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Committee on Environment
and Public Works

Washington, D.C.

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A LEGISLATIVE HEARING TO EXAMINE S. 2194, THE COASTAL HABITAT CONSERVATION ACT OF 2021, S. _____, THE STRENGTHENING COASTAL COMMUNITIES ACT OF 2022, S. 3069, THE GREAT LAKES FISH AND WILDLIFE RESTORATION REAUTHORIZATION ACT, AND S. 3767, THE DELAWARE RIVER BASIN CONSERVATION REAUTHORIZATION ACT

Wednesday, June 15, 2022

United States Senate

Committee on Environment and Public Works

The committee, met, pursuant to notice, at 10:00 a.m. in room 406, Dirksen Senate Office Building, the Honorable Thomas R. Carper [chairman of the committee] presiding.

Present: Senators Carper, Capito, Cardin, Whitehouse, Graham.

STATEMENT OF THE HONORABLE THOMAS R. CARPER, A UNITED STATES
SENATOR FROM THE STATE OF DELAWARE

Senator Carper. Good morning, everyone. I am happy to call this hearing to order. We welcome our witnesses.

We welcome the jury sitting back here, all these young people in the audience. It is nice to see you guys.

Today, our committee, the Environment and Public Works Committee, will examine four pieces of legislation. Collectively, they would enhance the ability of the U.S. Fish and Wildlife Service to restore but also conserve coastal habitats for the benefit of wildlife and people too.

The critical work implicated in each of these bills could not be more timely. According to the United Nations, we are experiencing an unprecedented global biodiversity decline. Extreme weather events are causing accelerated loss of coastal habitat, imperiling vulnerable species.

But that is not all. These coastal areas that many species call home also protect coastal communities, homes, businesses, and infrastructure alike. So while investing in coastal habitats, we are investing in local economies at the same time.

One of the bills we are examining today, the Coastal Habitat Conservation Act, would codify the Fish and Wildlife Service Coastal Program. This voluntary program provides technical and financial assistance to States, to tribes, to

landowners, and to other partners to support habitat conservation in coastal watersheds.

Since 2010, this program has enabled, just in Delaware alone, some 66 projects. For every federal dollar invested, partners have contributed \$7, an impressive leveraging ratio.

I want to thank both Senators Cardin and Senator Graham, who will be joining us later, for their leadership on this legislation and Senator Cardin in particular for encouraging us to hold today's hearing.

We will also consider legislation today pertaining to two regional Fish and Wildlife Service programs. The Great Lakes Fish and Wildlife Restoration Authorization Act would reauthorize the Service's Great Lakes Program. This program has provided funding for research and restoration projects in the Great Lakes since 1998. That is before a number of our guests our here today were born.

The Delaware River Basin Conservation Reauthorization Act would reauthorize the Service's Delaware River Basin Program. This program has successfully brought federal, State and local governments together with regional partners to identify, to prioritize and to implement restoration activities within the Basin.

I would like to note that the Fish and Wildlife Service has done an exceptional job of getting this program off the ground

since Congress authorized it in 2016. Recent grants from the Service have already been put to work in Delaware enhancing pollinator habitats and improving fish passage and restoring our wetlands.

Last but not least, today we will consider draft legislation that amends the Coastal Barrier Resources Act and codifies maps to add units to the Coastal Barrier Resources System. This program protects sensitive habitats, and in doing so saves taxpayers dollars by restricting the use of federal funding in those areas.

The bipartisan Coastal Barrier Resources Act became law in 1982, the year I was elected to serve in the U.S. House of Representatives. It became law in 1982, in no small part due to the hard work of my predecessor, Congressman Tom Evans from Delaware. I am glad to carry on his important work.

As I mentioned earlier today, the benefits of coastal restoration are well documented. After Hurricane Sandy, the Fish and Wildlife Service received funding for large scale restoration activities to remediate habitat damage and to improve resiliency. The Service spent some of this much needed funding to restore Fowler Beach in Prime Hook National Wildlife Refuge, one of our two national wildlife refuges in Delaware.

As a result of that project's completion more than six years ago, record number of piping plovers are nesting on our

beaches. The community resiliency benefits are just as impressive. The homes and infrastructure surrounding Fowler Beach which had flooded in nearly every major rain event in the years before the completion of this project no longer flood. That is what we call in our State a real win-win.

In addition to advancing the legislation before our committee today, I believe we should also undertake these types of large-scale restoration activities ahead of the next storm, instead of in response to it. Doing so would make our coastal communities even more resilient and better able to withstand extreme weather events in the face of a changing climate.

Just as our committee has agreed that an ounce of prevention is worth a pound of cure when it comes to our goals for conserving species, the same is true of building resiliency in our Nation's coastal communities. The Fish and Wildlife Service has demonstrated that we can and we should tackle these important goals together. This is evident from their successful work not just in the First State but in many other States as well.

While what we have experienced in Delaware is the rule, not the exception. When we restore and conserve habitat, we also protect communities and support local economies. I hope that our colleagues and our distinguished panel of witnesses will highlight their similar experiences. We look forward to hearing

from all of you.

Before we do, though, let me turn to our Ranking Member, Senator Capito, for her opening remarks. Senator Capito?

[The prepared statement of Senator Carper follows:]

STATEMENT OF THE HONORABLE SHELLEY MOORE CAPITO, A UNITED STATES
SENATOR FROM THE STATE OF WEST VIRGINIA

Senator Capito. Thank you, Chairman Carper, and thank all of our witnesses for coming today. I look forward to hearing from each one of you.

When considering our Nation's natural resources and all that our beautiful Country has to offer, it is important to consider the importance of our coastal communities and foster programs that protect those resources while also supporting economic growth. We are lucky on this committee to have much representation from our coastal States.

We are here today to examine a number of bills that would affect our coastal communities and the programs established to conserve and protect those areas. The Coastal Habitat Conservation Act of 2021 introduced by my colleagues, Senators Cardin and Graham, provides statutory authority for the U.S. Fish and Wildlife Coastal Program, as the Chairman said, originated in appropriations language in 1985.

The Coastal Program works through partnerships to protect, restore and enhance important coastal areas that provides fish and wildlife habitat. I want to thank Senator Graham for inviting our witness Emily Cope, from the South Carolina Department of Natural Resources for their support for partnership programs that encourage conservation of these areas.

Next on the agenda is Chairman Carper's draft legislative text, the Strengthening Coastal Communities Act of 2022, which would amend the Coastal Barrier Resources Act, or CBRA, and codify changes to the John Chafee Coastal Barrier Resources, CBRS, maps. In the past, these maps have been codified in a bipartisan manner. In 2018, 35 revised maps were adopted with the bipartisan support of this committee. That compilation of maps was the largest legislative update to the CBRS since 1990.

In addition to codifying maps, the legislation we are looking at today would make programmatic changes to the CBRA program. As we learn more about the proposed amendments to the CBRA, it is important to me that we maintain the bipartisan approach to updating CBRA that the committee has followed in the past.

We will also consider the Great Lakes Fish and Wildlife Restoration and Reauthorization of 2021, which would reauthorize that underlying statute through Fiscal Year 2027 to fund projects to conserve Great Lakes fish and wildlife habitat.

Finally, we will consider the Delaware River Basin Conservation Reauthorization Act of 2022 that the Chairman spoke about, which would reauthorize the Delaware River Basin Restoration Grant Program through 2030 and makes a number of changes to the program. I think the Chairman is aware, we have made him aware, that we have heard some concerns on this bill,

specifically, that it fails to address some of the regulatory overreach of the Delaware River Basin Commission.

The concerns are that commission has overstepped its intended role as coordinator and clearinghouse for State and federal stakeholders in the Delaware Basin by taking actions to ban the development of natural gas in the commission's footprint, a troubling precedent. Indeed, the commission's claim to regulatory authority is rooted in a statute enacted before the passage of the Clean Water Act or even the creation of the EPA.

At a time when we are seeking to increase our natural gas production to meet domestic and international demands, it is worth the Senate reviewing whether the commission has assumed for itself a regulatory role that is out of step with our current environmental statutes and policy needs. As we examine each of the four pieces of legislation before us today, I look forward to hearing more about the programs that you support and working toward bipartisan solutions.

Again, I thank the Chairman for this hearing.

[The prepared statement of Senator Capito follows:]

Senator Carper. I have just spoken with Elizabeth Grace Mabry. She thinks we may be conflating two different items that have very similar names. But we will get to the bottom of that and try to straighten this out.

Senator Capito. Sounds good.

Senator Carper. Thanks so much.

Before I introduce Mr. Guertin, our first witness on panel one, all by himself, I want to turn to our colleague without whom we probably wouldn't be here today. Senator Cardin, thank you for your leadership on these issues.

STATEMENT OF THE HONORABLE BENJAMIN L. CARDIN, A UNITED STATES
SENATOR FROM THE STATE OF MARYLAND

Senator Cardin. To our Chairman and Ranking Member, thanks for scheduling the hearing on these four very important bills. I thank you.

One of the things I really enjoy about this committee is that we do work together, Democrats and Republicans, to advance the agenda of the Environment and Public Works Committee. Today is no exception.

I am very proud to partner with Senator Graham on the Coastal Habitat Conservation Act. I can point to so many areas where this has been beneficial in the Chesapeake Bay Watershed.

As the Chairman pointed out, this is a voluntary program that provides the services of Fish and Wildlife for the planning, protection, and restoration of public and private lands on our coastal habitat. Mr. Chairman, I can point to so many examples of where this program has been instrumental in helping us achieve our objectives in the Chesapeake Bay Watershed. I could point to the fact that we have been able to deal with habitat restoration for federal trust species, the DelMarVa fox squirrel is doing very well, thanks to the help of this program.

We can point to the fact that our nutria population on the Eastern Shore is just about zero, which is critically important

to protecting our wetlands. We can point to wetlands restoration from Blackwater throughout our watershed. We can point to our coastal cities, including Annapolis, that have benefited from these programs. We can point to the oyster beds that are now coming back as a result of the help from these programs. There are so many examples that we could give.

I take pride because the Fish and Wildlife Service started with the Chesapeake Bay but it is now a national program and a very effective national program. This legislation would codify and authorize at a level slightly higher than the President's Fiscal Year 2023 budget. The Fiscal Year 2023 budget is \$16 million. We are suggesting reauthorizing it at \$20 million, growing to \$25 million.

I thank the Chairman and Ranking Member for their help in putting together this legislation, and I look forward to our witnesses.

[The prepared statement of Senator Cardin follows:]

Senator Carper. Senator Cardin, thank you so much.

We have two panels today. The first panel is a one-person panel. I want to welcome Stephen Guertin, who is currently serving as the Deputy Director for Program Management and Policy at the U.S. Fish and Wildlife Service. Mr. Guertin has been a public servant for over 30 years, almost all of his life. He started to work at the Department of Interior in 1989, and later the Fish and Wildlife Service, where he has held several leadership positions.

He also served in the United States Marine Corps for eight years, and we want to thank you for your service, and thank you for joining us today. I am a retired Navy captain, and we have Dan Sullivan, who is from Alaska, who is a Marine colonel. So the Navy and Marine Corps welcome you here today.

I like to say the Navy and Marine Corps have a friendly rivalry. I like to say different uniforms, the same team. So we welcome you before this committee today.

You may begin your testimony when you are ready. The committee will then proceed with asking you some questions before we move on to our second panel. Please proceed.

STATEMENT OF STEPHEN GUERTIN, DEPUTY DIRECTOR, PROGRAM
MANAGEMENT AND POLICY, U.S. FISH AND WILDLIFE SERVICE,
DEPARTMENT OF THE INTERIOR

Mr. Guertin. Thank you, Chairman Carper, Ranking Member Capito, and members of the committee. I am Steve Guertin, Deputy Director at the U.S. Fish and Wildlife Service. We appreciate the opportunity to testify today on three bills, as well as the discussion draft regarding the conservation of coastal habitats.

Our Nation's coastal habitats play a vital role in sustaining healthy populations of fish, wildlife and plants. These habitats provide shelter and food to a diverse array of species. They serve as breeding grounds and nurseries for fish and shellfish and are important stopovers for migratory birds.

Coastal habitats are equally important for people. They support commercial and recreational fisheries, buffer communities against storms and sea level rise, improve water quality and provide other valuable ecosystem services. These coastal habitats are threatened by climate change, rising sea levels, increasingly frequent and intense storms and habitat loss. With population growth and urbanization projected to increase along our coastline, the people, assets, and natural resources exposed to these risks will only increase.

We at the Fish and Wildlife Service play a key role in

protecting, conserving, and restoring these important habitats. We recognize the importance of amplifying our efforts to address these threats as well as the need for greater investment in coastal habitat conservation.

These bills and the discussion draft before the committee today would take steps to address these needs and we support the legislation. We support S. 2194, the Coastal Habitat Conservation Act, which would codify and authorize funding for the Service's Coastal Program. The Coastal Program is a voluntary partnership-based program that provides beneficial and financial assistance to States, tribes, coastal communities, and other partners for habitat conservation in coastal watersheds. It leverages partner funds at a ratio of five to one, increasing the positive impact of every taxpayer dollar.

These projects result in many benefits for fish, wildlife, plants and people. They help build resilience to the impacts of climate change, conserve federal trust species, and improve habitat connectivity. They also provide lasting benefits to coastal communities and their economies by employing contractors, restoring coastal wetlands, supporting fisheries, improving water quality, and increasing opportunities for hunting and fishing.

We support S. 3069, which would reauthorize the Great Lakes Fish and Wildlife Restoration Act. This partner-like grant

program under the Act has a successful track record of restoring and managing fish and wildlife resources and their habitats in the Great Lakes Basin. The program has provided over \$32 million in federal funding to 193 projects. We have worked collaboratively with more than 100 organizations that have contributed about \$15 million in matching, non-federal support.

We also support S. 3767, which would reauthorize our successful Delaware River Basin Restoration Program. This voluntary, non-regulatory program brings partners together across the Delaware River watershed in pursuit of a shared vision: restoring and protecting the Nation's watersheds' natural resources for the benefit of wildlife and people.

This program supports partner priorities of the watershed by awarding matching grants to on-the-ground conservation projects. Since 2018, we have awarded nearly \$27 million to 123 projects which have generated \$46 million in matching funds. These projects have helped restore fish and wildlife habitat, improve water quality, reduce flooding, and enhance public access and recreational opportunities.

Finally, we support the draft bill, the Strengthening Coastal Communities Act. The Coastal Barrier Resources Act, through its non-regulatory free market approach mitigates coastal hazards associated with climate change by removing federal subsidies and incentives for development along our

coastlines. This in return reduces development pressures and conserves fish and wildlife and their habitats. The Coastal Barrier Resources Act has been highly successful in its 40-year history by reducing the intensity of development on these important coastal barriers, resulting in over \$9.5 million in savings.

The draft bill would improve our administration of the Coastal Barrier Resources Act. For example, it would examine future application of the Act to high hazard areas not included in the current CBRA system. The bill would also adopt our final recommended modernized maps for more than 450 coastal barrier resource system units, including those maps recently revised through our Hurricane Sandy remapping project. Adoption of these maps by Congress would be the single largest action to modernize the system since the law's enactment.

We support the draft bill and look forward to working with the committee on technical changes to ensure the successful implementation of the Act and the long-term protection of these important coastal barriers that help keep our communities safe. We appreciate the committee's interest in advancing coastal habitat conservation and restoration, and I would be pleased to answer any questions that you may have.

[The prepared statement of Mr. Guertin follows:]

Senator Carper. Thanks for that testimony. Thanks again for your service in uniform and civilian life, and for your leadership today.

I want to start with a question dealing with the relationship between the Fish and Wildlife Service and the National Fish and Wildlife Foundation. The Delaware River Basin Conservation Act receives appropriations, as you know, through the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation administers grants under that Act through a cooperative agreement with the Service.

My question is this. Would you elaborate on the importance of this relationship with National Fish and Wildlife Foundation? How does your partnership with that foundation help leverage additional investment in conservation?

Mr. Guertin. Thank you for your question, Mr. Chairman.

We have a very unique mission with the Fish and Wildlife Service. It tells us to work with others to conserve, protect, and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people. We take that model and that mission to heart. Our work with the National Fish and Wildlife Foundation is an example, a great example of collaborative, voluntary, non-regulatory conservation. We use it to high advantage and great success in the Delaware Basin.

As a matter of fact, Congress saw the effectiveness of this

program and appropriated an additional \$5 million a year for the Bipartisan Infrastructure Law for us also to use for this successful partnership. We both bring our expertise, our capacity, our networks, and our hard-working employees, as well as those of our partners, to the mission, and collaborative effectively. The match that we are getting out of this partnership is very, very impressive. We have awarded about \$27 million and the matches come in at \$48 million.

Senator Carper. Say that again.

Mr. Guertin. We at the federal level have used about \$27 million of our appropriated dollars, and the match, led by the foundation, has brought in another \$47 million. So total capacity out there is enormous, and it is all done on a voluntary, non-regulatory approach. We find the partnership highly effective and look to it to guide some of our conservation work in other regions of the Country as well.

Senator Carper. I like to say teamwork makes the dream work. It is certainly true in this case as well.

Second question. Fish and Wildlife Service is known as a regulatory agency to a lot of people. The legislation before us today supports non-regulatory, voluntary partnership-based conservation. In my experience, the Fish and Wildlife Service embraces this approach whenever possible.

My question is, would you elaborate on the effectiveness of

this approach when it comes to habitat conservation?

Mr. Guertin. Thank you, Mr. Chairman. We are all in when it come to non-regulatory, voluntary approach to habitat conservation. We have many authorities under the Fish and Wildlife Coordination Act, legislation that encourages us to work with partners across the landscape.

In my experience, when we can help develop a shared vision amongst all partners, States, tribes, private sector, military, private industry and others, and we each bring our advocacy, our capacity, and our hard-working folks to the table, we can accomplish great strides for conservation. Our administration, our leadership, Director Williams and others, are encouraging us to focus where we can make the most significant impacts with limited dollars.

This collaborative approach is one way and one approach that helps us do that. We can see these types of results in Delaware, in the Chesapeake Bay, in the Great Lakes, in the prairie pothole region and other parts of the Country.

Senator Carper. Thank you.

One last question, then I will yield to Senator Capito. My staff knows two of my favorite words are "for example." I love examples. I use a whole lot myself. Would you share with our committee today some examples of how the legislation before us supports the conservation and recovery of threatened and

endangered species?

Mr. Guertin. Thank you for your question, Mr. Chairman. These legislative vehicles will give an enormous amount of support and capacity for the Fish and Wildlife Service to deliver our mission. These are the kinds of tools we can use in our joint quest to bring species recovery or to head off a potential listing.

A great example is our work with States and others on the salt marsh sparrow in the Chesapeake Bay area. These small birds are threatened by sea level rise. We have seen about an 85 percent decline in them. So we are in a race against the clock now using voluntary conservation to head off a potential listing. It is all about voluntary cooperation.

In the Delaware River, we have done a lot of proactive work on the bog turtle. In the Great Lakes, we have done a lot of work on piping plover restoration. We have a lot of positive cooperative conservation for grassland nesting birds, monarchs and other pollinators. Matter of fact, there will be a big summit or conference here on monarch conservation next week in the capital as well.

Then Senator Cardin talked a little bit about some of our other success stories in conservation with the DelMarVa squirrel and nutrient eradication in the Chesapeake Bay. We led an effort involving a lot of partners, and were able to eradicate

this invasive species from the ecosystem. We have now turned our efforts to other parts of the Country where unfortunately, they have started to show up.

So these pieces of legislation will do an enormous amount of good to further give the Fish and Wildlife Service authorities and funding levels to go after this mission with our partners.

Senator Carper. Those are good examples.

Before I yield to Senator Capito, I just shared with her a note handed to me by a member of our staff. The note says that Ranking Member Capito raised concerns regarding the Delaware River Basin Commission, which involves, as you know, the U.S. Army Corps of Engineers and the EPA. My question is, could you confirm for us that this commission is separate and apart from the Delaware River Basin Conservation Act, which is a voluntary, non-regulatory Fish and Wildlife Service program?

Mr. Guertin. To the best of my knowledge, yes, Mr. Chairman, they are two separate and distinct organizational entities.

Senator Carper. I will ask you to respond to that in greater detail for the record. Then we will talk some more later.

Senator Capito. Okay.

Senator Carper. Thank you. Senator Capito?

Senator Capito. Thank you. Thank you, Mr. Guertin, for being here with us today, and your long years of service at the federal level.

When you are talking about the coastal program, and you have talked about partnerships, the Chairman was talking about the foundation, how do you weave that into private landowners and those kinds of other partners that could be involved or would be affected by what you might be moving forward with at the coastal program?

Mr. Guertin. Thank you for your question, Senator. We are talking about non-regulatory, voluntary programs here. That is an approach we try to employ whenever we can. We try to establish a vision for a landscape. We reach out and work very closely with our State counterparts, State fish and game agencies, tribes and other jurisdictions.

Then with private landowners, we have several effective programs, Partners for Fish and Wildlife, our private lands program, or the coastal program, where we build trust and confidence up over time, some of it at the kitchen table, some of it at local forums, some of it working with the Farm Service Agency and others to try and generate interest in conservation.

In many cases, private landowners approach us. We can use these programs as a front porch for people to talk about a shared vision, then work with them on fulfilling some of their

conservation needs as well as some of ours.

But we really use a model of trying to bring people to the table and look to convening authorities, many of which are already in existence. We can just turn to those and bring some of the capacity, and bring capacity from other federal agencies like Farm Service Agency and RCS, and others and some of the BIL funding is a great example as well, to bring it to the table and pursue a shared vision for conservation on the landscape.

Senator Capito. Great, thank you. That is good.

In considering the Coastal Habitat Conservation Act, are there changes to the program that you think would improve its implementation? In every program, not just this one, but any program, any bailiwick, certainly we want to eliminate any kind of possibility of duplicative programming that might be coming out of one pocket but serving the same purpose. It sort of dilutes the purpose if you keep separating it out into different programs.

Do you have any suggestions there?

Mr. Guertin. We see the Coastal Program authorized under the Coastal Habitat Conservation Act as pretty effective right now. We have a lot of flexibilities. We believe getting it codified with its own authorities would be enormously helpful going forward. That will give us kind of a stronger mandate. Setting these new fund targets or authorized funding levels will

help us internally with the Department, OMB, advocating for budget increases, and we think it will give Congress a lot more oversight, getting clearer reporting and chain of command from us into how we are executing the program on the ground.

We work very closely with this program and our Partners for Fish and Wildlife Program, private lands program, to try and have a more consistent approach on the landscape. Our field employees are great. They take off the bowling shirt, and when landowners and others come up to talk to them, they are not representing the Coastal Program or the Partners. They are representing the Fish and Wildlife Service and the consortium of land managers on the landscape to try and hammer out that shared vision and try to forge commonsense solutions going forward.

Senator Capito. Thank you. Just for my own education here, you are talking about, we codified the maps, I said in 2018. You said this is 400 maps that would be codified, the most ever.

How does that affect what you do?

Mr. Guertin. Thanks for your question, Senator. This Hurricane Sandy remapping project, as well as the smaller units we updated in about six other States are an enormous undertaking. About a third of the acreage of the CBRA will be impacted as well. It is really going to provide a lot of certainty and answer a lot of questions to homeowners who have

advocated for several years, they were erroneously included in the CBRA boundaries. Using new technology, we were able to clean up some of those.

It is also going to give Congress a clean slate to start the program afresh with more consistent interpretation and application of where the delineation of the boundaries is. It actually adds several hundred thousand acres as well to CBRA, which will further provide additional strong natural habitat to resist storms, absorb a lot of that energy, provide great habitat.

So it is a revolutionary accomplishment and I think a game changer for coastal conservation if Congress were to move forward and enact this legislation and codify these map revisions into law.

Senator Capito. Final question. Would that be equivalent to, say, a FEMA flood map, or something of that nature? Inland, that is what we deal with.

Mr. Guertin. What our maps do, Senator, if they are enacted into law, is they delineate the boundaries of the Coastal Barrier Resources Act. If any acreage or structures are included by those, they are not eligible for federal flood insurance.

Senator Capito. I see.

Mr. Guertin. They can still go ahead and develop, but they

have to use non-federal funding or seek insurance elsewhere. So it is a marketplace disincentive --

Senator Capito. There are interplays with that.

Mr. Guertin. Yes. Interplays with both of those, yes.

Senator Capito. Thank you.

Senator Carper. Thank you. Thank you, Senator.

We have been joined by someone who thinks and talks and works a lot on coastal issues. He has been one of our leaders on this issue. Sheldon, thank you for joining us. You are recognized.

Senator Whitehouse. My pleasure, Chairman. Thank you, and thank you to the witness for joining us.

With respect to the Strengthening Coastal Communities Act, the administration of it is by Interior with consult to the Army Corps, NOAA, and FEMA. I would propose that the Coastal Zone Management Act agencies at the States be included in that consultation. The State agencies are effectuating the federal CZMA policies on behalf of Congress.

And at least in the case of Rhode Island, they do a far, far, far better job of mapping risk than FEMA flood maps have. FEMA flood maps have proven defective over and over again in a great variety of ways, the most flagrant of which is probably refusing to anticipate the realities of sea level rise and assuming static state with no scientific evidence to support

that assumption.

So I think it is really important that CZMA agencies be added, and would make that recommendation to the extent you have input into that process.

More generally, I just wanted to flag the importance of funding for coastal resilience. We are, in Rhode Island and elsewhere, seeing really remarkable changes happening along our coasts. We are seeing sea level rise. Again, thanks to the CRMC mapping, we can understand what it means for Rhode Island in the future. We are going to have to redraw our map. Mainland areas will become islands, we turn into an archipelago in many respects. That is an enormous, enormous change to burden the State with. We need resources to managing that coming hazard.

We are seeing ocean heating. That is causing our fisheries to go into complete uproar. Invasives coming in, longstanding fisheries departing. That creates enormous upheaval in communities based around fisheries.

We are seeing globally massive amounts of ocean acidification for reasons having to do with Pacific hydrology. It has been worse on the west coast first. But we are seeing industries like shellfish aquaculture being crushed by the ocean water in which they try to grow the small oysters and clams becoming so acidic that it kills the small oysters and clams.

So they have to buffer their entire intake in order to get around the acidification of the waters. We are seeing the terapod, which is a foundational species of the ocean ecosystem, experiencing massive shell damage when sampled offshore.

Of course, ocean storms are dialed up by heavier, higher ocean surface temperatures. We are seeing higher ocean surface temperatures. So we are seeing far worse storms, which then rolls back into the problem of bad FEMA mapping when you look at what happened to Texas and some of these recent hurricanes that have come ashore there, where more than half of the flooding happened in areas that FEMA had failed to identify as flood prone.

So we have a mess on our hands, and it is going to take real resources to coasts to get around that. I make that point often, but I wanted to make it again here. We see it, for instance, in the Land and Water Conservation fund, which ought to be renamed the Upland and Freshwater Conservation Fund, because of where it directs its attention. Luckily, we are developing an Oceans and Coastal Fund to deal with coasts and saltwater. We are increasingly able to fund that. But it is a stepchild compared to the Upland and Freshwater Conservation Fund.

We are still pursuing with the Army Corps of Engineers why it is that the Inland and Coastal Flooding Fund, depending on

the year, spends 20 times as much on inland flooding as coastal flooding, or 100 times as much on inland than coastal flooding. So our coastal communities are facing really unprecedented risks and hazards. I encourage you to continue to bear down on these issues and particularly to the extent you deal with Interior and the Land and Water Conservation Fund and the Army Corps and its flooding fund, let's try to figure out why it is that coasts are disfavored so badly in those.

Mr. Chairman, my time has pretty much expired. But if the witness would like to make a comment, I would be happy to entertain his comment, and I appreciate his service.

Mr. Guertin. Thank you for your statement, Senator. I appreciate your support for these three bills and the draft legislation.

Just for the record, I would note in addition to these coastal related programs, we have a lot of other programs that deal with oceans and coasts, 180 of our National Wildlife refuges that encompass about 750 million acres of submerged or terrestrial and underwater ecosystems are a part of that. We do a lot of work in our five National Marine monuments, interjurisdictional fisheries work, migratory birds, and others.

So if you look at the whole portfolio of programs U.S. Fish and Wildlife is entrusted to manage, we have a lot of interest and support for oceans and coastal programs, and continue to

keep them a priority. We will do our best going forward to make sure the Land and Water Conservation Fund takes into account some of your concerns about the allocations made to inland acquisition or easements as opposed to coastal packages as well. And the Migratory Bird Conservation Fund and others, because there are a lot of packages of funding that are deployed for conservation.

Senator Whitehouse. I think if we can continue to support, Mr. Chairman, the Coastal Fund, which got, for instance, \$492 million, the biggest allocation it has ever received, in the Bipartisan Infrastructure Bill, and we have other plans for additional revenues, then we don't have to get into a fight between coastal and upland and saltwater and freshwater. We grow the pie in ways that support coastal communities without having to take back the enormous largesse that the Land and Water Conservation Fund sends to upland and freshwater resources.

Thank you.

Senator Carper. Thank you very much, Senator Whitehouse.

I have at least one more question I would like to ask. It deals with proactive coastal conservation. In my opening statement, I talked about the successful restoration of Fowler Beach, which is a part of the Prime Hook National Wildlife Refuge. This was not a small project. This was a huge project.

The cost was about \$38 million, which is enormous. Considering the community flood protection and the habitat resiliency benefits, the return on investment is also substantial.

The Fish and Wildlife Service undertook the Fowler Beach restoration project after Hurricane Sandy had done such damage up and down the east coast, but especially in New Jersey and Delaware and Maryland. The reality is that the project was long overdue.

Do you think the Fish and Wildlife Service could and should do more projects like this one proactively instead of retroactively?

Mr. Guertin. Thank you for your question, Mr. Chairman. To go back to one of my earlier statements, our leadership team wants us to focus our efforts where we can make the most significant impact. Sometimes that requires us to pull together or bundle several funding streams to go after a larger ecosystem or watershed-based restoration or conservation action.

So we are certainly taking a look at some of those. We can point to Congressional leadership on passing the recent Bipartisan Infrastructure Law. A lot of the funding capacity that came to us was specifically for large scale ecosystem restoration on a geographic scale, Delaware River, Lake Tahoe, Klamath Basin, and the National Fish Habitat Passage Program as well.

So yes, we are certainly taking a look at those. A lot of the lessons learned with Fowler Beach in Delaware can be taken and used in other geographies of the Country as well. But these big, larger scale projects require bundling funding from elsewhere. We always have to balance that out with the needs of smaller scale projects or other needs as well.

I look forward to working with you and the committee as we move forward with your deliberations on our pending budget request for 2023. It includes a lot of funding to do this kind of work, including for the Coastal Program that is under Congressional consideration right now. That would fund some more of that kind of work.

Senator Carper. Good. As you know, we have a number of committees and subcommittees that are meeting simultaneously. Our members are engaged in other places; they will be coming and going throughout. I am not sure that during the time you are here we will be joined by another one of our committee members. I am going to give you an opportunity, since we have a minute or two, is there anything else you would like to mention in terms of a question maybe you weren't asked, that you would have liked to have been asked, or something else you would like to say just as a closing thought?

Mr. Guertin. Thank you for that opportunity, Mr. Chairman. Just to reaffirm our continued interest and support for what you

are doing here. We really appreciate the committee evaluating these three bills as well as the draft bill. We stand ready to provide any kind of support on a technical or policy level that will help your deliberations.

We think these four pieces of legislation will be force multipliers for us. They will give us needed authority and authorization for appropriations, flexibilities as well. They will allow us to do a better job working with our partners on coastal resiliency, address climate change, work on some of these big natural resource programs. We really appreciate your leadership and look forward to working with you going forward. Thank you.

Senator Carper. We look forward to it as well. Thanks for your service, and we look forward to working with you and your team, the people you represent.

Thank you so much. Semper fi.

Mr. Guertin is going to be succeeded by a second panel. We have two witnesses on our second panel. One is Dr. Elizabeth Gray, and the other is Ms. Emily Cope. We thank both of you for joining us today. It is good to see you. Go ahead and take your seats if you would, please.

I see a former Sea Grant fellow from our committee, who is leaving. It is nice to see you, Katie, welcome. I could barely see your lips move when Mr. Guertin spoke.

[Laughter.]

Senator Carper. All right, Emily Cope. How are you today?
Great to see you.

Just a brief introduction if I could. We are delighted to welcome Emily Cope, recommended as a witness by a member of our committee from South Carolina. Ms. Cope is currently serving as Deputy Director for Wildlife and Freshwater Fisheries for South Carolina Department of Natural Resources. She has served the department for over 22 years and has held numerous positions within the agency, most recently serving as Assistant Director.

Ms. Cope, I think one of your two Senators may be able to drop in and join us at some point during your testimony. If he does, we will certainly recognize him to add whatever comments he would like to add. We are delighted that you are here.
Thank you so much for joining us.

STATEMENT OF EMILY COPE, DEPUTY DIRECTOR FOR WILDLIFE AND
FRESHWATER FISHERIES DIVISION, SOUTH CAROLINA DEPARTMENT OF
NATURAL RESOURCES

Ms. Cope. Thank you. It is my pleasure to be here.

Mr. Chairman, I appreciate you and Ranking Member Capito and members of the committee allowing me the opportunity to come here today and address your committee in support of S. 2194, the Coastal Habitat Conservation Act. As you mentioned, my name is Emily Cope, and I serve as the Deputy Director for the South Carolina Department of Natural Resources.

First, I would like to thank my Senator, Lindsey Graham, for cosponsoring this legislation with Senator Cardin. The support and dedication that both of them have shown for our Country's natural resources has resulted in wide sweeping impacts and is greatly appreciated.

The South Carolina Department of Natural Resources is supportive of your efforts to authorize the Secretary of Interior and U.S. Fish and Wildlife Service to work with willing partners to further the purpose and implementation of the Coastal Program. Habitat loss due to development pressure, natural disasters, and climate change continues to threaten our coastal ecosystems and communities. This in turn jeopardizes our fish and wildlife species as well as our local economies.

South Carolina, along with many other coastal States, has

implemented numerous habitat enhancement, as well as research and survey projects utilizing Coastal program funding.

Specifically, in South Carolina, we focused on threatened and endangered species as well as species of concern including black rail, loggerhead sea turtles, shorebirds, and waterbirds. These projects simply would not have been possible without Coastal Program funding.

In addition, because the Coastal Program implements the National Coastal Wetlands Conservation Program, I want to more specifically elaborate on these efforts. On the land acquisition side, the South Carolina Department of Natural Resources has secured over \$9.5 million of funding through the Coastal Wetlands Conservation Program and protected 52,320 acres on 11 different tracts of land.

These areas are not only managed by SCDNR to enhance coastal resources but are also open for public recreation opportunities. This \$9.5 million investment was leveraged by approximately \$77.8 million of State, private, and federal funds as well as in-kind contributions. These projects involve numerous partners, including but not limited to Ducks Unlimited, Local Land Trust, the National Oceanic and Atmospheric Administration, the U.S. Forest Service, and other U.S. Fish and Wildlife Service programs.

Most recently, South Carolina has utilized an additional \$2

million from the National Coastal Wetlands Conservation Program to restore and enhance hydrological function of 3,578 acres of managed wetlands on two SCDNR properties. This funding was leveraged with approximately \$1 million of State funding.

Ducks Unlimited has been a significant partner in these two projects and has provided numerous hours of oversight, engineering and design, as well as technical expertise. Key activities include the addition of water control structures and the restoration of canals, embankments and berms on these historically and ecologically important wetlands.

Through these acquisition and restoration efforts of the programs I have mentioned, we have protected and enhanced critical wetland habitat for not only migrating waterfowl but also other wetland-dependent bird species, herpetofauna, and native plants, many of which are species of concern and are priorities for conservation efforts.

In addition, these areas provide valuable ecological filtering services from landscape runoff, namely pollutants and silt which would have entered our rivers, estuaries, and ocean, thereby decreasing water quality. These impoundments also buffer the mainland from storm surges and exceptionally high tides, which are becoming more common each year.

I hope these examples of give you a clear picture of not only the direct impacts of the Coastal Program, but also the

volume of leverage and partnerships generated by such. South Carolina is known for its beauty and the quality of its coastal resources. These resources provide our citizens with a sense of place, support our local communities, and enhance the quality of life for our residents. They are a key reason that people from across the United States come to visit our State.

By solidifying the future of the Coastal Program, we can ensure South Carolina continues to set the bar high for coastal resource conservation.

Again, on behalf of the South Carolina Department of Natural Resources, I sincerely want to thank you for your support of the program and your commitment to ensuring its future through this important legislation. With that, I will be happy to answer any questions.

[The prepared statement of Ms. Cope follows:]

Senator Carper. That is great. Thank you so much. Great to see you in person.

I think we are joined by our second person who is going to be on this panel, Dr. Elizabeth Gray. Dr. Gray, are you out there?

Ms. Gray. I am, I am on video feed. Can you see me?

Senator Carper. Yes, we can see you, and hear you. Let me just take a moment to introduce you, Dr. Gray. Currently serving as CEO of the National Audubon Society. Prior to joining Audubon, Dr. Gray worked for the Nature Conservancy for more than 17 years, most recently serving as the Global Managing Director of the Nature Conservancy's Climate Change Program.

We welcome you. There was once a Delawarean, actually a very senior member of the leadership team at Dupont Company who became Governor of Delaware, Russell Peterson, who later became the Chairman of the Council on Environmental Quality in the Nixon and Ford Administration. Then I think after that, he served as the CEO of the National Audubon Society. So we have a rich heritage from Delaware that has been part of the National Audubon Society's leadership.

We welcome you especially today, with that history in mind. Please proceed. Your full testimony will be made part of the record, then we will get into some questions with both you and Ms. Cope.

STATEMENT OF ELIZABETH GRAY, PH.D., CHIEF EXECUTIVE OFFICER,
NATIONAL AUDUBON SOCIETY

Ms. Gray. Thank you, Chairman Carper

Good morning. My name is Dr. Elizabeth Gray, and I am the Chief Executive Officer of the National Audubon Society.

Audubon represents 1.8 million members nationwide protecting birds and the places they need through our 23 State programs, 41 centers, and 450 chapters. I appreciate the opportunity to testify today on behalf of Audubon regarding coastal habitats and the need to protect and restore these vital areas.

Over the past year, I have identified three pillars that are guiding the National Audubon Society's work: hemispheric conservation, equity diversity inclusion and belonging, and climate change. Audubon's work around protecting and restoring coastal resources, such as wetlands, beaches, and barrier islands touches upon all three of these pillars. These resources serve as recreational spaces, enhance our resilience to climate threats like floods and hurricanes, and provide habitat for birds and other wildlife.

Yet climate change and development have diminished bird habitats. The U.S. has lost 3 billion birds since the 1970s, with a 70 percent decline in sea and shorebird populations over the last 50 years.

Increasing storms and hurricanes also threaten coastal communities. Hurricanes have killed nearly 6,700 people and caused more than \$1.1 trillion in damages from 1980 to 2021.

However, the burdens of climate change do not affect all communities equally. Those on the frontlines of climate change, primarily lower income communities, communities of color, and tribal nations and indigenous communities, are being the first and the worst hit by its impacts.

The U.S. Fish and Wildlife Service plays a crucial role in climate resiliency and adaption through its administration of programs throughout the United States that focus on habitat conservation and protection. Audubon supports these four bills which would codify, reauthorize and expand critical U.S. Fish and Wildlife Service programs in vulnerable coastal areas, increase coastal resiliency and safeguard important habitat.

The Coastal Habitat Conservation Act of 2021 would improve coastal community protection through the authorization of technical assistance for grant programs targeted to coastal habitat conservation. The Great Lakes Fish and Wildlife Restoration Reauthorization Act reauthorizes the U.S. Fish and Wildlife Service to continue to work with States and other agencies to develop and execute proposals to conserve, restore, and manage fish and wildlife populations and other habitats.

The Delaware River Basin Conservation Reauthorization Act

reauthorizes critical conservation programs throughout the Delaware River Watershed and improves the equitability of federal funding provided through the Act. The Strengthening Coastal Communities Act of 2022 expands the bipartisan Coastal Barrier Resources Act and its system of protected areas, protecting vital coastal ecosystems while saving federal tax dollars.

The Coastal Habitat Conservation Act of 2021 would authorize imperative technical assistance to sustain the U.S. Fish and Wildlife Service's Coastal Grant Program. To clarify from my written testimony, this bill authorizes that technical and financial assistance, not the grant program itself. With the support granted by this authorization, the Coastal Program focuses on habitat conservation along the Nation's coastlines, which provides resiliency for coastal communities prone to storms and flooding as well as critical habitat for birds, fish, and other wildlife.

Both the Great Lakes Fish and Wildlife Restoration Reauthorization Act and the Delaware River Basin Conservation Reauthorization Act reauthorize vital Fish and Wildlife Service programs that support coastal habitat conservation protecting critical areas for migratory birds in these regions. The Strengthening Coastal Communities Act of 2022 would expand the successful and bipartisan Coastal Barrier Resources Act which

currently protects 3.5 million acres along undeveloped beaches, islands, and wetlands along the Gulf of Mexico, Atlantic, Great Lakes, U.S. Virgin Islands, and Puerto Rico. CBRA does not prohibit development. It simply removes the taxpayer from funding in important designated areas.

CBRA supports coastal resiliency by protecting undeveloped areas that buffer nearby communities from storms and flood. It has saved the federal taxpayer \$9.5 billion and is projected to save billions more. It protects wetlands that provide important habitat and support the Nation's \$244 billion a year recreational and commercial fishing industry.

This legislation would strengthen and expand CBRA by adding 278,000 acres, expanding the definition of an undeveloped coastal barrier, and directing the Service to carry out a Coastal Hazard pilot project to identify areas that are and will be vulnerable to coastal hazards at sea level areas.

Thank you for the opportunity to testify. I am happy to answer any questions you may have.

[The prepared statement of Ms. Gray follows:]

Senator Carper. Thanks so much for joining us remotely, and for those comments.

We are going to be joined by a couple other members of our committee. I understand Senator Graham is trying to get here, Ms. Cope, if he can. Senator Capito is going to lead off the question and I will follow. Thank you.

Senator Capito. Thank you both for your testimony, and thank you for what you are doing for the Country and your State to preserve our natural resources.

I am going to start with you, Ms. Cope. You mentioned in your statement the coordination that you do with Ducks Unlimited and U.S. Fish and Wildlife. Can you give me some other examples of partnerships that you have that have been particularly successful, are those partnerships growing, and how that impacts your ability to move forward with these programs?

Ms. Cope. Absolutely. Thank you for your question.

In utilizing Coastal Program funding, one of the projects we did was enhancing black rail habitat on private lands. So the Coastal Program was able to provide funding for us to go in and treat some vegetation that was deteriorating the quality of wood stork habitat as well as increasing predation on wood storks.

So without the Coastal Program funding and the participation of private landowners, we would not have been able

to do that project, and we would not have been able to increase the wood stork nesting that is in South Carolina. So private landowners provide a critical partner in some of the things we do.

In addition, when we utilized one of our national coastal wetlands projects, one of our properties was Samworth Wildlife Management Area. We went in and did some major renovations. We had tremendous storm damage as well as just dealing with effects of higher tides impacting the berms and impoundments. In that Ducks Unlimited was a partner, but we also partnered with Audubon South Carolina as well as the Open Space Institute, which brought resources and technical expertise to the table. They donated those as in-kind contributions.

Through that, we were able to re-top 7,780 linear feet of dike as well as 13,425 linear feet of interior canal restoration, 1,460 linear feet of interior setback dike, thereby enhancing also 2,560 linear feet of berm along those eroded dikes, as well as installing four trunks and water control structures.

Because these other partners were willing to come to the table, share their resources and their technical expertise, we were able to develop a project that would enhance these wetland areas for not only wintering waterfowl, but many other non-game species and many species of concern.

Senator Capito. Great. I know South Carolina, having been to the South Carolina coast myself, it has beautiful and very great beaches. I know that because of that, there is a lot of infrastructure, hotels, people, and recreationists who want to enjoy those areas.

How do you balance that when you are looking at the conservation aspects with the infrastructure needs and just the human love of your coasts?

Ms. Cope. Thank you. That is a great question, and a huge challenge for us. Our natural resources and our coastal ecosystems are a tremendous draw to our State. Oftentimes when people come to visit, they determine that it is a wonderful place to live.

So we do have just under a 200-mile coastline. There are significant development pressures along that coastline. What we have tried to do is utilizing funding of our partners as well as our own internal agency funding and programs to identify those areas that are most significant, and to try to protect those areas in perpetuity.

Our goal is not only to manage them to enhance natural resources, but to open them up for public use and enjoyment. We believe that people will conserve what they appreciate and what they love. So by providing them these public areas, by protecting the resources on these areas and managing them for

not only water quality but numerous fish and wildlife species, we can instill a conservation ethic and a passion for conservation in not only our citizens but also our visitors, so in hopes that when they go back home, even if they don't move to South Carolina, they will support conservation back in their own States.

Senator Capito. Right. So you have a 200-mile coastline. If you were to put a percentage, or let's say a one to ten scale of repairs that have been made, what else needs to be done, are you at a seven? Are you at a ten but constantly redoing? Or at you at a one, which I know you are not at a one, so we can eliminate that.

But if you understand the point of my question, it is how much more work is there to be done? I know it is a constant reassessment of where you are. But there certainly have to be places that still are in great need.

Ms. Cope. Absolutely. And this is really an off the cuff estimate. I would say we are probably at a six or a seven. We have been incredibly successful at moving the needle on restoration projects as well as habitat protection projects. But there is still a lot to be done, especially on private lands.

But one of the biggest challenges we have is dealing with climate change and just the effects of Mother Nature. So it is

a continuous effort. The dikes on our impoundments continue to settle and wear away, as well as managing invasive species. So we are never finished, but we are committed to the task and will continue to move the needle and do all that we can.

Senator Capito. Good. Let me ask one other question. This came up when we were considering the transportation bill that we very successfully put together for the big Infrastructure Bill, which were, and I think, Senator Graham, this was an area of concern for him, the exit routes in the Myrtle Beach area for hurricane evacuation.

Do you work with the DOT or State DOT, are you a part of that strategy that the State has tried to put together to make sure people can be safe?

Ms. Cope. Yes, ma'am. I have not worked with those individuals directly, but as an agency we do have staff who work with them. A couple of key things we look at. One would be the routes of the proposed interstate, making sure that we minimize impacts to natural resources, but also identifying proper mitigation alternatives.

So while we work very hard to protect our natural resources, we understand needs of public safety and transportation. We are known for working with our partners and our sister State agencies to try to find a balance and minimize impacts but meet the needs of our citizens.

So one of our primary focuses has been assuming funding for I-73 or other roads go into effect, how can we protect land in other areas and mitigate the impacts of those.

Senator Capito. Thank you.

Senator Carper. Thanks, Senator Capito. I am going to give you a break for a minute, Ms. Cope, and ask a couple questions of Dr. Gray, then come back to you.

Dr. Gray, are you still with us?

Ms. Gray. I am still here.

Senator Carper. That is good. Dr. Gray, your testimony focused on Audubon's support for four specific Fish and Wildlife Service coastal programs. But the National Audubon Society actually has, as I understand it, a broader national coast strategy.

My question would be, would you elaborate on the importance of this broader coastal restoration strategy, and share with the committee more about why Audubon invests time and resources into our Nation's coasts?

Ms. Gray. Absolutely. Our coastal areas are of course important to our seabirds and shorebirds that rely on them. Many areas along both the Pacific and Atlantic flyways are critical stopover sites for our precious natural resources, of which birds are one huge piece.

We also invest in coastal restoration and protection and

conservation efforts because not only do they provide important habitat for critical nesting birds, but they also provide buffers for coastal communities, which are our constituents, with several million members that support us and advocate on our behalf.

So we have critical habitat needs that are involved. We have important resiliency needs that play into protecting coastal communities. Also, we know that many of these coastal habitats also serve as carbon sinks. They are important sources of carbon sequestration as our temperature continues to rise and we need to take action. These can serve as natural infrastructure, not only for helping us adapt to the effects of climate change that Senator Whitehouse spoke so eloquently about, but also help us mitigate greenhouse gas emissions by storing and capturing carbon out of the atmosphere.

So for all those reasons, habitat protection to people who live in these coastal communities, and carbon sequestration and storage. That is the underlying reason for our broader coastal community program.

Senator Carper. Good. Thanks for that explanation.

A question on landowner equities if I could. The National Audubon Society advocates for sound policies to protect coastal habitats. But I understand you also have some skin in the game as a coastal landowner. Would you just take a minute and share

with the committee more about Audubon's equities as a landowner and how as a landowner Audubon has benefited from the Fish and Wildlife Service coastal programs that we are discussing today?

Ms. Gray. Of course. I would like to highlight a specific project, which is the Blackwater Salt Marsh rehabilitation project that we have been doing in Maryland. We definitely have a number of projects with the U.S. Fish and Wildlife Service on coastal work throughout the U.S. But the Blackwater Salt Marsh rehab program in Maryland is one of the more important ones, specifically because it allows us to both better serve the communities that are there and also the wildlife that depends on that region.

So we do rely on vital funding from the U.S. Fish and Wildlife Service. Frankly, we wouldn't be able, without that funding, to spend the time and energy needed to have an impactful presence in the places that we work. So as climate change increases in its impact, as it threatens not only the wildlife and the communities that are frontline, frankly, in the fight against sea level rise and flooding, including sunny day flooding that we see.

It is really critical, our partnerships with agencies like the U.S. Fish and Wildlife Service, it helps us build resiliency, it helps us protect both wildlife and people from the impacts of storm and flooding. As you all know, these are

just becoming more and more intense over the last few years. We anticipate that trend will continue into the future.

Senator Carper. Thanks for explaining that.

Last question I am going to ask of you, Dr. Gray, then I am going to yield to Senator Graham, welcome. I will turn to you next, Lindsey.

Last question for Dr. Gray from me, at least. Reinvesting savings that are generated from CBRA, Coastal Barrier Resources Act, your testimony mentions billions of dollars, billions of dollars in taxpayer savings generated by the Coastal Barrier Resources Act. That would be music to the ears of former Delaware Congressman Tom Evans, who was very much involved in its creation.

My question is, do you think Congress should consider reinvesting a portion of those savings into proactive habitat conservation and community resilience?

Ms. Gray. The quick answer to your question, thank you for that question, Chairman Carper, is yes. There are a number of scientific studies that show it is actually less expensive to be proactive and invest in this type of habitat restoration and conservation up front rather than waiting for hurricanes and other natural disasters to strike. In addition, it is definitely less expensive to try to keep populations of our birds and wildlife healthy rather than continually trying to

fight against extinction, when species are already threatened and endangered.

So I would absolutely advocate for reinvesting in a proactive approach, in addition to a reactive approach, which we know we also will do. But yes, I think National Audubon Society would be highly supportive of that.

Senator Carper. All right, great. Thank you so much.

Senator Graham, we are glad to see you. Ms. Cope has been holding forth quite ably and awaiting your arrival. Thank you so much for recommending that we invite her to testify today. She is doing a great job.

Senator Graham. Thank you very much, Mr. Chairman. I really appreciate the committee. You do a good job, and your Ranking Member. It is a pleasant place to work, and good causes.

Ms. Cope, thank you so much. I appreciate your coming up here and sharing your testimony with us. I really am not going to ask any questions; I just want to make a statement.

It seems that we have a hard time getting anything done in Washington. This is an area where we are getting things done. This is a committee where we are getting things done. So the Coastal Habitat Conservation Act that I am sponsoring with Senator Cardin from Maryland codifies an existing program that has been around since the 1990s that allows the Department of

Natural Resources in South Carolina to partner with Ducks Unlimited, all kinds of different groups, to put land in conservation. It is voluntary, the money comes from fees collected from the tourism and fishing industry. Now putting it into law, codifying it, having it authorized I think will take it to the next level.

So, Mr. Chairman, I just want to thank you for inviting Ms. Cope. We are very proud of you, Emily, at home. You do a great job. God has blessed South Carolina with an incredible coastline and a beautiful State. We are going to try to keep it that way. We are going to make it business friendly but partner with the private sector to put land in conservation. That is a win-win for sportsmen, for just the beauty of South Carolina. This is a voluntary program, collected, the money comes from fees from the boating and sporting community.

I want to say on behalf of our entire delegation, thank you for what you do. We are very proud of the work being done by the Department of Natural Resources.

Thank you, Mr. Chairman.

Senator Carper. Thank you so much again for recommending Ms. Cope. I am going to grill her now further. Thank you so much for bringing her to our attention.

Ms. Cope, I want to ask you a question with respect to Coastal Program support for endangered species. Your testimony

acknowledges that the State of South Carolina uses some of the funding it receives from the Fish and Wildlife Service program to support the recovery of endangered and threatened species, such as the black rail bird and loggerhead sea turtle, species I am sure you are familiar with.

Would you take a minute and elaborate on that work for us, please?

Ms. Cope. Yes, sir, I appreciate it. The black rail is a very secretive marsh bird. It was listed as federally threatened. In South Carolina, we really did not know much about how many of these were in our areas, specifically where we would find them.

So through the Coastal Program funding we were able to conduct additional surveys and locate them on some of our properties. We were able to learn more about the types of habitat that they utilize. This in turn led us to be able to manage our impoundment slightly differently, so that we could provide additional habitat for the species in hopes of increasing its reproduction and helping to recover the species.

Some additional ones on the sea turtles is, sea turtles are very prone to predation from coyotes and feral hogs on their sea turtle nests on the beach. So we utilized Coastal Program funding to go in and initiate trapping efforts on one of our properties, the Yawkey wildlife area in Georgetown County, to

protect these sea turtle nests.

In looking at it as we did the trapping, depredation of these nests decreased significantly, thereby increasing reproduction of our sea turtles and helping to further restore the population. Our goal through all of these efforts is to recover these species so that we can eventually work toward delisting and down listing the species that are listed through the Endangered Species Act.

Senator Carper. Thank you for that.

I understand, I think you said in your testimony that South Carolina's coastal resources support your local communities. That is our experience in Delaware as well. People travel from all over the world to visit our five-star beaches and view our wildlife. When they do, they drive what is already a thriving tourism economy.

Would you take a minute for us and just elaborate on how South Carolina's coastal resources support local communities and economic growth?

Ms. Cope. Absolutely. So historically speaking, hunting and fishing are key recreational activities in South Carolina. They are part of our culture and who we are. As times have changed, we have seen an increase in more of the non-traditional outdoor recreation opportunities.

So our coastal resources are very diverse. We have people

who run commercial hunting and fishing operations. We have people who travel simply to hunt and fish on their own. But we have an even larger number of constituents who visit South Carolina just simply to enjoy the scenic views of our coastal areas, to go boating and kayaking, to go birdwatching and do nature photography.

So all of those combined together not only provide opportunities for local people to spend money in these areas and support the local economies, but it also brings people in from all across the United States to see these coastal areas. So they support the local economies just simply through their normal tourism dollars.

Senator Carper. Okay. One more question. We have some people, I mentioned to Senator Capito, there are some young people sitting out in the audience here, behind you over your left shoulder, Ms. Cope. I think some of them, at least one of them, might be an intern who is working with Senator Cardin's office. Several others are interns in Senator Shelby's office.

I am going to telegraph my pitch. When we have finished the questioning, I will ask if you might like to share a message while these young people are here that you would like for them to take with them once their internship on Capitol Hill is over this summer.

My last question of you, Ms. Cope, deals with the

collaborative nature of coastal projects in South Carolina. Your testimony explains really well how different federal agencies and partners have come together to support coastal projects in South Carolina.

My question would be, would you say that these partnerships are enabling more landscape-scale restoration than if each of these entities were working independently?

Ms. Cope. Absolutely. But working together and having these partnerships, we are moving the needle on conservation so much more significantly than if we were doing it alone. What we have found is that by creating the local partnerships, working with other State and federal entities and especially our private landowners and private organizations, we all have different resources to bring to the table. We all have different contacts.

So it really is finding the right tool for the job and getting the right people to the table. We share a commitment and a passion for conservation. So by working together and creating a team, we are incredibly successful. We leverage each other's resources, and we get things done much more effectively and efficiently than any of us could alone.

Senator Carper. All right. A follow-up if I could. I said earlier two of my favorite words are "for example." With that in mind, are there any examples of larger scale projects

that your State of South Carolina is supporting that you might share with us today?

Ms. Cope. As far as new projects?

Senator Carper. Yes.

Ms. Cope. So we are working on multiple land acquisition projects in our State, on our coast, which will protect, one will protect about another 7,000 acres of land along one of our coastal river systems. That not only protects water quality as it is flowing out to the estuary but also protects habitat for gopher tortoises as well as many wading birds that are species of concern.

So we have a long list of habitat acquisition projects that are going on. We are currently working on some more restoration projects on our waterfowl areas to continue to get a handle on better management of these areas.

I would offer up, I am sure Senator Graham would agree, if any of you would like to come to South Carolina and see what we are doing on the ground and visit our great State, we would be more than delighted to host you.

Senator Carper. I love that. I always like to put in plugs for inviting people to come to Delaware. It is only fair that you do that for South Carolina, or West Virginia.

Senator Capito, is there anything else you would like to do before we recognize some of these young people in the audience?

Senator Capito. No, I just appreciate everybody's testimony. It has been very interesting. Thank you very much.

Senator Carper. Thank you.

I am going to ask, if there is in our audience today at least one intern here representing Senator Cardin's office, would you raise your hand? Hello, are you from Maryland? Good. Welcome.

Do we have any interns from Senator Shelby's office? That is good.

Dr. Gray, you couldn't see this, but we have a number of folks from Senator Shelby's office. Do any of you live in Alabama? If you live in Alabama, raise your hand.

If you live in Delaware or West Virginia, raise your hand. All right. If you would like to live in Delaware or West Virginia, raise your hand.

[Laughter.]

Senator Carper. Dr. Gray, I am going to ask you and Ms. Cope if you would like to share some words of wisdom. Looking back, these people look like they are probably in their early 20s. Maybe some thoughts you would like to share with them.

Senator Capito. Could I add, I have Baylor behind me, and she is my intern here. So direct it to her as well.

Senator Carper. Baylor, like the university?

[Remark off microphone.]

Senator Carper. That is great.

Senator Capito. She goes to Alabama, though. There is a conspiracy here.

[Laughter.]

Senator Carper. Ms. Cope, any thoughts?

Ms. Cope. Absolutely, my pleasure, and thank you for the opportunity.

It is so refreshing to see young people who have an interest in our political system and especially conservation and the environment. I would just encourage each and every one of you to continue to learn, continue to get involved in conservation as well as the political arena. Because we can do a lot on the ground as far as direct management.

But in terms of really moving the needle for conservation, it happens through the political arena. Because if we didn't have the support of our Congressional delegations to support funding, and work on critical legislation to help protect and manage our resources, then we would not be able to move things forward.

So whatever path you take down the road, always remember the importance of it. As I told some friends of mine yesterday, please remember the importance of voting. Every vote matters. It is worth taking the time to do your research and select candidates that are truly going to represent you and your State

well.

Senator Carper. Very well said.

Dr. Gray, are you still with us?

Ms. Gray. I am. Thank you for the opportunity to say a few words to the interns. I am happy to share that I have actually worked with each of the States represented today. So it is a real pleasure to participate today in the hearing.

The words I would leave you all with is, we are in a climate and a biodiversity crisis. I doubt this is news to anyone who is sitting here today. But I do believe, while this planet is in crisis, we inherited this planet from past generations, we are deeding it to future generations. I think we have about a decade to get this right and set the planet on a course that will continue to serve us moving forward as human beings and all the other species that share it.

I love what Emily Cope said, I think what you are doing is extremely important. If the planet doesn't continue to survive, none of us will. It is absolutely essential to our wellbeing, to our food security, to our energy security, to our livelihoods and to our health and wellbeing and happiness.

Continue to do what you are doing. National Audubon Society focuses on education, on advocacy and on-the-ground projects. Every organization that has been mentioned today, whether it is a political organization, an agency, a non-profit

organization, needs talented young people to come and work with it and to continue to make this world a better place.

So I would echo what Emily said, vote, make sure you support people who support the environment, and be active. Continue to speak up, continue to intern and remember that this precious planet is, at the end of the day, all that we have.

Senator Carper. That is great. Thank you.

I have a thought I want to share on a personal note with the interns who are here. Any comment you would like to offer?

Senator Capito. I think it is a great day to be here on Capitol Hill to see not only government working, but to meet so many other bright young people around the Country who are motivated to learn about being public servants.

I would say to my interns, which I always do, dig in, have a good time, talk to all you friends about the importance of what Ms. Cope said, voting and being a participant. If you are on the sidelines and don't participate, you don't have the right to complain. So get in the game. It is a very exhilarating process.

Senator Carper. Thank you very much.

This is a committee that has been around for quite a while. We have 20 members, 10 Democrats, 10 Republicans. Senator Capito and I are privileged to lead the committee at this point in time. We work across the aisle very well. We were both born

in West Virginia. People ask me, if I couldn't be governor, I used to be governor of Delaware, they would say, after you are governor of Delaware, what would you like to do? I would say, I would like to be governor of West Virginia. Well, you can't do that.

[Laughter.]

Senator Carper. But we have the opportunity to work together on a whole range of issues. Much of the legislation that we pass here is passed unanimously. The large Infrastructure Bill was transformational, signed by the President last November or December, was adopted in this committee unanimously, for all the roads, highways, bridges, pieces of surface transportation, all the water pieces, water infrastructure legislation, all was adopted unanimously here and later made part of the Infrastructure Bill.

When I was the age of these young people here, Senator Capito, I actually had a chance to visit Washington, D.C. for the first time. I was a naval ROTC midshipman. I ended up being stationed later on Corpus Christi at a naval air station. My roommate was from Baltimore.

We had the opportunity to visit Washington, D.C. at one time. It was 1965, a million years ago. I had some time on Capitol Hill, and I didn't know what was going on. I looked around, and wandered into the Rayburn Building over on the House

side. I asked someone of the security people, I said, is there anything going on here? I would like to find a hearing and sit in on a hearing if I could.

Lo and behold, there was a hearing going on. It was the Civil Rights Act of 1965. I wandered into the Judiciary Committee hearing room chaired by Emmanuel Celler. I had the opportunity to see and hear one of the most transformational bills regarding voting rights in this Country ever debated and adopted at a very young age, your age.

That was part of what inspired me to become involved publicly. I did a lot of years in the Navy after that, but ultimately ended up here with Senator Capito.

Senator Capito. My father was on that committee.

Senator Carper. Wow. Small world.

Senator Capito. He was in the room.

Senator Carper. In the room, wow.

I would close with this. Actually I have two closes. I love to give commencement speeches. We get to do high school commencement speeches and college commencement addresses. I got to do one last month, with the President of the United States who spoke at the University of Delaware. I got to speak as well.

I gave a ten-word commencement address, ten words. Then I had the graduates stand up and I had them repeat the ten words.

I am not going to do that with you guys today. But the ten words are, the first two are, aim high. Aim high is first. The next two are work hard. The next four are embrace the Golden Rule, treat other people the way we want to be treated. The last two are don't quit. Aim high, work hard, embraced the Golden Rule, don't quit.

I would urge you to keep those in mind as you go forward. They might help guide you. They have certainly helped to guide me in the years I have been privileged to live and to be involved here.

Again, to our witnesses here and all of our panelists, but especially the last two, thank you so much for joining us. I want to thank our first panel of witnesses as well, and those of our committee who were able to join us.

I want to thank our staffs for the work that led up to this hearing today. We are grateful to our witnesses especially for your work at a time when we face a lot of challenges. But there is also a lot of opportunity. I like to say in adversity lies opportunity. But there are opportunities when it comes to conserving our coastal ecosystems.

Now I want to ask unanimous consent to submit for the record materials that relate to today's hearing. That includes testimony from Senators Klobuchar and Portman in support of the Great Lakes Fish and Wildlife Restoration Reauthorization Act.

I also have a letter from some 33 advocacy groups, including conservationists, hunters, anglers, and advocates in support of the Coastal Barrier Resources Act.

Finally, last but not least, I am including a letter from the Coalition for the Delaware River watershed in support of the Delaware River Basin Conservation Reauthorization Act.

Hearing no objection, so ordered.

[The referenced information follows:]

Senator Carper. Senators will be allowed to submit written questions for the record through the close of business on Wednesday, June 29th, 2022. We will compile those questions and send them to our witnesses and ask our witnesses to reply by Wednesday, July 13th, 2022.

With that, before we adjourn, I want to say to the interns who are here, I am going to ask you to come up and join us at the front of the room. We will take a quick picture, if Senator Capito wouldn't mind, and Baylor will join us as well. We will take a quick picture for posterity.

With that, this hearing is adjourned. Thank you all.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]