs	Wisconsin Wildlife Federation
WI Hunter Ed Instructor Association	Wisconsin's Green Fire
WI Muzzle Loaders Association	Yahara Fishing Club
WI Sharp-Tailed Grouse Society	ZG Enterprises
WI Taxidermist Assoc	
WI Trappers Association	Wyoming
WI Woodland Owner's Association	Audubon Rockies
Wilderness Sportsmen's Club Inc.	Back Country Horsemen Wyoming Chapter
Wildlife Restoration Association Inc.	Bowhunters of Wyoming
Willow Aces	Brushback Wildlife Tours
Wilton Rod & Gun	Desert Fish Habitat Partnership
Winchester Gun Club	EcoTour Adventures
Wings Over Wisconsin	Greater Yellowstone Coalition*
Winnebago Conservation Club	Hole-in-the-Wall Grotto
WinnebagoLand Conservation Alliance	Mule Fanatic Foundation
Wisconsin Association Of Field Trial Clubs	Pheasants Forever, Wyoming Chapter
Wisconsin Association of Sporting Dog Clubs	Theodore Roosevelt Conservation Partnership,
Wisconsin Bowfishing Association	Wyoming Chapter
Wisconsin Chapter of Backcountry Hunters & Anglers	Trout Unlimited, Wyoming Chapter
Wisconsin Conservation Congress	Western Bear Foundation
Wisconsin Coon Hunters Association Inc.	Wind River Outdoor Company
Wisconsin Ducks Unlimited	Wyoming Outfitters and Guides Association
Wisconsin Falconer's Association	Wyoming Wild Sheep Foundation
Wisconsin House Outdoorsmen Club	Wyoming Wildlife Federation

*National organization



2019 Annual Convention Suquamish, Washington

RESOLUTION # 19 - 52

“CALLING FOR SUPPORT AND PASSAGE OF RECOVERING AMERICA’S WILDLIFE ACT WITH A TRIBAL WILDLIFE CONSERVATION AND RESTORATION ACCOUNT”

PREAMBLE

We, the members of the Affiliated Tribes of Northwest Indians of the United States, invoking the divine blessing of the Creator upon our efforts and purposes, in order to preserve for ourselves and our descendants rights secured under Indian Treaties and benefits to which we are entitled under the laws and constitution of the United States and several states, to enlighten the public toward a better understanding of the Indian people, to preserve Indian cultural values, and otherwise promote the welfare of the Indian people, do hereby establish and submit the following resolution:

WHEREAS, the Affiliated Tribes of the Northwest Indians (ATNI) are representatives of and advocates for national, regional, and specific tribal concerns; and

WHEREAS, ATNI is a regional organization comprised of American Indians/Alaska Natives and tribes in the states of Washington, Idaho, Oregon, Montana, Nevada, Northern California, and Alaska; and

WHEREAS, the health, safety, welfare, education, economic and employment opportunity, and preservation of cultural and natural resources are primary goals and objectives of Affiliated Tribes of the Northwest Indians; and

WHEREAS, as indigenous peoples, we honor in all ways our relation to Creation and in that spirit acknowledge a sacred obligation to ensure all our relations are treated in a dignified manner that reflects our tribal cultural values passed down since time immemorial; and

WHEREAS, our ATNI youth leaders recognize that our salmon, traditional foods and resources need bold action in order to sustain our families and future generations for as long as the rivers flow; and

WHEREAS, the Federal Government has the trust responsibility to protect our fish and wildlife for future generations; and

WHEREAS, tribes have been wildlife managers since time-immemorial and now many tribal governments operate fish and wildlife programs, promote conservation and recovery of fish and wildlife, and regulate hunting and fishing within their traditional lands and areas; and

WHEREAS, tribes collaborate, co-manage, or partner with states on the conservation and recovery of fish and wildlife, but do not receive sufficient federal funding to protect and restore these species; and

WHEREAS, proactive tribal engagement in wildlife management is necessary to conserve, protect and restore wildlife resources and prevent the demise of species to the point of requiring listing under the federal Endangered Species Act; now

THEREFORE BE IT RESOLVED, that ATNI calls on Congress to support and pass Recovering America's Wildlife Act (RAWA) with the inclusion of a tribal fish and wildlife conservation and restoration account that provides long-term, dedicated, and stable funding for tribes in addition to a state account for tribal wildlife management created under RAWA; and

BE IT FURTHER RESOLVED, that ATNI respectfully requests that the legislation ensure a minimum of \$97.5 million as an annual allocation for tribal fish and wildlife programs; and

BE IT FURTHER RESOLVED, that ATNI supports Congressional direction to the federal government to ensure consultation with tribes on the development of an allocation process for distribution of these funds; and

BE IT FINALLY RESOLVED, that this resolution shall be the policy of ATNI until it is withdrawn or modified by subsequent resolution.

CERTIFICATION

The foregoing resolution was adopted at the 2019 Annual Convention of the Affiliated Tribes of Northwest Indians, held at Suquamish Clearwater Casino Resort, Suquamish, Washington on October 7-10, 2019, with a quorum present.



Leonard Forsman, President



Norma Jean Louie, Secretary



NATIONAL CONGRESS OF AMERICAN INDIANS

**The National Congress of American Indians
Resolution #ABQ-19-036**

TITLE: Calling on Congress to Support and Pass Recovering America's Wildlife Act, or Similar Legislation with a Tribal Wildlife Conservation and Restoration Account

EXECUTIVE COMMITTEE

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Fawn R. Sharp
Quinault Indian Nation

FIRST VICE-PRESIDENT
Aaron Payment
Sault Ste. Marie Tribe of Chippewa Indians

RECORDING SECRETARY
Juana Majel-Dixon
Puuma Band of Luiselto Indians

TREASURER
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Wyandotte Nation

GREAT PLAINS
Larry Wright, Jr.
Ponca Tribe of Nebraska

MIDWEST
Shannon Holsey
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NORTHEAST
Tina Abrams
Seneca Nation of Indians

NORTHWEST
Leonard Forsman
Squamish Tribe

PACIFIC
Erica Mae Macias
Cahuilla Band of Indians

ROCKY MOUNTAIN
MARK POLLOCK
Blackfeet Nation

SOUTHEAST
Nancy Carnley
Ma-Chis Lower Creek Indian Tribe of Alabama

SOUTHERN PLAINS
Robert Tippecanoe
Comanche Nation

SOUTHWEST
Vacant

WESTERN
Alan Mandell
Pyramid Lake Paiute Tribe

CHIEF EXECUTIVE OFFICER
KEVIN ALLIS
Forest County Potawatomi Community

NCAI HEADQUARTERS
1516 P Street, N.W.
Washington, DC 20005
202.466.7767
202.466.7797 fax
www.ncai.org

WHEREAS, we, the members of the National Congress of American Indians of the United States, invoking the divine blessing of the Creator upon our efforts and purposes, in order to preserve for ourselves and our descendants the inherent sovereign rights of our Indian nations, rights secured under Indian treaties and agreements with the United States, and all other rights and benefits to which we are entitled under the laws and Constitution of the United States, to enlighten the public toward a better understanding of the Indian people, to preserve Indian cultural values, and otherwise promote the health, safety and welfare of the Indian people, do hereby establish and submit the following resolution; and

WHEREAS, the National Congress of American Indians (NCAI) was established in 1944 and is the oldest and largest national organization of American Indian and Alaska Native tribal governments; and

WHEREAS, tribal nations have been wildlife managers since time-immemorial and many tribal governments now operate fish and wildlife programs, promote conservation and recovery of fish and wildlife, and regulate hunting and fishing within their traditional lands and areas; and

WHEREAS, tribal nations collaborate, co-manage, and partner with states on the conservation and recovery of fish and wildlife, but do not receive sufficient federal funding to protect and restore these species; and

WHEREAS, proactive tribal engagement in wildlife management is necessary to conserve, protect and restore wildlife resources and prevent the demise of species to the point of requiring listing under the federal Endangered Species Act; and

WHEREAS, NCAI supports federal legislation meant to protect and restore wildlife species that includes tribal nations, and that resources are obligated to tribal nations for law enforcement, fish and wildlife programs, range and habitat management, and other conservation and recovery efforts that tribal nations deem necessary.

NOW THEREFORE BE IT RESOLVED, that the National Congress of American Indians (NCAI) calls on Congress to co-sponsor and pass Recovering America's Wildlife Act (RAWA), or similar legislation, with the inclusion of a tribal wildlife conservation and restoration account that provides long-term, dedicated, and stable funding for tribal wildlife management in addition to a state account created under RAWA; and


BE IT FURTHER RESOLVED, that the NCAI respectfully requests that the legislation ensure a minimum of \$97.5 million as an annual allocation for tribal fish and wildlife programs; and

BE IT FURTHER RESOLVED, that the NCAI further supports Congressional direction be provided to the federal government to ensure consultation with tribal nations on the development of an allocation process for distribution of these funds; and

BE IT FINALLY RESOLVED, that this resolution shall be the policy of NCAI until it is withdrawn or modified by subsequent resolution.

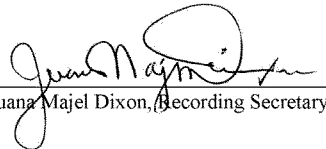
CERTIFICATION

The foregoing resolution was adopted by the General Assembly at the 2019 Annual Session of the National Congress of American Indians, held at the Albuquerque Convention Center, October 20-25, 2019, with a quorum present.



Fawn Sharp, President

ATTEST:



Juana Majel Dixon, Recording Secretary

Senator CARPER. Senators will be allowed to submit questions for the record through the close of business on Wednesday, December 22nd. We will compile those questions, send them to our witnesses, ask for our witnesses to reply by Christmas Day. Not really. We are going to ask you to respond by Wednesday, January the 5th.

With that, we wish you all, you and your families, happy holidays, and thank you for all that you are doing to protect God's creations on this planet.

With that, our hearing is adjourned. Thank you.

[Whereupon, at 11:59 a.m., the hearing was adjourned.]

